



# Certified in Planning and Inventory Management

Warehousing





# CPIM On-Demand Training for Self-Study Professionals

**Are you preparing for the CPIM certification through self-study?** As an experienced supply chain professional, you already have strong practical knowledge—but some topics may still need expert clarification. Fhysics Business Consultants bridges that gap with on-demand, topic-oriented CPIM training sessions designed specifically for self-learners.

Whether you need guidance on a single concept or an entire module, our focused training helps you master complex areas quickly and confidently. Get personalized support, strengthen your exam readiness, and elevate your supply chain expertise—on your schedule.

Mobile: +91-900-304-9000 (WhatsApp)

Email: [Certifications@Fhysics.net](mailto:Certifications@Fhysics.net)



# **Warehousing**

## **1. Role of Warehousing in the Supply Chain**

Warehousing supports the smooth flow of goods from suppliers to customers by providing space for storage, consolidation, and order fulfillment. It reduces transportation inefficiencies and ensures product availability by balancing supply and demand fluctuations. In CPIM, it is important to understand how warehouses enable postponement, value-added services, risk pooling, and service-level improvement. Warehousing also affects cost structures—inventory carrying, handling, labor, and facility operations—making strategic warehouse deployment crucial to total supply chain efficiency.

## **2. Types of Warehouses**

Warehouses exist in several forms: private, public, contract, distribution centers, fulfillment centers, cross-dock facilities, and bonded warehouses. Each offers distinct cost, control, and flexibility characteristics. For CPIM, candidates must understand why organizations select specific warehouse types depending on volume, service requirements, capital availability, and product characteristics. Knowing the difference between storage-focused facilities and high-velocity distribution centers helps align warehouse structure with corporate logistics strategy.

## **3. Warehouse Layout and Design Principles**

Warehouse layout influences labor efficiency, space utilization, material flow, picking speed, and safety. Good design incorporates optimal aisle widths, storage zoning, equipment accommodation, and logical flow from receiving

to shipping. CPIM emphasizes lean design principles, minimizing travel distances, eliminating bottlenecks, and maximizing cube utilization. Concepts such as slotting, ABC zoning, and ergonomic design contribute to improved productivity. Understanding design trade-offs is essential for efficient operations.

#### **4. Material Handling Equipment (MHE)**

MHE includes forklifts, conveyors, pallet jacks, automated guided vehicles (AGVs), cranes, and sortation systems. Proper selection of equipment is based on load characteristics, throughput requirements, safety, cost, and automation needs. Understanding how MHE integrates with warehouse processes can significantly reduce handling times and labor costs. CPIM candidates must understand the operational considerations, maintenance requirements, and safety implications of using different types of MHE.

#### **5. Storage Systems and Technologies**

Storage systems include pallet racking, shelving, drive-in racks, flow racks, mezzanines, and automated storage/retrieval systems (AS/RS). The chosen system determines accessibility, storage density, and speed of retrieval. Decisions depend on SKU characteristics, turnover rates, and operational strategy (FIFO, LIFO). Modern technologies like shuttle systems, vertical lift modules, and high-bay AS/RS enhance space utilization and accuracy. Understanding storage-system trade-offs is essential for optimizing cost and performance.

#### **6. Receiving Operations and Best Practices**

Receiving ensures accurate verification of incoming goods,

correct documentation, proper inspection, and timely allocation to storage or processing. CPIM requires understanding the importance of dock scheduling, ASN (Advance Ship Notice) usage, barcode scanning, and quality checks. Efficient receiving reduces bottlenecks, prevents errors from entering the system, and accelerates put-away. Best practices include standardized procedures, real-time data capture, and clear coordination with procurement and carriers.

## **7. Put-Away Processes and Optimization**

Put-away involves transporting received goods to appropriate storage locations, ensuring accuracy, safety, and efficiency. Effective put-away minimizes travel time, reduces congestion, and supports inventory accuracy. CPIM emphasizes slotting strategies, directed put-away via WMS, and dynamic space allocation. Proper put-away practices reduce misplacements and support faster picking later. Technologies such as RFID, mobile scanners, and location-based guidance improve productivity and precision.

## **8. Order Picking Strategies**

Picking is labor-intensive and often the costliest warehouse activity. CPIM covers picking methods like discrete picking, batch picking, zone picking, wave picking, and pick-to-light systems. Strategies depend on order profiles, SKU velocity, and warehouse layout. The goal is to reduce travel time, enhance accuracy, and improve service levels. Understanding ergonomic principles, slotting optimization, and automation helps in designing efficient picking operations.

## **9. Packing, Staging, and Shipping Processes**

Packing ensures items are correctly consolidated, protected, labeled, and compliant with customer or regulatory requirements. Staging involves organizing packed orders in shipping lanes based on carrier, route, or time. Shipping finalizes documentation, loads carriers, and updates systems. CPIM requires understanding the integration of shipping processes with transportation management, carrier scheduling, and service-level requirements. Effective execution minimizes errors, delays, and freight costs.

## **10. Warehouse Management Systems (WMS)**

A WMS tracks inventory, directs workflows, improves accuracy, and enhances visibility. Key functionalities include receiving, put-away, picking, replenishment, cycle counting, labor tracking, and performance analytics. CPIM emphasizes how WMS enables real-time decision-making, integrates with ERP systems, and supports automation technologies. A strong understanding of WMS capabilities and limitations is essential for effective warehouse planning and optimization.

## **11. Inventory Control Techniques in Warehousing**

Warehouses must maintain accurate inventory to support planning, order fulfillment, and financial reporting. Techniques include cycle counting, ABC analysis, reconciliation procedures, and variance analysis. CPIM stresses methods such as location-level accuracy, real-time updates, and process standardization. Understanding how inaccuracies arise—mis-picks, damage, improper labeling—helps implement corrective actions. Effective inventory control enhances service levels and reduces carrying costs.

## **12. Slotting Optimization and SKU Velocity Management**

Slotting determines where each SKU is placed to minimize travel time and improve picking efficiency. CPIM requires understanding the principles of SKU velocity, product affinity, FIFO requirements, ergonomic placement, and replenishment frequency. Slotting tools and WMS support dynamic slotting based on demand patterns. Good slotting reduces labor cost, improves accuracy, and adapts warehouse performance to changing customer needs.

## **13. Warehouse Capacity Planning and Utilization**

Capacity planning ensures the warehouse can handle expected storage, throughput, and labor requirements. Key concepts include cube utilization, space forecasting, throughput capacity, and equipment allocation. CPIM focuses on understanding peak vs. average demand, storage-density calculations, and constraints in receiving/picking areas. Effective planning avoids congestion, delays, and excessive operating costs while ensuring service-level reliability.

## **14. Warehouse Labor Management and Productivity**

Labor is a major cost component in warehousing. CPIM emphasizes workforce planning, productivity standards, performance measurement, and incentive systems. Techniques such as engineered labor standards, time studies, cross-training, and ergonomic design support improved productivity. Proper labor planning aligns staffing with workload patterns, reducing overtime and enhancing service levels. Understanding how human factors affect safety and performance is essential.

## **15. Lean Warehousing and Waste Reduction**

Lean principles target the elimination of waste in processes, space, motion, and inventory. CPIM candidates must understand how to apply value stream mapping, 5S, standardized work, and continuous improvement (Kaizen) in warehousing. Lean warehousing improves service-level performance, reduces cost, and increases responsiveness. Emphasis is placed on reducing touchpoints, optimizing flow, and implementing visual management for process clarity.

## **16. Warehouse Safety and Compliance**

Safety is critical due to equipment use, heavy materials, and high activity levels. CPIM highlights safety regulations, hazard identification, equipment certification, training, signage, and emergency procedures. Programs such as OSHA compliance, PPE requirements, and incident investigation help reduce injuries and legal risk. Safety-focused warehouse culture improves morale, productivity, and operational continuity.

## **17. Cross-Docking and Flow-Through Operations**

Cross-docking bypasses storage by directing inbound goods directly to outbound shipments. It reduces handling, improves speed, and minimizes inventory holding. CPIM requires an understanding of pre-distribution, post-distribution, synchronized scheduling, and transportation coordination. Flow-through increases efficiency when SKU velocity is high or customer lead-time requirements are tight. Proper execution depends on accurate data, reliable suppliers, and fast processing.



## **18. Value-Added Services (VAS) in Warehousing**

Warehouses often perform VAS such as kitting, labeling, customization, bundling, and light assembly. These services enhance customer satisfaction and improve supply chain responsiveness. CPIM highlights how VAS supports postponement strategies and reduces finished-goods variety upstream. Understanding the resource, space, and labor requirements for VAS helps in cost planning and operational design.

## **19. Performance Metrics and KPIs for Warehousing**

KPIs help evaluate warehouse efficiency, accuracy, and service levels. CPIM emphasizes key metrics such as order accuracy, dock-to-stock time, pick rate, inventory accuracy, space utilization, labor productivity, and cost per order. Monitoring KPIs enables continuous improvement and highlights areas requiring corrective actions. Data-driven performance management enhances reliability and supports strategic decision-making.

## **20. Automation and Emerging Warehouse Technologies**

Automation includes AS/RS, robotics, conveyors, AMRs, pick-to-light, voice picking, drones for cycle counting, and IoT sensors. CPIM requires understanding the benefits—higher accuracy, faster throughput, lower labor dependence—and the challenges such as capital cost, integration complexity, and maintenance. Emerging technologies like digital twins, AI-based slotting, and real-time visibility platforms are transforming warehouse operations. Proficiency in these technologies supports future-ready logistics planning.

# Micro-Learning Programs in Supply Chain Management & Procurement



Enhance your professional edge with Fhyzics Business Consultants' Micro-Learning Programs in Supply Chain Management and Procurement. Designed as focused, two-hour Executive Development Programs, these sessions deliver practical insights and tools to solve real-world business challenges. Conducted in small batches for personalized learning, participants gain a deeper understanding of key supply chain and procurement strategies that drive efficiency and profitability. Each participant receives a certificate of completion, adding value to their professional profile and career growth. Whether you aim to advance in your current role or explore new opportunities, this program equips you with the knowledge and confidence to excel.



# Micro-Learning Programs in Supply Chain Management



1. Fundamentals of Supply Chain Management
2. Supply Chain Planning and Optimization
3. Demand Forecasting Techniques
4. Inventory Control and Management
5. Distribution and Logistics Strategy
6. Warehouse Layout and Operations Efficiency
7. Supply Chain Risk Management
8. Supply Chain Performance Metrics (KPIs)
9. Lean Supply Chain Practices
10. Agile and Responsive Supply Chains
11. Sales and Operations Planning (S&OP)
12. Supply Chain Network Design
13. Supply Chain Digital Transformation
14. AI and Data Analytics in Supply Chain
15. Supply Chain Sustainability and Green Logistics
16. Reverse Logistics and Returns Management
17. Supply Chain Collaboration and Integration
18. Supplier Relationship Management in SCM
19. Global Supply Chain Strategy
20. Transportation Management Systems (TMS)
21. Inventory Optimization Models
22. Demand-Driven MRP (DDMRP) Concepts
23. Blockchain Applications in Supply Chain
24. Supply Chain Cost Reduction Techniques
25. SCOR Model and Process Improvement

# Micro-Learning Programs in Supply Chain Management ...



26. Capacity Planning and Resource Allocation
27. Managing Supply Chain Disruptions
28. End-to-End Supply Chain Visibility
29. Cold Chain Logistics Management
30. Supply Chain Compliance and Ethics
31. Import–Export Procedures and Documentation
32. Managing Third-Party Logistics (3PL) Providers
33. Supply Chain Collaboration Technologies
34. Production Planning and Scheduling
35. Strategic Supply Chain Design Using Case Studies
36. Circular Economy in Supply Chain
37. Vendor-Managed Inventory (VMI)
38. Transportation Optimization Techniques
39. E-Commerce Supply Chain Models
40. Omni-Channel Fulfillment Strategies
41. Warehouse Automation and Robotics
42. SCOR DS Roadmap for Supply Chain Excellence
43. Customer-Centric Supply Chain Strategies
44. Supply Chain Finance and Working Capital Management
45. Supply Chain Data Visualization Using Power BI
46. Strategic Sourcing in Supply Chain Context
47. Supply Chain Benchmarking and Best Practices
48. Integrated Business Planning (IBP)
49. Supply Chain in Crisis Management and Recovery
50. Future Trends and Technologies in Supply Chain



# Micro-Learning Programs in Procurement



1. Fundamentals of Procurement Management
2. Strategic Sourcing and Category Management
3. Supplier Selection and Evaluation
4. Contract Management Essentials
5. Cost and Price Analysis in Procurement
6. Negotiation Strategies for Procurement Professionals
7. E-Procurement and Digital Tools
8. Procurement Planning and Budgeting
9. Risk Management in Procurement
10. Supplier Relationship and Performance Management
11. Sustainable and Ethical Procurement
12. Total Cost of Ownership (TCO) Analysis
13. Make-or-Buy Decision Frameworks
14. Procurement Policies and Governance
15. Procurement in Public vs. Private Sectors
16. Procurement Audit and Compliance
17. Procurement Data Analytics and Reporting
18. Procurement Scorecards and KPIs
19. Strategic Supplier Partnerships
20. Category Strategy Development
21. Managing Global and Offshore Procurement
22. Negotiation Simulation Workshop
23. Contract Law for Procurement Managers
24. Cost Reduction Strategies in Procurement
25. Supplier Risk Assessment Models

# Micro-Learning Programs in Procurement ...



26. Procurement Process Mapping and Improvement
27. Procurement Automation and AI Applications
28. Managing Procurement Teams Effectively
29. Procurement Ethics and Transparency
30. Procurement in the Digital Supply Chain
31. Vendor Consolidation Strategies
32. Spend Analysis and Optimization
33. Demand Forecasting for Procurement
34. E-Auction and Reverse Bidding Techniques
35. Inventory and Procurement Alignment
36. Procurement in Project-Based Organizations
37. Supplier Onboarding and Development
38. Procurement Market Intelligence
39. Measuring Supplier Innovation
40. Procurement in Times of Supply Disruption
41. Cross-Functional Collaboration in Procurement
42. Writing Effective RFPs, RFQs, and RFIs
43. Contract Negotiation Best Practices
44. Green Procurement and Circular Economy
45. Legal Aspects of Procurement Contracts
46. Performance-Based Contracting
47. Procurement Leadership and Strategic Influence
48. Cost Avoidance and Value Creation in Procurement
49. Managing Procurement with Power BI Dashboards
50. Future Skills and Trends in Procurement



## **Fhyzics Business Consultants Pvt. Ltd.**

Professional Training Partner of ASCM, USA

[www.Fhyzics.net](http://www.Fhyzics.net)

ASCM Referral Code  
**XEFGHYZ88**

[Certifications@Fhyzics.net](mailto:Certifications@Fhyzics.net)  
**+91-900-304-9000**

CPIM aspirants may buy the CPIM Learning System and Examination Credits directly through ASCM Portal. When purchasing CPIM Examination Credit, please enter Referral Code **XEFGHYZ88** to receive CPIM Recertification Guidance for life.