Panel on Management of Emerging Software Technologies

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Panelists:

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Background and Motivation

A number of software technologies such as object-oriented are emerging. These technologies promise to increase productivity in making available computer systems that fully support business needs in a timely and cost-effective manner. Many organizations are trying to adopt these technologies in order to stay competitive and possibly gain strategic advantage. However, the adoption and management of these technologies is proving to be difficult.

Management of even the traditional software technology is a difficult task. These difficulties are magnified and multiplied when introducing new software technologies into an organization. This is especially so for technologies that involve a major paradigm shift in how software must be developed and/or made available as is the case for object-oriented technology.

In spite of the difficulties in managing emerging software technologies, the reasons for adopting them are compelling. They offer the possibility of a rapid response to changes in the business environment. It is thus very important to develop policies, procedures, and techniques that can facilitate the transition to these technologies and provide help in successfully managing them.

The proposed panel will critically examine a number of issues related to the management of emerging software technologies. The format of the panel will stress brief introductory remarks by the panelists followed by interaction with the panelists and the audience based on issues identified by the moderator. The major issues addressed by the panel will include the following:

a. Personnel Issues: How to train, motivate, and evaluate employees while making the transition to the new technology and after the technology has been introduced?

b. Organizational Structure: How does the new technology affect the organizational structure and how to change the organizational structure that best suits the technology?

c. Project Management Issues: How does the new technology affect how a project must be managed and how the related resources must be planned?

d. Strategic Planning: How to decide when to incorporate new software technology and when not to?

e. Corporate Investment in Necessary Research Support: How do organizations get actively involved in the maturation of emerging software technologies?