Integration of Strategic Issue Management and Knowledge Management in View of Strategic Information Paradigm – An Integrative Framework

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Acknowledgement: This work was supported by the Brain Korea 21 Project in 2001.

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Abstract

Knowledge management is a current management concept dealing with information gathering and implementation processes for the organizational performance advantage. The study investigates knowledge management in two perspectives: internally, organizational information processing structure and externally, strategic issue management system. The study proposes the existence of filtering processes in the organizations. Based on this argument, the authors propose that organizations need to employ strategic issue management system for the successful implementation of knowledge management.

1. Problem Statement

Organizations interact to the environment in order to fulfill their purposes and continue to survive. Organizational enactment to the environment requires information processing – information gathering, selecting, and integrating with other information. Organizations are required to achieve efficient and effective information processing systems that enrich organizational knowledge. Organizational knowledge eventually leads to organizational capability to adapt to the change of environment and develop the competitive advantage.

However, there has been limited research done concerning knowledge management in view of strategic management paradigm. The authors proposes that knowledge management is the essential part of the integrating framework for strategic issue management.

2. Strategic Information and Filter

Ansoff (1990) postulated filtering process/effect concerning organizational strategic processes. Information from the environment penetrates through surveillance filter, mentality filter and power filter. Through these processes, organizational environment is conceptualized and characterized by managerial hierarchy.

Where environmental surveillance filter controls the depth and the realm of the surveillance, mentality filters of the organizational manager is subject to the managerial mindset. Managerial mindsets are precursor of the organizational strategic intents. Environmental surveillance is relatively objective compared to the mentality filter. Environmental surveillance can also be done by the experts using specific techniques.

However, mentality filter is directly related with the subjective human perceptions. As Reed & DeFillippi (1990) proposed, mentality has been accumulated by the past performance. In other words, mentality is path dependent. As the case, mentality filter contributes to the process of attraction-selection-conduct in organizational behavior (Gray et Al., 1985). In the same vein, the accumulation of the successes forms a conviction in the manager's mind about 'the things that do work' and failures build a conviction about 'things that do not.' (Ansoff, 1990; p.61).

Normally decision maker's perceptions and intentions are not actualized without change in the implementation stage. Especially when the organization is planning strategic change that includes both organizational structure and processes, the organization will meet enormous resistance from the impacted group. In the stage of implementation, the strategy itself may be changed so the expected results may not be attainable. Even the same information from the environment can be perceived differently by the internal organizational information processing dynamics.

Ansoff proposed that data from the environment would be instituted as 'information' after the processes of power filter. Fundamentally, organizations are political entities: coalitions of interest and demands emanating from within, and outside organizations (Mintzberg, 1978; Thompson, 1967). Different interests and demand arise from an organization for various reasons. Narayaman and Fahey (1982) claimed that under the dynamic, intra-organizational processes, varying decision domains, and differing levels of decision criticality, organizations could be viewed as loose structures of interests and demand, competing for organizational attention and resources. These conflicts eventually lead to political behaviour for organizational power. From the

political perspective, the content of strategic decisions is viewed as an outcome of transactions of power and influence.

The main point of political conception is the role of coalitions in organizational decision-making. Coalitions evolve in organizations due to limited resources, interdependence of tasks, limited availability of information, differential, but limited power, and differences in, and mutuality of interests (Pfeffer & Salancik, 1978; Thompson, 1967). As most organizations a re divisionalized by functional orientations, organizational power interactions work in a pivotal role for organizational strategy making and implementation. The perception of organizational power position is denoted here as the organizational power filter. The organizational power filter influences the organizational strategic positions by passing through various perceptions of the organizational power structure

However, information through the filters may lead the systematic biases. Various researchers termed the information processing mechanism as 'knowledge management' (Morten et. Al. 1999; Sarvary, 1999; Hedlund, 1994; Nonaka, 1991).

Organizations are regarded as an information processing entity (March & Simon, 196). New information age urged organizations process information efficiently and effectively in unimaginable manner. The need for strategic information is even more essentially required for survival where the organizational information processing capacities have exponentially increased.

3. Organizational Structure and Knowledge Management

By the 1990s, new environmental demands – particularly globalization of competition, markets, and technology and related economic and social consequences – were driving changes in strategy, structure, and management that were probably as widespread and influential as the diversification/divisionalization changes that drove current strategic management scheme. In such an environment, the existing paradigms of strategy, organization and decision-making, developed to explain an earlier form of the corporate model (Ansoff, 1965), might no longer be as relevant or as powerful as they once were (Harmel & Prahalad, 1993; Bartlett & Ghoshal, 1993).

The organizational structure has been argued as a primal factor for organizational adaptation to the environment. Organizational structure embedded in the organization routine or process is the main characteristic of organizational decision-making. The management of organization is premised on a set of basic assumptions on the part of its managers regarding organization structure, decision making processes, and ultimately human behavior, that are significantly different from those that underlie the economic and behavioral theories that currently dominate academic analysis of business organizations (Bartlett & Ghoshal, 1993).

Bartlett and Ghoshal proposed new form of organizational structure and process that is appropriate to the current knowledge based, information age economy – entrepreneur process. The entrepreneur process redefines set of management roles and relationships. Frontline managers have evolved from their traditional role of implementers of top-down decisions to become the primary initiators of entrepreneur action creating and pursuing new opportunities for the company. Middle level managers are no longer preoccupied

with their historic control role, but instead have become a key resource to the front line manager, coaching and supporting them in their activities. Top management, having radically decentralized the resources and backed them with strong delegated responsibility, focus much more on driving the entrepreneur process by developing a broad set of objectives and by establishing stretched performance standards that the frontline initiatives must meet.

Ansoff (1990) discerned the requirements of strategic leadership other then operational efficiency. The leverage of strategic role to explore the future environmental opportunities is essentially required for top-level managers. Michel Porter proposed almost identical arguments (1996). Porter proposed that operational effectiveness never be the same as a strategy. However, for the current information intensive knowledge based economy, totally new job requirements from the front line managers to the top-level managers are essential. This different view of roles shifted traditional operation oriented job prescriptions. The frontline managers not only have a hand-on decision making role but also have a financial control. As organizational processes are getting more project-based, front line managers are required to perform multiple functions.

These changes of roles and tasks in an organization may differentiate the level of strategic workload for top managers compared to the past. This transformation processes will implant new knowledge resources and capabilities into the organization. In the highly competitive, technologically driven environment, scarce resource that constrains the growth and strategic success of companies is not as much capital as it is specialized knowledge and expertise (Bartlett & Ghoshal, 1992) and the organizational capability (Amit & Shoemaker, 1993) that embeds in within the company. Unlike capital,

knowledge is a resource that is difficult to accumulate at the corporate level and allocate according to top management's evaluation of strategic needs (Bartlett & Ghoshal, 1992).

By decentralizing assets and resources into small-specialized operating units, organizations can create an environment in which this scarce knowledge can be developed and applied most appropriately. However, this creates a greater need for a powerful horizontal integration process to ensure that the entire organization benefits from the specialized resources and expertise developed in its entrepreneur units (Bartlett & Ghoshal, 1992; Hedlund, 1994).

The elaborate planning, coordination, and control systems have been drastically redesigned and simplified as management time and attention has shifted towards the creation and management of processes more directly related to adding value than on facilitating internal administrative activities (Bartlett & Ghoshal, 1993; Bettis & Hitt, 1995). As the environment has been more competitive and turbulent, the more flexible, knowledge generating organizational structure such as 'N form' or 'entrepreneur' structures may be required.

3.1 Organizational Information Processing Structure

As Penrose (1958) proposed, organization is an information processing structure. The organization is a storehouse of information, and within the organization incentives are created for the efficient accumulation and use of that information (Prescott & Visscher, 1980). Information about employee and task characteristics that influence productivity is part of the firm's capital stock, and the firm maximizes its value by choice of current period inputs, outputs, and a rate at which to acquire such information.

Information is an asset to the firm, for it affects the production possibility set and is produced jointly with output. Prescott and Visscher (1980) called this kind of information as organizational capital.

Prescott and Visscher (1980) categorized organizational capital as (1) personal information, (2) team information and (3) firm-specific human capital. Personal information is information about the match between workers and tasks. The work force is not homogeneous: workers have different sets of skills and talents. Some tasks within the firm are performed better with workers of a particular aptitude, and the efficiency of the organization depends how well individuals are matched to tasks at which they have a comparative advantage. Personal information is an example of organization capital.

Personnel information need not be valuable only because it facilitates the matching of workers to tasks. Another equally valuable use of personnel information lies in the matching of workers to jobs. What is important to performance in many activities within the firm is not just the aptitude of an individual assigned to a task, but also how well the characteristics of the individual mesh with those of others performing related duties. The productivity of a team member is not simply a function of his individual contribution to output but is also a function of how well his attributes complement those of other team members. The capacity of the organization to function effectively as a production unit is determined largely by the level and meshing of the skills of the employees. The case for the human capital of employees being a part of the capital stock of the firm is well established. Productivity in the future depends on levels of human capital in the future.

Human capital that possesses specific kinds of information (production processes, changing nature of competitions, new scientific knowledge that can be utilized for reshaping production processes) is a source of competitive advantage. As Prescott and Visscher (1980) proposed, group and intra-organizational information processing structure is as important as individual information-task alignment.

3.2 Knowledge as an Organizational Resource, Capability, and Competence

Strategy research has focused on factor market imperfections and highlighted the heterogeneity of firms, their varying degrees of specialization, and the limited transferability of corporate resources (Coase, 1937; Penrose, 1959; Wernerfelt, 1984; Barney, 1986; Diericks & Cool, 1989). Named as resource based view, this perspective that holds the type, magnitude, and nature of firm's resources and capabilities has been an important determinant of organizational profitability.

The firm's resource will be defined as stocks of available factors that are owned or controlled by the firm. Resources are converted into final products or services by using a wide range of other firm assets and bonding mechanisms such as technology, management information systems, incentive systems, trust between management and labor, and more. Capabilities, in contrast, refer to a firm's capacity to re-deploy resources, usually in combination, using organizational processes, to effect a desired end. They are information-based, tangible or intangible processes that are firm specific and are developed over time through complex interactions among the organizational resources. Unlike resources, capabilities are based on developing, carrying, and exchanging information through the firm's human capital (Amit & Shoemaker, 1993).

Organizational competency (or distinctive competence) emerged in the 1960s as a desired end-result of business policies (Ansoff, 1965; Learned et al., 1969). Hofer and Schendel (1978) described distinctive competence under the broad heading of resource deployment. Specifically, they defined competence as the "pattern of ... resource and skill deployments that will help the firm achieve its goals and objectives." Hofer and Schendel's work converges into two important themes: (1) the source of a competency is always internal to the firm, (b) competency is produced by the way a firm utilizes its internal skills and resources, relative to the competition. Competencies are within the firm's control and can be manipulated within strategy to generate advantage for performance (Reed & DeFillippi, 1990).

Knowledge as an organization specific resource has been proposed relatively long time ago (Arrow, 1969). In view of economic analysis, knowledge has been translated as a technology, technological knowledge or in a broad sense, resource (Penrose, 1959). Knowledge can be differentiated with two conceptually distinct attributes: tacitness and tangibility. Tacit resources contain knowledge or skills that are difficult to articulate, specify or explain. The tacitness of a resource is directly related to the tangibility of that resource, but the words are not perfect synonyms. An intangible resource that is not apprehensible would tend to be tacit. However, tacit knowledge is not necessary intangible. Skills often include tacit knowledge. For example, a skill may be teachable though not articulable. A skill may be apprehensible and observable in use though not codified. The tacit skill would be apprehensible and observable in use, even though not articulated or put into words.

An organization's unique set of assets is the result of the relationships both within and across the levels of factors, resources, and competencies. This results in two types of networks: local networks and structural networks (Black & Boal, 1994). A local network is the configuration of relationships within a level of analysis as in among factors, where it is the entire network that results in a resource. The resource is not merely the listing of its factors but is the interaction configuration among the resource factors A, B and C; its local network consists of all the existing relationships among A, B and C. For example, one can think simplistically of a unit's performance as a result of the interactions among the capacities of unit members (Factor A), the motivation present (Factor B), and the unit's physical and capital resources (Factor C) (Blumberg & Pringle, 1982).

A structural network is the configuration of relationships between local networks and between a factor of a local network and other networks or factors. Applying social network theories, structural network represents the relationships between the focal resource and other resources, as well as, the relationships between other resources and the factors of the focal resource (Black & Boal, 1994). For example, if one looks at the resource, a unit's performance as a single entity, it will have links to other resources and yet, individually, its factors (people's skills, attitudes, raw materials, etc.) will simultaneously also have links between resources and/or factors. It is the configuration of both of these sets of links that create the resource's structural networks. This structural network will be especially dense for non-tradable factors such as 'trust', and 'intangible assets' (Itami & Roehl, 1987).

There has been a misunderstanding concerning the resource or product of the organization in view of structural viewpoint. Resource or product is regarded as an end

result as the artifact of the local network and its place in a value chain will reveal the structural network. However, it is noted that a factor of that product's network, the manager of that department, will also individually have links to other networks (the chain of command relationships). Sayles (1993) notes that the widespread tactic of downsizing and eliminating middle managers may have a serious impact on the firm's ability to retain previous competencies. Given that middle managers play a crucial role in integrating and aligning competencies, the competency is destroyed in the letting go of the managers (Sayles, 1993). This happened due to a lack of understanding of the inter-resource (internalized knowledge) relationships that make up the competency and results in further destruction of other competencies due to the structural relationships that were involved.

In view of strategic resource, organizational network that is socially created, non-tradable and relationship based will be defined as knowledge. As a nature of knowledge has been generated by complex tacit organizational processes, the 'knowledge' may not be easily codified and fully imitatable. While complexity may be desirable to confound competitors, complexity makes it difficult for firms to create, manage, exploit, and nurture their knowledge.

Leonard Barton (1992) proposed knowledge-based view of organizational capability (1992). She proposed four dimensions of the knowledge set. Its content is embedded in (1) employee knowledge and skills and embedded in (2) technical systems. The processes of knowledge creation and control are guided by (3) managerial systems. The fourth dimension is (4) the values and norms associated with the various types of embodied and embedded knowledge and with the processes of knowledge creation and control.

The first dimension, knowledge and skills embodied in people, is the one most often associated with core capabilities (Teece et. Al., 1990) and the one most obviously relevant to new product development. This knowledge/skills dimension encompasses both firm specific techniques and scientific understanding.

The second dimension, knowledge embedded in technical systems, results from years of accumulating, codifying and structuring the tacit knowledge in people's brain. Such physical production or information systems represent compilations of knowledge, usually derived from multiple individual sources; therefore, the whole technical system is greater than the sum of parts. This knowledge constitutes information (e.g. proprietary design rules).

The third dimension, managerial systems, represents formal and informal ways of creating knowledge (e.g. through sabbaticals, apprenticeship programs or networks with partners) and of controlling knowledge (e.g. incentive systems and reporting structures).

Infused through these three dimensions is the fourth: the value assigned within the company to the content and structure of knowledge (e.g. chemical engineering vs. marketing expertise; open systems software vs. proprietary systems), means of collecting knowledge (e.g. formal degrees vs. experience) and controlling knowledge (e.g. individual empowerment vs. management hierarchies).

Leonard-Barton asserted that all four dimensions are interrelated and interdependent. She named these four as core capabilities of the organization. However, she also proposed that these sources of competitive advantage might hinder as core rigidity. Values, skills, managerial systems, and technical systems that served the company well in the past and may still be wholly appropriate for some projects or parts of

projects, are experienced by others as core rigidities – inappropriate sets of knowledge. Core rigidities are the flip side of core capabilities. They are not neutral; these deeply embedded knowledge sets actively create problems. While core rigidities are more problematic for projects that are deliberately designed to create new, nontraditional capabilities, rigidities can affect all projects – even those that are not reasonably congruent with current core capabilities.

These arguments are congruent with Danny Miller's proposition (1993). He proposed that past success that brings strong organizational inertia lead to perish by prohibiting change. He argued that organization's technologies stabilize and become more stabilized. Its employees develop a narrow knowledge base; they know how to do various tasks, but they forget why work is done in a specific way. In a sense, the search for comprehension is replaced by the quest for refinement. The result is that most organizations unreflectively embrace a narrowing set of skills and employ people whose knowledge is confined to a single technology. Successful organizations come to concentrate only on certain skills – those required to implement their current strategies and those corresponding to the knowledge of only the most esteemed managers and departments. Strategy becomes increasingly constrained by this narrowing skill set.

4. Strategic Issue Management

Strategic issue management has been proposed very recently, where strategic management has been proposed forty years ago. Strategic issue management (SIM) was proposed in the late 1970's and structured as a part of strategic management discipline in the early 1980's (Ansoff, 1980; King, 1980). Strategic issue management is one set of

organizational procedures, routines, personnel, and processes devoted to perceiving, analyzing and responding to strategic issues (Dutton & Ottensmeyer, 1987). This management system enhances an organization's capacity to adapt and learn more effectively (Dutton & Jackson, 1987). Adapting implies that an organization can achieve a better alignment with its environment (Lawrence & Lorsch, 1967), and learning implies that an organization can facilitate to internalize knowledge and understanding of the environment. Ansoff (1980) proposed SIM as a product of evolution of strategic management. He wrote the need of SIM as below:

The concept of strategic issues first appeared during the evolution of strategic planning. When strategic planning was first introduced in practice, the experience quickly showed this to be both impractical and unnecessary. Impractical because strategy revision is an energy and time absorbing exercise which, if conducted annually, overloads management. Unnecessary because a strategy is a long term thrust which takes several years to implement. Unnecessary annual revisions, instead of improving a strategy, will cause vacillations in managerial behavior and prevent a fair test of strategy. (Ansoff, 1980. p.133)

According to Ansoff, SIM does not replace the role of strategic management.

Rather SIM is a management tool for effective and efficient employment of strategic management system. As the level of environmental turbulence increases, the needs for SIM has increased accordingly. Ansoff proposed two rationales for the needs of SIM.

First one is the cost efficiency concern. Regular strategic management system is too expensive and requires huge resources and managerial capacity. Secondly, SIM is needed for the firms whose basic strategic thrusts are clear and stable but the environment is turbulent. The firm can establish its long range planning, but the environment is turbulent enough to affect its performance. In this case, SIM is an essential tool to explore the environmental turbulence.

In a similar vein, Dutton and Ottensmeyer (1987) define the essential needs for SIM in view of organizational adaptability. They proposed two distinctly different, yet complementary ways for the use of SIM. First, a SIM system can collect, disseminate, and interpret information and by doing so, identify issues that require managerial interpretation (Daft & Weick, 1984). Thus, adaptation of better alignment between an organization and its environment is achieved through a SIM system by helping to solve problems of equivocality management or uncertainty reduction.

Here, equivocality and uncertainty concept has been proposed by Daft and Lengel (1986). They explored to differentiate the nature of information processing problems. Information processing system might be suffered by the two different characters — equivocality and uncertainty. Equivocality means ambiguity and the existence of multiple and conflicting interpretations about an organizational situation. High equivocality means confusion and lack of understanding. Equivocality makes a yes-no question not feasible. Participants are not certain about what question to ask, and if questions are proposed, the situation is ill defined to the point where a clear answer will not be forthcoming (March & Olson, 1976).

Uncertainty comes from the absence of information. Galbraith (1977) defined uncertainty as "the difference between the amount of information required to perform the task and the amount of information already possessed by the organization."

Organizations that face high uncertainty have to ask a large number of questions and to acquire more information to learn the answers. The important assumption underlying this approach is that the organization and its managers work in an environment where questions can be asked and answers obtained (Daft & Lengel, 1986).

In the information age, information overflow has been serious concern for organizational managers. Unnecessary information gathering and processing increases the information processing cost and eventually decreases organizational performance. The SIM system helps to decrease uncertainty by allowing the organization to adapt efficient information processing system and lower equivocality by defining and clarifying issues before information gathering process.

Secondly, SIM system can bestow legitimacy on decisions to ignore some issues and to take action on others, enhancing the probability that powerful collective groups will endorse an organization's actions (Dutton & Duncan, 1987). Thus, SIM system fosters adaptation by helping to solve an organization's problems of reducing equivocality and preserving accountability (Dutton & Ottensmeyer, 1987). By using SIM, an organization may increase its efficiency to collect, interpret and report the information throughout the organization.

Narayaman, 1983). They claimed that as strategic decision makers in organization are continuously bombarded by an array of ambiguous data, strategic decision makers must somehow make an order and explicate and imbue with meaning. Strategic Issue Diagnosis (SID) refers to those activities and processes by which data and stimuli are translated into focused issues (i.e. attention organizing acts) and the issues explored (i.e. acts of interpretation) (Dutton et. al., 1983). Dutton et. al. (Dutton et. al., 1983) used the term issue diagnosis to emphasize the fact that the process is important in a development stage which has not yet achieved the status of a decision event, i.e. the decision alternatives which may emerge are still in the process of unfolding. Diagnosis

emphasizes the role of interpretation and judgment which is an unavoidable part of decision makers' endeavors to comprehend an issue. The diagnosis concept contributed to increase our understanding how the organizations react to the same impact to the different ways. SID generates the importance of decision maker's cognitive bias and limitation as one of important factor. This argument is congruent with the strategic behavior school of thought emphasizing decision makers' attitudes and mindset.

However, issue diagnosis concept lacks in the action plans and performance effects. As issue diagnosis is not fully integrated with the management system, it deals only with top management issue categorization and group dynamics. More importantly, because SID presumes that issue diagnosis may affect actual decision through unexplained individual cognitive processes, the SID concept has only limited applicability in the real field of management. For example, Dutton et. al.'s study presents outputs of SID are assumptions, cause-effect understanding, judgment language and labels. This study assumes that top management's assumptions will be actualized fully without exception throughout the organization. Seeing these limitations, the concept of strategic issue diagnosis may lie in sub-concept of strategic issue management emphasizing cognitive dynamics of decision-makers. Strategic issue management concept is the integrating framework that involves full spectrum of issues and activities possible in the identification, interpretation, and response to the issues including issue diagnosis (Dutton & Ottensmeyer, 1987).

5. Knowledge Management System

Knowledge management (KM) emphasizes to respond quickly to customers, create new markets, rapidly develop new products, and dominate emergent technologies (Nonaka, 1991). As the organizations are interacting with the environment as a living organization, continuous development of organizational knowledge is essential. Knowledge management is a business process (Sarvary, 1999). Knowledge management institutionalizes the information gathering, processing, and utilizing. In these processes, the systematic, institutionalized organizational value and attitude plays a pivotal role. As Sarvary (1999) suggested, internal rules and organizational information technology are very important to achieve the success of knowledge management. In these cases, two generic questions arouse: which is more important, technology or internal values and motivations of organizational members? In order to answer this question, the author adopts Morton et al.'s two kinds of knowledge management system – codification and personalization of knowledge management.

Organizational knowledge has been differentiated in two sections: personalized and codified (Sarvary, 1999; Morton et. al., 1999). Personalized and codified knowledge management system lies in the one continuous line, only emphasizing organizational knowledge processing node — either top down or bottom up. The reason the author asserting that this lies in the single continuum is any organization has these two characteristics. Morton et. al. proposed 80 to 20 method (one is about 80 % the other is about 20%). This classification gives descriptive picture of knowledge management 'strategy'. As strategy research has been suffered by the fuzzy set of reality (such as 'stuck on the middle' or 'not differentiable strategy' or 'industry standard that is not at all

related with performance advantage'), this classification scheme relatively clarifies the knowledge management strategy.

Personalized KM emphasizes on people rather than on organizational reporting system or information technology. This system typically deals with very high level of management decisions. Thus, solutions and problems tend to be unique and, as a result, difficult to codify in standard formats. The level of synthesis or abstraction is limited by high context dependence. One clear advantage of this system is that it is market driven. Administrative costs are small and the firm's management does not need to deal with the system. However, such system is reactive. People are not pushed to build knowledge and because it takes time away from engagement while providing no guaranteed return, they have little incentive to do research. Rather, they wait until sufficient information is available before they sit down and draw some conclusions. Such a system works well for making the firm's exiting wisdom available, but it might not be the best for triggering new ideas or revelations that lead to breakthroughs.

Codified systems are generally based on quite advanced information technology. They typically establish the connections through the large central organizations. Where most required knowledge is less dependent on the context, and is more generalizable, this system gives economy of scale with less person dependency. The advantage is this system provides an opportunity for breakthroughs (Sarvary, 1999). It allows the organization can do 'mass customization' with the help of distributed information technology. However, this system is very expensive where benefit may be hard to measure. Another disadvantage is that firm-wide norms, incentives, and corporate

culture must be explicitly built while in decentralized system they tend to evolve automatically from the very philosophy of system.

6. Integration of Strategic Issue Management and Knowledge Management

Development of information technology brought a fundamental change in organization communication processes. As Bartlet and Ghoshal (1995) asserted, the real job of top management is either positioning the organization for the future, or face to face interacting with organizational members, but not through memo, E-mail, or reports in order to find out the real problem in the organization. In this case, a developed organizational communication system helps top management create more free time to invest in strategic thinking and facial interactions with the organizational members while minimizing time spent on day to day operational processes. Huber (1990) emphasized the value of effective and efficient communication through IT that may be varied across organizations. In his arguments, IT as a medium of organizational structure and processes is expected to be a key variable for organizational intelligence. The quantity and quality of organizational communications make a performance difference. Reciprocal communications both vertical and horizontal, contribute to the level of organizational intelligence. Organizational intelligence is regarded as an output to the organization's decision makers. In order to increase organizational intelligence, well-defined organizational communication is prerequisite. Organizational communication is also a medium for shared knowledge. Shared knowledge must be expressed in words or symbols that are common to the social domain of different levels of organizational members. Such a shared language can facilitate the knowledge transfer as well as create a

positive, social influence process. And it is also a source of organizational synergy because shared knowledge enhances efficient organizational processes in order to accomplish objectives (Ansoff & McDonnell, 1990). Shared knowledge also improves the efficiency of organizational communication. Efficient organizational communication reciprocally increases synergy. As the authors asserted earlier, an organization is a goal seeking entity. To fulfill this objective, organization needs to interact to the environment with an efficient and effective manner. Knowledge management is a tool for processing information from the environment to interact with the environment. As Nonaka (1991) asserted knowledge creation and processing is a center of organizational strategy.

Strategic issue management is on the other hand, systematic organizational environmental surveillance and filtering processes embedded in the organizational structure. SIM can actualize knowledge trivial but not insignificant knowledge for organization into performance advantage. As the first part of the paper proposed, filtering processes are the organizational reality. It is given. Managers cannot do without this reality. However, the more efficient and effective information processes may give a performance advantage. Because of this, SIM is critically important in the knowledge management. SIM can bestow the knowledge creation and distribution in a more structured manner. It can also minimize organizational resistance by institutionalizing knowledge-based hierarchy. Although the KM is related with inter-organizational structure, initiative system for KM is essentially required as Ansoff proposed strategic initiatives. In this sense, SIM can be strategic initiatives for KM.

Where organizational restructuring requires enormous cost and time lag, SIM is also a fascinating alternative for KM. As Nonaka addresses, spiral of knowledge requires

fundamental shift of attitudes and structure. For efficient tactic for this purpose, SIM can be a important mechanism to realize KM. Some organizations see SIM as a slack that is not really applicable to their environment. That is partly true. However, in the case of environmental shift, organizational slack can be a bumper for environmental shock (Thompson, 1967). This is also related with Nonaka's notion of 'redundancy'. Where SIM can be a slack, it will be a source of future adaptability with organizational knowledge base.

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