How to Do Systems Analysis: Primer and Casebook
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Hardcover ISBN: 978-1-119-17957-3  August 2016  $124.75

**DESCRIPTION**

Presents the foundational systemic thinking needed to conceive systems that address complex socio-technical problems

This book emphasizes the underlying systems analysis components and associated thought processes. The authors describe an approach that is appropriate for complex systems in diverse disciplines complemented by a case-based pedagogy for teaching systems analysis that includes numerous cases that can be used to teach both the art and methods of systems analysis.

- Covers the six major phases of systems analysis, as well as goal development, the index of performance, evaluating candidate solutions, managing systems teams, project management, and more

- Presents the core concepts of a general systems analysis methodology

- Introduces, motivates, and illustrates the case pedagogy as a means of teaching and practicing systems analysis concepts

- Provides numerous cases that challenge readers to practice systems thinking and the systems methodology

*How to Do Systems Analysis: Primer and Casebook* is a reference for professionals in all fields that need systems analysis, such as telecommunications, transportation, business consulting, financial services, and healthcare. This book also serves as a textbook for undergraduate and graduate students in systems analysis courses in business schools, engineering schools, policy programs, and any course that promotes systems thinking.
ABOUT THE AUTHOR

JOHN E. GIBSON, Ph.D., was the Commonwealth Distinguished Professor of Systems Management at the School of Engineering and Applied Science, University of Virginia, Charlottesville. He served as Dean of Engineering at the University of Virginia and at Oakland University. Dr. Gibson was working on this book at the time of his death.

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WILLIAM F. GIBSON, MBA, MPA, is the Senior Managing Director and President of IVY Creek Associates, an international consulting firm for global asset managers, brokerage firms, and banks. He was Global Chief Operating Officer at ING Investment Management, and the Head of Securities and Fund Services Operations EMEA at Citigroup. Mr. Gibson has led the infrastructure groups of global financial services firms, and is actively engaged in developing and applying new technologies in those domains. He has also been an executive lecturer at the S.C. Johnson Graduate School of Management at Cornell University.

MICHAEL C. SMITH, Ph.D., is the Executive Director of the Accelerated Masters Program in Systems Engineering at the University of Virginia. Prior to joining the University of Virginia, Dr. Smith was a Senior Scientist at Science Applications International Corporation (now Leidos) and also served on the Industrial Engineering faculties at Oregon State University and the University of Missouri. In addition to directing the University of Virginia's Accelerated Master's Program, Dr. Smith teaches an introductory course in systems thinking and the systems approach, drawing on many of the case studies in this book.

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