

Knowledge Management: A Learning Organization Model

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Abstract: - Information, i.e. the mere accumulation of data, is, by itself, rather meaningless unless it can be collected, well-structured, organized, and made available as knowledge. The effective use of knowledge is an important ingredient in all successful organizations, no matter what business they may be in or what services they may provide. To build and use knowledge effectively, what is needed is an organization that encourages the development of knowledge base and sharing of insights – a learning organization. A model of learning organization is presented, consisting of four cells: goals and values, motivation and empowerment, teamwork and collaboration, and feedback and learning.

Key-Words: - knowledge management, learning organization, motivation, empowerment, collaboration, teamwork

1 Introduction

Much has been written and even more said about knowledge management as a panacea for the enduring business of the new millennium. The liberated knowledge worker is being provided with a lot of technology – from the Internet and intranet, through OLAP (On-Line Analytical Processing) data mining and business intelligence, to various information architectures – to manage and share his new contribution.

Unfortunately, the flaws in this approach have become obvious. Namely, while technology is great enabler for the flow of data and information, it does not turn it into knowledge. Indeed the exploitation of the technology prompts other knowledge bearers to want to share the fruits of their own experience and wisdom, but the organization becomes a barrier to success – it becomes the weakest link in the knowledge management chain.

To rectify this imbalance, and to use knowledge effectively, what is needed is an organization that encourages the development of knowledge base and sharing of insights – *a learning organization*.

But, assuming that the learning organization can be developed, some important questions arise:

- How are organizations dispelling the traditional call of 'Knowledge Is Power'?
- What is inducing more selfless attitudes?
- What are the human pre-conditions for managing knowledge and becoming a learning organization?

The human context goes to the heart of every successful organization. In exploring our learning organization model, we can begin to identify these facets of the human context and examine how the direction, motivation and behavior of people can make the difference in leveraging knowledge and stimulating group learning

2 About Knowledge Management

2.1 The Key Role of Knowledge in Contemporary Business

It is very clear that today's business models depend greatly on maximizing resources, eliminating redundancy, and automating business processes to meet business goals. Furthermore, it is also clear that information technology has become an essential part of the business equation. One of the truisms of the new business model, in fact, is that the competition becomes even sharper and harder. The juxtaposition of these forces brings business management and executives to the conclusion that enhances customer satisfaction while improving enterprise efficiency.

Key to this is the effective use of information. But information, i.e. the mere accumulation of data, is, by itself, rather meaningless unless it can be collected, well-structured, organized, and made available as *knowledge*.

The effective use of knowledge is an important ingredient in all successful organizations, no matter

what business they may be in or what services they may provide. “With the advent of e-business, knowledge management is moving to the forefront of CEO agendas as a disciplined approach for enterprise transformation” [1].

In all these circumstances, knowledge management enhances products, speeds deployment, increases sales, improves profits, and creates customer satisfaction. But using knowledge in an organization requires an understanding that mere *availability of simple, disconnected bits of information is not knowledge*, and cannot adequately address these enterprise imperatives.

2.2 Implementing Knowledge Management

Knowledge management (KM) is as much an activity as it is a type of system or technology. That is why it is worthwhile to explore what is involved in implementing knowledge management, or to put it more formally, in capturing existing knowledge within an organization, and then adapting that old knowledge with capturing new knowledge going forward.

This process can involve a series of steps [2]:

- creation
- identification
- collection
- organization
- sharing
- adaptation
- use

Once such knowledge is captured, knowledge management professionals can apply the processes of analysis, organization, assigning relationships and priority rankings between questions and answers.

To begin, implementing KM system within an organization means analyzing its current sources of knowledge. This includes capturing useful information from wherever it may exist, e.g. business documents, files and databases, data warehouse, e-mail repository, conventional mail archives, etc.

The phases that KM effort goes through when capturing knowledge, and the activities related to completing each phase are [3]:

- *Document knowledge.* Analyze all possible sources of organizational knowledge to build taxonomy of knowledge types and to decide what attributes and values should be associated with each type. Next, examine all possible sources to uncover existing knowledge elements, and make it possible to discover new knowledge elements.

- *Share knowledge.* Start by recording all known knowledge elements from documents, communications, and subject matter expert interviews. Analyze the collection to classify knowledge elements by type, and to establish a hierarchy or other sort of organization among types. Finally, tag the knowledge elements and hierarchy information to make it possible to search the knowledge by keyword, explicit match, or relationships to one or more problems.
- *Apply knowledge.* This is where people interact with knowledge base to locate and use relevant knowledge. This is where it is essential to refine the contents of knowledge elements and to adapt the structure of the knowledge base in response to such interaction.

Knowledge management encompasses the broad range of capabilities needed to logically capture, organize, share, and use knowledge elements in order to recognize problems and suggest possible solutions. The following functions are crucial for a successful KM implementation. Solutions must be provided that are able to:

- *Capture and organize knowledge elements* for the purpose of identification and relevance ranking.
- *Apply contents of knowledge base* to incoming queries to look for matches and establish relevance between knowledge and query contents.
- *Maximize reuse of knowledge elements.* Any relevant query is represented in knowledge management system as it occurs, generating knowledge elements that will be considered each time a similar query occurs.
- *Represent any workflow or organizational process* with its own application-specific sources of knowledge within the KM system – thus, accounting professionals could have access to accounting knowledge, human resources experts to human resources knowledge, information technology professionals to information technology knowledge, etc.
- *Solicit continuous feedback* on the applicability of existing knowledge elements to new situations, new problems, new challenges, and new queries [4].

Experience has shown that implementing a KM solution is both attainable and desirable within most

organizations. Typically, it is possible to conduct a standard initial implementation within a month or so [5]. Within that timeframe users are able to demonstrate the success of installing, populating, and using a modest knowledge base system to address issues in well-defined problem area.

2.3 Knowledge Management Strategy

Establishing a KM strategy can be much less daunting if it is thought of KM as organizing, locating and reusing actionable information. The same concept that would be applied to a collection of recipes applies to KM solutions of a much more complex and organizational level – ensuring that relevant and necessary data and experiences are readily available to help solve problems.

In developing your KM strategy, the focus should be placed on four key points to ensure its success [6]:

- A knowledge management plan should map directly back to the business strategy of an organization.
- It should be designed to help solve business issues, such as accelerating innovation, or line of business requirements, for example speeding new product introductions or improving customer, employee, or partner relationship management.
- A KM strategy should highlight and intertwine three areas: people, processes and technology.
- Knowledge management should motivate, catalyze and accelerate both individual and organizational learning.

Knowledge that has an impact on the business strategy is broken down into two distinct categories – *tacit* and *explicit* knowledge.

Tacit knowledge is the information and expertise that is difficult to document. It is the knowledge stored in employees' minds, such as anecdotal experiences with customers that is often shared around a water cooler or over the phone but never captured electronically.

Explicit knowledge is that which can be found in documents, databases, e-mails and logged instant message chats.

So what is the starting point? An organization's existing infrastructure and application environment, integration challenges, innovation needs, corporate imperatives and cultural readiness dictate the starting point for a KM strategy. In many cases, it is best to begin with a departmental pilot that gradually rolls out the technology in several phases.

This departmental implementation will help to iron out the kinks in your KM strategy and technology implementation before rolling it out enterprise-wide.

3 A Learning Organization Model

The core elements required to build and sustain an organization that will create and manage knowledge effectively are outlined in the following four-cell model.

Schematically, the model is shown in Fig. 1.

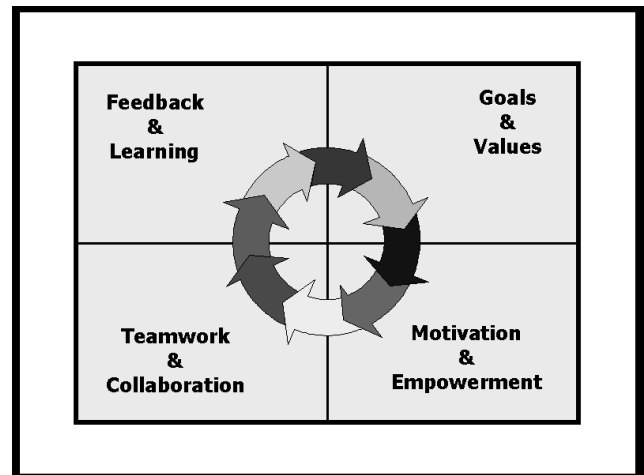


Fig. 1. The Learning Organization Model

This model exhibits a few basic attributes and dynamics:

- Each cell must achieve tangible outcomes.
- Mutual dependencies and tensions exist between cells.
- The model can be scaled to any level – functional department, enterprise or entire branch, a project or program, a total organization or virtual organizations.
- The size and scope of the organization unit do, however, raise the significance of consistency and tensions in how momentum is sustained.

Let's look at the model in more detail and draw some examples from our experience.

3.1 Goals and Values of the Model

Innovative leaders are developing new shared ethics of how knowledge and learning are vital as the glue to their enterprise, and to winning teams within their organizations. New values based on openness, accessibility, collaboration, knowledge sharing, and teamwork are in the forefront. These same leaders want to build and accentuate this new vitality by measuring and changing their corporate cultures.

Many enlightened companies are linking their human resources policies and practices to achieve the knowledge values they espouse, with, for example, staff rotation and mobility, and with early retirement and consultation, to maximize access and diffusion of knowledge within new knowledge networks [7].

Successful knowledge managers must eliminate incongruence of targets, measures and rewards. Many organizations are not sufficiently explicit or scientific in linking their knowledge creation objectives with management targets and reward mechanisms.

3.2 Motivation and Empowerment

Motivation requires well-designed reward and recognition systems. People must be rewarded for both performance and behavior. Recognition schemes are powerful ways for the organizations to articulate the significance of knowledge creation, sharing, and reuse. Regular informed communication can sustain the power of the message, and can reinforce how we value collaboration and sharing of learning across the organization [8].

In recent years, we have seen the rise of the flat organization structure, which is increasingly replacing the conventional command-and-control hierarchy. The growth of informal contracts and obligations between employer and employee are giving rise to new insights in motivation. Organizations want their people to add value. But, at the same time, managers and staff are seeking opportunities to build value in their own repertoire. A learning environment that encourages and supports knowledge sharing meets both of these needs.

3.3 Teamwork and Collaboration

Process improvement thinking has not only shaken the vertically structured organization, it has forged some new paradigms on working across the organization, paying less heed to conventional business functions. Collaboration, involvement, and cross-discipline teamwork have moved from being unusual, becoming a regular style of working and accomplishing business tasks. People's success and value is being based not on seniority or power of position, but on knowledge contribution and the ability to manage and challenge within a different organizational matrix.

This is where the dynamics of values, motivation, and collaboration could be seen, creating knowledge and learning simultaneously.

Successful "knowledge brokers" [9] within these teams are empowered to respect and challenge conventional wisdom as well as organization rules and individual customs and habits.

3.4 Feedback and Learning

Key skills in a learning organization support following core processes:

- Systematic problem-solving
- Experimentation
- Learning from acquired and cumulated experience
- Learning from others
- Transferring knowledge.

Outcomes from these processes not only fulfill the driving objectives of the organization, but also sustain the momentum of the thirst for knowledge development.

The greatest barrier for many organizations lies in poor feedback. i.e. starting the process but not closing the loop. Essential business values can promote or impede feedback. Evaluating and learning from risks that have been taken is becoming fundamental in new business development.

4 A Brief Discussion

We have learned that organizational behavior can both sustain or unhinge the learning organization.

Consistency creates a virtuous circle of the learning continuum [10]. We are looking for congruency from each of the cells of our model and within our real life organization. Specifically, we are looking for targets that motivate, values that empower, and teams that are rewarded and recognized.

The corollary is also true: inconsistency creates a vicious circle of learning discontinuity [11]. Some examples are: the leader who does not recognize the values of investing in learning, the reward system that is under-funded, or "intangible" manager who is allowed to avoid participation or sharing expertise. These could be temporary aberrations, but, unfortunately, in many cases permanent barriers, too.

If we examine leads and lags in the completeness of each cell in our model, we can also understand the tensions that can occur. Some knowledge management projects start with goals being set and a team being formed and motivated, but committing to agree values later. Such teams can progress only so far before they grind to halt because misaligned values reduce collaboration.

Indeed, collaboration across part of an organization may far exceed the stated values of the total business, yet even this can lead to competition, conflict, and delay.

5 Challenges

Perhaps anyone can pinpoint examples, no matter how small they are, of where the attributes of our model are in place and where truly exceptional results are being achieved.

Scale is a challenge, but a sample process that works for a smaller organization or department can work for a larger one. The greater challenge is repeatability – that is, once we get it right, ensuring we continue to deliver excellent results consistently, again and again. Assuring repeatability and assessing the impact and benefit from selective deployment of learning capability have become the most critical elements of the client-vendor relationship [12].

Just as we know such success is delivered against a backdrop of constant turbulence in the race to stay ahead, we also know successful managers move on, teams are dissipated by promotion and group motivation is hard to keep on the same high. But our model does not become irrelevant over time. Instead, it shows a renewed poignancy, because truly successful and enduring organizations are relentless in sustaining these principles.

6 Conclusion

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