

Stage de master – MSc internship

Enterprise architecture in the context of agile and digital transformation

Overview of the topic:

Enterprise Architecture (EA) plays a crucial role towards process alignment with business strategy and ensuring competitiveness on the long run. A plethora of applied research works are available in the literature proposing frameworks, methods, practices and tools to adapt EA to evolving business environment of companies. This work aims to review the literature and conduct a comparative analysis of existing EA frameworks with regard to their potential to support agile and digital transformation. The analysis will be conducted following four main steps, first one aims to define inclusion and exclusion criteria of available EA frameworks. This step will be supported by previous works from the research team. Second step focuses on the assessment of a sub-set of EA frameworks using evidence-based approaches. The selected framework will be used in the third step as a means to structure a transformation project. The final step is concerned with the analysis of the results from the case study and on drawing recommendations.

Desired candidate skills: Industrial management, information systems, object-oriented modelling (preferably).

Location: Mines Saint-Etienne.

Laboratory: LIMOS (UMR 6158) – Laboratory of Computing, Modelling and Optimization of the Systems.

Supervisors: Khaled Medini, Nicolas Sauzéat

Period: 5 months starting from February/March 2025.

Salary: Internship scholarship.

Application:

- The application should include the following: short résumé, cover letter, transcripts of the past two years (including partial results of the current semester, if any).
- Application and any request should be emailed to: khaled.medini@emse.fr
- Deadline: December 3, 2024.

References:

- R. M. van Wessel, P. Kroon, de Vries, H. J., 2022. Scaling Agile Company-Wide: The Organizational Challenge of Combining Agile-Scaling Frameworks and Enterprise Architecture in Service Companies. *IEEE Transactions on Engineering Management*, 69(6), 3489-3502.
- Filipe, J., Smialek, M., Brodsky, A., Hammoudi, S., 2020. An Approach for Adaptive Enterprise Architecture. In : *Proceedings of the 22nd Conference on Enterprise Information Systems (ICEIS)*, Prague, Czech, 738-745.
- Medini, K., Bourey, J. P., 2012. SCOR-based enterprise architecture methodology. *International Journal of Computer Integrated Manufacturing*, 25(7), 594–607.

Related SDGs:

