



PROCUREMENT AND SUPPLY CHAIN MANAGEMENT | PSCM-021

Omnichannel Supply Chain & E-Commerce Fulfillment

UK

+44 33 000 111 90
info@informatelch.co.uk
<https://informatelch.uk>
63-66 Hatton Garden Hatton Garden
EC1N 8LE, London

NL

+31 85 74 444 46
info@informatelch.nl
<https://informatelch.nl>
Waarderweg 50 - 2031PB
Haarlem - Netherlands



Course content

Why Attend

Customers increasingly expect a consistent purchasing and delivery experience across online stores, marketplaces, mobile applications, physical retail locations, and business-to-business channels. Meeting these expectations requires supply chains capable of coordinating inventory, orders, warehouses, transportation, and returns across multiple sales and fulfillment channels.

Traditional distribution models often struggle with fragmented inventory visibility, competing channel priorities, inaccurate stock availability, expensive last-mile delivery, and inefficient returns management. Omnichannel fulfillment addresses these challenges by connecting demand, inventory, order processing, and logistics operations within an integrated supply chain strategy.

The Omnichannel Supply Chain & E-Commerce Fulfillment course provides a practical understanding of designing, operating, and improving fulfillment networks that support both digital commerce and physical distribution. Participants explore omnichannel supply chain models, distributed inventory management, order management systems, warehouse operations, fulfillment technology, last-mile delivery, reverse logistics, and performance analytics.

The programme emphasizes operational decision-making, cost-to-serve analysis, customer experience, and scalable fulfillment strategies that balance service quality, speed, inventory availability, and profitability.

Professional Problems This Course Is Designed to Solve

- Fragmented inventory across sales channels: Improving inventory visibility and stock allocation across e-commerce platforms, marketplaces, warehouses, and retail stores.
- Inconsistent order fulfillment performance: Establishing coordinated order routing, picking, packing, dispatch, and delivery processes that support reliable customer service.
- High fulfillment and last-mile delivery costs: Evaluating fulfillment network design, transportation options, delivery promises, and cost-to-serve trade-offs.
- Stockouts and excess inventory: Applying demand forecasting, inventory segmentation, and replenishment planning to improve availability while controlling working capital.
- Poor integration between commerce and logistics systems: Connecting order management, warehouse management, inventory, transportation, and e-commerce platforms.



Course content

Why Attend

- Inefficient returns and reverse logistics: Designing structured return authorization, inspection, restocking, refurbishment, and disposition processes.
- Limited visibility into fulfillment performance: Developing operational dashboards and KPIs covering order accuracy, on-time delivery, fulfillment cost, inventory performance, and customer experience.

Course Methodology

The programme combines instructor-led sessions, omnichannel supply chain case studies, fulfillment process mapping, inventory planning exercises, logistics simulations, system integration discussions, and performance improvement workshops.

Participants work with realistic e-commerce and retail distribution scenarios to evaluate fulfillment network alternatives, design order routing workflows, analyze inventory requirements, and improve delivery and returns processes. Practical exercises emphasize the operational and financial trade-offs involved in omnichannel fulfillment decisions.

Course Objectives

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

- Explain the structure and operating principles of omnichannel supply chains
- Evaluate fulfillment strategies for e-commerce, marketplaces, and physical retail channels
- Design integrated order management and fulfillment workflows
- Improve inventory visibility, allocation, and replenishment across multiple channels
- Assess warehouse and distribution center requirements for omnichannel operations
- Compare centralized, decentralized, and store-based fulfillment models
- Evaluate last-mile delivery strategies and logistics cost drivers
- Develop efficient returns management and reverse logistics processes
- Understand the role of OMS, WMS, TMS, ERP, and e-commerce platform integration



Course content

Course Objectives

- Apply demand forecasting and supply chain analytics to fulfillment planning
- Establish KPIs for service levels, operational efficiency, and cost-to-serve
- Develop an omnichannel fulfillment improvement roadmap

Target Audience

This course is suitable for:

- Supply chain managers and directors
- E-commerce operations managers
- Logistics and distribution managers
- Warehouse and fulfillment center managers
- Retail operations and omnichannel managers
- Inventory planning and demand forecasting professionals
- Transportation and last-mile delivery managers
- Procurement and supply chain transformation specialists
- Customer fulfillment and order management professionals
- Digital commerce and operations executives

Target Competencies

Participants will develop competencies in:

- Omnichannel supply chain strategy
- E-commerce fulfillment operations
- Inventory visibility and allocation
- Order management and routing



Course content

Target Competencies

- Warehouse and distribution optimization
- Last-mile delivery management
- Reverse logistics and returns management
- Supply chain systems integration
- Fulfillment cost-to-serve analysis
- Omnichannel performance measurement

Course outline

Day 1: Omnichannel Supply Chain Strategy and Fulfillment Network Design

- Understanding the differences between single-channel, multichannel, cross-channel, and omnichannel supply chain operating models
- Mapping customer journeys and fulfillment requirements across online stores, marketplaces, mobile commerce, physical retail, and business-to-business channels
- Evaluating centralized distribution centers, regional fulfillment facilities, micro-fulfillment centers, and store-based fulfillment models
- Comparing ship-from-warehouse, ship-from-store, click-and-collect, buy-online-pick-up-in-store (BOPIS), and direct-to-customer delivery strategies
- Assessing fulfillment network design using service coverage, delivery speed, operating costs, inventory positioning, and capacity constraints
- Practical workshop: Designing an omnichannel fulfillment network for a retailer operating physical stores and multiple digital sales channels

Day 2: Inventory Management, Demand Planning and Order Orchestration

- Establishing unified inventory visibility across warehouses, retail stores, marketplaces, and third-party logistics providers



Course content

Course outline

- Applying demand forecasting, inventory segmentation, safety stock, and replenishment planning across multiple fulfillment channels
- Designing inventory allocation rules that balance online demand, store availability, service priorities, and profitability
- Understanding order management systems (OMS) and their role in order capture, inventory availability, allocation, routing, and exception handling
- Developing order routing logic based on inventory location, delivery commitments, fulfillment capacity, transportation costs, and customer preferences
- Practical exercise: Optimizing inventory allocation and order routing decisions across a network of stores and distribution centers

Day 3: E-Commerce Warehousing and Fulfillment Operations

- Designing fulfillment workflows covering order release, picking, packing, quality checks, labeling, dispatch, and shipment confirmation
- Comparing discrete picking, batch picking, zone picking, and wave picking for different order volumes and product characteristics
- Improving warehouse slotting, storage strategies, picking routes, labor productivity, and order accuracy
- Evaluating automation technologies including barcode scanning, RFID, sortation systems, goods-to-person solutions, and autonomous mobile robots
- Integrating warehouse management systems (WMS) with e-commerce platforms, ERP systems, and order management applications
- Case study: Redesigning an e-commerce fulfillment center to improve throughput, reduce picking errors, and support seasonal demand peaks

Day 4: Last-Mile Delivery, Customer Experience and Reverse Logistics

- Evaluating parcel carriers, delivery service providers, third-party logistics partners, and alternative last-mile delivery models



Course content

Course outline

- Designing delivery service options covering standard delivery, express delivery, scheduled delivery, pickup points, and store collection
- Analyzing transportation costs, delivery density, failed deliveries, route efficiency, and service-level trade-offs
- Improving customer communication through shipment visibility, tracking information, proactive notifications, and exception management
- Developing reverse logistics processes covering return requests, collection, inspection, restocking, refurbishment, and product disposition
- Practical workshop: Evaluating last-mile delivery and returns scenarios to improve customer satisfaction while reducing fulfillment cost-to-serve

Day 5: Fulfillment Technology, Performance Analytics and Continuous Improvement

- Understanding the integration of OMS, WMS, TMS, ERP, inventory platforms, and e-commerce applications within an omnichannel technology architecture
- Applying supply chain analytics to monitor order processing, fulfillment lead times, inventory availability, delivery performance, and returns
- Developing performance indicators including perfect order rate, on-time-in-full delivery, order accuracy, inventory turnover, cost per order, and return processing time
- Assessing the use of artificial intelligence, predictive analytics, and automation in demand planning, inventory optimization, order routing, and fulfillment operations
- Establishing fulfillment governance, supplier performance management, service-level agreements, operational risk controls, and continuous improvement priorities
- Capstone exercise: Developing an Omnichannel Supply Chain and E-Commerce Fulfillment Improvement Plan covering network design, inventory strategy, order orchestration, warehouse operations, last-mile delivery, technology integration, and performance KPIs

Seminar dates

Available seminar dates

Live dates and pricing for Omnichannel Supply Chain & E-Commerce Fulfillment generated from the course details page.

Date	Location	Format	Fee
Dates on request	Venue on request	Classroom	Contact us
Live online option		Online delivery is available at €1,850.-.	