Record Nr. UNINA9910557407703321

Autore Philbin Simon P

Titolo Driving Sustainability through Engineering Management and Systems

Engineering

Pubbl/distr/stampa Basel, Switzerland, : MDPI - Multidisciplinary Digital Publishing

Institute, 2021

Descrizione fisica 1 electronic resource (156 p.)

Soggetti Technology: general issues

Lingua di pubblicazione Inglese

Formato Materiale a stampa

Livello bibliografico Monografia

Sommario/riassunto

Despite the ongoing impact of the COVID-19 pandemic, the challenge of realizing sustainability across the triple bottom line of social, environmental, and economic development remains an urgent priority. If anything, it is now imperative that we work towards achieving the United Nations Sustainable Development Goals (SDGs). However, the global challenges are significant. Many of the societal challenges represent complex problems that require multifaceted solutions drawing on multidisciplinary approaches. Engineering management involves the management of people and projects related to technological or engineering systems—this includes project management, engineering economy and technology management, as well as the management and leadership of teams. Systems engineering involves the design, integration and management of complex systems over the full life cycle—this includes requirements capture and integrated system design, as well as modelling and simulation. In addition to the theoretical underpinnings of both disciplines, they also provide a range of tools and techniques that can be used to address technological and organisational complexity. The disciplines of engineering management and systems engineering are therefore ideally suited to help tackle both the challenges and the opportunities associated with realising a sustainable future for all. This book provides new insights on how engineering management and systems

engineering can be utilised as part of the journey towards sustainability. The book includes a discussion of a broad range of different approaches to investigate sustainability through utilising quantitative, qualitative and conceptual methodologies. The book will be of interest to researchers and students focused on the field of sustainability as well as practitioners concerned with devising strategies for sustainable development.