



METADATA

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Abstract

The present book, a collaborative effort between academics and engineers with many years of professional experience, addresses the approach and practice of Project Management. It focuses on a fundamental professional activity for engineers and other scientists as more and more organizations and enterprises operate based on projects that support their typical organizational structures. The starting point and focus of the book is the management of engineering projects in industry, covering the definitions, principles, concepts, and phases of project management, as well as the analysis of individual stages and operations. Specifically, it discusses project planning, scheduling techniques, the organization and management of necessary engineering studies, technology selection, procurement, and various procurement contract forms, the

organization of construction, testing, and commissioning of a new production unit, monitoring and controlling the implementation process and taking corrective actions, risk management, coordination and communication processes, and human resources management. The book also includes a series of case studies based on the authors' experience, characterized by diversity in relevant fields (natural gas plant, municipal wastewater treatment plant, company relocation project, IT project). These case studies aim to provide a deep understanding of the horizontal application of basic project management principles while highlighting the relative differences between different project types in methodology, critical factors, and stages. Each chapter begins with a description of its learning objectives and ends with comprehension questions.

