The Encyclopedia of Operations Management
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A Field Manual and Glossary of Operations Management Terms and Concepts

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To the author of all truth.
PREFACE

Purpose – The Encyclopedia of Operations Management (EOM) is an ideal “field manual” for students, instructors, and practicing managers. For students, the EOM is a useful guide for developing an integrated mental map for the entire field of supply chain and operations management. It has also proven useful as a reference for students preparing for case discussions, exams, and job interviews. It is particularly helpful for students new to supply chain and operations management and for international students who need precise definitions of specialized terms. For instructors, the EOM is an invaluable desk reference and teaching aid that goes far beyond the typical dictionaries. Many instructors and doctoral students find the numerous figures, graphs, equations, Excel formulas, VBA code, and references helpful for their lectures and research. For practicing managers, the EOM is a valuable tool for black belt and green belt training programs and a powerful tool for helping organizations build a precise standard language.

This encyclopedia has proven to be a useful text for core undergraduate and graduate courses in both business and engineering schools. It is also useful for second-level courses in supply chain management, quality management, lean manufacturing, project management, service management, operations strategy, manufacturing management, industrial engineering, and manufacturing engineering.

Coverage – The EOM covers a wide range of operations and supply chain management disciplines, including:

- Accounting
- Customer service
- Distribution
- e-business
- Economics/finance
- Forecasting
- Healthcare management
- Human resources management
- Industrial engineering
- Industrial relations
- Inventory management
- Lean sigma (six sigma)
- Lean thinking
- Logistics
- Maintenance/reliability engineering
- Management information systems
- Manufacturing management
- Marketing/sales
- New product development
- Operations research
- Operations strategy
- Organizational behavior/management
- Personal time management
- Production planning and control
- Purchasing/supply management
- Quality management
- Reliability engineering
- Service management
- Simulation
- Sourcing
- Statistics
- Supply chain management
- Systems engineering
- Theory of Constraints
- Transportation
- Warehousing

Format – This book is designed to be an easily carried “field manual.” Each entry begins with a short formal definition followed by a longer description and ends with references to additional resources and cross-references (links) to related terms. The links (cross-references between terms) help the reader develop a complete mental map of the field. Essential terms are marked with a star (☆) at the end of the short definition.

History – As a faculty member at IMD International in Lausanne, Switzerland, I gave my MBA students a one-page list of about 50 essential operations management terms. Several students requested help defining those terms. This encyclopedia grew out of my response to those requests. As shown in the table below, the EOM has grown in size over the years. This 2012 edition has 540 new entries and nearly twice the number of links. More importantly, the EOM has grown in clarity and precision. About 30% of the entries were completely rewritten and many photos, figures, graphs, tables, examples, references, and footnotes were added and improved. We compressed the 2012 edition by about 50 pages so it is still a handy “field manual.” We did this by removing white space, shrinking figures, shortening longer entries, and combining entries to reduce redundancies. Comments, additions, and edits are welcomed and should be sent to the author at ahill@umn.edu. Substantive contributions will be acknowledged in the next edition.

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