

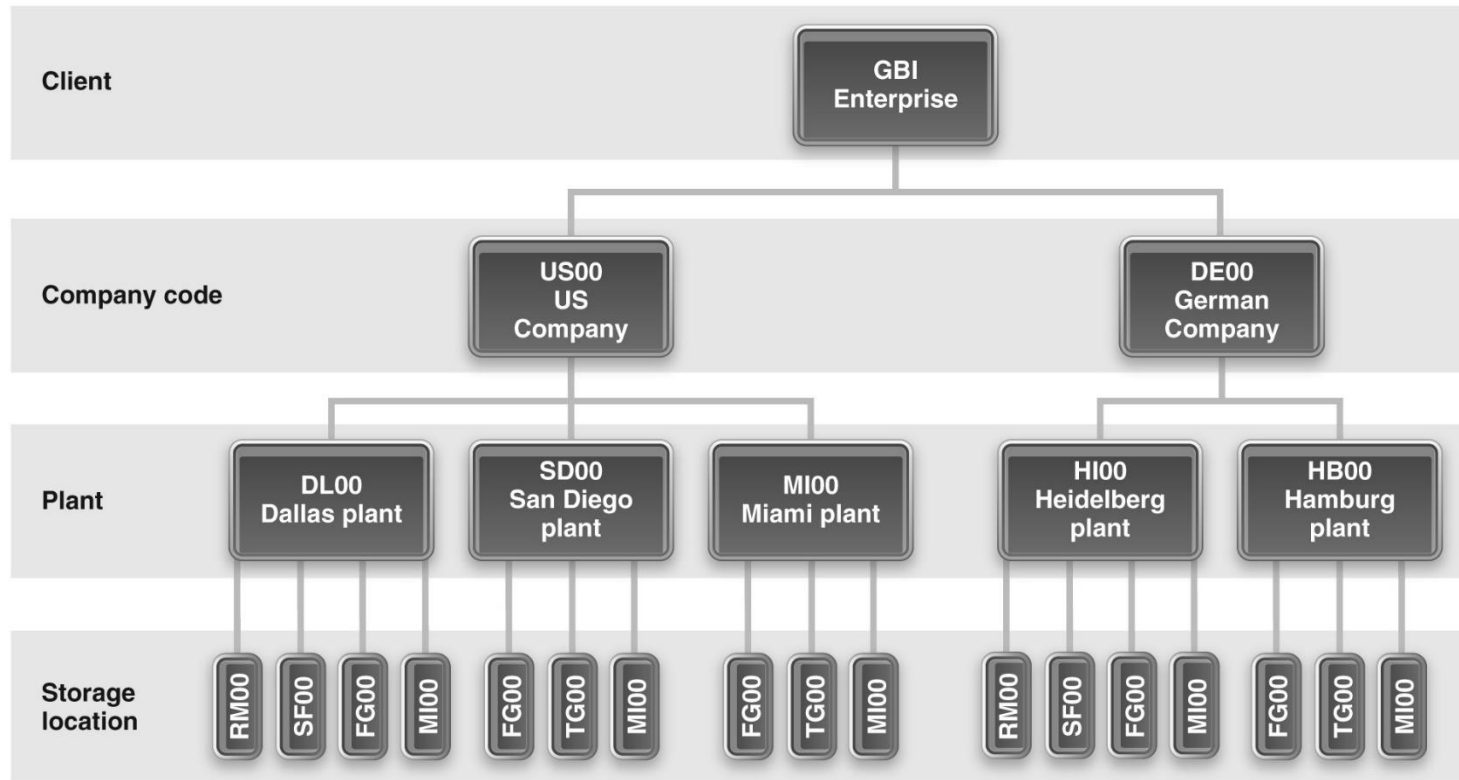
# **SAP MATERIAL MANAGEMENT**

Enterprise Information System

# Organizational Data

- Client
- Company code (CC)
- Plant
- Storage location (S Loc)
- Purchasing organization (P Org)
- Purchasing group

# GBI Storage Locations



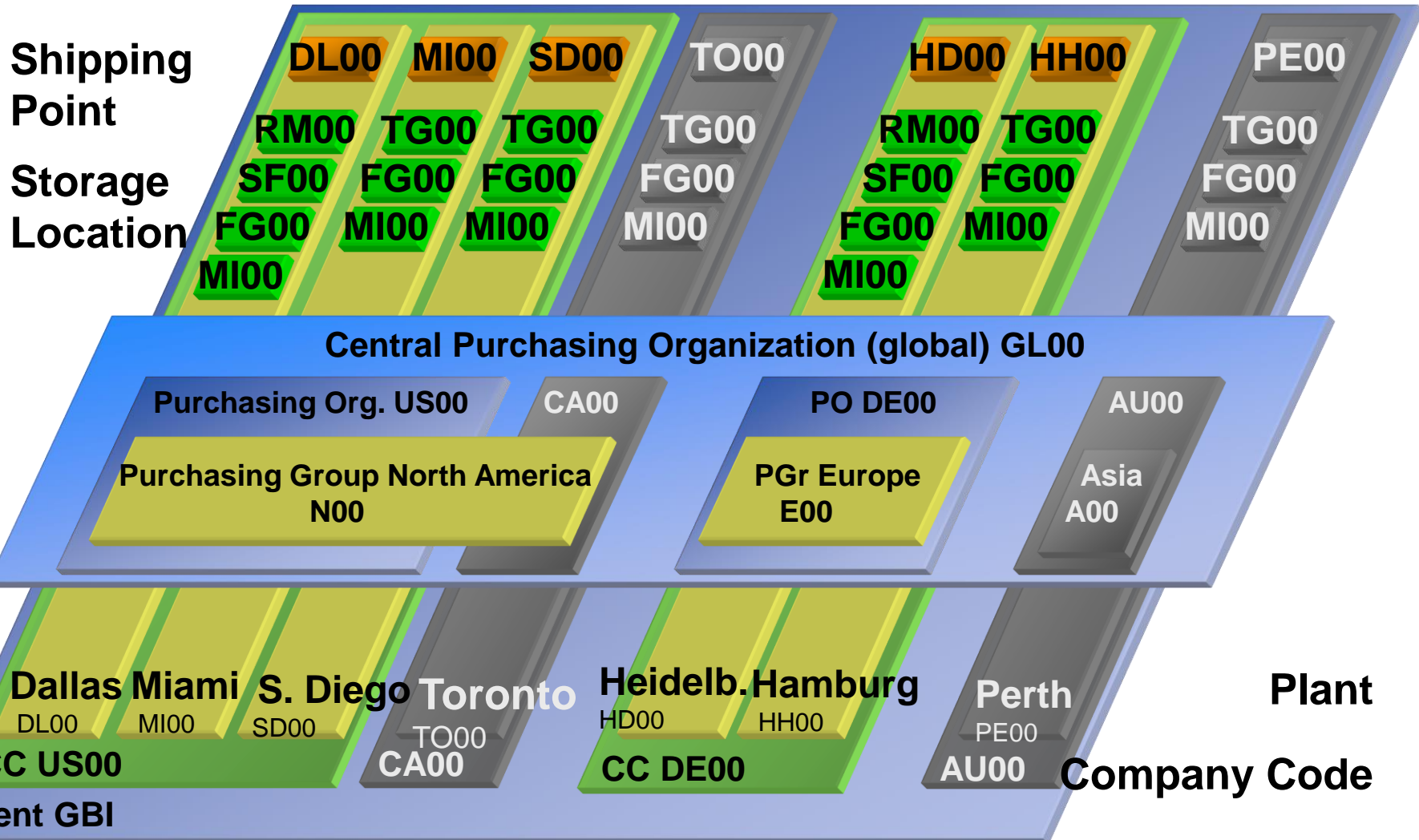
# Purchasing Organization

- Identify and select vendors
- Negotiate general conditions of purchase and contracts for one or more plants or companies.
- Determine pricing conditions
- Typically three models for Purchasing Organization
  - Enterprise-Level
  - Company-Level
  - Plant-Level

# Purchasing Group

- A buyer or group of buyers responsible for certain materials or groups of materials
- Can be internal to the company or external
  - Decide to purchase land, but use a realtor (external purchasing group) to execute the purchase
- Not assigned to or related to purchasing org

# GBI Enterprise Structure in SAP ERP (Logistics)



# Vendor Master

- Data needed to do business with vendors
- Data needed to execute transactions related to vendors (along with org data)
- Data are specific to (defined for) different organizational levels. The three segments are:
  - Client level data (General)
  - Company code level data (Accounting)
  - Purchasing organization level data (Purchasing)

# Vendor – General Data

- Client-level data
- Valid across all CC in a client
- Examples
  - Name
  - Address
  - Communication (phone, fax)
  - Search term



# Vendor – Accounting Data

- Company code specific data
- Valid for the entire company code across purchasing areas
- Examples
  - Account information
  - Bank information
  - Reconciliation account
  - Payment terms and methods
  - Communication (dunning)

# Vendor – Purchasing Data

- Separate for each Purchasing Organization
- Applies to the specified Purchase Org
- Examples
  - Partner functions (vendor, invoicing party, payment recipient)
  - InCoTerms: defines responsibilities and costs of shipment
    - Freight, insurance, customs clearance, locations

# Material Master

- Data needed to execute transactions related to materials (along with org data)
- Data are grouped by different user areas ([views](#))
- Data are specific to (defined for) for different organizational levels

# Material Master – Views

- Basic data
- Purchasing
- Accounting
- Forecasting
- Sales
- Plant / Storage
- Work Scheduling
- MRP
- Classification
- Warehouse Management

# Material Master – Views

- Basic data
  - Description, unit of measure, weight, material group
- Purchasing
  - Purchasing group, GR processing time, delivery (under / over) tolerances
- Accounting
  - Currency, valuation class (link to G/L), price control (moving price, standard price, future price)
- Plant / Storage
  - Storage requirements (hazard, temperature, etc.)
  - Shelf life
  - Weight, volume

# Material Master - Views

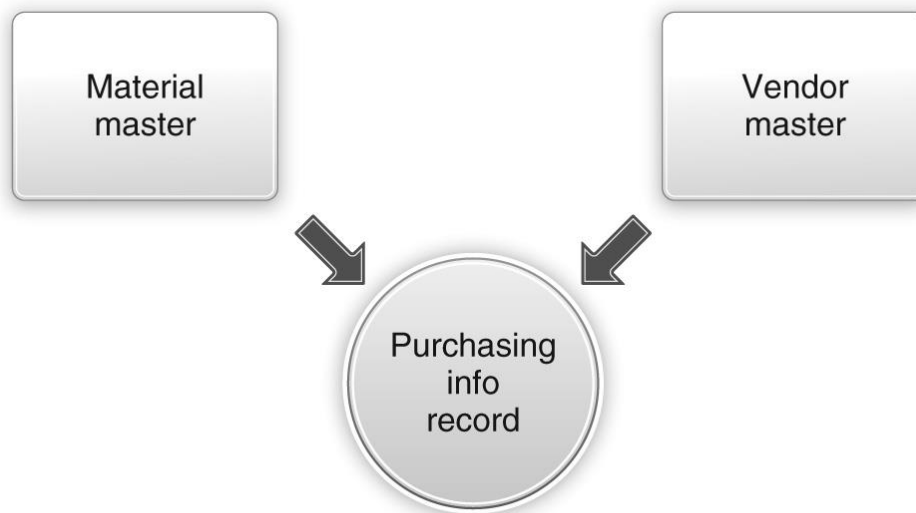
- Views for other processes
  - Forecasting (Material Planning process)
  - Sales (Fulfillment process)
  - Work Scheduling (Production process)
  - MRP (Production process)
  - Classification (PLM process)
  - Warehouse Management (WM process)

# Material Master - Views

- Different material types have different required views
- Examples:
  - Raw material: no sales view
  - Finished Goods: no purchasing view
  - Trading goods: no production related views

# Purchasing Info Record

- Relates vendors and materials.
- One info record per combination of vendor and material (or material group)
  - General data
  - Conditions: pricing, discounts, free goods (current and future)
  - Vendor data
  - Texts (notes)





# Purchasing Info Record

Spy Gear  
Vendor 100006

Info record 5300000816	
Vendor:	100006
Material:	SHRT1000
Purchasing org:	US00
Planned delivery time: 4 days	
<b>Conditions</b>	
Price/Unit:	\$15
Discount:	4% etc.
Last purchase order 4500006398	



Material SHRT1000

# Purchasing Info Record

- Allows buyers to quickly determine:
  - Which vendors have offered or supplied specific materials
- Serves as default information for Purchase Orders

# Stock Types / Status

- Based on usability of material
  - Unrestricted use
  - In quality inspection
  - Blocked stock (damaged, unusable; wrong delivery)
  - Stock in transit

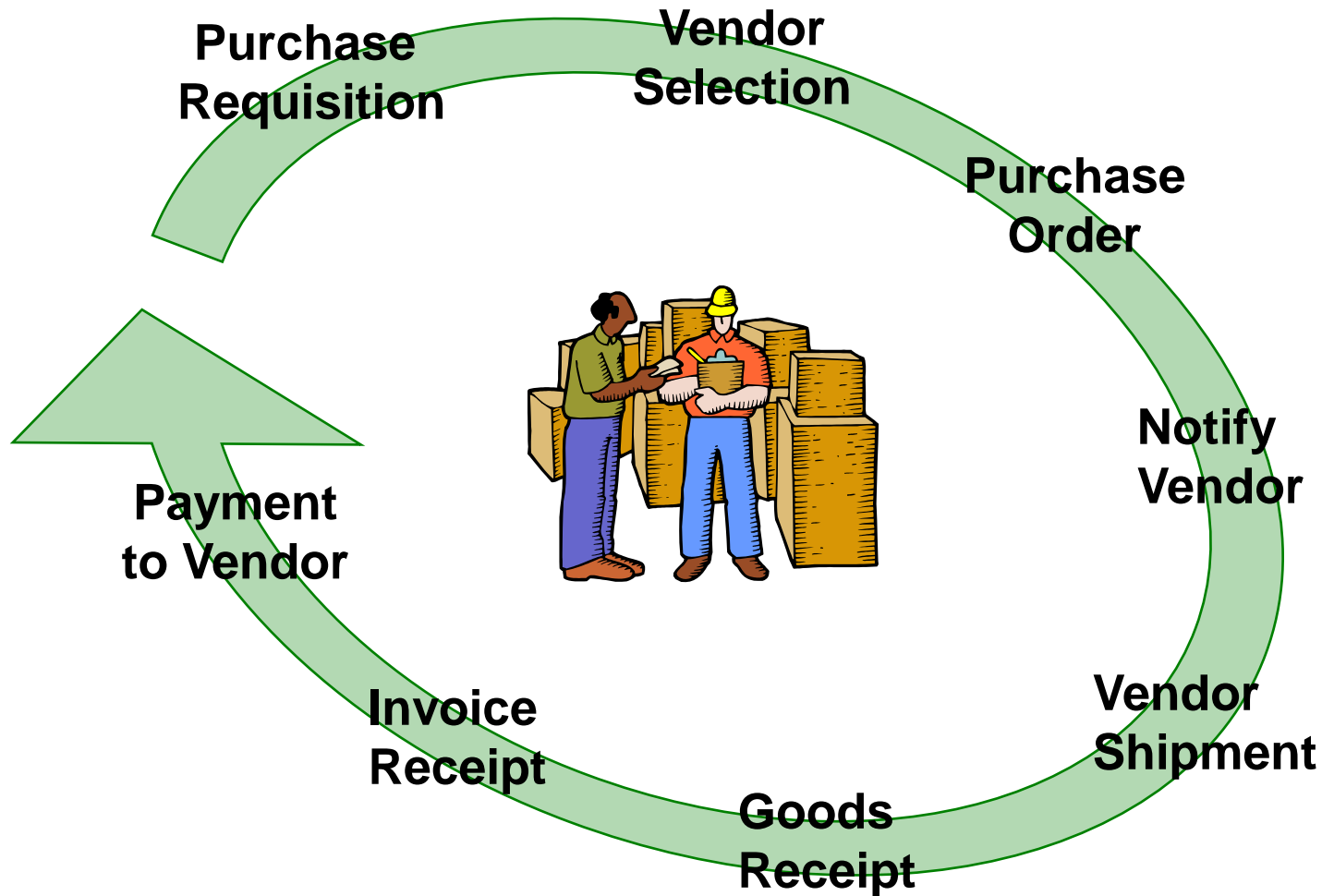
# Goods Movement

- A transaction that causes a change in stock (value or status)
- Goods Receipt
  - From vendor or production process
  - Increase in quantity and value of stock
- Goods Issue
  - To sales order or internal consumption
  - Decrease in warehouse stock

# Goods Movements

- Stock Transfer
  - Physical movement of material between storage locations
    - Sloc to Sloc
    - Plant to Plant
    - CC to CC
- Transfer Posting
  - Results in a change in material status
    - In-quality inspection/ blocked/ unrestricted use
    - One material type to another
  - May or may not include a change in location (Sloc, plant)

# Procure-To-Pay Process



# Purchase Requisition

- Internal document instructing the purchasing department to request a specific good or service for a specified time
- Requisitions can be created two ways:
  - Directly - Manually
    - person creating determines: what, how much, and when
  - Indirectly - Automatically
    - MRP
    - Production Orders
    - Maintenance Orders
    - Sales Orders

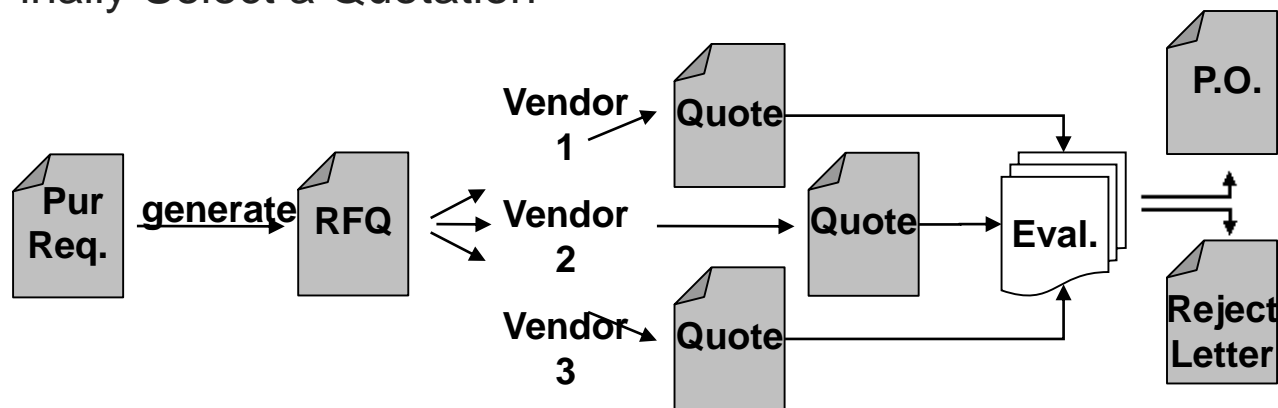
# Requisition Sourcing

- Once the requisition has been assigned a source of supply it can be released for processing
- There are a variety of ways that a purchasing department can process a requisition to determine the appropriate Source of Supply:
  - Internal Sourcing Requirements
  - Source List
  - Outlined Agreement
  - RFQ



# Request for Quotation

- If nothing exist in the system we may need to submit a **request for quotation** to our vendors. An RFQ is an invitation to a vendor by a Purchasing Organization to submit a bid for the supply of materials or services
  - The accepted quotations will generate Purchasing Information Records
  - Perform Quotation Price Comparisons
  - Finally Select a Quotation



# Quotation from Vendor

- The quotation received by your company is a legally binding offer, should decide to do business with the vendor, containing price's and conditions for the materials specified in the RFQ for a predefined period of time.
  - In SAP the RFQ and the Quotation will be become a single document, you will enter the vendor's response in the RFQ you created.

# Vendor Evaluation once Identified

- Vendor evaluation helps purchasing evaluate vendors for sourcing while also enabling the company to monitor vendor relationships through performance scores and criteria you put in place.
- Supports a maximum of 99 main criteria and 20 sub criteria for each main:
  - Price : Price Level, Price History
  - Quality : Goods Receipt, Quality Audit, Complaints/Rejection level
  - Delivery : On-time delivery performance, Quantity reliability, Compliance with shipping instructions, Confirmation Date
- You then must establish a scoring range (1 -100) and determine the weight factors of scores for each.

# Purchase Order

- A purchase order is a formal request to a vendor for a specific material or service under the stated conditions
- Purchase Orders can be created manually
  - Reference a Purchase Order
  - Reference a Purchase Requisition
  - Reference a RFQ/Quotation
  - Without Reference
- Purchase Orders can be create automatically

# The Structure of a Purchase Order

## Header

- Purchase order number
- Purchase order data
- Payment terms
- Vendor
- Currency

## Items (detail)

- Material
- Order quantity
- Delivery date
- Price

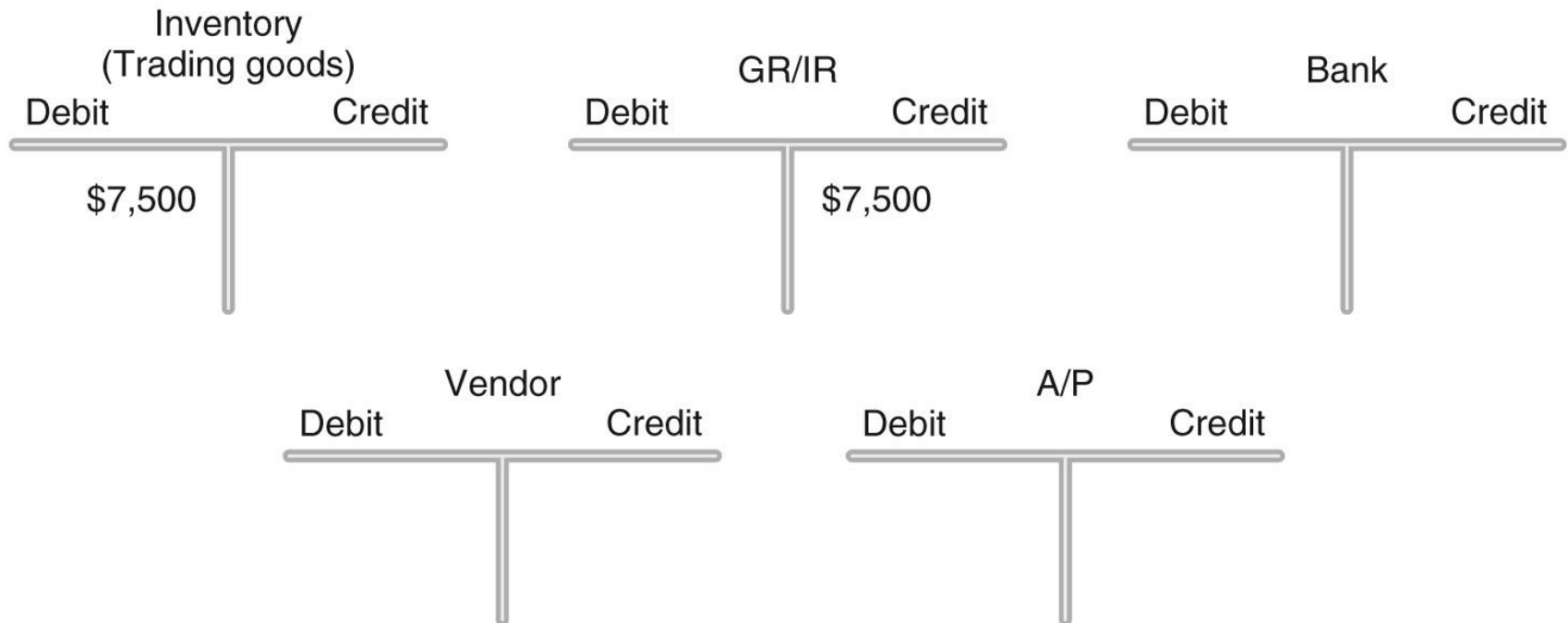
# Goods Receipt

- Goods movement in which we accept goods into our system
- If materials are delivered against a Purchase Order we will reference that Order
  - Determine if we got what we ordered
  - System can purpose data for us from the PO
    - Material, quantity
  - Purchase Order History is update with the receipt
  - Updates Physical Inventory
  - Updates Inventory G/L Account

# Effects of a Goods Receipt

- When a Goods Movement for the receipt of goods takes place a series of events occur
  - Material Document is Created
  - Accounting Document is Created
  - Stock Quantities are Updated
  - Stock Values are Updated
  - Purchase Order is Updated
  - Output can be generated (GR slip / pallet label)

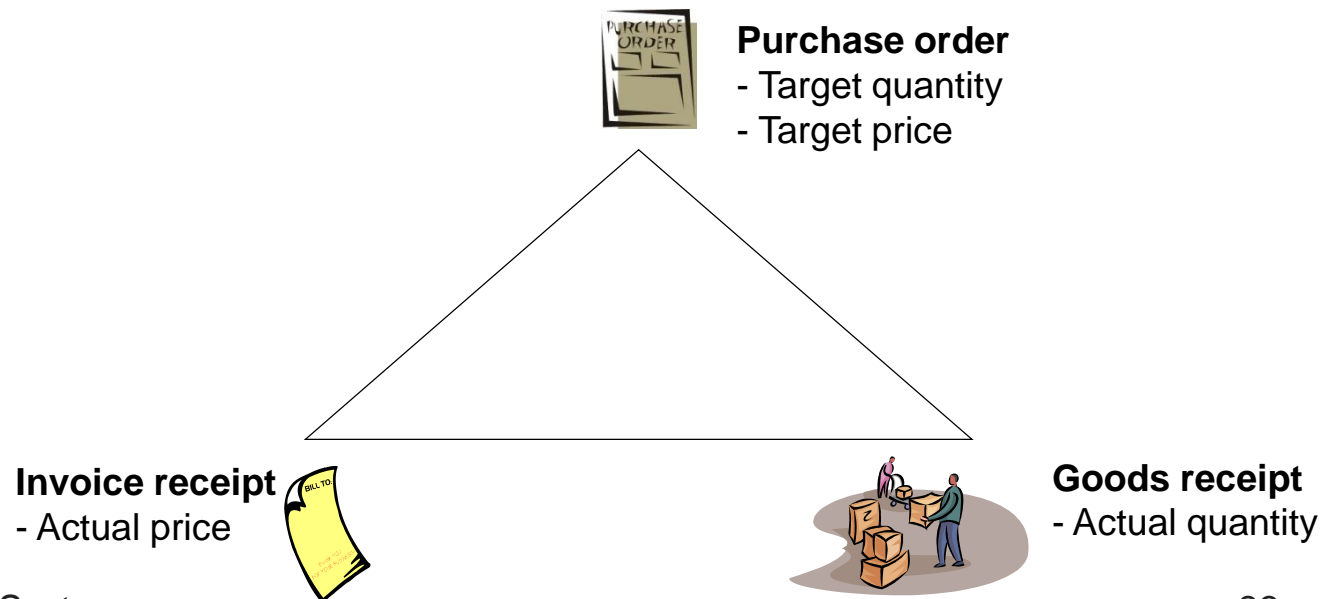
# Financial Impact of Goods Receipt





# Invoice Processing

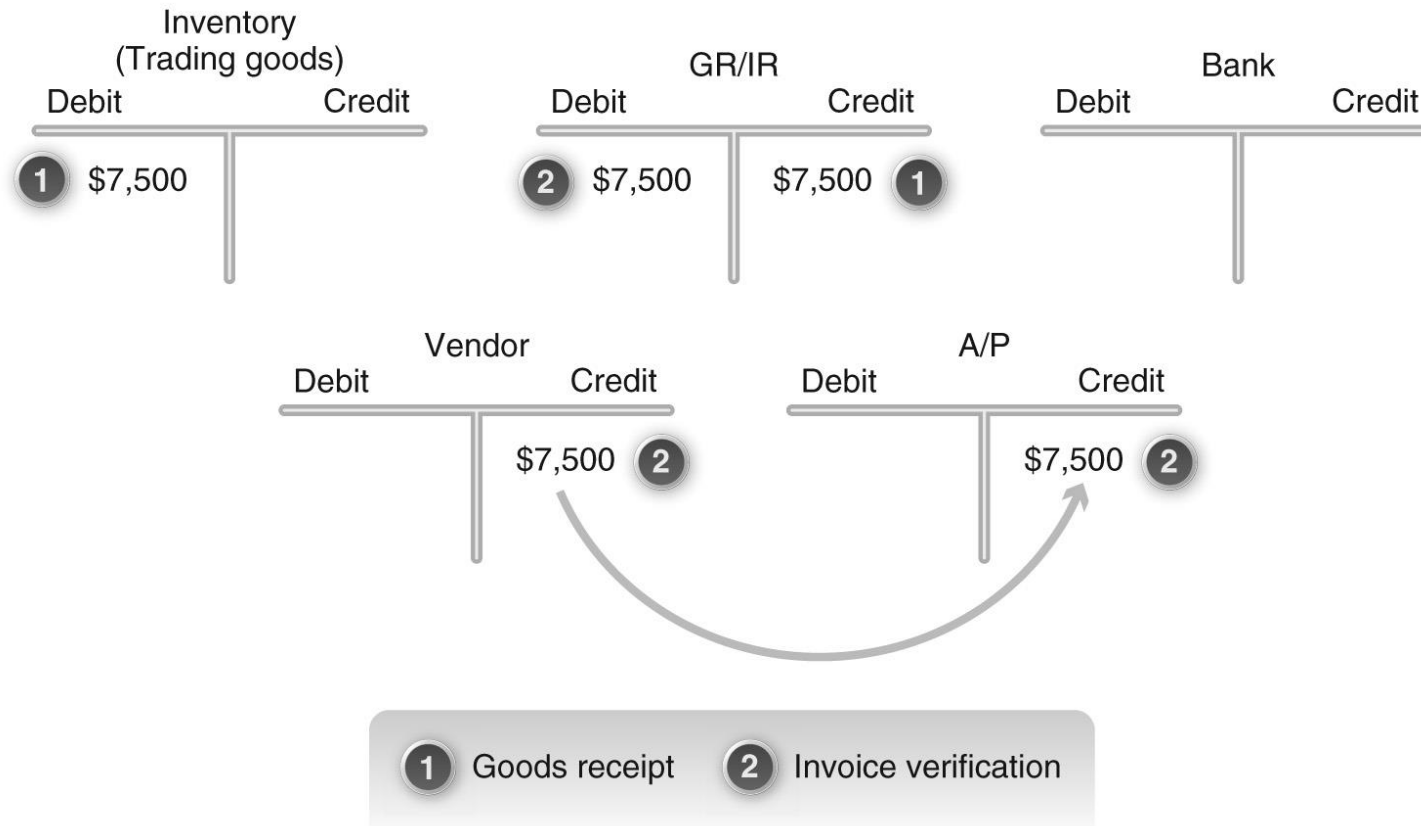
- Incoming Invoices are reference against a Purchase Order to verify their content, prices, and arithmetic.
- If discrepancies arise between the purchase order or goods receipt and the invoice the system will generate a warning or an error
  - Depending on system configuration the difference could cause the system to Block the Invoice



# Invoice Processing

- When an invoice is saved it applies the liability from the Goods Receipt of our Purchase Order to a Vendor
- Upon verification the:
  - Purchase Order is updated
  - Material Master is Updated
  - Accounting Document is created
- Once the Invoice has been posted the verification process is completed and the payment process is initiated within Financial Accounting

# Financial Impact of Invoice Verification



# Payment to Vendor

- Can be done automatically or manually
  - Post Outgoing Payment vs. Payment Program
- Elements of the Payment Transaction:
  - Payment Method
  - Bank from which they get paid
  - Items to be Paid
  - Calculate Payment Amount
  - Print Payment Medium
- Process will create a financial accounting document to record the transaction

# Financial Impact of Vendor Payment

