

Product Lifecycle Management (Volume 7)

PLM and Digital Twins

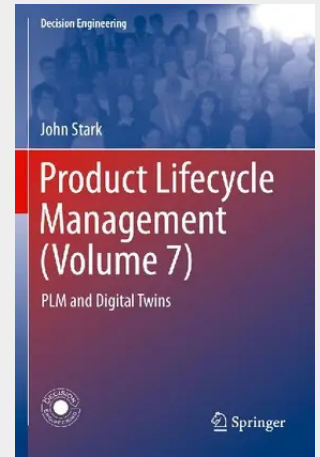
This volume addresses the convergence of three technologies that emerged in the early 21st century: Product Lifecycle Management (PLM), the Internet of Things (IoT), and Digital Twins. These are available to all manufacturing companies as their products go through the product lifecycle. This starts with Ideation, continues through Definition, Realisation and Use/Support, and ends with Retirement/Disposal.

This book is the 7th volume in a series that started in 2004 with the publication of 'Product Lifecycle Management: 21st Century Paradigm for Product Realisation', which has become a seminal book on PLM.

The first chapters of the book address the fundamentals of PLM, the IoT and Digital Twins, highlighting their value and benefits. The following chapters look at applications and advantages resulting from the convergence of the three technologies in specific phases of the product lifecycle. Digital Twin applications in these phases include decision support, design iteration acceleration, predictive analytics and maintenance, product and process documentation, product upgrades, product and manufacturing process simulation, quality assurance, remote monitoring and troubleshooting, remote sales, training, virtual prototyping, and virtual showrooms. The final chapter addresses the implementation of an integrated PLM and Digital Twin environment.

The book gives the reader a broad understanding, valuable insights, and practical guidance about three important technologies and the way they are converging and evolving together. It will stimulate innovation, propel companies forward, and motivate them to succeed in an increasingly digitally connected product world.

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