

# ESSENTIALS OF INVENTORY MANAGEMENT

Second Edition

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# Introduction to the Second Edition

When I wrote the first edition of *Essentials of Inventory Management* my objective was to present, in accessible language supported by copious illustrations and examples, timeless inventory management concepts and techniques. My purpose was to give the reader a fundamental understanding of inventory as it exists in the physical world (shelf count), and as an intangible item (record count) existing in a computer database and/or on paper.

The basic principles covered in that edition are as relevant today, even with the explosion of Internet-based e-commerce solutions to many inventory and materials management issues, as when they were first written.

I am pleased to note that the book was successful. It has been translated into Spanish, with distribution in a number of Spanish-speaking countries, and, an English-language soft cover edition is being distributed in India, Pakistan, Sri Lanka, Nepal, and Bangladesh. AMACOM Books and I have received excellent responses to the first edition from individuals just beginning their careers in fields related to inventory management, as well as from experienced materials managers who reported that the book reminded them of effective techniques they had known but had forgotten over the years.

Over the past several years, as I have continued to lecture and consult, it became apparent that the book could be enhanced by adding chapters and sections on subjects such as cycle counting, enterprise resource planning, and supply chain management. And so, this second edition was born.

The second edition retains the timeless, essential inventory management basics that are the hallmarks of the first edition, with new and expanded information that includes:

- ▶ An expansion of Chapter 2, “Inventory as Money,” to include a section dealing with profit margins and merchandising metrics and containing both examples and formulae related to merchandising.
- ▶ A renamed Chapter 4, “Automated Inventory Identification Systems,” with new material on Radio Frequency Identification Systems (RFID) that discusses the strengths and challenges associated with this technology.
- ▶ New coverage in Chapter 5, “Planning and Replenishment Concepts,” of the benefits of enterprise resource planning (ERP), including the five main reasons why an enterprise should consider incorporating this concept into its organization.
- ▶ A revised and expanded Chapter 6, “Why Inventory Systems Fail and How to Fix Them,” which includes new material regarding how to distinguish A-B-C cycle counting analysis using a single factor from approaches combining multiple factors (e.g., dollar value and usage rate). The chapter now explains in detail how to undertake an A-B-C cycle counting analysis by combining multiple factors.
- ▶ A new Chapter 7, “Basics of Supply Chain Risk Management,” reveals how the very techniques that have allowed American businesses to slash operating costs and inventories by embracing just-in-time and lean manufacturing techniques have made them vulnerable to a number of serious supply chain risks. It offers suggestions regarding steps organizations should take in trying to balance the risks and rewards of SCM, and

provides a starting point to any supply chain risk management effort.

And, of course, as it has since the first edition, the book introduces the new stockroom/warehouse manager, the nonfinancial inventory control individual, and the small business owner to the fundamental nature of inventory from financial, physical, forecasting, and operational standpoints. In addition, it explains in easily understandable terms the concepts underlying automated identification of product through both bar coding and RFID.

The ultimate goal of this book is to present immediately usable information in the areas of forecasting, physical control and layout, problem recognition, and resolution, as well as how to begin to better manage a supply chain.

Ultimately, *Essentials of Inventory Management* will enable you to:

- ▶ Understand that modern practice discourages holding large quantities of inventory and encourages only having amounts on hand required for current needs.
- ▶ Grasp the significance of controlling actual, on-hand inventory as both a physical object (shelf count) and as an intangible object (record count and monetary worth).
- ▶ Appreciate the fundamental differences between finished goods inventories in the retail/distribution sectors and raw materials and work-in-process inventories found in the manufacturing environment.
- ▶ Apply basic formulae to calculating inventory quantities.
- ▶ Utilize basic formulae to compute breakeven points, profit margins, markups and markdowns, as well as selling price and margin percentages.

- ▶ Select the cycle counting inventory method that is right for you.
- ▶ Undertake an A-B-C cycle counting analysis by combining multiple factors.
- ▶ Recognize and analyze dysfunctions within your own operation.
- ▶ Employ basic problem-solving techniques to issue resolution.
- ▶ Control the physical location of inventory in a more efficient manner.
- ▶ Analyze whether or not RFID is right for your organization.
- ▶ Be aware of supply chain management risks and possible solutions.

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