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Emerging trends of knowledge management in organizations (2)

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ROLES, EFFECTS, AND RAMIFICATIONS OF IN-PERSON INTERACTIONS IN A DIGITAL TEAM

Abstract

The COVID-19 crisis, besides the scientific challenge that the world needed to manage, forced the aerospace industry to engage in digital transformation. Overnight, organisations - public and private - had to quickly adapt their ways of working to those developed in the early 2010s by the IT sector, adopting Agile and SAFe management methods.

This study - conducted during the 2024 IPMC's Young Professionals Workshop organised by the IAF - aims to provide a framework to ease digital transformation deployment in the aerospace industry, from the early steps to the continuous improvement loops, also proposing recommendations to balance digital and in-person interactions.

This paper firstly proposes a comprehensive overview of digital transformation in the aerospace industry. Even if this transformation is still ongoing, a representative return on operational experience can be done, not only based on existing research papers but also on interviews performed in industrial companies like Thales and Airbus and aerospace agencies like CNES, DLR, ESA, and NASA. In addition, the direct experience of young professionals worldwide who started their careers during the COVID-19 pandemic and, consequently, in a digital context is taken into account.

Then, the study addresses the consequences of the methods and environment changes in a digital world over in-person interactions. From the early results, team cohesion and knowledge transfer were particularly affected by the sudden aerospace sector digitalization, where the digital environment created

an intense work environment given the missing social interaction. This statement is especially observed for the biggest companies and organisations where projects and programmes inertia is generally larger. Moreover, a variation in adaptability has been identified during the deployment of these new working methods, specifically when the transformation focuses on full digitalization, strongly reducing in-person interaction.

Lastly, the paper introduces a framework based on the data extracted from the interviews and real-life experiences. This framework not only presents a deployment plan for digital transformation in the aerospace sector but also some recommendations to improve project management continuously in a digital world. These recommendations include some top tips to balance digital, in person, and virtual interactions in the workplace, therefore, improving in-person interactions in the working flow, even for most global programmes, and having efficient team cohesion and knowledge transfer, and maintaining a productive and engaging work environment.