

Organizational and Technological Dimensions of Management Services in Companies

L. S. Bălan

Leonard Sergiu Bălan

Faculty of Economics

“Aurel Vlaicu” University of Arad, Romania

Abstract

The importance and value of tracking and sharing the dispersed knowledge resources of contemporary organizations have received widespread recognition in recent years. It is widely believed that with the transition from the industrial to the information-based economies, organizational knowledge has emerged as the single most critical resource at both, macro- and micro- levels.

A major challenge for most organizations during this transition and beyond is to learn to deal with the intricacies of discovering knowledge from the vast amounts of data being generated, identifying pockets of important knowledge in various forms, to devise strategies and techniques to formalize parts that lend themselves to codification and to nurture technical and other solutions with which useful knowledge can be shared among relevant participants.

This has the potential to produce greater knowledge utilization leading to multiplier effects in organizational performance. This calls for an approach in which both, the organizational and technological dimensions of the challenge are better understood and effectively integrated.

Keywords: management, organization, services, business, economy, resources

Knowledge Management: Conceptual Foundations

The notion of knowledge processing as perhaps one of the most important organizational activity has gained currency among researchers in fields such as Information Systems, Organizational Studies, International Management and economics.

This view goes beyond the more traditional information processing perspective of organizations, as being primarily engaged in processing a large volume of internal and external data, designated to produce useful information to support decision making and to facilitate strategic and operational planning. It is based on the idea of organizations as knowledge producing, sharing and disseminating entities in which there is an explicit focus on the processes and techniques for generating, selectively sharing and using knowledge. This idea is capture dwelling Winter's description of organizations as entities which "Know How to do things".

Knowledge Management as an area of academic inquiry and managerial practice is primarily concerned with a range of questions such as:

- What constitutes organizational knowledge and how is it generated and validated?
- What are the effective organizational and technological means for sharing and transferring organizational knowledge?
- How can organizational knowledge be measured? What are the useful metrics for quantitative assessment?
- What are the major constraints and bottle necks that impede the effective sharing and using of organizational knowledge?

The important role played by the stock and application of knowledge in economic development is relatively well understood and has been addressed extensively by economists for sometime. As early as 1962, Arrow had analyzed the effects of learning by doing in firms. However, its centrality in management of firms is recently.

The active interest in managing knowledge as a critical organizational resource is largely a response to the challenges posed by an increasingly complex business environment characterized by intensified competition, globalization, compressed product life cycles and the consequent information overload for senior management.

As well advances in information and communications technologies (ICT) in the form of internet and intranets, the World Wide Web(WWW), electronic document repositories with sophisticated

search capabilities, computer-supported cooperative work and group ware systems, among others, promise the means for addressing the knowledge management challenge.

The issues referred above have been faced in a more acute form by large, multinational corporations (MNCs) for which the forces of global integration, local differentiation and world wide innovation have become stronger and more compelling. Several scholars have argued that such firms have to devise mechanisms to enhance their global flexibility and learning levels in order to stay competitive. This is increasingly achieved through the adoption of new organizational capabilities for pooling world-wide knowledge and to transfer and adapt innovative product and process technologies and project management know how to international markets.

Design Perspective: Social and Situated Views of Knowledge Management

The greatest contribution of the Internet was to facilitate reciprocity. Similarly, the design perspective for KM goes beyond reach to allow reciprocity. It recognizes the key role of human agency in knowledge able performances, which are processes by which stake holders are capable of knowledge ably acting in practices and there by making appropriate and informed decisions concerning a problem at hand.

Knowledge is often portrayed as a possession that people carry around in their heads and transfer to each other, despite the fact that work is unlikely to be carried out in isolation, lethal one without the aid of external artifacts. Knowledge then becomes the people's ability to act, participate and make appropriate and informed decisions. Knowledge thus emerges from the synergy (rather than the synthesis) of distributed social networks of stake holders and artifacts, operating in concern to help each other accomplish a common goal.

It is no longer held or possessed, but fluid, distributed and "activated". It focuses on the role of human agency in enabling the work to get accomplished in the context of a design practice.

Due to the complex nature of social settings in which knowledge is enacted, it is critical to understand the various aspects that contribute to the formation of the socio technical conditions for stake holders to accomplish their work, instead off focusing solely on the knowledge – transferring problem. To this end, we propose a conceptual framework

to understand the socio - technical conditions at design time as well as at use time.

This framework attempts to guide the design of KM systems by highlighting the distributed and collaborative nature of design practices and to help in the analyses of organizational issues that may facilitate or hinder the use of such systems. This framework draws on the following concepts:

- Communities of Practice and Interest: Design contexts in which the design perspective on KM emerges.

- Distributed Cognition: Knowledge distributed in the environment.

- Social Networks: Knowledge as a property of the interactions and relationships amongst stake holders and artifacts.

- Information Ecologies: Complex, coordinated, dynamic and dependable relationships among the factors and information sources.

- Living Organizational Memories: Design rational effort, evolving KM system to support social networks.

A Sense making Theory of Knowledge in Organizations and Its Application

To create and provide products and services, organizations use their various resources. Different organizations use their resources differently, with varying market success and economic and social outcomes, depending on the knowledge they draw upon.

Organizations create new knowledge to use their resources efficiently, in providing distinctive products and services. The most interesting insight from such a view is that there is no limit in an organization's use of its knowledge resources: "the more practitioners invent new ways of using their resources, the more services they can potentially derive".

The key that makes difference is the knowledge organizations draw upon and their knowledge generating capacity. That knowledge makes a difference in the performance of many organizations worldwide. In order to manage knowledge better, organizations undertake various knowledge management programs, appoint chief knowledge officers (CKO) and implement Knowledge Management Systems (KMS).

Managing knowledge is considered to be of critical importance for sustained competitive advantage. However, despite the abundance of literature on knowledge management in Information Systems (IS), organization studies, management, cognitive science, sociology and other disciplines, practitioners do not find many applicable or useful concepts, frameworks and models. Interestingly enough there are no satisfactory answers to the fundamental questions, like: What is the nature of knowledge that organizations try so hard to manage and what does it actually mean 'to manage' knowledge?

This paper addresses these questions by exploring knowledge in organizations from a sense making perspective assuming that knowledge is both, an input to and a product of sense making. By investigating distinct kinds of sense making proposed by Weick and inspired by Wiley's semiotic theory of self, the paper identifies distinct types of knowledge that organizations draw from.

Identifying different types of knowledge and understanding their individual nature and their mutual relationships are important, both, theoretically and practically, if we are to understand how organizations create and use their knowledge and in what ways they can improve managing it.

The objective of the paper is to present a sense making Theory of Knowledge in Organizations and demonstrate its applicability and value in studying knowledge management practices and in explaining their organizational implications. To achieve this objective, the paper:

1. describes a Sense making Model of Knowledge in Organizations that identifies different types of knowledge at four distinct sense making levels: the individual knowledge at the intra-subjective sense making level, the collective knowledge at the inter-subjective level, the organizational knowledge at the generic-subjective level and the cultural knowledge at the extra-subjective level, including the inter relationships between the knowledge types;
2. discusses characteristics of knowledge types and the dynamics of knowledge creation, sharing and deploying in organizational processes at each level and between levels and then
3. illustrates how the theory can be applied to better understand the Knowledge Management processes and to gain new insights into organizational implications of knowledge management.

Knowledge Acquisition and Transfer in Strategic Alliances

There are various reasons why firms form strategic alliances, including the reduction of risk, economies of scale, access to new markets and the search for legitimacy. Researchers have also suggested that an important explanatory factor for the alliance trend is that alliances provide a platform for access to new knowledge. Through the shared execution of the alliance task, mutual interdependence and problem solving, firms can acquire knowledge from their partners.

Unlike other learning contexts, the formation of an alliance reduces the risk that the knowledge will dissipate quickly. Two or more organizations collaborate because of their different skills, knowledge and strategic complementarity's. The differences in partner skills and knowledge provide the potential trigger for knowledge acquisition by the alliance partners.

The objective of this chapter is to examine the factors associated with successful acquisition of alliance knowledge by an alliance partner. We will begin by reviewing the relevant theoretical background relating to knowledge acquisition through alliances. Building on this background, a framework of alliance learning is developed with an emphasis on key knowledge acquisition variables.

In an alliance, knowledge access can be viewed from several perspectives. First, firms may acquire knowledge useful in the design and management of other alliances. Second, firms may acquire knowledge about an alliance partner that supports the firm's ability to manage the collaborative task.

Third, firms may learn with an alliance partner when the partners jointly enter a new business area and develop new capabilities. Lastly, firms may acquire knowledge from an alliance partner by gaining access to the skills and competencies the partner brings to the alliance.

For the purpose of our discussion, we focus on the last perspective, which concerns knowledge flows between alliance partners. This type of knowledge, called alliance knowledge in the remainder of the chapter, is directly associated with the skills of the partner firms and may have value to the parent outside the alliance agreement.

For the value to be captured, knowledge must be acquired by the parent and applied to new geographic markets, products and businesses. This potentially useful knowledge is the knowledge the parent would not have had accessed without forming an alliance.

The Significance of Knowledge Management for a Large Company

In a study of any market, you are likely to find successful companies, side by side with less successful companies, within the same market sector. What is the reason for this difference? What is the reason behind a good performance? The good performers may have had a little bit more luck in the past, but usually they tend to have a better management and better processes.

But why should less successful companies find it so difficult to have good management? The methods and tools for management seem to be well known, taught in business schools and universities and they are more or less the same in each company. The organizational structure of the companies may differ, but, within each structure, companies can post a typically good or poor performance.

So, it seems to be rather difficult to manage a company while the "proven" concepts taught in business schools and implemented by advisors might not be as reliable as those actually needed.

An alternative basis for a company will be described focusing on knowledge and knowledge management.

How Do We Manage a Company?

A company model is based on the assumption that there are a few key factors that have to be precisely monitored, measured and controlled since they represent the impact of the company.

All other factors are of secondary importance: they are either directly linked to the key factors, thus allowing them to be portrayed in conjunction with the latter, or, they are of minor importance, so that they do not have to be taken into account when managing the company. This model of a company is the basis of all the operational and strategic controlling and steering measures. The key factors form the basis for defining optimization strategies and for implementing them in the company.

The company's "really relevant factors", commonly known as "factors of production" are: •labor; •capital; •facilities and raw materials.

At first sight it might appear rather surprising that the very complicated system "company" can be reduced to only these three items and that the

non-linear interactions are not explicitly mentioned in this model, but, as we will show, this is the world we now live in when we talk about the management of a company.

This way of looking at things in a company has its origins in the 19 th century. Today, this company model offers a wide range of methods and tools for handling these "factors of production" in the operational and strategic management of a company, in order to monitor, plan and implement optimization measures:

- monitoring labor-time, planning resources, head count, etc. focuses on labor;
- controlling, cost centers, balance sheets, budget planning, etc. focuses on capital;
- capital expenditure account, (fixed) cost accounting, write-offs, etc. focuses on facilities and raw materials.

These methods and tools are constantly being adapted and refined by business experts. Also at the operational level these three factors of production are the main focal points. Managing a development project, for example, demands tight control of the labor and capital factors in the starting phase by reducing budgets as much as possible and by planning the optimal use of human resources; in the working phase rigid control has to be exercised over money and the labor investment (people, working hours).

Even in the strategic are these three factors of production build the basis for new optimization strategies: lean management (labor factor), share holder value (capital factor), lean production, just-in-time production and out sourcing (investment and raw materials) are examples from the last decade. If something very important has to be done in a company, these three factors of production have to be kept in focus.

Additionally, these factors of production represent values and so there is a kind of business philosophy behind this model: earnings and profits are more or less proportional to the use of these factors. The possession of these factors of production and their investment in a real product brings its own rich rewards.

The situation is described here in such detail as to make it clear that this really is the common model of the company. Managing a company means thinking and acting according to this model. Of course, it is not a bad thing to use a model when dealing with complicated and

complex systems. In fact, it is the only way to act sensibly and not just leave it to chance.

Nevertheless, one big problem still exists: is the model the right one or the best one possible? If not, wrong decisions might be taken in the company and wrong optimization strategies might be setup. If a better model for companies existed, its implementation would bring more clarity and better opportunities for control and consequently it would cause fewer problems and generate higher profits.

Conclusion

We have shown that present day company management is based on a model of the company, which might be insufficient and thus constrain the development of efficient and effective management methods and tools.

We have presented here an alternative company model based on knowledge that might have the potential to open up the way towards a new and better understanding of the company and could lead to a new and better operative and strategic management.

The result is that knowledge management is no longer an additional task for the company - but the core of the company management itself.

Bibliography

- Bartlett, A.B., Ghoshal, S. (1989), *Managing Across Borders: The Transnational Solution*, Boston, MA: Harvard Business School Press
- Brown, J.S. (1991), "Research that Reinvents the Corporation", Harvard Business Review, Jan.-Feb
- Clark, K.B., Fujimoto, T. (1991), *Product Development Performance*, Boston, MA: Harvard Business School Press
- Culpan, R. (1983), *Multinational Strategic Alliances*, Binghamton, NY: Howarth Press Inc.
- Edstrom, A., Galbraith, J. (1977), "Transfer of Managers as a Coordination and Control Strategy in Multinational Organizations", ASQ, 22(2), pp.248-263

- Jain, R.K., Triandis, H.C. (1990), *Management of R&D Organizations: Managing the Unmanageable*, New York: Wiley and Sons
- Murray, P. (2000), *Designing Business Benefits from Knowledge Management*. In C.
- Wiley, N. (1988), "The Micro- Macro Problem in social Theory". *Sociological Theory*, 6, 254-261
- Winter, S. (1987), "Knowledge and Competence as Strategic Assets" *The Competitive Challenge: Strategies for Industrial Innovation and Renewal* D. Teece (ed.), Cambridge, MA: Ballinger

