Introduction to the Designing and Deploying Next Generation Knowledge Systems and Knowledge Intensive Business Processes Minitrack

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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 need to be redesigned due to technological progress manifested by, for example, social software, mashups, and semantic technologies. In our view, these redesigns lead to a new class of knowledge systems that we call “Next Generation Knowledge Systems.”

Project management (PM) involved in the design and deployment of knowledge systems differs from the PM involved in traditional IS projects. While design projects are essential in creating next generation knowledge systems, deployment projects have a crucial role in implementing organizational and societal changes enabled by the systems. Digital Natives (i.e., computer-savvy employees who see technology as an integral part of their life) draw upon and contribute to organizational and societal change processes by adapting and deploying next generation knowledge systems in organizational knowledge processes and structures.

The objective of this minitrack is to contribute to the body of knowledge that helps academics and practitioners to
- design, deploy, and evaluate next generation knowledge systems,
- explore and leverage appropriate PM methods and tools for designing and deploying knowledge systems, and
- innovate new organizational knowledge processes and structures enabled by the next generation knowledge systems.

After a rigorous review process, five papers were accepted in the proceedings and for presentation.

The first paper is authored by Olivera Marjanovic. Her paper analyses a business process ownership case in a healthcare organization using a combined theoretical lens of the process/knowledge continuum and boundary-spanning. Rather than focusing on management and control, the key aspects of process ownership included knowledge sharing, boundary-spanning, shared responsibility, and grass-root leadership.

The second paper is co-authored by Wier Ying, Pradeep Ray, and Lundy Lewis. In their paper, the authors describe a methodology and an experiment for building multi-agent systems for business applications. The approach focuses on the ontology development as the driving force of the development processes. Thus, application development should be conducted by domain experts rather than by software developers.

The third paper is co-authored by Michael Leyer and Nina Claus. The authors present a new approach aiming at socially connecting employees: an internal social knowledge network. A major novelty of the proposed approach is the usage of an organization’s business processes as a starting point. Thus, employees can connect to each other by indicating their process-related areas of expertise.

The fourth paper is co-authored by Tim Pidun and Carsten Felden. It delivers a literature review aiming at explicating the reasons for failure of performance measurement systems in order to identify patterns and implications for improving the systems. It is found people are often not able to understand, interpret, and adapt the outputs and purposes of performance measurement systems. Better internal communication and training are required to help people and organizations to fully leverage performance measurement systems.

The fifth paper is co-authored by Jiaqi Yan, Daning Hu, and Leon Zhao. It proposes an approach for modeling and calibrating scenarios in bank stress testing. The approach is based on a set of proposed stress testing ontologies. In addition, he shows how to use this approach to correctly model and examine “exceptional but plausible” stress testing scenarios in an example process for crisis events.

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. We believe that the accepted papers contribute significantly to furthering our understanding of next generation knowledge systems and knowledge intensive business processes. We look forward to discussing them in our session.