

The Relationships among Organizational Learning Process, Organizational Learning Facilitators, Working Environment, and Value Creation

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ABSTRACT

The organizational learning management literature has devoted a lot attention on various factors affecting organizational learning. While there has been much work done to examine organizational learning facilitators in promoting organizational learning, there is a lack consensus of the specific type of the facilitators involved. The purpose of this paper is to examine the importance of specific organizational learning facilitators and organizational learning process in promoting organizational working environment and value creation. This paper contributes to the existing organizational learning literature by specifying organizational learning facilitators – leadership support, reward mechanism, and employee collaboration, which enhance organizational working environment and value creation, and proposing 12 propositions involved.

Keywords: *Organizational learning, organizational learning process, knowledge achievement, knowledge dissemination, knowledge use, value creation*

INTRODUCTION

Organizational learning refers to the organization-wide activity of generating and utilizing knowledge to strengthen competitive advantage (Tushman and O'Reilly, 1996). This consists of achieving and disseminating information about customer needs, market changes and competitors actions (Moorman and Miner, 1998). Organizational learning impacts on what type of information is collected and how it is explained, valued, and disseminated (Sinkula *et al.*, 1997). Organizational learning is described by the existence of an organizational culture that values learning manifested by top management commitment towards learning, a shared vision, open mindedness towards change and intra-organizational sharing of knowledge (Sinkula, 1994).

Organizational learning is considered as an intangible resource which is manifested by specific orientations instilled within the processes and culture of an organization (Starbuck, 1992). For organizational learning to be manifested in practice, there must be an understanding from management of its importance and a consequent commitment towards it (Preskill and Torres, 1999). Managers must stress the value of learning and facilitate learning by encouraging and facilitating employees to work together in achieving common goals, to share information with each other and with other departments, to reflect critically on actions taken in serving the customers and performing their duties and to preserve and distribute the knowledge created during the course of their operations. Organizational learning is promoted via teamwork and cross-functional communication (Cohen and Levinthal, 1990).

To create value, organizational learning is necessary. In nature, organizational learning consists of individual learning but not exclusively. Indeed, learning is a complex process, which can be viewed from different perspectives (Dodgson, 1993). The literature on this topic, especially on identifying factors that facilitate the organizational outcomes in a variety of organizations has grown rapidly over the past few years (Stonehouse *et al.*, 2001). However, there is a lack of consensus on the relationships among organizational learning facilitators, organizational learning process, and organizational value creation (outcomes). Therefore, the objective of this research is, based on the relevant literature review, to provide a conceptual framework that integrates organizational learning facilitators, organizational learning process, and organizational value creation.

BACKGROUND

ORGANIZATIONAL LEARNING

The literature on organizational learning offers myriad perspectives about the nature of learning that is regarded as organizational. In general, the differences can be considered on the basis of a continuous spectrum. At one extreme, organizations are perceived as mental entities capable of thought (McGrath, 2001) and learning by sensing their settings and acting to these sensations (Eisenhardt and Martin, 2000). Put it another way, an organization is an entity in its own right that learns. This perspective is described by Torbert (1994) who stresses that an organization learns via processing of information that can change potential behaviors. At the other extreme, learning is conceived as an attribute of the individual, and organizational learning is considered an aggregate of individual learning. Between these two extremes of the spectrum are a significant number of approaches to organizational learning that tries to resolve the contradiction between the individual and the collective nature of organizational leaning (Bateson, 1972). In addition, Argyris and Schein (1978) unveil an inherent paradox in the nature of organizational learning: organizations are not merely a collection of individuals, yet there is no organization without such collection. In the same vein, organizational learning is not merely individual learning, yet organizations learn only via the experiences and actions of individuals.

In efforts to eliminate this paradox, Crossan *et al.* (1999) argue that organizational learning is regarded as a process consisting of intuiting and interpreting at the individual level, aggregating at the group level, and institutionalizing at the organizational level. The important thing is to go beyond the anthropomorphic metaphor of organizations as individual cognizers and understand thoroughly the social and situated character of learning (Huber, 1991). While it is individuals who make sense of events and learn, they do it inter-subjectively in a social context, via social interaction. In other words, organizational learning is considered as a social affair (Lave and Wenger, 1991). Thus, organizational learning can be defined as the social production of inter-subjective experiences and organizational rules, structures and relationships, leading to changed organizational behavior (Holmqvist, 2003).

Furthermore, Dodgson (1993) has specified different types of organizational learning. These types are associated with the essence and degree of changed organizational behavior. The organizational learning model includes single-loop, double-loop and triple-loop learning as

specified by Snell and Chak (1998). Single-loop learning involves adaptive responses: measuring an organization's performance, comparing it with its stated goals and taking corrective actions to close the gap. Through single-loop learning organizational actors detect deviations from their theory-in-use in response to a changing environment and take corrective actions. Single-loop learning contributes to an organization's knowledge and competency base without altering its goals, strategies or mental maps.

Double-loop learning involves evaluating and changing organizational goals, organizational strategies and mental maps. Double-loop learning is typically initiated when established mental maps and ways of understanding the business become inadequate. Triple-loop learning occurs in response to a realization that existing mental models and ways of organizational learning no longer suffice. Snell and Chak (1998) state that the essence of triple-loop learning consists of inventing new processes, methods or strategies for reframing and generating new mental maps. Such reframing takes the form of rigorous questioning, self-critique and critical reflection on double- and single-loop learning processes themselves.

As explained above, mental maps play a vital role in organizational learning (Teece *et al.*, 1997). By becoming an organizational member, an individual not only learns about operating procedures and organizational structures, norms and rules, but also gradually acquires shared beliefs, perceptions and mental maps or models of understanding the world. These shared beliefs and mental maps enable learned responses and consistent actions by actors across an organization (Hawkins, 1991). However, Argyris and Schein (1978) warn that there is a danger of their institutionalization that may lead to protecting the status quo and in effect preventing the search for new understanding and new mental maps or, in other words, preventing double-loop learning (Kim, 1993).

ORGANIZATIONAL LEARNING FACILITATORS

The literature provides some major aspects that are very likely to facilitate organizational learning. These major aspects consist of individual learning, team learning, learning environment, shared vision, friendly change culture, knowledge dissemination, and system thinking (McDougall and Beattie, 1998). These aspects in their combination require people to continuously extend their ability to create the outcomes they really want. That is why firms desiring to become a learning organization are forced to make investments of their resources towards developing as well as retaining these organizational learning facilitators.

In a word, organizational learning embeds gaining, storing and disseminating knowledge within the organization; is a product of certain organizational arrangements and decisions; is a kind of learning that embeds reassessment of core assumptions and values; and the consequence of organizational learning is organizational adaptation and value creation (Othman and Hashim, 2004). In addition, it embraces two perspectives - cognitive and behavioral perspectives of learning and tries to integrate them towards the realization of organizational learning. There are some scholars who have regarded organizational learning as a normative function but others have viewed it as a descriptive category, arguing that every organization learns in their own way, and studied what and how they learn (Pareek, 2004). This perception of organizational learning

should stretch beyond the human capital aspect of organizations.

It is believed that the desired job behaviors required in the processes of organizational learning are not the outcome of only the cognitive brain but also of the emotional brain of the employees (Chermack, 2003). Put it another way, it is the interaction of both cognitive and emotional brain that propels experimentation and innovation on the part of the employees at the workplace (Pentland, 1995). Therefore, understanding the process of organizational learning requires studying not only the cognitive but also the emotional brain of humans at the workplace (Huber, 1991).

RELATIONSHIP BETWEEN INDIVIDUAL AND ORGANIZATIONAL LEARNING

In spite of the fact that organizational learning depends much on individuals, not all kinds of learning at the individual level are transferred into learning at the organizational level (Holmqvist, 2003). Organizational learning is not purely the sum of the learning of the organization's members (Watkins and Marsick, 1993). Organizational learning occurs when the lessons and problems of the organization's members are studied at one point in time in the organization and are then stored and disseminated to others in the organization. This, then, leads to actions focused on correcting discrepancies in the organization (Othman and Hashim, 2004). The construct of organizational learning is independent of any specific individual. Therefore, although the leader in an organization may change over time, the way in which the organization learns or fails to learn has little to do with him or her.

However, it is also true that organizations may know less than their members and cannot even learn what every member knows. In the view of Kim (1993), individual learning impacts organizational learning through influencing the organization's shared mental model. More specifically, individual learning influences the individual's internal mental models where shared mental models reside. As a result, as individual learning progresses to make shared mental models, the organization's view of the world evolves. In this way, organizational routines or work procedures change over time as individual routines change and improve. In addition, McDougall and Beattie (1998) argue that individual learning is connected to organizational learning through such factors as learning environment, active informal learning, and good communication of knowledge and skills.

ORGANIZATIONAL LEARNING AND VALUE CREATION

The success of a firm depends on its ability to create value (Kim and Mauborgne, 1997). As the source of this value creation, March (1991) specifies two alternative forms of organizational learning: exploratory and exploitative. Exploratory learning embeds the pursuit of knowledge that does not exist in the firm to create value, or that replaces a firm's existing knowledge to enrich current value. In contrast, exploitative learning involves refining and deepening existing knowledge that results in expanding or enriching current value. The two forms of learning are based on different patterns of knowledge flows and bear different benefits and costs for the firm.

In many cases, a firm creates value by refining existing knowledge stocks and improving how they are used (Schumpeter, 1961). In this case, organizational learning derives from localized

and in-depth search in a narrow range of knowledge domains so as to pursue well-defined solutions in the existing knowledge bases of the firm. According to Schulz (2001), the resulting exploitative learning is usually more certain in process and outcomes and less diverse than in exploratory learning with completely new knowledge. Dewar and Dutton (1986) describe it as more incremental, more routine, and more pertinent to the current operations.

Under the view of value creation, if value is perceived as the difference between benefits derived and costs incurred, exploitative learning creates both more proximate benefits and predictable costs (Sanderlands and Stablein, 1987). The benefits consists of improving the firm's productivity, incremental innovation, and a particular kind of dynamic capability to consistently improve competences in stable environments by increasing the efficiency of knowledge search, absorption, and combination (Benner and Tushman, 2003). Still, a firm's sole focus on exploitative learning may have detrimental effects if the firm's knowledge bases ultimately decay and become obsolete (Levinthal and March, 1993). In other words, because the returns on this form of learning are ordinarily more certain, immediate, and familiar (March, 1991), a firm runs the risk of utilizing its knowledge stocks but failing to renew them. Another, complementary way for firms to create value is to pursue radically new ideas and innovations, especially in highly complex or changing environments (Luo and Peng, 1999). Exploratory learning, which is based on relatively broad and general knowledge search, would enable firms to achieve radical innovations that would dramatically improve firm performance, and a kind of dynamic capability or flexibility to adapt to unpredictable changes by expanding knowledge pools and/or enhancing new re-combinatory mechanisms (Danneels, 2002).

Also, under the view of value creation, exploratory learning carries both higher potential benefits and higher potential costs. As described by Schulz (2001), exploratory learning has uncertain relevance—an unknown potential to affect everything or nothing. In other words, although the allure of knowledge exploration is seen in terms of large payoff, it is also a potentially risky activity with few guarantees of success. The potential value of exploratory learning may be substantial, but Levinthal and March (1993) note that over-reliance on this approach will ordinarily prevent a firm from gaining the full returns of its knowledge. Constant exploratory learning causes a firm to operate with less efficiency if it is constantly renewing its stocks without fully utilizing them.

Taken together, firms can neglect neither exploratory nor exploitative learning. For example, Miner and Mezias (1996) suggest that differences in these two learning modes firms adopt, as well as the extent to which they pursue learning, are associated with differences in the firms' value creation. In fact, some researchers have argued that it is important for a firm to understand how to exploit its knowledge stocks to ensure current viability and, at the same time, to explore complementary domains to ensure future viability (Katila and Ahuja, 2002).

PROPOSITIONS

With respect to organizational characteristics, three factors are examined as leadership support, reward mechanism, and employee collaboration. These three factors are often mentioned in the literature (Bierly and Chakrabarti, 1996). The organizational learning process consists of three ingredients - knowledge achievement, knowledge dissemination, and knowledge use. Knowledge

achievement is defined as the development or creation of skills, insights and relationships (Dibella and Nevis, 1998). Knowledge dissemination is defined as sharing what has been learned. It is the process by which knowledge is shared and diffused throughout the organization (Argyris and Schein, 1978). Knowledge use is defined as the integration of learning so that the knowledge is broadly available and can be generalized to new situations. Knowledge use happens when knowledge is being applied to a business context. It refers to the way in which knowledge is applied by members of an organization to better understand the area of assigned work so as to be able to make informed managerial decisions and implement changes (Moorman, 1995). Learning outcomes are in this paper specifically described by two dimensions – value creation and organizational working environment.

LEADERSHIP SUPPORT AND ITS RELATIONSHIPS WITH VALUE CREATION AND ORGANIZATIONAL WORKING ENVIRONMENT

Leadership support describes the attitudes of a firm's leaders in supporting learning. The role of leaders is to develop a shared vision, provide the resources needed, delegate authority, and celebrate learning successes (Senge, 1992). For successful learning, Brown and Duguid (1991) indicate that leadership has an important impact on the organization. Leaders who view knowledge as a critical resource have a positive attitude towards organizational learning. In practice, this attitude is materialized by the leader's support and approaches in order to promote knowledge and learning.

Mills and Friesen (1992) emphasize that leadership support would make favorable conditions for employing people who own fresh and valuable knowledge to the organization and have ability to disseminate knowledge. Leadership support requires nurturing learning activities from both internal and external sources of knowledge. Leaders set up a learning culture embracing values such as risk taking, empowerment, courage, collaboration, listening, feedback, and opportunities (Teare, 1998). This standpoint is shared by Nevis *et al.* (1995) who emphasize the association between organizational learning facilitators and learning outcomes where leadership support plays a central role in the organizational learning process. In other words, leadership support has a substantial influence on the organizational learning process, leading to the following propositions:

P1. The more substantial the leadership support, the higher the value creation.

P2. The more substantial the leadership support, the more efficient the organizational working environment.

THE REWARD MECHANISM AND ITS RELATIONSHIPS WITH VALUE CREATION AND ORGANIZATIONAL WORKING ENVIRONMENT

The reward mechanism of a firm has a strong impact on how its employees learn. A mechanism, which rewards thoughts of innovation and knowledge achievement, promotes more learning. Organizations where member performance is examined primarily on the basis of outcomes create more room to study fresh techniques. Using new approaches is often related to rewards. If this

results in positive performance evaluation, and rewards organizational members will learn more, if not no learning happens in the organization. This kind of relationship is examined in the following propositions:

P3. The more rewards to promote learning, the higher the value creation.

P4. The more rewards to promote learning, the more efficient the organizational working environment.

EMPLOYEE COLLABORATION AND ITS RELATIONSHIPS WITH VALUE CREATION AND ORGANIZATIONAL WORKING ENVIRONMENT

Learning is associated with many social and technical aspects of the organization. The center is on the interaction of the employees. If work is more collaborative, learning is gained via the interaction of employees and their communication. This collaboration makes favorable conditions for individuals and teams to create and disseminate relevant knowledge in the organization (Stonehouse *et al.*, 2001). An organization that promotes its employees to communicate in an open and intimate manner is very much likely to lead to sufficient interaction to handle problems and disseminate knowledge (Williamson and Iliopoulos, 2001). The nature of organizations functioning based on teams is the collaboration of individuals. Managers cannot implement the collaboration effectively if the relevant knowledge is not disseminated (Grant, 1996). Through working in teams, knowledge can be disseminated among employees. There is also a need for better understanding counterparts, their demands and how they work in various functions of the organization (Garvin, 1993). The collaborative process and team-based working environment bring about a necessary basis for new knowledge achievement and dissemination. The following propositions consider this relationship:

P5. The closer the employee collaboration, the higher the value creation.

P6. The closer the employee collaboration, the more efficient the organizational working environment.

ORGANIZATIONAL LEARNING PROCESS AND ITS RELATIONSHIPS WITH VALUE CREATION AND ORGANIZATIONAL WORKING ENVIRONMENT

Organizational learning is promoted towards generating beneficial knowledge for the organization to create value such as improvement in productivity or innovation via shared experience and reflection on practice (Easterby-Smith, 1997). The organizational learning process consists of knowledge achievement, dissemination and use. Knowledge achievement or dissemination is not expected to directly lead to a measurable performance. Organizational knowledge is only available for other individuals to achieve and use. Tangible results can only be materialized via knowledge use. An efficient working environment makes favorable conditions for the organizational learning process. “Environment” means a set of perceptions by the organizational members about the extent to which the organization is satisfying for them to work in (Deshpande and Webster, 1989). In reality, organizational learning and organizational working environment are closely associated (Nevis *et al.*, 1995). The relationships among the

organizational learning process, value creation, and organizational working environment are examined in a set of the following propositions:

P7. The higher the emphasis on knowledge achievement, the greater the value creation.

P8. The higher the emphasis on knowledge achievement, the more efficient the organizational working environment.

P9. The higher the emphasis on knowledge dissemination, the greater the value creation.

P10. The higher the emphasis on knowledge dissemination, the more efficient the organizational working environment.

P11. The higher the emphasis on knowledge use, the greater the value creation.

P12. The higher the emphasis on knowledge use, the more efficient the organizational working environment.

CONCLUSIONS AND DIRECTIONS FOR FUTURE STUDIES

In today's knowledge-based economy, learning is extremely important for organizations to create value. Myriad researchers have indicated that organizations not only develop strategies on the basis of core knowledge and capabilities but also work to achieve, disseminate, and integrate new knowledge to create value in dynamic environments. These processes – generally referred to as organizational learning – can derive from sources both internal and external to the organization, and they are necessary for promoting the organization's core knowledge base.

The organizational learning management literature has devoted a lot attention on various factors affecting organizational learning. While there has been much work done to examine organizational learning facilitators in promoting organizational learning, there is a lack of consensus on the specific type of the facilitators involved. This paper suggests the importance of leadership support, reward mechanism, and employee collaboration on the value creation and organizational working environment.

From the management point of view, this paper provides several meaningful implications. For those organizations that want to promote organizational working environment and value creation, the important facilitator is the full support of leadership. From this support, supportive behaviors and rewards will follow. This brings about an environment in which knowledge achievement, dissemination, and use will be enhanced. The organizational structure and operations should also be designed in such a way to maximize the collaboration among employees to gain new knowledge. Last but not least, a learning environment should be nurtured on a continuous basis.

Based on a careful literature review on organizational learning, organizational learning facilitators, and value creation, a number of propositions are set up in this paper as follows:

- P1.** The more substantial the leadership support, the higher the value creation.
- P2.** The more substantial the leadership support, the more efficient the organizational working environment.
- P3.** The more rewards to promote learning, the higher the value creation.
- P4.** The more rewards to promote learning, the more efficient the organizational working environment.
- P5.** The closer the employee collaboration, the higher the value creation.
- P6.** The closer the employee collaboration, the more efficient the organizational working environment.
- P7.** The higher the emphasis on knowledge achievement, the greater the value creation.
- P8.** The higher the emphasis on knowledge achievement, the more efficient the organizational working environment.
- P9.** The higher the emphasis on knowledge dissemination, the greater the value creation.
- P10.** The higher the emphasis on knowledge dissemination, the more efficient the organizational working environment.
- P11.** The higher the emphasis on knowledge use, the greater the value creation.
- P12.** The higher the emphasis on knowledge use, the more efficient the organizational working environment.

Future research should be conducted to ascertain how organizational learning facilitators and organizational learning process could be related to value creation and organizational working environment. There has been limited research done to understand the extent leadership support, reward mechanism, and employee collaboration influence on knowledge achievement, dissemination, and use. More empirical research should be directed to better understand their effects on organizational working environment and value creation. In other words, quantitative studies with a powerful and comprehensive statistical approach are necessary to clarify the importance of organizational facilitators and organizational learning process on organizational working environment and value creation based on the relevant construct development and measurement, and an overall assessment of the relationships among the constructs (testing the propositions derived from this paper).

References are available upon request.