

1. Record Nr.	UNINA9910220007603321
Autore	Arcadio Reyes-Lecuona
Titolo	Dynamics of Long-Life Assets [[electronic resource]] : From Technology Adaptation to Upgrading the Business Model // edited by Stefan N. Grösser, Arcadio Reyes-Lecuona, Göran Granholm
Pubbl/distr/stampa	Springer Nature, 2017 Cham : , : Springer International Publishing : , : Imprint : Springer, , 2017
ISBN	3-319-45438-2
Edizione	[1st ed. 2017.]
Descrizione fisica	1 online resource (XXVI, 356 p. 117 illus., 81 illus. in color.)
Disciplina	658.514
Soggetti	Management Industrial management Knowledge management Management information systems Organization Planning Production management Innovation/Technology Management Knowledge Management Business Information Systems Production
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	PART I: Introduction and Setting the scene -- Dynamics of Long-Life Assets: The Editors' Intro -- The Challenge -- The Use-it-Wisely (UIW) Approach -- PART II: Tools and Methods -- Innovation Management with an Emphasis on Co-Creation -- Complexity Management and System Dynamics Thinking -- Managing the Life Cycle to Reduce Environmental Impacts -- Virtual Reality and 3D Imaging to Support Collaborative Decision Making for Adaptation of Long-lifetime Assets -- Operator-oriented Product and Production Process Design for Manufacturing, Maintenance and Upgrading -- Fostering a Community

of Practice for Industrial Processes -- Extending the System Model -- PART III: From Theory to Practice -- Collaborative Management of inspection Results in Power Plant Turbines -- Rock crusher Upgrade Business from a PLM Perspective -- Space Systems Development -- Adaptation of High-Variant Automotive Production System Using a Collaborative Approach -- Supporting the Small-to-Medium Vessel Industry -- Sustainable Furniture that Grows with End-users -- Comparing Industrial Cluster Cases to Define Upgrade Business Models for a Circular Economy. .

Sommario/riassunto

This book is published under a CC BY-NC 4.0 license. The editors present essential methods and tools to support a holistic approach to the challenge of system upgrades and innovation in the context of high-value products and services. The approach presented here is based on three main pillars: an adaptation mechanism based on a broad understanding of system dependencies; efficient use of system knowledge through involvement of actors throughout the process; and technological solutions to enable efficient actor communication and information handling. The book provides readers with a better understanding of the factors that influence decisions, and put forward solutions to facilitate the rapid adaptation to changes in the business environment and customer needs through intelligent upgrade interventions. Further, it examines a number of sample cases from various contexts including car manufacturing, utilities, shipping and the furniture industry. The book offers a valuable resource for both academics and practitioners interested in the upgrading of capital-intensive products and services. “The work performed in the project “Use-It-Wisely (UiW)” significantly contributes towards a collaborative way of working. Moreover, it offers comprehensive system modelling to identify business opportunities and develop technical solutions within industrial value networks. The developed UiW-framework fills a void and offers a great opportunity. The naval construction sector of small passenger vessels, for instance, is one industry that can benefit.” Nikitas Nikitakos, Professor at University of the Aegean, Department of Shipping, Trade, and Transport, Greece. “Long-life assets are crucial for both the future competitiveness and sustainability of society. Make wrong choices now and you are locked into a wrong system for a long time. Make the right choices now and society can prosper. This book gives important information about how manufacturers can make right choices.” Arnold Tukker, Scientific director, Institute of Environmental Sciences (CML), Leiden University, and senior scientist, TNO.
