

OPERATIONS STRATEGY

Principles and Practice

SECOND EDITION

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Cover design: Patrick Ciano

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Library of Congress Cataloging-In-Publication Data

Van Mieghem, Jan A.

Operations Strategy: Principles and Practice / Jan A. Van Mieghem, Gad Allon.—2nd ed.

p. cm.

Includes bibliographical references and index

ISBN 978-0-9899108-6-6

1. Operations Management. 2. Strategy. 3. Business Logistics. I. Allon, G. (Gad) II. Title.

HD38.5.MI 2015

To Shannon and our future:
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PREFACE

This book explains the principles of operations strategy and describes how companies can apply these principles in practice to increase value. Designing and implementing a successful operations strategy require judgment, experience, creativity, and luck, all of which cannot be taught. What *can* be taught, however, are the concepts, principles, and tools to help you in that process—and therein lies the purpose of this book.

“Principles and practice” is my guiding motto throughout this book. Going beyond telling war-stories, my goal is thus to describe the practice of operations strategy while revealing its driving principles in a structured manner. I am writing under the assumption that *we*—which in this book means you, the reader and I, the writer—seek to build sound intuition for designing, assessing, and improving operations strategies. I believe that sound intuition results from a journey of logical analysis that culminates in a theory. Good theory gives you intuition into the familiar, and beyond.

Each chapter opens with a description of how a real company practices some aspect of operations strategy and then reviews the concepts behind that practice. Tools are provided to analyze the concepts, distill their principles, and suggest guidelines for implementation and improvement. When appropriate, state-of-the-art research findings are integrated in the discussion. Each chapter closes with a mini-case that asks you to explore how you would apply the principles and tools in practice. The last part of the book contains a set of “full-blown” cases to integrate the chapters and emphasize the relevance of our topic to practice.

To increase accessibility, most analysis is described in words and is exhibited with minimal notation and mathematics. For example, equations are stated only if they capture a relationship better than words alone can. To increase usefulness and illustrate implementation, a particular example of each analysis is worked out in a spreadsheet (all spreadsheets can be downloaded from www.vanmieghem.us). More advanced analysis or spreadsheet implementations are relegated to appendices for those who are interested.

Though we are interested in designing *good* operations strategies, strategy evaluation is as much art as it is science. We will adopt a dual perspective that combines qualitative analysis with a financial evaluation of the value created by the operations strategy. Throughout this book, value will thus be our yardstick and our guide to assess and improve operations strategy. Merging the strategic and financial perspective should be natural to the intended reader:

I have written this book with a specific focus on MBA and engineering management students, and on their instructors. I hope that the structured approach

of using analysis to build intuition and reveal improvement levers within a coherent framework facilitates learning and instruction. While the book naturally follows a core course in operations and supply chain management and adopts basic financial evaluation, all concepts are explained “from scratch” to make the book accessible to every business or engineering management student. The book should also be of interest to consultants and practitioners as a reference for concepts, principles, and tools.

According to Francis Bacon, “writing makes an exact man.” While a valiant goal, operations strategy is not an exact science. Nor is there an agreed-upon paradigm for its study, let alone agreement on what exactly “is part” of operations strategy. Given these constraints, this book reflects my best effort to structure concepts and principles in a unified framework for operations strategy. Like any good operation, however, this really is a process of continuous improvement. It never ends, as better ways always exist. If you have any suggestions for improvement, I welcome hearing about them.

Jan Van Mieghem (Jan@VanMieghem.us)
July 13, 2007

CHANGES IN THE SECOND EDITION

This second edition contains changes along various dimensions. First, Professor Allon has joined this ongoing book project as second author. In 2010, Gad started teaching the MBA elective course, *Operations Strategy*, that Jan began designing and teaching in 1998. Second, while the first edition followed a “leading strategy,” in the sense that it contained material that hadn’t been taught yet, this second edition reflects how our MBA elective course has evolved over the last 7 years. It thus contains “class-room tested content.” These two changes led to a new chapter 2; majorly revised chapters 1, 3, 4, 5, 6, and 7 and appendix A; and minor revisions of the remaining chapters.

While we believe significant progress has been made, this book project remains a process of continuous improvement. It never ends, as better ways always exist. If you have any suggestions for improvement, we welcome hearing about them.

Jan Van Mieghem and Gad Allon
July 11, 2014

ACKNOWLEDGMENTS

This book results from the MBA elective course, *Operations Strategy*, that I began designing and teaching in 1998. It reflects the experience and knowledge of the colleagues, teachers, and managers that I have worked with. I have also benefited greatly from the experience, suggestions, and questions of the many MBA and executive students that I have interacted with; while I was teaching, I was learning even more.

Many people have helped me while writing this book. I would especially like to acknowledge the following people:

My students who collaborated with me or shared experiences that are described in this book: Troy Anderson, Mark Bruno, Steven Rudolf Bystriansky, Hsing-Chien (Ken) Chou, Mary Delaney (*Careerbuilder.com*), Hubert Fisher, Devika Gupta, Daisuke Kobayashi, Vikram Malhotra, Kai-Lung (Ron) Nien, Dan Nisser (*Cargill*), Thomas John O'Reilly, Chinmay Pandit, Dhruv Patel, Richard Pérez, Kitikun Prasithrathsint, Mark Price, Chris Recktenwald, Mani Sundaram, Ron Tamir, Brendan F. Tansill, Shaun Usmar, Christian Walters (*Harley-Davidson*), Stacey Watson (*Harley-Davidson*), all my OPNS454 students who provided feedback during Winter 2007 on a early version, and especially my doctoral advisee Lauren Lu (now at *Univ. of North Carolina*) for her research collaboration, careful readings, and suggestions.

All the colleagues who shared their knowledge, especially Gad Allon, Baris Ata, Sunil Chopra, and Marty Lariviere (*Northwestern University's Kellogg*) for all their encouragement during this long project. Sunil's energy and supply chain book have inspired me and Marty has been an incredibly valuable source of information on recent managerial developments. I would also like to thank: Dan Adelman (*University of Chicago*), Costis Maglaras (*Columbia University*), Serguei Netessine (*University of Pennsylvania's Wharton*), and Sharon Novak (*UCLA*) for carefully reviewing chapters and suggesting many improvements; John Birge (*University of Chicago*), Vishal Gaur (*NYU*), Steve Graves (*MIT*), Panos Kouvelis (*University of St. Louis*), Christoph Loch, Ioana Popescu and Nils Rudi (*INSEAD*), Costis Maglaras (*Columbia University*), Scott McKeon (*Northwestern University's Kellogg*), Glen Schmidt (*University of Utah*), and Serguei Netessine (*University of Pennsylvania's Wharton*) for sharing their teaching materials.

All the friends, managers, and professionals for sharing their time, knowledge and experience, especially: Eddy Dumarey (*Cortina*), Maggie and Ken Fleming (for fine culinary and carpentry provisions), Bill Fox (*Eli Lilly*), Cort Jacoby and Ruchir Nanda (*Deloitte Consulting*), Marc van Gelder and Mike Brennan (*Peapod*), Philippe Geyskens (*Digitas*), Luc Kerkhof (*Poppies*), Colin Kessinger (*Vivecon*), Jeff Pharris (*Harley-Davidson*), Martine Van Campenhout (*Procter & Gam-*

ble), and Dirk Wouters (*Dynaco*).

I am especially grateful to Alexandru Rus for compiling the references, glossary, and indexes, as well as for offering many suggestions; to Akhila Kolisetty for final copy-editing the entire manuscript; and to Joshua Miller for all his help during graphic design and typesetting. It is a joy having assistance of that caliber—I could not have finished this project in time without them. (They compressed time during the last week through time-shifting: Josh worked in Evanston, Alex was vacationing in Romania, and Akhila in India!) Meg Stuart and Kate Iberg edited several chapters in early format. Many thanks to Uwe Kern (author of `xcolor.sty`), Frank Mittelbach (author of the `LATEX Companion`), Michael Sofka, Lieven Vandenberghe, and my brother Piet for generously sharing their knowledge of `LATEX`. I am grateful to my editor and colleague, Dimitris Bertsimas, for publishing my book, and to Laura Rose for her careful handling of the production.

I am particularly indebted to the organization that has graced my business card for the last 12 years—after all, this book would have never seen the light of day without the Kellogg School of Management. I am also thankful for the hospitality of the Katholieke Universiteit Leuven during my sabbatical in 2005, when half this book was written.

Finally, and most importantly, I would like to thank my lovely wife, Shannon Cahill, for her unwavering support during this project and so many others. She managed the family with a smile, even during my extensive absence during the last months of this project. It is done at last!

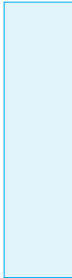
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July 13, 2007

SECOND EDITION: ADDITIONAL ACKNOWLEDGMENTS

We would like to thank our colleagues Pamela K. Armstrong (*University of Maryland*), Robert Boute (*Vlerick - KU Leuven*), Lieven DeMeester (*Singapore Management University*), Lauren X. Lu (*UNC*), Inneke Van Nieuwenhuyse (*KU Leuven*), and Fuqiang Zhang (*Washington University at St. Louis*); our Ph.D. students Kejia Hu, Dennis Jiajun Zhang, Katarina Sonja Eriksson (*Linnaeus University*); and our undergraduate students Anne Xie and Jenny Zhou for carefully reviewing new and revised chapters and suggesting many improvements. Thanks to Brian Tomlin (*Dartmouth University*) and Seenu Sarma (*Deloitte Consulting*) for sharing experiences and several figures. Our ongoing collaboration with Seenu and Deloitte Consulting has resulted in our improved location framework.

We are grateful to Michael Anderson for all his help in graphic design. We thank our editor and colleague, Dimitris Bertsimas, for publishing this second edition, Patrick Ciano for the cover design, and Laura Rose for her careful handling of the production.

Jan Van Mieghem and Gad Allon
July 11, 2014



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