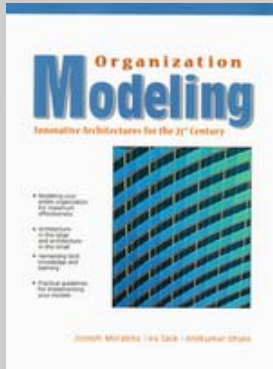


April 2004



**Organization Modeling:
Innovative Architectures
for the 21st Century**

**Joseph Morabito, Ira
Sack, Anikumar Bhate**

**Prentice Hall
1999
293 pages
\$48.60**

Reviewed by Paul Harmon

This book is a basic introduction to process analysis and improvement, as conceptualized by academic consultants resident at Northwest University's Kellogg Graduate School of Management. The focus here is on helping managers understand the basic concepts of processes, the measurement of process flows, and managerial techniques that can be used to synchronize and improve flows. The authors conceptualize this as the essence of operations management. The book assumes an organization producing products and spends quite a bit of time discussing how to rationalize the production of multiple product lines.

MBPF, as the authors term the book, is divided into four major sections:

I. Process Management and Strategy - which introduces the basic concepts of business processes and management strategy.

II. Process Flow Measurement - which examines key process measures and the relationships and management levers for controlling them.

III. Process Flow Variability - which considers the effects of uncertainty in flows on process performance and control levers.

IV. Process Integration - which defines a set of principles for synchronizing flows of materials and information through a network of processes to maximize economic efficiency.

In keeping with its academic background of the authors, the book is technical and spends a lot of time with precise definitions, formulas, and techniques. Moreover, the text seems to assume advanced students, since it provides brief definitions and moves along rapidly. If a reader didn't have a good idea of how to model a complex process when he or she began this book, he or she wouldn't obtain it by reading this book. Assuming a simple process, however, or some previous knowledge of modeling techniques, this book is an excellent introduction to the concepts a manager would need to do some serious simulation work. The book comes with a disc with an educational version of the software tool, ProcessModel, which combines Micrografx FlowCharter and PROMODEL's simulation tool. Using this software a reader can set up and study the various situations suggested in the book. (Exercises are available on the Prentice Hall website: www.prenhall.com/anupindi)

Many managers who have taken graduate courses have encountered simulations done with spreadsheets, or with system dynamic's models. This book focuses on discrete event simulation done in the context of business process models.

This is not a book for the casual reader, or for someone without some familiarity with process analysis, a good grounding in probability and statistics, and a familiarity with calculus. Indeed, I'd probably describe this book as a text book for an advanced course in process simulation and operations analysis. That



said, I think the book offers a very systematic introduction to the concepts underlying the simulation of business processes and the evaluation of the results.

If you work your way through this book, using the ProcessModel software as you go, you will end up with a very thorough understanding of the mechanics of process flows. This isn't a discipline that every business manager will want to master, but it is increasingly useful for mathematically inclined managers. Complex processes are often counter-intuitive. Without using simulation, it is often impossible to predict what will happen when inputs change dramatically as they often do from week to week or from month to month. Moreover, as companies attempt to build distributed processes that incorporate subprocesses managed by other companies, analysis is only going to get more complex.

In discussions with experts who are experience with simulation, one is often told that the problems encountered by beginners usually result from trying to simulate too much. MBPF, with its emphasis on techniques and analytic tools might very well lead a new practitioner to try to do something very complex. I'd emphasize the concept of minimal simulation. Start with a few elements that describe your process at the highest possible level and simulate how they interact. Don't add any subprocesses or complexities you don't have to until you are completely satisfied that you are comfortable with the high level simulation, and then only add them if you can't solve your problems without adding them. As you work through this book you'll find it goes a lot easier if you only focus on a very simple system.

Going through this material would certainly be a lot easier if you had a skilled teacher to guide you. On the other hand, if you have a good math background, and you have a process tool that includes simulation and want a book to walk you through all the basic concepts you'll need to take advantage of your tool's simulation capabilities, this is probably the book to get.

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