Strategic Distribution Planning and Inventory Control Training Course

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4100 € (Per Person)

Ref: #IM6327_288017

Course Introduction / Overview:

In today's volatile global market, the ability to effectively manage inventory flow and plan distribution is no longer a competitive advantage but a fundamental requirement for survival and growth. This course provides a comprehensive exploration of Distribution Requirements Planning (DRP) and advanced inventory control techniques, moving beyond basic principles to strategic implementation. We will delve into the intricate mechanics of how DRP integrates with master scheduling and demand forecasting to create a seamless, responsive supply chain. The curriculum is influenced by the foundational work of logistics experts like Martin Christopher, whose book "Logistics & Supply Chain Management" emphasizes the creation of agile and resilient supply networks. Participants will learn not just the 'how' but the 'why' behind inventory policies, safety stock calculations, and network design. At BIG BEN Training Center, we have designed this program to empower professionals to reduce costs, improve service levels, and eliminate inefficiencies like the bullwhip effect. This training course is an intensive journey into mastering the systems that ensure the right product is in the right place at the right time, transforming your supply chain into a strategic asset for the organization.

Target Audience / This training course is suitable for:

- Supply Chain Managers.
- Logistics and Distribution Managers.
- Inventory Planners and Analysts.
- Demand Planners.
- Warehouse and Operations Supervisors.
- Procurement and Sourcing Professionals.
- ERP System Consultants.
- Operations Managers.
- Supply Chain Consultants.

Target Sectors and Industries:

- Manufacturing and Industrial Production.
- Retail and Consumer Goods.
- E-commerce and Direct-to-Consumer Businesses.
- Pharmaceutical and Healthcare.
- Automotive and Aerospace.
- Third-Party Logistics (3PL) Providers.
- Food and Beverage Distribution.
- Government and Public Sector Supply Agencies.

Target Organizations Departments:

- Supply Chain Management.
- Logistics and Distribution.
- Inventory Control and Management.
- Planning and Forecasting.
- Warehouse Operations.
- Procurement and Purchasing.
- Operations Management.
- Information Technology (ERP/SCM Systems).

Course Offerings:

By the end of this course, the participants will have able to:

- Master the core principles and mechanics of Distribution Requirements Planning (DRP).
- Develop and implement effective inventory control strategies to minimize costs.
- Analyze and improve inventory flow across multi-echelon supply chain networks.
- Apply advanced forecasting techniques to improve demand planning accuracy.
- Calculate and manage safety stock levels to balance service levels and costs.
- Understand the relationship between DRP, Master Production Scheduling (MPS), and MRP.
- Mitigate the bullwhip effect through enhanced visibility and collaboration.
- Utilize key performance indicators (KPIs) to measure and improve distribution performance.
- Integrate DRP concepts with modern ERP and supply chain management systems.
- Design a responsive and efficient distribution network structure.

Course Methodology:

The training methodology at BIG BEN Training Center is designed to be highly interactive, engaging, and practical, ensuring that participants can immediately apply their learning in the workplace. We move beyond traditional lectures to foster a dynamic learning environment built on a foundation of experiential activities. The course heavily utilizes real-world case studies from various industries, allowing participants to analyze complex distribution challenges and develop strategic solutions. Group discussions and collaborative workshops encourage the sharing of diverse perspectives and problem-solving approaches. Practical exercises, including DRP calculations and inventory modeling simulations, provide hands-on experience with key tools and techniques. Our expert instructors facilitate sessions that are rich with practical examples, industry best practices, and actionable insights. Continuous feedback is provided throughout the course to reinforce learning and guide participant development. This blended approach ensures a deep and lasting understanding of strategic distribution planning and inventory control principles.

Course Agenda (Course Units):

Unit One: Foundations of Supply Chain and Inventory Management

- Introduction to Supply Chain Management and Logistics.
- The Strategic Role of Inventory in the Supply Chain.
- Understanding Inventory Costs, Carrying Costs, and Ordering Costs.
- Core Principles of Inventory Management.
- Introduction to Distribution Requirements Planning (DRP).
- The Relationship Between DRP, MRP, and ERP Systems.
- Key Terminology and Concepts in Distribution Planning.

Unit Two: The Mechanics of Distribution Requirements Planning (DRP)

- The DRP Planning Horizon and Time Fences.
- Constructing and Managing the Bill of Distribution (BOD).
- The DRP Calculation Process, Gross to Net Requirements.
- Managing Planned Order Releases and Receipts.
- Integrating DRP with the Master Production Schedule (MPS).
- Handling Lumpy Demand and Promotions in DRP.
- DRP Software and System Considerations.

Unit Three: Advanced Inventory Control and Optimization

- ABC and XYZ Inventory Classification Techniques.
- Economic Order Quantity (EOQ) and its Variations.
- Calculating and Optimizing Safety Stock Levels.
- Understanding Service Levels and the Cost of Stockouts.
- Just-in-Time (JIT) and Lean Inventory Principles.
- Vendor-Managed Inventory (VMI) and Consignment Stock.
- Strategies for Reducing Obsolete and Slow-Moving Inventory.

Unit Four: Demand Forecasting and Inventory Flow

- The Role of Forecasting in DRP and Inventory Management.
- Qualitative and Quantitative Forecasting Models.
- Measuring Forecast Accuracy (MAPE, MAD, Bias).
- Understanding and Mitigating the Bullwhip Effect.
- Lead Time Management and Reduction Strategies.
- Optimizing Physical Inventory Flow in the Warehouse.
- Cross-Docking and other Flow-Through Distribution Strategies.

Unit Five: Strategic Integration and Continuous Improvement

- Introduction to DRP II (Distribution Resource Planning).
- Aligning Distribution Strategy with Corporate Objectives.
- Key Performance Indicators (KPIs) for Distribution and Inventory.
- Designing and Analyzing Distribution Networks.
- Risk Management in the Distribution Network.
- The Role of Technology, AI, and Machine Learning in Inventory Planning.
- Final Capstone Project, A Comprehensive DRP Case Study.

FAQ:

Qualifications required for registering to this course?

There are no requirements.

How long is each daily session, and what is the total number of training hours for the course?

This training course spans five days, with daily sessions ranging between 4 to 5 hours, including breaks and interactive activities, bringing the total duration to 20 - 25 training hours.

Something to think about:

In an era of increasing supply chain volatility and AI-driven forecasting, how does the foundational logic of DRP need to evolve to remain relevant and effective?

What unique qualities does this course offer compared to other courses?

This course distinguishes itself by focusing on the strategic integration of DRP and inventory control within the broader context of business operations, rather than treating them as isolated functions. While other programs may focus heavily on the software-driven, transactional aspects of DRP, our curriculum emphasizes the critical thinking and analytical skills required to design, manage, and continuously improve a distribution system. We explore the intricate financial implications of inventory decisions, linking logistics performance directly to the bottom line. The course content is built around a philosophy of proactive and predictive management, equipping participants with the foresight to anticipate disruptions and the agility to respond effectively. Furthermore, we dedicate significant time to understanding and mitigating systemic issues like the bullwhip effect, providing practical strategies for enhancing collaboration and visibility across the entire supply chain. The inclusion of advanced topics such as DRP II and network design ensures that participants leave not just with technical skills, but with a holistic, strategic perspective that empowers them to lead and innovate within their organizations.