

1. Record Nr.	UNINA9910677903003321
Autore	Kenett Ron
Titolo	Systems engineering in the fourth industrial revolution : big data, novel technologies, and modern systems engineering / / edited by Robert S. Swarz, Avigdor Zonnenshain and Ron S. Kenett
Pubbl/distr/stampa	Hoboken, New Jersey : , : Wiley, , 2020
ISBN	1-119-51392-8 1-5231-3332-5 1-119-51395-2 1-119-51394-4
Edizione	[1st edition]
Descrizione fisica	1 online resource (659 pages)
Disciplina	620.001171
Soggetti	Systems engineering
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	<p>An up-to-date guide for using massive amounts of data and novel technologies to design, build, and maintain better systems engineering</p> <p>Systems Engineering in the Fourth Industrial Revolution: Big Data, Novel Technologies, and Modern Systems Engineering offers a guide to the recent changes in systems engineering prompted by the current challenging and innovative industrial environment called the Fourth Industrial Revolution—INDUSTRY 4.0. This book contains advanced models, innovative practices, and state-of-the-art research findings on systems engineering. The contributors, an international panel of experts on the topic, explore the key elements in systems engineering that have shifted towards data collection and analytics, available and used in the design and development of systems and also in the later life-cycle stages of use and retirement. The contributors address the issues in a system in which the system involves data in its operation, contrasting with earlier approaches in which data, models, and algorithms were less involved in the function of the system. The book covers a wide range of topics including five systems engineering domains: systems engineering and systems thinking; systems software</p>

and process engineering; the digital factory; reliability and maintainability modeling and analytics; and organizational aspects of systems engineering. This important resource: Presents new and advanced approaches, methodologies, and tools for designing, testing, deploying, and maintaining advanced complex systems Explores effective evidence-based risk management practices Describes an integrated approach to safety, reliability, and cyber security based on system theory Discusses entrepreneurship as a multidisciplinary system Emphasizes technical merits of systems engineering concepts by providing technical models Written for systems engineers, Systems Engineering in the Fourth Industrial Revolution offers an up-to-date resource that contains the best practices and most recent research on the topic of systems engineering.
