Logistics Overview
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Topics

- Logistics Applications
- Logistics Business Processes
- Reporting
The R/3 Integration Model

R/3

Client / Server

ABAP

SD
Sales & Distribution

MM
Materials Mgmt

PP
Production Planning

QM
Quality Mgmt

PM
Plant Maintenance

HR
Human Resources

FI
Financial Accounting

CO
Controlling

AA
Asset Accounting

PS
Project System

WF
Workflow

IS
Industry Solutions

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Business Process Integration

Financial controlling

Resource controlling

Sales
- Presales Activity
- Sales order
- Inventory Sourcing
- Delivery
- Customer Billing
- Customer Payment

Production
- SOP
- MPS
- MRP
- Planned order
- Production order
- Shop floor control

Purchasing
- Requisition
- Vendor selection
- Purchase order
- Goods receipt
- Invoice verification
- Vendor Payment

Logistics controlling

Sales, Production, Purchasing, Warehouse
Customer Order Management: Supporting Modules

The SAP R/3 application modules that support most of Customer Order Management are:

- Sales and Distribution
- Materials Management
- Production Planning
- Financial Accounting
- Controlling
Customer Order Management Process Overview

1. Pre-Sales Activities
2. Sales Order Processing
3. Inventory Sourcing
4. Delivery
5. Billing
6. Payment

Invoice
Customer Order Management in R/3

Document flow of a sales order

Order 900
- Delivery 80000459
- WMS transfer order 1000000062
- GD goods issue: delvy 49001828
- Invoice 90000333
- Accounting document 100000276
Pre-Sales Activities

Pre-Sales activities may include:

- Mailing list
- Phone Call records kept on the system
- Inquiries
- Quotations
Sales Order Processing

- Standard orders normally contain:
  - Customer and item information
  - Delivery schedules and information
  - Billing data
Inventory Sourcing

- Inventory Sourcing determines:
  - If the product is available (availability checking)
  - The date product is confirmed for delivery
  - How the product is supplied
Delivery Overview

1. Delivery Document
2. Pick with transfer order
3. Warehouse
4. Pack
5. Shipping papers
6. Post Goods Issue
7. Update Inventory

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Billing supports:

- Creating invoices for deliveries and services
- Creating credit and debit memos on the basis of requests
- Canceling business transactions
- Transferring posting data to financial accounting

Invoices

Staffel Motorcycle company

One order of 16 Motorcycle for the Santa Fe store.

Price per bike $15,000 times 16 equals $240,000 price is equal to our discussion about the new Feldwebel Bike with 1600cc of Horsepower.
The primary SAP R/3 application modules that support the Procurement process are:

- Materials Management
- Production Planning
- Financial Accounting
Procurement Process Overview

1. Requirements determination
2. Source determination
3. Vendor selection
4. Order Processing
5. Order follow-up
6. Goods receipt and inventory management
7. Invoice verification
8. Payment

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Procurement Process in R/3

1. Requisition for Goods or Services
2. Purchase Order
3. Goods Receipt
4. Invoice Processing

Planning, Reporting, and Analysis
Purchase Requisition Processing

- MRP
- Direct Entry

1. Purchase requisition
2. Release strategy
3. Determine source of supply
4. Purchase Order
Purchase Order Processing

- Purchase Order
  - Standard
  - Blanket
  - Sub contract
  - Consignment
  - Third-party

- Statistics
- Order history

- Direct Entry or Purchase requisition
- Stock material
- Consumable material
- Service
- Account assignment (cost center, asset, project...)

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Goods Receipt

Purchasing documents

Items
1. ____________
2. ____________
3. ____________

Vendor

RUHR TRUCKING

Goods Receipt

Entering the goods receipt increases the inventory level of a material that is procured for stock.

Warehouse/stores
Posting an invoice in the R/3 System updates purchasing and accounting data
Manufacturing Planning and Execution: Supporting Modules

The SAP R/3 application modules that support most of Manufacturing Planning and Execution are:

- Production Planning
- Materials Management
- Sales and Distribution
Sales and Operations Planning (SOP)

- Demand Mgmt
- MPS
- MRP
- Manufacturing Execution
- Order Settlement

Planning process

Execution process

Sales Info System

Forecasting

Sales & Oper Planning

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Planning and Scheduling

Forecasting → Sales & Oper. Planning → Demand Mgmt → MPS → MRP → Manufacturing Execution → Order Settlement

Planning process
Execution process
Manufacturing Execution

Planning process
Execution process

Forecasting → Sales & Oper. Planning → Demand Mgmt → MPS → MRP → Manufacturing Execution → Order Settlement
Reporting

Info structure

Standard analyses

Flexible analyses

Info library

ABAP query

lists & reports

LIS

Master and document data
The Executive Information System (EIS) is used to review and analyze key performance figures throughout the R/3 System.

The Logistics Information System (LIS) uses the summary data. Data from other systems may also be used in the LIS.

Standard Reporting uses the daily transactions from the R/3 applications.
Logistics Information System (LIS)

Logistics Information Library

Sales Information System
Purchasing Information System
Inventory Controlling
Shop Floor Information System
Maintenance Information System
Quality Management Information System

R/3
Sales and Distribution (SD)
Materials Management (MM)
Production Planning (PP)
Plant Maintenance (PM)
Quality Management (QM)

Logistics Processing Systems

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Summary

- Core Logistics Applications
  - Sales and Distribution (SD)
  - Materials Management (MM)
  - Production Planning and Control (PP)

- Logistics Business Processes
  - Customer Order Management
  - Procurement
  - Manufacturing Planning and Execution

- Reporting
  - Logistics Information System (LIS)