



International Journal of Information Management

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Call for Papers (Special Section @IJIM)

Theme: Blockchain in the Operations and Supply Chain Management

Short Title SI: blockchain in the OSCM

In the digital age, virtually all business models have been undergoing unprecedented disruptions thanks to unending breakthroughs in cutting-edge ICTs. A prominent and highly disruptive technology is blockchain (BC), which is already contributing to remodeling traditional business models and creating new opportunities across the entire supply chain. As a rule, BC refers “to a fully distributed system for cryptographically capturing and storing a consistent, immutable, linear event log of transactions between networked actors” (Risius & Spohrer, 2017). BC emerged as a technology to perform transactions in the cryptocurrency market (Nakamoto, 2008; Oh & Shong, 2017; Prybila, Schulte, Hochreiner, & Weber, 2017). Blockchain applications have reached an authoritative level in the financial sector, but it is only recently that they have spanned other areas, such as the Operations and Supply Chain Management (OSCM) field. Blockchain is considered there as both a critical challenge and a well-fit paradigm for opportunities. For instance, BC can trigger significant improvements in transparency, accountability and trust, security, efficiency and costs minimization (Kshetri, 2018).

Additionally, BC is viewed as a solution for SCM traceability problems (Lu & Xu, 2017) and for generating closer and trustworthy relationships (Aste, Tasca, & Di Matteo, 2017) not only between organizations and their suppliers, but also through the entire SCM. On the one hand, a blockchain-enabled smart contract (a script that can trigger a transaction) has the potential of bringing high levels of efficiency with a decentralized operation to SCM. On the other hand, BC can be combined with other cutting-edge technologies (such as big data analytics, internet of things, and cyber-physical systems) to bring about disruptive impacts in all specialized fields.

Despite the numerous potential benefits of BC, blockchain-related concepts (enablers, adoption, implementation, etc.) are still to be well mastered by a good number of managers. The challenges about how they can ensure that BC adds value to both their organizations and SCM remain unanswered. From the OSCM perspective, BC is still in its infancy, and all its potential remains unclear. For example, a recent review on bitcoin, blockchain and Fintech in SCM (Fosso Wamba, Kamdjoug, Robert, Bawack, & Keogh, 2018) identified few empirical studies using the survey method approach for investigating these subjects. And this adds to the scarcity of studies on BC applications that use empirical approaches, including survey (Ying, Jia, & Du, 2018).

This Special Section aims to call on OSCM scholars and practitioners to investigate the role of BC in creating value in OSCM. Specifically, this Special Section intends to gather research from the aforementioned specialists in order to shed more light on and gain an in-depth understanding of how blockchain integrates with and impacts new business models, transforms relationships, and improves performance and competitive advantage in OSCM. Subsequently, we look forward to unveiling strong practical and theoretical implications concerning BC in the OSCM context. As BC has only recently merged with OSCM, the research papers awaited are

expected to make new contributions in terms of reporting empirical results (surveys and case studies) and practical field developments. The proposed Special Section is targeted at (but not restricted to) the following topics:

- Blockchain adoption barriers and challenges in the OSCM.
- A cross-country analysis of blockchain adoption barriers, challenges, and opportunities.
- Survey studies assessing the value of blockchain in OSCM improved service level.
- Survey studies reporting blockchain in the OSCM contexts (e.g., food industry transparency, counterfeiting, adulteration, trusted process, cooperation, operations costs minimization, fake drugs in pharmaceutical SCM, among others).
- Blockchain and OSCM information systems capabilities.
- Blockchain and the needs for workers' skills and capabilities in OSCM.
- Blockchain and big data analytics (BDA) applications in OSCM.
- Blockchain and the Internet of things (IoT) applications in OSCM.
- Blockchain and smart-contract applications in OSCM.
- Blockchain and cyber-physical system applications in the OSCM.
- Blockchain and OSCM security improved in OSCM.
- Blockchain and information sharing in OSCM.
- Blockchain and OSCM improved efficiency process.
- Blockchain and improved transportation performance.
- Blockchain and SCM competitive advantage.
- Blockchain and SCM traceability/transparency improved B2B and B2C perspectives.
- In-depth case studies reporting blockchain applications in OSCM.
- Blockchain and buyer-supplier relationships remodeling.
- Blockchain and diffusion of innovation through SCM.

Important Dates

Manuscript submission deadline: 15-Feb-2019

Notification of Review: 15-Jun-2019

Revision due: 15-Sep-2019

Notification of 2nd Review: 15-Nov-2019

2nd Revision [if needed] due: 15-Dec-2019

Notification of Final Acceptance: 30-Dec-2019

Expected Publication: 1st Quarter 2020

Submission Guidelines

All submissions have to be prepared according to the Guide for Authors as published in the Journal's website at: <https://www.elsevier.com/journals/international-journal-of-information-management/0268-4012/guide-for-authors>

Authors should select “**SI: Blockchain in the OSCM**”, from the “Choose Article Type” pull-down menu during the submission process. All contributions must not have been previously published or be under consideration for publication elsewhere. Link for submission of manuscripts : <https://www.eviser.com/eviser/jrnl/IJIM>

A submission based on one or more papers that appeared elsewhere must bear major value-added extensions or updates (at least 50% of new material). Authors are requested to attach to the submitted paper their relevant, previously published articles and a summary document explaining the enhancements made in the journal's version.

All submitted papers will undergo a rigorous peer-review process that will consider programmatic relevance, scientific quality, significance, originality, style and clarity.

The acceptance process will focus on papers that address original contributions in the form of theoretical, empirical and case research, leading to new perspectives on Blockchain in Operations and Supply Chain Management. Papers must be grounded on wide array of scholarly works on Blockchain and OSCM. This Special Section will serve as a reference archival repository for blockchain applications in OSCM.

Guest Editors

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About Guest Editors

Dr Samuel Fosso Wamba, PhD, HDR, is a Full Professor at the Toulouse Business School, France. He earned an MSc in Mathematics from the University of Sherbrooke in Canada, an MSc in e-commerce from HEC Montreal, Canada, and a PhD in industrial engineering for his work on RFID-enabled supply chain transformation from the Polytechnic School of Montreal, Canada. His current research focuses on business value of IT, business analytics, big data, inter-organizational system (e.g. RFID technology, blockchain) adoption and use, e-government, IT-enabled social inclusion, IT and talent management, supply chain management, electronic commerce and mobile commerce. He has published papers in the proceedings of a number of international conferences (AMCIS, HICSS, ICIS, PICMET and PACIS) and in renowned international journals, including the *Academy of Management Journal*, *European Journal of Information Systems*, *Production Planning and Control*, *International Journal of Production Economics*, *Information Systems Frontiers*, *International Journal of Production Research*, *Business Process Management Journal*, etc. He has been organizing special issues on IT-related topics for top IS and OM journals including: *Annals of Operations Research*, *Computers and Industrial Engineering*, *Electronic Markets*, *Production Planning and Control*, *International Journal of Production Research*, *International Journal of Operations & Production Management*, and *Business Process Management Journal*. He is CompTIA-RFID+ certified.

Maciel M. Queiroz, PhD, is a Researcher in Operations and Supply Chain Management at the Naval Architecture and Ocean Engineering Department of the University of São Paulo, Brazil. Maciel holds an MSc and a PhD in Naval Architecture and Ocean Engineering from the University of São Paulo. His current research interests focus on supply chain digital disruptions, digital supply chain capabilities, Industry 4.0, blockchain, big data, IoT, CPS, including the adoption and use of these technologies. His research work has been published in international journals and/or presented at international conferences such as the International Journal of Logistics Management, Proceedings of the IMAM, TMS, and NetLog. He serves as a reviewer for international journals and for The Academy of Management Annual Meeting.

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