Risk-Based Project Decisions in Situations of High Complexity and Deep Uncertainty

This book integrates for readers three areas of knowledge, pertaining to risk-based project decision making: project risk management (PRM), complexity theory, and decision-making under deep uncertainty (DMDU). Readers will appreciate that in practice, too often relevant complexity and uncertainty factors are either ignored or overlooked resulting in epic project failures. The author discusses a variety of methodologies and a decision-tree-type framework to determine why, when and how particular methodologies should be applied to ensure project success. These include nonlinear Monte Carlo techniques, a dynamic adaptive methodology to adapt to external environment changes, game theory for devising robust decision-making criteria, systems dynamics and cost escalation modelling, as well as risk-based & economic-based alternatives selection methodologies. This book will be an eye-opener for many PRM practitioners, helping to increase their chances of project success by properly handling inescapable project-complexity and deep-uncertainty implications in specific contexts.

This book integrates for readers three areas of knowledge, pertaining to risk-based project decision making: project risk management (PRM), complexity theory, and decision-making under deep uncertainty (DMDU). Readers will appreciate that in practice, too often relevant complexity and uncertainty factors are either ignored or overlooked resulting in epic project failures. The author discusses a variety of methodologies and a decision-tree-type framework to determine why, when and how particular methodologies should be applied to ensure project success. These include nonlinear Monte Carlo techniques, a dynamic adaptive methodology to adapt to external environment changes, game theory for devising robust decision-making criteria, systems dynamics and cost escalation modelling, as well as risk-based & economic-based alternatives selection methodologies. This book will be an eye-opener for many PRM practitioners, helping to increase their chances of project success by properly handlinginescapable project-complexity and deep-uncertainty implications in specific contexts. - Integrates project risk management (PRM), complexity theory, and decisionmaking under deep uncertainty (DMDU); - Provides conceptual overview of PRM, project complexity and DMDU methodologies, their interdependencies and integration; - Enables robust, risk-based decision-making for contingency development and alternatives selection, rooted in game theory.



Deringer

117,69 € 109,99 € (zzgl. MwSt.)

Lieferfrist: bis zu 10 Tage

ArtikeInummer: 9783031569876 Medium: Buch ISBN: 978-3-031-56987-6 Verlag: Springer Nature Switzerland Erscheinungstermin: 07.06.2024 Sprache(n): Englisch Auflage: 2024 Produktform: Gebunden Gewicht: 781 g Seiten: 382 Format (B x H): 160 x 241 mm



Kundenservice Fachmedien Otto Schmidt Neumannstraße 10, 40235 Düsseldorf | <u>kundenservice@fachmedien.de</u> | 0800 000-1637 (Inland)

