KNOWLEDGE MANAGEMENT STRATEGY AND PERFORMANCE OF NIGERIAN SMALL AND MEDIUM ENTERPRISES

Akeke, Adenike Rita¹, Ashade, Abiodun Oladimeji² *Akeke, Niyi Israel³

¹Department of Business Education, Lagos State University of Education, Otto-Ijaninkin, Lagos State ³Department of Business Administration, Ekiti State University, Ado-Ekiti. ²Department of Public Administration, Lagos State University, Ojo, Lagos State ¹ninikx2002@yahoo.com, ³niyi.akeke@eksu.edu.ng*, ²oladimeji.ashade@lasu.edu.ng

ABSTRACT

The study examines the effect of knowledge management strategies on performance of firms in the small and medium scale sector in Nigeria. Previous researches have demonstrated growing concern on knowledge management and performance discourse but the benefits of knowledge management adoption are not fully exploited by small firms in emerging economies, particularly in Africa. For this reason, to explore our understanding in this area, the present study was conducted in the Nigerian small and medium scale enterprises sector. The data were collected through a survey of 798 registered firms in southwest geopolitical zone of the country. The data collected was subjected to editing and coding and was analysed using structural equation modeling method. The results of the study indicate a negative but statistically significant impact of knowledge management on the performance of SMEs. It is concluded that knowledge management elements do not have direct influence on the performance of firms in the small and medium sized enterprises sector.

Keywords: Knowledge management, strategy, performance, SMEs, structural equation modeling

Introduction

One common objective for operating business whether large or small is to succeed in level of competitiveness and improve performance. The driver of firm performance and sources of sustained competitive advantage have been at the core of strategic management research over many decades ago. Specifically, Venkatramma (1989) and Morgan and Strong 2003) asked the question of what is the business practice and strategy that lead to superior performance? The answer proposed by Theodosiou, Kehagias and Katsika (2012), Hilman and Kaliappen (2014) and Masa'deh *et al* (2015) is that firms which make strenuous efforts to formulate and implement effective strategies that exploit opportunities in the market place while capitalizing on available resources and capabilities, will witness performance improvement. To this end, Lenz (1980) and Hansen and Wernerfelt (1989) identified firm resources as influencing firm performance and that firm performance is depended on the fit between its resource position and strategic position (Cool

& Schendel, 1988). Furthermore, Peteraf (1993) affirms the importance of resources and capabilities of organisations to obtain competitive advantage as not only an end to greater performance but account for differences in performance of competing firms.

Resource based perspective stipulates that the fundamental sources and drivers of competitive advantage and superior performance are chiefly associated with the attributes of resources and capabilities which are valuable (Barney, 1991). Furthermore, Johannessen and Olsen (2003) and Martinez-Costa and Jimenez-Jimenez (2009) assert that knowledge among other operant resources remains dominant through its inimitability characteristics. Thus, business that strive to remain competitive ought to put more efforts on the management of its knowledge resources which are necessary to its increased profits, sales growth, market share and customer satisfaction (Byukusenge, Menene & Orobia, 2016). Essentially, firms that use knowledge management strategies enhance their capabilities which lead to improve business performance (Seba & Rowley, 2010). According to Audretsch and Thurik (2004), knowledge management (KM) is the best business strategy for improving competitive level and organisation that use it improves its performance and ensures its long-term viability in the business environment of its operation (Malhotra, 2001). An efficient use of knowledge not only lead to competitive advantage, but also will contribute to the sustainable development of enterprises (Storey & Barnett, 2000;).

The significance of knowledge management in terms of organisational performance has been established and its adoption is now widely practiced in diverse industry (Gholami, Asli, NazariShirkouhi & Noruzy 2013; Yang *et al.*, 2014).

Despite the growing concern on knowledge management and performance discourse as a scholarly field of research, the attention given to the discourse has not been strongly emphasized in SMEs considering their vital role in industrialising national economies. According to Marra, Ho and Edwards (2012), the benefits of knowledge management adoption are not fully exploited by SMEs in emerging economies, particularly in Africa. Besides, many of the studies already conducted are grounded in the context of advanced nations while solid empirical evidence in emerging economies like Nigeria has been sparse. It is therefore, misleading to assume the generalisability of results of knowledge management adoption in different national context. Therefore, this study aims to shrink this gap. It is hoped that the study will enable firms in the small and medium scale enterprises sector to make their employee learn and execute acquired knowledge for increased level of competitiveness, cost effectiveness and bring about change that will create customer value.

Literature Review and Theoretical Background

Increased attention has been focused on the concept of knowledge as the basis to explain differences that exists in performance among firms even when they operate within the same environmental conditions. The fact that knowledge is one way firms remain competitive and attain prosperity has increased in awareness among organizations for its proper management. This is because valuable and knowledgeable employees are not sufficient to outperform competitors until they are managed and controlled in a way that enables the firms to implement its chosen strategy (Barney, 1991). KM as a line of research has some definitional ambiguities, to the extent that Marques and Simon (2006) note that it is still today has no common conceptualisation in the extant

literature. As such, many terminologies have been used to define KM. However, Dahiya, Gupta and Jain, (2012) define it as a management strategy aimed at developing, transferring, transmitting, storing and implementing knowledge to enhance competency and efficiency of employees. KM is a business strategy that creates, accumulates, organize and utilize knowledge to enhance organisational performance (David & Wendy, 2009). KM may be seen as a process-oriented model that reflects strategies used to acquire or create knowledge, distribute, and store and apply within the firm. Chang and Lee (2008) consider it as a valuable process that impact organisational performance in different segments. It is a systematic and integrated management strategy that develops transfers, transmits stores, and implements knowledge so that it can improve efficiency and effectiveness of firms operations (Dahiya et al., 2012). Knowledge management is often seen as a multidimensional concept which includes knowledge acquisition, knowledge conversion, knowledge storage and knowledge use (Gold *et al* 2001; Alavi & Leidner, 2001; Lee & Choi, 2003; Darroch, 2005; Lee *et al.*, 2013).

Knowledge acquisition refers to the processes of creating, generating, developing, building and constructing knowledge. Knowledge acquisition is improved use of existing knowledge and effectively producing new knowledge through active conversation and externalized and distributed as new knowledge (Hung *et al.* 2006). This practice encompass the process of acquiring and learning appropriate knowledge from various internal and external resources, such as experiences, experts, relevant documents, plans and so forth. Interviewing and hiring of new employees, laddering, process mapping, concept mapping, observing, research and development, strategic alliances, seminars, educating and training are the most familiar techniques for knowledge acquisition (Gholami et al., 2013).

Knowledge transfer or conversion refers to integrating specialised knowledge of many individuals by converting them into firm knowledge, thus, making individual knowledge useful to the firm (Gold *et al.* 2001). It is an important process of knowledge management in organisational settings which deals with the transfer of knowledge to locations where it is needed and can be used (Novak, 2017). Knowledge conversion is a process through which personal and organisational knowledge is exchanged by conveying from one person to another, from group to group and from persons to group and from organization to organisation (Frappaolo, 2006). Knowledge conversion is made possible through the processes and activities of synthesis, refinement, integration, combination, coordination, distribution, and restructuring of knowledge. Kimaiyo, Kapkiyai and Sang, (2015) identified four commonly cited mechanisms for facilitating integration are rules and directives, sequencing, routines, and group problem-solving and decision-making.

Knowledge storage or protection refers to organising and retrieving organisational knowledge and use the information by the individuals (Karadsheh, Mansour, Alhawan, Azar & El-Bathy, 2009). Protection of knowledge asset is an essential task in the organization's knowledge management implementation. Security is always the major concern in any organisation's management of information systems. Protecting corporate knowledge requires clear but detailed policies to ensure the knowledge asset is in its safe state at all times. Knowledge protection is necessary for effective functioning and control within organisations (Kimaiyo et al., 2015). Knowledge application or utilisation refers to the process of the actual use of knowledge. It is the application of existing and new knowledge for decision-making, on the services, processes and

products of the organisation for improving performance and achieving goals (Gholami et al., 2013). It refers to the degree to which the firm applies the knowledge resources that are shared across functional boundaries. The application of knowledge enables organisations to continuously translate their expertise and capability into embodied products to create commercial value since knowledge can only be realised when it is applied to solve problems (Gold et al., 2001). Bhatt (2001) asserts that applying and sharing knowledge means making it more active and relevant for the organisation in creating values. Knowledge application also helps a firm to enhance its business performance by having up-to-date information and knowledge (Kimaiyo *et al.*, 2015). It is through knowledge utilization that acquired knowledge can be transformed from being a potential capability into a realised and dynamic capability that impacts organisational performance (Seleim & Khalil, 2007).

KM is one of the resources and capabilities possessed by firms and have been identified as a source of competitive priorities in the activities of any organisation (Barney, 1991; Gold et al, 2001). The resource based view of the firm provides the theoretical framework for this study. The theory according to Mahoney and Pandian (1992), Barney (1991) and Wernerfelt (1984) argues that firms success can be explained in terms of the resources and capabilities possessed by an organization, and that organization is a bundle of resources, and thus, a single resource does not create competitive advantage. It proposes that the firm's internal resources are the direct predictors of superior performance (Wernerfelt, 1984). Barney (1991) argues that internal resources in the possession of an enterprise which are scarce, unique, valuable, and costly to imitate and are not easily substituted can provide source of competitive advantage if well utilised. The resource based perspective maintained that firms perform well and create customer value when they formulate and execute strategies that exploit their internal resources and capabilities (Barney, 1991). This is due to the fact that within the firm there are unique and particular competencies and capabilities that can be leveraged to influence strategic goal options. Therefore, firms that possess and tap these resources obtain competitive advantage and above average returns on investments.

Firm Performance

Performance in organisation has been an important concept to scholars in academic as well as to business practitioners. Despite its importance, the construct is viewed by researchers as not only multi-dimensional but, also context driven. Firm performance deals with the ability of an enterprise to achieve performance compared to goals and objectives as high profit, quality product, increased market share, good financial breakthrough, and survival at pre-determined time using relevant strategy for action (Koontz & Donnell, 1993).

Firm performance has been measured in terms of profits growth, sales growth, and market share (Venkatraman, 1989). This means that most surveys of firm performance have used the approach of aggregating financial and non-financial measures (Kaplan & Norton, 1992; Lee & Choi, 2003). The financial and non-financial outcomes are distinct constructs with regard to the impact that KM may make in firm operations (Simonin, 1997). The most popular measurement of this type is the balanced scorecard (Kaplan & Norton, 1992).

Knowledge Management and Firm Performance

Knowledge management has been examined as essential to attain firm sustained competitive advantage and increased performance because knowledge is a strategic resource which enables firm to attain high level of competitiveness (Chirico, 2008). Barney's (1991) opinion is that knowledge leads to performance improvement when well managed. Empirical studies suggest that firms which use suitable knowledge management strategies might enhance their capabilities to move them to the next level of higher performance. For example, Marques and Garrigo-Simon (2006) confirmed that firms obtain better results than their competitors when they adopt knowledge management practices. Noruzy, Dalfard, Azhdari, Nazari-shirkouhi and Razazadeh (2012) sampled 106 manufacturing firms in their investigation of knowledge management influence on organisational performance. The results indicated a positive relationship. Rehman, Ilyas and Asghar (2015) cited in Ali et al., (2021) suggested that knowledge sharing, KM strategy and performance are found to be significantly related except explicit knowledge sharing practices. Yang (2010) assesses KM strategy-performance relationship and found that knowledge management strategy and performance connection is contingent on both performance-driven strategies and knowledge management-based competencies. Choi, Poon and Davis (2008) suggest that firms could benefit from KM by executing external-oriented, internal-oriented strategy. Beside, combining tacit-internal-oriented and explicit-external oriented KM strategies are complimentary of each other that possess synergistic effects of KM and performance. Torabi and El-Den's (2017) study of KM and productivity in Iran showed that employee intention to share and consequently the sharing of tacit knowledge has direct positive impacts on productivity as well as employee innovative contributions increased as a result of exposure to others' knowledge, expertise and experiences.

Furthermore, study like Aliyu (2015) on KM and manufacturing SMEs in Nigeria showed a significant and positive relationship between KM and business performance. Gholami et al's (2013) investigation of KM practices on organisational performance revealed that knowledge acquisition, storage, creation, sharing and implementation have significant factor loading on KM; productivity, financial performance, staff performance, work performance and customer satisfaction have significant factor loading on organisational performance. The results showed further that KM practices directly influence the performance of SMEs. McKeen, Zack and Singh (2006) revealed that all KM practices are directly related to organisational performance which in turn was directly related to financial performance. The results further indicate that different sets of KM practices were associated with specific value disciplines such as customer intimacy, product development and operational excellence. Based on the reviewed of extant literature, the study proposes the following null hypothesis:

There is no significant and positive relationship between KM strategies and SMEs performance in Nigeria.

Materials and Methods

The research design is cross sectional descriptive because the study seeks to describe the effect of knowledge management on performance of small and medium scale enterprises sector in Nigeria. The study sample consists of 1,078 respondents from a population of 73,082 out of which 798 responses were found usable. The questionnaire used was based on relevant literature review. The validity as well as reliability of the research instrument was carried out. The owner/managers of SMEs in six States of the southwest geopolitical zone were targeted. The survey lasted or four months. The variables of Knowledge management measurement was adapted from Wang et al. (2009) in Yewoh (2021), while organizational performance which is the dependent variable was measured through Balanced Score Card which comprises both financial and non-financial measures (Hernaus *et al.*,2002). Data collected were subjected to analysis using descriptive and inferential statistical techniques

Results and Discussion

Results

Effects of Knowledge Management on Performance of SMEs

This section presents the data analysis of the Effects of knowledge management on performance of SMEs. Structural equation model was used to achieve the objective. The results cover the confirmatory factor analysis, and the path analysis through the structural equation modeling (SEM).

Confirmatory Factor Analysis of KM on performance of SMEs

This section presents the regression estimates of the effects of knowledge management on performance of SMEs using SEM. Prior to the estimation of the effects, the general goodness of fit, using confirmatory factor analysis, is presented in Table 1. Confirmatory factor analysis is used to determine the acceptance or rejection of the assumption of the measurement model. Different index such χ^2 /degree of freedom, root mean square error of approximation (RMSEA), relative fit index (GFI) and comparative fit index (CFI). The results confirmed the appropriateness of the model specifications. Each of the indices fit the data having fell within the acceptable range of the basic benchmark. For instance, the acceptable fit for χ^2 /df is < 5 while the model value is 3.124. The value of the RFI is 0.922 which is above the basic specification. Similarly, all other index such as comparative fit index (CFI = 0.97), incremental fit Index (IFI = 0.90) and RMSEA of 0.07 are suitable for the specification of the model. This signifies that analysis of knowledge management as the causal factor of performance in SMEs is appropriate.

Table 1: Model fit index for the measurement model

	Acceptable fit	Model
x^2/df	< 5	3.124
RFI (Relative Fit Index)	> 0.90	0.922

CFI (Comparative Fit Index)	> 0.90	0.97
IFI (Incremental Fit Index)	> 0.90	0.98
RMSEA	< 0.08	0.07

The path analysis (SEM) of KM and SMEs Performance

The regression model is presented in Figure 1 and Table 2. The results in figure 1 show the intercepts of the model, the regression estimates of each of the constructs of KM and the variance estimate of the model. The intercept of the model which corresponds to the weighted average of the constructs show that knowledge acquisition variable is the least with the value of 2.93. The remaining constructs are high as they are approximately equal to 4 out of the 5 possible values based on the specification. This indicates that generally, knowledge acquisition among the SMEs is low. The results confirm the existence of knowledge conversation, application and protection among the SMEs. However, the regression model through the path analysis to examine the influence of KM on SMEs performance shows that out of the four variables that are specified as measurement of knowledge management, knowledge application and conversation are the items with the significant effect (Table 2) on performance of SMEs.

The coefficient of knowledge application is negative but significant for the SMEs (path coefficient = -0.155, CR = -2.207, P < 0.05). The result indicates inverse relationship between knowledge application strategies and performance of the SMEs. Since knowledge application enables firms to increase their efficiency and reduce costs, the result implies that the SMEs may be experiencing lower efficiency level and challenges associated with cost management. The negative but significant coefficient of the variable also implies existence of reduced level of value creation through knowledge application among the SMES.

The coefficient of knowledge conversation is negative but significantly related to the performance of SMEs (path coefficient = -0.338, CR = -5.306, P < 0.05). The negative but significant coefficient of the construct suggests that the SMEs are unable to directly utilize the advantage inherent in knowledge conversation to drive the performance of the firms. The negative sign on the variable suggests indirect effect of the variable on SMEs performance. This further indicates that the path way to ensuring a direct influence of knowledge management constructs on SMEs performance is yet to manifest among SMEs in Nigeria.

Results in Figure 1 show that the knowledge management constructs have different contributions to the performance level of SMEs. Knowledge acquisition contributes the lowest to the performance level of SMEs at an average level of 2.93. This is followed by knowledge conversation and knowledge protection at the average level of 3.95. Knowledge application is highest with an average value of 4.20. This suggests that driving SMEs performance through knowledge application is critical to boosting the performance of SMEs.

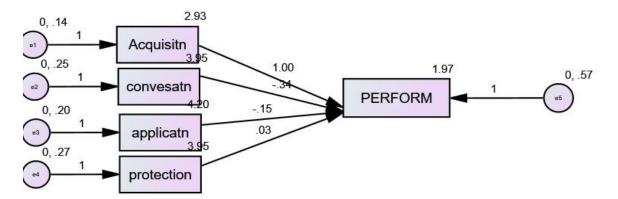


Figure: 1 Regression model (SEM) of knowledge management and SMEs performance from SEM Table 2: Regression model of KM and SMEs performance from SEM

			Estimate	S.E.	C.R.	Р
Perform	<	Protection	.033	.061	0.533	.594
Perform	<	Application	155	.070	-2.207	.027**
Perform	<	Conversation	338	.064	-5.306	***
Perform	<	Acquisition	1.000			

Source: Data Analysis Discussion on influence of Knowledge Management on Firm Performance

The purpose of this study is to investigate the impact of knowledge management on the performance of SMEs. It contributes to the literature by identifying the role of knowledge management indicators on firm performance in small and medium size enterprises (SMEs). Knowledge management has a positive and significant impact on the performance of SMEs in Southwest Nigeria, according to the regression model presented in figure 1 and table 2.

The findings revealed that the value of virtually all knowledge management strategies was extremely high. According to the results of the path analysis, knowledge application or use, as well as knowledge conversion, have a significant impact on the performance of SMEs. This means that knowledge application and conversion will make it easier to make decisions in order to maximize productivity and achieve exceptional performance (Edvardson, 2008). The findings of this study are consistent with those of previous studies that have looked into the relationship between knowledge management and performance. As an example, Marque and Simon (2006), McKeen et al (2013), and Harlow (2008) discovered that firms that adopt knowledge management practices outperform their competitors in terms of financial performance. Torabi and El-Den (2017) added that knowledge sharing will not only increase the productivity of firms, but it will also increase employee innovative contribution, which will enable the introduction of new products and services, as a result of their exposure to knowledge experiences, expertise, and exposure to other employees in the organisation. Consequently, managers must manage their firm's resource potentials by emphasizing not only the sharing and communicating of knowledge but also the ability to use that knowledge in order to increase efficiency and reduce costs in order to maximize performance and maximize profits (Gold et al., 2001). It is the opinion of Davenport and Prusak (2000) that the sharing of knowledge must begin at the human level in order to produce positive results when combined with technology.

Conclusion and Recommendations

In today's business environment, one of the most significant challenges for businesses is figuring out how to devise strategies for gaining a competitive advantage over competitors while still meeting bottom-line objectives. This is made possible, however, by the ability to learn about customers' needs and preferences in order to provide them with unique products that meet their needs and preferences. On the other hand, the lack of agreement among past researchers on how knowledge is managed and its effects upon firm outcomes leads to a search for an organisational practice that may act as a mechanism through which value can be created to satisfy customers in order to increase the effectiveness of the firm. This is the purpose of the study, which is to investigate how knowledge management strategies affect the performance of SMES in Nigeria. The findings of the study support the hypothesis that knowledge management strategy has an inverse and statistically significant impact on the performance of SMEs. This negative sign indicates that the variables have an indirect impact on the success of SMEs. The consequence is that the mechanism that will ensure that knowledge management frameworks have a direct impact on the performance of SMEs have a direct impact on the performance of SMEs have a direct impact on the performance of SMEs.

It is recommended that there is need to increase the level of knowledge resource investment in SMEs which more likely will help gain desirable outcomes. This is so because more knowledge experience will lead to efficiency and performance. Besides, SMEs operators need to deploy methods of managing knowledge that ever before particularly on how they apply knowledge because the negative but significant coefficient of knowledge management strategies imply the existence of reduced level of value creation through knowledge application.

REFERENCES

Alavi, M., & Leidner, D. E. (2001). Review: Knowledge management and knowledge management systems: Conceptual foundations and research issues. *MIS Quarterly*, 25(1),

107–136.

Ali, N., Gulzar, R., Ali, H., Ullah, A. & Siddique, U. (2021). Fostering Innovation With Digital Mode By Integrating Knowledge Management Focus And Sources Into A Degree Of Knowledge:

A Study Of Higher Education Of Pakistan. Multicultural Education, 7(8),

709-715.

Aliyu, S. M. (2015). Influence of knowledge management on performance in small manufacturing firms. *International Journal of Business, Economics and Law*, 8(2) (Dec.) Audretsch, D. B., & Thurik, A. R. (2004). A model of the entrepreneurial economy. *International Journal of Entrepreneurship Education*, 2, 143–166

Barney, J.B. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1),99-120

Bhatt, G. D. (2001). Knowledge management in organizations: Examining the interaction between technologies, techniques, and people. *Journal of Knowledge Management*, 5(1),

68–75

Byukusenge, E., Munene, J. & Orobia, L. (2016). Knowledge Management and Business

Performance: Mediating Effect of Innovation. *Journal of Business and Management Sciences*, 4(4), 82-92

Chirico, F. (2008). Knowledge accumulation in family firms: Evidence from four case studies. *International Small Business Journal*, 26, 433–462

Choi, B. & Lee, B. (2003). An empirical investigation of knowledge management styles and their effect on corporate performance. *Information and Management*, 40, 403-417 Choi, B., Poon, S.

K. & Davis, J. G. (2008). Effects of knowledge management strategy on organizational performance: A complementarity theory-based approach, Omega *International Journal of Management Science*, 36, 235 – 251

Cool, K., Schendel, D., 1988. Performance differences among strategic group members. *Strategic Management Journal*, 9(3), 207-22

Dahiya, D., Gupta, M., & Jain, P. (2012). Enterprise knowledge management system: A multi agent perspective. *Information Systems, Technology and Management*, 285, 271-281 Darroch, J. (2005). Knowledge management, innovation, and firm performance, *Journal of Knowledge Management*, 9(3) 101-115.

Davenport, T., & Prusak, L. (2000). Working knowledge: How organisations manage what they know? Harvard, USA: Harvard Business School Press

David, J. F., & Wendy, L.C. (2009). A multi-layered approach to CRM implementation. An investigation perspective. *European Management Journal*

Edvardsson I. R. (2009). Is knowledge management losing ground? Developments among Icelandic SMEs.knowledge *Management Research and Practice*, 7(1), 91–99

Frappaolo, C. (2006) *Knowledge management*. West Sussex, England: Capstone Publishing Gholami1, M. H., Asli, M. N., Shirkouhi, S. N., & Noruzy, A. (2012). Investigating the influence of knowledge management practices on organizational performance: An empirical study. *Acta Polytechnica Hungarica*, 10, 205-216

Gold, A.H., Malhortra, A. & Segars, A.H. (2001). Knowledge Management: An organizational capabilities perspective. *Journal of Management Information Systems*, 18(1), 185-214 Hansen, G. & Wernerfelt B. (1989). Determinants of firm performance: The relative importance of economic and organizational factors. *Strategic Management Journal* 10

(5), pp. 399- 411

Harlow, H. (2008). The effect of tacit knowledge on firm performance. Journal of Knowledge Management, 12, 148-163

Hernaus, T., Bach, M. P., & Vuksic, V. B. (2012). Influence of strategic approach to BPM on financial and non-financial performance. *Baltic Journal of Management*, 7(4), 376–396. Hilman, H. & Kaliappen, N. (2014). Do Cost Leadership Strategy and Process Innovation

Influence the Performance of Malaysia Hotel Industry? Asian Social Science, 10(10), 134–141.

Hung, R. H., Lien, B. Y., McLean, G. N., & Fang, S. (2006). Knowledge as a facilitator for enhancing innovation performance through total quality management. *Proceeding of Academy of Management conference*

Johannessen, J. & Olsen, B. (2003), Knowledge management and sustainable competitive advantages: the impact of dynamic contextual training. *International Journal of Information Management*, 23(4), 277-89

Kaplan, R.S. & Norton, D.P. (1992), The balanced scorecard – measures that drive performance. *Harvard Business Review*, 70(1), 71-8.

Karadsheh, L., Mansour, E., Alhawari, S., Azar, G., & El-Bathy, N. (2009) A theoretical framework for knowledge management process: Towards improving knowledge performance. *Journal of Communications of the IBIMA*, 7(1), 67-79

Kimaiyo, I. K., Kapkiyai, C., & Sang, J. C. (2015). Effect of knowledge management on firm performance in commercial banks in Nakuru, Eldoret and Kisumu. *European Journal of*

Business and Management, 7(3), 207-216

Koontz, H. & Donnell, C. (1993). *Introduction to Management*. McGraw-Hill Inc., New York Lee, H., & Choi, B., (2003). Knowledge management enablers, processes, and organizational performance: An integrative view and empirical examination. *Journal of Management Information Systems*, 20(1), 179-228.

Lee, V. H., Leong, L. Y., Hew, T. S., & Ooi, K. B. (2013). Knowledge management: A key determinant in advancing technological innovation? *Journal of Knowledge Management*, 17(6), 848-872.

Lenz, R. T. (1980). Environment, strategy, organization structure and performance. *Strategic Management Journal*, 1, 209-226.

Mahoney, J. & Pandian J., (1992). The Resource-Based View within the conversation of strategic management. *Strategic Management Journal*, 13(5), 363-380

Malhotra, Y. (2001). It's Time to Cultivate Growth. Leading Views, March.

Martinez-Costa, M., & Jimenez-Jimenez, D. (2009). The effectiveness of TQM: The key role of organizational learning in small business. *International Small Business Journal*, 27, 98-125

Marra, M., Ho, W. & Edwards, J. S. (2012). Supply chain knowledge management: A literature review. *Expert systems with applications*, 39(5), 6103-6110

Marques, D. P., & Simon, F. J. G. (2006). The effect of knowledge management practices on firm performance. *Journal of Knowledge Management*, 10(3), 143-156

Masa'deh, R., Obeidat, B. Y., Al-Dmour, R. H., & Tarhini, A. (2015). Knowledge management strategies as intermediary variables between IT-business strategic alignment and firm performance. *European Scientific Journal*, 11, 344-368

McKeen, J. D., Zack, M. H., & Singh, S. (2006). Knowledge management and organizational performance: An exploratory survey. *In Proceedings of the 39th annual Hawaii international conference on systems sciences*, 1–9

Morgan, R. & Strong, C> A, (2003). Business performance and dimensions of strategic orientation. *Journal of Business Research*, 56(3), 163-176.

- Nonaka, I. (1998). The knowledge creation company, *Harvard Business Review on Knowledge* Management
- Noruzy, A., Dalfard, V., Azhdari, B., Nazari-Shirkouhi, S., & Rezazadeh, A. (2012). Relations between transformational leadership, organizational learning, Knowledge management, organizational innovation, and organizational performance: an empirical investigation of manufacturing firms. *The International Journal of Advanced Manufacturing Technology*, 1-13

Novak, N. (2017). Knowledge management and organizational performance – literature review.

Management, Knowledge and Learning International Conference, 17–19 M Lublin Poland

Peteraf MA (1993). The cornerstones of competitive advantage: Resource-based view. *Strategic Management. Journal.* 14, 179-191

Seba, I., & Rowley, J. (2010). Knowledge management in UK Police force. *Journal of Knowledge Management*, 14, 611-626

Seleim, A., & Khalil, O. (2007). Knowledge management and organizational performance in the Egyptiansoftware firms. *International Journal of Knowledge Management*, 3(4), 37-66

Simonin, B.L. (1997). The importance of collaborative knowhow: An empirical test of the learning organization. *Academy of Management Journal*, 40(5), 1150-1174

Storey, J. & Barnett, E. (2000). Knowledge management initiatives learning from failure. *Journal* of Knowledge Management, 4(2)

Storey, J., & Barnett, E. (2000). Knowledge management initiatives: Learning from failure. *Journal* of Knowledge Management, 4, 145–156

Theodosiou, M., Kehagias, V., & Katsika, E. (2012). Strategic orientation, marketing capabilities and firm performance: An empirical investigation in the context of frontline managers in service organisations. *Industrial Marketing Management*, 41(7), 158-1070.

Torabi, F. & El-Den, J. (2017). The impact of knowledge management on organizational productivity: A case study on Koosar Bank of Iran. *Procedia Computer Science*, 124,

300–310 Venkatraman, N. (1989). Strategic orientation of business enterprises: The construct, dimensionality, and measurement. *Management Science*, 35(8), 942-962

Voronov, V. & Lavrinento, O. (2014). Knowledge management and the increase of SME competitiveness: A case study. Baltic Region, 3(21), 22-32

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, S., Noe, R. A., & Wang, Z. M. (2014). Motivating knowledge sharing in knowledge management systems: A quasi-field experiment. *Journal of Management*, 40(4), 978– 1009.

Wernerfelt, B. 1984. A resource-based view of the firm. *Strategic Management Journal*. 5(2), 171-180

Yang,L, C- Huang, & Hsu. T. (2014). Knowledge leadership to improve project and organizational performance. *International Journal of Project Management*, 32, 40–53 Yewoh, F R. (2021). Knowledge management orientation and its impact on organizational performance. Case of selected micro financial institutions (MFIs) in Yaoundé, Cameroon

(April)

This pages has been intentional left blank