

BACKGROUND: THE CENTRAL DILEMMA OF KNOWLEDGE MANAGEMENT

Organization and management scientists have long studied the role of incentives in organizational behavior. Whyte (1955), for instance, provides a classic study of “the 5 M’s of factory life: men, money, machines, morale, and motivation” (p. 1). The dominant scientific management view, which held sway in the incentive systems of the time, was based on an economic model of rational human beings who seek to maximize their individual material gains. Whyte challenged this model and replaced it with a socioeconomic model that studies human reaction to incentives in the context of their relationships with other human beings (fellow workers, work groups, managers, etc.). He argued that incentives can be symbolic and much broader in character than purely material and monetary, and emphasized that “we change sentiments and activities through changing interaction” (p. 227). The lessons of the latter half of the last century, including those of KM, seem to support Whyte’s model as a more realistic picture of human organizational behavior.

The situation in knowledge management is obviously different from the factory-floor situation studied by Whyte (1955). Not only are we dealing with a different work environment in terms of organization, management, culture, technology, and so on, we are facing a new type of economic agent, usually referred to as a knowledge worker in the literature. Although this term implies a different type of economic activity from earlier ones (e.g., factory work), it does not necessarily mean that knowledge workers have a totally novel psychology in their reaction to incentives. To the contrary, we argue that Whyte’s original insights are by and large true of the current work environments as well. To demonstrate this, we introduce what might be called the central dilemma of knowledge management.

A widely studied phenomenon in the social studies of cooperative behavior are the situations known as social dilemmas: namely, those where individual rationality (trying to maximize individual gain) leads to collective irrationality (Kollock, 1998; cf Cabrera & Cabrera, 2002). Well-known examples of social dilemmas are the tragedy of the commons, where overuse of a shared resource (such as land) by beneficiaries (such as herders) would result in its ultimate depletion (Hardin, 1968), and the phenomenon of free ride, where individuals are tempted to enjoy a common resource without contributing to it (Sweeney, 1973). It has been suggested that knowledge sharing can be understood as a special case of a social dilemma (Cabrera & Cabrera; Connolly, Thorn, & Heminger, 1992). That is, if we consider knowledge as a common resource of an organization, individual workers are often faced with the questions of whether or not, to what extent, and under what circumstances should they use, relate to, and contribute to this common property. Although there are clear differences between a natural resource, which is physically constrained in the extent of its use, and knowledge, which is not depleted by use, this conceptualization of knowledge sharing as a social dilemma is rather useful. One way to understand this dilemma is through the fact that contribution to a KM system involves cost (in terms of time, expertise, job security, etc.) that may not be accounted for or paid off by the organizational incentive structures. This is the essence of the central dilemma of KM, which can be articulated as follows:

Why should a knowledge worker contribute to the shared knowledge of the organization if the cost of doing so for the individual is higher than its benefits?

This dilemma gives rise to a tension that is inherent in almost any knowledge-management effort. Incentive structures could therefore be

broadly understood as attempts to resolve or reduce this tension. Such attempts should at a minimum address the following questions (Cabrera & Cabrera, 2002, p. 691).

- Why do people share or not share information with coworkers?
- What motivates a person to give up personal knowledge to a third party?
- What are the main barriers that an organization may face when trying to foster knowledge sharing among its employees?
- What can an organization do to overcome those barriers?

The ubiquity of the above dilemma turns these into central questions in the theory and practice of KM. The following discussion demonstrates that various approaches to KM partly diverge on the basis of the answers that they give to the above questions.

INCENTIVES IN KM THEORY

There are different ways to classify KM approaches. For our purposes here, we are going to distinguish among three different views of KM: the techno-centric, human-centric, and socio-technical.

The Techno-Centric View

Roughly speaking, the techno-centric or product-oriented view emphasizes knowledge capture as the main objective of KM. This involves two major dimensions: a cognitive dimension that takes knowledge as something that can be codified, organized, stored, and accessed on the basis of need, and a technical dimension that emphasizes the role of new information and communication technologies in the knowledge-capture process. As such, the techno-centric view tends to formu-

late and answer the above questions in mainly cognitive and technical terms: People share their knowledge to the extent that they can elicit it and their technologies can capture it. The main barriers to such capturing are therefore either cognitive or technical in character, as are the solutions to overcome the barriers.

As we see, the techno-centric view does not pay much attention to issues of incentive and motivation. Nonaka's (1994) well-known quadrant model might be a rough example of this view: Capture and codify knowledge with expert systems, share knowledge with groupware and intranets, distribute knowledge with databases and desktop publishing, and create knowledge with CAD, virtual reality, and so on. Organizationally, the techno-centric view gives rise to an information-systems model of KM (cf Huysman & de Wit, 2002), concentrating KM efforts within IT departments. It might be fair to say that the techno-centric view, in its purest forms, belongs to the early days of KM and does not have much currency today, although its cognitive component is deep rooted and still holds a strong influence on KM thinking.

The Human-Centric View

The human-centric or process-oriented view, on the other hand, emphasizes the social processes that are needed for the development of trust and reciprocal relationships among individuals. As such, it focuses on person-to-person communication and highlights social constructs such as communities of practice as the main vehicles of KM implementation. According to this view, people are driven toward knowledge sharing by their need for knowledge (Lave & Wenger, 1991). Reciprocity and recognition are, therefore, major motivations for them. Knowledge sharing is often emergent, informal, and hard to create top-down. The barriers to knowledge sharing are often issues of trust, and they can be overcome by

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