

## Introduction to the Minitrack on Innovation, Design, and Development of ICT Enabled Services

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This minitrack's purpose is to draw researchers' attention to Innovation, Design, and Development of ICT Enabled Services for both Consumers and Enterprises. It provides a discussion forum for researchers interested in fostering a service-based approach to these areas as well as an opportunity to present and debate both design and theory-based solutions to the problems facing industry in the deployment of ICT enabled services [1-3]. In a broad sense, ICT enabled services can be defined as [1]: "...systems that enable value co-creation through the development and implementation of information and communication technology enabled processes that integrate system value propositions with customer value drivers."

This emerging area of research raises interesting questions. For example, the design of ICT enabled services may require an emphasis on the socio-psychological aspects, such as the value-in-use and user/consumer/co-creator experiences. The shift of consumer and enterprise personnel from users to co-creators of value, calls for a significant re-appraisal of our current design and development approaches.

The papers in the minitrack this year cover value network formation and the business models in the platform-as-a-service (PaaS) context. We also have two more technical papers, which focus on metamodeling support for ICT enabled service design and context-based energy saving strategies for location based services.

In addition to the papers, the minitrack initiated a special panel session that focuses on cyber-physical systems and service (CPSS) [4]. CPSS highlight the substantial opportunities for IT-driven service innovation in manufacturing in which innovation activities increase the digitization of products and processes. The data on products and processes gained through networked cyber-physical systems and the ability to act on this data through control systems and actors enables novel ways of co-creating service in industrial contexts. Not surprisingly, the digitization

of manufacturing calls for rethinking the innovation agenda of enterprises and governments. The panel seeks to establish knowledge on this new area of IT-driven service innovation in the information systems community. Moreover, the panel explores perspectives that IS academics can take to become part of research in this area. The following researchers contribute to the panel:

1. *Tuure Tuunanen, University of Jyväskylä, Finland:* Tuure introduces IT-enabled co-creation of value as a general concept that links service logic with IS research.
2. *Helmut Krcmar, Technische Universität München, Germany:* Helmut introduces cyber-physical systems and services, their role in the national research agenda in Germany and explores contributions of IS research to service innovation in the CPSS area.
3. *Lars Mathiassen, Georgia State University, USA:* Lars discusses challenges of CPSS from the perspective of IT-enabled innovation of business processes and software development.
4. *Tilo Böhmann, Universität Hamburg, Germany:* Tilo facilitates the panel discussion and contributes to the discussion by exploring the effects of IT-enabled service innovation on business models in manufacturing firms.

### References

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- [2] K. N. Lemon and M. H. Huang, "IT-Related Service: A Multidisciplinary Perspective," *Journal of Service Research*, vol. 14, p. 251.
- [3] I. R. Bardhan, H. Demirkan, P. Kannan, and R. J. Kauffman, "Special Issue: Information Systems in Services," *Journal of Management Information Systems*, vol. 26, pp. 5-12, 2010.
- [4] M. Broy, "Cyber-physical systems: Innovationen durch software-intensive eingebettete Systeme", Berlin: Springer, 2010.