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Titolo	Advances in Through-life Engineering Services // edited by Louis Redding, Rajkumar Roy, Andy Shaw
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ISBN	3-319-49938-6
Edizione	[1st ed. 2017.]
Descrizione fisica	1 online resource (XIV, 470 p. 153 illus., 106 illus. in color.)
Collana	Decision Engineering, , 1619-5736
Disciplina	658.827
Soggetti	Engineering economy Economic policy Management Industrial management Manufactures Engineering Economics, Organization, Logistics, Marketing R & D/Technology Policy Innovation/Technology Management Manufacturing, Machines, Tools, Processes
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	Introduction -- The Development of a UK National Strategy for Through-Life Engineering Services -- The Development of a UK National Strategy for Through-Life Engineering Services -- Warranty Driven Design – An Automotive Case Study -- Designing for Service in a Complex Product Service System. Civil Aerospace Gas Turbine Case Study -- The Knowledge Management Perspective -- Predictive Big Data Analytics and Cyber Physical Systems For TES Systems -- Development and Operation of Functional Products: Improving Knowledge on Availability Through Use of Monitoring and Service-Related Data -- Remodelling of Structured Product Data for Through-life Engineering Services -- Holistic Approach for Condition Monitoring in Industrial Product-Service Systems -- An Erlang-Coxian-Based method for Modelling Accelerated Life Testing Data -- Thermographic NDT for Through-life Inspection of High Value Components --

Engineering Support Systems for Industrial Machines and Plants -- Infrastructure/Train Borne Measurements in Support of UK Railway System Performance: Gaining Insight Through Systematic Analysis and Modelling -- Warranty Impacts from No Fault Found (NFF) and an Impact Avoidance Benchmarking Tool -- Insights into the Maintenance Test Effectiveness -- Best Practices in the Cost Engineering of Through-Life Engineering Services in Life-Cycle Costing (LCC) and Design To Cost (DTC) -- Cost Model for Assessing Losses to Avionics Suppliers During Warranty Period -- Product-Service Systems Under Availability-Based Contracts: Maintenance Optimization and Concurrent System and Contract Design -- Application of Open source Hardware to the Development of Autonomous Maintenance Support Systems -- Design for Zero Maintenance -- Graph-Based Model for Context-Aware Maintenance Assistance with Augmented Reality and 3D Visualization -- Remotely Piloted Aerial Systems Support Considerations -- Preventive Maintenance Scheduling Optimization: A Review of Applications for Power Plants -- Beyond RAMS Design: Towards an Integral Asset and Process Approach -- On the Initial Spare Parts Assortment for Capital Assets: A Structured Approach Aiding Initial Spare Parts Assortment Decision-Making (SAISAD) -- The Design of Cost and Availability in Complex Engineering Systems -- Defence Support Services For The Royal Navy: The Context of Spares Contracts.

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### Sommario/riassunto

This edited book offers further advances, new perspectives, and developments from world leaders in the field of through-life engineering services (TES). It builds up on the earlier book by the same authors entitled: "Through-life Engineering Services: Motivation, Theory and Practice." This compendium introduces and discusses further, the developments in workshop-based and 'in situ' maintenance and support of high-value engineering products, as well as the application of drone technology for autonomous and self-healing product support. The links between 'integrated planning' and planned obsolescence, risk and cost modelling are also examined. The role of data, information, and knowledge management relative to component and system degradation and failure is also presented. This is supported by consideration of the effects upon the maintenance and support decision by the presence of 'No Fault Found' error signals within system data. Further to this the role of diagnostics and prognostics is also discussed. In addition, this text presents the fundamental information required to deliver an effective TES solution/strategy and identification of core technologies. The book contains reference and discussion relative to automotive, rail, and several other industrial case studies to highlight the potential of TES to redefine the product creation and development process. Additionally the role of warranty and service data in the product creation and delivery system is also introduced. This book offers a valuable reference resource for academics, practitioners and students of TES and the associated supporting technologies and business models that underpin whole-life product creation and delivery systems through the harvesting and application of condition and use based data.

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