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A new product lifecycle management platform for CERN's accelerator complex and beyond

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Particle accelerator projects are complex, and CERN's current engineering tools already manage millions of documents that follow various lifecycles and workflows. Future projects will push size and complexity to yet higher levels, in addition to increased collaboration with external partners. As reliable data is critical for success of complex system design, CERN is now implementing a new PLM (Product Lifecycle Management) platform that outperforms previous disparate design data management systems in several aspects: Consolidation of legacy data in a consistent data model; Federation of data from different systems and external partners in a common structure; Processes with flexible Workflows and Lifecycles; Integration with Simulation, Manufacturing, Maintenance, and other services dealing with design and product data. The overarching goal for the new PLM platform is to act as a catalyser for improved quality and traceability of data (often known as the "Digital Thread") and to serve as the foundation for Digital Twins of current and future accelerators with the aim to drastically reduce development times as well as operation and maintenance cost.

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Footnotes

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Yes

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