Organizational Memory: A Preliminary Model Based on Insights from Neuroscience

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The concept of Organizational Memory (OM) has been evolving for decades, drawing upon contributions from psychology, sociology, organizational behavior and information systems. This article presents a model of organizational memory based upon neuroscience and current understanding of human memory (Baddeley, 1997). Human memory is used by analogy and as a metaphor for conceptualizing collective memory. This concept of collective memory, in conjunction with theory on how knowledge is captured and stored by organizations and social groups, comprises the organizational memory model—and its sensory, communicative, cultural, and political components.

If the term memory is also used in an organizational context, then it should be possible to observe functions and dysfunctions similar to those that have been attributed to human memory, particularly with regard to the distributed capabilities of experience encoding and storage as well as recalling past experience.

We begin with a review of the literature that highlights precepts and assumptions associated with the study of organizational memory, identifying those aspects that have been explored separately by researchers (Hirst and Manier, 2008; Rowlinson et al., 2010; Assmann and Czaplicka, 1995; Barnier et al., 2008; Hirst and Manier, 2008; Ricoeur, 2004; Halbwachs, 1992). These studies show that many of the functions of the human memory, such as rapid recognition of external "objects," creation of coherent experiences and storage of autobiographical memories, have been identified in organizations. Similarly, disorders attributed to human memory, for example delusions, false memories and attention deficit, have also been associated with organizations (Girard, 2005; Pollitt, 2000; Othman and Hashim, 2005; Wentworth, 2002).

Recently, much has been said about collective intelligence and the tools to achieve this. However, there is no existing framework for understanding how people collectively and seamlessly, store, reason and apply knowledge to act more intelligently (Ackerman and Halversin, 2004; Lehner and Maier, 2000; Casey and Olivera, 2003; Nevo et al., 2008). Our OM model is intended as a starting point to define a framework that can support the development of information technology tools that can more effectively support organizational cognition.

In this article, we explore the potential value for this holistic understanding of organizational memory to intervene in organizations more assertively in order to improve systems and the way knowledge is managed—and how it is encoded, stored and retrieved. Suggested next steps for validation studies of the organizational memory model and its implications are offered.

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