The Analysis of MIS Collaboration Research Networks and Research Issues Structure: The Example of MIS *Quarterly* Journal

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ABSTRACT:

The development of theoretical diversities within management information systems (MIS) discipline has been a constant focus and a frequently discussed issue. Those studies provide a developing pattern for the readers and researchers to track and understand the evolution of information technology and management subjects. Furthermore, the results can be a guidebook for future trends of information management researches.

In this research, we collected the authors and keywords from the most prestigious journal in MIS research domain, MISQ, from 1977 to 2007, as the source of data sample. Using social network analysis (SNA) for mapping out the Journal's author collaboration network over time and classifying each article through their keywordhierarchical structure, we exemplified the development of research communities and referenced domains.

While limited by the sampled data, the results of our findings indicated that the structure of co-author research communities fits a scale-free distribution model, a preferential attachment process, in the first decade of these research collaborations. And the research communities developed a stable small-world structures/ communities over time, and many distinct clusters are connected to each other by a rather small number of links, since 1997. We conclude by applying the trends of co-author relationship in each MIS sub-domain to provide a new aspect to observe and understand the development of various MIS subjects.

KEYWORDS: Small-World Network, Scale-Free Distribution, Social Network Analysis, Research Co-Author Community, Research Keywords, Community Structure Variation.

1. Introduction

This study made innovative contribution to information management domain by advocating an idea of applying social network analysis and theoretical basis into research on development of information management domain from the perspective of coresearch in knowledge community. Innovations constantly taking place in information