BRIEF TABLE OF CONTENTS

SECTION ONE

STRATEGY, PRODUCTS, AND CAPACITY

- 1 Introduction 2
- 2 Strategy 23
- 3 Design of Products and Services 42
- 4 Projects 73
- 5 Strategic Capacity Management 110
- 6 Learning Curves 130

SECTION TWO

MANUFACTURING AND SERVICE PROCESSES

- 7 Manufacturing Processes 148
- 8 Facility Layout 168
- 9 Service Processes 201
- 10 Waiting Line Analysis and Simulation 221
- 11 Process Design and Analysis 265
- 12 Six Sigma Quality 298
- 13 Statistical Quality Control 317

SECTION THREE

SUPPLY CHAIN PROCESSES

- 14 Lean Supply Chains 350
- **15** Logistics, Distribution, and Transportation 378

16 Global Sourcing and Procurement 402

SECTION FOUR

SUPPLY AND DEMAND PLANNING AND CONTROL

- 17 Enterprise Resource Planning Systems 426
- 18 Forecasting 444
- 19 Sales and Operations Planning 489
- 20 Inventory Management 515
- 21 Material Requirements Planning 559
- 22 Workcenter Scheduling 590
- 23 Theory of Constraints 622

SECTION FIVE

SPECIAL TOPICS

- 24 Health Care 656
- 25 Operations Consulting 671

APPENDICES

- A Linear Programming Using the Excel Solver 691
- B Operations Technology 711
- C Financial Analysis 718
- D Answers to Selected Objective Questions 734

- E Present Value Table 736
- F Negative Exponential Distribution: Values of e^{-x} 737
- G Areas of the Cumulative Standard Normal Distribution 738

H Uniformly Distributed Random Digits 739

I Interest Tables 740

Index 744