

Research Article

Use of practical wisdom through human capital in enhancing organizational innovativeness

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Abstract

In this dynamic global environment only those companies survive who know the power of knowledge and consistently create new knowledge. Such knowledge creating firms utilize dynamic dimensions of human capital. Human capital is the most important resource for a firm and has ability to create new knowledge in a changing environment. Various dimensions of human capital transcend themselves through knowledge creation in spiral knowledge creation process. These dynamic dimensions of human capital create knowledge in firms and foster practical wisdom, called phronesis. In a specific and dynamic context, subjective and objective ideals everyday through the SECI process, create knowledge and it is refined to become wisdom. Same is the case with innovation which emerges from the spiralling continuity of knowledge creation process. This conceptual paper builds on the philosophical concept of phronesis to describe the development and utilization of dynamic human capital to enhance organizational innovativeness.

Keyword: Human capital, Knowledge creation, Phronesis, Organizational innovativeness.

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1. Introduction

Last few decades clearly showed the significance of knowledge management practices within organizations. The knowledge-based view of the organizations describe companies as institutions that create, transfer, and protect knowledge in a more effective way than markets, which justify their existence and boundaries (Conner and Prahalad, 1996; Kogut and Zander, 1992). According to Nonaka & Takeuchi (1995) knowledge is considered to be the one sure source of lasting competitive advantage. In current dynamic global environment where markets are shifting, technologies are proliferating, competitors are multiplying, and products are becoming obsolete almost overnight. Only those companies survive who know the power of knowledge and consistently create new knowledge, disseminate it widely throughout the

organization, and quickly embody it in new technologies and products. Nonaka & Takeuchi (1995) say that such organizations are defined as the “knowledge-creating” company, whose sole business is continuous innovation.

In the knowledge creating company, innovation does not come from logical analysis of a firm’s resources and environment. It is created out of the ability to interpret the environment and resources both subjectively and in combination with objective information in a continuous interplay that is open, inclusive and collective. In particular it means creating such environment and conditions that will enable people doing a job they are skilled for, they enjoy and at the same time the job that satisfies them, so they can achieve results above standard and think out of the box. Nonaka and Takeuchi (1995) consider knowledge and intellectual capital as a company’s primary source of

production and value. Human capital, recognized by organizations as the strategic value of the human assets, is the collective value of the workforce. Human capital is not the worker in a company, it is what that person brings and contributes to the success of the organization. Human capital is the collective value of the capabilities, knowledge, skills, life experiences, and motivation of the workforce (Aldisent, 2002). It reflects the thinking, knowledge, creativity, and decisions making that people in organizations contribute; human capital includes these organizational contributions (Kaplan & Norton, 2004). Knowledge creation requires the kind of leadership that synthesizes practice and dialogue to create practical wisdom, called *phronesis*. The practice of *phronesis* provides an illuminating description of what that skill is (Nonaka and Toyama, 2005).

Creating knowledge through human capital of an organization is considered to be an important concept in knowledge management. And by pursuing subjective and objective ideals everyday through the SECI process, in a specific and dynamic context, knowledge is created and refined to become wisdom. Knowledge creation through SECI process has taken the advance step in which it is not only limited to transfer of tacit and explicit knowledge but also develops *phronesis*. According to Nonaka & Takeuch (1995) Building such organizational *phronesis* helps a firm become a resilient organization which can proactively deal with any environmental changes to realize its idealistic vision.

Same is the case with innovation, which comes through dialogue, exchange of ideas and communication between organizational members. The essence of innovation is to re-create the world according to a particular vision or ideal (Beckett & Hyland, 2007). New knowledge always begins with the individual. For instance, A middle manager's intuitive sense of market trends becomes the catalyst for an important new product concept. In each case, an individual's personal knowledge is transformed into organizational knowledge valuable to the company as a whole.

Understanding knowledge creation as a process of making tacit knowledge explicit is a matter of analogies, and models along with creation of value laden knowledge through practical wisdom. It is direct linked with organizational design and how company defines its managerial roles and responsibilities within it. This is the "how" of the knowledge-creating company, the structures and practice that translate a company's vision into innovative technologies and products. In this conceptual paper, the concept of human capital is taken the creation of knowledge and practical wisdom which leads toward innovation.

2- Purpose of the paper

Human capital is the most important resource of the firm to create knowledge in ever changing

environment. Therefore the purpose of this conceptual paper is to elaborate the role of human capital in creating knowledge which leads to practical wisdom called *phronesis*. It emphasize on need of making organization *phronetic*. The need of hour is to enhance organizational innovativeness and Innovation depends on the flow of knowledge and people in a competitive market. The conceptual model is suggested as an aid to enhance innovativeness of an organization and improves its performance. Firstly brief literature on human capital, knowledge creation and innovation is explained. Then the concept of *phronesis* is explained with relation to knowledge creation. Next section elaborates the relationship between human capital, *phronesis* and innovation. Conceptual models have been established to enhance the understanding of the phenomenon of study. In the final section conceptual model is established followed by conclusion.

3- Philosophical roots of human capital, knowledge creation and innovation

3.1- Human capital as a source of knowledge creation

Human capital is a dynamic self-replenishing resource. The new economic realities of twenty-first century production and competition, which have changed the patterns of work and have increased the premium on constant innovation, coincide with the accumulation of new empirics on innovation and their links to knowledge flows and job mobility. At the same time that human capital has risen above tangible assets as a key ingredient for economic success. Human capital represents the individual knowledge stock of an organization as represented by its employees (Bontis et al., 2001). Bontis (1999) argues that human capital is important because it is a source of innovation and strategic renewal. The essence of human capital is the sheer intelligence of the organizational member. Investment in human capital empowers the ability of organizations to sustain development through the creation of new and innovative knowledge and the diffusion of appropriate technologies. Human capital is one of the important sources of sustainable development; it consists of people's health, knowledge, skills, talent and motivation. Development of human capital is important through specific programmes such as permanent education, mentoring or training, broad cross-working education (job enrichment, job enlargement) in order to become aware of the different challenges and issues of corporate sustainability (Baumgartner & Ebner, 2010).

The standard approach for human capital is a set of skills/characteristics that increase a worker's productivity. According to Becker (1964) human capital is directly useful in the production process. More explicitly, human capital increases a worker's productivity in all tasks, though possibly differentially in different tasks, organizations, and situations. Education, training, medical care, personal development activities are also included in human

capital as they improve health, increase income or give satisfaction for life-long learning (Becker, 1992). The According to Schultz (1961), Nelson-Phelps (1966) view, human capital is viewed mostly as the capacity to adapt. Schultz explained human capital theory as knowledge and skills obtained by people as capital in the process of vocational and technical education. According to this approach, human capital is especially useful in dealing with “disequilibrium” situations, or more generally, with situations in which there is a changing environment, and workers have to adapt to this. The Bowles-Gintis (1975) view, “human capital” is the capacity to work in organizations, obey orders, in short, adapt to life in a capitalist society. The human capital theories lead towards improved productivity, education, knowledge, skills, competencies, attitude, health and welfare have an impact on it.

According to Nonaka, Toyama & Peltokorpi (2011) distributed dynamic dimensions of human capital are developed and utilized in knowledge-creating companies. It perceives human capital as the most important resource for a firm, and argues that a firm's sustainable competitive advantage comes from its ability to create knowledge in a changing environment. Because knowledge is created by people in their interactions with each other and the environment, it is important to understand the nature of human beings in order to keep creating knowledge and make knowledge a sustainable competitive advantage of the firm. Compared to other resources, Human capital is different because humans are subjective, interrelated beings who make value judgments.

3.2- Knowledge creation in organizations

A firm creates knowledge through the synthesis of subjectivity and objectivity in the SECI process of Dialogues and Practice as described by (Nonaka and Toyama 2005, 2007). The process is based on the Knowledge Vision and Driving Objective, which gives direction and energy to the SECI process. Ba, defined as a shared context in motion, provides an existential place for the SECI process. Ba can occur in a work group, a project team, an ad hoc meeting, a virtual e-mail list, or at the frontline point of contact with customers. It serves as a petri dish in which shared insights are cultivated and grown. Knowledge Assets are the inputs and outputs of the SECI process, and a firm creates knowledge through interactions with the Environment as an ecosystem of knowledge and multi-layered Ba.

Companies can foster ba by designing processes that encourage people (human capital) to think together. A knowledge creating firm pursues its vision and driving objective, which leads to creation of new knowledge through practice and dialog in interaction with the environment. The key resource that enables this process, the capability to coherently direct, synthesize, and implement the elements that foster knowledge creation is accomplished by leadership.

Leadership in a knowledge-creating company is not about fixed administrative control. It is a flexible and distributed leadership, where the leader is determined by the context. (Nonaka and Toyama, 2007).

According to Nonaka knowledge-creating theory, a firm must be capable of immediate action in response to the various ba that emerge and disappear in real time, both inside and outside the organization. In a fixed leadership company, this would be impossible. As knowledge is created in dynamic interactions with the environment, managing the knowledge creating process requires the ability to foster and manage those interactions according to the situation. It is the responsibility of the leadership to mobilize knowledge that is unevenly distributed, while determining how to enhance the quality of knowledge on all levels and how to synthesize the diversity of knowledge. To do so, knowledge leaders must be able to connect various ba both inside and outside the organization to form a selforganizing ecosystem of knowledge. This process is similar to the establishment of a small world network, in which individuals, in many cases middle managers, become nodes, which are connected to each other on their own will (Gladwell, 2000).

Knowledge creating activities are conversion processes through which the tacit knowledge originating in the body, experiences, thoughts and beliefs of an individual is put into words and thus transformed into explicit knowledge (Nonaka & von Krogh, 2009). This is the spiral of knowledge creation in organizations and according to Nonaka, Kodama, Hirose & Kohlbacher (2014) phronesis is the factor that promotes this spiraling process; the synthesis of tacit and explicit knowledge and call this relationship as knowledge triad. They presented new paradigm for promoting knowledge base transformation. Dynamic fractal organization as a new organizational model to foster innovation through sustained knowledge creation. From the perspective of knowledge creating theory, it is clear that companies that sustainably achieve the dynamic synthesis of exploration and exploitation commonly have multi-layered networks of ba that produce the knowledge triad relationships of tacit knowledge, explicit knowledge and phronesis. These knowledge triad relationships synthesize the activities of exploration and exploitation and create robust dynamic fractal organizations which enable environmental adaptation and creation simultaneously (Nonaka, Kodama, Hirose & Kohlbacher, 2014).

3.3- Phronesis with human capital

3.3.1- Phronesis

Nonaka and toyama (2007) described a process by which any company can apply tacit and explicit knowledge and he noted that such processes flourish in organizations led by individuals who embody tacit and explicit knowledge in their own behavior. These “virtuous artisans,” as he calls them, have also been

present in Western culture, dating back to Aristotle's exploration of the idea of phronesis in his work *Nicomachean Ethics*. Often translated as "practical wisdom," phronesis is the ethical yet pragmatic frame of mind held by those who can sense the essence of a situation and respond with creative and timely judgments.

In the *Nicomachean Ethics*, he distinguishes between three types of knowledge: episteme, techne, and phronesis. Episteme is universal truth, corresponding to the universal validity principle in the practice of modern science. Based on the rational analysis of idealism, it is context-independent, objective (explicit) knowledge that focuses on universal applicability independent of time or space. Techne roughly corresponds to technique, technology and art. It is the know-how or practical skill required to be able to create. Based on instrumental rationality, it is context-dependent, practical (tacit) knowledge. Phronesis is an intellectual virtue. Roughly translated today as prudence, ethics, practical wisdom or practical rationality, phronesis is generally understood as the ability to determine and undertake the best action in a specific situation to serve the common good. Phronesis takes into account contextual circumstances, addresses particulars, and shifts aims in process when necessary (Eisner, 2002). In other words, it is the high-quality tacit knowledge acquired from practical experience that enables one to make prudent decisions and take action appropriate to each situation, guided by values and ethics. Phronesis is acquired through the effort to perfect one's craft, which makes one a virtuous artisan.

In general, Phronesis is the practical knowledge of ethical, social and political life, which accounts for its development first in the field of political science. Politics is the art of the possible, which creates the future through a process of negotiation and coordination. Phronesis as political judgment is the ability to initiate action toward the future based on universal consensus about specific goals and measures reached through the shared judgment and conviction of individuals in each context (Beiner, 1983).

3.3.2- *Phronesis – development and utilization of human capital*

Phronesis is knowing, "what must be done." This requires an understanding of how the organization should exist in the world: its purpose, its reason for being. Moreover, for an organization to be resilient as well as skilled at creating knowledge, phronesis must be broadly distributed. According to Nonaka & Toyama (2007), what exactly is phronesis, then, in the context of a knowledge-creating company, It is argued that it consists of the following six abilities: therefore, is built or acquired by practical wisdom, and has six key abilities: i) to base decision-making on what is good for the organization and society; ii) to quickly grasp the essence of each specific situation; iii) to provide a shared context in which organizational

members can create new meaning; iv) to use metaphors and stories to convert experience into tacit knowledge; v) to exert political power to bring people together; and finally vi) to guide others towards cultivating practical wisdom as distributed leadership. These six abilities are ideal and together they explain the development and utilization of distributed, dynamic human capital in knowledge creation companies.

Based on idealistic pragmatism (Rescher, 2003), this synthesis centres on the kind of skill leaders in the knowledge-creating process require. How and what knowledge is imparted and integrated into the firm influences the competitive edge of the firm (Eisenhardt & Martin, 2000; Grant, 1996). Knowledge based view of the firm is reinforced by various components: the people-who are the knowledge carriers and the agents of the business (Sveiby, 2001); organizational structures-which is created by people to allow communication as well as self-expression (Weick, 1983; Sveiby, 2001); transfer of knowledge-both internally and externally (Sveiby, 2001); and knowledge management (Bencsik & Solyom, 2011). The literature advances the idea that human capital development approach is a basic entity of knowledge generation (Sum, 2010), which results into strategically using the acquired knowledge and hence effecting firm's performance (Conner & Prahalad, 1996; Eisenhardt & Martin, 2000).

However, leadership in the knowledge-creating firm is based on more flexible distributed leadership, rather than leadership as a fixed control mechanism (Nonaka, 2007). Since knowledge is created through dynamic interaction, leadership in a knowledge-creating firm requires active commitment from all the members of the organization, not just from a few elites. In knowledge-creating firms, the planning and implementation of strategy is integrated instead of being separated, as suggested by existing theories of strategy and organization. Dynamic capability requires the entrepreneurship of a maestro (Tece, 2003). For such leadership to be effective, the discipline must be shared by the members. It does not mean that everyone starts creating knowledge immediately. For knowledge leadership to work, the mechanism of middle-up-down is key. In such a process, middle managers break down the vision or driving objective into concrete concepts or plans, build ba, and lead dialogues and practices. Such middle managers create tipping points in small-world networks (Gladwell, 2000; Watts, 2003). Knowledge cannot exist without human subjectivities and the contexts that surround humans. Humans are purposeful beings who will act to realize their dreams and ideals—and these are beyond mere preferences (Rescher, 2003).

An individual transcends himself or herself through knowledge creation (Nonaka et al., 2000; Nonaka and Toyama, 2003). In the organizational knowledge-creating process, individuals interact with each other to transcend their own boundaries, and as a

result, change themselves, others, the organization and the environment.

Human capital is a key to foster phronesis within organizations through multiple ways (Nonaka, Toyama & Peltokorp, 2011) and it is distributed at all levels of employment, higher level management, middle level management and lower level management; some of them are;

1) Pursuing the essence of routine phenomenon and it is fostered through the routine of asking relentlessly what the essence is (Nonaka, Toyama & Peltokorp, 2011). The routine work is sometimes considered monotonous but the routineness of tasks make an employee expert in that particular task and he/she will get true essence of it.

2) To read the situation correctly. One has to put oneself in actuality and experience it with five senses. (Nonaka and Toyama, 2007 ; Nonaka, Toyama & Peltokorp, 2011). An employee has to put in actual situation to solve the issue, it will give experience to the employee.

3) Understanding the situation and decide what action to take and take action to satisfy both objective and situation (Nonaka and Toyama, 2007; Nonaka, Toyama & Peltokorp, 2011). This is also related to human capital development to understand a particular situation and take action wisely.

4) Opportunity to get peak experience especially experience of having faced great challenges, adversity or failure. It gives exposure to employees and it tests the ability of a person (Nonaka, Toyama & Peltokorp,

2011). This enhances employees ability to act in changing circumstances.

5) Practice and direct experience gives ultimate exposure to employees. It should be given at every level of organization and show them the phronetic ways of thinking and acting in their daily works. (Nonaka and Toyama, 2007; Nonaka, Toyama & Peltokorp, 2011). It means training and development of human capital at every employment level plays an important role in developing wisdom (Krogh & Wallin, 2011).

6) Create an environment within which employee can share their knowledge comfortably and develop new knowledge via exploration and exploitation (Nonaka and Toyama, 2007; Nonaka, Toyama & Peltokorp, 2011). This distributed leadership enhances phronetic ways of thinking.

7) Apprenticeship is another way to foster phronesis and acquired from a mentor/mentee relationship, in which experience, context and time is shared (Nonaka, Toyama & Peltokorp, 2011).

Conceptual Model 1

The following model depicts that human capital development through training, education and employment contracts become an essential part of knowledge creation in firms (Krogh & Wallin, 2011), And above mentioned dimensions of human capital foster phronesis through subjective interpretation of environment.

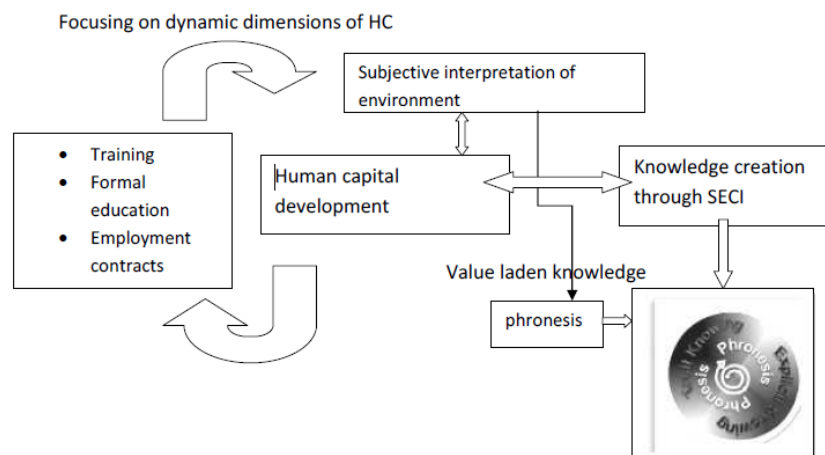


Figure 1: Conceptual Model 1

3.4- Knowledge and innovation

From reviewing the literature on innovation, it is identified that many studies have focused on the organizational characteristics (such as organizational structure, organizational size and organizational resource slack), while the others have considered the role of the external environment of an organization (Damanpour, 1992). Some other researchers have empirically analyzed relationships concerning the external environment of an organization implying the importance of the external knowledge acquisition (Iansiti & Clark, 1994).

Indeed the assumption that organizational knowledge influences the innovation process finds theoretical and empirical support in several studies (Nonaka & Takeuchi, 1995; Carneiro, 2000). Specifically, the processes and practices of knowledge management are found to be driving forces for innovation (Darroch & McNaughton, 2002; Scarbrough, 2003). Generally speaking, organizational knowledge is translated into a core organizational capability for the organizations that are able to use effectively what they know in order to act before their competitors by constructing and managing an innovation portfolio which is hardly possible for competitors to imitate (Davenport et al, 1996; Sharkie, 2003). Hence, it is expected that the management of knowledge and knowledge based assets to be closely related to innovation performance.

Schumpeter argued that innovation is brought about by entrepreneurial leaders. However, he viewed leadership as an activity of elites, and entrepreneurship as a matter of individual disposition. He confined the innovation to managerial level of organization (Peukert, 2003). Unlike Schumpetrian view knowledge creation, on the other hand, implemented at every level of the organization through daily practice, demands the active commitment of every individual in the organization, not just a small group of elites. In other words leadership should be distributed to bring innovation (Nonaka, 2007). Phronetic leadership in a knowledge-creating company is not about fixed administrative control. It is a flexible and distributed leadership, where the leader is determined by the context (Nonaka, 2007). Research on innovation and technological change offers a view of the relationship between knowledge and technical change. Innovation scholars refute the notion that new knowledge is the source of generalised – yet elusive – positive externalities. Rather, they propose, the emergence of new opportunities due to the growth of knowledge sets in motion a nonlinear process of adaptation of the existing structure of knowhow (Rosenberg, 1976; Nelson and Winter, 1982). Strong emphasis is placed on the pivotal role of discoveries originated in the context of problem-solving activities rather than basic research (Rosenberg and Birdzell, 1986). Allied to this is the claim that the ability to reap the benefits of new knowledge is contingent rather than automatic:

uncertainty, irreversibility and path-dependency play a significant role in either stirring or thwarting the potential of new knowledge (Arthur, 1989; David, 2001).

In essence, the source of real innovation stems from the creation and exploitation of knowledge, with this relationship between the creation and exploitation of knowledge being socially dynamic. Specifically, the creation and utilization of knowledge occur simultaneously and cannot be separated (Osono, Kodama, Yachi, & Nonaka, 2006).

Recent studies have shown that in order to construct and motivate ideas for maintaining innovation in the company, managers and organizations have to face and solve this paradox (Lewis, 2000). Indeed, maintaining an appropriate balance between exploration and exploitation, and promoting synergies between exploration and exploitation can help improve corporate performance (Kodama, 2003).

Knowledge creation theory sets the premise that the process of knowledge creation and usage forms a continuum and occurs simultaneously. This also leads to diversity as a consequence of multiple levels of involvements of individuals, teams and organizations. In order to foster innovation it is important for corporations to possess the “synthesizing capabilities” which is needed to integrate diverse pieces of knowledge and increase the quality of knowledge (Nonaka & Toyama, 2002). Synthesizing capability is the process of dialectic solution – the result of the interaction of thesis and antithesis – of diverse knowledge dispersed inside and outside of a company through the process of affirming, negating and integrating; it is the ability to dynamically create consistent knowledge systems and synthesize a wide range of contradictory factors through the structure of

the knowledge creation firm model (Nonaka and Toyama, 2005). At the foundations of achieving innovation with synthesizing capability is the “phronetic knowledge leadership” demonstrated by leaders with practical wisdom (Nonaka, et al., 2008; Nonaka & Toyama, 2007), which is a requisite for acquiring collective knowledge through organized practical training. Most scholars focus on the benefits and the challenges of tacit and localized knowledge (Cowan et al, 2000) and more, in general, how firms acquire new knowledge and implement it in their operations. Knowledge within organization can be tacit, explicit or phronetic (knowledge triad).

When an individual’s tacit knowledge is shared with another person it becomes explicit knowledge, and when this is merged with other explicit knowledge it becomes new explicit knowledge, which in turn can then be converted into the tacit knowledge of an (other or the same) individual and thus link with the subsequent conversion process. Innovation emerges from the spiralling continuity of this conversion process. The same holds true for the relationship between exploration and exploitation (Nonaka,

Kodama, Hirose & Kohlbacher, 2014). They, too, lie on a continuum and interact in a spiraling continuity. This means that the concept of exploration and exploitation—and thus also the concept of ambidextrous organizations can be easily and straightforwardly explained by the knowledge-creation theory. As a matter of fact, these concepts are actually already submitted in knowledge creation theory and thus part of it.

Conceptual Model 2

As conceptual model 2 suggest that innovation, which comes through dialogue and communication (knowledge creation) between organizational members. In order to foster innovation through subjective interpretation of environment it is important for organization to possess the “synthesizing capabilities” which is needed to integrate diverse pieces of knowledge and increase the quality of knowledge.

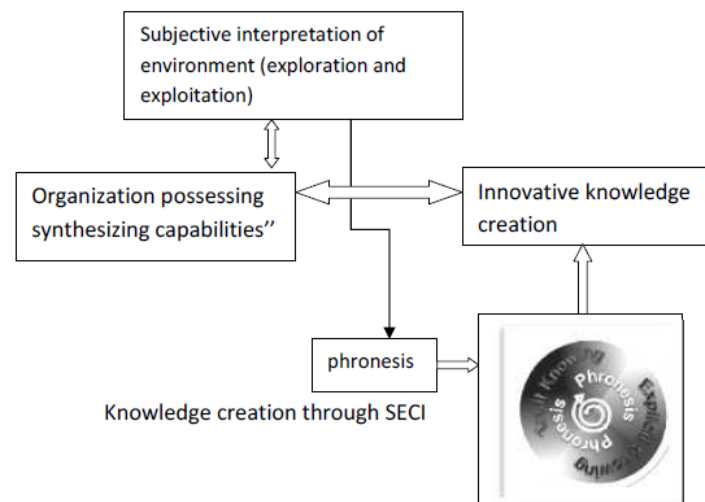


Figure 2: Conceptual Model 2

4- Relationship between human capital, knowledge creation and innovation

Hess and Ostrom (2006) suggested that “an infinite amount of knowledge is waiting to be unearthed. The discovery of future knowledge is a common good and a treasure we owe to future generations. The challenge of today’s generation is to keep the pathways to discovery open.” Knowledge however is not merely a good that can be unearthed and passed on, like a tangible gift, to future generations. In its dual meaning, knowledge simply cannot be captured by merely examining the codified items we consider intellectual property – ownership in patent, copyright, trade secrets. Knowledge is also the human skills, communications, and know-how that exist within people. The direct interactions between people are the primary vehicle of transmitting these aspects of knowledge.

There are multiple reasons why even in the age of information, when the digital sphere provides abundant access to knowledge, knowledge flows still rely on direct human capital. A primary reason for the

continuing need for human interaction is that knowledge is often not codified. Empirical findings similarly and consistently show that social interaction is necessary to seed the first ideas for groundbreaking inventions. (Hansen 1999).

The proposed conceptual model builds on the philosophical concept of phronesis to describe the development and utilization of dynamic human capital to enhance organizational innovativeness. It is developed by joining the concepts elaborated in conceptual model 1 and conceptual model 2. This model shows that new knowledge always begins with the individual which depicts that human capital is the source of new knowledge.

Various dynamic dimensions of human capital through dialogue and practice, create knowledge in firms and foster practical wisdom, called phronesis. Knowledge creating organizations through SECI process spiral the knowledge creation process and this spiraling continuity of knowledge creation process possess synthesizing capabilities to foster innovation in organizations. This process repeats itself in changing

environment and that is how innovation comes with dynamism in human capital.

5- Final conceptual model

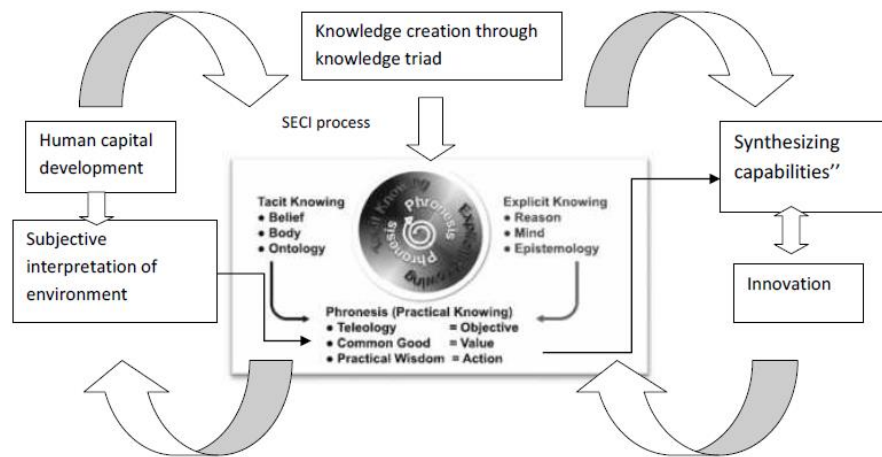


Figure 3: Final conceptual Model

6- Conclusion

The transition to a knowledge-based economy suggests that we must rethink the ways law and policy shape the market for skills. We must ask whether the innovation ecosystem supports information sharing, and successful scientific and creative pursuits. New empirical studies indicate that the more information flows freely, the more innovation we will witness. This paper built on the philosophical concepts of phronesis in relation to the dynamic dimensions of human capital, and the influence of knowledge creation on organizational innovativeness. The value driven from human's ability to subjectively interpret environment is the source of innovation in knowledge creating organizations. It needs emergent and distributed phronetic leadership to synthesize organization and its environment.

Good ideas are out there, but only companies with a structure of openness will be able to increase their absorptive capacities for innovation. Companies, who close themselves off, sinking into the depths of secrecy measures, are limiting their capacity to recognize and make use of external valuable information. Companies that encourage development of human capital and distributed phronetic process are able to respond to changes in environment and bring innovation through wisdom.

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