Stage de master - MSc internship

Hierarchical Analysis of SCOR Digital Standard Orchestrators in Green, Lean, Agile

Contexts

Overview of the project:

The Supply Chain Operations Reference (SCOR) Digital Standard model is a comprehensive and universally accepted supply chain (SC) standard, providing a unique framework that links business processes, metrics, best practices, and technologies into a unified structure to support communication among SC partners and subsequently to improve the effectiveness of SC management and related SC improvement activities (ASCM, 2022). An increasing number of literature studies have found that it can significantly contribute to creating effective SC management. It is asserted by ASCM (2022) that SCOR Digital Standard is used by plenty of public and private organizations around the world to assess and improve their SCs, directly leading to improved operational performance.

However, despite its broadly acknowledged capabilities in the field, practitioners continue to be cautious about its implementation. This may be due to a significant paucity of knowledge and uncertainty about its key orchestrators, which are designated as the vital functions associated with the integration and enablement of SC strategies. In the green, lean, and agile contexts, which are emerging as effective solutions, the enabling orchestrators have yet to be viewed and gauged while being green, lean, and agile is no longer a "could have" or "nice to have" but a business obligation (Gholami et al., 2022). Green focuses on minimizing green waste to generate an efficient low-carbon SC (Gholami et al., 2021). Lean concentrates on eliminating non-value-added activities to create an efficient low-cost SC (Abu et al., 2019). Finally, agility enables the SC system to face and recover from disruptions, hence sustaining SC activities (Mamaghani & Medini, 2021).

Thus, the aim of this research project is to scrutinize the key orchestrators enabling the SCOR Digital Standard implementation in agile, lean, and green contexts under uncertainty. The investigation will be conducted at Mines Saint-Etienne, LIMOS lab, within the framework of the RAMP-UP II project. The role of a researcher is to use his/her engineering skills to set up, collect data, and run tests to ensure data integrity and protocol compliance for this project.

Keywords: Supply chain, SCOR Digital standard, Orchestrators, Agility, Lean, Green.

Desired candidate skills: Analytical Skills, Problem-Solving Skills, Research and Communication Skills.
Location: Mines Saint-Etienne.
Supervisors: Hamed Gholami; Khaled Medini
Period: 6 months starting from February – March 2023
Salary: ~ 550 €/month (scholarship)

- Application:
 - The application should include the following: a short résumé, cover letter, and transcripts of the past two years (including partial results of the current semester, if any).
 - Application and any request should be emailed to: <u>hamed.gholami@emse.fr; khaled.medini@emse.fr</u>
 - Deadline: January 10, 2023.

References:

- ASCM (2022). Association for Supply Chain Management. *Supply Chain Operations Reference Digital Standard*. Available online: https://scor.ascm.org/processes/introduction (accessed on 15 November 2022).
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- Gholami, H., Jamil, N., Mat Saman, M. Z., Streimikiene, D., Sharif, S., & Zakuan, N. (2021). The application of green lean Six Sigma. *Business Strategy and the Environment*, 30(4), 1913-1931.
- Gholami, H., Hashemi, A., Lee, J.K.Y., Abdul-Nour, G. (2022). Scrutinizing state-of-the-art I4.0 technologies toward sustainable products development under fuzzy environment. *Journal of Cleaner Production*, 134327.
- Mamaghani, E. J., & Medini, K. (2021). Resilience, agility and risk management in production ramp-up. *Procedia CIRP*, *103*, 37-41.