



CONSTRUCTION OF KNOWLEDGE CREATION: A CONCEPTUAL FRAMEWORK

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ABSTRACT

In knowledge-based economy, continuous innovation is the key to sustainable competitive advantage. Innovation can strengthen the sustainable growth and productivity of a country and increase national productivity as well in the global market through creation of new ideas and opportunities. Innovation is extremely dependent on the availability of knowledge, therefore the complexity created by the explosion of richness and reach of knowledge has to be identified and managed to ensure successful knowledge creation. The purpose of this paper is to construct a knowledge creation framework. A further study will be undertaken using this constructed framework for collecting and analysing data. The framework shows that knowledge creation is influenced by organizational knowledge and market knowledge. Organizational knowledge always becomes obsolete and it should be updated by market knowledge and new created knowledge via technological advancement in order to maintain its up-to-date information.

Keywords: Organizational Knowledge, Market Knowledge, Knowledge Creation

INTRODUCTION

Today market is very dynamic and very high competitive. The market preferences are changing all the time. An organization has to know the market tendencies in order to compete in a very fragile environment. Nonaka and Tekeuchi (1996) stated that in today economy where the only certainty is uncertainty, where competitors grow more and more, customers' preferences are changing and technology develops quickly. Hence, knowledge becomes the source of competitive advantage. Management scholars agree that knowledge has emerged as the critical resource. However, knowledge is not something new, it has been used and exchanged within organizations. Therefore, organizations have to recognize, understand and manage it effectively and efficiently in order to transform that knowledge to become the source of competitive advantage and convert it to be tangible assets of organizations (Davenport & Prusak, 1997).



Davenport and Prusak (1997, p.5) defined knowledge as “a flux mix of framed experience, values, contextual information, and expert insights providing a framework for evaluating and incorporating new experiences and information. It originates and is applied in the minds of knower. In organizations, knowledge often becomes embedded not only in explicit form, documents or repositories, but also embedded in individual. Thus, knowledge derives from individuals’ experiences, values, beliefs, attitudes, and memory that define the individual’s know-how within an organization. Knowledge is invisible and intangible, and thus it is not captured very well by any of the traditional techniques that corporations master in their everyday operations. However, scholars are still debating about definition of knowledge and where it belongs to (Stenmark, Winter 2000-2001; Nonaka and Takeuchi, 1996). Tsoukas and Vladimirou (2001) give a picture of knowledge more realistic. They define knowledge is a transformation of individual distinction into actions within a context and it becomes a distinctive production factor that has a huge impact on productivity, innovation, and product development. Thus, many organizations are practising knowledge management to discover new knowledge internally and externally to sustain their competitiveness in the market and make it as a critical source of product input and innovation.

KNOWLEDGE MANAGEMENT

Knowledge management (KM) becomes a hot issue of today business and those who are ignoring this aspect will be left behind (Drucker, 1999). Knowledge management significantly influences strategy formulation and implementation (Grant, 1996a; Zander and Kogut, 1995). Whilst the literature reveals a diverse range of knowledge management definitions and perspectives (Brown and Duguid, 2000; Grant, 1996b; Spender, 1996b), the acknowledged generic management intention is to improve the “wisdom” of the organization to enable improved decision making, and increase innovation, performance, and sustainable competitiveness outcomes (Nonaka and Takeuchi, 1996; Davenport and Prusak, 1997). KM and related strategy concepts are promoted as important and necessary components for organizations to survive and maintain their competitive keenness. It has become necessary for managers and executives to address KM (Goodman & Chinowsky, 1997). KM is considered a prerequisite for higher productivity and flexibility in both the private and the public sectors.

Knowledge management is a necessity due to changes in the environment such as increasing globalization of competition, speed of information and knowledge aging, dynamics of both product and process innovations, and competition through buyer markets (Day, 1994). It promises to help companies to be faster, more efficient, or more innovative than the competition. Also, the term “management” implies that knowledge management deals with the interactions between the organization and the environment and the ability of the organization to react and act (Nonaka & Toyama, 2003). This is particularly true in knowledge-intensive work such as the design and development of products, where knowledge is both a key ingredient as well as a key outcome of the work. Product differentiation requires the rigorous application of theoretical and practical knowledge from various sources, and for this reason the proper management of knowledge can influence the results significantly.

KNOWLEDGE BASED VIEW OF KNOWLEDGE CREATION

The resource-based view (RBV) regards knowledge as a vital organizational resource (Barney, 1991). Organizations that are aware of their knowledge resources possess a valuable, unique resource that is difficult to imitate and can be exploited to achieve a sustainable competitive advantage (Alavi & Leidner, 2003). However, Nonaka & Toyama (2003) argued that RBV ignores the aspect of market knowledge. According to the dialectic knowledge creation, an organization is full of contradiction within and outside firm. Hence, an organization should find a mechanism to balance it but not to control it (Nonaka & Toyama, 2003; Takeuchi & Nonaka, 2004).

Knowledge-based view (KBV) aims at developing a comprehensive view of knowledge that could shed light on organizational creativity, learning, innovation, and change (Nonaka & Krogh, 2009). The existing research suggests that knowledge creation has strong implications for the development of organizational competitive advantage. For example, researchers such as Nonaka and Takeuchi (1996), Ravichandran and Rai (2003) indicate that individuals' abilities to generate new knowledge constitute increasingly rare and socially complex capabilities that contribute to competitive advantage of an organization over its competitors. This notion is supported by other research findings suggesting that successful knowledge creation and implementation will help improve the efficiency and effectiveness of organizational operations (Coff, 2003).

KBV is a contemporary approach to strategic management that guides attention toward the understanding of the management of an organization's core knowledge (Ling, Liau, & Hsing, 2005). Organizational knowledge and related organizational learning processes, such as knowledge creation, represent the core elements of innovative organizations (Inkpen & Tsang, 2005). Knowledge has become the most important strategic input and valuable asset for innovation activities, playing a prominent role in the development of innovative organizations (Nonaka & Teece, 2001). According to KBV, knowledge is continually renewed and replenished (Brown & Eisenhardt, 1997).

The knowledge-creation process starts with socialization where the tacit knowledge of customers and competitors is acquired through field building. That knowledge is then externalized through dialog into explicit knowledge to be shared within an organization. Next, the explicit knowledge is in a form appropriate to be diffused throughout the organization and combined with other existing knowledge. Subsequently, an organization's workers internalize these complex sets of explicit knowledge, and then determine the most favourable application to be put in action. Thus, when an organization is considered a source of knowledge creation, the promotion of the knowledge-creation process expressed by the SECI model becomes an important part of the organization's strategic management. Organizational knowledge is created and restructured in an upward spiral—beginning at the individual level, then moving up to the group level, and finally to the organizational level (Nonaka & Teakeuchi, 1996; Nonaka & Krogh, 2009). This spiral process takes place both intra-organizationally and inter-organizationally as knowledge is transferred beyond organizational boundaries and knowledge from different organizations interacts to create new knowledge. According to Sanchez (2005, p. 28), management must therefore “create broadly based knowledge sharing and learning processes that stimulate and draw on the learning of all individuals and groups in generating the best possible flow of new ideas for their



organizations". According to the knowledge-based view, a firm's primary purpose is the integration of knowledge, and the creation and deployment of dynamic capabilities (Grant, 1996a).

SOURCES OF NEW KNOWLEDGE

The introduction of new products and services is a critical issue of organizational performance and survival (Damanpour, 1991). By introducing new products and services, organizations can establish new markets and technologies (Burgelman, 1991) and adapt and change to meet new market demands (Brown & Eisenhardt, 1995). Hargadon and Fanelli (2002) have divided sources of knowledge into two streams; organizational knowledge which is static and market knowledge which is dynamic.

1. Organizational Knowledge

Organizational knowledge becomes an important factor for knowledge creation (Park, Ribiere, & Schulte Jr, 2004). It is defined as the capability members of an organization have developed to draw distinctions in the process of carrying out their work by enacting sets of generalizations based on collective understandings and experiences (Tsoukas & Vladimirou, 2001). The internal created knowledge can develop new skills, ideas and uniqueness, and difficult for competitors to imitate (Nonaka & Teakeuchi, 1996). Thus, the creation of new knowledge is essential for the success of organizations competing in dynamic environments (Kogut and Zander, 1992). Hedlund and Nonaka (1993) highlight that creating and exploiting knowledge within an organization revolves around the integration of tacit and explicit knowledge and the transfer and transformation of knowledge between internal organization knowledge and market knowledge. Thus, organizations have to adapt the market knowledge and transform it to become organizational knowledge.

The primary source of organizational knowledge is organizational culture, employees' knowledge, procedures and information technology that comprise a firm's climate that informally, and perhaps tacitly, define how the firm is to develop and use knowledge which in turn will affect the creation of new knowledge (Wang, Su, & Yang, 2011, Tsoukas & Vladimirou, 2001).

1.1 Organizational Culture

The concept of organizational culture began seriously in the 1980s (Cameron & Quinn, 2006). They argue that organizations have taken for granted and ignore organizational culture as an important factor. Many researchers have argued that organizational performance has a positive relation with organizational culture (DeLong and Fahey, 2000). Organizational behaviour is determined more by its culture than directives from senior management and the implementation of strategies in many organizations is affected if they are at odds with the organization's culture (Jarnagin and Slocum, 2007). According to Tsoukas and Vladimirou (2001) find that employees' judgement in diagnosing problems has been crucially shaped by the overall company culture. This makes employees to internalize a set of values which help them shape their actions accordingly.

Organizational culture is an important issue in both academic research and management practice because it is the most important factor that can make the organization succeed or fail (Schein, 2004). Culture might be one of the strongest and most stable strength within the organizational context (Schein, 2004). According to Schein (2004), organizational culture is the most critical factor controlling an organization's capacity, effectiveness, survival and success. Schein (2004) defines organizational culture as a pattern of shared basic assumptions that the group learned as it solved its problems of external adaptation and internal integration that has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems. This definition gives a reason why the culture is important in the success of the operations and activities of the organization.

Many studies proposed that organizational culture can play a key role in supporting or hindering successful application of knowledge creation (Rhodes, Hung, Lok, Lien, & Wu, 2008). A study conducted by Al-Adaileh & Al-Atawi (2011) to investigate the impact of organizational culture on the knowledge creation process in the Saudi Telecom Company (STC) has a statistically significance.

1.2 Employees' Knowledge

Many philosophers acknowledged that there are two types of knowledge in organization; tacit and explicit knowledge (Davenport & Prusak, 1997; Nonaka & Krogh, 2009; Nonaka & Takeuchi, 1996; Nonaka & Teece, 2001). The debate among those philosophers is on whether tacit knowledge is individual essence or organizational knowledge. However, Tsoukas & Vladimirou (2001) do not make any differences for both types of knowledge. They argued that both types of knowledge are necessary for organizational knowledge.

Tacit knowledge is knowledge that cannot be easily captured by any information system. It only exists in people's hands and minds, and manifests itself through their actions. Therefore, tacit knowledge has drawn the interest from many knowledge management researchers. Stenmark (Winter, 2000-2001) suggested that an organization should observe and recognize it through the actions instead of identify, capture and make it explicit.

The tacit knowledge of employees should be reflective in the form of actions so that the process of knowledge creation will happen. In other words, it is a process of internalization which is mentioned by Nonaka (1995) in the knowledge creation spiral. Tsoukas & Vladimirou (2001) suggest that in order to make employees' tacit knowledge reflective, an organization should have some mechanism such as training, supervision, and knowledge sharing among employees.

Employees need to develop their skills in order to become effective in their job. The required skills can be developed through training. Once, employees develop a set of diagnostic skills which over time become instrumentalized tacit (Tsoukas & Vladimirou, 2001). This enables them to think quickly and effectively. According to SECI, training is a process of internalization in knowledge creation process (Nonaka, Toyoma, & Konno, 2000). Internalization is the process of embodying explicit knowledge into tacit knowledge. Through internalization, explicit knowledge created is shared throughout an organization and converted into tacit knowledge by individuals. Training programs can help trainees to understand an organization

and themselves. By reading documents or manuals about their jobs and the organization, and by reflecting upon them, trainees can internalize the explicit knowledge and will enrich their tacit knowledge. When knowledge is internalized to become part of individuals' tacit knowledge bases in the form of shared mental models or technical know-how, it becomes a valuable asset.

1.3 Organizational Routines

Besides the employees' skills and experience. An organization needs a written procedure, tacit knowledge, to be a guideline for effective work and good quality output. Employees will refer to the written procedures or manual in completing their tasks and jobs. A study conducted by Tsoukas & Vladimirou (2001) on customer operators in Patafon shows that written manuals provide information for the operators on going issues and current network problems. This makes operators can handle customers queries. Operators mostly agreed that most of the knowledge contains in company's manuals. This type of knowledge will make employees doing their tasks for efficiently and effectively. The written manual is stored in an organization's memory in the form of tacit knowledge.

Written Manual and procedures also become an integrating mechanism of an organizational knowledge cross-functional collaboration. A study undertaken by Sobek, Loker and Ward (1998) found that Toyota established coordinating mechanisms, including standardized reporting, and documentation, formalized work processes, problem-solving meetings. Integration among its different units. Those written procedures were also adopted by Southwest and BMW to integrate the knowledge among members of their cross-functional teams (BusinessWeek, 2006).

1.4 Technological System

The development of sophisticated corporate information system makes an organization to retrieve needed information very quickly and on time. This system is very important especially in service providing organization such as telephone operator department. Any delay in response to customers will make customers dissatisfied with the service. Tsoukas & Vladimirou (2001) found that telephone operators will retrieve customers' profile very quickly. Ideally, an organizational member will have all information they needed. Without a solid IT infrastructure, an organization cannot enable its employees to share information on a large scale. Yet the trap that most organizations fall into is not a lack of IT, but rather too much focus on IT.

Information technological system becomes one of the critical success factors in implementing knowledge management (Hasnali, 2002). The study shows that ICT has a significant positive influence on the processes of knowledge creation (Lopez-Nicolas & Soto-Acosta, 2010). The study in small innovative hi-tech firms shows that the use of IT assists in creating new knowledge (Spraggon & Bodolica, 2008). IT represents a valuable tool where individual, group and organizational knowledge is continuously codified, stored, diffused and renewed. It also represents a significant source of organizational learning and knowledge creation.

The study of Yang, Chen and Wang (2012) on the impacts of information technology on knowledge management practice in construction industry shows that levels of IT application



are positively associated with projects' levels of knowledge management. Additionally, project outcomes can be achieved with higher levels of knowledge management. The findings also indicate IT application affects on project performance in terms of schedule and cost success as well as quality and safety performance.

2. Market Knowledge

In general, there are two basic sources of knowledge. The first appears when firm conducts learning with unexplored with an organization, which is called internal source. Second, an organization explores new knowledge from outside an organization which comes from external source (Nonaka & Teakeuchi, 1996). According to knowledge based view of the firm, external knowledge acquisition from market environment becomes one of the critical means for knowledge creation in order to achieve competitive advantage (Nonaka & Teakeuchi, 1996). In this study we refer external knowledge as market knowledge. Market knowledge is not explicit but rather than difficult to codify and communicate (Nonaka,1995).The prior research shows that the acquisition of market knowledge leads to short-term improvements in sales and profitability growth, market share, new product success, customer satisfaction and return on assets (Slater & Narver, 1994).Outside sources of knowledge are critical to the innovation process in general (Cohen and Levinthal, 1990) and in particular in the context of changing knowledge environments. Organizations can acquire information and knowledge from their interactions with a variety of external sources which includes customers and competitors (Day, 1994). The advantages of market knowledge acquisition are worthwhile since dynamic environments may cause obsolescence in firm's current knowledge and capabilities (Nonaka, 1995). The ability to capture market knowledge leads to active acquisition and distribution of the needs and responses of the market, the position of competitors and customer preferences (Day, 1994). This implies that an organization that correctly identifies, collects, and uses information about customer and competitor conditions is deemed to be knowledgeable about the market.

Knowledge and capability value can be eroded by external changes (Collins, 1994). Thus, it is the environment, through opportunities and threats, which determines the real value of organizational knowledge (Priem and Butler, 2001). Therefore, if supply-side, demand-side or macroeconomic factors change, then knowledge value also may vary. As Nonaka (1995) points out that any organization that dynamically deals with a changing environment ought not only to process information efficiently but also create information and knowledge. An organization needs to continually acquire new market knowledge as the seeds for future market development. The inability to respond to market changes quickly makes an organization hard to survive in the competitive world (Kumar, Jones, Venkatesan, & Leone, 2011). Therefore, it is critical for managers to identify and understand market changes in order to sustain performance. De Geus (1988) pointed out that the sustainable advantage of an organization is its ability to learn and anticipate market trends faster than its competitors.

The organizational knowledge is useful at a certain period of time when market environment changes, it needs to acquire and create new knowledge in order to update the existing knowledge within an organization and to sustain the competitive advantage (Nonaka & Teakeuchi, 1996). Thus, they enable an organization to build a value-creating strategy (Barney, 1991). Moreover, when organizational capabilities are embedded in firm's tacit and

collective knowledge, the factor market threats of imitation, substitution, dissipation and appropriation may decrease (Barney, 1991).

The determining factors in the dynamic market environment are customers and business partners including competitors (Day, 1994). A study by Belkahl and Triki (2011) found that organizations perceive employees as corporate knowledge, meanwhile customers and competitors are market knowledge and become sources of competitive advantage in creating new knowledge.

2.1 Customer Knowledge

The voice of the customer is deployed throughout the product planning and design stages (Franceschini and Rossetto, 2002). It will become an input in the product design and development (Zairi and Youssef, 1998). Any changes in customers' demands may negatively affect the value of current marketing capabilities. The literature suggests that the primary objective of an organization is to deliver superior customer value, which is based on knowledge gathered from customer analyses and disseminated throughout the organization (Narver & Slater, 1990). The understanding of customer needs, preferences and market trends enables the organization to identify and develop capabilities for long term performance (Day, 1994) because the organization has information on customers' implicit needs to fulfill customers' satisfaction.

The collection of customer needs and preference can be done by incorporating customer's voice into every aspect of the organization's activities and rapid sharing and disseminating the knowledge of the organization's customers. The sharing of this information within an organization makes the firm well positioned to develop organizational memory (Kumar, Jones, Venkatesan, & Leone, 2011).

2.2 Competitor Knowledge

A considerable body of marketing thought suggests that competitor knowledge should improve an organization's performance by enabling the firm to position its strengths against rivals' weaknesses (Slater & Narver, 1994). Besides, customers' implicit needs and preferences, an organization also needs to analyze competitors' strength, weaknesses, capability and strategy in order to sustain competitiveness in the market. This rivalry view is also shared by prominent theorists in management and economics, who argue that an organization's performance largely depends on its ability to "beat the competition" either by manipulating an industry's structural parameters, as in competitive forces theory (Porter, 1980), or by developing difficult-to-imitate competencies, as in the resource-based perspective (Barney 1991). Specific competitor knowledge may result from an in-depth analysis of the behavior, products, and strategies (De Luca & Atuahene-Gima, 2007).

However, some researchers viewed that the rivalry is not the only approach to gather competitor knowledge (Luo, Rindfleisch, & Tse, 2007). They argued that alliances with competitors are another approach to create market knowledge. For example, Sony, IBM, and Toshiba are co-developing the cell chip to serve as the brains of the PlayStation 3 console (BusinessWeek, 2005).

To sum up, environmental dynamism may cause obsolescence in firm's current knowledge base, eroding its competitive advantage (O'Reilly & Tushman, 2008). To avoid this damage, organizations need to carry out an explorative learning that enables them to reconfigure their capabilities base (Lavie, 2006). Thus, market knowledge acquisition by firms may be considered as a key element for explorative learning development (Lavie, 2006). Therefore, any organization which deals with changing environment efficiently, it will create new knowledge as a source of competitive advantage.

NEW KNOWLEDGE

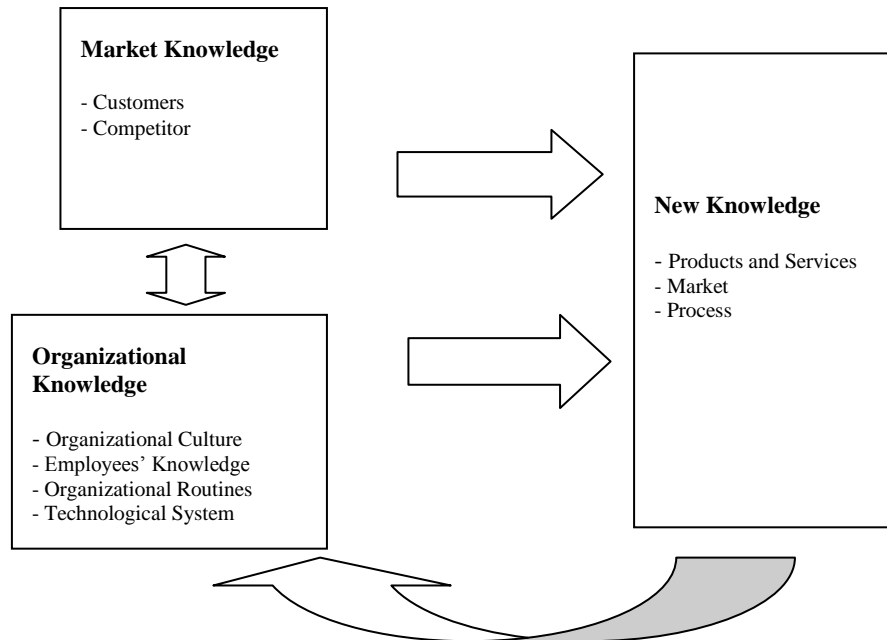
An organization can develop value and potential to sustain competitive advantage by creating knowledge (Bryant, 2005). Spender (1996a) emphasizes the importance of knowledge creation in knowledge-based views of the organization. He holds that there are two predominant goals of organization which are the generation and application of knowledge. Tsoukas and Mylonopoulos (2004) noted that an organization that has the ability to create knowledge develops a capability that is dynamic and unique and that potentially underpins continuous organizational learning. This is supported by empirical findings that knowledge creation is critical to a range of organizational processes supporting competitive advantage, including new product development and dynamic capability evolution (Smith, Collins, & Clark, 2005).

According to KBV, knowledge creation is a synthesizing process between organizational knowledge and market knowledge (Nonaka & Toyama, 2003; Takeuchi & Nonaka, 2004). The processes involved in knowledge creation are not only organization-specific, but also socially complex (Coff, 2003). KBV argues that RBV fails to capture the dynamic process through which organizational members interact with the environment (Nonaka & Toyama, 2003). Knowledge should be viewed from different angles through environmental interaction and externalization of personal knowledge. An organization will create new knowledge by assimilating and integrating organizational knowledge and market knowledge (Nonaka & Toyama, 2003; Takeuchi & Nonaka, 2004). Knowledge is produced through the synergy of four activities: problem solving, implementing and integrating, experimenting, and importing knowledge (Leonard & Sensiper, 1998). According to KBV, the knowledge creation is a spiral process. The organizational knowledge will be updated when there is new information or the market environment changes (Takeuchi & Nonaka, 2004). Therefore, the new created new knowledge will renew the existing knowledge in the organization by the advancement of technology.

There are not many literatures discussing about the dimensions of new knowledge. Most of the literatures discussed new knowledge in the form its tacitness and explicitness. New knowledge may be translated into many forms such as in products or services, in process and in technology (Cooper, 1998). Schumpeter (1934) suggested five dimensions in which new knowledge is translated namely new products and services, new method of production, new markets, new sources of supply and new organizational forms. Miller & Friesen (1983) focused on four dimensions: new product and services, new method of production, risk taking by key executives and seeking solution. While Capon, Farley, Hulbert, & Lehmann (1992) suggested three dimensions: market, strategic tendency to pioneer and technological advancement. Wang and Ahmed (2004) suggested five dimensions of new knowledge; products and services, market, process, behaviour and strategy. We decided to take

dimensions introduced by Wang and Ahmed (2004) in our framework. However, this framework excludes strategy because it is still debateable among researchers (Wang & Ahmed, 2004).

Figure 1 The Framework of Knowledge Creation



1. Products and Services Outcome

Innovative products and services present an opportunity for business expansion and success (Henard & Szymanski, 2001). New knowledge in products and services allow companies to establish dominant position in the competitive marketplace, and afford new entrants an opportunity to gain a foothold in the market (Danneels & Kleinschmidt, 2001). New knowledge is crucial to new product creativities (Yang, 2007). Innovation, which harnesses new knowledge or reconfigures existing knowledge, can yield new ideas and products (Grant, 1996a), while at the same time yielding projects competent to the customers (Rastogi, 2002).

2. Market Outcome

Market is highly related to new product, and often studied as product-market innovativeness (Schumpeter, 1934; Cooper, 1973; Miller, 1983). New knowledge of market refers to the discovery of new market which is related to market research, advertising and promotion (Andrews and Smith, 1996), as well as identification of new market opportunities and entry into new markets (Ali, Krapfel, & Labahn, 1995). They can enter a market or identify a new market niche and launch products with cutting-edge technological content.

3. Process Outcome

The discovery of new knowledge can lead to process innovativeness which captures the introduction of new production methods, new management approaches and new technology



that can be used to improve production and management process (Wang & Ahmed, 2004). Process outcome is mainly driven by the needs of production and can be said to be primarily efficiency-driven (Bergfors & Larsson, 2009). As a result, an organization can exploit their resources and recombine its resources for optimizing the competitive advantage in production. Besides the implementation of new approach, new process also can lead to the reduction of production costs, higher production yields, improvement of production volumes and product recoveries and environment-friendly production (Lager, 2002).

CONCLUSION

In today fast changing business world, innovation has become the mainstay of every organization. The nature of global economic growth has been changed by the speed of 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 innovative to build and sustain competitive advantage. Innovation is a capacity to move beyond current ways of doing things and current ways of operating companies to move beyond the best practice to shape best practice Innovation can strengthen the sustainable growth and productivity of a country and increase national productivity as well in the global market through creation of new ideas and opportunities.

Innovation has, however, become increasingly complex due to changing customer needs, extensive competitive pressure and rapid technological change. The complexity of innovation has also been increased by growth in the amount of knowledge available to organizations as basis for innovation. It 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. Knowledge as embodied in human capital becomes a central to economic development. There is a reason to believe that the nature of the organizational knowledge and market knowledge have an effect on organization's growth.

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