



PRO-VE 2023

24rd IFIP/SOCOLNET Working Conference on Virtual Enterprises
Resilient and Responsible Collaborative Networks

PRO-VE 2023 Special Session

Cyber-Physical Systems in Field- and Customer-Services: innovating new business models within Collaborative Networks

Scope

This special session will focus on innovations offered in Cyber-Physical Systems (CPS) and Collaborative Networks (CN) for field services and customer services. The CPS technologies here are manifold: from augmented, virtual, and extended reality to digital helpers based on artificial intelligence (such as ChatGPT). These technologies offer the potential for closer or different collaborative relationships between the provider and the consumer of the services. In effect, Cyber-Physical Systems may become operant resources supporting institutional arrangements within the service system and the wider Collaborative Network. This opens new possibilities for delivering value propositions or adaptations to existing business models. As CPS improve the potential to support actor/actor interactions and collaboration, the experience for the actors using the technologies should be enhanced. These technologies allow actors to focus more on the key outcomes for the beneficiary by supporting the Collaborative Network to co-create value.

Today, researchers have a role in identifying the critical dimensions and variables contributing to the development of value associated with the interplay between the many entities involved in the engagement. There are wider beneficiaries of the new technologies along with those system actors engaged with service delivery. The impact to the Collaborative Network can be on the micro (i.e., individual actor), meso (i.e., team or firm level) or macro (i.e., societal) levels. Or, more simply, benefits can be experienced by the technicians, the equipment operators, the firms or more widely on a societal basis. This is an area that has, until recently, been poorly researched.

In this special session, we encourage conceptual and empirical papers that describe the impacts on system reliance, value co-creation (or destruction) within Cyber-Physical Systems that support Collaborative Networks in service contexts and/or lessons learned from industry. Papers submitted must clearly describe the Cyber-Physical System (including the technologies) and how it supports Collaborative Networking within the system between the actors and the beneficiary(ies), papers covering the topics that include (but are not limited to) the following are welcome:

- technology-enabled collaboration in field and customer services, value propositions and business models
- change management aspects for technology adoption
- the ability of these new technologies to reduce the risk for supplier firms and service-consuming firms.
- the role of technology providers in supporting the development and scaling of new technologies within the field and customer services environments.
- how firms should/could measure and assess the value co-creation potential within the Collaborative Network for these new technologies.
- how to align the expectations of designers, suppliers and organizational buyers with actors who use the new technologies.
- design, development and testing of tools based on new technologies/new tools to support customer engagement and value co-creation.

The session organisers intend to offer presenters in this special session preferred invitations to submit to a special issue of a peer-reviewed journal (*to be determined*).

Session Organizers

- Giulia Wally Scurati, Blekinge Institute of Technology, giulia.wally.scurati@bth.se
- Marco Bertoni, Blekinge Institute of Technology, marco.bertoni@bth.se
- Shaun West, Lucerne University of Applied Sciences and Arts, shaun.west@hslu.ch
- Petra Müller-Csernetzky, Lucerne University of Applied Sciences and Arts, petra.mueller-csernetzky@hslu.ch
- Kyle Alves, Bristol Business School – UWE, kyle.alves@uwe.ac.uk



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Topics/ Keywords

- Field and customer services
- Virtual reality / Augmented reality / Extended Reality
- Artificial intelligence
- Interactive design
- Value propositions
- Business models
- Cyber-Physical technologies
- Co-creation

Submission procedure

Special sessions are included in the main Conference and follow the same reviewing process.

Short abstracts submission (100-150 words): March, 27th, 2023

Full papers submission: April, 24th, 2023

Acceptance Notice: June, 5th, 2023

Final version submission: Jun 19th, 2023

Acceptance of papers is based on the **full paper** (up to **18** pages). Each paper will be evaluated by three members of the International Program Committee.

When submitting on the web site, you have to indicate the name of the special session. Submission procedure via EasyChair available on: <http://www.pro-ve.org>, with copy by email to the chairs of the special session.
