KNOWLEDGE MANAGEMENT LIFECYCLE: A DRIVER FOR PRODUCTIVE INNOVATION IN THE ORGANZATION

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Abstract: This paper show cases how knowledge management life cycle provides stimulus for innovation in the organization. A Well implemented knowledge life cycle would ensure that knowledge is produced by the individuals who work in groups and that knowledge is disseminated into all parts of the organization paving the way for sustained innovations so that organization remains competitive by creating new products and services.

Keywords: Knowledge management life cycle, Innovation, Social innovation capital and Sustainable innovation

"Innovation is fostered by information gathered from new connections; from insights gained by journeys into other disciplines or places; from active, collegial networks and fluid, open boundaries. Innovation arises from ongoing circles of exchange, where information is not just accumulated or stored, but created. Knowledge is generated anew from connections that weren't there before."

—Margaret J. Wheatley

Leadership and the New Science

INTRODUCTION

Innovation is on the agenda of almost all the organizations today and is defined as the development of new values through solutions that meet new requirements, inarticulate needs, or old customer and market needs in value adding new ways.

Value addition is accomplished through more effective products, processes, services, technologies, or ideas that are readily available to markets, governments, and society.

Innovation is a self-organizing, self-propelled process in human social systems. Organizations, societies, communities, and businesses are all knowledge-making systems at their most fundamental level.

The reflections of innovation are seen in the areas that matter most to us especially in business, technology and economics. Competition is compelling the organizations to take steps towards identifying new products and services. Advancements in technology and strategic collaboration are encouraging the organizations to be innovative. In the new economy the success of an organization on the basis of its history is not guaranteed but is related to the innovative capabilities of the organization and its intellectual capital.

In this information age with the coming of age of internet many tools have become accessible to the people globally fostering innovation. Internet has now substantially contributed to the incubation of ideas and is helping people collaborate seamlessly. The information explosion that is taking place would only aggravate the need for better products and services. The future need for innovation would enable the organizations to meet the customer needs and then allow the organization to meet the next wave of customer needs. It is a real challenge for the organizations as they would have to create new solutions in the place of existing ones to meet the forecasted customer needs

In the current knowledge age, all the relationships that exist in business are interwoven and interdependent. A new product or a service offering would mean that there have to be new innovations in the value chain and across many organizations to grow profitable and secure market share.

In other words, this type of innovation outlook is what a firm can look to so that it can grow making millions of unique widgets.

Institutionalizing Innovation

An organization is built by the people and for the people therefore, it is very important to involve all the employees and utilize their intellectual potential to create new products and services. To be successful organizations must look into various elements of innovation process and practice them just like any other important critical process.

Studies show that innovation is built on the past. In other words, all innovative solutions are based on past knowledge, continual experimentation, and extension of

this past knowledge and experimentation. Innovation process has evolved over a period of time and has helped organizations identify new solutions. The new age innovation process empowers the people to identify new solutions on the basis of the knowledge gained in the past by the organizations.

Knowledge management

Knowledge is familiarity with someone or something, which can include facts, information, descriptions, or skills acquired through experience or education. It can refer to the theoretical or practical understanding of a subject.

First, knowledge is justified true belief. An individual justifies the truthfulness of his or her beliefs based on experiences in the world; whenever knowledge is created it expresses a new situation. The creation of knowledge is not simply a compilation of facts but a uniquely human process that cannot be reduced or easily replicated as it is so unique.

Knowledge exists both in explicit and tacit forms. Explicit knowledge is there to be seen in the form of documents, movies and other visible forms. Tacit knowledge which is tied to the senses, skills in bodily movement, individual perception, physical experiences, rules of thumb, and intuition is often very difficult to describe to others. For an organization in today's context it is very important to recognize the value of tacit knowledge and to use it to its advantage and it is possible by creating a culture for knowledge enabling and knowledge sharing. Tacit knowledge may seem too puzzling to be understood however it could be applied in a focused area to draw desirable results which is what makes tacit knowledge a powerful tool for innovation. It's therefore very sensible to enable tacit knowledge and nurture it.

Effective knowledge creation depends on an enabling context. Knowledge depends on the situation and people involved rather than on absolute truth or hard facts. It is important to understand that knowledge depends on its context. Organizational knowledge creation involves five main steps. The five knowledge-creation steps that are suggested are (1) sharing tacit knowledge, (2) creating concepts, (3) justifying concepts, (4) building a prototype, and (5) cross-leveling knowledge.

The process starts when team members meet informally to share their knowledge of a given area of interest, much of which is tacit and can include insights into products, services, technologies and the skills. Based on the meetings the team develops new concepts through the sharing of tacit knowledge. Team members could use various means that they are exposed to discuss the concept with some members agreeing and some disagreeing.

Team members after much deliberation for and against the concept shall take the responsibility for transforming the concept into a prototype.

The new concept could be a path breaking new supply chain idea, a new operational excellence plan and so on. The general goal is to create a tangible manifestation of the team's knowledge. Finally, the team assumes responsibility for sharing its knowledge with the organization at large, so that all the stakeholders can offer feedback about the new product or a service.

Knowledge creation is a social as well as an individual process. Sharing tacit knowledge requires individuals to share their personal beliefs and experiences about a condition with other team members.

A fruitful concept could evolve into a prototype when each individual in the team passionately gets involved in the team and connect with others so that knowledge creation is enabled.

Knowledge creation should be supported by all the functions irrespective of shortcomings that they could have, they should at least make an attempt to support the initiative. All the stakeholders including the critical players from outside the system such as from academia and other business partners should be involved in this all important exercise.

Knowledge enablement in the organization could take place through planned and organized activities and few times could happen as an unexpected event while working towards a productive activity.

Knowledge management should be iterative in nature; Organization should continuously strive to enhance the knowledge potential of the firm and they may consider doing it by dividing the major processes into smaller manageable ones.

Knowledge is enabled by the following factors (1) instill a knowledge vision, (2) manage conversations, (3) mobilize knowledge activists, (4) create the right context, and (5) globalize local knowledge.

First, all five enablers have a strong influence on the dissemination of information in the organization and manage conversations ensures that relationships grow strongly in the organization and affects all the remaining knowledge creation steps

Knowledge is always relevant to environmental conditions, and stimulates action in response to these conditions even in conditions of intense competition.

Era of new knowledge management

Thought process in this new era professes that knowledge is the produce of human social systems, and is a contribution of both individual and shared processes that have regularity to them. This process is best explained by the Knowledge Life Cycle (KLC). KLC believes that

People are likely to learn when they experience gaps in their current understanding and what they would like to be in the future.

During this time of learning people would come up with theories, arguments and assertions if acted upon might lead to desired outcomes, in ways that will close the gap between current and goal states.

During this learning phase people form groups when they see individuals with such learning inclination and try to collaborate to share ideas and try to review them in the group.

The claims of knowledge identified by the individuals should be validated at the organizational level to understand their rationality as not all knowledge claims formulated by individuals and groups succeed at an organizational level.

As knowledge claims are evaluated and validated at different levels of organizational scale, attempts should be made afterwards by managers and others to share their content and value with other members of the group or organization, in which case efforts are made to integrate them into the operations of a wider population of people. This process of managed knowledge sharing and diffusion can be thought of as "knowledge integration."

The knowledge life cycle, begins with the detection of problems or needs by the individuals in the context of business and when they are engaged in problem identification they experience gaps in their knowledge of how to move from current states to goal states), and end with the choice of newly validated knowledge claims, beliefs, and belief predispositions. Once this knowledge claims are recognized on regular basis it is then possible to support the claims and reinforce the behaviors that enable knowledge creation.

At an organizational level, people and groups engage in the kinds of activities encompassed by the KLC. This is known as knowledge processing. Knowledge processing includes knowledge production and knowledge integration, the two major areas of activity within the KLC, as well as their sub processes.

ORGANIZATIONAL LEARNING

Organizational learning (OL) Popularized by Peter Senge has attracted an enormous following and is widely regarded as a reference to the only sustainable advantage in business: OL is the ability to learn faster than your competitors. OL, therefore, focuses on how to create and foster effective knowledge.

Knowledge management and Senge's OL movement come together convincing the organizations that they could enjoy competitive advantage, the combination of which is much greater than either the knowledge management or OL.

The success of the knowledge lifecycle or knowledge processing depends upon the organizations ability to be open to new thinking and understanding. Organizations should be open to criticism and new thoughts directed towards learning and knowledge production should be adopted.

It is very important for the organizations to audit their openness from time to time to ensure that they are on the pedestal for knowledge creation and knowledge sharing.

SOCIAL INNOVATION CAPITAL

Along with knowledge management and organizational learning domains another domain that has been evolving in the recent times has been intellectual capital (IC) which is the difference between the organization's market capitalization and their book values. IC is part of that intangible which has significant bearing on the firm's value.

Infect it was in the late 1950s, the gap between these values, as displayed by the Dow Jones Industrials, started to widen significantly. New thinking in Knowledge management considers that knowledge processing is a social process unto itself can speak in rational terms and consider both knowledge production and knowledge integration as important considerations in computing the IC value of a firm. Equally important as the value of intellectual capital is the organization's capacity to produce it. Intellectual capital has now taken the form of social innovation capital wherein the organizations take the form of social groups and display their strength in influencing the society through products and services.

Self-Organization and Complexity Theory

Complex adaptive systems theory or CAS theory which is a part of complexity theory holds that living systems

including organizations are made up of living, independent agents, such as people self-organize and continuously fit themselves, individually and collectively, to ever-changing conditions in their environment. They do this, the theory says, by formulating and testing their beliefs and belief predispositions as a way of solving their problems and getting along with their work

CAS models can help organizations to equip themselves with the skills to thrive in the business environment and which is the reason why its application is widening in the area of business.

Sustainable Innovation

Organizations should realize that a continuous and consistent generation and facilitation of knowledge and its dissemination only would lead to sustainable innovation.

Successfully managing for sustainable innovation, then, begins with recognition of the distinction between decision-making and knowledge-making. Decision making is a prerogative of the management whereas knowledge making should be the motto of all the employees. It is an equal contribution from both these that would ensure consistent performance in line with innovation objectives. Organizations should keep learning from their experiences thereby supporting and strengthening their KLCs

Technology especially Information and communication technology (ICT) has contributed immensely through various products and services delivered information to people whenever and wherever it was needed.

Thus, knowledge management practice ensures the right information to the right people at the right time, using tools such as document management, imaging, data warehousing, data mining, and information-retrieval systems while focusing on the origin of data and its understanding.

Knowledge containers

One of the fundamentals of KM is the concept of knowledge containers—that is, the blocks in which shared knowledge is held and expressed. From the times in memorial human civilizations have been embedding knowledge in "containers" such as myths, rituals, dance, and other cultural artifacts. Indeed, these containers, along with our societies' institutions, reveal much about our cultural values, beliefs, rules, and the ways in which they have evolved over time.

One can see the codification of such collective social knowledge in the form of cave drawings which facilitated knowledge transfer from one generation to the next without individuals having to deal with the short comings associated with human memory.

Much of a firm's organizational knowledge, then, is expressed in the form of procedural and declarative rules held in various container types

It is very important for the organization to know what it knows, as well as appreciate the versatility of its knowledge. Procedural knowledge is expressed in the form of rules contained in such places as culture, business strategies, processes, and organizational schemes makes it easier for practitioners to help discover and articulate what their organizations know.

Second, recognizing that declarative knowledge drives procedural knowledge can dramatically increase an organization's rate of learning and innovation. It is very important to have a thorough declarative knowledge as it defines the path that the organization's procedural knowledge would take.

The production of new knowledge lies at the heart of organizational learning.

By combining both the organization learning and CAS one can have a hybrid approach in which both individual and organizational learning are accounted for using principles especially the principles of self-organization and emergence in complex systems.

In the organizations innovation is not the job of only R&D or product development groups. In the days gone by other functions in the organizations were spectators to the innovation routine s carried out by R&D and product development teams and they were just asked to follow the new knowledge. Organizations have started realizing the potential of all the employees in the organization in what they could contribute to the social innovation capital.

There are supply-side versus demand-side knowledge management. Supply-side strategies tend to focus only on the distribution of existing organizational knowledge, and are usually techno centric in their orientation.

Demand-side strategies, by contrast, focus instead on satisfying organizational needs for new knowledge, and therefore tend to be learning-or innovation-oriented. Therefore, it is very important for the organization to balance both the supply and demand side of KM strategies to ensure that new ways of knowledge production is carried out which is complemented by new ways of knowledge sharing.

The answer to the question of how to improve learning and innovation lies in the recognition of knowledge production as a social process. People don't innovate but organizations do. Sometimes organizations miss those milestones without realizing that they produced knowledge. An individual's creativity if shared with the groups would bring in innovations. However the individual's contribution to the groups should be widely accepted.

Therefore, organizational knowledge is produced and then integrated within the operating behaviors of a social system. In other words, new knowledge is produced by individuals collaborating in groups, who collectively formulate new ideas, validate them, and then propagate their knowledge across the organization, such that the individual and collective behavior of all of an organization's members changes in accordance with the new knowledge.

People and organizations practice their knowledge. Regardless of how else it might be expressed, organizational knowledge is always articulated in the form of organizational behavior and can be deciphered accordingly.

The most important factors that impact knowledge creation in the organization are: The four aspects of organizational life that are the most important variables in human social systems which impact organizational learning and production of knowledge are:

Embryology (of knowledge): The embryology of knowledge refers to the extent to which individuals in an organization are free to pursue their own learning agendas, and the degree to which they are further free to self-organize into knowledge-making communities of interest or practice.

Politics (of knowledge): The politics of knowledge making, diffusion, and use in an organization can have a dramatic impact on the overall rate of business innovation and the quality of the ideas produced.

Intellectual Diversity: The degree to which a business supports a plurality of ideas, even the critical ones, will also have a material impact on its overall performance in innovation. Firms that seek and promote diversified intellectual activities tend to be more innovative than those that don't.

Connectedness: Connectivity between various networks in the organization is also important for business innovation as collaboration would take place more efficiently between the teams which are well connected and eventually lead to better innovation efforts.

These aspects define the predicate rules for the successful implementation of knowledge management framework in the organizations

CONCLUSION

Knowledge management facilitates innovation in the organizations through effective knowledge creation, knowledge processing and knowledge integration. A learning and open enterprise would foster innovative ideas and also promote the culture of sharing knowledge. For the organizations which intend to overcome the competition and increase its market capitalization it is important that it harnesses the intellectual capital of the people in the organizations and turn into social innovation capital.

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