Knowledge Management Practice For Competitive Advantage Through Innovation

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ABSTRACT: The purpose of this paper is to provide insight on capability of knowledge management practices inestablishing competitive advantage of organization through innovation. This paper indicates that practice of knowledge management as knowledge dissemination is crucial to empower competencies and skills of the workers for innovation. However, the facts show that knowledge management practices have encountered many obstacles to be implemented effectively. Therefore, this paper considers that it is important to revitalize knowledge management practices through a variety of implementations such as acquisition, conversion, and application to drive innovation in order to adapt on change in the future for organizational competitive advantage in era of knowledge-based economy.

KEYWORD: Knowledge Management, Competitive Advantage, Innovation

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I. INTRODUCTION

Knowledge is fundamental resource for establishing competitive advantage of an organization in the era of knowledge economy. In this era, workers are demanded to be more proactive driven by the need for innovation. It is imperative for human resources to have specific skills and expertise to survive in adapting the need of knowledge based economy. As stated by Lundvall and Nielsen (2007), organizations will failin establishing competitive advantage when there is no innovation. Thus, knowledge management is an antiquated phenomenon. Competency of workers and how they are integrated into organization capacity is the key to organizational performance. It depends on the ability of leadersinmanaging the need of organization on the knowledge of the worker. Therefore, Martínez-Costa et al. (2013) argued that knowledge management is often considered as a source of competitive advantage in turbulent market. Thus, organization can be prepared to face high competition and rapid changes by practicing concept of knowledge management and innovation.

As needed, innovation related to knowledge management has been around for the most recent two decades since 1975. In the mid-1980s, people and organizations began to welcome on the importance of knowledge in developing aggressive environment. From 1986 to 1989, there were reports in the publicabout how to monitor or oversee knowledge strictly. There are studies, consequences, and meetings related to knowledge management themes (Wiig, 1997). Further, according to Ramusen and Nielsen (2011), knowledgemanagement has become important in management literature. In the last 20 years, knowledge management has called for special attention from organizations. It encourages dynamic use of knowledge since there is a continuing need forinnovation that changes the focus on the characteristics of human resources as knowledge capital for organization.

At the same time, researchers have revealed the significant effect ofknowledge management practice on innovation (e.g. Claro et al., 2006; Darroch, 2005;Tan & Nasurdin, 2011;McAdam, 2000; Ramusen &Nielsen, 2011;Liao& Wu, 2010). In this way, knowledge management has taken place as a new requirement to consolidate, create and empower the development of a framework adapted to situations that flare up to the knowledge-based economy(Palacios et al., 2009). In the knowledge economy, knowledge management can lead organization to the innovation for sustaining competitive advantage. However, there is still debate by some researchers on the effect of knowledge management practice on innovation (e.g. Alegre et al., 2013; Lundvall & Nielsen, 2007; Del Giudice et al., 2014; Chawla &Joshi, 2010). According to Darroch (2005), it is hard to get conclusion on the relationship between effective practice of knowledge management and innovation because some empirical evidence reject this relationship. Therefore, this paper indicates that there is a need for knowledge management to be practicedeffectively. Thus, This paper will provide insight to understand the crucial role of knowledge management in adopting innovation for success in achieving competitive advantage of organization in the era of knowledge economy.

II. LITERATURE REVIEW

2.1. Conceptualization of Knowledge Management

Creating and transferring knowledge becomes an important factorin the success of organization to overcome competitiveness. From this concept comes the idea of knowledge management to ensure the right information conveyed to the right people in order to make the right decisions as well. Practiceof knowledge management determines the decisions and actions taken. Therefore, it is important to focus on the efforts for improving practice of knowledge transfer since that is crucial factor for organization(Chawla &Joshi, 2010). There are various concepts of knowledge management. Some researchers have been characterized this concept in distinctive way. Tan and Nasurdin (2011) considered that knowledge management is a procedure to upgrade knowledge management as a process for getting, arranging, and imparting both tacit and explicit knowledge of employees to be more profitable in performing their work. Furthermore, Lundvall and Nielsen (2007) assertedthat knowledge management is to a greater extent a "social art" than an experimental order.

A further definition by Palacios et al. (2009) mentioned, knowledge management is framework of management to catch parts of set up models of organization and stretch out them to provide a reasonable strategy. Knowledge management is developing from two measurements: principles and practices. Specific ideas in knowledge management as management tools that regulate shared principles in the development of practices and systems to create, transform, disseminate, and use knowledge.Besides, Darroch (2005) considered that even though knowledge is an asset of organization, success in empowering knowledge within the organization is valued more than the asset itself. Furthermore, providing or readiness to learn management plays the vital capacity of organizational components to increase assets into abilities.Generally, the reason for the need for knowledge management is related to the efforts for restoring knowledge from its source and rebuilding the knowledge.

Therefore, knowledge management is to understand, concentrate, and oversee knowledge development, rebuild, and apply knowledge in an orderly, expressive, and application manner by controlling powerful forms of knowledge(Wiig, 1997). Specifically, knowledge management can be characterized as an idea of overseeing knowledge resource for accomplishing competitive advantage that includes the procedure of applying the knowledge as an imperative asset to upgrade hierarchical performance.

2.2. Knowledge Management Practice

Knowledge management is about dealing with knowledge resources as well as dealing with the procedures that follow up on the benefits for the organization. These procedures include: creating knowledge; saving knowledge; utilizing knowledge, and sharing knowledge (Mackintosh et al., 1999). Some studies have been directed to show the process of knowledge management practice (e.g. García-Álvarez, 2015; Gupta et al., 2006, Bhatt, 2001; Liao & Wu, 2010; Ju et al., 2006; Chang &Chuang, 2011; Gold et al., 2001; Lytras & Pouloudi 2003). Thus, researchers have made the structure to pick up knowledge management practices into the system. As claimed by Schiuma (2012), knowledge procedures keep running inside of or crosswise over hierarchical procedures and add to get the most out knowledge assets applied in the procedures. According to Alegre et al. (2013), thecomponent of knowledge management comprises of its hierarchical practices and element capacities with the creation, maintenance, and exchange of knowledge as follows:

a. Acquisition

Acquiring transferred knowledge is the first procedure of knowledge management that emphasizes and gives extraordinary significance to the ability of individual knowledge in organizations (Aujirapongpan et al., 2010). However, organization does not get benefit from this process if the beneficiaries do not apply the knowledge gained in their work even though they have high enthusiasm. Then, the beneficiary will not be able to make a difference in knowledge unless he or she gets the transferred knowledge. Therefore, individual knowledge acquisition functions as a relationship between knowledge sharing and the source and application of knowledge by beneficiaries (Pacharapha & Ractham, 2012). There are various methods to gain knowledge that can be started with coercion programs for new workers. Yet at this stage, it needs to assume personality as a top priority of newcomers who have knowledge by new entrants, despite it may not be specifically related to the organization, can be converted into hierarchical advantages, for example past client management experiences (Koh et al., 2005). Organization can motivate the worker to gain knowledge regularly through several exercises, for example, reading expert reports, meeting outside specialists, and going to outside courses and workshops

(Hsiao, et al., 2011). In this way, the ACQUIRE procedure is related to the capacity of colleagues to formalize, organize, talk to, organize, and guide knowledge components with the ultimate goal of securing their presence in exploitable configurations (Lytras & Pouloudi, 2003; Aujirapongpan et al., 2010).

b. Conversion

Organizations offer knowledge created and transformed into knowledge for workers. This procedure can be described as "learning while doing". The dynamics of knowledge change begin at the individual level and grow as they move through communication groups, sectional, departmental, division, or even authoritative boundaries (Tseng, 2010).While, Al-adaileh et al. (2012) assumed that organization also prepares a virtual space for cooperation where new emphases are synthesized to learn different groups of knowledge and then reconceptualized valuable knowledge at an authoritative level. This is related to groups that emphasize learning and authoritative knowledge about the correspondence, distribution, mix, and systemization of knowledge.Conversion-oriented knowledge management procedures are methods organized for existing knowledge that is useful for members of organization. The procedure empowering knowledge transformation is the capacity of organizations to organize, combine, join, structure, or match knowledge (Gold et al., 2001). As a result, organizations spread knowledge among individuals who tend to achieve higher levels of authoritative performance (Hsiao, et al., 2011). The period for TRANSFER must be planned appropriately. Basic ways of knowledge, in which the storage of knowledge and specific knowledge products are connected to individuals for using knowledge in advance (Lytras & Pouloudi, 2003). Organization also needs to regulate the stages of interior knowledge dissemination in the organization, for example, databases, intranets, and prepare exercises to spread knowledge among representatives and units within the organization (Hsiao, et al., 2011).

c. Application

The last part of knowledge management procedure is knowledge application that can be of quality to the organizations. It can make organizations in accomplishing the viability of knowledge management practice (Aujirapongpan et al., 2010). At long last, the **USE** stage is objective situated. Knowledge has been changed in reusable arrangements that must be connected in the setting of particular tasks, incorporated with a specific end goal to develop implications of higher worth, and needs to bolster the knowledge procedure. It alludes to the capacity to characterize in every phase of the model required to expand adequacy of knowledge management (Lytras & Pouloudi, 2003). Thus, knowledge application is another critical part of the knowledge management process in choosing procedures, identifying business methodology, assigning performances, managing conveyance, integrating hierarchical performance and adequacy(Kim & Lee, 2010).

2.3. Conceptualization of Innovation

Innovation is the one most significant organization predictor of organization development(Lee at al., 2001). Researchers provide many definitions of the concept of innovation. Some of them have a common understanding. In general, innovation is improvement and application of novel ideas that lead to the change. Therefore, Ross (2016) suggested the best definition for innovation from a business viewpoint, "innovation is whatever which becomes novel to add value". However, this definition becomes quite common in order to adjust the diversity from techniques, products, processes, also management character from innovation. From the perspective of managerial, conceive the innovation process is to understand which elements encourage, also prevent improvement of innovations. These components incorporate notions, individuals, exchange, and condition from period to period (Van de Ven, 1986; De Jong & Den Hartog, 2008).

Mulgan and Albury (2003) supported this argument, the innovation is invention and also application of novel products or services, processes, and techniques for conveyance that necessary enhancements for results usefulness, successful and/or excellence. Following work by Koch (2011), innovation is the result of knowledge creation within product development, for example, a high outcome. Further, Lawson and Samson (2001) mentioned, innovation is power, consistently needing extensive period perception, also obligation in producing results. Thus, components innovation impact new knowledge in adding to novel results, techniques, and also frameworks that will establish enhancement in the future.

Also, Gallouj and Weinstein (1997) assumed that innovation could be identified for whatever influencing more than one part points from attributes (from anything type, technique, administration, or skill).Innovation in this way is what attracts the economic system from developments towards the more unexpected changes connected with improvement because innovationcan add to economic development and encourage growth and welfarewhen another component is produced (Drejer, 2004).

2.4. Knowledge Management Practice and Innovation for Competitive Advantage

Process of knowledge management is the knowledge and information created as the result of innovation process (Jang et al., 2002). Knowledge is becoming increasingly useful because management considers the value of creativity, that enables transformation from one form of knowledge to the next. The perception of the relationship that exists between several elements of the system leads to new interpretations that imply another level of knowledge manifested in the value produced. This relationship shows that innovation depends on the evolution of knowledge (Carneiro, 2000).

McAdam (2000) argued that innovations arise because of interesting knowledge management will be opportunities to 'adjust the circle' of business benefits and representative liberation. The business benefits of expanded development through imaginative new products and management can be paralleled by a simultaneous increase in innovation and representative reinforcement (for example, Caterpillar allows representatives to invest 10% of their energy to add their special thinking in small groups). Indeed, this activity leads to the new ideas generated in the form of innovation as a result of knowledge management practice

Some researchers considered knowledge management as a methodology of competitive advantage through innovation. Thus, Forcadell and Guadamillas (2002), characterized knowledge management includes organization and change of systems, down to earth instruments and devices that add to the overseeing of knowledge, in a wide sense, in each region and level in the organization that prompts change in products and routines for work. Organization does not think that it is simple to find the right type of knowledge in the right shape. Then, organization may think that it is hard to manage its competitive advantage (Kim & Lee, 2010). As a rule, authoritative knowledge should be utilized in an organization's products, procedures, and management. If organization does not think that its simple to find the right type of knowledge management provides many benefits to organizations including those related to changes in business quality, having data redesigned, increasing productivity, changing the adequacy of choice changes, increasing capacity to offer explanations to client needs, increasing reacting to alternative organizational needs, and being able to anticipate changes and make adjustments quickly. Thereby, knowledge management is one of the competitive advantages and innovation elements of the organization in strengthening the organization to achieve important goals (Claro et al., 2006).

III. CONCLUSION AND IMPLICATION

Knowledge management practice is critical resource for innovation in establishingcompetitive advantage. It is fundamental asset that determines the success of the organization in anticipating competition in the era of knowledge economy. As suggested by Darooch (2005), to create innovation, then a manager first needs to know internal and external forces in the organization. With more knowledge, and the greater the variety of knowledge, the better the manager will be. Second, knowledge must flow freely around the organization. The better the dissemination of knowledge, the more likely the innovation is because more people at the organization level and department are developed with new knowledge that interacts with their knowledge. Finally, innovation is a response. The more responsive an organization, the more likely it is to be innovative.

There are many practices that can be implemented for the sustainability of knowledge management. It startsbyacquiring, conversing, and applying. However, it is important to note that organization is responsible for knowledge management practice. The most important part of its implementation is strict supervision. It is important to empower workers to be proactive in process of knowledge management because this practice will not run successfully when the workers do not apply or spread the knowledge appropriately. Workers have to restore and rebuild knowledge for the effectiveness of knowledge management practice. Thereby, knowledge can spread among members of the organization either by distributing new knowledge.

REFERENCE

- [1]. Alavi, M., & Leidner, D. E. (1999). Knowledge management systems: issues, challenges, and benefits. *Communications of the AIS*, 1(7), 1–37.
- [2]. Alegre, J., Sengupta, K., & Lapiedra, R. (2013). Knowledge management and innovation performance in a high-tech SMEs industry. *International Small Business Journal*, 31(4), 454–470.

[6]. Chang T.-C., & Chuang, S.-H. (2011). Performance implications of knowledge management processes: Examining the roles of infrastructure capability and business strategy. *Expert Systems with Applications*, 38(5), 6170–6178.

^{[3].} Aujirapongpan, S., Vadhanasindhu, P., Chandrachai, A., & Cooparat, P. (2010). Indicators of knowledge management capability for KM effectiveness. *VINE*, 40(2), 183-203.

^{[4].} Bhatt, G. D. (2001). Knowledge management in organizations: examining the interaction between technologies, techniques, and people. *Journal of Knowledge Management*, 5(1), 68–75.

^{[5].} Carneiro, A. (2000). How does knowledge management influence innovation and competitiveness?. Journal of Knowledge Management, 4(2), 87-98

- [7]. Chawla, D. and Joshi, H. (2010), "Knowledge management initiatives in Indian public and private sector organizations", *Journal of Knowledge Management*, Vol. 14 No. 6, pp. 811-827.
- [8]. Claro, D.P., Claro, P.B. & Hagelaar, G. (2006).Coordinating collaborative joint efforts with suppliers: the effects of trust, transaction specific investment and information network in the Dutch flower industry.Supply Chain Management: An International Journal, 11(3), 216–224.
- [9]. Darroch, J. (2005). Knowledge management, innovation and firm performance. Journal of Knowledge Management, 9(3), 101-115.
- [10]. De Jong, J.P.J & Den Hartog, D. N. (2008). Innovative Work Behavior: Measurement and Validation. Scientific Analysis of Entrepreneurshipand SMEs, (November), 1–27.
- [11]. Del Giudice, M., Maggioni, V., Jiménez-Jiménez, D., Martínez-Costa, M., & Sanz-Valle, R. (2014). Knowledge management practices for innovation: a multinational corporation's perspective. *Journal of Knowledge Management*.
- [12]. Drejer, I. (2004). Identifying innovation in surveys of services: a Schumpeterian perspective. *Research policy*, *33*(3), 551-562.
- [13]. Gallouj, F., & Weinstein, O. (1997). Innovation in services. Research policy, 26(4-5), 537-556.
- [14]. García-Álvarez, M. T. (2015). Analysis of the effects of ICTs in knowledge management and innovation: The case of Zara Group. *Computers in Human Behavior*, *51*, 994–1002.
- [15]. Gupta, B., Iyer, L. S., & Aronson, J. E. (2006). Knowledge management : practices and challenges Knowledge management : practices and challenges.
- [16]. Gold, A. H., Malhotra, A., & Segars, A. H. (2001). Knowledge management: an organizational capabilities perspective. J. of Management Information Systems, 18(1), 185–214.
- [17]. Jang, S., Hong, K., Bock, G. W., & Kim, I. (2002). Knowledge management and process innovation: the knowledge transformation path in Samsung SDI. *Journal of Knowledge Management*, 6(5), 479-485.
- [18]. Koch, A. (2011). Firm-internal knowledge integration and the effects on innovation. *Journal of Knowledge Management*, 15(6), 984–996.
- [19]. Kim, S., & Lee, H. (2010). Factors affecting employee knowledge acquisition and application capabilities. *Asia Pacific Journal of Business Administration*.
- [20]. Koch, A. (2011). Firm-internal knowledge integration and the effects on innovation. *Journal of Knowledge Management*, 15(6), 984–996.
- [21]. Koh, S. C. L., Gunasekaran, A., Thomas, A., & Arunachalam, S. (2005). The application of knowledge management in call centres. *Journal of Knowledge Management*, 9(4), 56–69.
- [22]. Hsiao, Y. C., Chen, C. J., & Chang, S. C. (2011). Knowledge management capacity and organizational performance: the social interaction view. *International Journal of Manpower*, 32(5-6), 645-660.
- [23]. Lawson, B., & Samson, D. (2001). Developing innovation capability in organisations: a dynamic capabilities approach. International journal of innovation management, 5(03), 377-400.
- [24]. Lee, C., Lee, K. and Pennings, J.M. (2001), "Internal capabilities, external networks, and performance: a study on technologybased ventures", *Strategic Management Journal*, Vol. 22 No. 6/7, pp. 615-640.
- [25]. Liao, S.-H., & Wu, C. (2010). System perspective of knowledge management, organizational learning, and organizational innovation. *Expert Systems with Applications*, 37(2), 1096–1103.
- [26]. Lundvall, B. Å., & Nielsen, P. (2007). Knowledge management and innovation performance. International Journal of Manpower, 28(3/4), 207-223.
- [27]. Lytras, M. D., & Lytras, M. D. (2009). Miltiadis D. Lytras and Athanasia Pouloudi. Organization, 237–250.
- [28]. Mackintosh, A., Kingston, J., & Filby, I. (1999). Division of Informatics, University of Edinburgh by Knowledge Management Techniques: Teaching & Dissemination Concepts. *International Journal*, (September).
- [29]. Martínez-Costa, M., Jimenéz-Jimenéz, D., & Sanz-Valle, R. (2013, September). Knowledge Management for Organizational Innovation: A Multinational Corporations Perspective. In *European Conference on Knowledge Management* (p. 413). Academic Conferences International Limited.
- [30]. McAdam, R., & Reid, R. (2000). A comparison of public and private sector perceptions and use of knowledge management. *Journal of European Industrial Training*, 24(6), 317-329.
- [31]. Mulgan, G., & Albury, D. (2003). Innovation in the public sector. Strategy Unit, Cabinet Office, 1(1), 40.
- [32]. Pacharapha, T., & Vathanophas Ractham, V. (2012). Knowledge acquisition: the roles of perceived value of knowledge content and source. *Journal of Knowledge Management*, 16(5), 724–739.
- [33]. Palacios, D., Gil, I., & Garrigos, F. (2009). The impact of knowledge management on innovation and entrepreneurship in the biotechnology and telecommunications industries. *Small Business Economics*, 32(3), 291–301.
- [34]. Rasmussen, P., & Nielsen, P. (2011). Knowledge management in the firm: concepts and issues. *International Journal of Manpower*, 32(5-6), 479-493.
- [35]. Ross, A. (2015). Establishing a system for innovation in a professional services firm. Business Horizons, 59(2), 137-147.
- [36]. Tan, C. L., & Nasurdin, A. M. (2011). Human Resource Management Practices and Organizational Innovation: Assessing the Mediating Role of Knowledge Management Effectiveness. *Electronic Journal of Knowledge Management*, 9(2), 155–167.
- [37]. Tseng, S.-M. (2010). The correlation between organizational culture and knowledge conversion on corporate performance. *Journal of Knowledge Management*, *14*(2), 269–284.
- [38]. Van de Ven, A. H. (1986). Central problems in the management of innovation. Management science, 32(5), 590-607.
- [39]. Wiig, K. M. (1997). Knowledge management: Where did it come from and where will it go? *Expert Systems with Applications*, 13(1), 1–14.