

CALL FOR PAPERS

Information System Frontiers (ISI ranked journal)

Special Issue on

**“Modeling Knowledge Work and
Communication in Networked Enterprises”**



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Important Dates:

Paper Submission: **Aug 21, 2009**
Authors Notification: **Sep 26, 2009**
Final Submission: **Oct 24, 2009**
Projected Publication: **Winter 2009**

Journal Website:

<http://www.som.buffalo.edu/isinterface/ISFrontiers/>

Special Issue Scope:

Knowledge work processing plays a pivotal role in the efficient and effective functioning of any enterprise. Over the past few years, researchers and practitioners have made tremendous progress in terms of developing innovative tools and technologies that have improved users abilities to capture increasing volumes of information and process more work in short timeframes. Several of the new communication technologies, ubiquitous mobile and computing devices are posing greater demands on the knowledge worker's time and attention in a work environment that is now even more technologically and socially wired than ever before. Although there is clearly some benefit of this constant connectivity, there are also numerous reports of increased stress, cognitive overload, interruptions, turnover, and productivity loss, along with several other negative effects.

Despite making significant progress towards streamlining organizational workflow processes with the aid of various technologies, researchers have given little attention to various direct and indirect economic, time and performance implications of having to process so much information in a timely manner. Service organizations such as health care industry, call centers, IS development firms, etc. where knowledge work is the primary output are particularly impacted by the potential waste of time and effort. What is now needed is a systematic study of key organizational communication technologies to develop theories and methods to guide effective and efficient use of these technologies. Analytically robust solutions need to be developed from several different areas such as simulation modeling, social network analysis, human-computer interaction, information ergonomics, queuing theory, stochastic programming, game theory, micro-economic theory and other modeling or empirical approaches to help improve the performance of these technologies as their effects permeates more deeply into work and family life.

The scope of this special issue, thus, is to a) focus on a vast majority of cross-disciplinary analytical, simulation, and modeling approaches of scientific and practical value that can be used to identify strategies and suggest improvements in the knowledge work processing within service enterprises, b) mathematical, economic, and simulation models of work flow and information processing (strategies), c) innovative and scientifically robust models representing emerging problems or phenomena of importance, d) models of knowledge worker's behaviors.

Suggested Topics

- Agent based modeling, systems dynamics, and other simulation or modeling approaches to study emerging concepts or phenomenon such as information overload, fraud, etc.
- Modeling knowledge work and information flow within various multi-actors systems such as biological networks, security networks, social networks, supply chain networks, virtual environments, healthcare related networks, etc.
- Modeling technology based communication within and across organizations, such as email, instant messaging, and communication through social networking sites.
- Modeling knowledge work processes in service sector such as individual or network level communication processes and strategies, analyzing different types and characteristics of communication networks, etc.
- Economic and game-theoretic models of information processing.
- Analytical and mathematical models of knowledge worker behavior using techniques such as stochastic programming, queuing theory, etc.
- Modeling and simulating the flow of information in different organizational contexts such as healthcare, IS firms, call centers, financial and accounting institutions.
- Analytical models of time and memory and their influence on knowledge work processing.
- Social network analysis of communication networks.
- Models of social software (Web 2.0 and other) development process, adoption, prolonged use, diffusion, etc. in modern enterprises.
- Modeling productivity, cognitive challenges and other aspects related to social software
- Modeling project management and collaboration in virtual organizations

Submission Instructions

Manuscripts must be submitted in PDF format (one single file) by email. In your email, please copy all three co-editors:

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All submissions will be peer reviewed.