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PANEL 10 INFORMATION TECHNOLOGY AND TOMORROW'S ORGANIZATION: NEW MODELS FOR THE GLOBAL ENTERPRISE

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Many researchers believe that traditional models for thinking about information systems and global organizations are inadequate for the 1990s and beyond. New approaches are needed in order for information systems (IS) planners to design and develop effective enterprise-wide systems. This interdisciplinary panel of researchers and practitioners will review the shortcomings of previous theories and models for today's global enterprises and outline approaches and models which may be more useful. The panel will debate the need for new models, discuss the effectiveness of traditional concepts compared with recently proposed views, present preliminary empirical evidence on the relative utility of the concepts, and explore the value of using new models in guiding research and identifying opportunities for significant IT applications in global enterprise management.

Today's enterprise operates in an environment characterized by rapid social and technical changes. Unlike past organizations which could act locally and focus selectively on a few factors which directly affected them, the global enterprise is directly and indirectly affected by many of the changes taking place throughout the world. The global organization must deal not only with world-wide markets, distributed manufacturing, and global distribution networks, it increasingly must cope with distributed knowledge work (e.g., research, development, and engineering).

Hierarchical organizational structures that have served well in the past do not appear to offer the requisite complexity, flexibility, and responsiveness which enable a global enterprise to effectively manage the diversity of cultural, ethnic, and experiential backgrounds required for the success of the enterprise. Other organizational concepts, such as networks, adaptive organizations, information-based organizations, and team-based or cluster organizations, may be more appropriate for managing enterprises in an increasingly interdependent world economy.

These organizational structures have not been fully tested in practice, but the emerging concepts are closely identified with the application of information technology as a essential part of the enterprise management system. Consequently, organizations which are re-examining their existing structure may also re-examine the structure of their information systems and ask if the existing IS structure will lead, facilitate, or follow the organizational changes.

This panel will debate the value to IS and organizational planners and designers of a richer set of models to manage effectively the changes being faced by global enterprises. On the one hand, without such new concepts, the vision of IS planners and the implementation of information systems will be inhibited by inadequate, outdated theory. On the other hand, new theories and concepts may not translate well into practice.

Robert M. Mason, Director of the Center for Management of Science and Technology (CMOST) and a visiting professor at Case Western Reserve University, will moderate the discussion by the panel.

Ronald G. Smart, Director of Management Systems Research at Digital Equipment Corporation, will discuss the move Digital is making toward a networked, adaptive, value-adding, interrelated (NAVI) model of an organization, with IT enabling the replacement of "position" or "budget" authority with "knowledge authority" for decisions. This is part of a five-dimensional enterprise management system architecture which facilitates the solution to many of the problems of traditional organizations.

Charles B. Stabell will discuss the metaphor of an "intelligent organization" as an emerging, apt framework for thinking about organizations which engage in considerable non-routine work. How applicable is this metaphor for identifying the
hierarchied" organizational reality and will critically review the alternative organizational forms (e.g., networks, teams) that have been proposed as replacements to the hierarchy.

Klaus Lenk will then address the current challenges facing European companies and public organizations as they attempt to adjust to the radical changes in Europe. He will address in particular multi-layered structures in the public sector in EC countries as well as action chains and networks crossing organizational boundaries which blur the distinction between the private and public sectors. To explain the role of IT in bringing about a new kind of organization, he will sketch a theoretical approach which aims at identifying the informational structure of the process of organizing.

Bob Zmud will extend the discussion by focusing on the role of information technology infrastructure on transforming both internal organizational and external industry linkages. He will present a theoretical model for analyzing and integrating these external and internal perspectives. The model is illustrated through a historical examination of the changing nature of organizational and industry structures in the hospital industry.

Dan Robey will close the panel by presenting a theoretical framework for understanding the role of information technology in organizational change. He will address this issue from two perspectives. First, drawing largely on the management literature, he will discuss the processes underlying both transformational and emergent change. Next, drawing on structuration theory and process models of IT and organization change, he will address the role of information technology in the processes of organization change and persistence.