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Deployment of a Product Lifecyle Management (PLM) Solution Towards Digital Transformation

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Abstract : In the era of Industry 4.0, enterprises are increasingly employing digital technologies in order to improve their product development processes. This research focuses on the strategic deployment of Product Lifecycle Management (PLM) solutions during production as a key tracker of traceability and digital transformation activities. The study explores the integration of PLM within a larger organizational framework, examining its impact on product lifecycle efficiency, corporation, and innovation. Through a comprehensive analysis of a real case study from the automotive industry, this project evaluates the critical success factors and challenges associated with implementing PLM solutions for digital transformation. Moreover, it explores the synergic relationship between PLM and emerging technologies such as 3D experience and SOLIDWORKS, elucidating their combined potential in optimizing production workflows and enabling data-driven decision-making. The study's findings provide global approaches for firms looking to embark on a digital transformation journey by implementing PLM technologies. This research contributes to a better understanding of how PLM can be effectively used to foster innovation and competitiveness in the changing landscape of modern industry by shining light on best practices, critical considerations, and potential obstacles.

Keywords : product lifecyle management (PLM), industry 4.0, traceability, digital transformation, solution, innovation, 3D experience, SOLIDWORKS
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