

Call for Special Session

PLM Maturity, PLM implementation and Adoption within Industry 4.0

Industry 4.0, also called "Fourth Industrial revolution" is upsetting the organizations and industrial tools of enterprises especially SMEs. On the one hand, technologies offer several possibilities, such as digitization; simulation; modelling; communication between people, machines, products and computer systems. On the other hand, customer demand and the market are evolving and becoming increasingly demanding and more complex such as services and finally a major change in the business model.

The digital transformation aims as much to maintain the competitive edge of the SMEs as to anticipate the risks of new competition. To succeed in their digital transformation, SMEs must be able to rely on powerful, agile, innovative ICTs, and especially according to a well-defined approach. In this context, PLM plays a central role in improving internal and external collaboration, production and efficiency of enterprises. Despite the importance of these major challenges, several companies and especially SMEs do not realize the importance of the revolution impact on their ICT/PLM solutions.

SMEs, generally, are not well equipped to adopt and integrate them to their activities. Effectively, several years ago, PLM accounted for very high costs and long and costly internal resources deployments. Therefore, the introduction of the PLM in an organization has an intrusive aspect that may affect the existing organization in its different levels: Strategic, process and tools. Industry 4.0 brought new disruptive technologies (AI, Blockchain, etc.) and processes will definitely impact the PLM implementation.

One important rather recent solution for the above types of problems is various types of maturity – related approaches. A growing attention has been addressed by IFIP WG 5.1 members to PLM implementation, adoption and maturity- related issues, as demonstrated by the increasing number of papers on the topic.

For this session, contributors are challenged to discuss the Impact of Industry 4.0 evolution on PLM through collaboration levels and PLM maturity, the barriers that discourage enterprises from taking advantage of PLM and adoption aspects, strategies and approaches of PLM deployment and implementation.

In order to improve discussions, we will involve industrials and professionals. They will share their experience and also participate in discussions and exchanges. Thus, we will allow researchers to have an industrial feedback and explore opportunities for future collaborations.

Topics related to this special session, without being limited to, for instance the following:

- PLM maturity and PLM evaluation tools
- PLM and ICT adoption and adaptation
- Impact of digital transformation on PLM
- PLM implementation within the Industry 4.0 context
- PLM deployment for improving collaboration
- OEM and Supplier collaboration through PLM
- Impact, limits and challenges of PLM deployment

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