

# The Role of Knowledge Management in Created Organizational Innovation

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## ABSTRACT

In today's postmodern world organization and companies for to survive in flustered and unstable and constantly changing environment are require apply knowledge management completely. Nevertheless, implementation of knowledge management in organizations can have a positive impact that innovation in organization is most important of them. Although operational and surpassed in competition, requires provided innovation in new products and services but success in innovative programs, seeking to apply knowledge management in organizations. Then issue recognizing the nature of innovation, competitive strategy and effective management of knowledge is essential for organizations and companies more than more.

In this paper trying that also Identify and describe nature and innovation influence sphere in organizational competition shown associated knowledge management with innovation and its impact on the success of innovative and competitive organizations and we introduce innovation as the spirit of knowledge management at the end have reached to provide a conceptual model of the relationship between knowledge management with organizational innovation.

**KEY WORDS:** Knowledge Management, Organizational Innovation, Tacit Knowledge, Explicit Knowledge.

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## INTRODUCTION

Today all are acknowledged scientific and working groups because Organizations can have sustainable and continuous presence in commercial world, Should operate revolves around of knowledge and because knowledge is essential as source for survival of organizations. Condition for successful organizations is access to a deep knowledge and understanding at all levels but many organizations still have not considered to knowledge management seriously. Said Peter Drucker: "secret of organizational success is knowledge management in the 21st century" and nowadays we are seeing that Today's business environment is more competitive and untrue than in the past; and study and research literature published during the past decade have confirmed that some companies, from establishment of knowledge management process have get a lot of profits and benefits. The nature of global economic growth has changed with Speed of innovation. By Complemented technology has been possible, shorter product manufacturing cycles and high rates of new products manufacturing. Complexity of innovation has increased by increasing knowledge as the basis and foundation of innovation .Organizations Should be convinced that Commercial strategies must be sufficiently innovative Until create sustainable competitive advantage ,because innovation has been increasingly complex in faced with changing customer needs, extensive competitive pressures and very quickly technological change (Adams & Lamont2003). Innovation is extremely dependent on access to knowledge and as a result, complexity that has created by development and enrichment of knowledge, must be identified and managed to obtain a successful innovation (Cardinal & Turner, 2001). Thing what determines the characteristics of the recent technological revolution, Information and knowledge is not certainly but rather application of this Information and knowledge is for knowledge generation and information processing tools / information communication.

### Innovation

Innovation In existing literature has been defined in different forms. According to Chen et al comments (2004) Innovation is refers to the introduction of a new combination of production essential factors in production system. Innovation investment is include ability to organize and implement research and development and brings new technology or products that answerable for needs of customers. Innovation investment is includes new products, new technologies, new markets, new materials and new combinations. Marina du Plessis Innovation introduces as the creation of new knowledge and new ideas for achieving business consequences. That purpose of this innovation is processes improve and internal business structures and generation market-oriented products and services. Also innovation is included two types of fundamental and

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incremental. Cardinal et al in 2001 were expressed that innovation process involves technical activities, physical and knowledge-based that in shaping to normal flow of product development is interest as the main element. Herkema(2003) introduced Innovation as a knowledge process that have been target for creation of new knowledge tool in order create sustainable business solutions . Innovation is a process that in its, existing knowledge in order to create new knowledge is collected, shared and integrated. Innovation can be a new technology or new product or new service. In other words, innovation is related to change that can be integrated or incremental. Generally, innovation can be considered as implementation of exploration and processes that is shaping with outcomes, products, new processes or systems (Gloet & Terziovski, 2004). Many authors distinguish between incremental and radical innovations. Incremental innovations themselves represent to improve or modify product line of existing products. They are usually classified as market-driven innovations. Incremental innovations doesn't has require to significant changes in current business practices. Thus they is appropriate to enhance available inner competition using to provide opportunity for improve existing skills. Fundamental innovations that are likely destructive of competition, they often assume, Skills and existing knowledge are extension and are require to different management practices .Radical innovations are often faced with risk of trade because its commercialization is very difficult.

### **Knowledge management**

Knowledge isn't a clear and determine concept. There are many definitions of knowledge. Davenport and et al thought Knowledge as a combination of human environment and information that information provides practical and applications. However, the knowledge is foundation of skills, experience and expertise of each individual in the organization. Today, capital of an organization only isn't Financial and physical capital but Knowledge capital is considered more importantly from two capital. In addition, several definitions of knowledge management are presented that from among them only refers to cases that were in line with this topic. Definition of Knowledge management is always difficult because in this area there are numerous interpretations. In here is referred to some definitions that is provided newly: Knowledge management is a set of processes that are looking to change the pattern of organizational knowledge processing because increase its own and Consequences arising from Its. Knowledge management use systematic strategies until for to create value, discover knowledge, understand and use(Harry, 2006). knowledge management is access to expertise, knowledge and expertise that provide new capabilities, enables better performance, encourages developed and innovation, and boosting customer value (Gloet & Terziovski, 2004). Or a knowledge management is strategy that points of intellectual organization including information or human resources talents will lead towards greater productivity, new values, the development and increased competition, thus knowledge management wants from managers until learn to employment what make practical their skills as a unit together and improvements (Jen,2007 ). In addition to this definitions Darroch and McNaughton (2002) have expressed that knowledge management is a management function that creates knowledge, manage knowledge flow and ensures that knowledge effectively and efficiently used for organization long term interests.

Thus, according to views of authors can say: Organization that has competes in the field of knowledge management, it is knowledge -based and thus knowledge management is turned to guide and leading that will effect on adopted strategies by organization managers (Harry, 2006).

Now, a question discusses how knowledge management can lead to innovation in organization. For answer this question has applied several ideas. Parlbay and Taylor (2000) believed that knowledge management is supporter innovation, creation of new ideas, and discoverer of organization thought power. Also knowledge management is including gain insight and experience for making available and usable them in appropriate time and place by individual that have need to them. Then knowledge management provides possible collaboration, knowledge sharing, continuous learning and quality improvement and will lead to decision with better quality and it guarantee that is understand value and share mental capital and addition organizational efficiency and effectiveness. Marina du Plessis (2007) believe that knowledge management is structured method for knowledge production, sharing, used from it as an organizational capital for enhancing ability ,speed and efficiency of company in delivered new product or service and qualify to benefit customer in towards commercial strategy (Joseph & Mark, 2004)

Nonaka et al also emphasized that creation knowledge is a spiral process of interactions between explicit and tacit knowledge that SECI Four-step model Nonaka- socialization, externalization, combination, internalization-showing this process. Socialization is contained share mental knowledge between individuals. Externalization is contained conversion of tacit to explicit knowledge; a new explicit knowledge create through the integration of explicit knowledge in a field (individual) with the explicit knowledge of the fields is (individuals) other- Commonly systematic step that previously by Nonaka-is called "combination" step. Organizational internalization Occur when explicit organizational knowledge is became Individual tacit knowledge (Leila, Richard |& Jay, 2006)

### **Role of knowledge management in created organizational innovation**

Knowledge management doesn't focus on organizational innovation particularly but it provides a favorable environment for creation innovation. these effects include:

- 1) Create a sustainable competitive advantage: first role of knowledge management in innovation of today's commercial environment is create and develop competitive advantage by using participatory methods of acquiring knowledge. Cavusgil et al (2003) expressed that creation and support from innovation program due to changing customer needs, is caused intense competitive advantage and changing technology rapid and complex. Although innovation internalization for today's organizations is very problem but close collaborative relationships can provide access to common processes and used by other organizations. Today acquire knowledge and skills through collaboration and participation has been identified as efficient and effectively method in successful innovation. However, we can say that knowledge management systems have effective and specific collaboration in development of sustainable competitive advantage through innovation.
- 2) Reduce the complexity of the innovation process: second role of knowledge management is reduced the complexity in the innovation process. Shani et al(2003) believe that increasing the amount of knowledge that is available in organizations can increase the complexity in design and management of new products, but this complexity can be identify and easy by knowledge management and organization knowledge-oriented units that have strategic role(Adams & Lamont, 2003). Also Cavusgil and et al (2003) believe that knowledge management is mechanism that by it is identified innovation complexity and Companies that have used and created knowledge quickly, able to innovate faster and more than companies that doesn't this work.
- 3) The integration of tacit and explicit knowledge within the organization: third role of knowledge management in order to innovation process is Integration, sharing and developing tacit knowledge. As a result, knowledge and information is available and possibility. Sharing of tacit knowledge for innovation capability of organizations is very necessary(Adams & Lamont, 2003). Nonaka et al have divided knowledge to type of explicit & tacit knowledge that knowledge integration In connection with the use of policies, tools and processes knowledge management should be facilitate thinking and talking for learning and innovation in individual and organizational level. Because this issue has require to communicability, compatibility and provide dynamic commercial information and knowledge .Should be said that without the help of knowledge management is not stimulated knowledge integration and therefore innovation does not pass and also Organizations can use knowledge as a source of innovation(Gloet & Terziowski, 2004).
- 4) Produced a clear and explicit knowledge: The fourth role that knowledge plays in innovation process is related to clear and explicit knowledge. Although explicit knowledge such as tacit knowledge in innovation process does not play a dominant role, because explicit knowledge about innovation is readily available to competitors, however, explicit knowledge is one of the main components of innovation. In advanced scientific processes and also in research and development process features explicit knowledge with tacit knowledge is being replaced. This process need to possibility convert process and product of tacit knowledge to clear and explicit models that in result when knowledge is from results of exploratory and development research, its nature is implicit(Marina du Plessis, 2007).
- 5) Cooperate in goals sharing: fifth role that knowledge plays in innovation is possible cooperation. Marina du Plessis knows cooperation as ability of consumers, suppliers and workers to create a community for sharing knowledge inside and outside organizational boundaries that can shared commercial goals with together cooperation to give its benefit and profit to all of society members. That can say, cooperation for the organization, in two forms internal and external is playing a significant role in transfer of tacit knowledge and creating and collecting skills(Parlby & Taylor, 2000). Strong relationship between partners and colleagues considered transfer wider and larger tacit knowledge. Collecting tacit knowledge from partners and colleagues reduces risk and cost of innovation potentially. As a result is make shorter development cycles and is Confirmed effective innovation(Adams & Lamont, 2003).
- 6) Integration and maintenance of knowledge process: sixth role that knowledge plays in innovation process is different management activities in life cycle of knowledge management, which consists of four steps creation, collect, sharing and application of knowledge. Knowledge management plays significant role in ensuring the integration organization through the organizational structure, until makes possible sharing and application of knowledge. According to Chen & et al (2004) theories, knowledge integration is noted that timely insights and experiences can be available in times of crisis in order to solve the problem, means when organization has need to knowledge can be used discussed, be shared, be concluded, be reviewed and be available (Adams & Lamont, 2003).

In addition to above cases, Adams and Lamont (2003) have listed several types of knowledge management cycle activities based on which knowledge management systems can have direct collaboration for the development of innovative:

- A. First case is Absorptive Capacity, refers to the ability of organizations in order to identify value of new and external information and assimilate information that this issue essential for development of innovative solutions and new basic competencies and capabilities within the organization.
  - B. Second sample is Transformative Capacity that has referring to the organization's ability in order to collect, matched, combined and transfers of knowledge to deal with current special needs. Functions of storage, retrieval and distribution of knowledge management systems are needed for developing Transformative Capacity.
  - C. Third sample is Supply, distribution and internal Knowledge storage that is required for the proper use of organizational resources.
  - D. The fourth sample is creation, processing and distribution of knowledge that for strategic decisions should be evaluated by members of the organization.
  - E. Fifth sample is review and test of external environment that it is for identification and detection activities and potential learning opportunities of competitor. Therefore, knowledge management enable processes in life cycle of knowledge, also it is manages life cycle of knowledge particularly in innovation process and integration of generated knowledge in the process of innovation with other knowledge bases will ensure in the organization(Cardinal & Turner, 2001).
- 7) Creating an effective culture: seventh role of knowledge management in innovation environment is creating an effective culture that is caused to create generating and sharing Knowledge by cooperation of organization members. Some researchers emphasize the central role of knowledge management, especially in the creation of their domestic workspaces that this domestic working space support creativity and grow innovation. Gloet and Terziovski (2004) believe that there is important and positive relationship between knowledge management methods and innovation performance that this relationship will help in creating organizational culture until innovation performance get the maximum extent possible and it will lead to competitive advantage(Gloet &Terziovski, 2004).  
In summary, knowledge management creates a culture that value of knowledge and it application is identified and is discussed. Such culture encourages processes and knowledge-based programs, such as innovation and creativity. Culture creates knowledge sharing, changing behavior in order to creation, sharing and use from knowledge.

### **Knowledge management as changed factor innovation process**

Based on Castell ideas, today's human mind innovation being considered "a production main force" more than be one of elements of production system. In this view, knowledge significantly has been abandoned from physical and structural barriers division of labor. One of the results of this new relationship between science and production activities, challenge is that occur in front innovation traditional views. Innovation process is traditionally based on determine the exact boundaries between the roles played by different groups and as result different types of knowledge, based on their position in the division of labor(Parlby & Taylor, 2000).

Marina du Plessis (2007) characteristics and features of knowledge management in the innovation process is expressed as follows:

- 1- Knowledge management provides unique integrated structure for knowledge base.
- 2- Knowledge management guarantees flow and smooth knowledge used in innovation processes.
- 3- Knowledge management provides policies, tools and processes to ensure integration organizational knowledge base.
- 4- Knowledge management help to identify gaps in the knowledge base and provide processes for fill these gaps to help innovation.
- 5- Knowledge management has participate in create qualifications and competencies required in the innovation process.
- 6- Knowledge management provides organizational framework for establishment a set knowledge in organization.
- 7- Knowledge management has participated in sustained and steady growth of knowledge base through the collection and obtaining knowledge simple and implicit.
- 8- Knowledge management occurs central that in it are grow innovation process(Joseph & Mark, 2004).

### **Proposed conceptual model**

According to philosopher theories and ideas in field of knowledge management and for achieving to organizational innovation is require that new knowledge is created and for new knowledge creation should established knowledge management that knowledge management is function of organizational learning and organizational learning is a result of processes sharing of knowledge and knowledge sharing is as function of

organizational management role and organizational culture and also individual behavior .in proposed model have shown relationship process. Model gives this concept that innovation has processes that can achieve rapidly to help them.

Nonako is adherent many of concepts related to knowledge creation. He separate scope knowledge creation from knowledge management. Knowledge management is including providing continuous knowledge in towards encounter with critical conditions in an organization. Whiles knowledge management added “existence knowledge systemically “to knowledge creation (Joseph & Mark, 2004). In the other hand knowledge management is focused on comprehensive and efficient use of existing knowledge while knowledge creation involved with acquisition and modification of new knowledge. Organizational learning enables of organizations that crate new knowledge and policy and strategies promote and change through group continuous learning process. This means that members in organizations operate differently order to increase organizational capabilities and improve organizational systems.in other hand, organizational learning can occur simultaneously with changes in individual and organizational behavior. kabdis and kuzmin (2003) believe when create knowledge , acquire knowledge and sharing them can be considered as a first step in pursuing organizational learning. Organization, knowledge related to their work operation will gain, create, share and utilize In order to add and valuing their customers(Gloet & Terziovski, 2004). level of learning may be lead to increasing organizational ability for generation a major competitive advantage. Whatever organization learning culture is stronger, will develop the degree of sustainable competitive advantage. If the company is learn quickly and is sharing its learned, Decision making process may be more efficient and more effective than companies that do not adopt similar policies.

Hislup (2003) believe that the most important factor in sharing knowledge is questions of the employees attitude, no incentive that cause employees share their knowledge .vahe (2000) said that a major obstacle in establishing knowledge management is people tend for storing knowledge. It seems that there is a store of knowledge and “sharing” is abnormal.

Bartol and astrio astavad (2002) defined Sharing knowledge as a practical that employees related and occurred information in organization is sharing to others .according to theory. Book and Kim (2002) knowledge sharing is most important sector of knowledge management. Final goal of employees’ knowledge sharing is its transfer to assets and organizational resources. In addition to sharing activities should be voluntary and not mandatory(Gloet & Terziovski, 2004). Employee attitudes and abilities maybe become barrier for knowledge sharing. Zoulaski (1996) and Odel and grison (1998) found that many employees don’t have aware from the importance of knowledge sharing and its transmission. Some individual don’t have tend to sharing that its behavior is due to individual insecurity. Such as have afraid from seem foolish or unable in developing work or creating new jobs opportunity (Pyka, 2002).

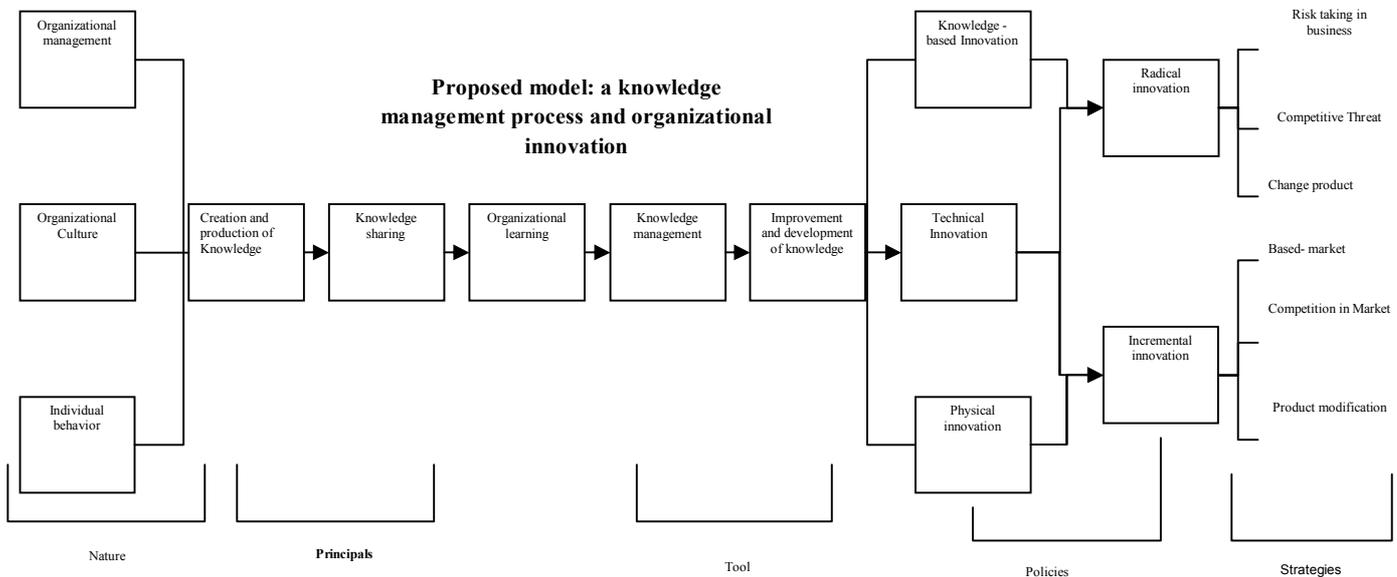


Figure 1 - The proposed model of knowledge management process and organizational innovation

### Conclusion

Since today's organizations and companies due to the changing environment and structure in it doesn't have meaning stability; according to Peter Senge theory in today's environment, the only thing that hasn't changed it is change that this subject represents value and importance of innovation for organizations.

Organizations and companies have need to innovate for survive and innovation requires knowledge and knowledge is also required knowledge management and knowledge management is function from role of organizational management and organizational culture and also individual behavior. With reviewing and studying this article find that innovation is spirit of knowledge management. Of course, we should consider that establishment of knowledge management in organizations has many benefits that innovation as this discussion is considered its most important. It is clear that knowledge management has a significant role in innovation.

Nevertheless, most research need in the field potential role of knowledge management in innovation and how it can be maximized value of knowledge management, until is created innovation process more effectively and efficiently. Serious studies in this field may be very valuable, especially in organizations that have distinct innovation and knowledge management programs. For professionals is very important innovation and knowledge management until understand systematic relationships between these concepts and values that can be created by creating and maintaining sustainable competitive advantage for companies. Configuration knowledge management and innovation will determine how companies can create new knowledge and convert it into capital, while is ready field until new product is create, design and complete. Therefore we can say knowledge management in creating organizational innovation is important.

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