***CFP: Artificial Intelligence in Global Production Systems and Supply Chain Management ***

********** CALL FOR PAPERS **********

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SPECIAL ISSUE ON **Artificial Intelligence in Global Production Systems and Supply Chain Management for the Journal *of Global Information Management (JGIM)***

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INTRODUCTION:

The digital disruption imposed by information and communication technologies (ICT) (Grant & Yeo, 2019; Wu & Raghupathi, 2015) by recent emerging cutting-edge technologies has become a buzzword and a challenge to scholars and practitioners. An emerging and highly disruptive of these technologies is Artificial intelligence (AI) (Davenport, 2018). In summary, AI refers to machines performing activities that commonly require some human intelligence to perform it (Minsky, 1968). AI has been changing the decision-making process drastically, by employing sophisticated approaches such as machine learning, natural language processing, augmented and virtual reality, voice recognition, cognitive analytics, robotics, smart machines, and vision, among others. AI has been applied in a vast of fields, e.g., medicine (Becker, 2019; Wong, Zhou, & Zhang, 2019), market knowledge in B2B (Paschen, Kietzmann, & Kietzmann, 2019), and production management systems (Burggräf, Wagner, & Koke, 2018; Davies, Thomas, & Shaw, 1994).

Nowadays, AI is transforming the global society and organizations' behavior due to its pervasiveness capacity. From an organization's perspective, AI can help the development and improvement of products and processes to support various business benefits, and consequently, generate competitive advantage (Davenport, 2018). For instance, with AI, organizations can improve the functions related to sales management by the automation of all repetitive tasks (Syam & Sharma, 2018), monitoring infectious disease (Wong et al., 2019), combat card fraud (Ryman-tubb, Krause, & Garn, 2018), among others. In this context, AI can be used in any economic field, notably to support planning, monitoring, and the decision-making process. In addition, AI has been changing profoundly the role of the workers by human-machine interaction to develop operational activities (Faraj, Pachidi, & Sayegh, 2018).

Despite the recent advances of AI techniques, there is a great debate between scholars and practitioners, especially about how AI can be implemented and managed, and how it creates value for the stakeholders (Davenport, 2018). In the same spirit, there are uncertainties related to AI issues, for example, ethical and legal issues (Duan, Edwards, & Dwivedi, 2019) related to data exploration and responsibility, the threats associated with AI usage (Clarke, 2019), and the relationship and the role of human-machine interaction (Jarrahi, 2018). At the global operations management and supply chain lens, there are several opportunities and challenges facing AI adoption and management. Besides, new skills are demanded to a new generation of global production systems (Freddi, 2018). However, little is known about how AI can support and bring benefits to the global operations and supply chain management (OSCM) and related-fields.

OBJECTIVE OF THE SPECIAL ISSUE:

The purpose of this Special Issue is to publish the latest and finest advances of AI techniques applied in Global Production Systems and OSCM, as also advance the information systems field. Moreover, we intend

to stimulate research and debate between scholars, managers, and practitioners interested in gaining a more in-depth understanding of the role, benefits, and complexities of AI in global production, manufacturing systems, SCM, and information systems. Following the tradition and rigor of high-quality papers published by JGIM in innovative technologies, we expect original contributions from scholars and practitioners that unlocks and shed more light on the comprehension of AI technologies in the global OSCM context, by employing quantitative and qualitative methods.

RECOMMENDED TOPICS:

Topics to be discussed in this special issue include (but are not limited to) the following:

- How can production and supply chain managers improve firm performance, capture benefits, and gain a competitive advantage with AI techniques?
- AI techniques to support the scheduling and demand planning in global logistics and OSCM
- How can AI be managed at different levels of planning, and support operational decisions in global OSCM?
- Ethical issues and societal implications related to AI applied to develop global products
- Global logistics and OSCM capabilities required to implement AI
- AI and the reconfiguration of global production systems business models
- Barriers related to AI implementation in intra-organizational and inter-organizational levels
- What is the role of the interaction between human-machine in global OSCM systems?
- Frameworks to support managers in the decision-making process using AI in planning and control of the global production/OSCM
- Which are the critical factors of AI in global manufacturing, production systems, and supply chain management?
- The impacts of AI in knowledge and innovation in global manufacturing, production systems, and supply chain management
- Governance models to support AI diffusion globally between stakeholders
- How can AI be used to transform traditional global manufacturing and production systems in smart manufacturing?
- The role and consequences of trust, commitment, and power enabled by AI use in global supply chain management
- AI applied to improve quality management
- Workers skills required to work with AI in operational, tactical, and strategic levels?
- How to measure the benefits of AI in global manufacturing, production systems, and supply chain management?
- The threats associated with AI usage

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SUBMISSION PROCEDURE:

Researchers and practitioners are invited to submit papers for this special theme issue on **Artificial Intelligence in Global Production Systems and Supply Chain Management *on or before* March 15, 2021.** All submissions must be original and may not be under review by another publication. INTERESTED AUTHORS SHOULD CONSULT THE JOURNAL'S GUIDELINES FOR MANUSCRIPT SUBMISSIONS at http://www.igi-global.com/publish/contributor-resources/before-you-write/. All submitted papers will be reviewed on a double-blind, peer review basis. Papers must follow APA style for reference citations.

All inquires should be should be directed to the attention of:

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