

CONTENTS IN BRIEF

Section One

STRATEGY, PRODUCTS, AND CAPACITY

- 1 Introduction 2
- 2 Strategy 20
- 3 Design of Products and Services 39
- 4 Projects 71
- 5 Strategic Capacity Management 108
- 5S Investment Analysis 128
- 6 Learning Curves 144

Section Two

MANUFACTURING AND SERVICE PROCESSES

- 7 Manufacturing Processes 162
- 7S Manufacturing Technology 182
- 8 Facility Layout 189
- 9 Service Processes 223
- 9S Health Care 244
- 10 Waiting Line Analysis and Simulation 258
- 11 Process Design and Analysis 301
- 11S Operations Consulting 334
- 12 Six Sigma Quality 344
- 13 Statistical Quality Control 363

Section Three

SUPPLY CHAIN PROCESSES

- 14 Lean Supply Chains 396
- 15 Logistics, Distribution, and Transportation 424
- 16 Global Sourcing and Procurement 448

Section Four

SUPPLY AND DEMAND PLANNING AND CONTROL

- 17 The Internet of Things and ERP 472
- 18 Forecasting 485
- 19 Sales and Operations Planning 526
- 19S Linear Programming Using the Excel Solver 552
- 20 Inventory Management 566
- 21 Material Requirements Planning 609
- 22 Workcenter Scheduling 640
- 22S Theory of Constraints 672

APPENDICES

- A Interest Tables 703
- B Negative Exponential Distribution: Values of E^{-X} 707
- C Areas of the Cumulative Standard Normal Distribution 708
- D Uniformly Distributed Random Digits 709
- E Answers to Selected Objective Questions 710

INDEX 712