Introduction to the Designing and Deploying Advanced Knowledge Systems Minitrack

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The objective of this minitrack is to contribute to the body of knowledge that helps academics and practitioners to

- investigate how IT can enable knowledge creation, retention, transfer and application,
- design, deploy and evaluate advanced knowledge systems,
- explore and leverage appropriate project management methods and tools for designing and deploying knowledge systems, and
- study changing organizational knowledge processes and structures.

First, work systems and the knowledge systems enabling them need to be aligned with emerging technologies to ensure organizational acceptance and to support effective organizational value creation. Traditional, often monolithic knowledge system architectures can be redesigned due to technological progress manifested by, for example, social networking sites, mashups, semantic technologies, machine learning technologies, and ubiquitous information and communication technologies. In our view, these redesigns are the basis of advanced knowledge systems.

Second, project management involved in the design and deployment of knowledge systems differs from the project management involved in traditional information systems projects. Examples abound in the literature about knowledge systems deployment efforts that failed because (1) the business cultures did not encourage and reinforce knowledge sharing, and (2) the necessary organizational change could not be implemented. Such failures could often have been avoided if (1) more balanced efforts between the design and deployment of knowledge systems had been implemented, and (2) the design and deployment efforts had been managed through coordinated design and deployment projects. Deployment projects have a crucial role in implementing organizational and social changes. Yet, deployment is often considered only as a phase in larger design-driven projects.

It is the fifth year of the minitrack. We have received 34 submissions in total and accepted 14 submissions (acceptance rate: 41%). Generally, the research presented in this minitrack has mainly focused on technical and design-oriented topics.

After a rigorous review process, one paper was accepted for publication in the proceedings and for presentation.

The paper is co-authored by Matthew Mitsui and Chirag Shah. These authors propose a general framework leveraging various retrieval architectures to aggregate relevant information into a natural language query for recommendation. They test their framework in text retrieval, aggregating text snippets and comparing output queries to user-generated queries. They show that an algorithm can generate queries more closely resembling the original queries and give effective retrieval results. Eventually, the authors' approach shows promise for also leveraging knowledge structures to generate effective query recommendations.

We wish to thank all of the authors who submitted work for consideration in this minitrack. We also thank the dedicated reviewers for the time and effort they invested in reviewing the papers: Gilbert Babin, Claudine Bonneau, Dominik Bork, Simon Bourdeau, Robert Andrei Buchmann, Patrick Delfmann, Hans-Georg Fill, Allen Flynn, Marie Christine Roy, and Silvia Schacht.

We believe that the accepted paper contributes to furthering our understanding of advanced knowledge systems. We look forward to discuss it further during our session.

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