Currently, it is usual described industrial engineering as the branch of engineering that is concerned with increasing productivity through the management of people, methods of business organization and technology or by others words industrial engineering is human effort engineering and system efficiency engineering. Depending on the specialties involved, industrial engineering include, operations management, management science, systems engineering, manufacturing engineering, ergonomics or human factors engineering, safety engineering, etc.


Section 1 provides information on crucial theories essential to the understanding of industrial engineering. Section 2 discusses the conceptual design and architecture of industrial engineering, focusing on aspects including parametric design, service design, fuzzy logic, control modelling, supply chain systems, and many more topics. Section 3 discusses extensive coverage of various tools and technologies used in the implementation of industrial engineering. Subsequently, section 4 describes
how the broad range of industrial engineering efforts has been utilized and offers insight on and important lessons for their applications and impact. Section 5 includes chapters discussing the organizational and social impact of industrial engineering. Section 6 is dedicated to coverage of industrial engineering as it relates to effective uses of offshoring, network marketing, knowledge management, e-government, knowledge dissemination, and many more utilities. Section 7 describes coverage of academic and research perspectives on industrial engineering tools and applications. Finally, the section 8 is dedicated to highlights areas for future research within the field of industrial engineering.

This book can be used for final undergraduate engineering course (for example, industrial, mechanical, manufacturing, systems, etc.) or as a subject on industrial engineering and management at the postgraduate level. Also, this book can serve as a useful reference for academics, researchers, managers, industrial, mechanical, manufacturing and systems engineers and others professionals in related with industrial engineering and management.

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