



Encyclopedic Dictionary of Public Administration

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In the world of organizations, knowledge management commonly refers to the preservation, sharing and development of knowledge deemed critical, strategic or important.¹

A logic of knowledge began to emerge from the prevailing industrial logic starting in the 1960s, with Drucker's work (1967) on the "knowledge worker," and continuing in the 1970s with the research of Argyris (1976) and Argyris and Schön (1978) on learning organizations and the theory of reflective action, as well as the research of Lindblom and Cohen (1979) on what is termed "actionable knowledge."

In the 1970s and afterward, the prevailing view of data and information management systems was technological (Alvesson and Kärreman 2001; Ferrary and Pesqueux, 2006; Zhenzhong and Kuo-Hsun, 2009). Then, in the 1990s, an entire stream of research developed that focused on social and organized relations in the sharing and development of tacit and explicit knowledge, as proposed by Nonaka and Takeuchio (1995), Nonaka and Toyama (2007), Nonaka and von Krogh (2009), Davenport and Prusak (1998), and Quinn, Anderson and Finkelstein (1996).

Far from being a trend, knowledge management in the organized world (Alvesson and Kärreman, 2001; Zhenzhong and Kuo-Hsun, 2009) is now a key issue in the way organizations and societies function (Ferrary and Pesqueux, 2006). It is a strategic part of organizational development and a topical issue in intergenerational knowledge transfer (Koskinen and Pihlanto, 2006; Lamari, 2010; Lagacé, Boissonneault and Armstrong, 2010; Rinfret et al., 2010; Piktialis and Greenes, 2007). In this context, the concept of "human capital" derives from the fact that workers no longer have to be assimilated to a "work force" but are instead considered "capital" due to their expertise and knowledge (Drucker, 2002).

Two major streams of research characterize the literature on knowledge management: the first stream assimilates it to information management and information and communication technologies (Rivard and Roy, 2005; Zhenzhong and Kuo-Hsun, 2009), whereas the second stream associates it

¹ The term *knowledge management* is used here to refer to both operational and organizational aspects.

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with social relations and organizational culture with a focus on knowledge explication, sharing and transfer² (Alvesson and Kärreman, 2001, p. 1015).

In the first case, knowledge management means managing virtual libraries with databases and research and communications systems. It promotes the exchange of information and embodies the concept of “organizational memory.”

In the second case, knowledge management is community-based and thus able to harness tacit or implicit knowledge through idea sharing (Alvesson and Kärreman, 2001; Gloet and Berrell, 2003; Olivier and Brittain, 2001; Wenger, 1996). The concept of a “learning organization” is related to knowledge management (Argyris, 2004; Easterby-Smith and Lyles, 2003; Senge, 1991; Sparrow, 1998).

The current concept of an “intelligent organization” (Bogner and Bansal, 2007) seeks to synthesize these two approaches by incorporating technological, managerial and social mediums, such as communities of practice (Gravel, 2010; Wenger, 1996), into individual, group and organized learning in order to develop organizations. This is an “exploitation-exploration” view of knowledge, known knowledge in the case of exploitation and new and innovative knowledge in the case of exploration (March, 1991 and 2006).

At the same time, some researchers have been building holistic management models (Boder, 2006; Diakoulakis et al., 2004; Lemay, 2009; Nonaka and Toyama, 2007) that support knowledge management.

According to the currently prevailing conception, knowledge management consists in codifying knowledge through virtual libraries (NICT) and social networks (organizational learning). Although it is now recognized as a field of research, the paradigms it covers and the key themes it studies are still being developed (Zhenzhong and Kuo-Hsun, 2009, p. 187).

In this context, and as Alvesson and Kärreman argue (2001), current knowledge management is mainly limited to people and information management and does not result in management that facilitates the creation of knowledge (for more on this topic, see Nonaka and von Krogh, 2009; Drucker, 2002).

There are four main types of challenges in knowledge management:

- **Technical:** designing human resource and information management systems that make information accessible and help individuals be reflective with each other (McDermott, 1999, p. 116), all of which is accompanied by the technological issues of availability, familiarity and integrated use of learning processes;
- **Social:** developing communities of practice (Gravel, 2010; Wenger, 1996) and maintaining diversity in connection with the issues of identifying and defining knowledge that should be preserved, shared and developed;

² It is important to make a distinction between the concepts of data, information, expertise and knowledge. *Data* is by nature qualitative or quantitative and meaningful only in context. *Information* is a datum or a series of data that are articulated in a meaningful way. *Expertise* is a “combination of knowledge, know-how, experience and behaviour operating in a specific context.” *Knowledge* “concerns the specific connection made between a subject and a thing or a person. It refers to content [...], and has the dual characteristic of establishing comprehension (cognitive aspect) and interpretation (hermeneutic aspect) through dissociation from action” (Ferrary and Pesqueux, 2006, p. 15-27; see also Lamari, 2010) [Our translation].

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- **Managerial:** creating an environment that leverages knowledge³ – the main challenge issue then being how to unite conditions that are conducive to improving productivity in terms of knowledge (Drucker, 2002);
- **Personal:** with openness to ideas and others and idea sharing, the real issue is then how to promote knowledge production. There are six major factors (Drucker, 2002) determining knowledge production by individuals: (1) they must understand the task and its relationship to knowledge production; (2) they must have some autonomy, whether given or taken; (3) they must be encouraged to be innovative; (4) they must be encouraged to continue to learn and share; (5) they must embrace the idea that the quality of knowledge production takes precedence over its quantity; (6) they must be considered assets and not costs.

As early as 1982, Chris Argyris argued that managers should have a better understanding of their reasoning method (theory-in-use), which is most often implicit, and indeed at times tacit, and leads in many documented cases to repeated errors. Can knowledge of their reasoning method be transferred to organizations? We can assume that it would cause changes in managerial styles and result in organizations acquiring a memory and becoming learning, even intelligent organizations.

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³ For more information about specific knowledge management practices in the public sector, consult Earl, 2003.

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