

IFAC MIM 2019

August 28 - 30, 2019, Berlin, Germany

Invited Session on:

Digital and Data Driven Sustainable Supply Chains

Proposed by:

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Short presentation:

New business models, stimulated by e-commerce, digital transformation and the internet of things (IoT), are gaining popularity and with rapid diffusion and adoption amongst organizations, individuals, and governments. This growth has resulted in an explosion of supply chain activities that generate large amounts of data (Big-Data). This data is captured by means of various information technologies such as sensors, smart phones, radio frequency identification (RFID), global positioning systems (GPS), blockchain distributed ledger technology, and social media and networks. Big-Data is available in large quantities (volume), at high sampling rates (velocity), and from different sources (variety). Managing and analyzing Big-Data to reveal appropriate insights to support these emerging new digital business models is necessary.

Companies face the challenge of achieving their business performance targets, while complying with the increasing regulatory legislation on greenhouse gas (GHG) emissions, noise, accidents, congestion, materials take-back management, consumer greening and social preferences. To offer cost efficient and sustainable services to their customers, they are therefore compelled to adopt new and creative supply chain solutions in this digitized environment, taking advantage of the current digital advances and the availability of Big-Data.

In this context, this invited session welcomes original theoretical approaches and new applications to digital and sustainable supply chains. Papers related to the following topics are appropriate for the invited session:

- Digital supply chains,
- Smart city logistics,
- Big-Data Analytics for sustainable supply chains,
- Smart transportation systems and sustainable supply chains,
- Collaborative planning and digital supply chains,
- Industry 4.0 and smart manufacturing as part of the sustainable supply chain

- Aided decision making for data driven supply chains,
- Artificial intelligence and sustainable supply chains
- Inter-organizational information and data management
- Digitization, Sustainable Development Goals, and Sustainable supply chains
- Transparency, auditing, and information based certification standards
- Other related aspects are also welcome.

We especially encourage research that expands the theory on sustainable supply chains including information, systems, ambidexterity, complexity, and paradox, and ecological modernization theories, as examples. Innovative theoretical insights adopting and integrating theory in these frameworks are also encouraged. Case studies grounded in theory are especially encouraged.

Keywords: Big-Data, Smart Logistics, Digital Supply Chain, Sustainability

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For author guidelines, please refer to <https://blog.hwr-berlin.de/mim2019/submission/>. All papers must be submitted via the IFAC Papercept platform at the following address: <http://ifac.papercept.net/conferences/scripts/start.pl>. 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 on line by December 15th, 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.

Important Dates

Paper Submission: 15 December 2018

Notification of Acceptance: 20 February 2019

Final Paper Submission: 15 March 2019