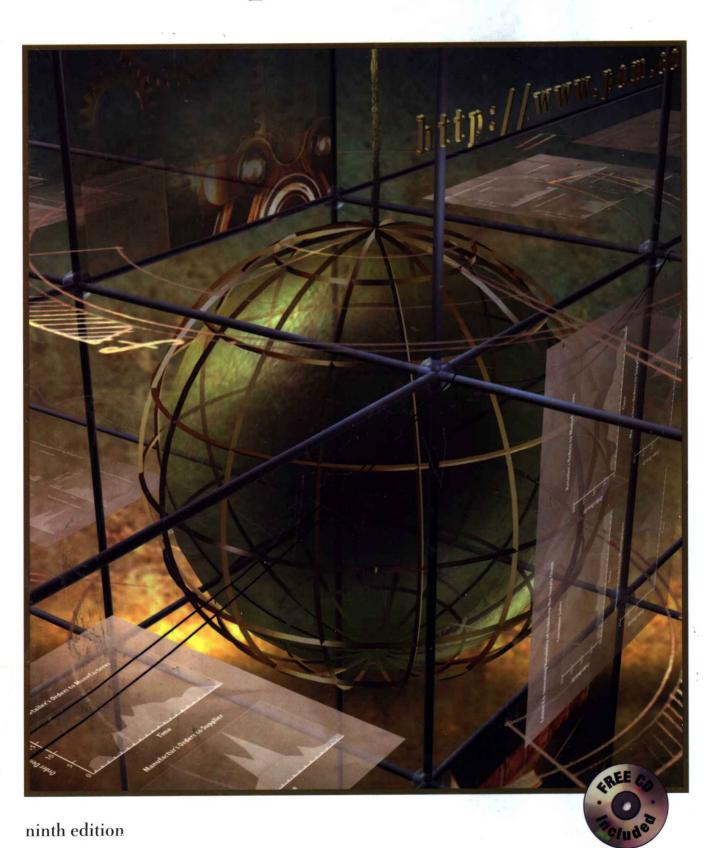
## Chase · Aquilano · Jacobs

# Operations Management for Competitive Advantage



## OPERATIONS MANAGEMENT FOR COMPETITIVE ADVANTAGE

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To our wives

Harriet, Nina, and Jeanne

and to our children

Laurie, Andy, Glenn, Rob, Christine, and Batsheva

Don, Kara, and Mark

Jennifer and Suzy

### PREFACE

Operations management (OM) has been a key element in the improvement in productivity in businesses around the world. Creating a competitive advantage through operations requires an understanding of how the operations function contributes to

operations requires an understanding of how the operations function contributes to productivity growth. However, our intent in this book is to do more than just show you what companies are doing to create competitive advantage through OM. Our overriding goal is to create a competitive advantage for you in the marketplace by convey-

ing a set of skills and tools that you can actually apply.

Three hot topics in business today are Electronic Commerce, Supply Chain Management, and Enterprise Resource Planning Systems. These topics are studied in the book from the view of the operations function with up-to-date high-level managerial material to clarify the "big picture" of what these topics are and why they are so important to business today. In the electronic commerce area for example, we introduce the term E-Ops to provide a structure for presenting numerous applications of Electronic Commerce in operations throughout the book. Applications that range from high-tech manufacturing to high-touch service are used in the balanced treatment of the traditional topics of the field. Operations management requires a global perspective for many of the topics. Operations management is best done with significant crossfunctional integration. Accounting, finance, marketing, human resources management, purchasing, logistics, and engineering impact how firms are run operationally. To highlight our emphasis on services, globalization, and cross-functional integration, we've used the logos you see here in the text margin next to these discussions.

Technical Notes detail how operations related problems are solved. These are concise treatments of the many decisions that need to be made in designing, planning and managing the operations of a business. Many spreadsheets are included on the CD to help clarify how these problems are quickly solved. We've indicated those spreadsheets with the spreadsheet logo shown here in the margin.

There are other instances where we've referenced in the text material that can be found on the CD. For example, in Chapter Four on Process Analysis we've included a slot machine simulation program on the CD and have indicated it with the logo you see in the margin. When you see these logos, check your CD.

Managerial Briefing sections follow Sections Three and Four and provide executive summary-style introductions to concepts of Electronic Commerce and Enterprise Resource Planning.

Operations Management should appeal to individuals who want to be directly involved in making products or providing services. The entry-level operations specialist is the person who determines how best to design, supply, and run the processes. Senior operations managers are responsible for setting the strategic direction of the company from an operations standpoint, deciding what technologies should be used, where facilities should be located, and managing the facilities that make the products or provide the services. Operations Management is an interesting mix of managing people and applying sophisticated technology. The goal is to efficiently create wealth by supplying quality goods and services.

Features to aid in your understanding of the material include the following:

- Solved problems at the end of chapters to serve as models that can be reviewed prior to attempting problems.
- Key terms highlighted in the chapter outline and their definitions at the end of each chapter.
- Answers to selected problems in Appendix A.
- A CD that includes PowerPoint slide outlines of each chapter, Excel® spreadsheets











- for many of the solved problems and other examples, practice exams, electronic tutorials, Internet links, and video clips that describe important terminology.
- Breakthrough Boxes to demonstrate leading-edge companies or practices that are innovative and trailblazing.

Our aim is to cover the latest and the most important issues facing OM managers, as well as the basic tools and techniques. We supply many examples of leading-edge companies and practices. We have done our best to make the book interesting reading, and as we said at the outset, give you a competitive advantage in your career.

We hope you enjoy it.

the book.

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Richard B. Chase Nicholas J. Aquilano F. Robert Jacobs

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