

12 A framework for knowledge management

As those who work in organizations know, organizations are not homogenous entities where grand theoretical systems are easily put in place. Change is difficult. A special challenge in deploying knowledge management is that it requires systemic change. Isolated initiatives fail, but it is also impossible to revamp the whole organization in one sweeping wave of change.

A consideration for a knowledge management framework, therefore, is that it needs to address systemic change in organizations. In practice, the framework has to provide a coherent language and a point of view that enables the various organizational actors to see their activities within the overall effort to develop organizational knowledge management. This requires that the current state and the vision of the organization can be seen together, in a way that enables the organization developers to bridge the gap.

Moreover, we need to take into account the simultaneous existence of several competing frameworks. In any large organization, it is impossible to develop one single approach to knowledge management and simply roll it out. Knowledge management is already happening, and much of the organizational development is working on solutions to its problems. When we deploy knowledge management, we have to be able to show how it relates to the ongoing initiatives in the organization, as well as to point out those areas where new thinking is required. Those frameworks that do not take into account change, or address issues of migration and co-existence of old and new concepts, practices, and tools, rarely generate major impact.

I proposed before that the answer to the question of knowledge management is that we want to make organizations more intelligent. There still remains the question how are we going to do this. In practice, knowledge management can be viewed as consisting of several dimensions where change is needed, and we have to address all these to get knowledge management deployed. To understand and manage knowledge in organizations, we need to understand what knowledge is, how it is used, what does its management consist of, and how we could improve organizational knowledge processes. The first dimension, therefore, is *conceptual*. We have to develop a set of integrated constructs that can be used to discuss knowledge in organizations. As we have seen in the previous chapters, this is a challenge in itself. The theoretical and conceptual basis for knowledge

management requires a multi-disciplinary approach and rather sophisticated theoretical discussion. In practice, we can not expect that everyone within the organization becomes an expert in the theory of organizational cognition, meaning processing, or activity theory. Therefore, we have to package the theory in a way that suits the needs of the organization in question.

Second, as I pointed out above, we need to explicitly address *change*. Change is closely related to stability. Therefore, a knowledge management framework has to say something about institutions and their evolution. As was discussed before, change, in itself is created when knowledge changes. Before new knowledge changes knowledge structures and systems of activity within an organization, knowledge has to be accessed, understood, and accepted. Knowledge management framework, to change the organization, needs to include concepts for change management.

One major aspect of change management is migration of old forms of activity into new forms. This requires coexistence of activities that are different versions of each other. In most cases this means that new activities are piloted as limited and isolated experiments, which in due course can be deployed more extensively within the organization.

Change often creates resistance. I would argue that in many cases this resistance actually, in itself, is a knowledge management problem, which results from problems with accessibility, acceptability, understanding, but also from problems in the management of attention. In effective organizations, people are busy doing those activities that they have understood to be the most relevant and urgent. Therefore any suggestions for new activities are competing with an existing set of relevant and urgent activities. In many cases, the newness of novel contributions of knowledge management is sufficient to make them less relevant and less urgent than items on the current agenda. This means that in practice there has to be some re-evaluation of priorities in the organization if the organization is going to deploy knowledge management practices. This, in turn, requires that the organization changes its vision so that it explicitly includes some aspects of knowledge management. For example, the organization can create a vision of itself as an intelligent organization, and look back from its strategic needs to see how it should prioritize its organizational development activities.

In research organizations, one commonly used approach to deal with the problem of change is to keep the number of possible projects so large that there exists alternatives if the priorities change. This

approach is used to make it easier for the researchers to develop their work identity around a strategic vision of the organization instead of specific “pet-projects” that for various reasons may change their priority. A similar management problem exists also for organizational development and innovation. To overcome this problem, the organization may develop a strategic vision from which a manageable portfolio of knowledge development projects are selected. At the same time there have to be processes that re-evaluate priorities from time to time. In knowledge management programs it is often reasonable to generate a set of high-priority implementation projects, and develop organizational knowledge management systems using a portfolio of strategically selected projects. Within each such project, change management, however, needs also to be addressed separately.

When organizations need to change, often the most scarce resource is time. Knowledge management is therefore also about management of time. This is so both at the macro-level and at the micro-level. At the organizational level, there has to be time to reflect on the organizational priorities and practices. If the organization is overloaded with current activities and existing initiatives, there is not much that can be done to manage organizational attention, and focus it toward knowledge management.

Time is critical also at the individual level. Learning requires that there is time for cognitive re-arrangement. Often, however, the drive for efficiency means that there is not much time devoted for reflection. A critical tool for knowledge management is, therefore, allocation of slack. Such “unallocated” time, however may need to be institutionalized and its use directed towards the strategic goals of the organization. If a strategic goal of an organization is to increase its intelligence, however, strategic allocation of slack may equal to making sure that there is enough time for consolidation of experiences, and radical reframing of existing knowledge structures. In a knowledge intensive organization, appropriately allocated slack may be its most productive investment.

It would be unwarranted to think that one organizational actor can design and implement change. As knowledge management touches more or less all the areas of organizational development, this leads, in practice, to the requirement of involvement of stakeholders in any knowledge management initiative. One way of doing this is, for example, to systematically integrate the change laboratory concept in knowledge management initiatives.

An especially important organizational institution is its system of incentives. This is also one of the major tools by which organizational change can be implemented. More generally, the third dimension in the framework relates to the problem of *measurement* of knowledge. Measurement is an important integration mechanism within organizations that directs managerial attention within an open field of potential interventions. Each measurement system implicitly defines a point of view. Therefore, the design of a measurement system is one of the most fundamental statements of organization's goals. Measurement also enables us to see whether we are moving towards these goals. I discuss this dimension in the next chapter in more detail.

The fourth dimension is informal and formal *organizational structure*. For knowledge management we have to be able to view organizations as knowledge processes, and discuss ways to implement formal, informal and communication structures that improve organizational knowledge processing. This includes defining new roles and responsibilities that are required for effective knowledge management. Such roles may include, for example, knowledge owners, knowledge publishers, knowledge harvesters, and community coordinators. In many cases, these roles exist in any given organization, but they are not institutionalized or supported. Much of the most important knowledge management work is currently done simply because people in the organization understand that it is useful and should be done. Often, however, such work is invisible, and instead of promoting and managing it, organizations make it difficult and unrewarding.

The fifth knowledge framework dimension is that of *knowledge content*. If we view knowledge as a product in itself, the resulting product can be classified and categorized in various ways. To manage the products of knowledge processes, we need compatible and complementary typologies for knowledge. Content can also be related to skills of people. To manage content we may develop expertise directories, skill management systems, knowledge maps, or other meta-models of knowledge content. For example, categorization principles used by information services professionals embed decades of research on knowledge categorization. Especially in electronic environments, however, also issues such as version control and document reliability, quality, and life-cycle require conscious effort.

The sixth dimension of knowledge management is *tools*. These include various knowledge management methodologies and their representations, but also infrastructure that makes effective knowledge

management possible. Most important, such infrastructure includes information and communication technology that can be used to support organizational knowledge processes and their management. For example, knowledge management may be supported by collaboration tools, document management systems, organizational memory support systems, innovation support systems, information retrieval tools, and data discovery tools.

As was noted before, although knowledge management is often seen as a technological issue, in practice it is widely understood that technology is a relatively small part of any successful knowledge management program. This is so because a tool can not be utilized without the corresponding practice. Although organizational change can sometimes be arranged around the introduction of a specific tool that symbolizes change, manages attention, and structures discussions, the criteria for successful deployment is behavioral change. For example, if the explosive growth of intranets, for example, would be measured by some quality criteria, we might see that the relative amount of actionable information, by any reasonable criteria, is decreasing. We might analyze this situation as a simple example of a situation where the link between knowledge products and activity systems that produce and use these products do not exist. Information is often produced without any clear model why someone would need it. More generally, in knowledge management similar waves of excitement and frustration follow each other when technology gets too much attention compared to organizational practice.

The dimensions of the framework are summarized in Figure 41, and the interpretation of the various dimensions is summarized in Table 13.

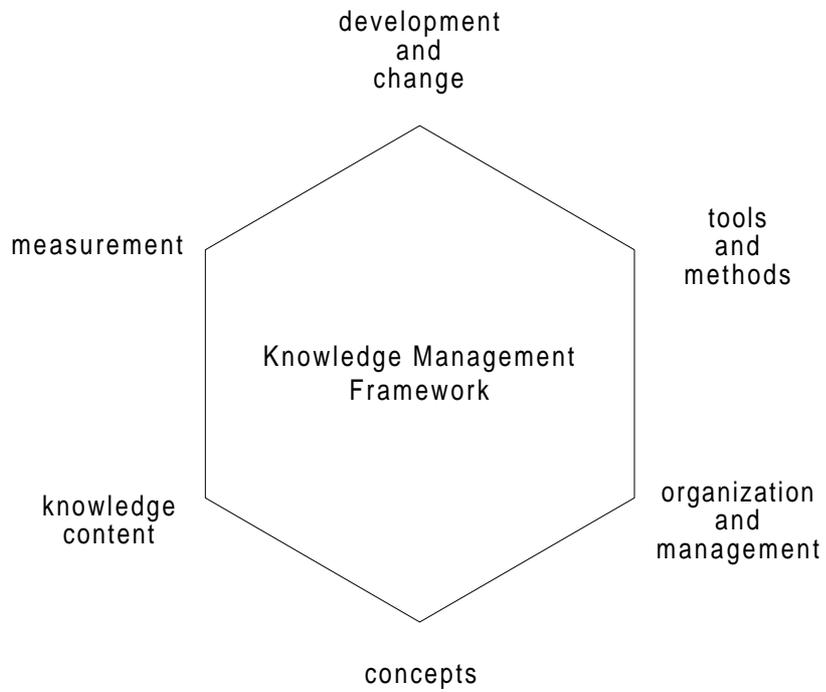


Figure 41. Framework dimensions.

Framework dimension	Interpretation
Concepts	an integrated set of constructs for understanding knowledge and its management in organizations
Development and change	migration and co-existence of knowledge frameworks, processes, tools, and behavior
Organization and management	integration and institutionalization of formal, informal and knowledge processing structures; knowledge management roles; organizational institutions, including incentive structures, knowledge sharing policies, and culture
Content	characteristics and typologies of the products of knowledge processes
Measurement	valuation of knowledge content, capabilities, and potential opportunities for their utilization; measuring knowledge processes, and locating areas of improvement
Tools and methods	methodologies, organizationally tailored "communication packages," information systems

Table 13. Interpretation of the framework dimensions.

In the next two chapters, I discuss in more detail two of the dimensions. First, I introduce the topic of measurement, and describe how the theory developed in earlier chapters can be used to develop a measurement system for knowledge management. After that, I show how the theoretical concepts presented can be implemented as new organizational structures that support knowledge creation. These two examples illustrate how the conceptual work done in the course of this work can be translated to organizational practice.