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PANEL 14

IT-SUPPORTED ORGANIZATIONAL MEMORY: HOW WILL IT AFFECT ORGANIZATIONAL LEARNING?

Panel Chairs: **Eric W. Stein**, Pennsylvania State University
Vladimir Zwass, Fairleigh Dickinson University

Panelists: **Betty Vandenbosch**, Case Western Reserve University
Dan Robey, Florida International University
Kent Sandoe, Claremont Graduate School

Preservation of organizational memory is vital to organizations as it is recognized that experiential knowledge is a key to improved productivity and competitiveness. IT support for organizational memory is now possible with advanced IT technologies. However, the use of these systems by organizations raises several issues, one of which relates to organizational learning. On the one hand, organizational memory information systems (OMIS) clearly support incremental learning. On the other hand, drastic productivity improvements occur when members shift paradigms and question underlying assumptions and business practices. In these cases, the past appears more as an enemy than as friend. By extension, one can wonder, is IT-supported memory always a friend to organizational learning?

The purpose of the panel is to explore the effects of IT-supported organizational memory systems on organizational learning in all its forms. Single-loop learning makes explicit its recognition of past practice, resulting in incremental improvements in performance. Double-loop learning occurs when members question underlying assumptions and invent new practices. Both forms of learning (and memory modification) are essential to organizational survival, growth, and enhanced productivity. The panel will examine the effects of OMIS designs on organizational learning from a variety of perspectives and at different levels of analysis (i.e., individual, group, and organization).

Eric Stein and Vladimir Zwass (panel co-chairs) have developed an integrative, organization level model of IT-supported organizational memory rooted in the construct of organizational effectiveness, which they will present. The chairs will introduce a model for OMIS design and discuss specific IT support for organizational memory, as well as posit the learning issues the panel is to explore.

Betty Vandenbosch argues that the way an organization learns is through its members. She brings a cognitive learning perspective at an individual level of analysis and will discuss ways executive information systems can support organizational memory and contribute to single and double-loop learning.

Dan Robey's ideas on organizational learning are formulated at the macro level. He sees memory as consisting of (i) identity (ii) causal maps and (iii) routines, which are shared and modified by members of the organization. Learning is conceived as the ability to access and revise memory. He will comment on the likely effects of IT-supported memories on learning as he has defined it.

Kent Sandoe will explore the ways organizational memory information systems support learning in groups and teams using McGrath's taxonomy of stages and functions of group activity. He believes that an OMIS has the potential to promote continuity across different kinds of group work. He will discuss the critical trade-offs between accessibility and completeness in an OMIS and between the efficiency and flexibility it offers groups.

The session will begin with open-ended brainstorming to get a sense of audience interests, and then each panelist will make a short presentation. Following the presentations, the session will return to open discussion format and encourage debate on

the issues listed below. The co-chairs will serve as facilitators as the discussion evolves.

Issues:

- Will IT-supported organizational memory cast old routines in concrete, favor single-loop learning, or encourage organizational exploration and double-loop learning?

- At what level (e.g., individual, group, or organization) will IT-supported memory have the greatest impact?

- To paraphrase J. March, does IT-supported organizational memory represent a technology of foolishness (i.e., one of playful experimentation) or just the foolishness of technology?

- What is the function of "forgetting" in organizations? What role will an OMIS play in this regard?

- How do organizations filter information prior to being incorporated into organizational memory? What are the implications for OMIS?