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ONLINE PM AND COLLABORATIVE TOOLS FOR THE AEROSPACE SECTOR

Abstract

The transformative impact of digital collaboration in the aerospace sector and the innovation in the space sector are driven by new disruptive space actors and philosophies such as the NewSpace Economy business models. Moreover, the effects of the global pandemic have accelerated the existing trends in online project management tools providing significant changes in project management and inter-team collaboration. These online collaboration tools are relatively new to the aerospace sector, while some sectors may have been using them for a longer time. There is an interest in assessing how these tools best fit into the aerospace sector to satisfy its stringent demands, and requirements and to ensure a reasonable level of security in the tools and applications that integrate into their business processes. This paper identifies, analyzes, and evaluates different types of project management collaborative tools, providing insights for future usage of these tools. The research investigates how different tools handle international space projects, emphasizing security and data integrity, and it also addresses the effects of payment schemes on the selection of tools. The research is carried out by means of analysis of the available tools, and interviews with subject matter experts from the aerospace sector, such as project managers at startups, SMEs, Space Agencies, prime companies, and international space organizations. The outcome provides a comprehensive overview of the usage of online project management collaboration tools in the aerospace sector. Furthermore, the findings emphasize the importance of addressing both tool and human aspects for effective online PM and collaboration tools usage. Finally, the paper contributes to a deeper understanding of the challenges and solutions in the aerospace sector's adoption of online collaborative project management tools and outlines recommendations and key features for effective tools that can improve the efficiency of operations in the space sectors. This work was conducted in the framework of the IAF IPMC Young Professionals Workshop.