



# Certified Supply Chain Professional

Supply Chain Master Data





# CSCP On-Demand Training for Self-Study Professionals

**Are you preparing for the CSCP 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 CSCP 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)



# **Supply Chain Master Data**

## **1. Definition and Importance of Master Data**

Master data represents the core, non-transactional information essential for running supply chain operations—such as products, suppliers, customers, locations, and bills of materials. It ensures consistency across systems and departments, forming the foundation for accurate transactions, analytics, and decision-making. Poor master data leads to inefficiencies, errors, and compliance issues, while high-quality master data enables synchronization across ERP, WMS, and TMS platforms.

## **2. Product Master Data**

Product master data defines all characteristics of an item—SKU number, description, dimensions, weight, cost, lead time, and classification. It ensures accurate inventory management, pricing, and forecasting. Standardized product data facilitates communication across supply chain partners, supports demand planning, and prevents duplicate or obsolete item records. Maintaining clean product master data is vital for efficient sourcing, production, and distribution.

## **3. Customer Master Data**

Customer master data contains all relevant information about customers, including billing details, delivery addresses, payment terms, and credit limits. This data supports order management, invoicing, and customer service functions. Accurate and current customer master data enhances customer satisfaction by ensuring correct shipments and timely payments, while reducing errors in communication, taxation, and compliance.

#### **4. Supplier Master Data**

Supplier master data includes details about vendors—such as contact information, bank details, product categories, certifications, and performance metrics. It enables effective supplier management, sourcing, and compliance tracking. A well-maintained supplier master allows organizations to assess supplier risk, manage relationships, and improve procurement efficiency. It also facilitates ethical sourcing and sustainability reporting.

#### **5. Location Master Data**

Location master data represents physical and virtual sites across the supply chain—plants, warehouses, distribution centers, and customer locations. Each site has attributes like capacity, geography, and handling constraints. Accurate location data is crucial for transportation planning, route optimization, and supply network design. It provides the geographic backbone for logistics and cost optimization models.

#### **6. Bill of Materials (BOM)**

A Bill of Materials defines the hierarchical structure of components, subassemblies, and raw materials required to produce a finished product. BOM master data ensures accurate production planning, cost estimation, and material requirements planning (MRP). Managing BOM consistency across engineering and manufacturing functions prevents delays, reduces scrap, and improves traceability and quality assurance.

## **7. Routing and Process Data**

Routing master data specifies the sequence of operations, work centers, and resources required to manufacture a product. It defines process times, labor requirements, and capacity utilization. Accurate routing data ensures efficient scheduling, cost tracking, and production flow. It aligns manufacturing execution with planning systems and supports continuous improvement in operational performance.

## **8. Pricing and Costing Master Data**

Pricing master data maintains information on product prices, discounts, taxes, and freight charges. Costing data captures material, labor, and overhead costs. This information supports profitability analysis, quotation accuracy, and financial reporting. Consistent and transparent pricing and costing data ensure competitive pricing strategies and alignment with financial performance objectives.

## **9. Inventory Master Data**

Inventory master data describes stock characteristics such as SKU type, storage conditions, reorder levels, and safety stock parameters. It supports inventory optimization, warehouse management, and replenishment planning. Reliable inventory master data prevents stockouts and overstocking, enabling accurate valuation and improved inventory visibility across the entire supply chain.

## **10. Lead Time Master Data**

Lead time master data specifies the time required to procure, produce, and deliver materials or products. It includes supplier lead times, production cycle times, and transportation durations. Accurate lead time data is crucial for forecasting, order promising, and MRP accuracy. It helps balance service levels with inventory costs and ensures on-time delivery.

## **11. Units of Measure (UOM)**

UOM master data defines how quantities are expressed (e.g., pieces, kilograms, liters). Consistent UOM data prevents conversion errors between procurement, manufacturing, and sales systems. UOM accuracy ensures proper costing, packaging, and logistics handling. It is essential for global operations where unit standards may differ across regions or partners.

## **12. Data Governance Framework**

Data governance defines the policies, standards, roles, and processes for managing master data. It ensures accountability and compliance across departments. A strong governance framework establishes ownership (data stewards), workflows for approval, and audit mechanisms. Governance prevents data duplication, enforces consistency, and supports data-driven decision-making throughout the organization.

## **13. Data Quality Management**

Data quality management involves monitoring, cleansing, and maintaining accuracy, completeness, and consistency of master data. Techniques include data profiling, validation

rules, and periodic audits. High-quality master data eliminates rework, reduces transactional errors, and improves forecasting and reporting accuracy—ultimately enhancing overall supply chain efficiency and agility.

#### **14. Master Data Integration Across Systems**

Supply chains often rely on multiple systems (ERP, WMS, CRM, SRM). Integration ensures that master data remains consistent across all platforms. Data synchronization through APIs or middleware enables seamless information flow and avoids discrepancies between systems. Integration supports end-to-end visibility and reduces latency in decision-making.

#### **15. Data Standardization and Harmonization**

Standardization establishes uniform formats, naming conventions, and classification systems (e.g., GS1, UNSPSC). Harmonized data allows comparison and aggregation across business units, regions, and trading partners. Standardization facilitates automation, regulatory compliance, and analytics, enabling organizations to operate efficiently in multi-entity or global environments.

#### **16. Master Data Lifecycle Management**

Lifecycle management covers the creation, use, modification, and retirement of master data. It ensures that outdated or duplicate records are deactivated systematically. Managing the lifecycle prevents clutter, reduces system errors, and supports compliance audits. A structured lifecycle process ensures that master data evolves in line with business changes.

## **17. Data Ownership and Stewardship**

Data stewardship assigns responsibility for maintaining data accuracy and integrity to specific roles within the organization. Data owners establish rules and standards, while data stewards enforce them. Clear accountability ensures that master data remains current, reliable, and compliant with internal and external requirements.

## **18. Master Data Security and Access Control**

Security ensures that only authorized users can view or modify master data. Access controls prevent unauthorized changes and data breaches. Encryption and audit trails protect sensitive supplier and customer data. Proper security policies maintain confidentiality, integrity, and trust in digital supply chain ecosystems.

## **19. Global Data Synchronization (GDSN)**

The Global Data Synchronization Network (GDSN) enables trading partners to exchange standardized product data globally. It ensures accuracy and consistency across markets by using GS1-compliant standards. GDSN helps reduce data discrepancies, enhance collaboration, and improve speed-to-market for products distributed across multiple geographies.

## **20. Role of Master Data in Digital Supply Chains**

In digital supply chains, master data serves as the foundation for technologies like AI, IoT, and blockchain. Clean, structured data enables predictive analytics, automation, and real-time visibility. Without high-quality



master data, digital transformation initiatives fail to deliver expected results. Hence, master data is the core enabler of end-to-end digital integration.

\*\*\*\*\*

# 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**

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