

**Invited Session on “Product service systems (servitization) in New ICTs Era”
for IFAC MIM 2019**

Invited session identification code XXXXX

IFAC MIM 2019, August 28-30, 2019, Berlin, Germany

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Session Chairs:

- *Prof. Dr. Zhibin Jiang, Shanghai Jiao Tong University, China*
- *Prof. Dr. Pingyu Jiang, Xi'an Jiao Tong University, China*
- *Dr. Ke Xing, University of South Australia, Australia*
- *Dr. Fabiana Pirola, University of Bergamo, Italy*
- *Dr. Kangzhou Wang, Lanzhou University, China*

Session Topics:

Servitization has become a new business model that integrates manufacturing with services. Traditional manufacturing firms increasingly try to provide product service systems (PSS) to their customers. Approximately two-thirds of manufacturing firms in developed countries have already adopted a servitization strategy. On average, 30% of the total revenue of product manufacturing firms comes from services. Servitization can help to achieve sound interaction and coordinated development between manufacturing and service industries. Specifically, there are several reasons why manufacturing firms should servitize: to lock out competitors, to lock in customers, and to increase the level of differentiation to customers. In addition to these strategic rationales for servitization, there are economic and environmental rationales.

In recent, New Information Communication Technologies (ICTs) such as the Internet of Things, cloud computing, big data and predictive analytics– play a crucial role in facilitating service transformation in industrial companies. These new ICTs enables the adoption of servitization and contributes to value creation, and thus reduces delivery costs and may help manufacturers overcome the service paradox. The easy access to real-time information also provides the opportunity to develop a better understanding of customer behaviours, facilitating the development of new PSSs.

The servitization of manufacturing and the adoption of new ICTs in servitization makes firms that are going along the servitization shift need to change their business models, operational processes as well as their relationships with the end-customers, the suppliers and their ecosystems. How do industries cope with all these challenges has yet to be better understood. The invited session aims at understanding the servitization of manufacturing and the new problems those arise from the new ICTs adoption in PSS.

The session chairs invite researchers from academia, industry, and government to contribute theoretical and applied research papers in areas including but not limited to the following topics:

- Innovative servitization business model supported by newICTs
- New ICTs' function in servitization
- Design of new ICTs enforced PSS
- Life-cycle management of PSS in new ICTs
- Networked servitized resource management in new ICTs
- Servitized value chain analysis in new ICTs
- Servitized supply chain management in ICTs
- Case studies of servitization in new ICTs

- Empirical studies of servitization performance
- Industry 4.0 and PSS (servitization)
- Industry Internet and PSS (servitization)
- Intelligent Manufacturing and PSS (servitization)
- Other theories, models and methodologies related to PSS (servitization)

Submission

For author guidelines, please refer to www.ifac-control.org. All papers must be submitted electronically using Symposium Manuscript Management System (CMMS). All papers must be prepared in a two-column format in accordance with the IFAC manuscript style. Please use the official IFAC instructions and template to prepare your contribution as full-length draft paper and submit it online by December 15, 2018. Submission details are available on the symposium website. All submissions must be written in English. All papers that conform to submission guidelines will be peer-reviewed by IPC members. The corresponding author submits the paper online (pdf format) as **an invited session paper**. Submission as an invited paper requires the **invited session code .xxxxx**. Several international journals are associated with the MIM 2019 for publication of special issues.

Important dates:

December 15, 2018 Deadline for the submission
February 20, 2019 Notification of acceptance/rejection
March 15, 2019 Deadline for the final submission