Call for Book Chapters

Smart Technologies for Improved Performance of Manufacturing Systems and Services

Book Series: Advances in Intelligent Decision-Making, Systems Engineering, and Project Management

Scope of the Book

Performability may be classified as an attribute of the product, system, or service performance evaluation and an attribute of the evaluation of the performance of persons. In addition to product dependability, performability engineering is concerned with product reliability. Also, there is a discussion on how to safely employ current technologies in manufacturing, and how to build more cost-effective alternatives. As a consequence of the manufacturing process, there is minimal environmental pollution. When it comes to performance requirements, performability engineering goes beyond the traditional definitions to embrace the new notion of requiring less in order to get greater results. It is necessary to employ the most effective use of resources and energy in order to manufacture dependable and trustworthy goods. The useful life cycle of a product comes to an end when it is no longer required and can be disposed of securely without causing damage to the environment.

In this view, the book calls for contributions focused on various applications of smart technologies like IIoT, AI, AR & VR etc. for the assessment and improvement of performability. It also includes recent development on various manufacturing processes like Focused Ion Beam (FIB) machining, welding 4.0 etc. for a long-term sustainability and implication of several digital technologies for the improvement in performability of industries.

Chapter Title

Chapters to be covered in this book includes (but not limited to) the following themes:

♦ How the Industrial Internet of Things may be used to improve performability of manufacturing systems.

♦ Using the IoT, AI & Cloud Computing to Create Smarter Warehousing and Logistics System.

♦ Knowledge Management and Retrieval in an Environment for Autonomous Maintenance Management System.

♦ IoT, AI & Cloud Computing for performability enhancement of Inventory systems.

♦ Digital Technology-Enabled Organizational Performance Enhancement: Applications in the Real World.

♦ Improved organizational performability through Intelligent Process Planning System.

♦ Performability Monitoring in Smart Manufacturing Systems through Advanced Sensing Technologies

♦ Machine Learning and Knowledge Engineering Framework. for improved Reliability Prediction

♦ The development of performability indicators, frameworks, or tools for smart and connected systems.

♦ Improved performability of Machines and Equipment through data driven predictive maintenance approach

♦ Welding 4.0 towards environmental sustainability.

♦ Challenges and Prospects of Welding 4.0 Adoption: Implications for Emerging Economies

♦ Focused Ion-beam Machining as a technology for long term sustainability.

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