

KNOWLEDGE AS A COMPETITIVE WEAPON OF KNOWLEDGE MANAGEMENT – TOOL OF MANAGERS

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Abstract

There is a huge amount of knowledge in any organization. People at all levels have accumulated knowledge about what customers want, about how best to design products and processes, about what has worked in the past and what has not. The article is focused on turning our attention to knowledge, to focus less on what we own and more on what we know, to knowledge, sharing of knowledge as a competitive weapon, generally about knowledge management. One of the most talked-about business developments of the late 20th and early 21st centuries. When people talk about knowledge management, the conversation often devolves into highly abstract and philosophical statements. But there is a real world of knowledge management – a world of budgets, deadlines, office politics, organizational leadership, and quality.

Key words: science, knowledge, knowledge management, knowledge chain, innovation, quality, manager, leaders.

Classification JEL: M12 Personnel Management

1. Introduction

New trend, that is expected to solve some insecurities, that continuously brings constantly changed environment, is economy based on a science management. Theory of science management is relatively new conception. Many aspects creating this conception have their beginnings in eighties of the last century.

The first scientist who was cognizant of significance of science for economy was Peter Drucker. He introduced such terminology as “work with science” and “worker of science.” He also supposed that we are living in time of “society of science” and where science and workers of science are the source of the higher order [5].

Utilization of science on management has its place as an element forming creative labour. Science (knowledge) management becomes the basis for creative thinking that rises the organization on a higher function degree. Exponential growth of information in the knowledge economy focuses attention to the importance of managing knowledge in organizations (see Figure 1). Specially the organizations, those that recognize the value of knowledge within their organizations, can grow and prosper through knowledge management. It takes examples and lessons from some of the world’s most successful businesses, corporations, including Shell Oil, British Aerospace, Dow Chemical, Hallmark, Pillsbury, Pfizer, Hewlet Packard, Nokia and the World Bank, and ideas from the smartest thinkers, including Peter Drucker, Michael Polanyi, and Ikujiro Nonaka.

Indeed, that is the academic world, which is the root of knowledge management.

2. Knowledge management philosophy

The philosophy of knowledge management is, to a large degree, an acknowledgement that the people at the top do not know everything. If they did, there would be no need to discover what anyone else knows. Why has knowledge and knowledge management suddenly become so prominent? And why specially these days?

First, knowledge has become a *competitive weapon*. Manufacturing has fallen as a proportion of total economic activity in the economically advanced countries. Services, and particularly professional and consulting services, play a vastly more important role.

There is a second and related reason why knowledge management has acquired such prominence: many companies have painful experience of *how easy it is to lose knowledge*. The professional services, creative and consulting firms, are acutely aware of how vulnerable they are to their staff leaving. A key employee, or worse, a whole team that walks out of the door takes a huge amount of knowledge. They could also take some key customers.

A third reason why knowledge management has become so popular is that *new technology makes it easier to share knowledge*. At its simplest, conference calls mean that several people in different cities can talk together on the telephone. Video conferencing means they can see each other while they talk. Electronic databases make it possible to store vast amounts of knowledge, to which others can be given access. E-mail means people can communicate quickly, cheaply and over long distances. Company intranets means staff can be given access to more information more quickly. But while new technology has made knowledge management easier, it has led many astray. Just because knowledge can be collected, this does not mean it will be profitably used.

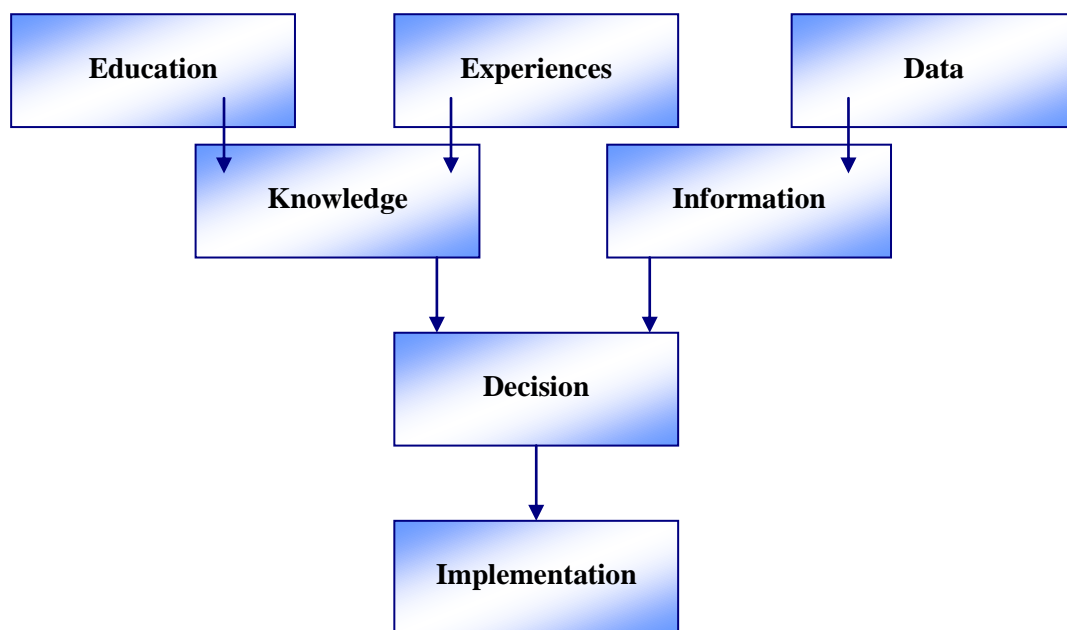


Figure 1. Managing knowledge in organizations

This is supported by new research on knowledge workers. Their work shows that organizations must pay much more attention to questions how to share knowledge and to culture, commitment, motivation and involvement. Management consultancies, architectural practices, advertising agencies and law and accountancy firms are staffed by people with nothing to sell but what they know. What makes these organizations competitive and profitable is the collective expertise and ingenuity of the people who work for them. All companies contain knowledge that they need to exploit. A company truly is a collection of people organized to produce something, whether it be goods, services, or some combination of the two. Their ability to produce depends on what they currently know and on the knowledge that has become embedded in the routines

and machinery of production. The material assets of a firm are of limited worth unless people know what to do with them. Understanding the role of knowledge in organizations may help answer the question of why some firms are consistently successful.

There are many questions. How to develop a preliminary understanding of what knowledge is within organizations? How does it look and sound in daily life and work? How is it different from data and information? Who has it? Where is it? Who uses it? What do we talk about when we talk about knowledge? On the other hand, what to do about knowledge? What key cultural and behavioural issues must we address to make use of it? What are the best ways to use technology in knowledge work? What are specific knowledge roles and skills? What does a successful knowledge project look like and how do you know if it has been successful? What measures and milestones can we use to evaluate it? Answers to these questions provide at least the beginning of a response to the essential question asked about knowledge in organizations: What do we do Monday morning to help make our organization's use of knowledge more effective, efficient, productive, and innovative?

Our aim, finally, is to provide a general perspective on how firms work that will give managers a means of decisively improving performance.

3. Development of Knowledge Management

In 1993 two Japanese academics, Ikujiro Nonaka and Hirotaka Takeuchi, published *The Knowledge-Creating Company*, a groundbreaking study of knowledge generation and use in Japanese firms [7]. That same year Dorothy Leonard-Barton wrote a finely detailed study of the role of knowledge to manufacturing firms, *Wellsprings of Knowledge*. Several other books exhorting managers to manage knowledge – without focusing much on how to do so – have appeared in the marketplace. Tom Stewart in a 1994 Fortune magazine article warned companies to focus less on what they *own* and more on what they *know*: their intellectual capital.

Since then, Peter Drucker has identified knowledge as the new basis of competition in post capitalist society and Stanford economist Paul Romer has called knowledge the only unlimited resource, the one asset that grows with use. Knowledge in today's world is the key source of competitive advantage. Some would say it cannot be 'managed', as it exists in people and they control it. However, that is an over simplification [2]. Firms such as Dow Chemical and Skandia and consultants such as McKinsey, Ernst & Young, and IBM Consulting have appointed „chief knowledge officers“ and „directors of intellectual capital“ to oversee the knowledge resources of their firms. They point to savings, improvements, and productivity increases that result from managing knowledge.

Knowledge is neither data nor information, though it is related to both, and the differences between these terms are often a matter of degree. It is important to emphasize that data, information, and knowledge are not interchangeable concepts. Organizational success and failure can often depend on knowing which of them you need, which you have, and what you can and cannot do with each. Understanding what those three things are and how you get from one to another is essential to doing knowledge work successfully. So it is best to begin with a brief comparison of the three terms and the factors involved in transforming data into information and information into knowledge (see Figure 2).

Data – Data Management

Data is a set of discrete, objective facts about events. In an organizational context, data is most usefully described as structured records of transactions. Modern organizations usually store data in some sort of technology system. Quantitatively, companies evaluate data management in terms of cost, speed, and capacity. It is very important to know how much does it cost to capture or retrieve a piece of data, how quickly can we get it into the system or call it up and how much

will the system hold. Qualitative measurements are timeliness, relevance, and clarity. It is important to define whether the employees have access to it when they need it, whether it is what they need and whether employees can make sense out of it.

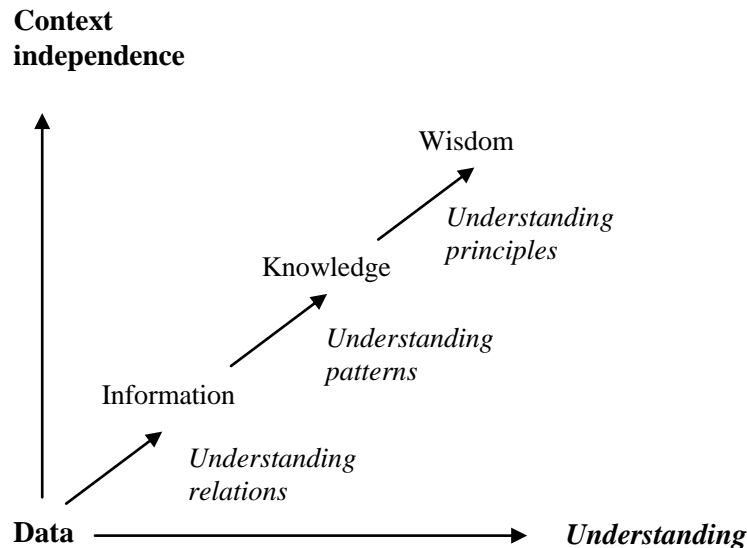


Figure 2. Transformation data into information and information into knowledge

Information – Information Management

Data becomes information when its creator adds meaning. We transform data into information by adding value in various ways. Information has a sender and a receiver. It is meant to change the way the receiver perceives something, to have an impact on his judgment and behaviour. It must inform; it's data that makes a difference. The word „inform“ originally means, to give shape to and information is meant to shape the person who gets it, to make some difference in his outlook or insight. The receiver decides whether the message he gets is really information, if it truly informs him [1].

Information moves around organizations through hard and soft networks. A hard network has a visible and definite infrastructure: wires, delivery vans, satellite dishes, post offices, addresses, electronic mailboxes. The messages these networks deliver include e-mail, delivery-service packages, and Internet transmissions. A soft network is less formal and visible too. Someone is handing you a note or a copy of an article marked „FYI“ is an example of information transmission via soft network. Quantitative measures of information management tend to include connectivity and transactions. Important is how many e-mail accounts do employees have, how many messages do employees send in a given period. Qualitative measures measure informativeness and usefulness also, for example to know whether the message give to employees some new insight or whether information help to employee make sense of a situation and contribute to a decision or the solution to a problem.

Knowledge – Knowledge Management

Most people have an intuitive sense that knowledge is broader, deeper, and richer than data or information. People speak of a „knowledgeable individual“ and mean someone with a thorough, informed, and reliable grasp of a subject, someone both educated and intelligent.

They are unlikely to talk about a „knowledgeable or even „knowledge-full“ memo, handbook, or database, even though these might be produced by knowledgeable, individuals or groups.

Knowledge is a fluid mix of framed experience, values, contextual information, and expert insight that provides a framework for evaluating and incorporating new experiences and information. It originates and is applied in the minds of knowers. In organizations, it often becomes embedded not only in documents or repositories but also in organizational routines, processes practises, and norms [4]. „Knowledge has become the key economic resource and the dominate – and perhaps the only – source of competitive advantage” [5].

Knowledge is close and closer than data or information – to action. Knowledge can and should be evaluated by the decisions or actions to which it leads. Better knowledge can lead, for example, to measurable efficiencies in product development and production. We can use it to make wiser decisions about strategy, competitors, customers, distribution channels, and product and service life cycles. Generally, three main categories of knowledge are distinguished:

- **Explicit**, that can be articulated in formal language, captured, exchanged and easily transmitted among individuals both synchronously and asynchronously. This includes information, experiences, and insights; that which we interact with every day through the written word and the Internet.
- **Tacit**, on the other hand, is personal knowledge embedded in individual experience, wisdom, involving such intangible factors as personal belief, perspective, instinct, and values and leads to decisions and advice, but which is difficult or impossible to articulate in any coded form.
- **Implicit**, certain knowledge can be harvested from its owner and codified in such a way as to make it more readily sharable. Implicit knowledge management employs tools, techniques and methodologies that capture these previously elusive processes and make them more generally available to the organization.

The central problem of knowledge management is how to create a climate in which everyone wants to share what they know. This has become more difficult, not easier, in recent years. The idea of a job for life has disappeared. Companies need to think of not only creating a knowledge database but to share knowledge much of it consists not of facts or figures but of ‘the tacit and highly subjective insights, intuitions and hunches of individual employees’.

There is large number of complex and frequently incomprehensible definitions. One company document described knowledge management as a way to ‘give employee time to reflect, exchange thoughts and transfer knowledge by enriched connectivity’. There is a far more simply definition. Knowledge management means using the ideas and experience of employees, customers and suppliers to improve the organization’s performance. A knowledge management website managed to be even more obscure, describes knowledge management as ‘directly overlaying the information life cycle on to the business processes so as to reuse information as a resource across an organization’. There are some **phases of knowledge management** interested for organizations:

- I. phase – oriented at explicit knowledge.
- II. phase – oriented at tacit knowledge.
- III. phase – oriented at knowledge management systems.
- IV. phase – oriented on management of knowledge workers.

Fundamental to the practical definition of knowledge management is the concept of the **knowledge chain** (K-chain). It is a series of interactions that constitute an organization’s cycle of innovation. Knowledge management creates permeability between the four cells of the K-chain and accelerates the speed of innovation. These four links are:

- internal awareness,

- internal responsiveness,
- external responsiveness,
- external awareness.

The four stages of the K-chain define the flow of knowledge through an enterprise. The ability to quickly traverse through the four cells of the K-chain is the essence of the benefit of knowledge management. It means that knowledge and science must be inseparably connected with responsibility. If it is not like that, science and knowledge become arrogant.

3. Future and recommendations through quality of people and managers

Defining knowledge management into future is not a simply issue. It requires a culture that promotes faith in collectively sharing and thinking. Knowledge management is the leveraging of collective wisdom to increase responsiveness and innovation. These days, during times of economic uncertainty, knowledge of employees is the key source of competitive advantage and power. Peter Drucker warns on necessity for transformation of worker's knowledge into his responsibility towards the company and also on his responsibility in work and function [5].

If companies want to get employees to share that knowledge, they will **have to persuade knowledgeable staff to teach, mentor or talk to their colleagues**. There is no simple situation. It requires the right corporate culture, the right people management, development policies, information technology, and time. It is a constant process. But the process needs items as pride, looking after the staff, and accepting that one does not know everything.

Teach one of your colleagues your special area of expertise and he or she might become an organizational star instead of you and win the performance-related bonus that could have been yours alone. How starts looking after the staff, improving quality of managing and managers?

Teaching in organizations means that we establish so called group of scientific workers, who will be permanently educated, they will acquire knowledge and new abilities, they will reach high productivity and form people able to generate innovations and at the same time people who will quickly master qualifications that allow them quickly adapt to conditions, so that they rigorously and professionally establish new ideas. These are features the employees of the 21st century should be marked with. The employees will have to be devoted to their company, inspire confidence with chiefs and clients, they should be accepted by their colleagues and workmates. As the roots of their abilities should be lasting development of personality and professional carrier as well as abilities needed for smooth relation: chief – employee, employee – chief. This restructuring will **demand lasting improvement of mutual relations**, so that favourable ability of company management could be reached.

All well known large groups of companies, that influence global economy, were launched by persons with outstanding personality characters. Excellent organizations accept managers – leaders only with bellow given characteristics:

- ability to mobilize people to activity,
- ability to generate values,
- ability to comply with function of “social architect”, (ability to create understanding, mutual respect, culture of the economy and ethical bases).

Such social architect acts with the help of values and ethical evaluations that influence not only a judgement but also emotive sphere of individual person. These characteristics are also considerably reflected in his professional deciding. There are **some of them in the area of tasks and quality of the managers in future knowledge management**:

- managing must be realized by means of goals,
- managers must be able to risk more, namely be ahead of schedule, even the representatives of lower degrees of management must be able to make decisions based

on risk, manager will have to carry out calculation of possible risks, decide for the most optimal variant and exactly delimit his expectation,

- manager's decision must be of strategic nature,
- manager must be able to create a team, where each member will be able to evaluate his output from the view of corporate goals, education of managers who will fit the bill of the future is a significant task,
- manager must be able to hand over information quickly, exactly, and comprehensively,
- manager must be a motivator,
- manager cannot be oriented only in one or two functions, manager of the future must consider enterprising as a whole and must be in integrative connection with the whole,
- manager will have to learn to perceive economical, political, and social phenomena not only from the market view, where his company deals, but to perceive also global trends and make his decisions with taking account of them.

Already Diogenes said once that: "Knowledge is prudence for the young, consolation for the elders, wealth for the poor, and adornment for the rich."

4. Conclusion

In condition of **stimulating competition knowledge must lead up to improvement of comprehensively understood quality**, which refers to products, information, processes, and life. Managers, who did not yet appreciate the significance of lasting changes and demands, will be a break in development and reason for stagnation.

The future studies of organizational knowledge will make an important contribution to understanding the sources of long-term success. Organizations with experiences in knowledge management have quickly found that success is entirely dependent on people – their commitment, disciplines, attitudes and capabilities. Knowledge management is not easy task but it is prosperous way.

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