

1. Record Nr.	UNINA9910527724703321
Autore	Briffaut Jean-Pierre
Titolo	From complexity in the natural sciences to complexity in operations management systems / / Jean-Pierre Briffaut
Pubbl/distr/stampa	London, England ; ; Hoboken, New Jersey : , : ISTE : , : Wiley, , 2019
ISBN	1-119-61085-0 1-119-61081-8 1-119-61082-6
Edizione	[First edition]
Descrizione fisica	1 online resource (243 pages)
Collana	THEi Wiley ebooks.
Disciplina	658.403
Soggetti	Management science
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	Although complexity makes up the very fabric of our daily lives and has been more or less addressed in a wide variety of knowledge fields, the approaches developed in the Natural Sciences and the results obtained over the past century have not yet permeated Management Sciences very much. The main features of the phenomena that the Natural Sciences deal with are: non-linear behavior, self-organization and chaos. They are analyzed with the framing of what is called "systems thinking", popularized by the mindset pertaining to cybernetics. All pioneers in systems thinking either had direct or indirect connections with Biology, which is the discipline considered complex par excellence by the public. When applying these concepts to Operations Management Systems and modeling organizations by BDI (Beliefs, Desires, Intentions) agents, the lack of predictability in the conduct of change management that is prone to bifurcations (tipping points) in terms of organizational structures and in forecasting future activities, reveals them to be ingrained in the interplay of complexity and chaos.