Creativity/Innovation in Information Systems Organizations

Introduction to Session

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Objective

The Creativity in I.S. minitrack is in its seventh year. Its purpose is to generate a stream of research in an area which has been neglected in the I.S. literature. Prior to the first track session, very few papers had been published on that topic in the 40 year history of I.S. The minitrack includes papers that are theoretical, conceptual or empirical in nature, relating to approaches that will produce, or have resulted in, creativity in the information systems field.

Summary of Papers

"A Framework for Research on Creativity/Innovation in IS Organizations" is the title of the first paper in this year's minitrack." The 4P's framework (person, process, product and press (environment)) was used to solicit research for the first generation of papers. Papers were designed to concentrate on one or more of these key component areas. The second generation framework provides more specificity than the one for the first generation, therefore directs research at a more detailed, specialized level.

This matrix uses the subcategories of application areas (person, group, organization) on the Y axis and creativity component (characteristics, process, product) on the X axis. The first column heading, characteristics, calls attention to the basic talents that are brought into the creativity equation, e.g. skills, abilities, traits, when looking at groups and individuals. The organization has characteristics which produce a climate for creativity that is either negative, neutral or positive.

The framework identifies areas where additional research is needed. It also reviews the research methodologies used to generate the first 32 papers and identifies where additional methodological activity is needed. Results of this research should help IS management improve the organization's creative output, both in services and products.

Linking Creativity, Empowerment and Organizational Memory

Empowerment, creativity and organizational memory have individually been researched in I.S but there is little research linking them. Paper and Johnson develop a theoretical model to illuminate the relationships between these three constructs. Interview data revealed that empowered workers generate creative solutions to problems. However, creative solutions are useful in the future only if they are recorded into organizational memory. A classification scheme for potential challenges is developed to help in the retrieval of information from the creative solutions of the past.

Implementation as a Form of Institutional Innovation

Rickards and colleagues analyzed a study of management resource planning that had identified seven predictors of implementation success. They applied the same factors to a variety of information technology projects. The results suggest that these predictors can play an important role in diagnostic and interventional research studies. Using evidence from the research, the researchers propose that IT implementation can be regarded as a special case of innovation management. The linking of these two sets of concepts offers promise for enriching the theory of innovation and the practice of IT implementation.

Assessing Personal Style of Creativity in IS

Higgins compares several instruments for assessing style of creativity. He then compares three instruments (KAI, ISP and CPSP) to assess style of creativity in I.S. From this study he identifies the characteristics of an ideal assessment scale to be used in IS. These six characteristics should enable researchers to extend the knowledge of individual creativity of IS professionals and also serve as a valuable training tool to develop creativity in IS personnel.