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Titolo	Handbook of Systems Sciences [[electronic resource] /] / edited by Gary S. Metcalf, Kyoichi Kijima, Hiroshi Deguchi
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Descrizione fisica	1 online resource (1429 pages) : illustrations (some color)
Classificazione	QP 350
Disciplina	354.81150006
Soggetti	Knowledge management Service industries Technological innovations Evolutionary economics Institutional economics Economic sociology Knowledge Management Services Innovation and Technology Management Institutional and Evolutionary Economics Economic Sociology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Introduction to the Handbook of Systems Sciences -- Historical Foundations -- Systems Modeling and Methodologies -- Complex Systems Modeling -- Management and Organizations -- Social Systems -- Design of Systems -- Ecological Systems -- Engineered Systems -- Systems Research and Education.
Sommario/riassunto	The primary purpose of this handbook is to clearly describe the current state of theories of systems sciences and to support their use and practice. There are many ways in which systems sciences can be described. This handbook takes a multifaceted view of systems sciences and describes them in terms of a relatively large number of dimensions, from natural and engineering science to social science and systems management perspectives. It is not the authors' intent,

however, to produce a catalog of systems science concepts, methodologies, tools, or products. Instead, the focus is on the structural network of a variety of topics. Special emphasis is given to a cyclic–interrelated view; for example, when a theory of systems sciences is described, there is also discussion of how and why the theory is relevant to modeling or practice in reality. Such an interrelationship between theory and practice is also illustrated when an applied research field in systems sciences is explained. The chapters in the handbook present definitive discussions of systems sciences from a wide array of perspectives. The needs of practitioners in industry and government as well as students aspiring to careers in systems sciences provide the motivation for the majority of the chapters. The handbook begins with a comprehensive introduction to the coverage that follows. It provides not only an introduction to systems sciences but also a brief overview and integration of the succeeding chapters in terms of a knowledge map. The introduction is intended to be used as a field guide that indicates why, when, and how to use the materials or topics contained in the handbook.