

Role of Knowledge Management to bring Creativity and Innovation

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Abstract

The basic objective of the study is to reconcile the literature on the role played by the knowledge management to enhance creativity and innovation in organizations. The continuously increasing pressure of competition and global markets is forcing organizations to become more creative and innovative with a view to increasing overall competitiveness. The study seeks to examine and elaborate the linkage between knowledge management process and creativity and innovation process to dig out the important relationships and flows of activities. This need comes from increasing competition and customer demands and new market areas. The creativity and innovation is the body of knowledge referred to collectively as knowledge management. Within this discourse knowledge is considered as a potential key competitive advantage by helping to increase creativity and innovation within the organization. This paper focuses on the role of knowledge management in sustaining and enhancing creativity and innovation in organizations. From this literature a possible knowledge management model which incorporates creativity and innovation is suggested. The study involved socially constructed workshops representing 10 organizations, each of which constructed meanings in regard to creativity and innovation and the key areas of knowledge management as outlined. Overall it was found that effective systematic knowledge management can incorporate creativity and innovation drivers in key areas which will result in both increased business and employee benefits. This article seeks to clarify the role of knowledge management in creativity and innovation as an aid to address complexity.

Keywords: Knowledge Management, Innovation and Creativity.

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1. Introduction

In the fast changing business world of today, creativity and innovation has become the mainstay of every organization. The nature of global economic growth has been changed by the speed of creativity and innovation, which has been made possible by rapidly evolving technology, shorter product lifecycles and a higher rate of new product development. Organizations have to ensure that their business strategies are creative and innovative to build and sustain competitive advantage. Creativity and Innovation has become increasingly complex due to changing customer needs, extensive competitive pressure and rapid

technological change. The complexity of creativity and innovation has also been increased by growth in the amount of knowledge available to organizations as basis. Creativity and Innovation is extremely dependent on the availability of knowledge and therefore the complexity created by the explosion of richness and reach of knowledge has to be identified and managed to ensure successful innovation (Adams and Lamont, 2003; Cardinal *et al.*, 2001; Darroch and McNaughton, 2002; Pyka, 2002; Shani *et al.*, 2003).

In order to facilitate this, the definition and nature of knowledge management to enhance creativity and innovation will be investigated. The article also aims to identify the drivers for the application of knowledge management in creativity and innovation as well as the value proposition of the utilization of knowledge management in the creativity and innovation process. Importance of knowledge can be seen everywhere whether that is a society or a corporate world. Knowledge is the key activity to be performed to fulfill objectives of an organization in the corporate world.

Today knowledge and creativity are seen as the driving forces for the company to survival in the future. The knowledge economy is based on knowledge centered companies. The EU calls these companies as 'smart companies' (Filos & Banahan, 2000). The constantly changing customer needs and preferences providing market opportunities in the digital economy to organizations to ensure there is mandatory requirements of knowledge management to have creativity and innovation in an organizations.

2. Literature Review

Knowledge Management

Knowledge management is the collection of processes that govern the creation, dissemination, and leveraging of knowledge to fulfill organizational objectives. Knowledge Management is an emerging set of principles that govern organizational and business process design and as well as specific processes, applications and technologies that help knowledge workers dramatically leverage their creativity and ability to deliver business value'. This is the important content. The knowledge management in its creative sense, it is more of nurturing rather than managing. It is more *organic* than mechanistic. Knowledge Management is an organizational process that aims to create centralize knowledge source within the organization that acquire, assimilate, distribute, integrate, share, retrieve and reuse the internal and external, explicit and tacit to bring innovation in the organization in the form of the product, people and organizational process.

According to the literature there are three main drivers of the application of knowledge management in innovation. The first basic driver for knowledge management's role in innovation in today's business environment is to create, build and maintain competitive advantage through utilization of knowledge and through collaboration practices. Cavusgil *et al.* (2003) indicate that building and sustaining an innovation program has become increasingly complex due to changing customer needs, widespread competitive pressure and rapid technological change. Organizations find it increasingly difficult to internalize innovations. Some large organizations have therefore, started working collaboratively across organizational boundaries to ensure sustained innovation and

competitive advantage (Cavusgil *et al.*, 2003). Knowledge management can facilitate such collaboration. Close collaborative relationships can provide access to the processes other organizations use that could be applied in different contexts. Acquiring knowledge and skills through collaboration is considered to be an effective and efficient way of successful innovation.

The second driver of the role of knowledge management in innovation is that knowledge is a resource used to reduce complexity in the innovation process and managing knowledge as resource will consequently be of significant importance. Innovation is extremely dependent on the availability of knowledge and therefore the complexity created by the explosion of richness and reach of knowledge has to be recognized and managed (Adams and Lamont, 2003; Cardinal *et al.*, 2001; Darroch and McNaughton, 2002; Pyka, 2002; Shani *et al.*, 2003). According to Shani *et al.* (2003) the upsurge in the amount of knowledge that is readily available to organizations seems to add increased complexity to the design and management of new product development, but this complexity can be addressed by knowledge management and knowledge-intensive units in the organization that are strategic in nature.

Cavusgil *et al.* (2003) agree that knowledge management is a mechanism through which innovation complexity can be addressed. It assists in managing new knowledge created through the innovation process, but also in managing existing knowledge as a resource used as input to the innovation process. Cavusgil *et al.* (2003) are of the opinion that firms that create and use knowledge rapidly and effectively are able to innovate faster and more successfully than those that do not. According to Pyka (2002), creation of innovation networks are driven by synergistic creation and management of knowledge.

The third driver of applying knowledge management to the benefit of the innovation process is the integration of knowledge both internal and external to the organization, thus making it more available and accessible. Knowledge integration implies that timely insights can be made available to be drawn at the appropriate juncture for sense making, i.e. knowledge can be exchanged, shared, evolved, refined and made available at the point of need. Knowledge integration via knowledge management platforms, tools and processes must therefore facilitate reflection and dialogue to allow personal and organizational learning and innovation. This requires linkability, adaptability and dynamic representation of business information and knowledge. Without effective information and knowledge management that drives knowledge integration, which in turn underpins innovation, organizations could be underutilizing knowledge as an innovation resource (Baddi and Sharif, 2003; Chen *et al.*, 2004).

In conclusion, it can be said that knowledge management systems have a distinctive contribution in the development of sustainable competitive advantage through innovation. Whilst information and knowledge management systems alone do not possess the qualities required to provide organizations with sustainable competitive advantage, the bundling of knowledge management systems with other firm resources and core competencies is the key to developing and maintaining sustainable competitive advantage through product and

process innovation. In such a position, knowledge management systems play a major role in the conversion of learning capabilities and core competencies into sustainable advantage by enabling and revitalizing organizational learning and resource development processes (Adams and Lamont, 2003):

Creativity and Innovation

Creativity is refers to coming up with new ideas. Then there is need for innovation arises and finally the taking of new or existing ideas and putting them into action. This requires the application of existing knowledge and the development of appropriate new knowledge. The process of getting new ideas called creativity and applying the same into practicability called innovation. Both the creativity and innovation are tough to do and it is depending on the right amount of knowledge available in an organization.

The companies should not remain inactive and it should act upon the wishes of the customer. It should always try to attract the customers with new ideas and formulas. Creativity is one of the central building blocks of the new production system. Such creativity requires the capability of producing new ideas. Knowledge about past experiences and possible new ways is critical for a company. The creativity is also large depends on the changes in the technology. To develop these new uses and possibilities, workers must develop their knowledge. Companies must help workers to develop this knowledge to enable the creativity. With the help of the creativity the organizations can generate new ideas and will have the capability to convert such new ideas into products or services and also that assure such knowledge have reached all the workers.

Creativity and innovation concern the process of creating and applying new knowledge into business. As such they are at the very heart of knowledge management. Knowledge management, however, is an emerging discipline and creativity and innovation need to be thought about in this new context. It goes on to explore the role of knowledge management in creativity and innovation. Creativity and Innovation are simply seen as part of the process by which knowledge is developed and transformed into business value. Several researchers have emphasized the pivotal role of the management of knowledge, particularly in creating an internal working environment that supports creativity and fosters innovation (Gloet and Terziovski, 2004).

A more useful approach is to view creativity as the process of generating ideas and seeing innovation as the sifting, refining and more critically the implementation of those ideas. Creativity is about divergent thinking. Innovation is about convergent thinking. Creativity is about the generation of ideas and innovation is about putting them into action.

Creativity is often thought to be a serious analytical task. The starting point of creativity is the generation of new ideas. It is thus important to look at the process by which new ideas are created. New thoughts and ideas come from a kind of thought-play of the mind.

Generating new ideas is being creative and is often thought to be about holding brainstorming sessions. We actually get to play all of the time or at least we do if we see it that way. Every interaction in our lives should be about play, learning and creativity. In short when we interact with people we have an opportunity to learn, to influence, to make things happen. Creativity is needed at every level and every dimension within an organization. Creativity is the responsibility of each functional discipline, of each team, of each manager, of each and every individual. Creativity is not limited to the grand scheme of things to new products, new services and new or improved processes.

Innovation becomes crucial in terms of defining how a company, a city, a region, or a country evolves. However, the concept of innovation is more complex than ever before. Innovation is not something that is only embedded into products and services anymore. It is the input, the output, and the process. Innovation has become a mindset, a way to approach the world. There are several definitions of innovation. Herkma (2003) stated that foremost and basic purpose of innovation is to produce new knowledge which can develop and find out the doable solutions for society. Innovation is a practice and process which capture, acquire, manage and diffuse knowledge with aim to create new knowledge which will support to produce and deliver distinctive and idiosyncratic kind of products and services. (Gloat and Terziovski, 2004). Plessis (2007) delineated innovation as a formation of new knowledge which helps the new business returns, which has purpose to make organization internal business process and structure more sophisticated that produce the market acceptable products and services. We can define Innovation as “Activities and processes of creation and implementation of new knowledge in order to produce distinctive products, services and processes to meet the customers’ needs and preferences in different ways as well as to make process, structure and technology more sophisticated that can bring prosperity among individuals, groups and into the entire society.

Knowledge Management to Creativity and Innovation

The main aim of knowledge management is to shift towards a competition on ideas, since cost competition is replaced by the idea of competition for several reasons. Commercial success of the business today is much based on products produced should meet the requirements of the user rather than delivering cheap products to customers. A special focus on customer is base to have new production systems. A successful production system must be capable of delivering the right products to the right customer at the right time and at the right cost. Simultaneously, organizations need to check the changes in the daily preferences of customer. Organizations should have the customer focused production.

Companies and workers need to have a profound insight into wants and desires of customers based on the knowledge about the market demands.

Knowledge Management is a holistic concept which includes a set of knowledge processes that is knowledge identification, knowledge generation, knowledge codification, knowledge sharing, knowledge storing, and knowledge application and as well as the functions of supporting creativity and innovation. In knowledge management both creativity and innovation are viewed as constant processes, as the means for optimum usage of existing knowledge and as the key drivers for generating new knowledge.

According to Nonaka and Takeuchi (1995) effectiveness of knowledge creation especially determines the level of innovation. It is impossible to innovate only by using already existing knowledge and without creating new knowledge. Taking into account that learning is a production process in which knowledge is created (Weggeman, 1997), it becomes quite obvious that knowledge creation and learning are crucial for the innovation process. Analyzing the effect of organizational learning on creativity and innovation, research shows that organizational learning enhances organizations' innovativeness and capacity for adaptation (Hurley & Hult, 1988). In addition, one possibility in creating and developing knowledge is certainly through creativity and innovation.

Knowledge, creativity and invention are key drivers to the innovation process. Ideas present new thoughts, beliefs, or feelings that are generated as a result of some mental activity. Creativity is about combining these ideas in a unique and unexpected way. Based on these creative ideas, the process of invention creates something that is new and useful. This process is closely related to knowledge creation. Innovation is the result of combining these creative ideas, inventions and knowledge in a novel way for the full intent of creating value. This process of transforming creative ideas into vigor innovation requires just as much creativity as before.

Conceptual Framework and Model Explanation

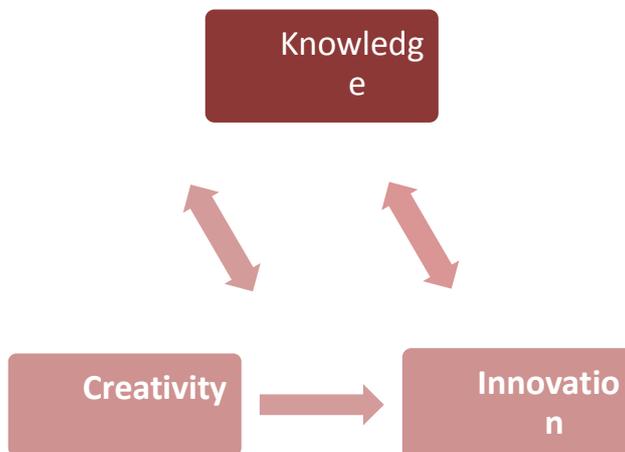


Figure 1.1: Research Framework

The basic aim of this research is to explore integrated approach of knowledge management, creativity and innovation in an organization. Research of innovation has shown that ‘domain relevant’ knowledge represents one aspect of creativity (Amabile, Conti, Coon, Lazenby, & Herron, 1996) disclosing the connection between creativity and innovation. Innovation are generated and sustained through the creative efforts of individuals, groups, and organizations (West, Hirst, Richter, & Shipton, 2004). Since innovation and creativity could be viewed as individual and group phenomena which contribute to individual and group creativity. Hence, the Creativity and Innovation have been considered as an invention of knowledge management.

3. Objectives of Study

The basic objective of this study is to create value for the business. In today’s competitive era creativity and innovation are like a two eyes of the business, with the help of this two components organizations can produce unique products and services. The creativity and innovation are important to trap the rapid changes in the taste and preferences of the customers of emerging and developed markets.

4. Methodology

The data have been collected in connection to the knowledge management enabling creativity and innovation in organizations through secondary data. According to secondary source of data 75 percent CEO’s of fastest growing organizations claim that their strongest weapon to compete in market is their innovative products and processes. The organizations are much capable to producing innovative products and services in order survival and have sustainability in the their business with the help of creativity and innovation, this two works like a fuel for the organization to grow in any type of environment.

5. Findings of the Study

1. Organizations are need to maintain speed in the creation and as well as innovation of Knowledge.
2. Organizations need to have centralized data base for the smooth functioning of activities.
3. In order to survival in the market for a long time a lot of pressure should be put on the process of creativity and innovation.
4. The turbulent market is demanding changes in the products or services features to suit the present taste and preferences of customers.
5. Information technology enabling services should facilitate the smooth and quick functioning of knowledge management in organizations.
6. Knowledge Management should have the risk taking attitudes in organizations in order to move with the volatile market.

6. Suggestions

- The speed of creativity and innovation in an organizations are largely depends on the more and more on the availability of knowledge in an organization. Hence, organizations need to give more priority to increase knowledge through creating suitable environment.
- Generally most change approaches confound knowledge, creativity and innovation with information in organizations, so organizations are required to come out of that.
- Knowledge management is then seen as a centralized database with a main goal to collect the information within companies. Since, every day data is required in order to facilitate effective functioning of organizational activities.
- Nothing is as fast outdated as information. The stress should be given on creativity and innovative capacity in organizations and hence, knowledge management should support to improve this capacity. This means that knowledge management should help workers to generate new ideas and solutions, should help to transform these ideas into working products or services and should ensure that these capabilities have been shared among all at all levels in an organizations.
- Knowledge management requires a coherent approach in which groups or teams form the core of knowledge management. Only groups can assure that investments in individuals are shared by more than the person receiving knowledge investments.

7. Conclusion:

To conclude, the knowledge management plays a significant role in innovation. Further research is required to understand the potential role of knowledge management in creativity and innovation and how the value of knowledge management can be maximized to ensure a more efficient and effective creativity and innovation. The impact of this two is extremely valuable, especially in organizations that have distinct knowledge management and creativity and innovation programs. It is important for both knowledge management and creativity and innovation professionals to understand the systemic relationship between these concepts and the value to generate, creating and maintaining sustainable competitive advantage for organizations.

At last, for a successful knowledge management, it is of central importance that management must have a 'risk taking attitude' and sufficient belief in the capabilities of its workers and teams. Only then, organizations can get engaged with the process of creativity and innovation to change the company as successful one.

Creativity and innovation are at the cutting edge of knowledge management. Organizations have a long way to go to release creative energy both at the personal and organizational level, as there are many blocks. One emerging powerful tool to help overcome these blocks is the concept of dialogue. Groupware technology is also evolving into knowledge management technology and playing a major and increasing role. Challenge of today is to build effective technology-based systems that support making knowledge productive.

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