



Electronic Data Interchange (EDI): X12, EDIFACT, Mapping and Partner Onboarding



Electronic Data Interchange (EDI): X12, EDIFACT, Mapping and Partner Onboarding

Introduction:

Electronic data interchange EDI problems rarely stop a business outright, yet a rejected purchase order, an advance ship notice that does not match the delivery or an invoice that fails validation can delay receiving, hold up payment and start disputes between trading partners. This Core Concept course trains supply chain, procurement, finance and integration practitioners to run EDI across order-to-cash and procure-to-pay: X12 and UN/EDIFACT messages, envelopes and acknowledgements, AS2 and VAN transport, mapping to ERP data and partner onboarding. Each participant produces an EDI Onboarding and Mapping Plan for a supplier-retailer case.

Course Objectives:

- Map order-to-cash and procure-to-pay document flows and decide which exchanges with each trading partner should move to EDI
- Interpret X12 transaction sets, UN/EDIFACT messages and GS1 EANCOM identifiers, including envelope and control number structure
- Write source-to-target mapping specifications that connect purchase order, ship notice, invoice and remittance data to ERP and warehouse systems
- Configure and assess AS2, SFTP, VAN and API transport options with certificates, signing, encryption and receipt notifications
- Reconcile functional acknowledgements and resolve rejected or mismatched documents through a structured exception process
- Produce an EDI Onboarding and Mapping Plan with test criteria, KPIs and a business case for a new trading partner

Target Audience:

- Order management and customer service staff who handle incoming orders, ship notices and delivery discrepancies
 - Purchasing operations staff who issue purchase orders and manage supplier document exchange
 - Accounts payable and receivable staff who process electronic invoices and remittance advice
 - Integration and ERP support staff who configure translators, maps and partner connections
 - Logistics coordinators who prepare shipment, packing and labelling data for customers
 - Partner onboarding coordinators who run connectivity tests, sample file checks and go-live
-

Course Outline:

Day 1: EDI Fundamentals, Business Drivers and Trading Partner Document Flows

- EDI Versus Email, Supplier Portal and Paper Document Exchange
- Order-to-Cash and Procure-to-Pay Document Flow Mapping
- Trading Partner Roles: Supplier, Retailer, Carrier, Bank and Service Provider
- Direct, VAN and Managed Service Connectivity Models Compared
- EDI Current-State Assessment: Partners, Volumes and Manual Touchpoints

Day 2: EDI Standards, Message Structure and Envelopes

- ANSI ASC X12 Transaction Sets 850, 855, 856, 810 and 820
- UN/EDIFACT Syntax: UNA, UNB, UNH and UNT Service Segments
- GS1 EANCOM Messages ORDERS, ORDRSP, DESADV, INVOIC and REMADV with GTIN, SSCC and GLN
- XML, JSON and API Messaging as Alternatives to Classic EDI
- Interchange, Group and Message Control Numbers and Envelope Validation

Day 3: Translation, Mapping and ERP and Warehouse Integration

- Partner Implementation Guide Reading and Requirement Capture
- Source-to-Target Mapping Specification for Purchase Order Data
- Advance Ship Notice Hierarchy: Shipment, Order, Pack and Item Levels
- Invoice and Remittance Advice Mapping to Payables and Receivables
- ERP and Warehouse Interface Design: Flat File, XML and Database Loads

Day 4: Transport, Acknowledgements, Security and Exception Control

- AS2 under RFC 4130: Certificates, Signing, Encryption and MDN Receipts
- SFTP, OFTP, VAN Mailbox and API Transport Selection Criteria
- Functional Acknowledgement 997, 999 and CONTRL Reconciliation
- Exception Queue Triage: Syntax Rejections, Data Mismatches and Duplicate Documents
- E-Invoicing Interface Patterns Alongside EDI Invoice Flows

Day 5: Supplier-Retailer Case Work and the EDI Onboarding and Mapping Plan

- Supplier-Retailer Case: Partner Profile and Document Scope Definition
 - Onboarding Test Plan: Connectivity, Sample Files and Go-Live Criteria
 - EDI KPI Scorecard: Acknowledgement Timeliness, Rejection Rate and Straight-Through Processing
 - EDI Business Case: Rekeying Removed, Order Cycle Time and Payment Speed
 - EDI Onboarding and Mapping Plan Presentation and Peer Review
-

Skills You Will Gain:

- EDI Document Flow Analysis
- X12 and EDIFACT Message Interpretation
- Data Mapping Specification
- AS2 Connectivity Setup
- Acknowledgement Reconciliation
- EDI Exception Handling
- Trading Partner Onboarding
- EDI Performance Measurement

Why Attend This Course:

- Return with an EDI Onboarding and Mapping Plan you can reuse for the next customer or supplier your organisation connects
- Read a raw X12 or EDIFACT file and explain to colleagues why a partner rejected it
- Reduce rekeying and invoice disputes by linking EDI data correctly to ERP and warehouse records
- Compare EDI practice with peers from retail, distribution, manufacturing and logistics

Conclusion:

EDI works when business teams and integration staff share one view of the documents, the standards and the partner rules. The course moves from order-to-cash and procure-to-pay flows, through X12, UN/EDIFACT and GS1 EANCOM message structures, to mapping purchase orders, ship notices, invoices and remittances into ERP and warehouse systems, then to AS2 and VAN transport, acknowledgements, security and exception handling. The final day applies case work to a supplier-retailer connection and produces an EDI Onboarding and Mapping Plan.