

# KNOWLEDGE MANAGEMENT AND ITS IMPACT ON ORGANISATIONAL INNOVATION AND PERFORMANCE IN NIGERIAN EDUCATIONAL SECTOR

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#### Abstract

Knowledge management is a process that transits individual knowledge into organisational knowledge. The aim of this paper is to show that through creating, accumulating, organizing and utilizing knowledge, organisations can enhance organisational performance. The findings indicates that knowledge management had certain impact on performance of organizations; training and development affected employee performance positively; employee motivation has positive impact on the ability to share knowledge, and E-learning tools affect knowledge sharing positively in Nigerian Educational sector. The study concludes that organizations need to improve existing skills and acquire new ones via knowledge management so as to have competitive advantages over organizations that do not practice knowledge management. The study recommends that Nigerian managers should fashioned out ways of implementing knowledge management that is most suitable for the organizations in order to enhance performance taking into consideration the nature of the organization and culture of the community where the organization is located and the prevailing situations facing the organization at a time. **Keywords:** Knowledge Management, Innovation, Organisation, and Performance

#### **1. INTRODUCTION**

Knowledge has become a shared asset that may be the key competitive advantage in the global economy. The ability for success of the companies is closely tied to their potential to innovate and to develop their ways of production; all this is based on the knowledge assets possessed by the company (Davenport & Prusak, 1998). The current focus and study of knowledge management is



not for the sake academics only, but a realization that knowing about knowledge is critical to business growth and business survival.

Knowledge is not just facts and numbers that organizations have on spreadsheets or in maps but rather it concerns the whole human experience acquired through education and working skills and experience (2). Today's businesses are characterized by a high degree of complexity and that indicates for a more accumulation in knowledge, and for sure this leads to a more difficulty in managing and controlling it in terms of storage, organizing and retrieval

During the past decade research on Knowledge Management (KM) has emerged as a new direction in the management literature. At the same time many governments have started to be aware of challenges that have forced them to think about new approaches and practices that can help them to be competitive (Chua & Goh, 2008). In developing countries, the issue of using KM initiatives is new to many organizations and even more to governmental organizations (Chawla & Joshi, 2010). The need for such research is rising with shrinking budgets available and governments' search for sustainable resources (Liao et al., 2008; Yang, 2010).

However, recent studies suggest that KM is still not well linked with certain practices relevant to organisational development despite the rapidly expanding knowledge economy (Lucas, 2010; Phusavat et al., 2010). Effective KM practices require an organisational climate with a reward system that values, encourages cooperation, trust, learning and innovation, which are still missing in many government organisations (Akdere, 2009).

Organizational knowledge is considered, nowadays, an asset that, although intangible, generates competitive advantage to the organization. To Grant (1996), competitive advantage is reached through continuous improvement and process innovation and of product, and knowledge is the organizational resource that allows the organization to develop activities of improvement and innovation. The evolution itself of the concept of company theory shows a paradigm change regarding the importance of knowledge. Grant (1996) and Kogut & Zander (1992) argue that this evolution comes from a vision in which profitability is explained based on existing productive factors, to a vision based on knowledge, constituting the theory based on knowledge according to which the competitive advantage of an organization is subjected to knowledge.



KM as an organisational internal resource can support the development of a comprehensive system, allowing the generation of new knowledge according to organisation needs; taking into consideration availability of proper environment and organisational status (Salisbury, 2003). In different industries, increases in knowledge management are associated with organizational changes towards better productivity that enables service or product differentiation, better organisational competitiveness through effective results and integrated understanding of both organisational developments with knowledge capabilities in a particular environment.

## Statement Of The Problem

Due to the rapid changes in a business environment, sustainability of an organization is possible only if the knowledge management trademark is utilized. As a result of this fact the foundation of industrialized economies has shifted from natural resources to intellectual assets. Executives have been compelled to examine the knowledge underlying their business and how that knowledge is used. The issue of ignoring knowledge management is mostly seen in organizations that are not concerned with influencing the ways in which people store and share their wisdom and understanding; and organizations that do not get involved in increasing the capabilities and potential of employees by providing learning and continuous development opportunities for enhancing knowledge sharing. Notably public sector organizations usually undermine the act of training and developing their personnel. They are also not able to identify the driving forces of knowledge management which influence the way knowledge is shared in these organizations. These organizations do not motivate their employees commensurately in order to share their knowledge and improve productivity and competitiveness. This however presents negative impact on such organizations and such organization ends up performing poorly.

Many organizations are reasonably good at acquiring knowledge but end up wasting this resource by not effectively disseminating it. Recent studies report that knowledge sharing is usually the weakest link in knowledge management. How do organizations share knowledge? Many corporate executives believe that training is the main element of knowledge management. Formal training is useful, but most knowledge sharing occurs through communication processes that quickly and fluidly share meaningful information across organization boundaries. All these problems which



hinder the performance of organizations in Educational sector have necessitated studying the impact of knowledge management in the Nigerian Educational sector.

#### **Objectives Of The Study**

The broad objective of the study is to assess knowledge management and its impact on organisational innovation and performance in Nigerian educational sector. The following are the specific objectives for the study:

- i. To determine the relationship between knowledge management and organizational Innovation and performance.
- ii. To evaluate how e-learning tools affect knowledge sharing in the Nigerian Educational sector.

## 2. METHODOLOGY

The paper adopted a singular source of data collection. The secondary source of data generation, which include the use of textbooks written by different authors on the subject matter, journals, magazines, information from the internet and other published and unpublished materials relevant to work. The data was analyzed using the content analysis approach. This is because of its major dependence on the secondary source data.

#### **3. LITERATURE REVIEW**

#### 3.1 Concept of Knowledge Management

Knowledge management has assumed a broad range of meaning from its inception. However, most of the published material remain ambiguous and provides little empirical evidence to support a specific definition for the knowledge management concept. Knowledge management has been acknowledged as being important to competitive advantage and organizational survival, thus a clear understanding and agreement about knowledge management should prime to be of a great value for create a competitive advantage with their product and services. They continue to contemplate the knowledge concept and impact on organization success. In an effort to define knowledge management in business objectives, organizations must determine which corporate knowledge should be harvested organized, management and shared. A general definition of



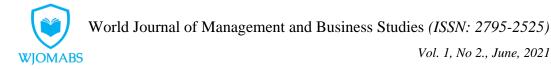
knowledge management (KM) has been getting the right information to the peoples at the right time.

As the concept is developed, the primary objectives is to add value to customers through the acquisition, creations, sharing and reuse of any aspect of knowledge relevant to the organization and its internal and external environment. The ability to manage and effectively use knowledge to develop new product and services or make important change in business decision will continue to be view as a competitive advantage while clearly demonstrating the value of KM system within the organization.

The general purpose of knowledge management (KM) is to make knowledge usable for more than one individual, e.g. for an organization as a whole; that is, to share it. New knowledge-based views on organizations suggest that it is knowledge that holds organizations together (Brown & Duguid, 1998). Knowledge management has existed and used for a long time, although it was neither called by this name nor necessarily recognized as what it is until a few years ago (Davenport & Prusak, 1998).

Knowledge management (KM) comprises a range of practices used in an organization to identify, create, represent, distribute knowledge for reuse and enable adoption of insights and experiences (Ezigbo, 2007). Such insights and experiences comprise knowledge, either embodied in individuals or embodied in organizational processes or practices. Knowledge management includes courses taught in the fields of business administration, information systems, management, and library and information sciences (Alavi & Leidner, 1999).

The intent with knowledge management is to manage knowledge practically and effectively to reach broad operational and strategic objectives. That requires crystal-clear understanding of what is meant by knowledge. We must be specific about what knowledge is to manipulate, monitor, and judge how it affects-and is affected by-people, culture, knowledge management activities, and other factors within the enterprise and its environment.



#### 3.2 Knowledge Management And Organizational Performance

Organizational performance (OP) means to what extent the organizational goals and objectives can be achieved. Many empirical and conceptual studies were conducted to test the relationship between Knowledge Management and Organisational Performance. (Kharabsheh et al, 2012) Investigated the organizational impact of knowledge management practices.

The study argued that it is expected that knowledge management practices including (communication, the ability to create new knowledge, acquisition, policies and strategies of KM, and training) affect organizational performance dimensions which include (financial performance, new product success, customer satisfaction, market share) in a positive way among all the dimensions. However, it was revealed that the highest impact was on the success of a new product, which is one of the OP dimensions, and the training was the strongest affecting dimension on OP. In order to help organizations including academic ones (e.g., Universities) to correctly choosing the strategies for investing in knowledge resources, an empirical study was conducted in the Isfahan universities in Iran, presented that knowledge management resources such as organizational structure and knowledge application are positively affecting OP while other resources such as technology and knowledge conversion are not (Fattahiyan et al, 2012).

It is likely to address that KM strategy could include knowledge transfer concentration, open mindedness orientation, and skill sharing and integrated value knowledge. The most significant positive relationships from the whole KM processes performance indicators are factor strategy and leadership, among knowledge management enablers (Ho, 2009). On the other hand, other similar studies were conducted to reveal the influence of KM resources on organizational performance with the same dimensions. The results were supported along with organizational structure and knowledge application and weren't the case with as technology and knowledge conversion (Mills and Smith, 2010).

With this in mind, we can induce that not all KM resources contribute directly or positively on OP, in other words, each resource is not linked to performance, rather as a composed. It has been found



that a non-expected percentage of employees have no interest in knowledge sharing and retrieving, and most of them prefer to depend on their own knowledge and intuition (Shannak, 2010).

# 3.3 Knowledge Management and Organisational Innovation

Organisational Innovation can be described as the practices in the organisation leading to an environment of management and climate for the removal of barriers against idea generation and its implementation (Lee et al., 2011, Hung et al., 2010). Researchers believe that through organisational innovation redundant learning is decreased and organisational efficiency and responsiveness is increased (Basadur & Gelade, 2006).

Jensen et al. (2007) argue that the informal processes of learning and experience-based know-how establish different forms of knowledge that lead to different modes of innovation, since this style of unstructured learning attracts communities of practice in mobilizing tacit knowledge and innovation in problem-solving and learning. With KM influence, addressing business problems can help create innovative products or services that can enhance customer relationships, ensuring organisational growth.

KM practices are believed to play an intermediary role towards Organisational Innoation (Grimaldi & Rippa, 2011). To enhance the relationships between ability to retrieve and use knowledge, called knowledge inertia, Organisational innovation plays a role in enhancing the organisational problemsolving practices, depending on the type of organization. Hung et al. (2010) report that the humanist approach to KM influence significantly and positively affects innovation performance when compared to the IT-focused KM approach.

Chaston (2012) believes that KM influences open innovation practices in Government Organisations through enhancing the way the organisation works with its partners starting with changing the way of administering and improving work practices and processes. The consistent influence of KM is found to enhance the organisation's ability to produce products or services that are competitive, efficient, and effective while being able to continuously improve. KM practices



are found to enhance the ongoing interaction of individuals and groups in creating, capturing and sharing knowledge while turning it into new services and profitable products.

Nowadays, innovation management emerges as a viable concept that leads to OC through better performance and competitive edge that would happen through improvement in cultural creativity (Chaston, 2012). With more cultural communication, knowledge transfer can be facilitated to broaden organisational learning leading to Organisational Innovation (Lin, 2007). KM raises the capacity of the organisation making sense of the past compilation of experiences connecting patterns from the past to the present and future; this enhances the ability of the organisation to speed up creative processes to generate Organisational Innovation (Rivera-Vazquez et al., 2009). Certain cultural practices such as interpersonal trust, communication between staff, information systems availability, coordination, adaptability, responsiveness, organisation structure and rewards have influenced KM and Organisational Innovation. The influence of KM has a number of positive results that trigger Organisational Innovation, starting from maximizing Organisational Innovation the utilization of resources, to creating better government capacity to delivering value added services which finally encourages more open culture creating good governance (Chuang et al., 2010). Improving the image of the GOs can be an achievable task and this would raise the standing of civil servants, possibly leading to a culture of continuous improvement (Lee et al., 2011).

Studies demonstrate that knowledge sharing is a KM enabler that enhances innovation performance and reduces redundant learning efforts. Lin (2007) argues that employee willingness to both donate and collect knowledge enable the firm to improve innovation capability. Knowledge has the possibility to influence innovation when the organisation has to share and make interactions in the way they both influence organisation performance towards competitiveness.

# 3.4 Knowledge Management and Information Technology

According to literature and the analysis of critical success factors of KM, information technology (IT) is one of three components of KM (Martin, 2005). Some authors say that the most dominant KM paradigms are about IT. Results of research (Scarorough et al, 1998) show that 70 % of papers



on KM stress the importance of IT systems, developed to manage explicit knowledge. Even authors, whose main field of KM research is not about the importance of IT, state that information technology is crucial for successful knowledge management (Almashari et al, 2002).

Based on research (Rasula et al, 2008), two elements form the IT component of KM: the first element is the ability of IT to capture knowledge and the second element is usage of IT tools. First, the importance of IT systems designed to capture and store tacit or explicit knowledge will be stressed. Formalizing knowledge and storing it into applications (Kulkarai and St Louis, 2003) allows us to start the knowledge transformation cycle and the process of reshaping tacit knowledge into explicit knowledge (Nonaka and Takeuchi, 1995). Secondly, the usage and quality of IT tools, the quality of information, user satisfaction, rate of usage, efficiency and accessibility, are also very important for managing knowledge (Kulkarai and St Louis, 2003).

When it comes to judging the influence of those two elements on the KM construct, it is believed that the level of capturing both explicit and tacit knowledge with IT tools affects KM in a positive manner (Lee et al, 2005). It is the same with the usage of IT tools. The higher the quality of tools, quality of information, user satisfaction, usage and accessibility, the greater the positive influence on KM (Almashari et al, 2002). However, the compelling need for KM in organisations is fuelled by a host of social economic and technological factors and only when used in tandem with an appropriate KM strategy, IT is a powerful enabler of organisational success (Chua, 2004).

## 3.5 Management of Knowledge Process

In the literature, the importance of KM as a tool to achieve competitive advantage is a consolidated fact. All organizations need to mobilize their knowledge to promote and support their strategies, and KM indicates the system of organization and mobilization of knowledge acquired by the organization. From the point of view of literature review, it is possible to list different models that address the control group. These different models point to a variety of issues around KM. The models can be analyzed in two main areas. The first refers to KM as a restricted subject to IT scope. One of the main problems about IT on the KM contribution is the difficulty and/or impossibility to register the tacit knowledge of individuals, because it is impossible, according to



the author, to absorb or scan the content of human mind and store it inside a database (Bhatt, 2002). Regarding the importance of tacit knowledge, the author argues: The effective knowledge creation, specifically tacit, depends on strong relationships between members of the organization.

Knowledge management should focus its efforts on tacit knowledge, experimenting with new organizational structures, culture and reward systems to increase social relations in such a way that implicit knowledge is expressed, shared, and argued (Bhatt, 2002). The second, in turn, considers organizational development, emphasizing structure and organizational culture as facilitating the interaction between individuals, enhancing knowledge sharing (Rowley, 2001). Although many publications emphasize the information system processes for the conduct of KM, this cannot be mistaken with a vast electronic library that stores information. The focus of KM process is on connecting people, causing them to think and act together (Bhatt, 2002).

The KM must match IT with business processes, constituting an activity that develops, stores, and transfers knowledge, in order to provide the members of the organization information necessary to make correct decisions (Pinho et al., 2012). KM models based on IT secure the knowledge from static information, neglecting the role that individuals have about this process. Liao et al. (2011), treat KM as a process with specific phases, which have as main objective the dissemination of knowledge for later reuse by other individuals and groups, and subsequent transformation of their content, generating new knowledge.

## **4** CONCLUSION

Nowadays, knowledge is considered as an essential asset in any organization. Thus, many organizations are trying to apply Knowledge management in order to improve their organizational performance. This article has reviewed the positive impact of knowledge management and some of its practices on organizational performance. Many studies have concluded that KM is the main reason to business growth. Thus, it is good to invest in KM resources to attain organizational performance improvement, since KM resources and practices are related directly and indirectly to it when they are implemented effectively. In order to implement an effective knowledge management system, the support of senior management in consolidation of building knowledge



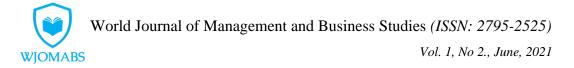
management and in spreading the culture of knowledge sharing need to be taken under consideration. Furthermore, there is a huge need to continuously train and educate the organizations' CEOs about the importance of KM through group works and training programs.

# **5 RECOMMENDATION**

Based on the findings of this study, the following recommendations are made: Management of knowledge, as the course of this study, was discovered as an emergent discipline as well as management strategy. Therefore, it is not of place to taste that it is a virgin area of human endeavor that needs profound exploration. Consequently, management scholars, students and particularly researchers are implored to critically assess all its forms and ramifications, thus bringing to limelight information that would help enrich the knowledge of individuals on the knowledge management strategy. Emphasis could be made on its strengths, weaknesses, opportunities and threats (SWOT).

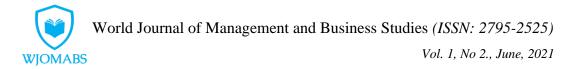
Training in knowledge management should be carried out from time to time in order to educate the management/senior staff of the organization on how they could respond to today's dynamic work environment. Management of organizations should be such that can enhance the productivity of employees and by extension, profitability of the organization through the implementation of knowledge management. There is a need for organizations implementing knowledge to respond positively to high performance variables, in order to promote maximization of the objectives of organizations

Therefore Nigerian managers should fashion out ways of implementing knowledge management that is most suitable for their organizations in order to enhance performance taking into consideration the nature of the organization, the culture of the community where the organization is located and the prevailing situations facing the organization at a time.

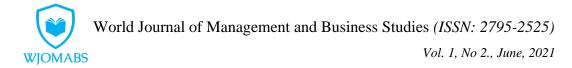


#### **6 REFERENCES**

- Akdere, M. (2009). The Role of Knowledge Management in Quality Management Practices: Achieving Performance Excellence in organisations. Advances in Developing Human Resources, 11(3), 349-361. <u>http://dx.doi.org/10.1177/1523422309338575</u>
- Alavi, M., & Leider, D. (2001). Knowledge Management and knowledge management systems: Conceptual foundations and research issues. MIS Quarterly, 25(1), 107-136. http://dx.doi.org/10.2307/3250961
- AlMashari, M., Zairi, M. &AlAthari, A. (2002). An empirical study of the impact of knowledge management on organizational performance. Journal of Computer Information Systems, 42 (5), 74–82.
- Bhatt, G.D. (2002). Management strategies for individual knowledge and organizational knowledge. Journal of Knowledge Management, 6(1), 31-39.
- Brown, J. S. and Duguid, P. (1998), "Organization Knowledge, California Management Review," Vol.40, Issues 3, pp. 90-111.
- Chaston, I. (2012). Knowledge Management and Open Innovation in United Kingdom Local Authorities. International Journal of Public Administration, 35, 248–258. http://dx.doi.org/10.1080/01900692.2011.651293
- Chawla, D., & Joshi, H. (2010). Knowledge management initiatives in Indian public and private sector Organizations. Journal of Knowledge Management, 14(6), 811-827. http://dx.doi.org/10.1108/13673271011084871
- Chua, A., & Goh, D. (2008). Untying the knot of knowledge management measurement: a study of six public service agencies in Singapore, Journal of Information Science, 34(3), 259– 274. http://dx.doi.org/10.1177/0165551507084139
- Chua, A. (2004). Knowledge management system architecture: a bridge between KM consultants and technologists. International Journal of Information Management, 24, 87-98.
- Chuang, L., Liu, C., Tsai, W., & Huang, C. (2010). Towards an analytical framework of organisational innovation in the service industry. African Journal of Business Management, 4(5), 790-799.

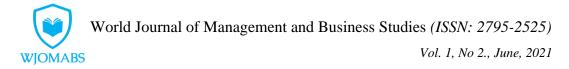


- Davenport, T.H., Prusak, L. (1998). Working Knowledge: How organizations manage that they know, Harvard Business School Press, Boston, MA.
- Ezigbo, C. A. (2007), Advanced Course on Management Theory and Application, Enugu: Immaculate Publications Limited.
- Fattahiyan S., R. Hoveida, S. Siadat, and H. Tallebi, (2012) Study Of Relationship Between Knowledge Management Enablers And Processes With Organizational Performancel, Interdisciplinary Journal Of Contemporary Research In Business, Vol.4 (4), pp. 36-44.
- Grant, R.M. (1996). Toward a knowledge-based theory of the firm. Strategic Management Journal, 17, 109-122. doi: 10.2307/2486994
- Grimaldi, M., & Rippa, P. (2011). An AHP-Based Framework for Selecting Knowledge Management Tools to Sustain Innovation Process. Knowledge and Process Management, 18(1), 45–55. <u>http://dx.doi.org/10.1002/kpm.365</u>
- Ho C., (2009) The Relationship Between Knowledge Management Enablers And Performancel, Industrial Management & Data Systems. Vol. 109 (1), pp. 98-117.
- Hung, R., Lien, B., Fang, S., & McLean, G. (2010). Knowledge as a facilitator for enhancing innovation performance through total quality management. Total Quality Management, 21(4), 425–438. <u>http://dx.doi.org/10.1080/14783361003606795</u>
- Jensen, M., Johnson, B., Lorenz, E., & Lundvall, B. (2007). Forms of knowledge and modes of innovation. Research Policy, 36, 680–693. <u>http://dx.doi.org/10.1016/j.respol.2007.01.006</u>
- Kharabsheh R., I. Magableh, and S. Sawadha, (2012) Knowledge Management Practices (KMPs) and Its Impact on Organizational Performance in Pharmaceutical Firms<sup>I</sup>.,European Journal of Economics, Finance and Administrative Sciences, Vol.48, pp. 6-15.
- Kogut, B., & Zander, U. (1992). Knowledge of the firm, combinative capabilities and the replication of technology. Organization Studies, 3, 383-397.
- Kulkarni, U. & St Louis. R. (2003). Organizational Self Assessment of Knowledge Management Maturity. Proceedings of the 9th Americas Conference on Information Systems 2542-2551.
- Lee, K. C., Lee, S. & Kang, I. W. (2005). KMPI: measuring knowledge management performance. Information & Management, 42 (3), 469–482.
- Lee, W., Hung, S., & Chau, P. (2011). Influence of Knowledge Management Infrastructure on Innovative Business Processes and Market-Interrelationship Performance: An Empirical



Study of Hospitals in Taiwan. Journal of Global Information Management, 19(2), 67-89. http://dx.doi.org/10.4018/jgim.2011040104

- Liao, S., Feib, W., & Liub, C. (2008). Relationships between knowledge inertia, organizational learning and organization innovation. Technovation 28, 183–195. http://dx.doi.org/10.1016/j.technovation.2007.11.005
- Lin, H.F.A. (2007).A stage model of knowledge management: an empirical investigation of process and effectiveness. Journal of Information Science, 33(6), 643-659. doi: 10.1177/0165551506076395
- Martin, V. A. et al. (2005). Cultivating knowledge sharing through the relationship management maturity model. The Learning Organization, 12 (4), 340–354.
- Mills A., and T. Smith., (2010) Exploring the Impact of Knowledge Management Capabilities on Organizational Effectiveness", CONF-IRM 2010 Proceedings. 35.
- Nonaka, I. & Takeuchi, H. (1995). The Knowledge-Creating Company: How Japanese Companies Create the Dynamics of Innovation. New York, Oxford (UK): Oxford University Press.
- Pinho, I., Rego, A., & Cunha, M. P. (2012). Improving knowledge management processes: a hybrid positive approach. Journal of Knowledge Management, 16(2), 215-242. http://dx.doi.org/10.1108/13673271211218834.
- Rašula, J., Bosilj Vukšić, V. & Indihar Štemberger, M. (2008). The Integrated Knowledge Management Maturity Model. Zagreb International Review of Economics & Business, 9 (2), 47-62.
- Rivera-Vazquez, J., Ortiz-Fournier, L., & Rogelio Flores, R. (2009). Overcoming cultural barriers for innovation and knowledge sharing. Journal of Knowledge Management, 13(5), 257-270. http://dx.doi.org/10.1108/13673270910988097
- Rowley, J. (2001). Knowledge management in pursuit of learning. The learning with knowledge cycle. Journal of Information Science, 27(4), 227-237. http://dx.doi. org/10.1177/016555150102700406.
- Scarborough, H., Swan, J. A. & Preston, J. (1998). Knowledge Management and the Learning Organization. Report for the Institute of Personnel Development, London: Institute of Personnel and Development.



- Shannak R., (2010) Knowledge-based Systems Support for Strategic Decisions<sup>II</sup>. European Journal of Economics, Finance and Administrative Sciences, Vol.21 (2010), pp. 7-20, 2010.
- Yang, J. (2010). The knowledge management strategy and its effect on firm performance: a contingence analysis. International Journal of Production Economics, 125(2), 215-223. http://dx.doi.org/10.1016/j.ijpe.2010.03.012.