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Information Technology Investment Decisions: A Sociotechnical Perspective

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Recommended Citation

Ryan, Sherry D., "Information Technology Investment Decisions: A Sociotechnical Perspective" (1997). *AMCIS 1997 Proceedings*. 163. http://aisel.aisnet.org/amcis1997/163

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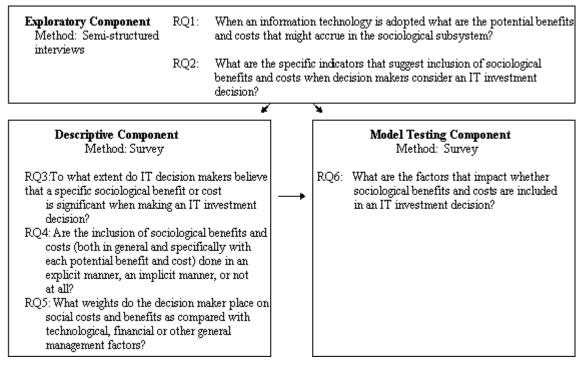
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Numerous researchers (e.g. Holen and Wilhelmij, 1995) as well as practitioners (e.g. Semich, 1994) have begun to realize that traditional cost/benefit analysis is an incompletely specified model, inadequate for a complete evaluation of information technology (IT) value. Too often, IT investment decisions focus on only financial or technological aspects of the decision. Other aspects, such as the spillover effects of technological implementation and the costs and benefits of human resource management, have substantially been ignored. Decision makers that rely solely on a technological frame of reference may choose less than optimal investment alternatives. A more comprehensive taxonomy that includes sociological issues is required for IT decisions.

Using sociotechnical systems theory as the conceptual underpinning, this research will investigate capital information technology investment decisions from the social subsystem perspective. This research will encompass exploratory, descriptive, and model testing components. Through semi-structured interviews with IT decision makers, the exploratory component seeks to provide insight on the potential benefits and costs that might accrue in the social subsystem when an IT investment is implemented. The data for the descriptive and model testing components will be gathered through a sample survey. The descriptive component will evaluate the degree to which social benefits and costs are actually included in IT investment decisions. The third research component, will test a model of factors that are proposed to impact whether or not sociological benefits and costs are included in an IT investment decision.

This research will contribute to the body of information systems knowledge in several ways. First, it will render insight on an important dimension of IT decision making, the sociological dimension. Next, it will uncover the processes by which social costs and benefits are considered by IT decision makers and the subjective weights that they place on sociological issues. Thirdly, it will provide knowledge on the factors that impact the degree to which sociological benefits and costs are included in an IT investment decision. This research, then, will highlight areas that are often inadequately considered in IT investment decisions and suggest their inclusion for a more comprehensive evaluation model.

Overview of Research Plan



References available upon request from author