

# Praktikum Keahlian Khusus Silabus dan ERP

[anton@ti.ukdw.ac.id](mailto:anton@ti.ukdw.ac.id)

# Deskripsi

- Mata kuliah Praktikum Keahlian Khusus merupakan mata kuliah yang berisi tentang materi-materi khusus berkaitan dengan topik tertentu dalam bentuk praktikum, di mana pada akhirnya mahasiswa akan mendapatkan sertifikat keahlian dari sebuah vendor berkaitan dengan materi sertifikasi tertentu.
- Contoh vendor pada Praktikum SAP01 adalah SAP (Edugate).
- Pada akhir mata kuliah mahasiswa diwajibkan menyelesaikan ujian sertifikasi SAP01 untuk mendapatkan sertifikat yang berguna untuk portofolionya setelah lulus kuliah.

## Unit 1/Lesson 1

# Perkenalan

- Dosen:
  - Antonius Rachmat C., S.Kom., M.Cs.
- Mata Kuliah: Praktikum Keahlian Khusus (SAP) – 3 sks
- Waktu:
  - Rabu, 10.30 di Lab
- Materi ada di e-class dan Moodle
- Email: [anton@ti.ukdw.ac.id](mailto:anton@ti.ukdw.ac.id)

# Capaian Mata Kuliah

- Mahasiswa dapat menjelaskan konsep dasar Enterprise Resources Planning (ERP)
- Mahasiswa dapat menjelaskan sistem SAP dan teknologinya secara umum
- Mahasiswa dapat menjelaskan proses bisnis pembelian, produksi, dan penjualan dalam SAP
- Mahasiswa dapat menggunakan aplikasi SAP dan MonsoonSIM secara umum
- Mahasiswa dapat menjelaskan konsep akuntansi dan manajemen dalam SAP
- Mahasiswa dapat menjelaskan konsep sumber daya manusia dalam SAP

# Silabus (1)

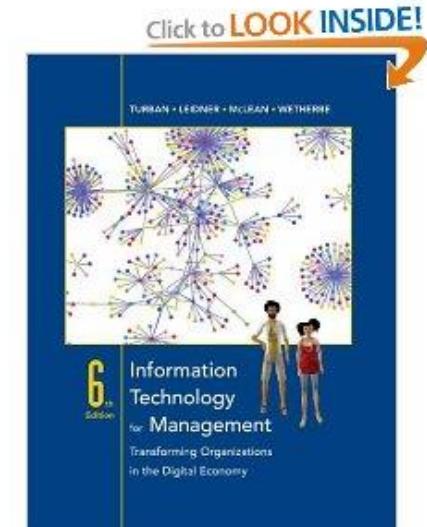
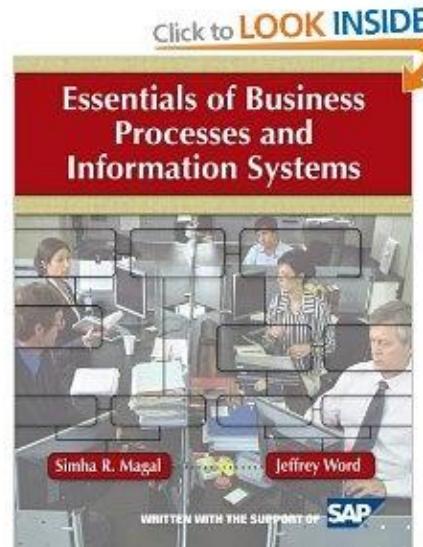
- Kontrak, Silabus dan ERP
- SAP Overview dan SAP Navigation –
- Systemwide Concepts –
- Logistics Business Process –
- SAP Logistics: –
  - Procurement
  - Sales Order
- SAP Logistics: Production –
- **TTS (teori) di Moodle**

# **Silabus (2)**

- Financials Business Process –
- SAP Financial –
  - Accounting Foundation
  - Financial Accounting
- SAP Financial: Management Acc –
- SAP Human Resources –
- mySAP Technology –
  - Client Server Architecture
  - The Database
  - **Latihan ujian**
- Business Simulation –
- MonsoonSIM 1 –
- MonsoonSIM 2 -
- **TAS (Ujian SAP) – online di System Edugate**

# Referensi

- Buku Materi SAP01 resmi
- Simha R. Magal & Jeffry Word, **Essentials of Business Processes and Information Systems**, John Wiley & Sons, Inc., 2009
- Turban, Leidner, McLean, Wetherbe, **Information Technology for Management: Transforming Organizations in the Digital Economy, 6<sup>th</sup> Edition**, John Wiley & Sons, Inc., 2008



# Bobot Penilaian

- TTS (teori) : 20%
- TAS (Ujian SAP) : 40%
  - Lulus : 40%
  - Tidak lulus : 5%
- Latihan Lab : 40% ( $8 \times 5\%$ )
  - Screenshot semua latihan di Word
  - Diberi penjelasan dan dikumpulkan ke asisten

# Penilaian

Penilaian bersifat mutlak dengan aturan:

A      A-      B+      B      B-      C+      C      D      E

$\geq 85$     $\geq 80$     $\geq 75$     $\geq 70$     $\geq 65$     $\geq 60$     $\geq 55$     $\geq 45$    0

# TTS dan TAS

- TTS: Materi dari awal hingga sebelum TTS, bentuknya tes teori
  - Menggunakan Moodle
  - Bentuk soal: pilihan ganda dan B/S!
- TAS: ujian SAP01 resmi

# Peraturan

- Harap tenang selama kuliah berlangsung
- Saling menghargai, saling menghormati
- Peraturan absensi mengikuti aturan Universitas (**75%**)
- Kurang dari 75% tidak diijinkan UAS

# Peraturan

- Modul **SAP01** harus di bawa/dibuka selama praktikum!
- Siapkan pas foto untuk kartu ujian SAP
  - Template di Moodle
- Praktikum menggunakan **SAP Logon**
  - SAP Client – SAP GUI
  - Ujian: <http://edugate.or.id/exam/>
- Manfaat Praktikum Keahlian Khusus (SAP):
  - Harga sertifikasi murah
  - Daya tawar perusahaan

# TTS Moodle

- Alamat: <https://moodle.fti.ukdw.ac.id>
- Daftar / gunakan akun Moodle anda!
  - Gunakan email @ti anda
- Mata kuliah:  
<https://lms.ukdw.ac.id/course/view.php?id=971> (**SAP - Gasal 2023/2024**)
- Enrollment key: **SAP-PraKKGs2324!**

# Jenis Sertifikasi SAP

## Certification of Key User

- Sertifikat ini di dapat setelah mengambil program UAP (University Alliance Program / yang biasa anda dapat setelah kursus di universitas yang ada kerjasama dengan UAP),
- Disini yang di pelajari hanya fundamental (fundamental dari perkenalan tentang SAP secara overall dan fundamental dari penjurusannya seperti ABAB,FI,CO dll),
- Sertifikat ini di keluarkan oleh regional misalnya di Indonesia dikeluarkan oleh SAP Indonesia (durasi +- 32 jam)

# Jenis Sertifikasi SAP

## Certificate of Associate Consultant

- sertifikat ini biasa di keluarkan setelah seseorang mengikuti akademi, seseorang bisa mengambil sertifikat ini tanpa harus mendapatkan *certification of attendance*, karena yang diajarkan di akademi ini mulai dari fundamental + bisnis proses + konfigurasi, dan sertifikatnya dikeluarkan oleh SAP Germany dan diakui Internasional.
- durasi 200 jam / 5 bulan

# Jenis Sertifikasi SAP

## **Professional Certificate of Associate Consultant**

- Seseorang baru dapat mengikuti ujian untuk mendapatkan sertifikat ini setelah mendapatkan Certificate of Associate Consultant + pengalaman implementasi SAP
- Durasi +/- 3 thn dan sertifikat ini juga dikeluarkan dari SAP Germany dan diakui internasional

## **Master Certificate of Associate Consultant**

- Seseorang baru dapat mengikuti ujian untuk mendapatkan sertifikat ini setelah mendapatkan Professional Certificate of Associate Consultant + pengalaman implementasi SAP
- Durasi +/- 8 thn dan sertifikat ini juga dikeluarkan dari SAP Germany dan diakui internasional

# Unit 1/Lesson 1

# SAP partner



BERTELSMANN  
medien. mehr Werte.



SIEMENS



SONY

RWE  
One Group. Multi Utilities.



Miele  
IMMER BESSER

BOSCH

H  
HONDA



Bayer



Coca-Cola

BASF



COLGATE-PALMOLIVE

Nestlé

EXXON

UBS

DAIMLERCHRYSLER

NOKIA



Deutsche Bank



edugate



SAP

THE BEST-RUN BUSINESSES RUN SAP

# **Tempat Ujian Sertifikasi SAP Internasional**

- <http://www.monsoonacademy.com/>
- **CityLoft Building**

Floor 23, unit 26  
Jl. K. H Mansyur Kav. 121  
Jakarta 10220  
Mobile: +62-81-8086-3127  
Fax: +62-21-2555-8672

## **STTS**

• Jl. Ngagel Jaya Tengah 73-77  
**Surabaya**, Indonesia  
Telp. 031-502 1252  
Fax. 031-5041509

- **Universitas Tarumanagara**

Mobile: +62-81- 5913 -5240 Fax: +62-21-2555-8672

- **Dloft Apartment**

Jl Sadang no 8 , Palmerah  
Kemanggisan, Jakarta - Barat ( Near Binus Campus )  
Phone : +62-21- 536536 - 87 Fax: +62-21-2555-8672

- **Telkom PDC**

- **Jl Belitung no.7, Bandung**  
Telp: +62-22 - 4262935

# Unit 1/Lesson 1

## Biaya



### SAP eAcademy SAP for Retail

Course type	eAcademy
Price	45,700,000 (Rupiah)
Student special price	Yes
Duration	5 months
Start date	Anytime
Also known as	TIRT1e
Lead to SAP certification	Yes
Books	IRT310;IRT320;IRT330;IRT370

[Read more](#)



### SAP eAcademy SAP Business All-in-One Financials

Course type	eAcademy
Price	20,800,000 (Rupiah)
Student special price	Yes
Duration	2 months
Start date	Anytime
Also known as	TA1FIe
Lead to SAP certification	Yes
Books	A1FIN

[Read more](#)



### SAP eAcademy SAP Business All-in-One Logistics

Course type	eAcademy
Price	20,800,000 (Rupiah)
Student special price	Yes
Duration	2 months
Start date	anytime
Also known as	TA1LOE
Lead to SAP certification	Yes
Books	A1LOG

[Read more](#)



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# Unit 1/Lesson 1

## Biaya (2)



### SAP eAcademy SAP BusinessObjects Planning and Consolidation 7.5

Course type	eAcademy
Price	45,700,000 (Rupiah)
Student special price	Yes
Duration	3 months (maximum)
Start date	Anytime
Also known as	Variant: TBC5E; SAP BPC, BPC Academy, BPC eAcademy
Lead to SAP certification	Yes
Books	BPC410;BPC420;BPC430;BPC440

[Read more](#)



### SAP eAcademy SAP NetWeaver Business Warehouse 7.0

Course type	eAcademy
Price	47,000,000 (Rupiah)
Student special price	Yes
Duration	5 months (maximum)
Start date	Anytime
Also known as	Variant: TBW4E; SAP BI/BW
Lead to SAP certification	Yes
Books	TBW10;TBW20;TBW42;TBW45

[Read more](#)



### SAP eAcademy PLM – Plant Maintenance & Repair

Course type	eAcademy
Price	33,900,000 (Rupiah)
Student special price	Yes
Duration	5 months (maximum)
Start date	Anytime
Also known as	Variant: TPPLM3E; SAP PM
Lead to SAP certification	Yes
Books	PLM300;PLM305;PLM310;PLM315;PLM318;TPPLM30

[Read more](#)



### SAP eAcademy ERP – Integration of Business Processes

Course type	eAcademy
Price	20,800,000 (Rupiah)
Student special price	Yes
Duration	2 months (maximum)
Start date	Anytime
Also known as	Variant: TERPE; SAP TERP10
Lead to SAP certification	Yes
Books	TERP10

[Read more](#)



### SAP eAcademy ABAP Basics

Course type	eAcademy
Price	33,900,000 (Rupiah)
Student special price	Yes
Duration	5 months (maximum)
Start date	Anytime
Also known as	Variant: TAW1E; SAP ABAP
Lead to SAP certification	Yes
Books	TAW10;TAW12

[Read more](#)

# Materi

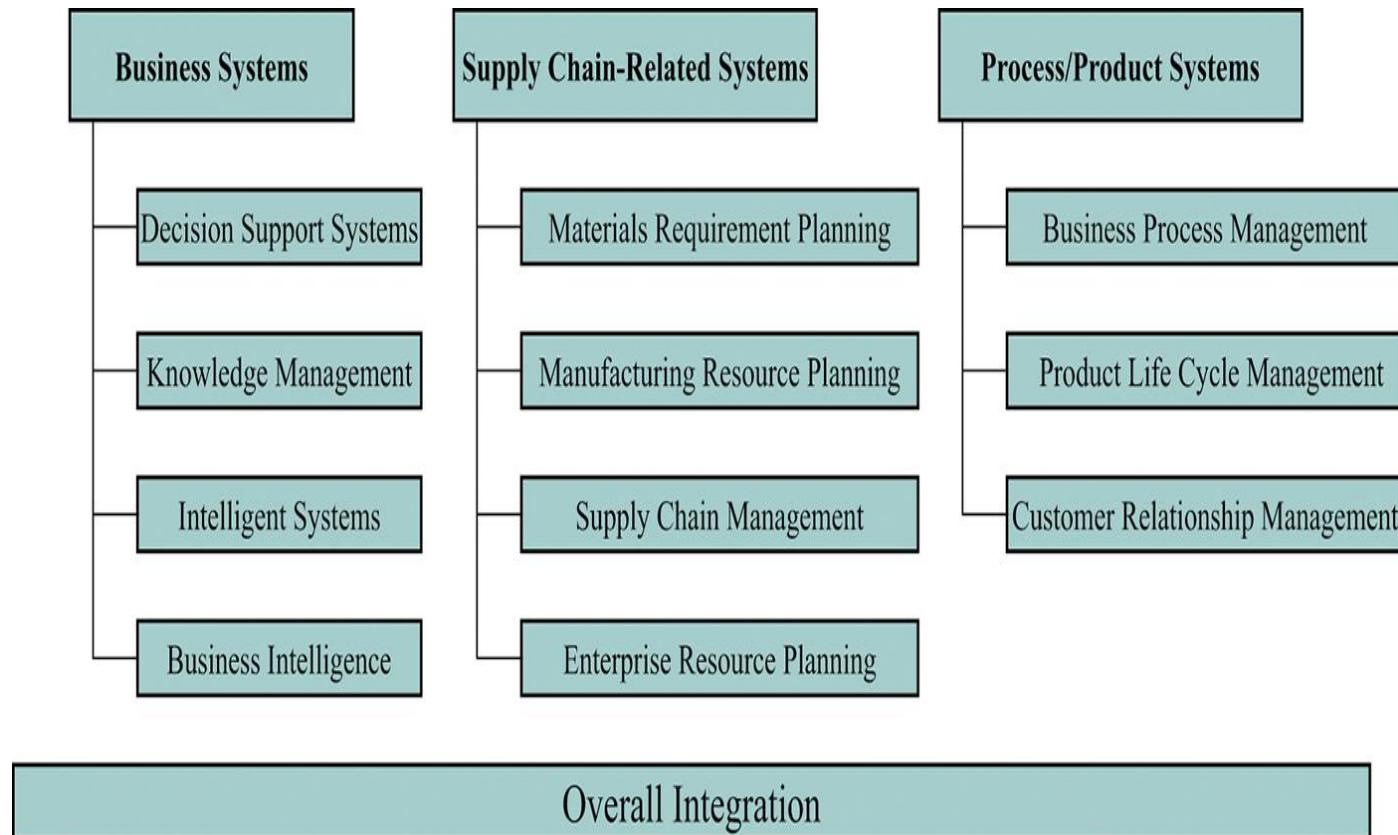
- Enterprise Resource Planning (ERP)
- ERP Software
- SAP Overview

# Enterprise

- What is Enterprise?
- Enterprise needs **data, information, and knowledge** to manage all of the business processes
  - Needs software
- Software that manage all of the resources, manage all of the business processes is **Enterprise Systems Software**  
**(Enterprise Resources Planning Software)**

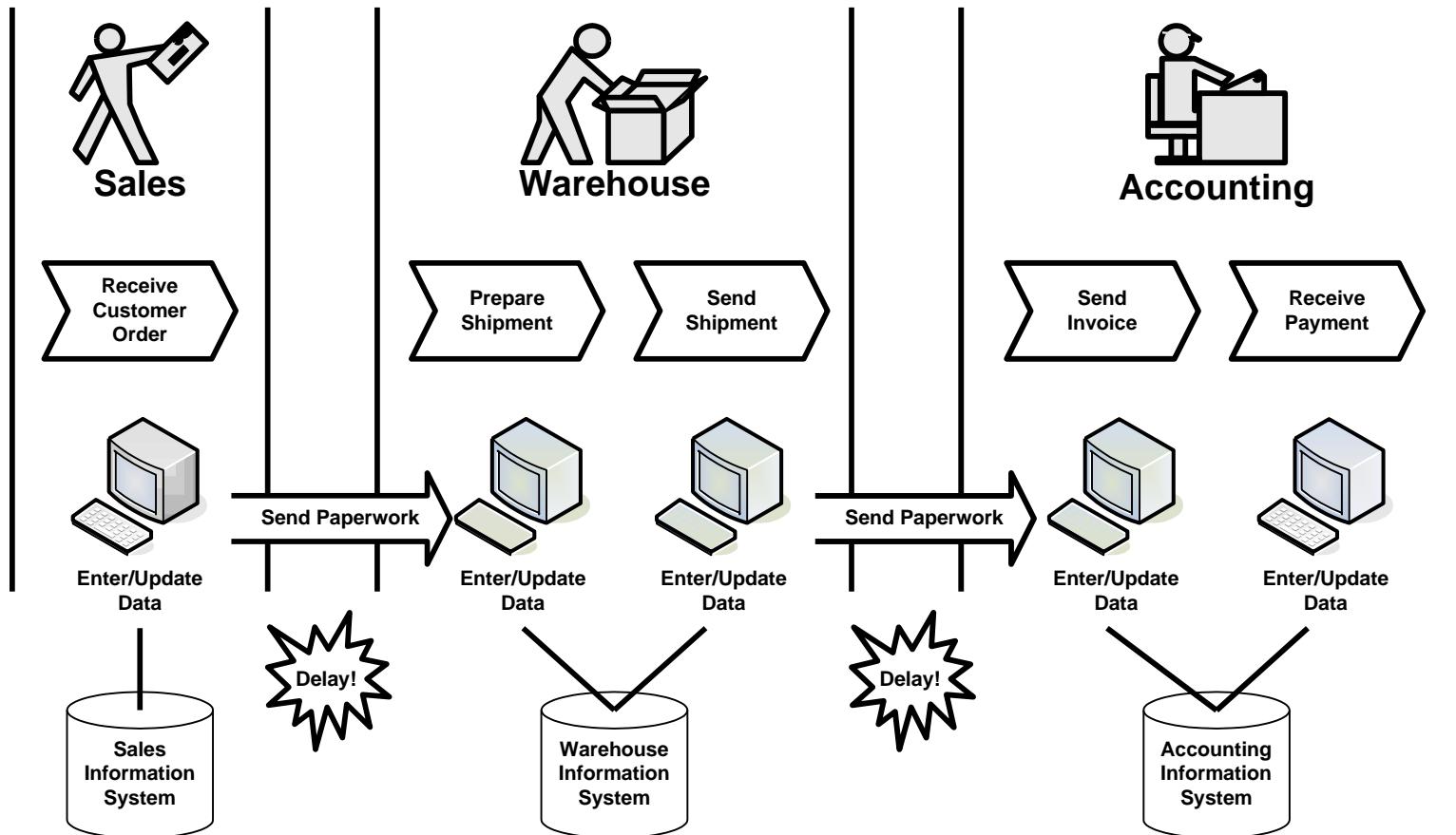
# Unit 1/Lesson 1

# Enterprise System Management



**Overview of enterprise system in Enterprise**

# Yesterday : Process using functional systems (departmental)



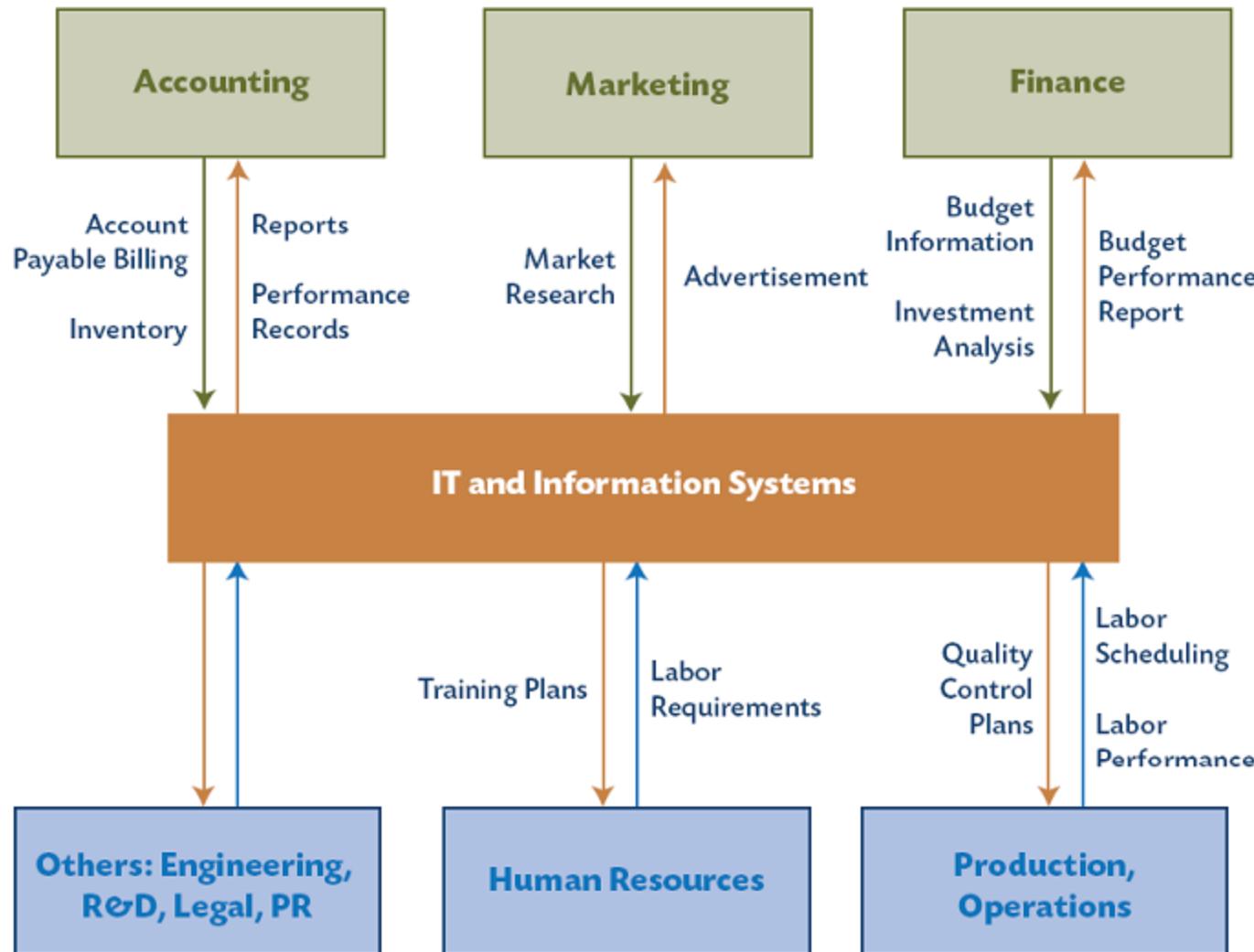
# Functional systems

- Typically contained **within a department**
  - Islands of data
  - Separated
- Applications **independently developed** and deployed by **each departments**



# Unit 1/Lesson 1

# Functional information systems data flow

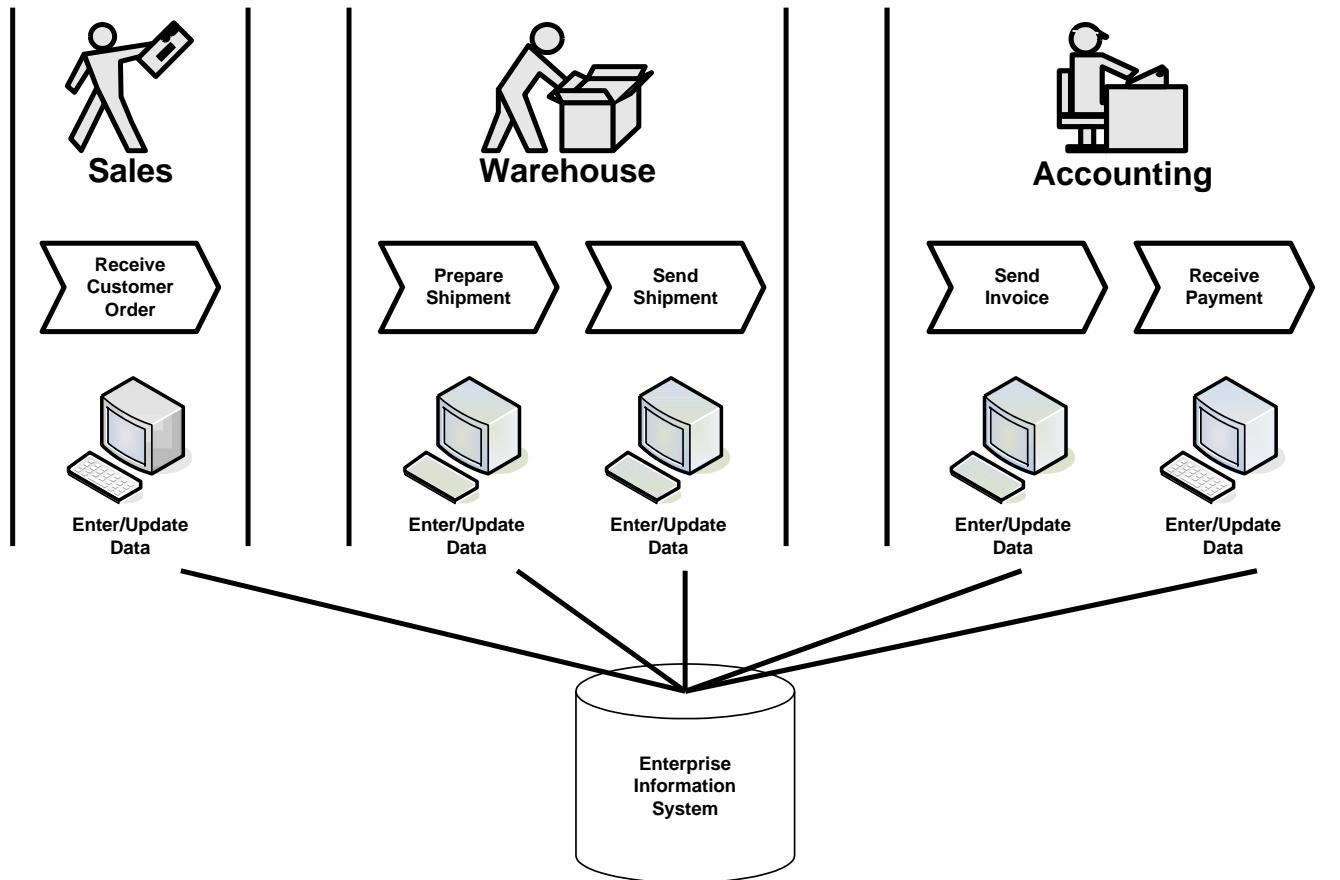


# Problems with function based application

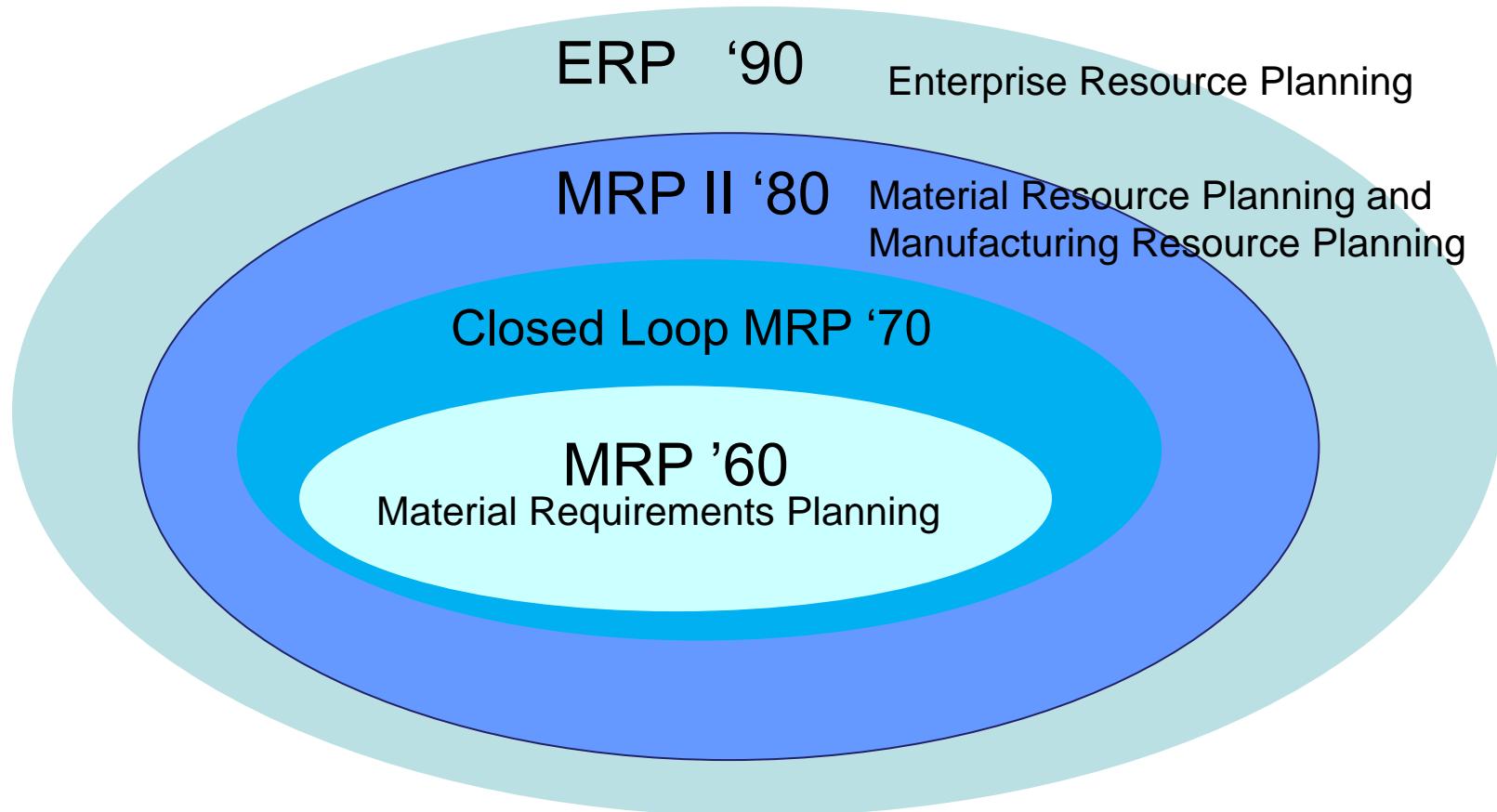
- Problem sharing of data between systems
- Data duplication
- Data inconsistency
- Applications that don't talk to one another
- Limited or lack of integrated information
- Increased expenses

# Unit 1/Lesson 1

# Now: Processes using Enterprise Systems



# Evolution of ERP (2)



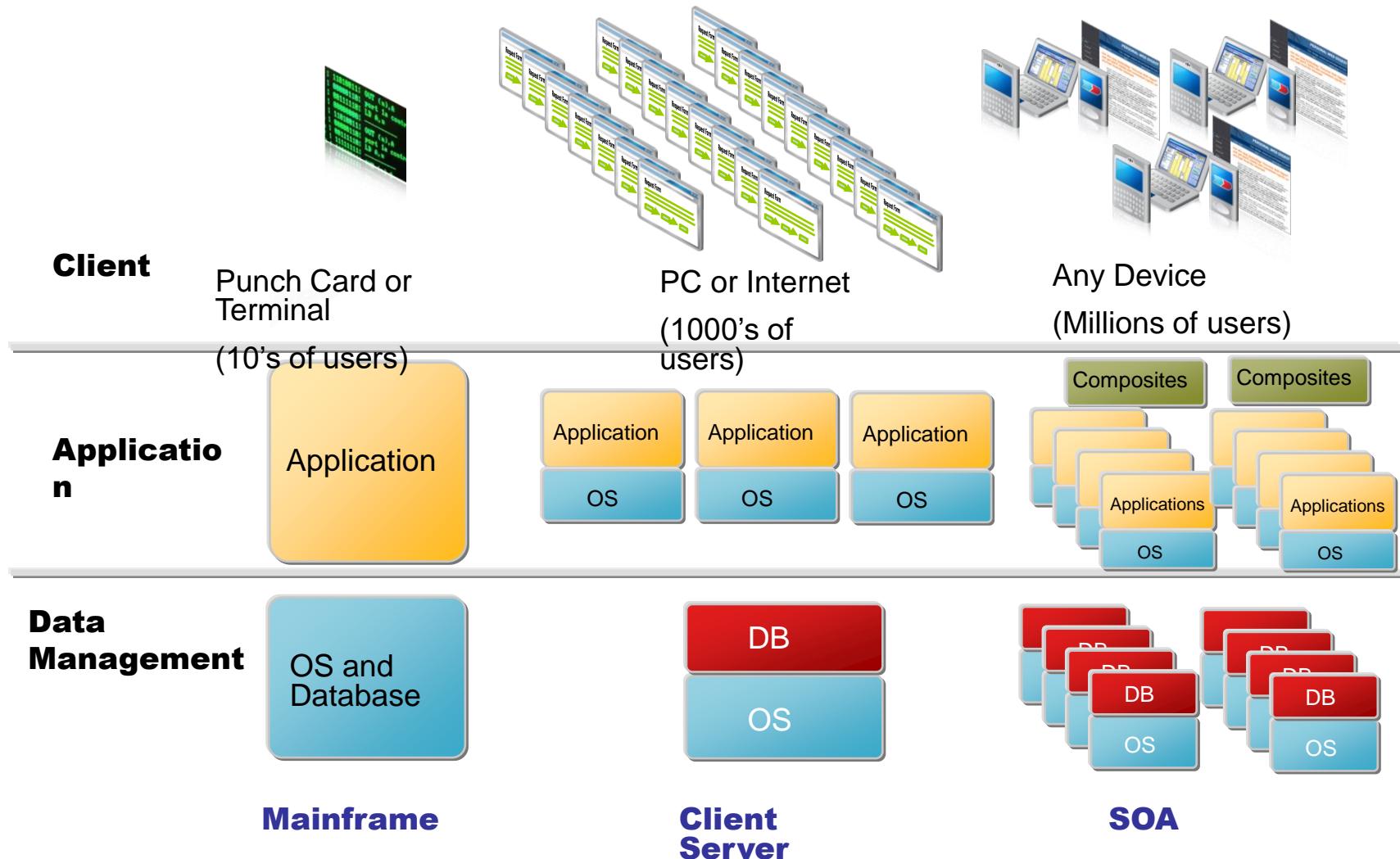
MRP and MRP II only focus on manufacturing

# Enterprise Systems Evolution

- Three stages of evolution
  - Stage 1: Stand-alone Mainframe Systems
  - Stage 2: Client-Server Architecture
  - Stage 3: Service-Oriented Architecture (SOA)
    - Web services

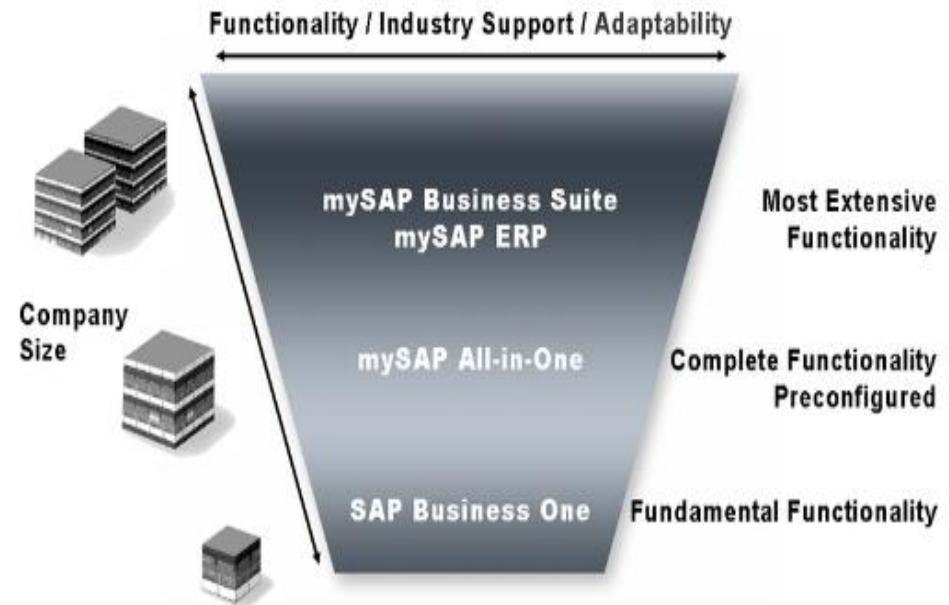
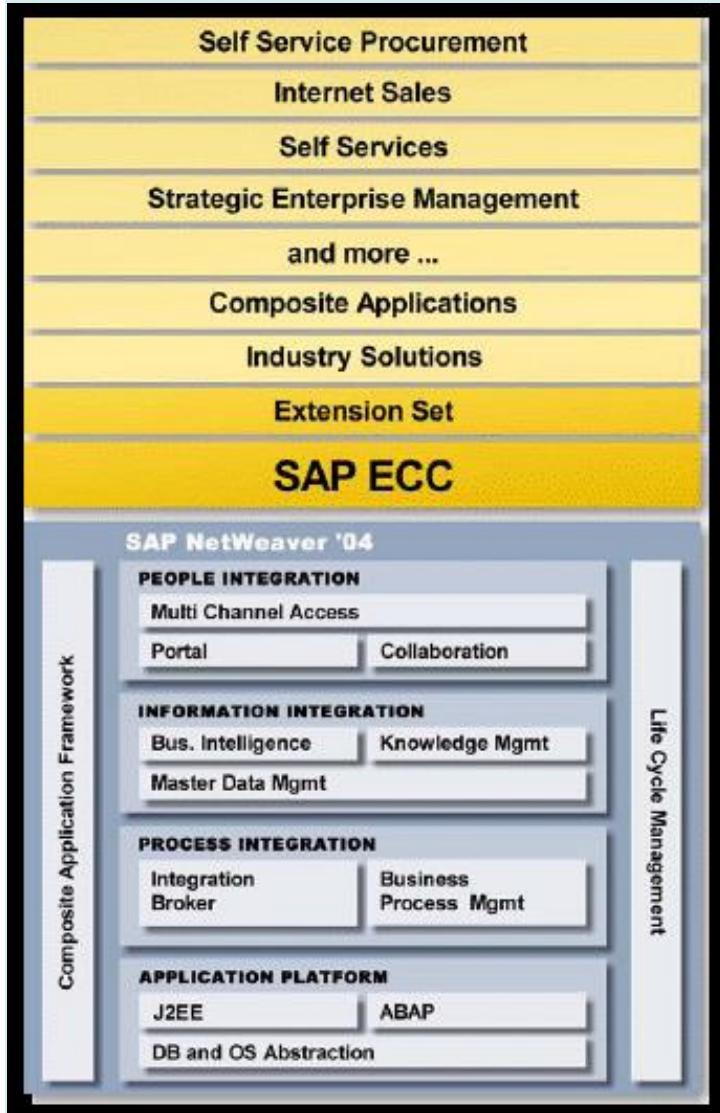
# Unit 1/Lesson 1

## Multi platform ES



# Unit 1/Lesson 1

# Contoh ERP: MySAP Architecture



## **Characteristics**

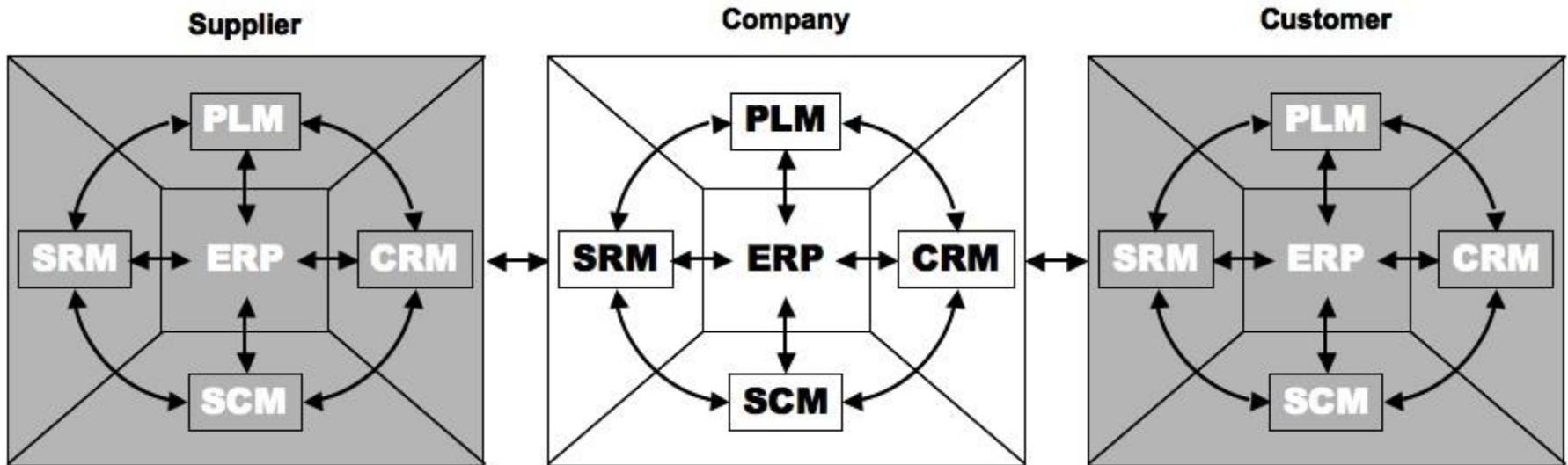
- Integrated with other departments
- Flexible (change ready)
- Open (compatible with other technology)
- Secure
- Technology trend support
- Standard support

# Component of Enterprise Systems

- The ES Application Suite
  - **Enterprise Resource Planning (ERP)**
  - Supply Chain Management (SCM)
  - Supplier Relationship Management (SRM)
  - Product Lifecycle Management (PLM)
  - Human Capital Management (HCM)

## Unit 1/Lesson 1

# The ERP application suite

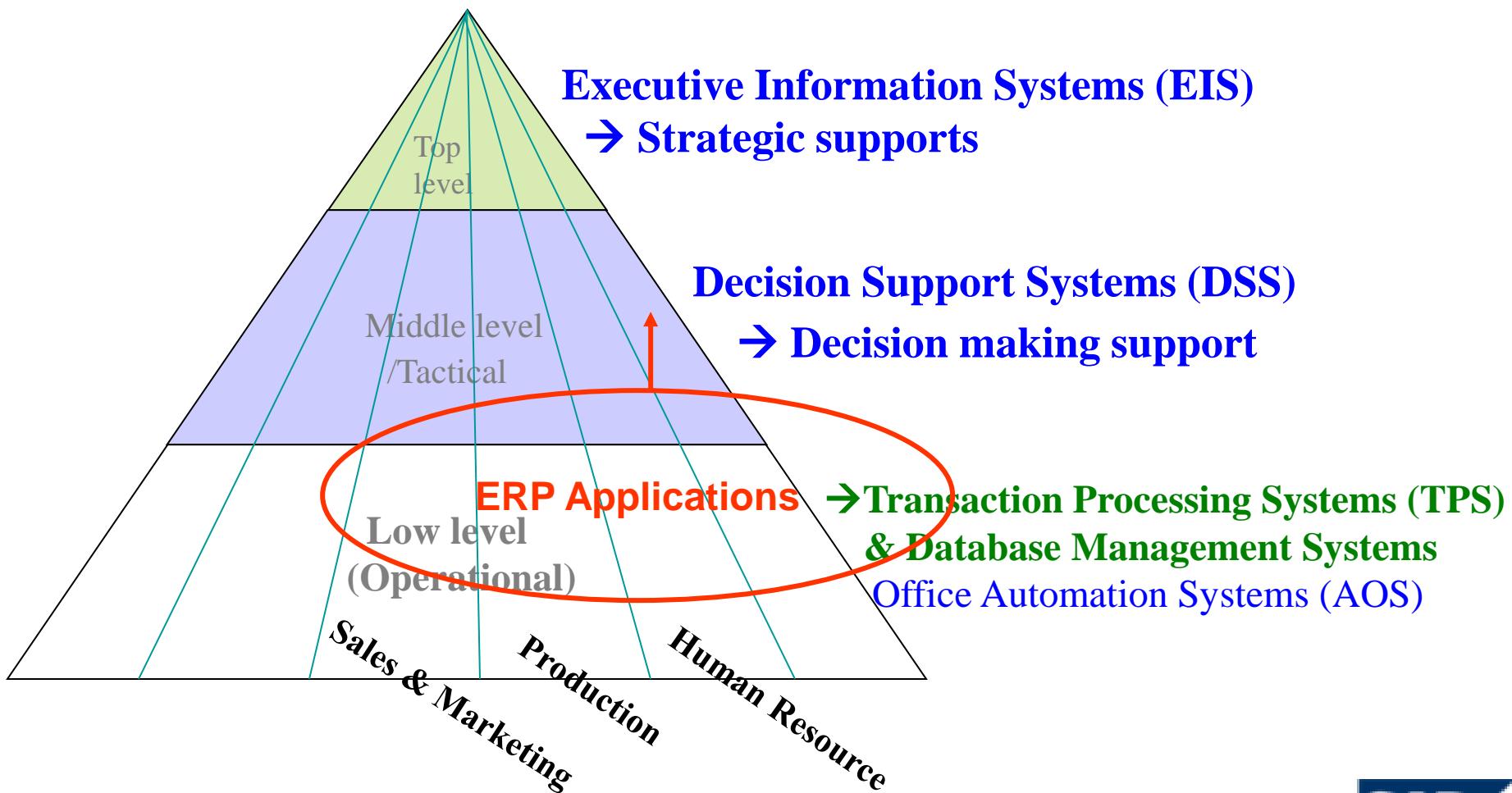


## ERP

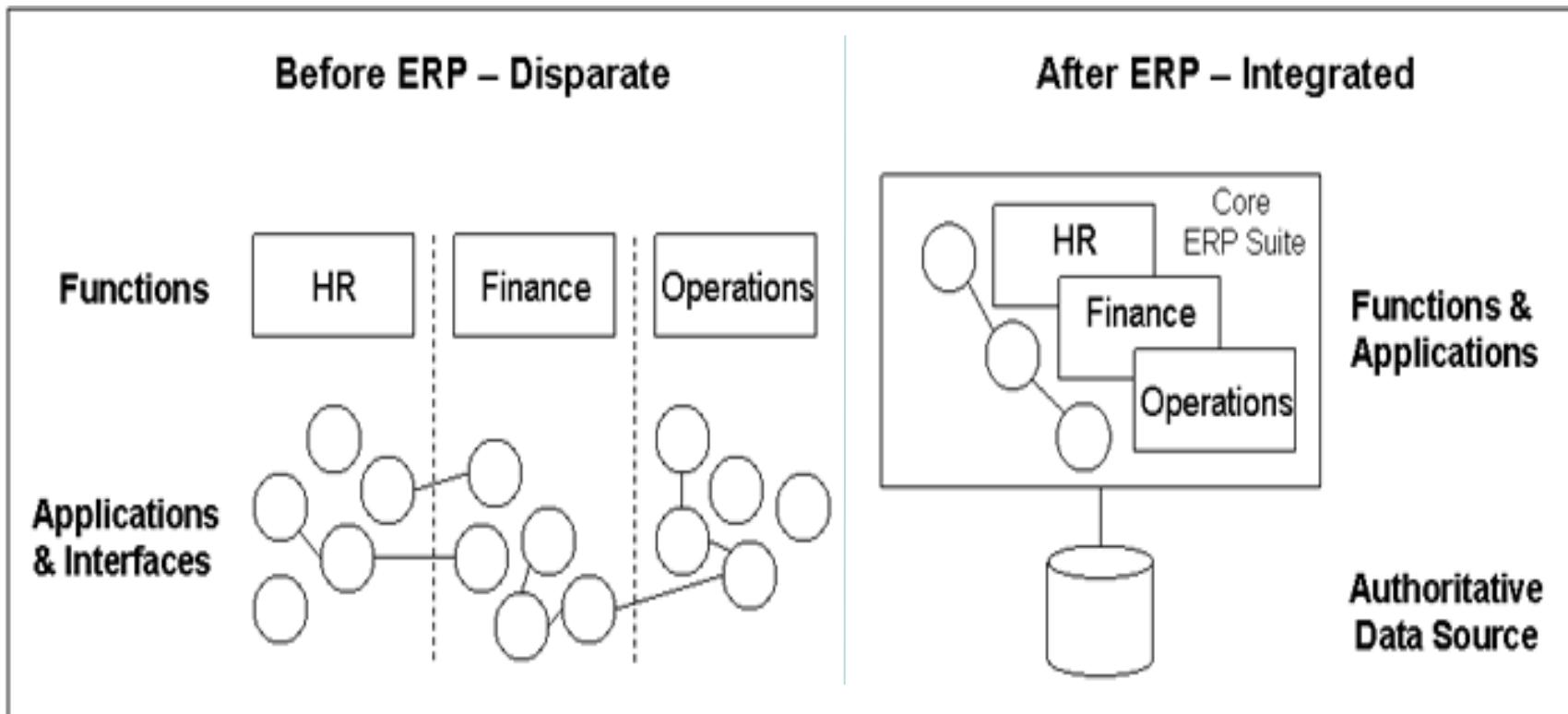
- Software that integrates planning, management & use of **all resources** in **entire enterprise**.
- Comprises **sets** of applications that **automate** back-end operations (ex: financial, inventory management & scheduling).
- Benefits range from increased **efficiency** to improved quality, productivity & profitability.

# Resources

- In the enterprise, resource are all assets:
  - aset keuangan,
  - SDM,
  - konsumen,
  - supplier,
  - barang,
  - teknologi,
  - strategi (proses bisnis)



# Unit 1 ERP untuk integrasi dalam organisasi



## Vendors of ERP

- SAP (mySAP)
- Oracle Business Suite
- JD Edwards (telah diakuisisi Oracle)
- Peoplesoft (telah diakuisisi Oracle)
- Compiere (Opensource)
- OpenBravo
- TinyERP
- OpenERP

## Unit 1/Lesson 1

# Vendor ERP Logo



IT'S ALL ABOUT THE CUSTOMER™



Alliance Partner



## **Unit 1/Lesson 1**

# mySAP

The screenshot shows the SAP HR Application Center interface. The top menu bar includes 'Appraisal Template', 'Edit', 'Goto', 'System', and 'Help'. The SAP logo is in the top right corner. A toolbar with various icons is above the main content area. The title bar says 'Display 'Development Plan - Executive Fast Track''. On the left, there's a navigation tree under 'Category Group / Category / Template' with several collapsed categories like 'Business Events', 'E-Recruiting', and 'Personnel Appraisals'. The 'Development Plan - Executive Fast Track' node is expanded, showing its sub-items: 'Development Activities', 'Objectives', 'Overall Rating', 'PC4YOU: Performance Planning 2003', 'Worldclass Management Objectives', 'Talent Management', 'Union Forms', and 'SAP Learning Solution'. Under 'SAP Learning Solution', there are two items: 'Training course appraisal: Classroom' and 'Training course appraisal: WBT'. The main right-hand panel displays the appraisal template details. It shows the 'Appraisal template' as 'Development Plan - Executive Fast Track', 'Status' as 'Released', 'Category Group' as 'Personnel Appraisals', 'Last Changed by' as 'Maurice HAGEN', 'Category' as 'Performance Management', and 'Last Changed' as '04.08.2006'. Below this, tabs for 'Description', 'Layout', 'Columns', 'Column Access', 'Value Descriptions', 'Roles', and 'Proces...' are visible. The 'Column Access' tab is selected, showing a table with columns for 'Column', 'Column Owner', and several checkboxes for 'Planning O...', 'Final Appra...', and 'Other Final' phases. The first row is for 'Objective Setting' and the second for 'Final Appraisal', both set to 'Appraiser' as the owner. Numerous checkboxes are present in the 'Change', 'Display', and 'Hide' columns for each phase.

## THE BEST-RUN BUSINESSES RUN SAFELY

 SAP

# Unit 1/Lesson 1

# TinyERP

Tiny ERP

Fichier Utilisateur Formulaire Options Plugins Aide

Menu Transfers

Description : Statement 14/001 Reference :

Transaction Type : Incoming Customer Payment Partner : ADRIANI

Payment Date : 12 05 2005 Project :

Amount : 174.00 Amount Changed : 0.00

Source Account : Main Receivable Destination Account : Bank Account

State : draft Confirm Payment

Related Invoices

Ajouter Enlever

ID Name

Invoices :

Adjustement and corrections

Adjustement amount 0.0000 Adjustement Account

State: Nouveau document

N Nouveau S Sauver D Effacer ... Demo User Requêtes: Pas de requête

The screenshot shows the TinyERP application window. At the top, there's a menu bar with 'Fichier', 'Utilisateur', 'Formulaire', 'Options', 'Plugins', and 'Aide'. Below the menu is a toolbar with various icons. The main area has tabs for 'Menu' and 'Transfers', with 'Transfers' currently selected. It displays a form for a payment transaction. The form includes fields for 'Description' (Statement 14/001), 'Reference', 'Transaction Type' (set to 'Incoming Customer Payment'), 'Partner' (ADRIANI), 'Payment Date' (12 05 2005), 'Project', 'Amount' (174.00), 'Amount Changed' (0.00), 'Source Account' (Main Receivable), 'Destination Account' (Bank Account), and 'State' (draft). There's a 'Confirm Payment' button. Below this, there's a section for 'Related Invoices' with buttons for 'Ajouter' and 'Enlever' and a table with columns for 'ID' and 'Name'. The bottom part of the window shows 'Adjustement and corrections' with fields for 'Adjustement amount' (0.0000) and 'Adjustement Account', and a 'State' field set to 'Nouveau document'. At the very bottom, there are buttons for 'N Nouveau', 'S Sauver', 'D Effacer', 'Demo User', and 'Requêtes: Pas de requête'.

THE BEST-RUN BUSINESSES RUN SAP



# Unit 1/Lesson 1

# OpenERP

The screenshot shows the OpenERP web interface for managing sales orders. The top navigation bar includes links for SUPPORT, FEEDBACK, and various modules like SALES, PURCHASES, WAREHOUSE, MANUFACTURING, PROJECT, ACCOUNTING, HUMAN RESOURCES, and TOOLS. The left sidebar provides quick access to Sales, Opportunities, Sales Orders, Address Book, Meetings, Phone Calls, Products, and Reporting. The main content area displays the 'Sales Orders' screen for Order Reference SO006. It shows fields for Order Reference (SO006), Ordered Date (11/08/2011), Paid (unchecked), Shop (OpenERP S.A.), Customer Reference, Delivered (unchecked), and Customer (ASUSTek). Below this, there are tabs for 'Sales Order' and 'Other Information'. The 'Sales Order Lines' section is currently active, showing a table with columns for DESCRIPTION, QTY, UOM, DISCOUNT (%), UNIT PRICE, and SUBTOTAL. At the bottom, there are buttons for Compute, Cancel Order (with a red X icon), and Confirm Order (with a green checkmark icon). The footer of the page features the SAP logo and the tagline 'THE BEST-RUN BUSINESSES RUN SAP'.



THE BEST-RUN BUSINESSES RUN SAP

# Unit 1/Lesson 1

# SAP ERP Solution Map

End-User Service Delivery							
Analytics	Financial Analytics		Operations Analytics			Workforce Analytics	
Financials	Financial Supply Chain Management		Treasury		Financial Accounting	Management Accounting	Corporate Governance
Human Capital Management	Talent Management		Workforce Process Management			Workforce Deployment	
Procurement and Logistics Execution	Procurement		Inventory and Warehouse Management		Inbound and Outbound Logistics	Transportation Management	
Product Development and Manufacturing	Production Planning		Manufacturing Execution		Product Development	Life-Cycle Data Management	
Sales and Service	Sales Order Management			Aftermarket Sales and Service		Professional-Service Delivery	
Corporate Services	Real Estate Management	Enterprise Asset Management	Project and Portfolio Management	Travel Management	Environment, Health, and Safety Compliance Mgmt.	Quality Management	Global Trade Services

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Shared Service Delivery

SAP NetWeaver



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# Modul ERP (tipikal mySAP) :

(Source : mySAP)

- mySAP Financials
- mySAP Human Resource
- mySAP Order Fulfillment / Sales
- mySAP Procurement
- mySAP Manufacturing
- mySAP Technology ABAP Workbench
- mySAP Technology Administration
- mySAP Plant Maintenance
- mySAP Planning
- mySAP Project Management

**NEXT**

- SAP Bab 1 dan 2



## SAP01

# SAP Overview dan Navigation

*anton@ti.ukdw.ac.id*



## Unit 1/Lesson 1

# SAP Chap 1

# What is SAP

- **Systems, Application, Products in Data Processing.**
- ERP software facilitates the flow of information among all the processes of an organization's supply chain .
- The ERP software market leader is SAP AG with the SAP R/3 System  
German-based software company  
Founded in 1972  
Four former IBM employees
- To track and manage, in real-time, sales, production, finance accounting and human resources in an enterprise.



# SAP History

- 1972: 5 org pegawai IBM -> SAP (*System Analysis and Program Development*)
  - Software dari Jerman
  - Tujuannya untuk mengembangkan standard aplikasi untuk real-time business
- 1973: Financial Accounting complete -> R/I System
- 1974: Dipamerkan -> dpt 40 perusahaan client
- 1976: SAP (*System Application and Products in Data Processing*) -> SAP GmbH
- 1977: SAP berkembang keluar jerman
  - Untuk sales n distribution

# SAP History

- 1979: SAP menggunakan server Siemens 7738
- 1982: ultah yg ke 10
- 1988: SAP GmH berubah menjadi SAP AG
- 1991: SAP mengeluarkan versi R/3
- 1997: SAP ultah ke 25
- 1999: mysap.com -> berbasis web
- 2003: mySAP business suite
- 2004: sudah menggunakan enterprise service architectures
- The newest version of the suite is SAP ECC 6.0.
- Karyawan SAP -> 30rb orang
- Web resmi: [www.sap.com](http://www.sap.com)

# Where is SAP

- No. 1 in Enterprise Applications Software (2018)
- No. 3 in software overall worldwide
- 75% of Global Organization run SAP
- Market leading software solutions for large, midsize companies

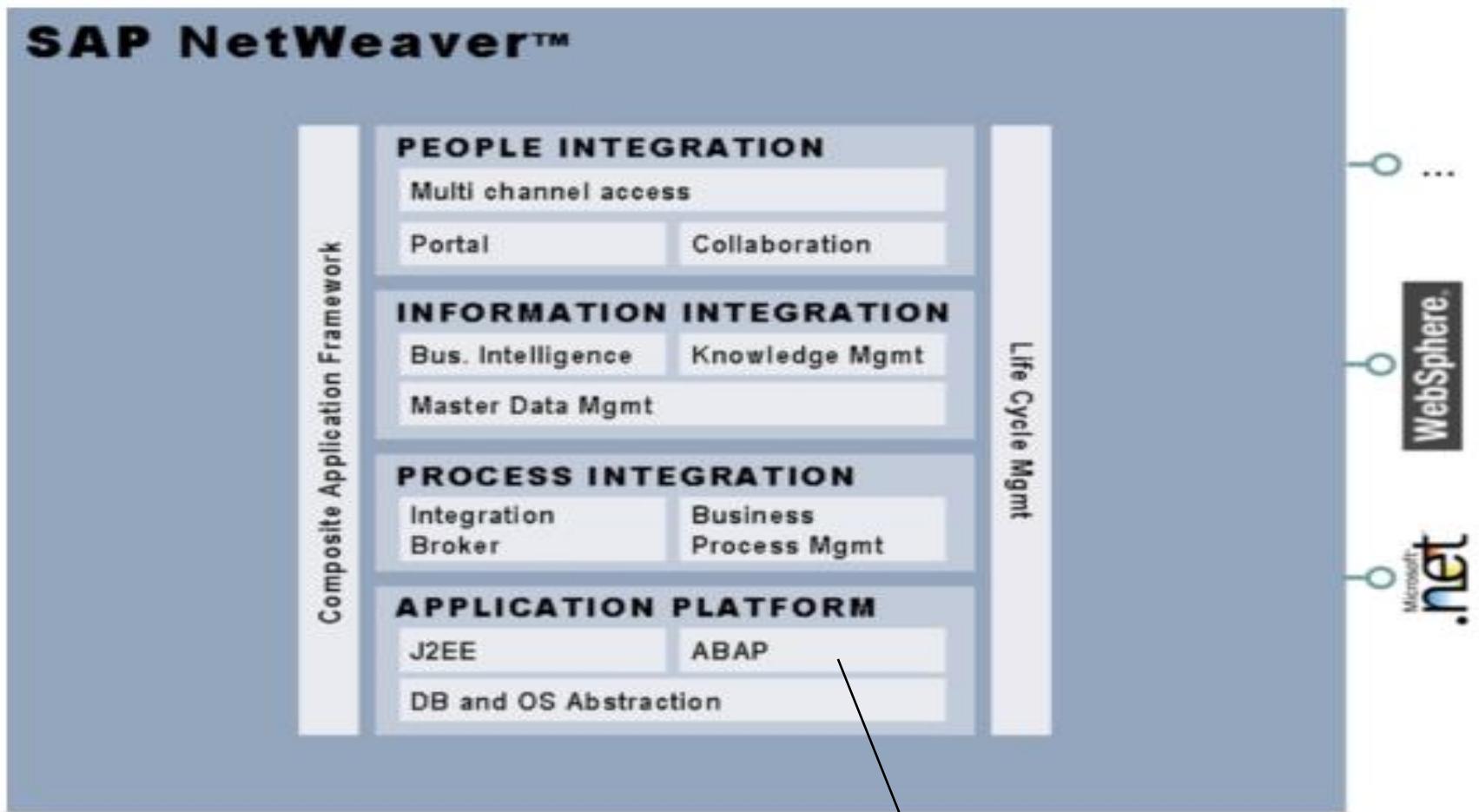
# ERP

- Istilah ERP muncul tahun 1980an
- ERP berbasis web: 1990an
- SAP Integrated Business Suite & Application: 2000an
  - SAP NetWeaver Teknologi
    - mySAP ERP

# Teknologi: SAPNetWeaver

- People integration
  - Human Resources Management
- Information integration
  - All data relevant to companies
- Process integration
  - All processes that run across system in heterogeneous platform

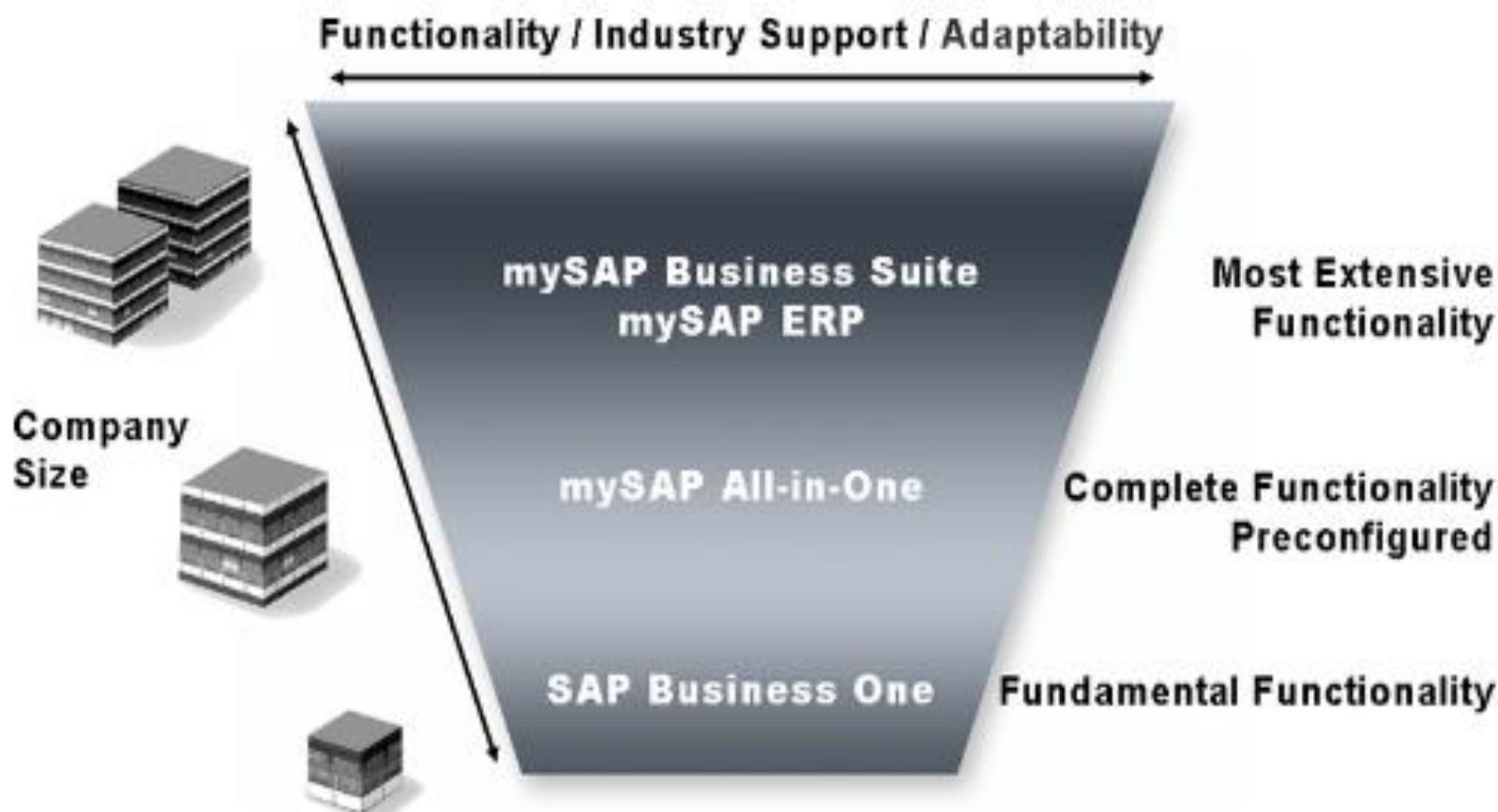
# Teknologi: SAP Netweaver



# mySAP ERP

- Bagian inti dari SAP NetWeaver
- Bagian yang bisa diimplementasikan ke client
- Inti dari produk SAP:
  - mySAP ERP Financial
  - mySAP ERP Human Capital Management

# Produk SAP



# Produk-produk MySAP ERP

- **mySAP Business Suite:** large company
  - Complete
- **mySAP All in One:** average company
  - Preconfigure functionality
- **SAP Business one:** small company
  - Fundamental function
  - Core Fungsional: SAP myERP
    - HR dan FI

# mySAP Business Suite

- Core function, plus
  - customer relationship management,
  - product life cycle management,
    - Development, quality, dan maintenance
  - supply chain management,
    - Coordination of raw material, information, and financial
  - supplier relationship management
    - Untuk purchasing

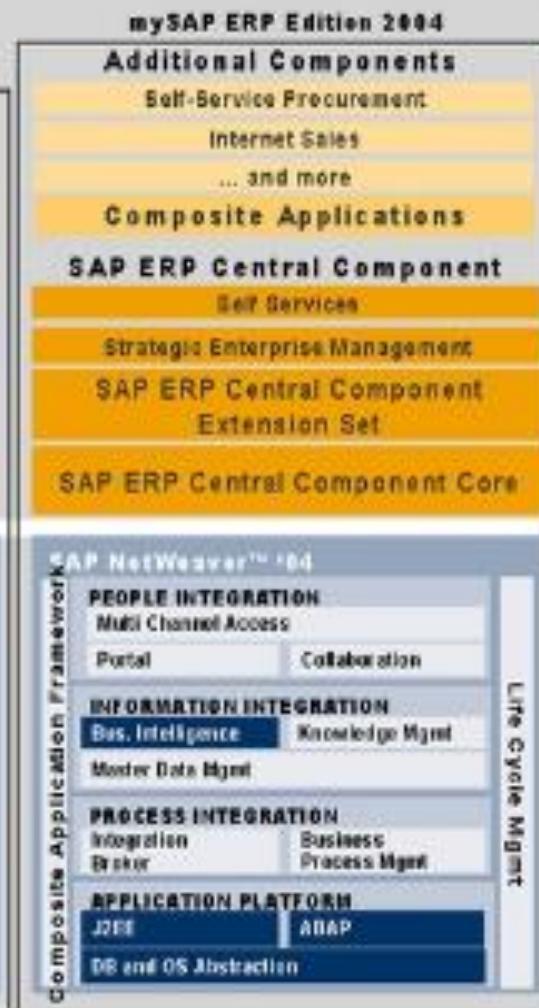
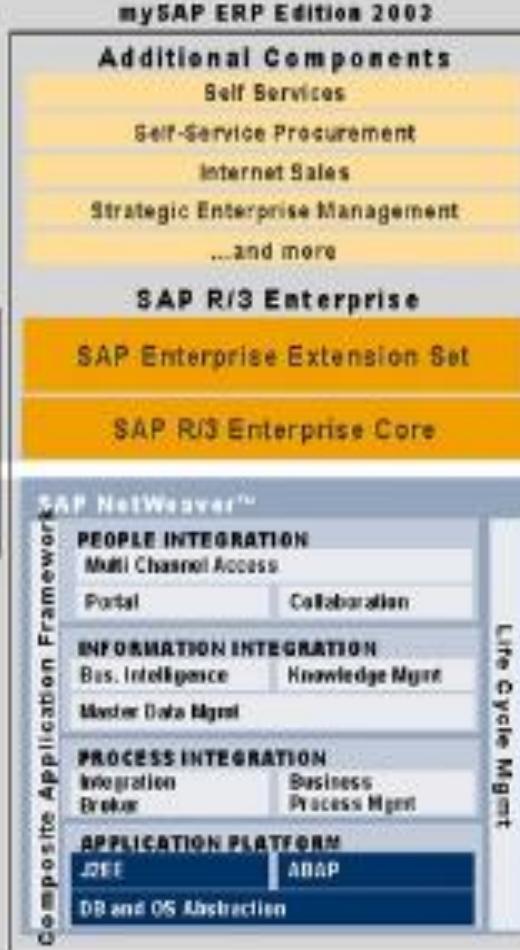
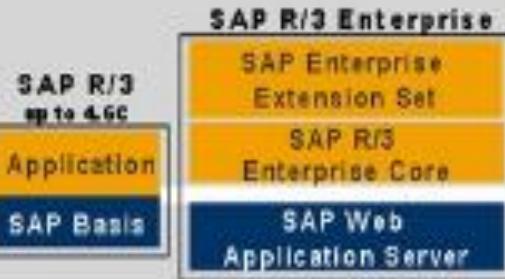
# SAP All in One: Industry Solution

- Aerospace/Defense
- Automotive
- Banking
- Chemicals
- Consumer Products
- Engineering/Construction
- Financial Svc Provider
- Healthcare
- High Tech
- Higher Education/Research
- Insurance
- Media
- Mill Products
- Mining
- Oil & Gas
- Pharmaceuticals
- Public Sector
- Retail
- Service Providers
- Telecommunications
- Utilities
- ...so on ...

# Unit 1/Lesson 1

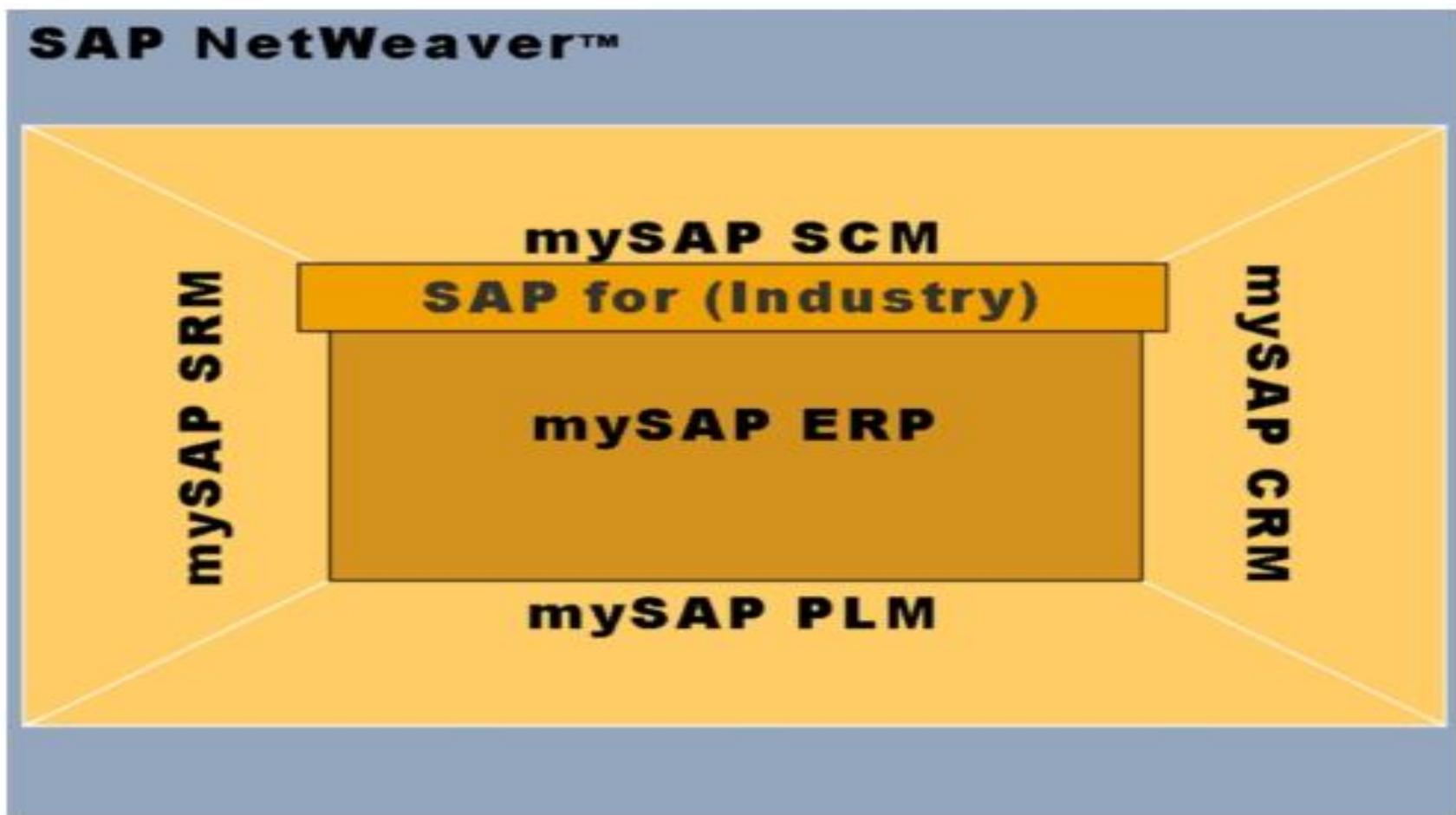
# Perkembangan

Application



Technology

# Industry specific - custom



# mySAP Business One

- Core function
- Rapid implementation
- Lower costs

# Unit 1/Lesson 1 SAP Modules

## FI (Financial)

- \* General ledger
- \* Book close
- \* Tax
- \* Accounts receivable
- \* Accounts payable
- \* Asset Management (SAP AM)
- \* Consolidation
- \* Special ledgers

## CO: Controlling

- \* Cost elements
- \* Cost centres
- \* Profit centres
- \* Internal orders
- \* Activity based costing
- \* Product costing

## PS: Project System

- \* Make to order
- \* Plant shut downs (as a project)
- \* Third party billing (on the back of a project)

## HR: Human Resources

- \* Employment history
- \* Payroll
- \* Training
- \* Career management
- \* Succession planning

## PM: Plant Maintenance

- \* Labour
- \* Material
- \* Down time and outages

## MM: Material Management

- \* Requisitions
- \* Purchase orders
- \* Goods receipts
- \* Accounts payable
- \* Inventory management
- \* BOM's
- \* Master raw materials, finished goods etc

## QM: Quality Management

- \* Planning
- \* Execution
- \* Inspections
- \* Certificates

## PP: Production Planning

- \* Capacity planning
- \* Master production scheduling
- \* Material requirements planning
- \* Shop floor

## SD: Sales and Distribution

- \* RFQ
- \* Sales orders
- \* Pricing
- \* Picking (and other warehouse processes)
- \* Packing
- \* Shipping

## BW: Business Warehouse

- \* Data extraction from source systems
- \* Some technical and functional transformation of the data
- \* Storage of the data in what are called Infoproviders
- \* Reporting (which uses Infoproviders)

## ABAP: Advanced Business Application Programming

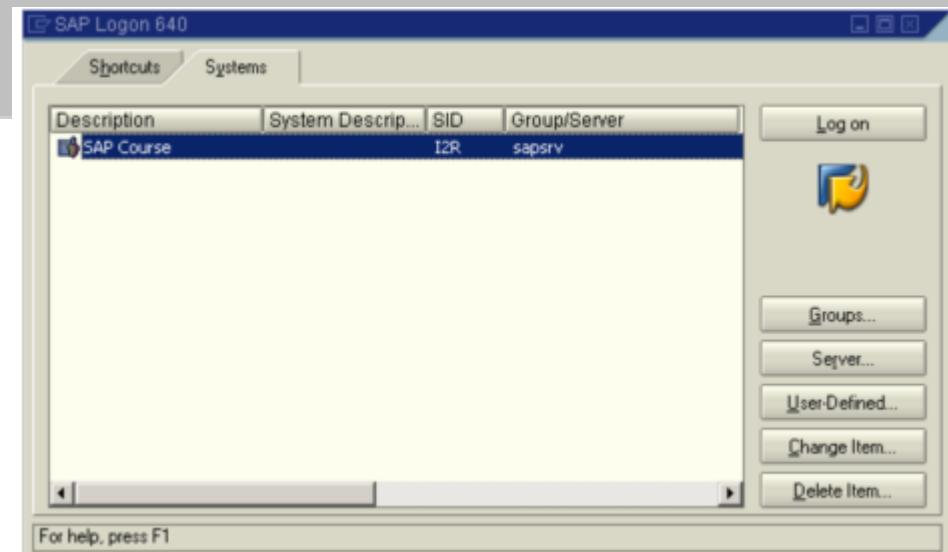
Is not really a module - it stands for Advanced Business Application Programming and this is the structured programming language for custom development including reports.



# Unit 2/Lesson 1

## Navigation

- SAP Client
  - SAP GUI (Windows)
    - 700mb
  - SAP GUI (Java)
- **Edugate.or.id/upp**
- SAP Logon
  - Client: **lihat excel**
  - User: **lihat excel**
    - Password:
  - <http://edugate.or.id/upp>

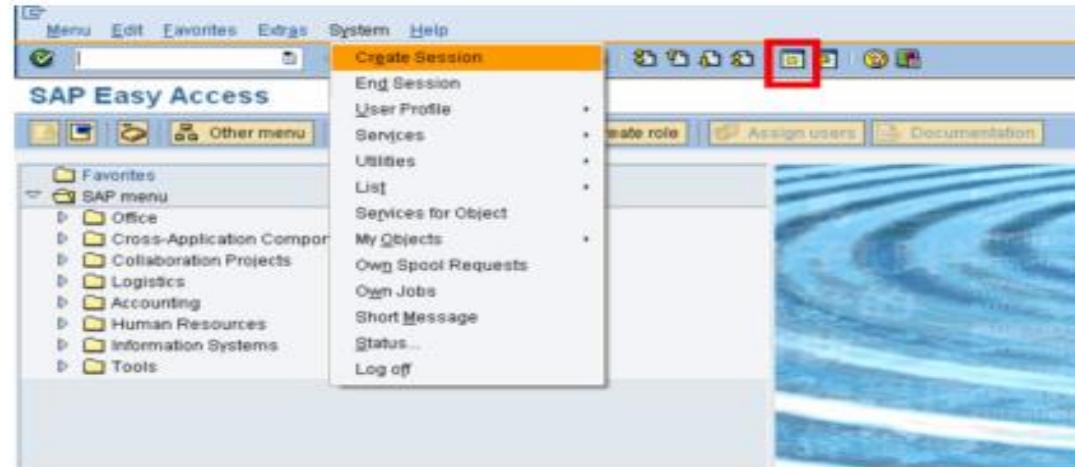


# Server Configuration Desktop

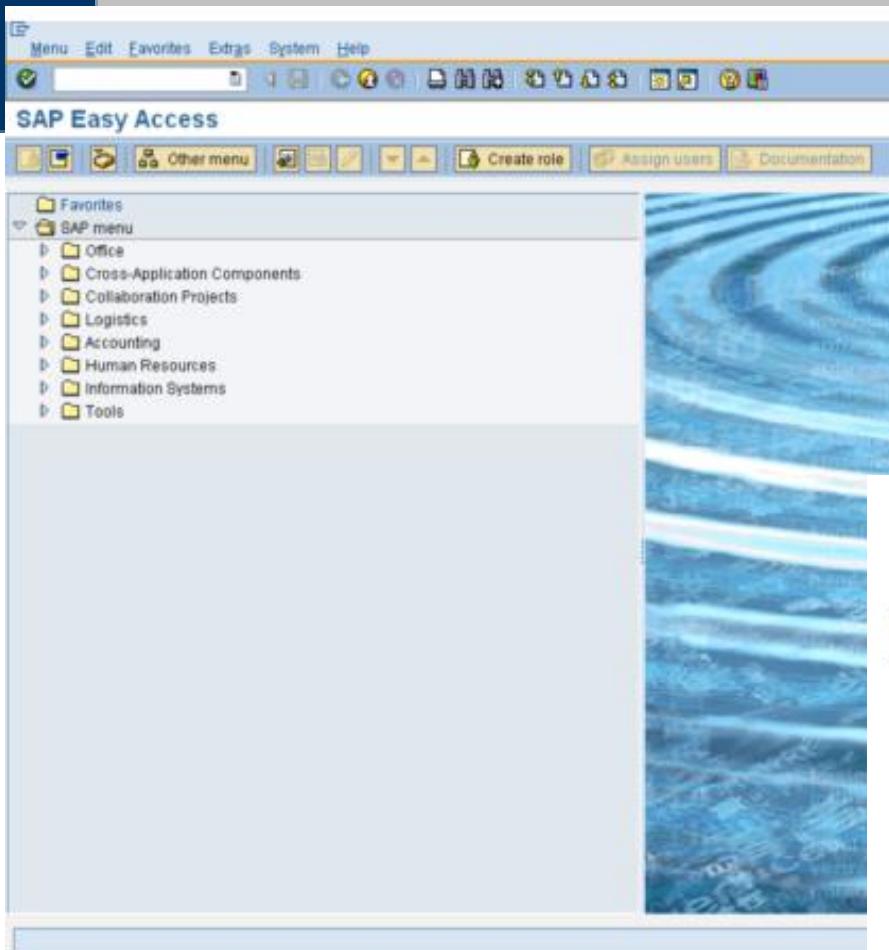
- Server: sap1.edugate.or.id
- System ID: EG1
- System Number: 63
- Description: SAP Server Jakarta

# Unit 2/Lesson 1

## Multiple Logon

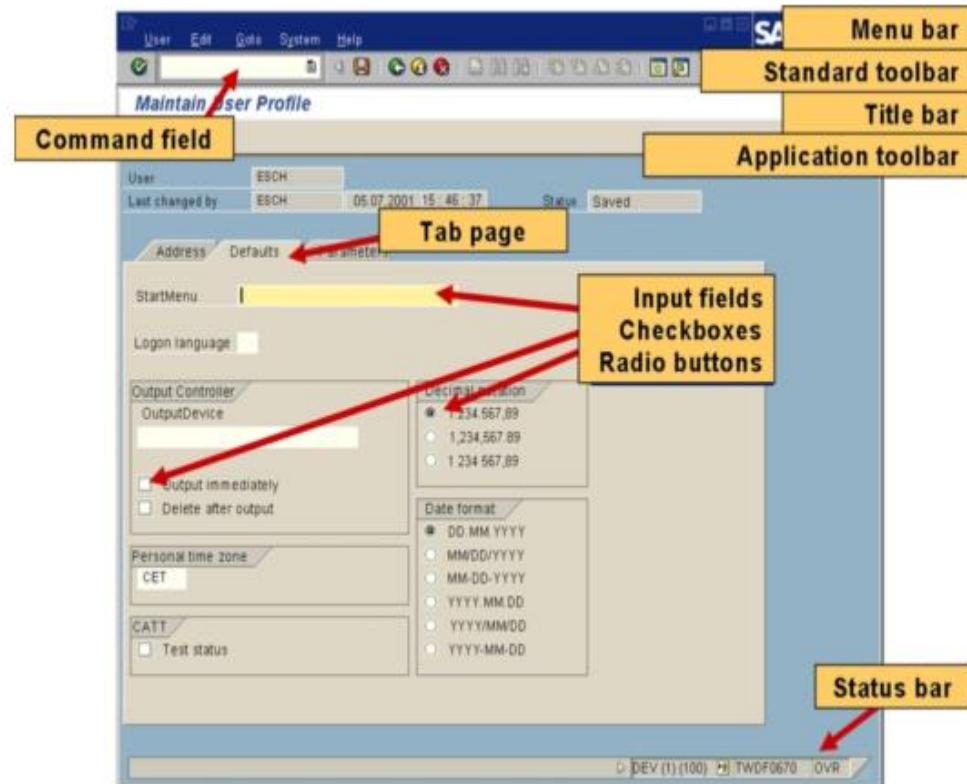


- Continue this logon, end any others logon
- Continue this logon, without ending any other logon
- Terminate this logon



## Tampilan utama

## Screen Structure

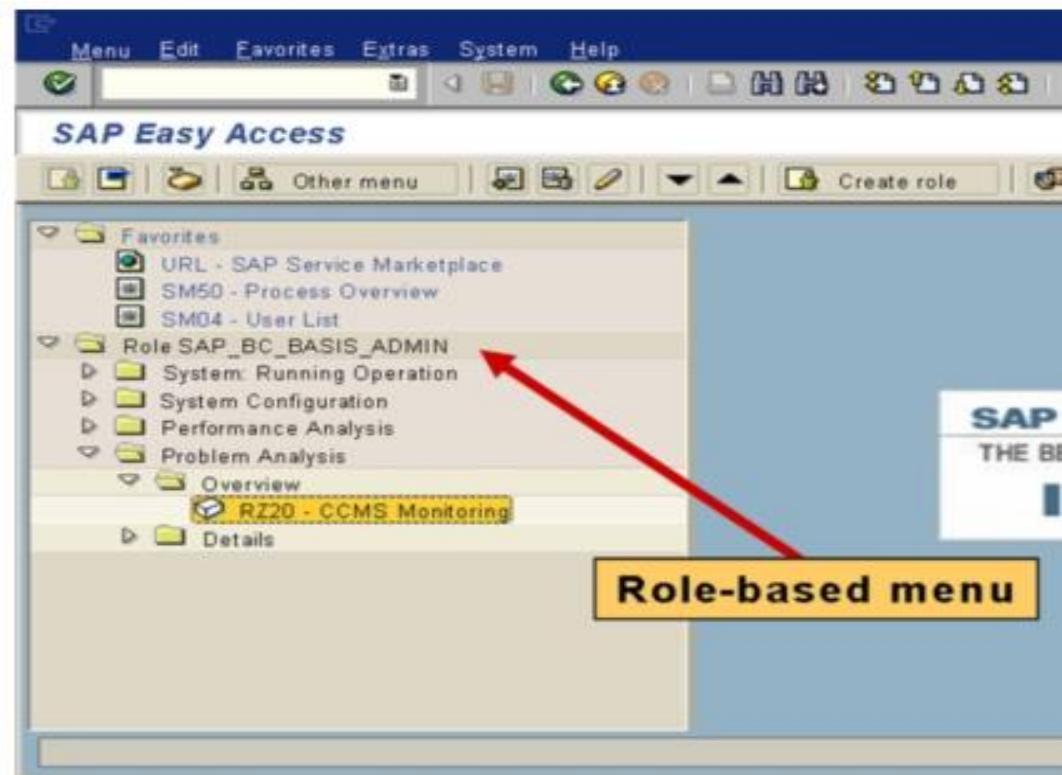


# Navigation

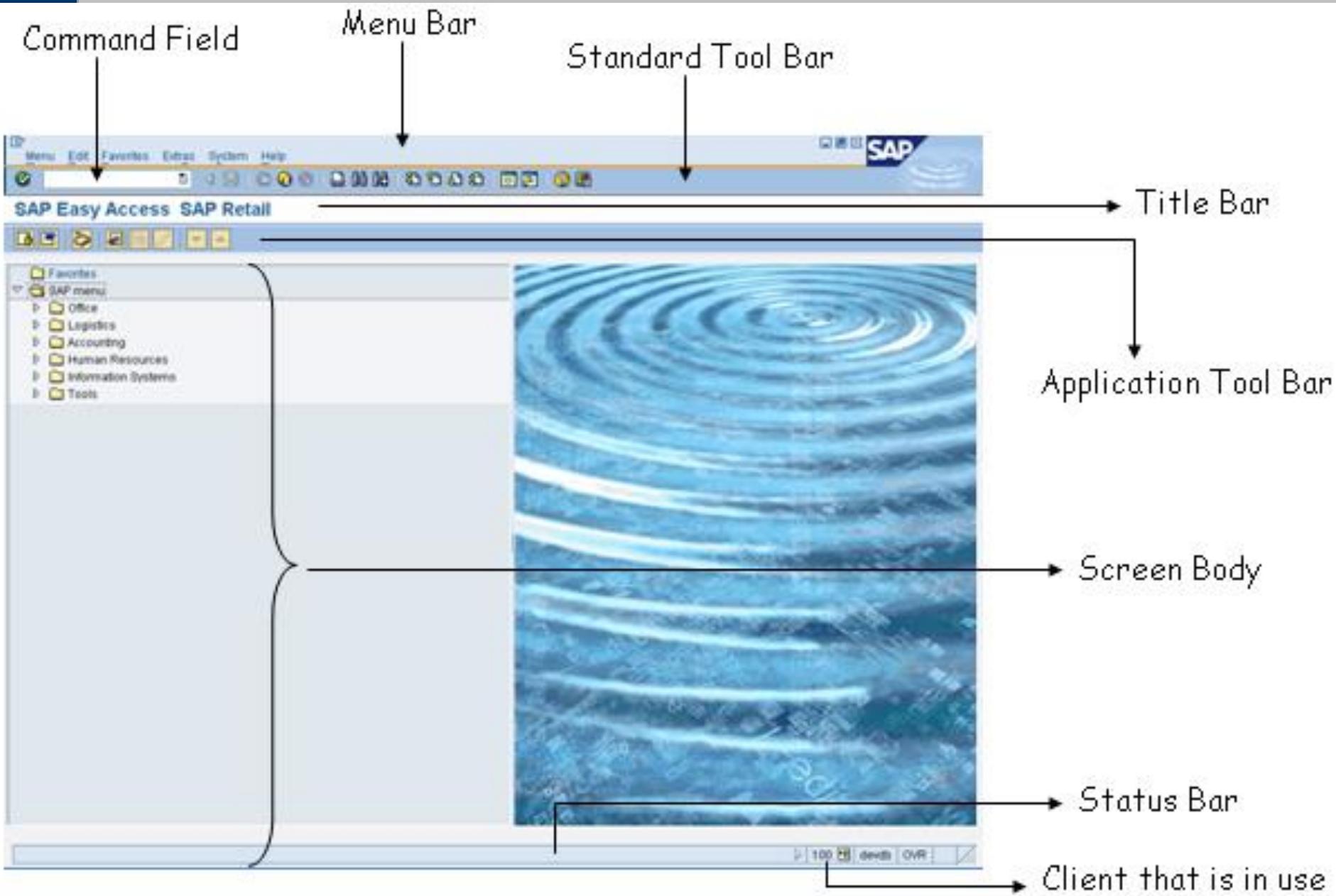
- Enter transaction code – T-CODE
- Choose item menu from menu bar
- Choose item menu from favorites
- Choose item menu from role based user menu



**SAP Easy Access and favorites list**



# Unit SAP Easy Access



# Using T-CODE

- /n cancel current transaction
- /nXXX cancel current transaction and go to specific T-CODE
- /o display session overview
- /oXXX initial specific transaction in new session
- /nend end current session with confirmation
- /nex end current session without confirmation
- /i delete current transaction

# Unit 1/Lesson 1

# Some Transaction Codes

ABAP / Data Dictionary TC		Transport: R3TR Objects				General Transactions	
se11	Dictionary Definitions	PROG	Program	FUGR	Function group	/nxyz	Terminates current transaction, and starts transaction <b>xzy</b>
se14	Database utility	VIEW	View	TABL	Table / Structure	/n	Terminates the transaction (corresponds to pressing F15 (=SHIFT-F3) to go back).
se16	Data Browser (display only)	DOMA	Domain	DTEL	Data element		
se16n	Modify :"&sap_edit" (uase16n)	TRAN	Transaction	TABU	Table contents		
sm30, sm31	Table views maintenance			FORM	SAP Script Form	/nend	Terminates all separate sessions and logs off (corresponds to System - Logoff)
Paths, Database, Connections TC		FI Basis Customizing TC					
al11	SAP file directory	ec01	Copy, Check, ... Company code			/nex	Terminates all separate sessions and logs off immediately (without any warning!).
file	Logical file path	fbkp	Accounting maintenance			/oxyz	Opens a new session and starts transaction <b>xzy</b> in the session.
scu0	Comparison Customizing	fbp1	Accounting Document->Number Ranges			/o	Lists existing sessions and allows deletion or opening of a new session.
scmp	Comparison tables	fl12	Change House Banks / Bank Accounts			/i	Terminates the current session (corresponds to System End)
		ob05	Accounting clerks T001S			/i1, /i2, ...	Terminates the session with the number given.
		ob13	Chart of accounts T004			.abc	Fast path: 'abc' refers to the underlined letters in the menus.
		ob29	Fiscal Year Variants			/h (/hs)	Debugging mode (System funct.)
		ob37	CC ->fiscal year variant			search_sap_menu	Can either use TC code in the search criteria or a description. "*" is not used as wildcard.
		ob38	Assign Co.Code -> Cred.Cntl Area			New Session	Press "SHIFT" and "*" simultaneously
		ob52	Posting periods T001B			Start Menu entry	Press "SHIFT" and "ENTER" simultaneously
		ob57	User ->Tolerance group T043			5000	SAP main menu
		ob62	CC->chart of accounts T001				
		oba3	Tolerances Details				
		oba4	Tolerance groups T043T				
		oba7	Document types T003				
		obas	Vendor acc. gr.->number range T077K				
		obbo	Define variants T010O				



# Favorite & Status Bar

- Favorite:
  - Transactions (T-CODE)
  - Link to files (excel, word, pdf)
  - Internet address (web)
- Status bar:
  - Left side: error message & another system message
  - Right side: system, client, user, program, transaction, response time

# Using help

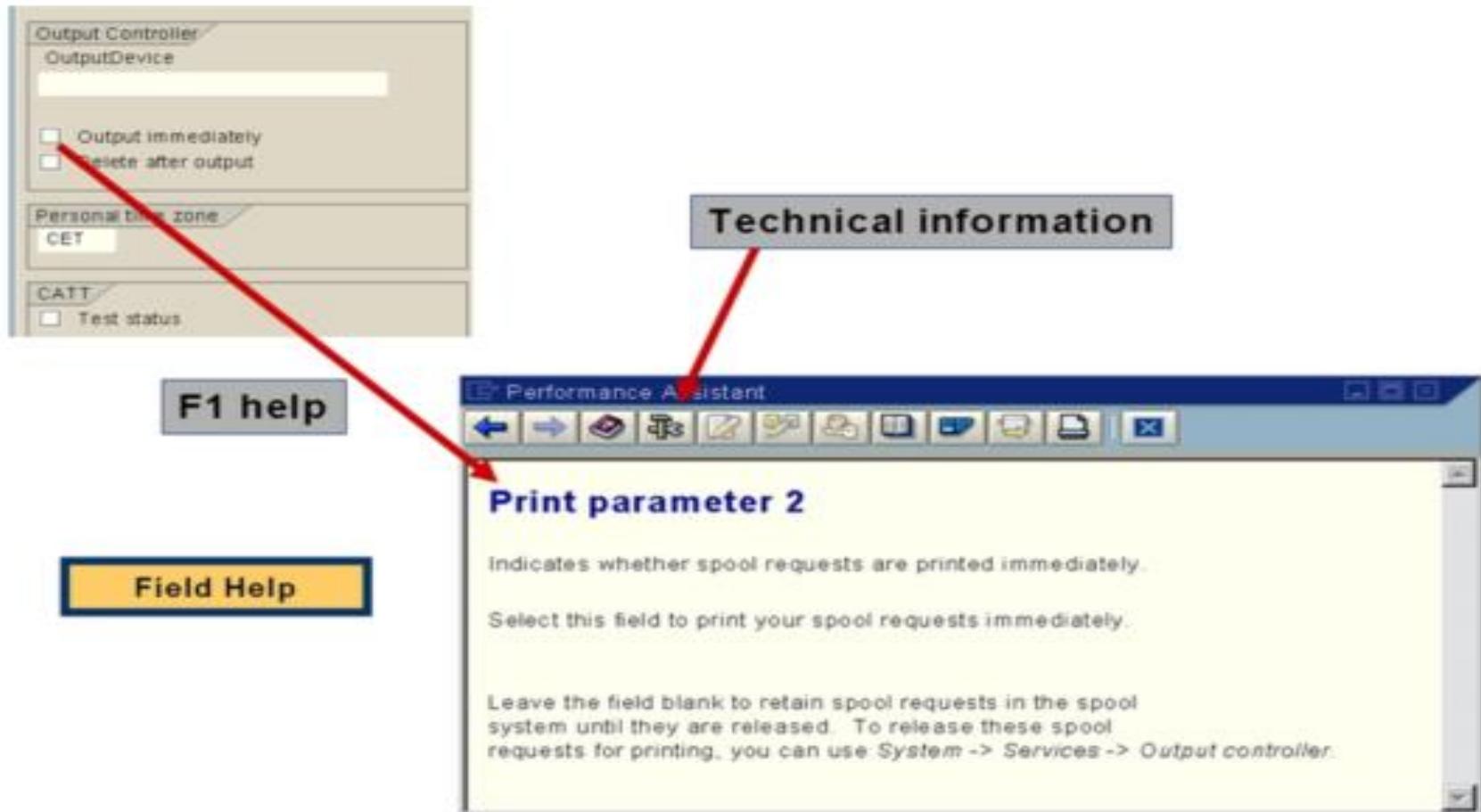
- Help features:
  - Application help: offline help
  - SAP library: online help
  - Glossary: find a definition
  - SAPNet: online web based help
- F1 help:
  - Display technical information
- F4 help:
  - Possible valid values

## Unit 1/Lesson 1

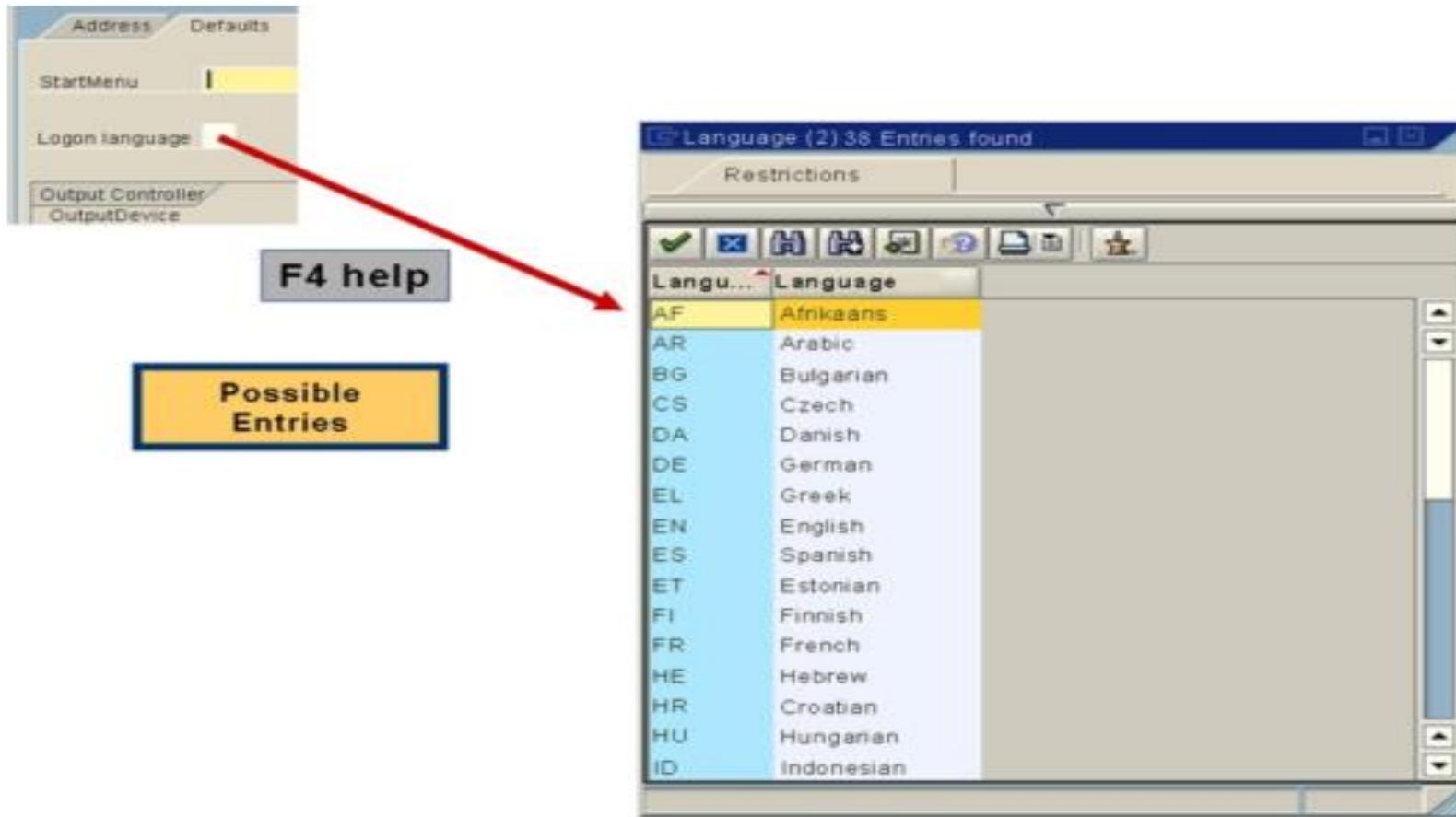
# SAP library



## F1 help



## F4 help



# Latihan

- Kerjakan semua latihan 2!
- Capture dan kumpulkan

# Next

- Systems Wide Concept

# SAP01 Ch. 3

## System Wide Concept

# Reminder: User Account

- User Login: sesuai yang sudah diberikan
- Client: .... (lihat di excel)
- Rohrer: .... (lihat di excel)
- Baltus: ... (lihat di excel)
- Material: .... (lihat di excel)

# Outline Materi

- Organizational Elements
  - Mapping dari hierarki perusahaan manufaktur ke sistem SAP
- Master Data
  - Kumpulan data terintegrasi untuk semua operasional SAP
- Transaction
  - Segala business process, kegiatan operasional perusahaan (tidak hanya jual beli)

# Notes

- Pada modul SAP Fundamental ini, anda akan menggunakan data perusahaan **IDES** sebagai contohnya

# Organizational Elements

- Client
  - Perusahaan yang menggunakan sistem SAP, dalam modul Fundamental ini adalah IDES
- Company Code
  - Unit Accounting di suatu negara. Perusahaan IDES memiliki banyak anak perusahaan di banyak negara, dibedakan misal karena Pajak
    - Dikodekan: misal 800, 100, dll
- Plant
  - Unit pusat produksi, unit penyimpanan dan pembuatan material (berhubungan dengan produksi) -> **Pabrik**

# Organizational Elements

- Storage Locations
  - Bagian dari Plant, sub-unit dari Plant -> **Ruang**
- Sales Organizations
  - Bagian **penjualan** di suatu negara/wilayah
- Distribution Channel
  - Bagian **distribusi** suatu produk yg dijual
- Organizational Unit
  - Unit-unit yang ada di perusahaan, dikelompokkan berdasarkan fungsinya -> **departemen**

# Organizational Elements

- Job
  - Template pekerjaan / jenis pekerjaan
    - Contoh: Sekertaris, Akuntan, Manager
- Position
  - Pekerjaan tertentu yg berkaitan dgn orang tertentu
    - Misal: akuntan di perusahaan cabang X
- Person
  - Orang yang menduduki position tertentu

# IDES

- IDES adalah perusahaan **manufaktur** multinasional yang beroperasi di beberapa negara di beberapa benua
- IDES menggunakan SAP untuk mengelola seluruh data dan proses bisnis yang ada di perusahaan tersebut, mencakup sampai unit terkecil di IDES

**SAP**

Client

Controlling Area

Company Code

Organizational Unit

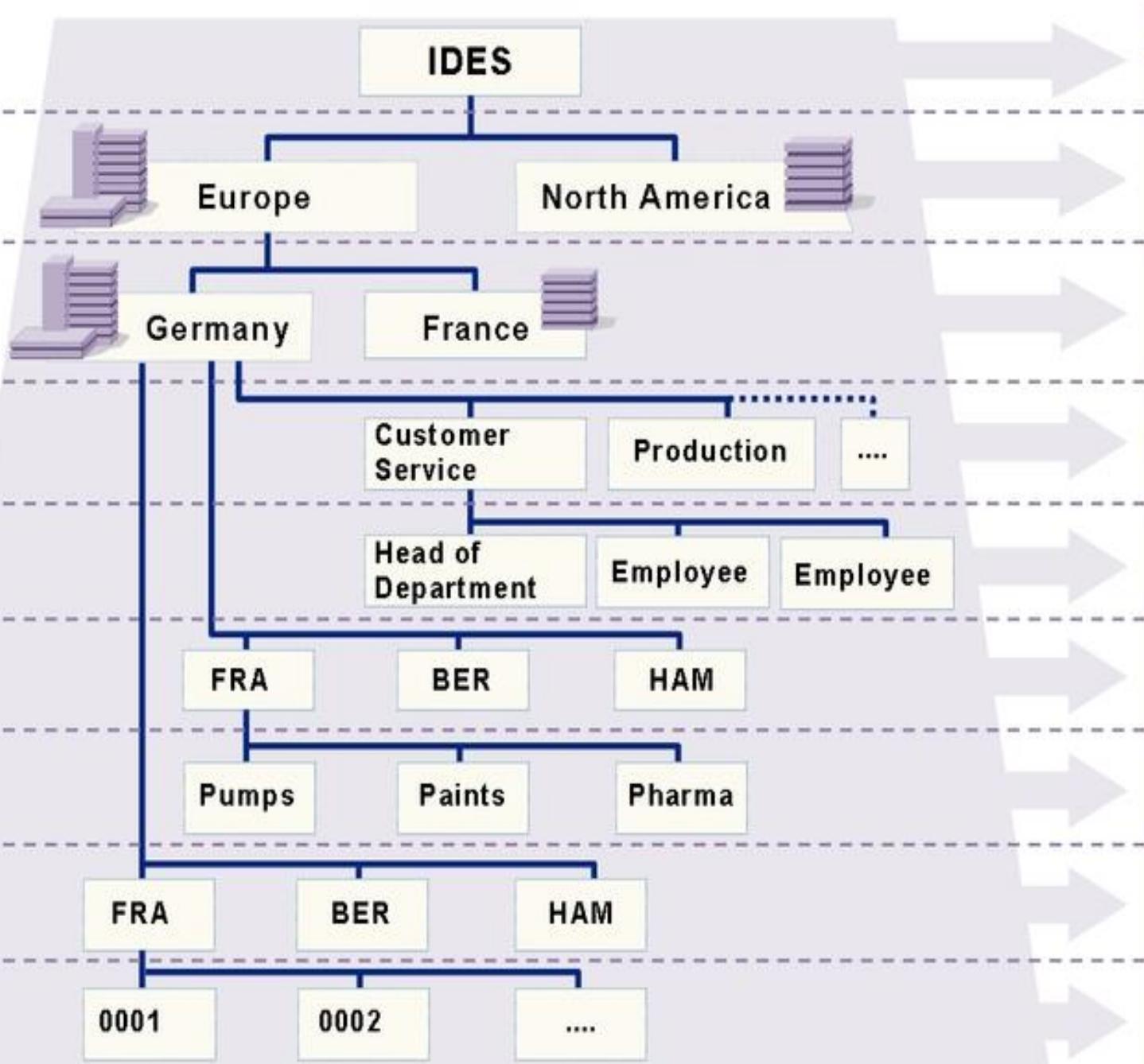
Position

Sales Organization

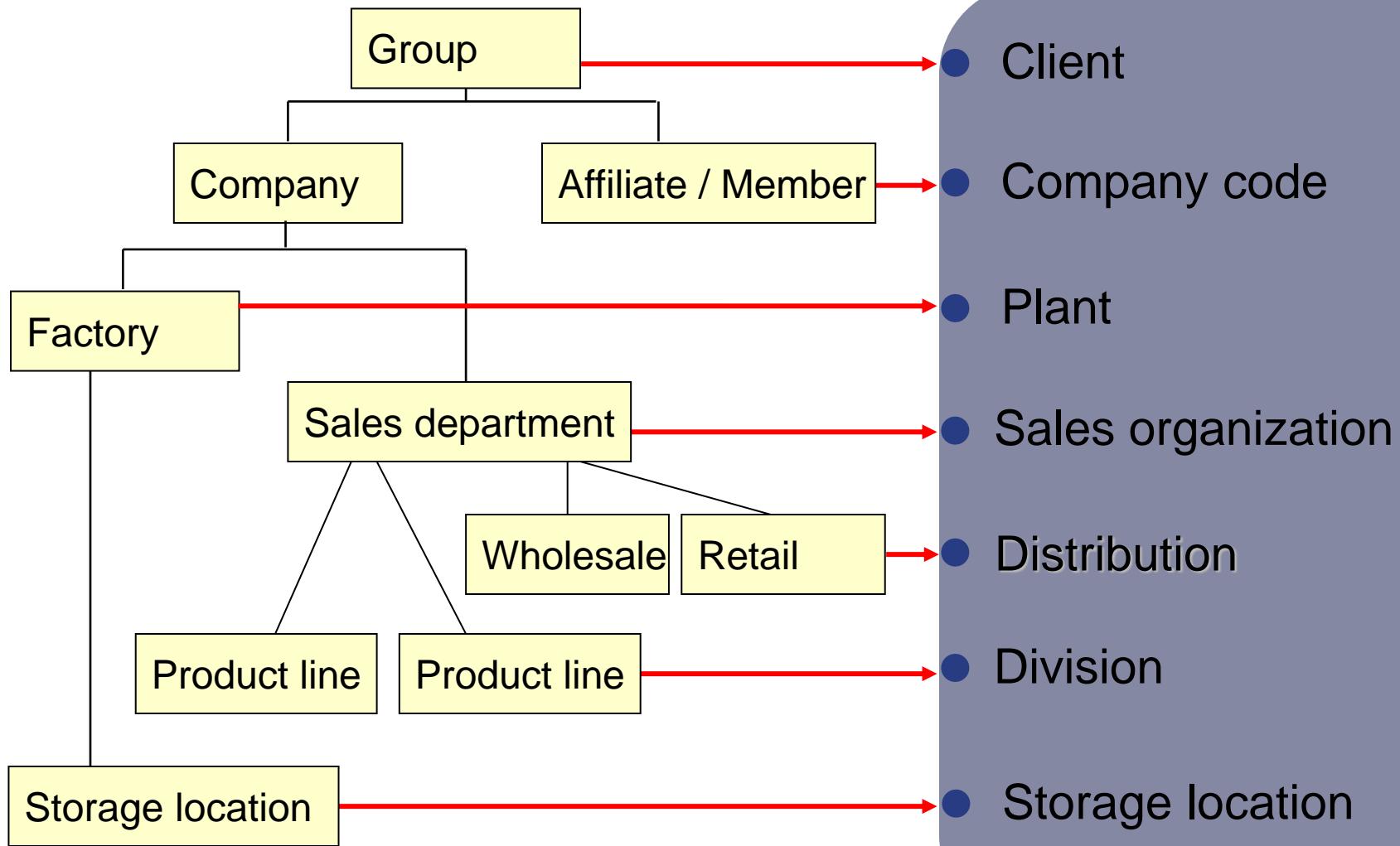
Division

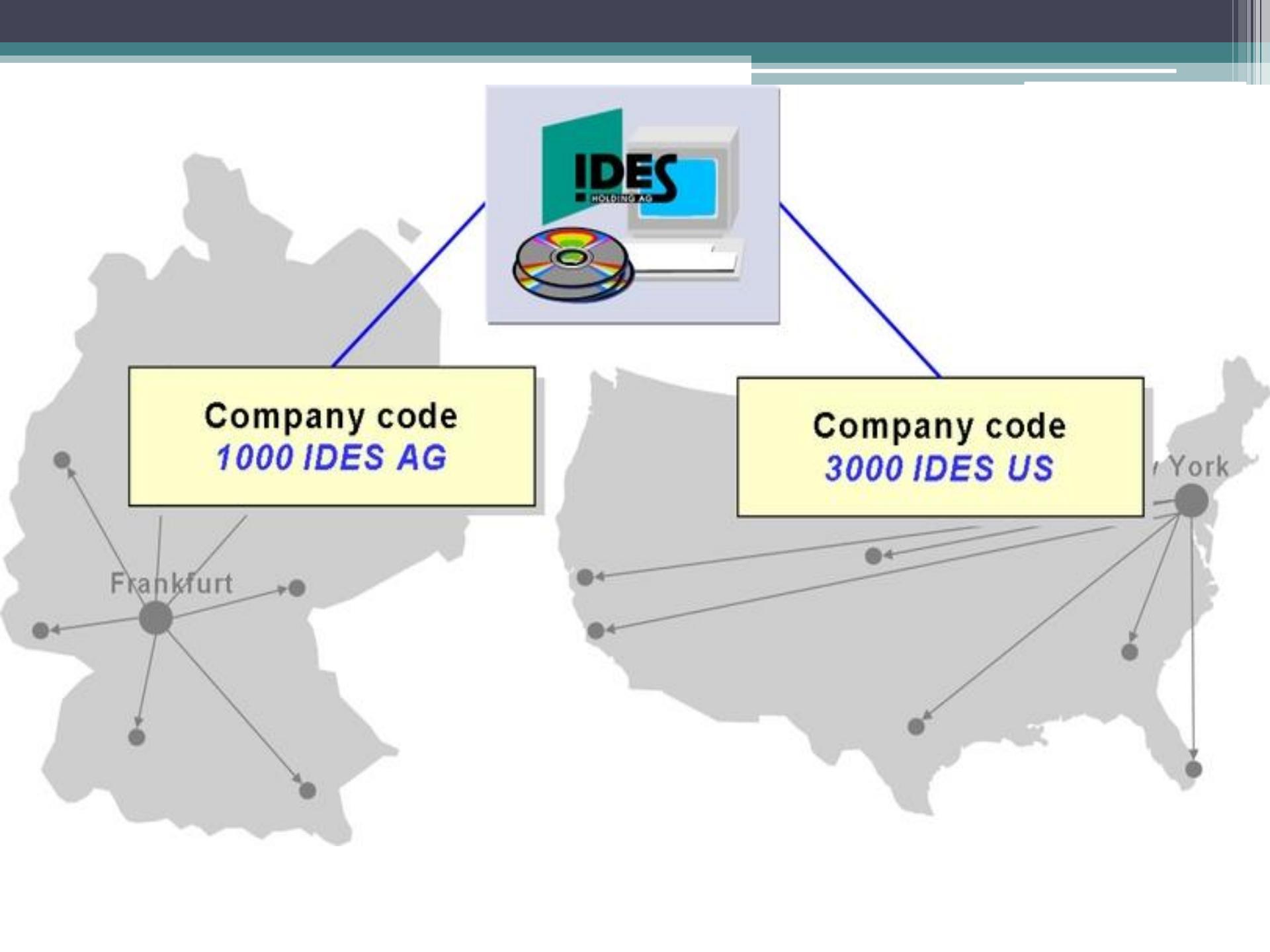
Plant

Storage Locations

**IDES**

# Enterprise Structure







## AG – Main building

### Management

Financial planning

Optimization of business processes

Strategies

Monitoring

Monitoring of competitors

### Employees

System access using a portal

Display own personal data

Self service

# Master Data

- Data yang disimpan secara **terpusat**, dapat diakses oleh seluruh elemen yang ada dalam perusahaan (tentunya menggunakan otorisasi dan tingkatan hak akses)
- Data terpusat berarti seluruh perubahan dapat langsung diakses oleh seluruh elemen. Selain itu dapat **menghindari duplikasi data**
- Infrastruktur yang ada harus bisa menjamin operasional sistem data terpusat ini

# Master Data

- Suatu perusahaan multi-nasional tentunya memiliki data yang sangat kompleks dan beragam
- Perusahaan IDES menggunakan SAP, yang menggunakan sistem **Master Data**
- Perusahaan IDES sendiri memiliki hierarki/organizational elemen, karena itu Master Data juga memiliki aspek hierarki tersebut

# Master Data

- Customer Master
  - Data mengenai customer, relasi antara perusahaan dengan customernya
- Material Master
  - Data mengenai material dan barang dagangan
- Personnel File
  - Data mengenai sumber daya manusia, digunakan oleh modul mySAP ERP Human Capital

# Customer Master

- Relasi antara perusahaan dengan **customernya**
- Customer di sini tidak selalu berarti pembeli, bisa juga pihak lain penyedia bahan baku (**supplier**)
- Perusahaan manufaktur selain menjual hasil produksi juga membeli bahan baku dari pihak supplier

# Customer Master

Terdiri dari 3 struktur penyusun, yaitu :

## 1. General Data

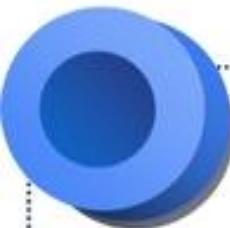
- Data tentang customer untuk seluruh bagian perusahaan

## 2. Data for Company Codes

- Data mengenai perjanjian khusus antara perusahaan dengan customer tertentu
  - Misal: perjanjian bundle software di Yogyakarta

## 3. Data for Sales

- Data penjualan pada suatu toko tertentu dan garansi



**Customer Master Record**



Name  
Address  
Language  
...

Payment Parameters  
G/L Account  
Dunning  
...

Sales, Shipping  
Billing Parameter  
Partner  
...

**Client**

**Company Code**

**Sales Area**

# Material Master

- Data mengenai material dan barang dagangan yang ada di perusahaan
- Meliputi penjualan material, produksi material, penyimpanan, pencatatan dan perhitungan biaya produksi dan biaya penjualan
  - Berkaitan juga dengan Financial
- Pada umumnya data material berada di level **Plant** (Gudang/Pabrik)



Material Number  
Short Text,  
Volume, Weight  
Basic Unit of Measure

...

Delivering Plant  
Tax Categories  
Sales Unit

...

Stock Valuation  
Prognosis  
Planning Parameters  
Purchasing Parameter

...

Requirement Planning  
Parameter  
Inventory Management  
Physical Inventory

...

**Client**

Sales Organization

Distribution Channel

**Plant**

**Storage Location**

# Personnel File

- Data mengenai pegawai/karyawan di seluruh tingkatan hierarki perusahaan
- Pada mySAP ERP HCM, hierarki jabatan di suatu perusahaan dipetakan dalam suatu tingkatan yang dinamakan **Organizational Management**
  - Struktur Organisasi

## The Organizational Plan

### Organizational Unit



**Customer Service  
Center**

### Position

**Customer Service  
Representative for  
Southeast**

### Person/User



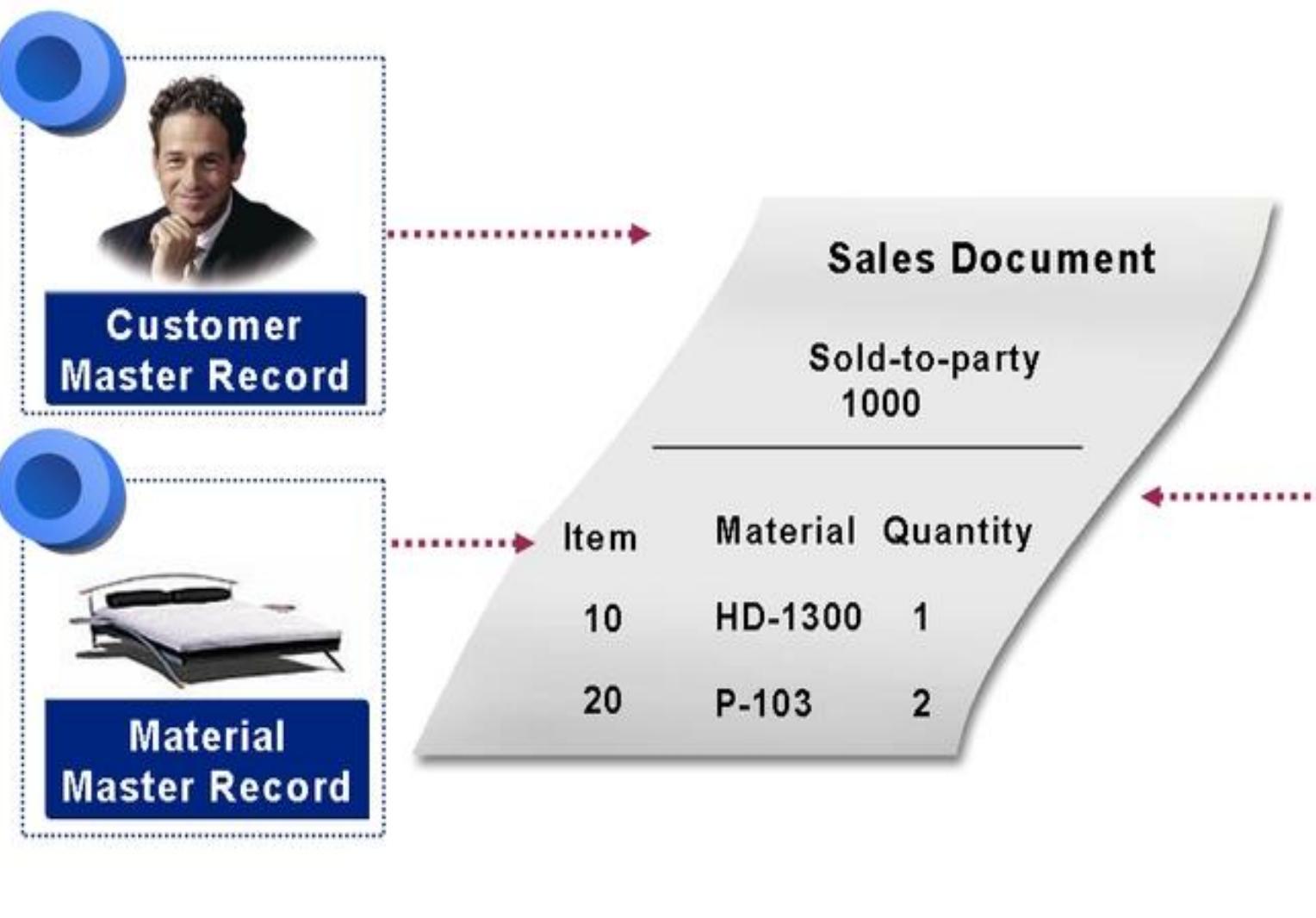
Anne Albrecht  
1346



User  
ALBRECHTA

# Transaction

- Business Process, merupakan kegiatan operasional perusahaan
- Meliputi proses produksi, pembelian bahan baku, perhitungan biaya produksi dan penjualan, proses penjualan dan proses-proses lainnya
- Untuk setiap transaksi, SAP akan membuat suatu dokumen/catatan untuk pencatatan transaksi dan mempermudah pengawasan
- Juga dicatat pada Financial / Akuntansi



Company  
Code

Sales  
Organization

Distribution  
Channel

Division

# Exercise

- Exercise 3-1
  - Display and Change Customer Master
- Exercise 3-2
  - Display a Material Master
- Exercise 3-3
  - Creating a New Material Master Record
- Capture dan kumpulkan di e-class tgl 21 Feb 2021

# Next

- Jangan lupa : KTM SAP, kumpulkan di e-class
- Business Process in Logistic

# Business Process in Logistics

## SAP01

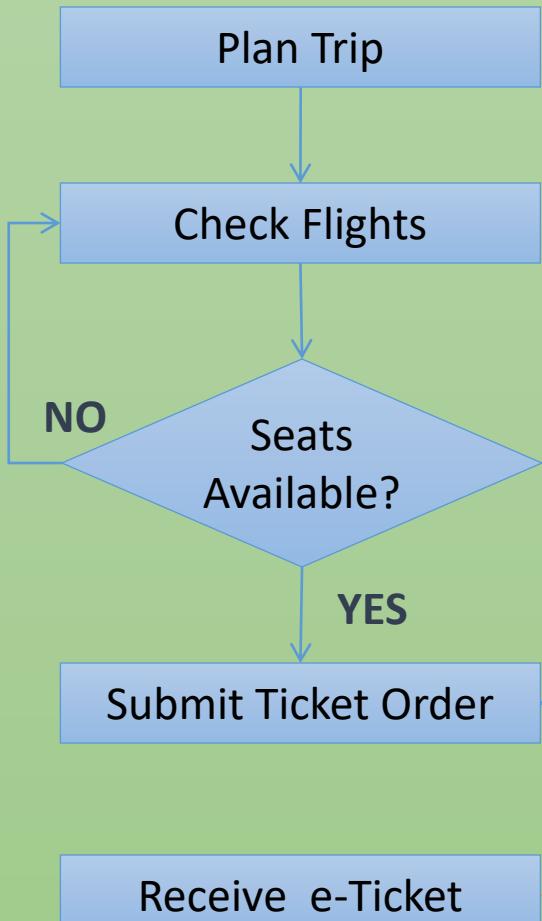
Antonius Rachmat C



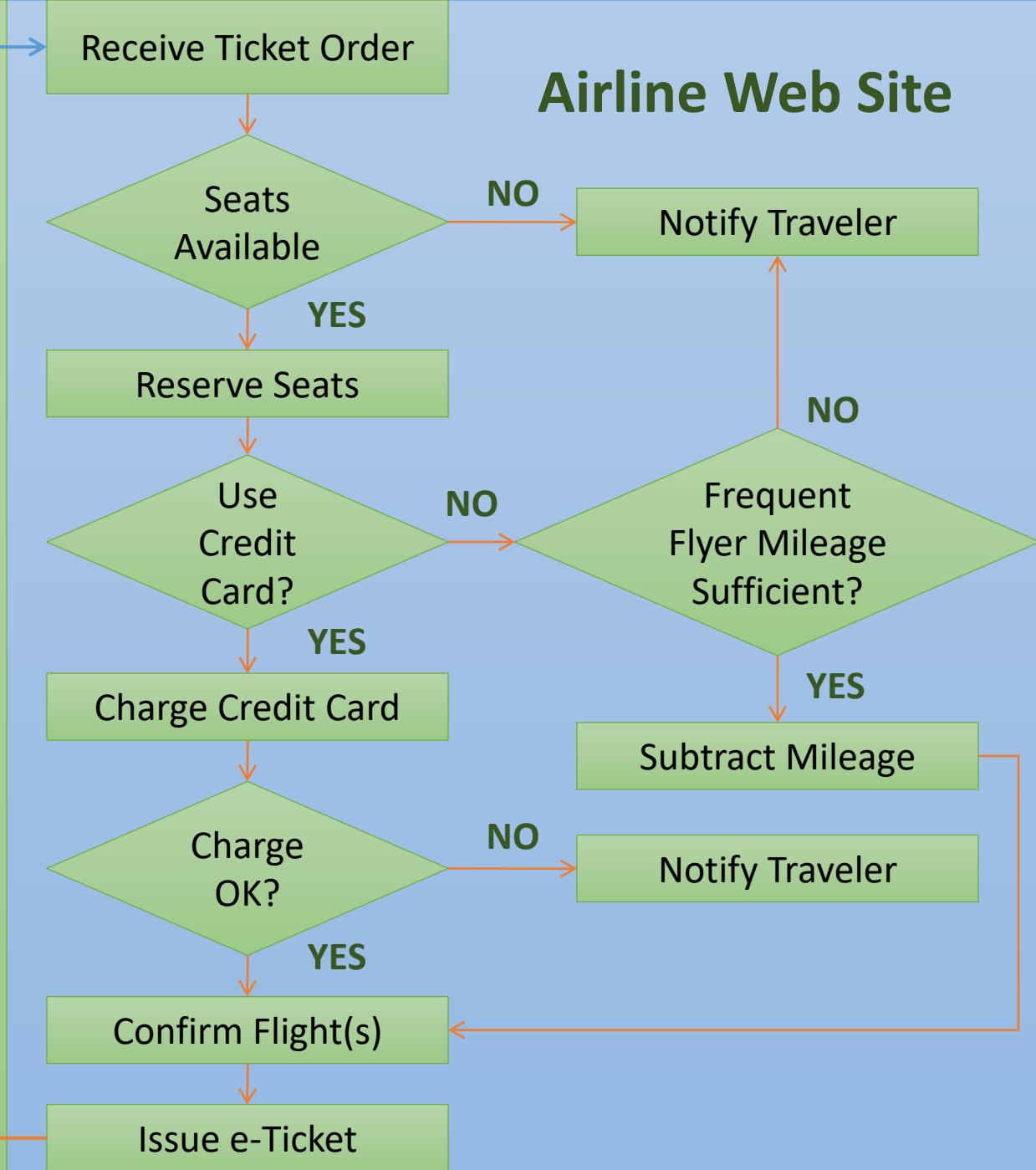
# Latar Belakang

- Organization ***creates & deliver*** value in the *form* of a **product or service**, which they offer to customers or organizations
  - **Tangible:** product physics
  - **Intangible :** service, such as education, health, information, financial services
- **Business Process:** sequence of activities that produce some output / outcome

# Traveler



# Airline Web Site



# Functional organizational (unit)

Purchasing

Operations

Warehouse

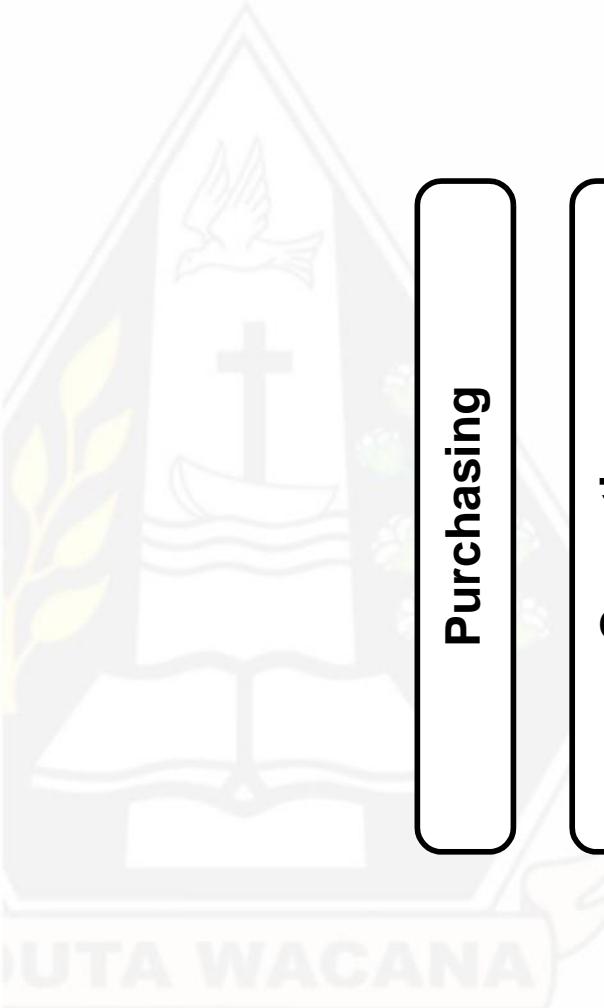
Sales & Marketing

Research & Development

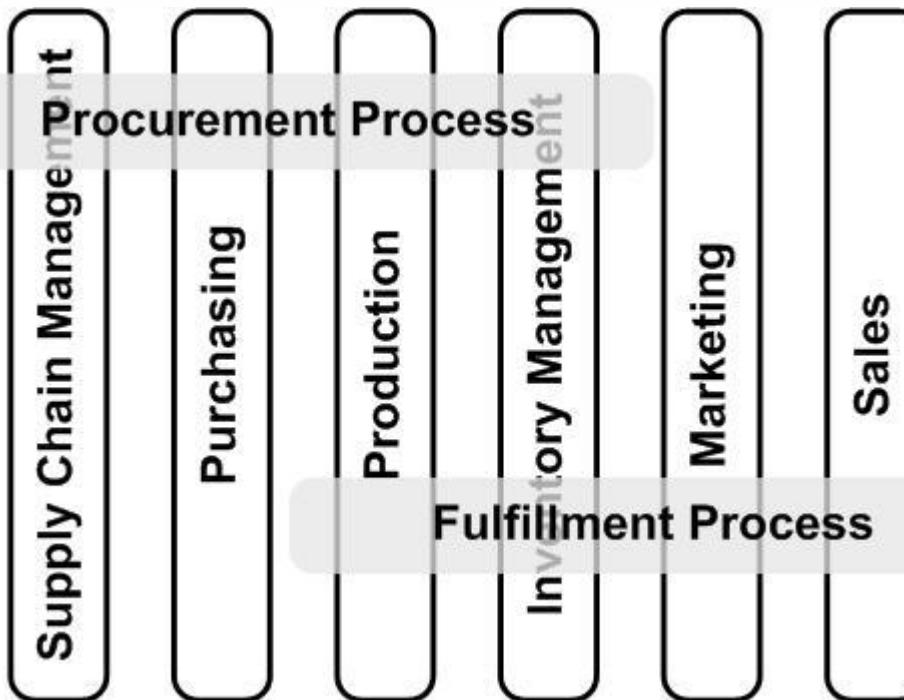
Finance & Accounting

Human Resources

Information Technology



# Functions vs. processes



**Procurement:** pembelian

**Fulfillment / Sales:** penjualan

# Job descriptions for Department

- **Purchasing**

- Identity vendor
- Select vendor
- Create and send purchase orders to vendor
- Evaluate vendor performance

- **Warehouse**

- Receive goods from supplier
- Quality inspection
- Prepare goods to be returned to supplier
- Shipment
- Receive goods returned from customer

# Job descriptions for Department (2)

- **Supply chain**

- Manage distribution strategy
- Inventory management

- **Marketing n Sales:**

- Identify customer
- Manage relationship with customer
- Promote product / serivces
- Receive customer order

- **R & D**

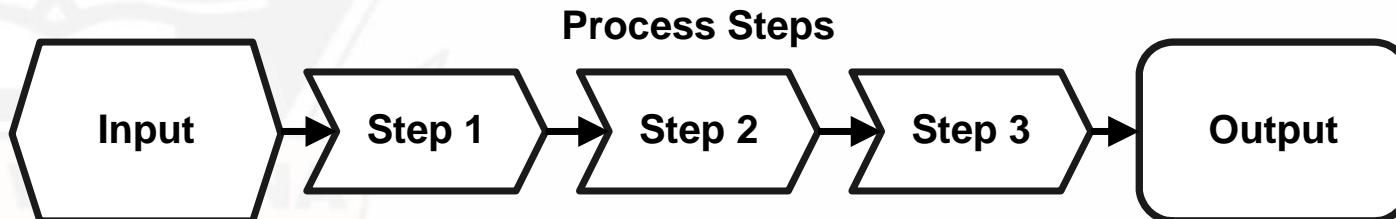
- Conduct research
- Develop product and process

# Job descriptions for Department (3)

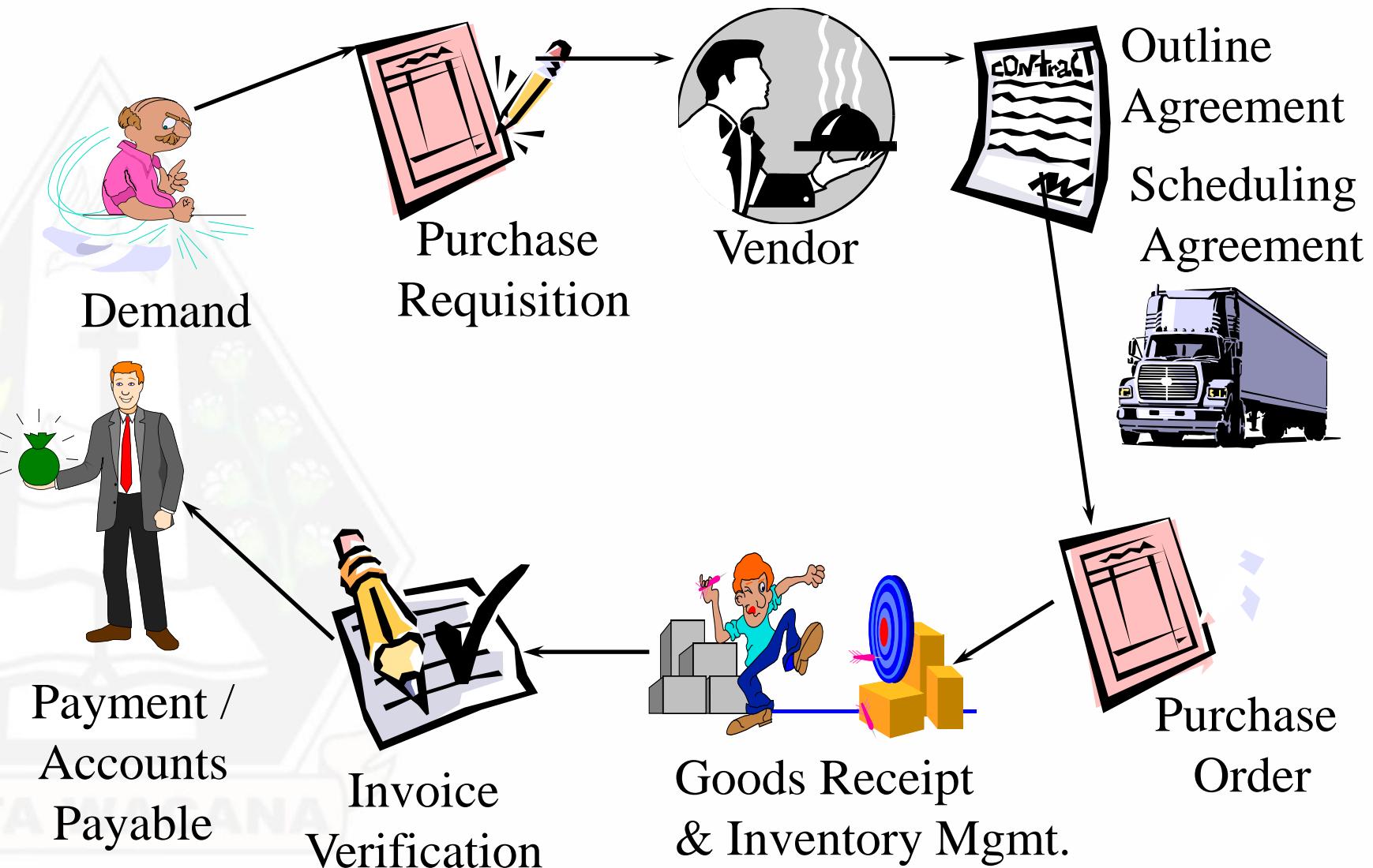
- **Financial**
  - Manage cash flow
  - Process incoming/outcoming payments
  - Prepare financial statements
- **Human Resources**
  - Recruit, train, hire, evaluate employee
  - Appraise employee
  - Manage compensation
  - Manage code of conduct

# Three fundamental processes

- **Procurement** -> require basic material to produce goods / services
- **Production** -> manufacturing / generating goods / services
- **Fulfillment / Sales** -> delivers the goods / services to it's customer / resellers
- Basic Steps:

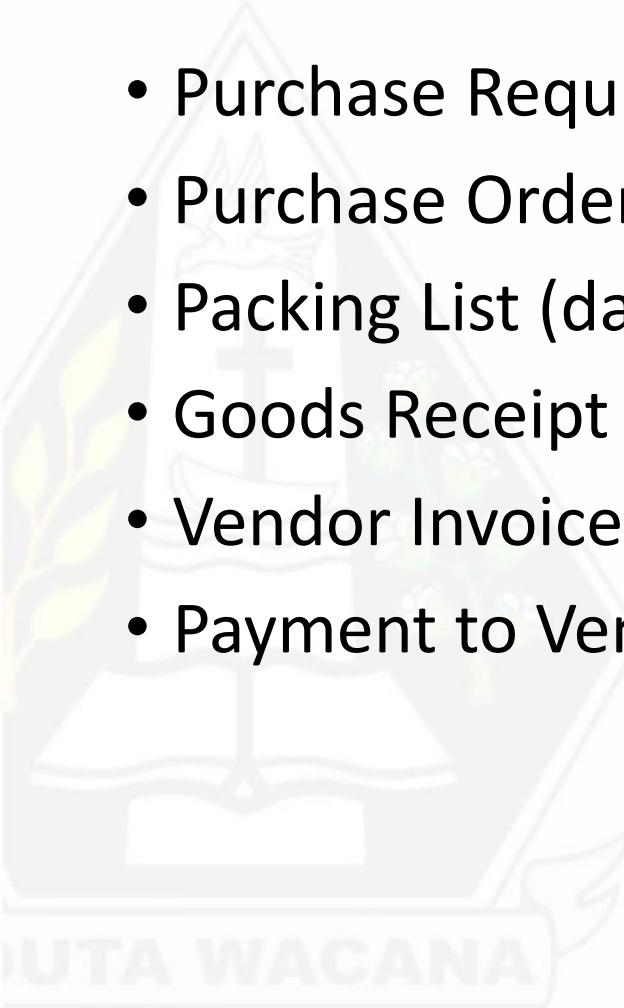


# Procurement Process



# Document flow on Procurement

- Purchase Requisition (permintaan pembelian)
- Purchase Order (perintah pembelian)
- Packing List (daftar barang)
- Goods Receipt Document (surat penerimaan barang)
- Vendor Invoice (tagihan)
- Payment to Vendor



# Skenario

- Pembeli: SuperSkateboard (Customer)
- Penjual: BlackWidow Skateboard (Supplier)



# Purchase Requisition

**Super Skateboard Builders, Inc.**  
**Purchase Requisition**

**Requisition Number:** 3754

**PO Number:** 1546

(to be filled in by Purchasing)

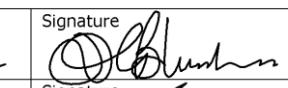
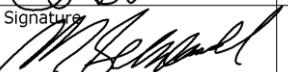
5

Request Date	Requested Delivery Date	Requester Name	Requester Extension	Delivery Location
7/9/07	7/27/07	D. Bloomberg	3984	Warehouse

Material #	Material Description	Quantity
ENSB3000	Entry-Level Skateboard	50
HLMT5000	Helmet	10
SHRT4000	T-Shirt	10
FAID6000	Skateboard First-aid Kits	20

**For use by Purchasing**

PO Date	Vendor	Requested Date	Delivery Location	F.O.B. POINT	TERMS
7/11/07	Black Widow Skateboards, Inc.	July 27, 2007	Warehouse	Destination	Net 30

Requisitioned by:	Name D. Bloomberg	Signature 	Date: 7/9/07
PO created by:	Name M. Seward	Signature 	Date: 7/11/07

# Purchase Order

**Super Skateboard Builders, Inc.**

1 Skateboard Drive  
Grand Rapids, MI, 49525  
Phone: 616.555.1234 Fax: 616.555.2234

**PURCHASE ORDER**  
**Purchase Order Number: 1546**

**THE PURCHASE ORDER NUMBER MUST APPEAR ON ALL RELATED CORRESPONDENCE, SHIPPING PAPERS, AND INVOICES**

**TO:**  
Black Widow Skateboards, Inc  
1 Spider Way  
Holland, MI, 49424  
616.555.7834

**SHIP TO:**  
Mr. David Bloomberg  
SSB, Inc.  
1 Skateboard Drive  
Grand Rapids, MI, 49525  
616.555.1234

Purchase Order #	P.O. DATE	Delivery Date	Shipped VIA	F.O.B. Point	Payment Terms
1546	July 11, 2007	July 27, 2007	Ground	Destination	Net 30

Quantity	Material #	Material Description	Unit Type	Unit Price	Item Total
50	ENSB3000	Entry-Level Skateboard	Each	34.00	1,700.00
10	HLMT5000	Helmet	Each	20.00	200.00
10	SHRT4000	T-Shirt	Each	7.00	70.00
20	FAID6000	Skateboard First-aid Kits	Each	10.00	200.00

SUBTOTAL	\$ 2,170.00
SALES TAX	Exempt
SHIPPING & HANDLING	Included
OTHER	N/A
ORDER TOTAL	\$ 2,170.00

Authorized by: *M. Seward* Date *7/11/07*

M. Seward, Purchasing Manager

# Packing List

Black Widow Skateboards, Inc. 1 Spider Way Holland, MT 49424 Phone: 616.555.7834 Fax: 616.555.2387				Packing List			
<b>Order Date</b>	<b>Customer Contact</b>	<b>Customer Number</b>	<b>Customer PO #</b>	<b>Order Number</b>			
July 11, 2008	D. Bloomberg	4302	1546	29837			
<b>Date Filled</b>	<b>Packed by</b>	<b>Checked by</b>	<b>Ship Date</b>	<b>Sales Rep</b>	<b>Shipped Via</b>		
July 20, 2008	Jones	Smith	July 23, 2008		UPS Ground		
<b>Ship To:</b> Super Skateboard Builders, Inc. 1 Skateboard Drive Grand Rapids, MI, 49525				<b>Bill To:</b> Super Skateboard Builders, Inc. Attention: David Bloomberg 1 Skateboard Drive Grand Rapids, MI, 49525			
Material #	Description	Unit Weight (lb)	Unit Type	Order Quantity	Ship Quantity	Backorder Quantity	Weight (lb)
ENSB3000	Entry-Level Skateboard	7.50	Each	50	50	0	375.00
HLMT5000	Helmet	4.00	Each	10	10	0	40.00
SHRT4000	T-Shirt	0.75	Each	10	10	0	7.50
FAID6000	Skateboard First-aid Kits	2.00	Each	20	20	0	40.00
							<b>Total Shipment Weight</b>
							462.50
<b>Comments:</b> Backordered items will ship as they become available.							
Please contact the Customer Service department at (616) 555-7834 with any questions or concerns.							
Thank you for your order!							

# A Goods Receipt Document

Super Skateboard Builder, Inc						
Goods Receipt Document (Receipt Verification)						
Receipt #	32343					
2	Receipt Date	PO Number	Vendor Number	Vendor Name		
	July 16, 2008	1546	43	Black Widow Skateboards		
3	Material #	Description	Unit Type	Quantity Ordered	Quantity Received	Backorder Quantity
	ENSB3000	Entry-Level Skateboard	Each	50	50	0
	HLMT5000	Helmet	Each	10	10	0
	SHRT4000	T-Shirt	Each	10	10	0
	FAID6000	Skateboard First-aid Kits	Each	20	20	0
4	Received by:	Signature				
	Tim Jones	<i>T. Brown</i>				

# A Vendor Invoice

I N V O I C E							
Black Widow Skateboard, Inc.							
Invoice #:	594873						
Invoice Date:	7/14/2008						
Customer ID:	74052						
Bill To:	Super Skateboard Builders, Inc. Attention: David Bloomberg 1 Skateboard Drive Grand Rapids, MI, 49525						
Ship To:	Super Skateboard Builders, Inc. 1 Skateboard Drive Grand Rapids, MI, 49525						
Date	Your Order #	Our Order #	Sales Rep.	FOB	Ship Via	Terms	
7/25/2008	1546	29837		Destination	UPS Ground	Net 30	
Quantity	Item	Units	Description	Discount %	Taxable	Unit Price	Total
50	ENSB3000	Each	Entry-Level Skateboard	0	0	34.00	1,700.00
10	HLMT5000	Each	Helmet	0	0	20.00	200.00
10	SHRT4000	Each	T-Shirt	0	0	7.00	70.00
20	FAID6000	Each	Skateboard First-aid Kits	0	0	10.00	200.00
						Subtotal	\$ 2,170.00
						Tax	Exempt
						Shipping	Included
						Miscellaneous	
						Balance Due	\$ 2,170.00

Make Checks Payable to: Black Widow Skataboards, Inc.  
1 Spider Way, Holland, MI, 49424,  
Phone: 616.555.7834

Paid in full  
check # 2584  
8/1/08  
HSF

# Sales Order / Fulfillment

## — Trading Goods



Customer Order



Picking



Packing



Receive payment /  
Accounts Receivable

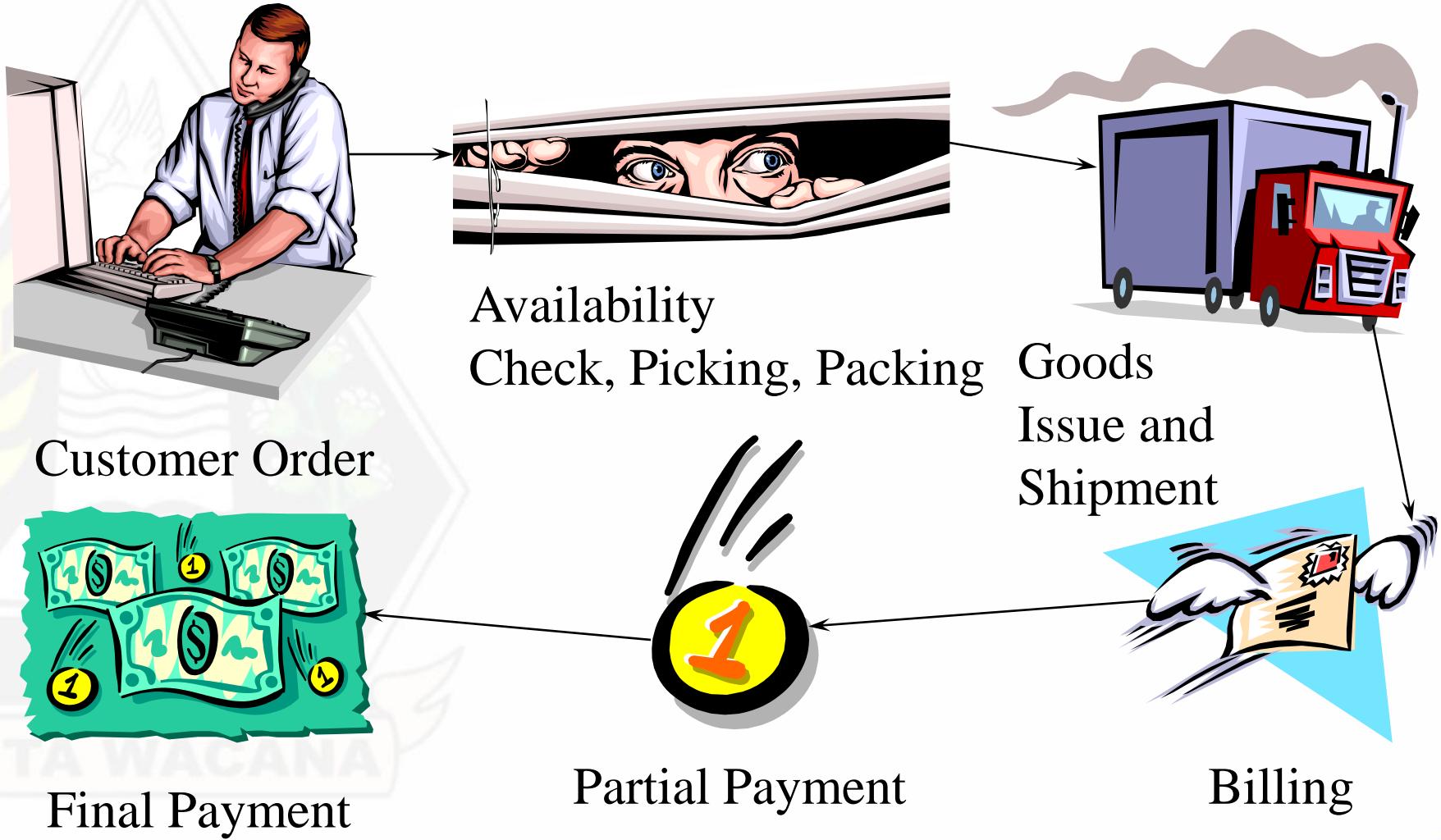


Billing

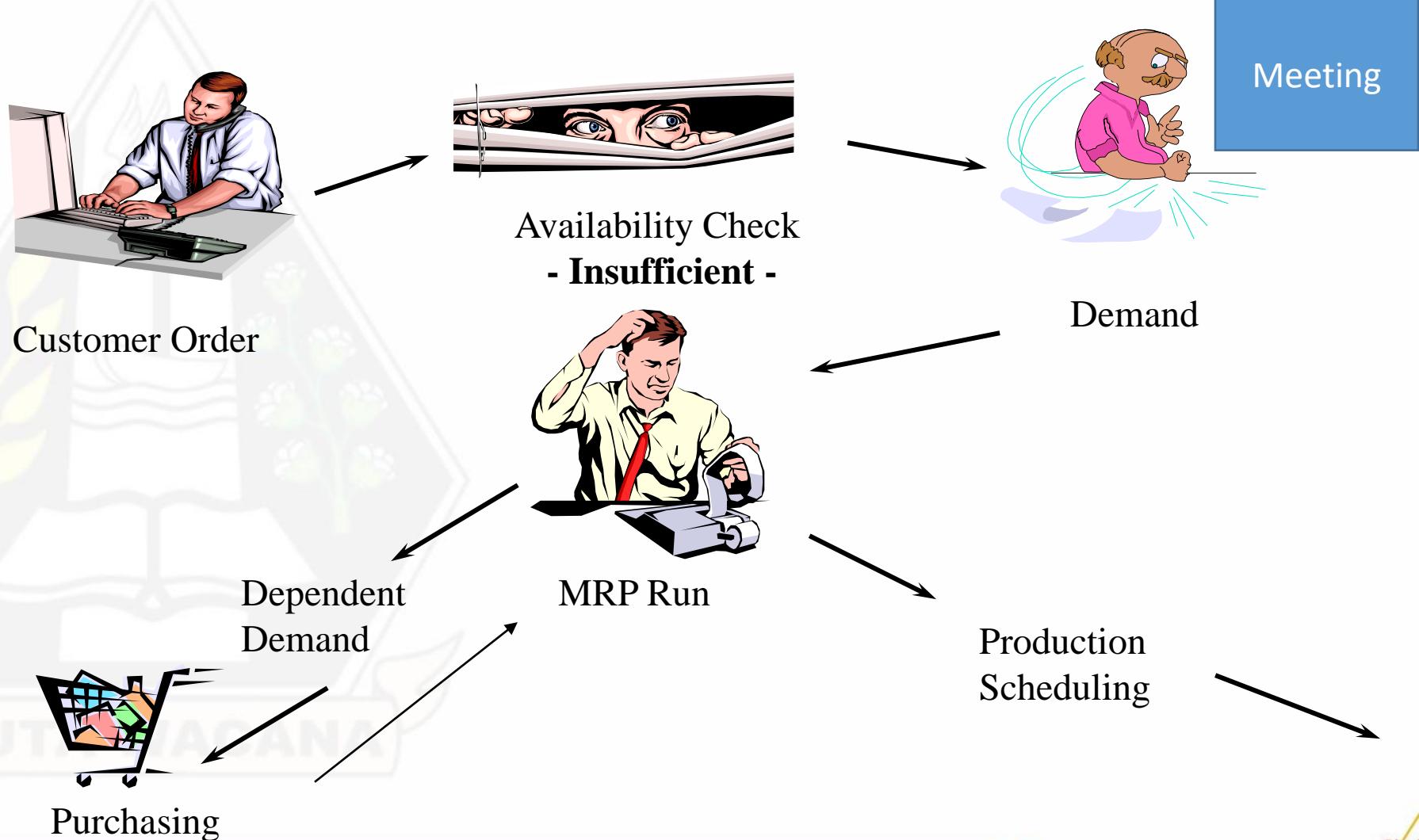


Goods Issue & Shipment

# Sales Order Finished Goods (1)



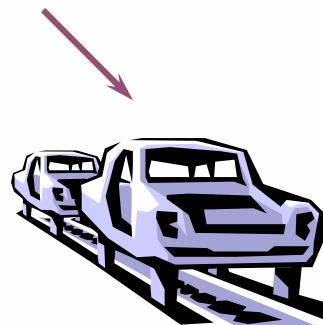
# Sales Order Finished Goods (2)



# Process Flow (3)



Goods Issue  
to Store Shop



Production



Goods  
Receipt in Plant



Accounts Receivable



Billing



Goods Issue

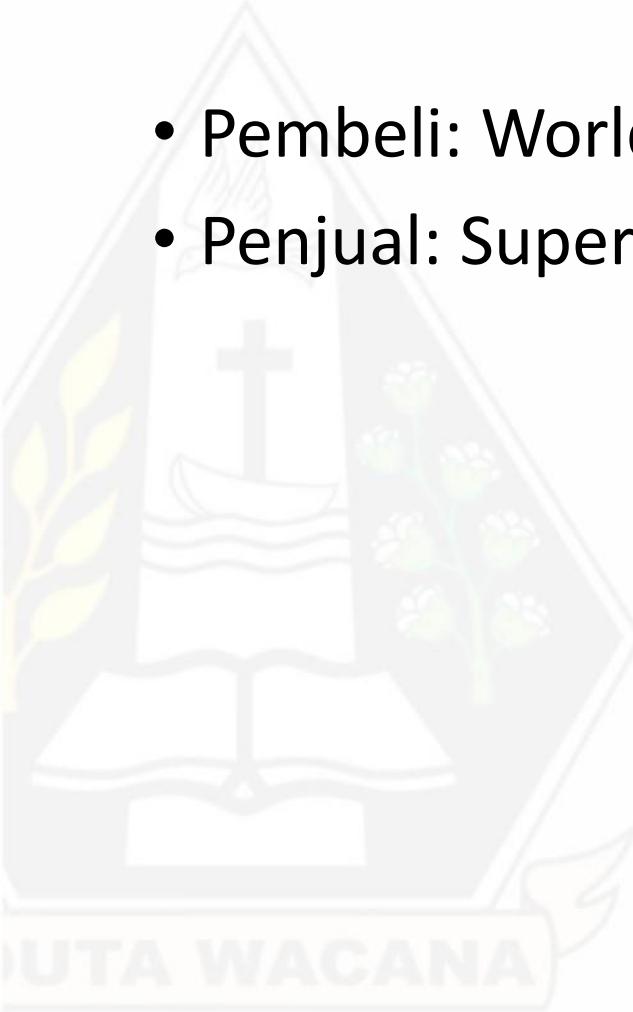
# Document flow in Sales Order

- Customer inquiry -> information request about availability and prices of product
- Quotation (penawaran dari vendor)
- Customer purchase order (pesanan dari customer)
- Sales order (perintah penjualan)
- Picking document (pemilihan)
- Packing list
- Customer Invoice (tagihan)

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# Skenario Sales

- Pembeli: World Wide Skateboard Distributors
- Penjual: SuperSkateboard Inc.



# Customer Inquiry

World Wide Skateboard Distributors

1229 Westwinde Street  
Ann Arbor, MI, 48109

Phone 734.555.5638 Fax 734.555.5648

1

Date: 6/2/08

To Whom It May Concern:

*My name is Patrick Wilson, and I am a purchasing agent for World Wide Skateboard Distributors in Ann Arbor, MI. I was looking through your catalog, and I would like to receive a quote for the following items:*

Quantity	Item	Material Number.
20	Skateboard first aid kit	FAID6000
10	SSB Inc. T-Shirt	SHRT4000
50	Entry-level skateboard	ENSB3000
10	Helmet	HLMT5000

2

*A quote by email or fax would be ideal.*

*Thank you*



3

Patrick Wilson

Purchasing Agent

Fax: (734) 555-5648

# Quotation

**Super Skateboard Builders, Inc.**

1 Skateboard Drive, Grand Rapids, MI, 49525  
Phone 616.555.1234 Fax 616.555.1235

**TO:**  
Mr. Patrick Wilson  
World Wide Skateboard Distributors  
1229 Westwinde Street  
Ann Arbor, MI, 48109

**Quotation**

Quotation Number: 1100435

6

Date: 6/6/08  
**This quotation is valid for 30 days.**  
**Terms of payment: Net 30**  
**Terms of delivery: FOB Receiving Dock**

2

Quantity	Material #	Material Description	Unit Type	Unit Price	Item Total
50	ENSB3000	Entry-Level Skateboard	Each	45.00	2,250.00
10	HLMT5000	Helmet	Each	27.00	270.00
10	SHRT4000	T-Shirt	Each	10.00	100.00
20	FAID6000	Skateboard First-aid Kits	Each	16.00	320.00

SUBTOTAL	\$ 2,940.00
SALES TAX	Exempt
SHIPPING & HANDLING	Included
OTHER	N/A
ORDER TOTAL	\$ 2,940.00

Authorized by: Matt Jones  
Matt Jones, Sales Associate

5

Date 6/6/08

# Customer Purchase Order

**World Wide Skateboard Distributors**

1229 Westwilde Street  
An Arbor, MI, 48109  
Phone 734.555.5638 Fax 734.555.55648

**PURCHASE ORDER****Purchase Order Number: 100074**

①

**THE PURCHASE ORDER NUMBER MUST APPEAR ON ALL RELATED CORRESPONDENCE, SHIPPING DOCUMENTS, AND INVOICES****TO:**

Mr. Matt Jones  
SSB, Inc.  
1 Skateboard Drive  
Grand Rapids, MI, 49525  
616.555.1234

**SHIP TO:**

World Wide Skateboard Distributors  
Mid West Warehouse  
1229 Westwilde Street  
An Arbor, MI, 48109  
Phone 734.555.5638 Fax 734.555.5648

③

Purchase Order #	P.O. DATE	Delivery Date	Shipped VIA	F.O.B. Point	Payment Terms
100074	July 15, 2008	August 1, 2008	Ground	Receiving Dock	Net 30

②

Quantity	Material #	Material Description	Unit Type	Unit Price	Item Total
50	ENSB3000	Entry-Level Skateboard	Each	45.00	2,250.00
10	HLMT5000	Helmet	Each	27.00	270.00
10	SHRT4000	T-Shirt	Each	10.00	100.00
20	FAID6000	Skateboard First-aid Kits	Each	16.00	320.00

SUBTOTAL	\$ 2,940.00
SALES TAX	Exempt
SHIPPING & HANDLING	Included
OTHER	N/A
ORDER TOTAL	\$ 2,940.00

Authorized by:

P. Wilson, Purchasing Agent

④

Date  
7/15/08

# Sales Order

## Super Skateboard Builders, Inc.

## Sales Order

**BILL TO:**

World Wide Skateboard Distributors  
Attention: P. Wilson  
1229 Westwinde Street  
An Arbor, MI, 48109  
Phone 734.555.5638 Fax 734.555.55648

**SHIP TO:**

World Wide Skateboard Distributors  
Mid West Warehouse  
1229 Westwinde Street  
An Arbor, MI, 48109  
Phone 734.555.5638 Fax 734.555.55648

Order #	Customer PO #	P.O. DATE	Requested Delivery Date	SHIPPED VIA	F.O.B. POINT	TERMS
34567	100074	July 15, 2008	August 1, 2007	Ground	Receiving Dock	Net 30

Quantity	Material #	Material Description	Unit Type	Unit Price	Total
50	ENSB3000	Entry-Level Skateboard	Each	45.00	2,250.00
10	HLMT5000	Helmet	Each	27.00	270.00
10	SHRT4000	T-Shirt	Each	10.00	100.00
20	FAID6000	Skateboard First-aid Kits	Each	16.00	320.00

SUBTOTAL	\$ 2,940.00
SALES TAX	Exempt
SHIPPING & HANDLING	Included
OTHER	N/A
<b>TOTAL</b>	<b>\$ 2,940.00</b>

Received by:

*M. Jones*Date: *7/18/08*

Packed by:

*T. J. Morris*Date: *7/23/08*

Shipped by:

*T. Jones*Date: *7/24/08*

Invoiced by:

*Shana Smith*Date: *7/30/08*

Payment received by:

*Shana Smith*Date: *8/7/08***5**

# Picking Document

**Super Skateboard Builders, Inc.**

## Picking Document

**BILL TO:**

World Wide Skateboard Distributors  
Attention: P. Wilson  
1229 Westwinde Street  
An Arbor, MI, 48109  
Phone 734.555.5638 Fax 734.555.55648

**SHIP TO:**

World Wide Skateboard Distributors  
Mid West Warehouse  
1229 Westwinde Street  
An Arbor, MI, 48109  
Phone 734.555.5638 Fax 734.555.55648

Order #	Customer PO #	P.O. DATE	Requested Delivery Date	SHIPPED VIA	F.O.B. POINT	TERMS
34567	100074	July 15, 2007	August 1, 2007	Ground	Destination	Net 30

**Table 1**

Material #	Material Description	Unit Type	Quantity Ordered	Storage Location	Quantity Picked	Storage Location
ENSB3000	Entry-Level Skateboard	Each	50	30	50	30
HLMT5000	Helmet	Each	10	30	10	30
SHRT4000	T-Shirt	Each	10	30	10	30
FAID6000	Skateboard First-aid Kits	Each	20	30	20	30

Picked by:

*T. James.*

Date: 7/23/08

(8)

# Packing List

## Super Skateboard Builders, Inc

1 Skateboard Drive  
Grand Rapids, MI 49525  
Phone (616) 555-1234  
Fax (616) 555-1245

## Packing List

Order Date	Customer Contact	Customer Number	Customer PO #	Order Number	Shipped Via
July 15, 2007	P. Wilson	10054	1000074	34567	UPS Ground
Date Packed	Packed by	Checked by	Ship Date	Sales Rep	
July 23, 2007	TJ	TJ	July 24, 2007	Matt Jones	

### 3 Ship To:

World Wide Skateboard Distributors  
Mid West Warehouse  
1229 Westwinde Street  
An Arbor, MI, 48109

### Bill To:

World Wide Skateboard Distributors  
Attention: P. Wilson  
1229 Westwinde Street  
An Arbor, MI, 48109

Material #	Description	Unit Weight (lb)	Unit Type	Order Quantity	Ship Quantity	Backorder Quantity	Weight (lb)
ENSB3000	Entry-Level Skateboard	7.50	Each	50	50	0	375.00
HLMT5000	Helmet	4.00	Each	10	10	0	40.00
SHRT4000	T-Shirt	0.75	Each	10	10	0	7.50
FAID6000	Skateboard First-aid Kits	2.00	Each	20	20	0	40.00

5

Total Shipment Weight 462.50

Comments: Backordered items will ship as they become available.

Please contact the Customer Service department at (616) 555-1234 with any questions or concerns.

Thank you for your order!

# Customer Invoice

Figure 4.8: Customer Invoice

Super Skateboard Builders, Inc.

I N V O I C E

**Invoice #:** 100452  
**Invoice Date:** 7/14/2008  
**Customer ID:** 10054

**Bill To:**  
World Wide Skateboard Distributors  
Attention: P. Wilson  
1229 Westwinde Street  
An Arbor, MI, 48109

**Ship To:**  
World Wide Skateboard Distributors  
Mid West Warehouse  
1229 Westwinde Street  
An Arbor, MI, 48109

**2**

Date	Your Order #	Our Order #	Sales Rep.	POB	Ship Via	Terms
7/30/2008	1000074	34567	Matt Jones	Receiving Dock	UPS Ground	Net 30

**3**

Quantity	Item	Units	Description	Discount %	Taxable	Unit Price	Total
50	ENSB3000	Each	Entry-Level Skateboard	0	0	45.00	2,250.00
10	HLMT5000	Each	Helmet	0	0	27.00	270.00
10	SHRT4000	Each	T-Shirt	0	0	10.00	100.00
20	FAID6000	Each	Skateboard First-aid Kits	0	0	16.00	320.00

Make Checks Payable to: Super Skateboard Builders, Inc.  
1 Skateboard Drive, Grand Rapids, Michigan, 49525  
Phone: 616.555.1234      Fax: 616.555.1235

Subtotal	\$ 2,940.00
Tax	Exempt
Shipping	Included
Miscellaneous	
<b>Balance Due</b>	<b>\$ 2,940.00</b>

# Financial Impact of the Fulfillment Process

4.9A: When goods are shipped out

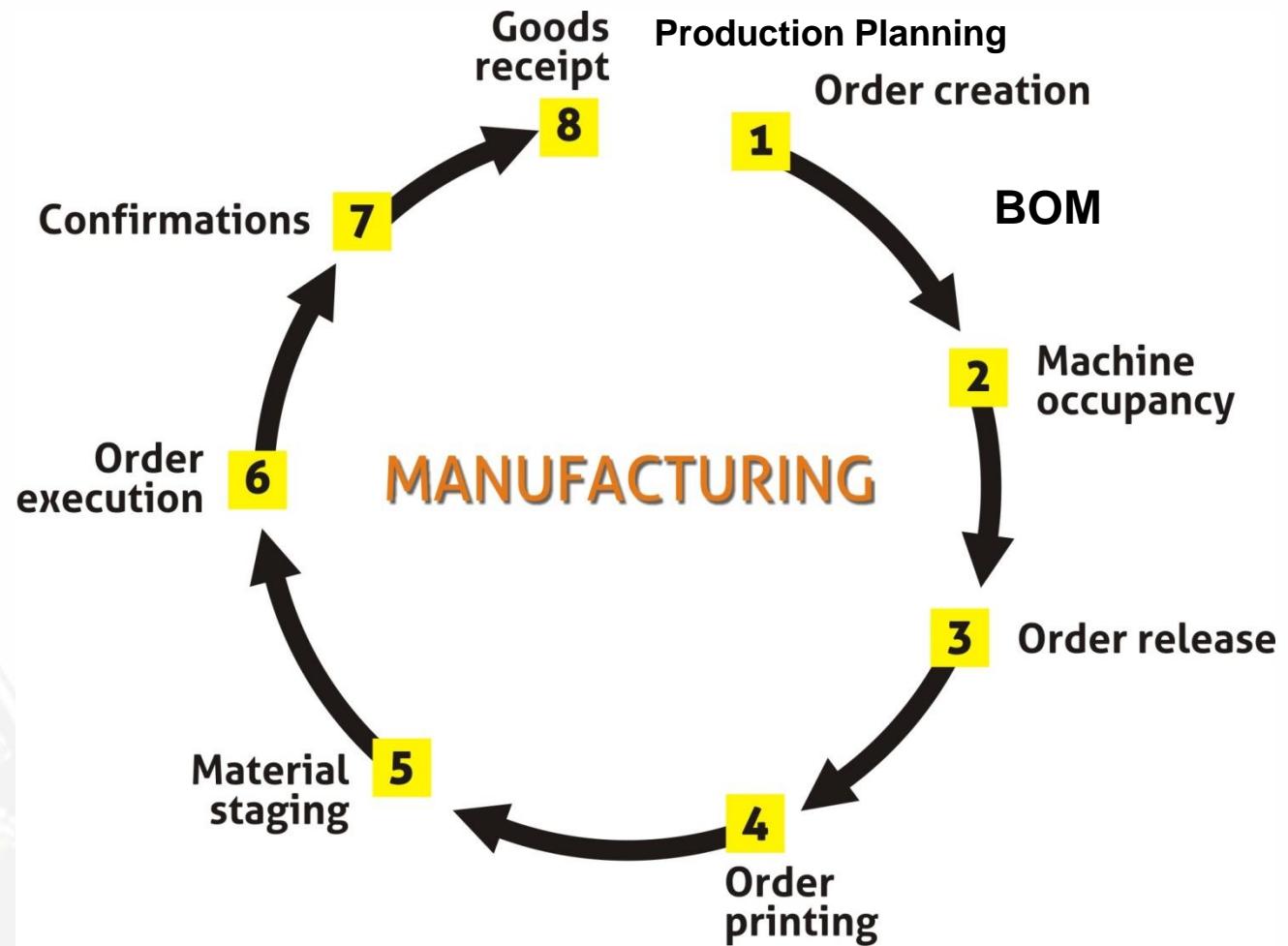
Income Statement		Balance Sheet	
Income		Assets	
Revenue from Sales	\$2940	Cash	\$0
		Accounts Receivable	\$2940
Expenses		Inventory	
Cost of Goods Sold	\$2170	Finished goods	\$2170
Net Income	\$ 770	Total Assets	\$ 700
		Liabilities	
		Accounts Payable	
		Total Liabilities	
		Equity	
		Retained Earnings	\$ 770
		Total Liabilities and Equity	\$ 770

Financial (Accounting) changed!

4.9B: When payment is received

Income Statement		Balance Sheet	
Income		Assets	
Revenue from Sales	\$2940	Cash	\$2940
		Accounts Receivable	\$0
Expenses		Inventory	
Cost of Goods Sold	\$2170	Finished goods	\$2170
Net Income	\$ 770	Total Assets	\$ 700
		Liabilities	
		Accounts Payable	
		Total Liabilities	
		Equity	
		Retained Earnings	\$ 770
		Total Liabilities and Equity	\$ 770

# MANUFACTURE PROCESS

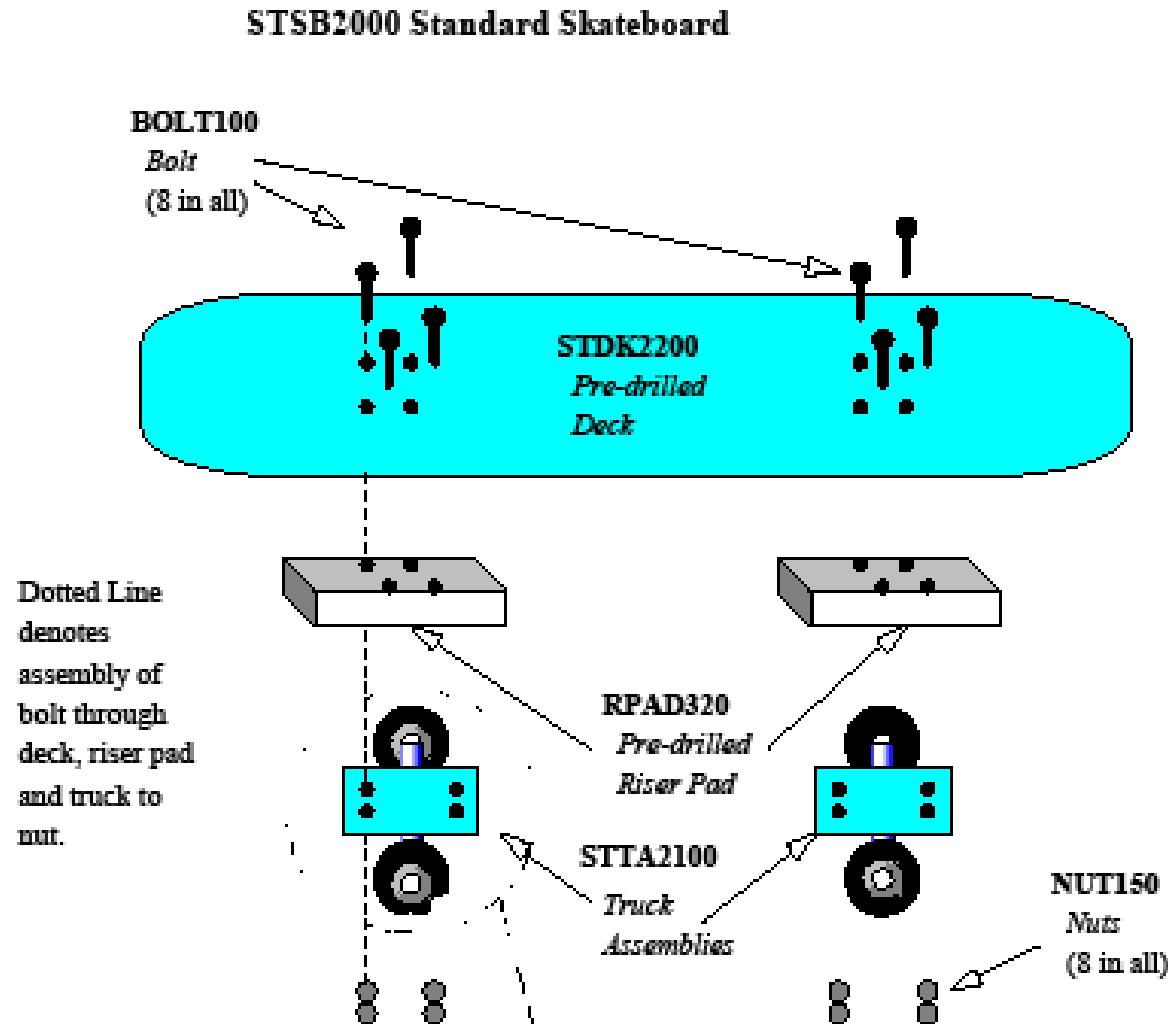


Delapan tahap proses manufacture

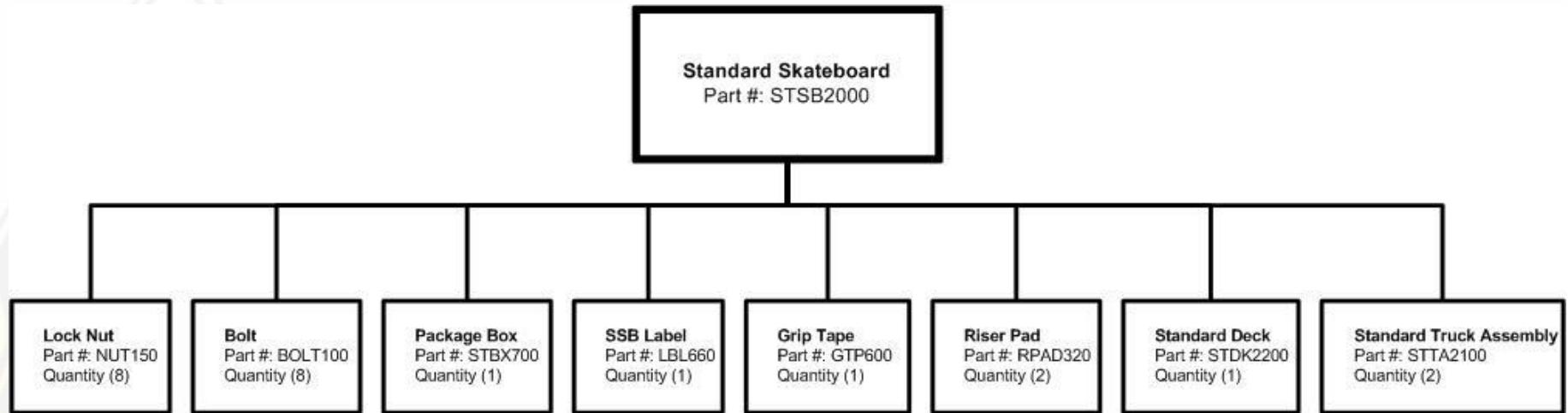
# Bill of Material (BOM)

- Identifies **components** needed to make one unit of finished product
  - Result of the product design process which leads to an engineering drawing
- Multiple levels of BOM
  - A component may have its own components
  - Example: components of the standard truck assembly
- Which components could be manufactured from raw material?

# Engineering Drawing of the Standard Skateboard



# Bill of Material



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# Planned Order

Super Skateboard Builders, Inc.

## Planned Order

Planned Order #: 7412  
Production Order #: 4142

(to be filled in by Production Controller)

②

Request Date	Requested Delivery Date	Requester Name	Requester Phone	Delivery Location
7/9/07	7/22/07	Bloomberg	555-1234	Warehouse

③

Material Number	Material Description	Quantity
SISB 2000	8ft. Skateboard	50

④

Requested by:	Dan Bloomberg	Date:	7/9/07
Approved by:	C. Sandusky	Date:	7/18/07

# Production Order – Completed State

Super Skateboard Builders, Inc. <b>Production Order</b>		Production Order # <u>7412</u>																	
Material Number	Material Description	Quantity																	
SSB 2000	Std Skateboard	50																	
<table border="1"><thead><tr><th></th><th>Date</th><th>Quantity Complete</th><th>Scrap Quantity</th><th>Completed by</th></tr></thead><tbody><tr><td>Raw Material Staging</td><td>7/23</td><td>50</td><td>0</td><td>CS</td></tr><tr><td>Assembly Completed</td><td>7/24</td><td>50</td><td>0</td><td>CS</td></tr></tbody></table>						Date	Quantity Complete	Scrap Quantity	Completed by	Raw Material Staging	7/23	50	0	CS	Assembly Completed	7/24	50	0	CS
	Date	Quantity Complete	Scrap Quantity	Completed by															
Raw Material Staging	7/23	50	0	CS															
Assembly Completed	7/24	50	0	CS															
<table border="1"><thead><tr><th></th><th>Date</th><th>Quantity</th><th>Completed by</th><th>Received by</th></tr></thead><tbody><tr><td>Move into Storage Location</td><td>7/25</td><td>50</td><td>MM</td><td>TJ.</td></tr></tbody></table>						Date	Quantity	Completed by	Received by	Move into Storage Location	7/25	50	MM	TJ.					
	Date	Quantity	Completed by	Received by															
Move into Storage Location	7/25	50	MM	TJ.															
Requisition Number: <u>7412</u> Authorized by: <u>Chandler Bass</u> Date authorized: <u>7/10/07</u>																			

# Material Withdrawal Slip

Super Skateboard Builders, Inc.

Production Order #: 4142

## Material Withdrawal Slip

Production Quantity: 50

1

2

Date	Issued by	Received by	Location	
7/23	TJ	CS	Warehouse	

3

4

Material Number	Material Description	Quantity per Skateboard	Total Quantity Needed	Quantity Issued
NUT 150	Lock Nut	8	400	400
BOLT 100	Bolt	8	400	400
STBX700	Packaging Box	1	50	50
LBL600	SSB Label	1	50	50
GTP600	Grip Tape	1	50	50
RPAD320	Riser Pads	2	100	100
STDK2200	Standard Deck	1	50	50
STTA2100	Standard Truck Assembly	2	100	100

# Goods Receipt Document

**Super Skateboard Builders, Inc.**  
**Goods Receipt**

(for production order)

**Goods Receipt #** 11421

Date:	7/21/07
Production Order #	4142
Material Number	SISB 2000
Material Description	Standard Skateboard
Quantity	50
Delivered by	MM
Received by	TJ.

# Next

- SAP Logistics 1 (bab 4 bagian pertama)





# Mengingatkan

- Tugas Pembuatan KTM untuk keperluan ujian

# Logistics

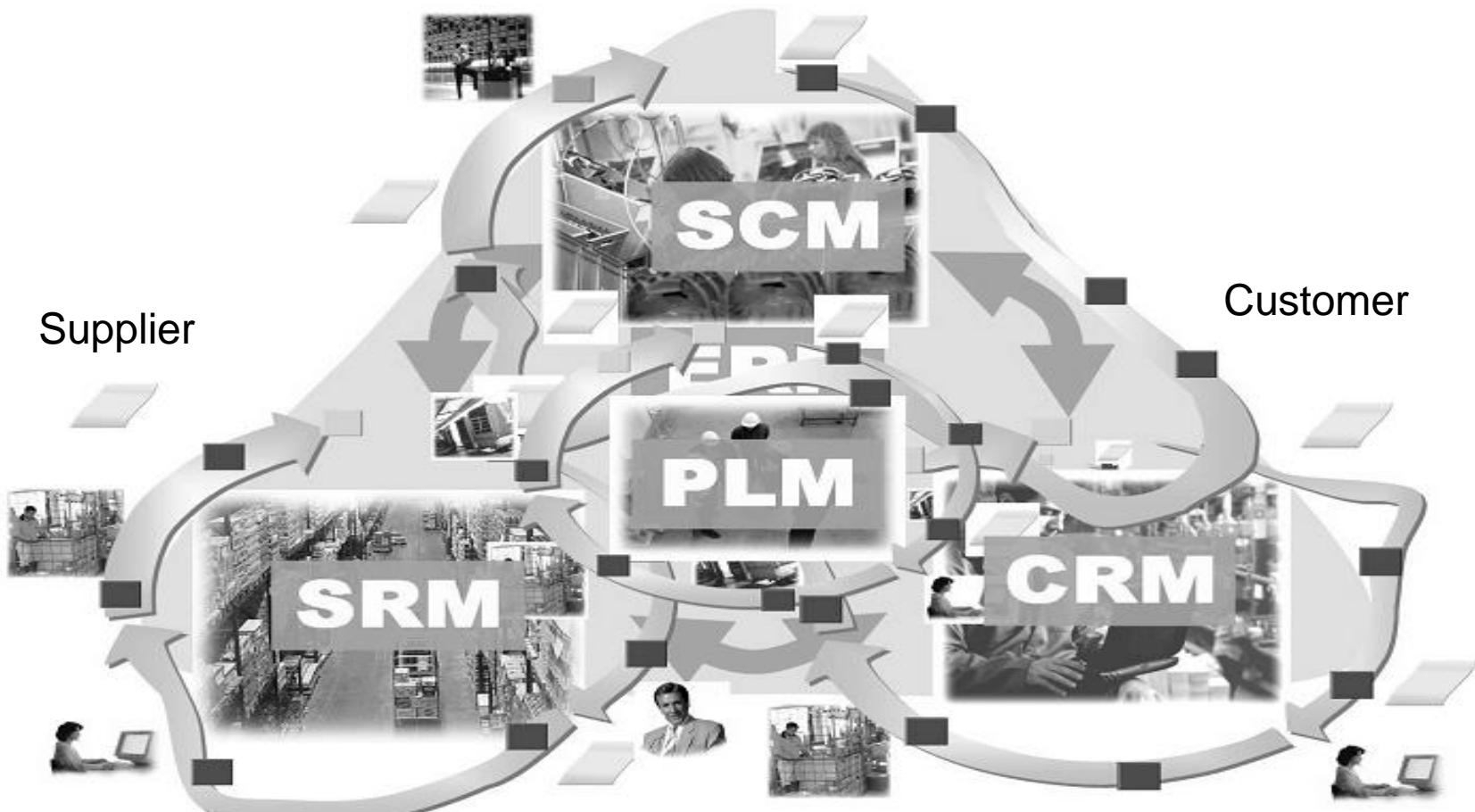
- Logistik adalah **seluruh proses** yang melibatkan barang / jasa yang diproduksi kemudian **dijual** oleh perusahaan tersebut
- Mulai dari **persiapan** sebelum produksi, **proses produksi** itu sendiri, sampai ke **penjualan**

# Business Process covered by Logistics in SAP

- **Procurement**
  - Persiapan dan Pembelian Bahan Baku / Barang Dagangan
- **Sales Order Management**
  - Penjualan Barang
- **Manufacture**
  - Produksi Barang

# SAP Module Function in General

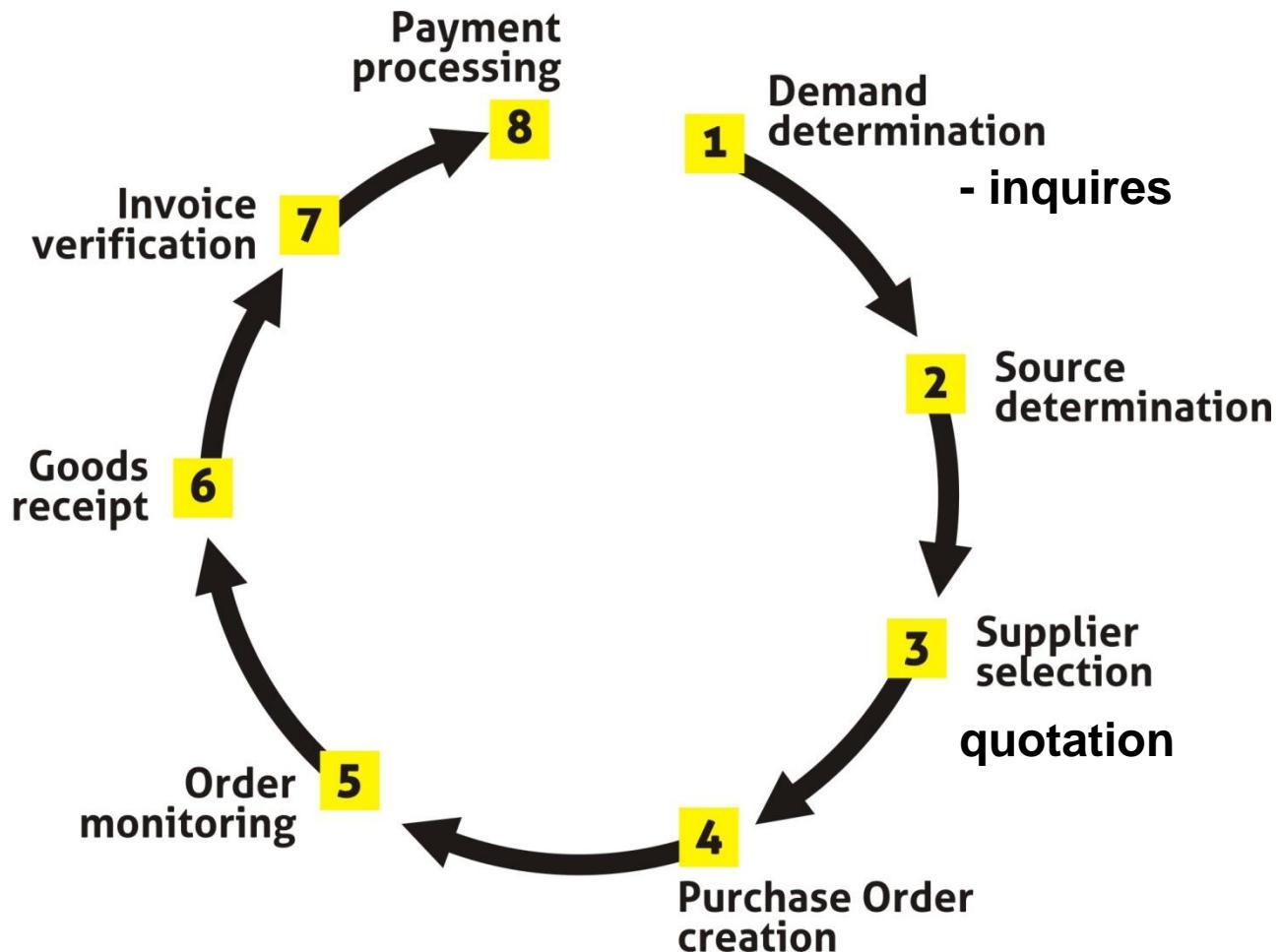
Supply chain



# Procurement

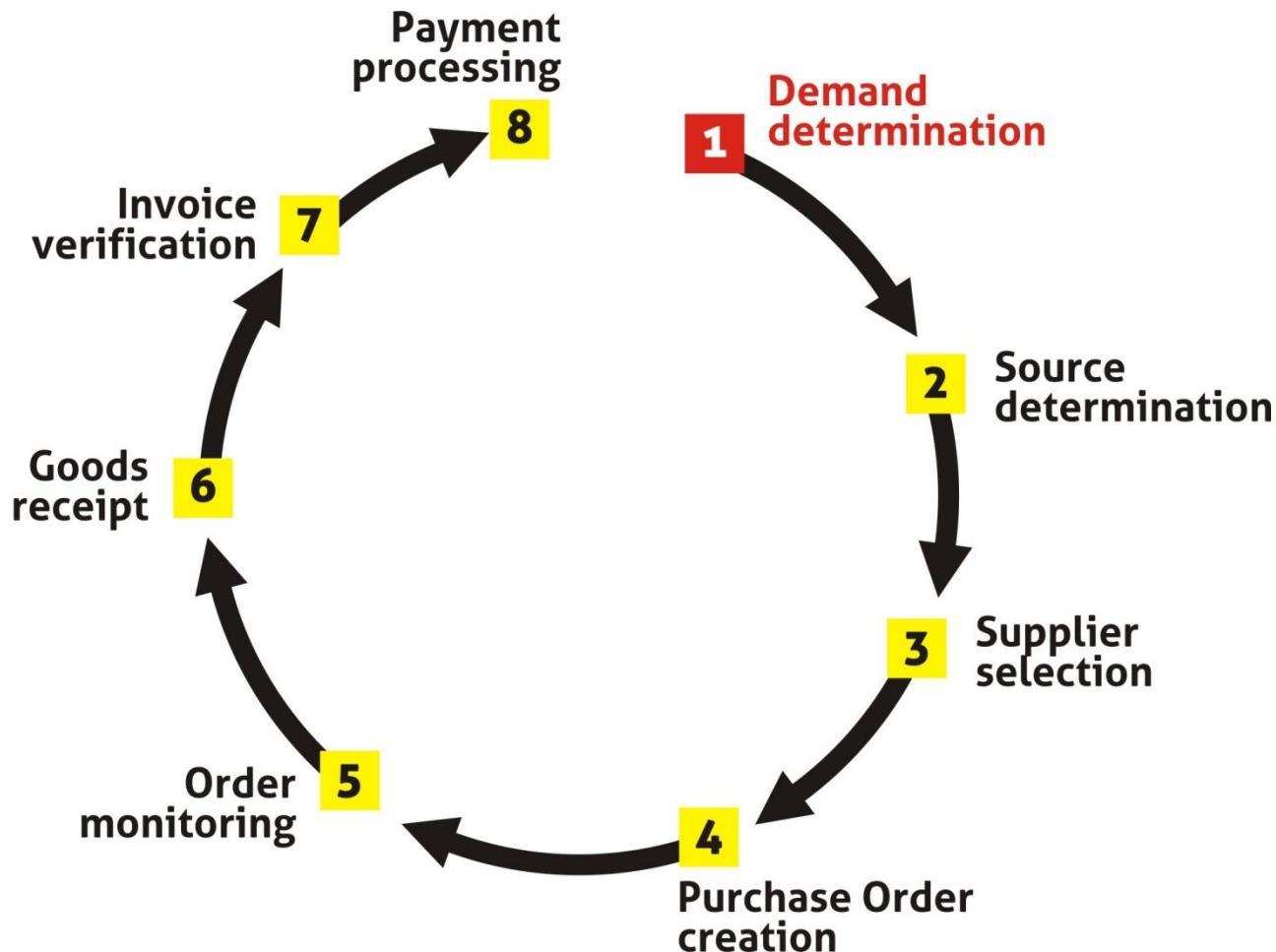
- Termasuk proses **persiapan** bahan baku untuk produksi, seperti penentuan sampai pembelian bahan baku dari supplier
- Procurement harus dilakukan **sebelum** manufaktur (produksi) dan sales (penjualan)
- Procurement dibagi menjadi **delapan** tahap

## PROCUREMENT PROCESS



Delapan tahap proses **procurement**

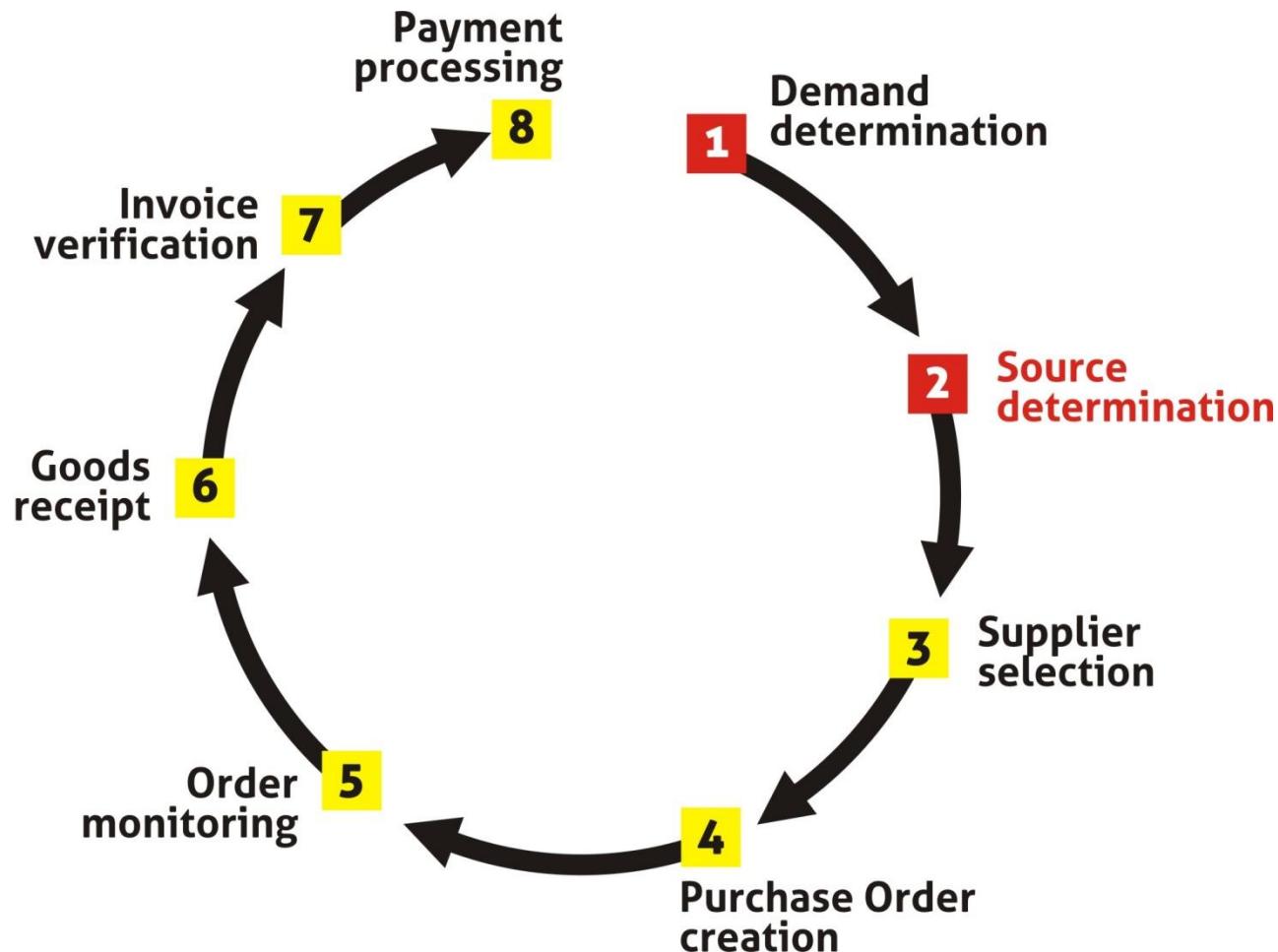
## PROCUREMENT PROCESS



### Menentukan bahan baku yang dibutuhkan

Pihak manajemen atau departemen perencanaan perusahaan, menentukan barang yang akan diproduksi pada satu periode berdasarkan kebutuhan, dan menginventarisir seluruh bahan baku yang dibutuhkan untuk proses produksi tersebut (**Material Request / MR**).

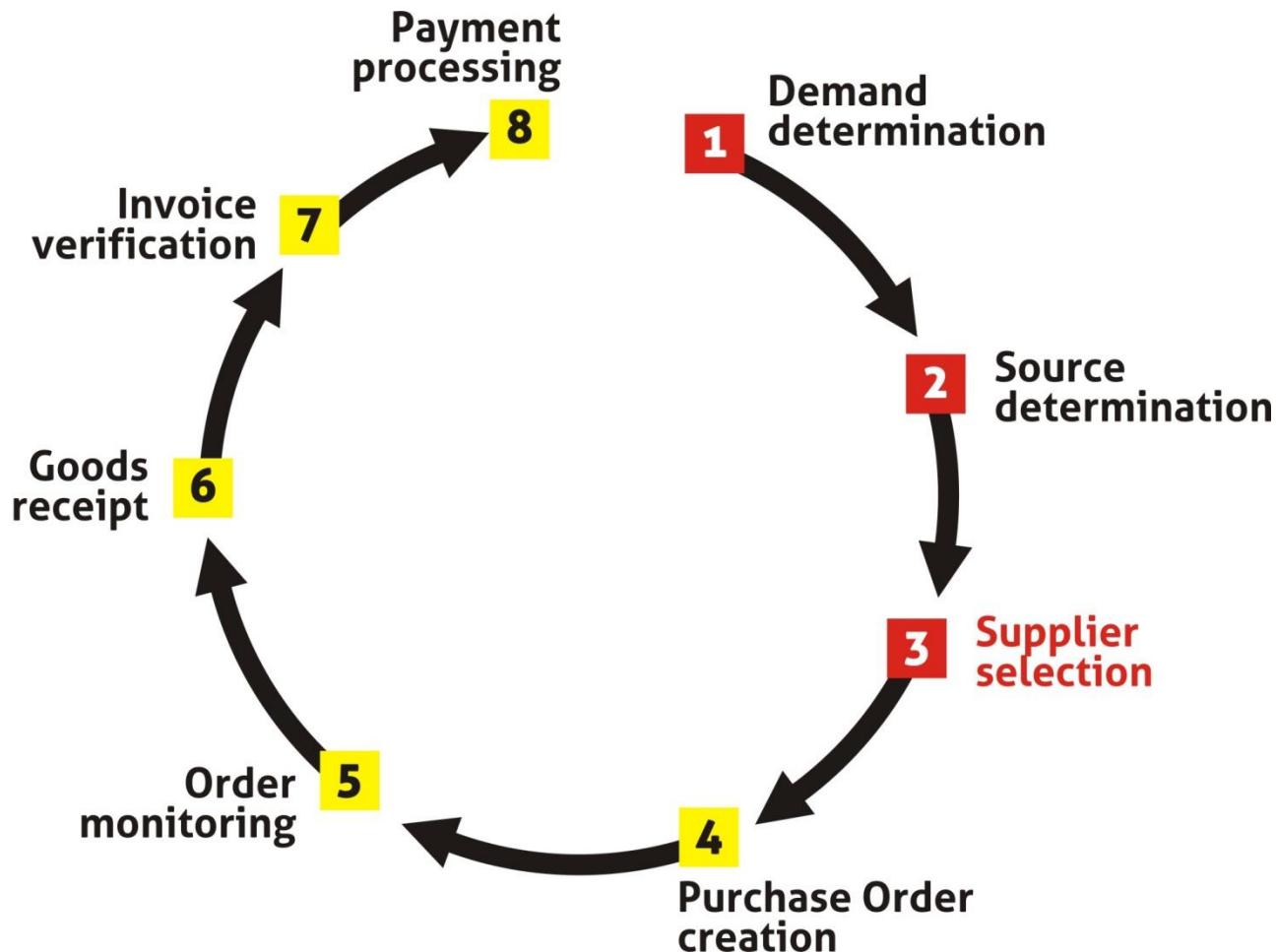
## PROCUREMENT PROCESS



### Menentukan sumber pengambilan bahan

Berdasarkan MR, perusahaan **mensurvei** supplier bahan baku, dengan melihat pada catatan perusahaan, atau meminta informasi pada para supplier bahan baku, mengenai *ketersediaan, harga, kualitas bahan baku dan jangka waktu pembayaran.*

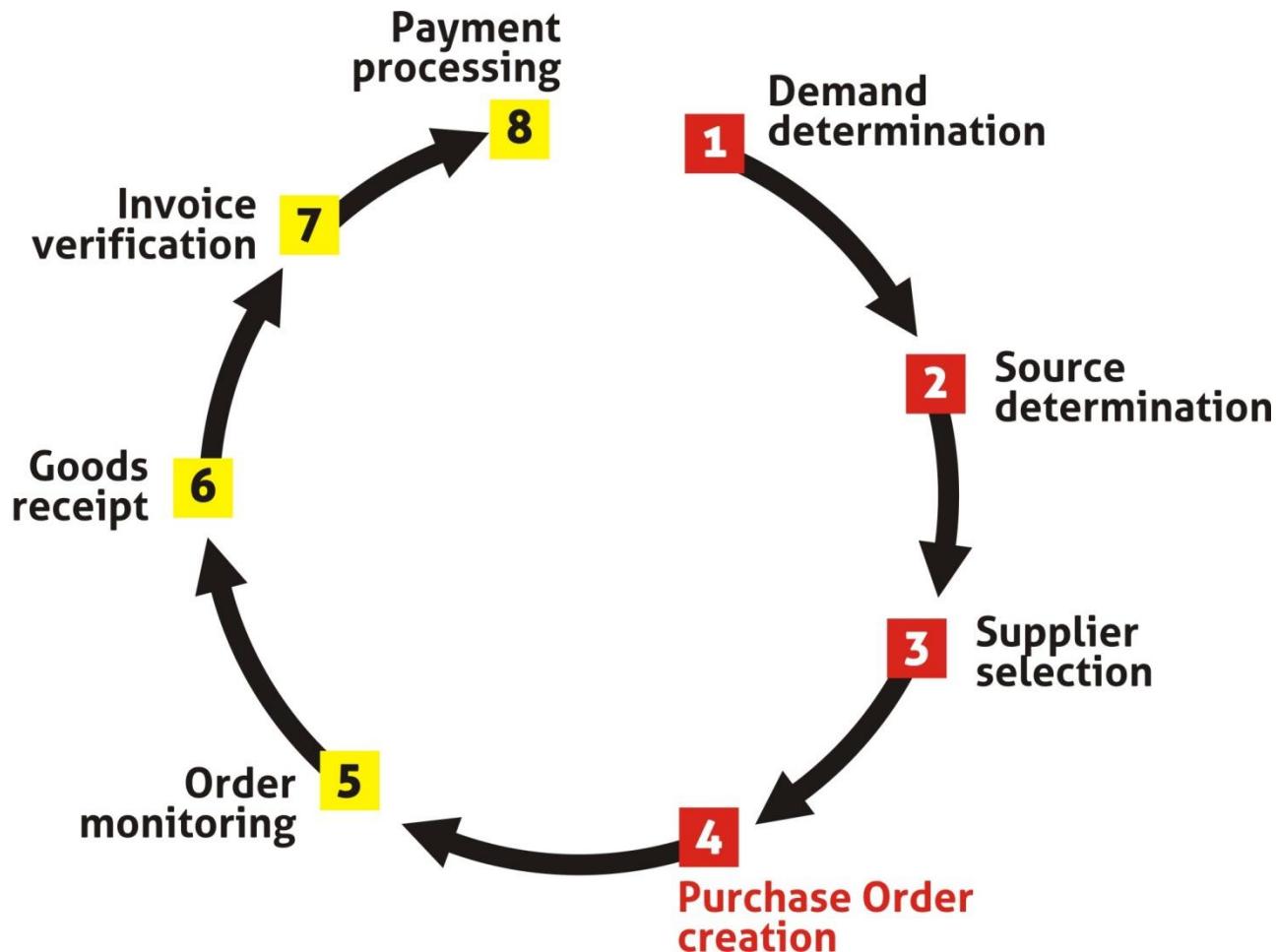
## PROCUREMENT PROCESS



### Memilih sang supplier bahan baku

Informasi yang didapat pada langkah 2 kemudian diolah untuk menentukan supplier yang paling **ideal** untuk menyediakan bahan baku.

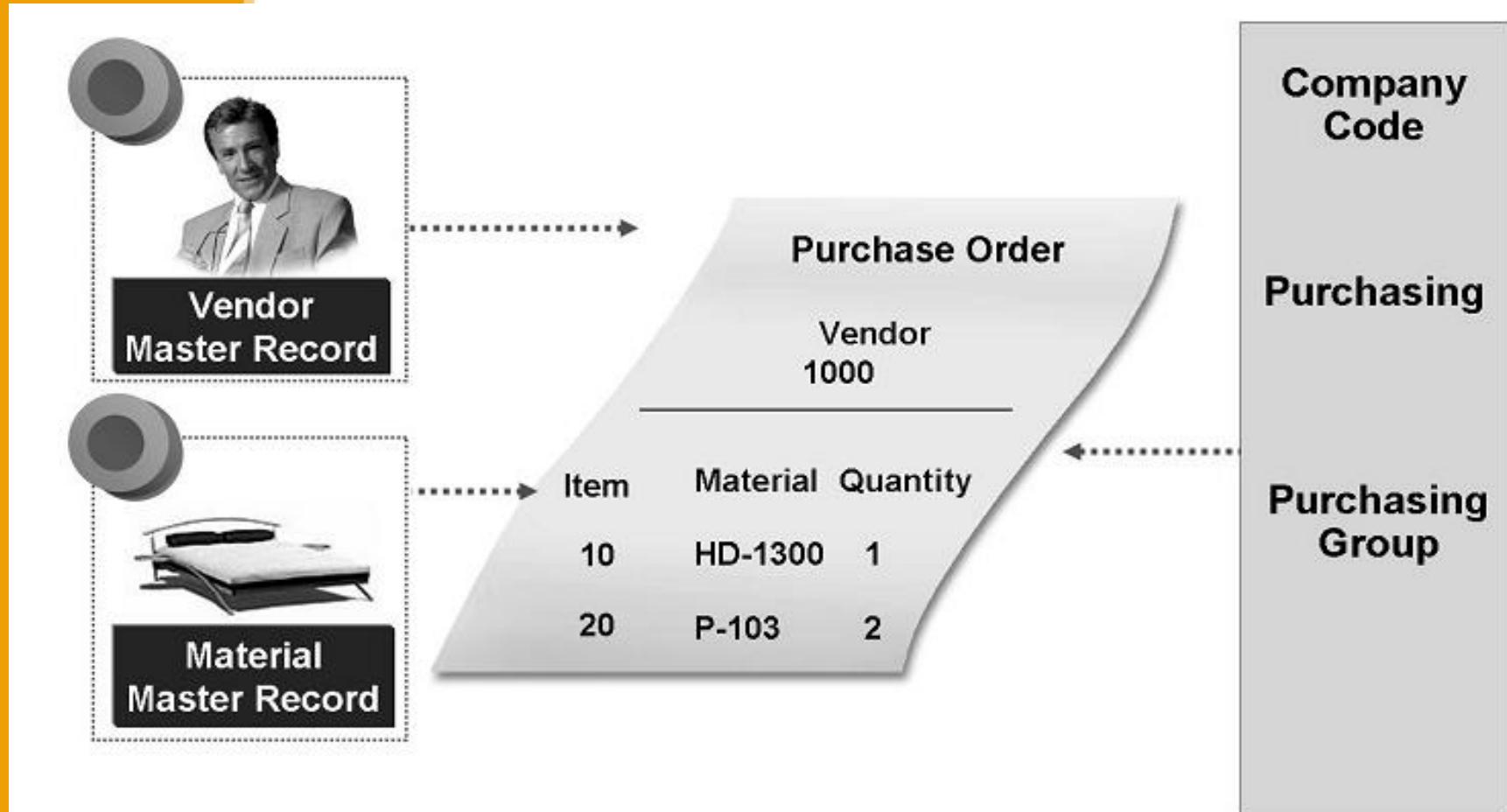
## PROCUREMENT PROCESS



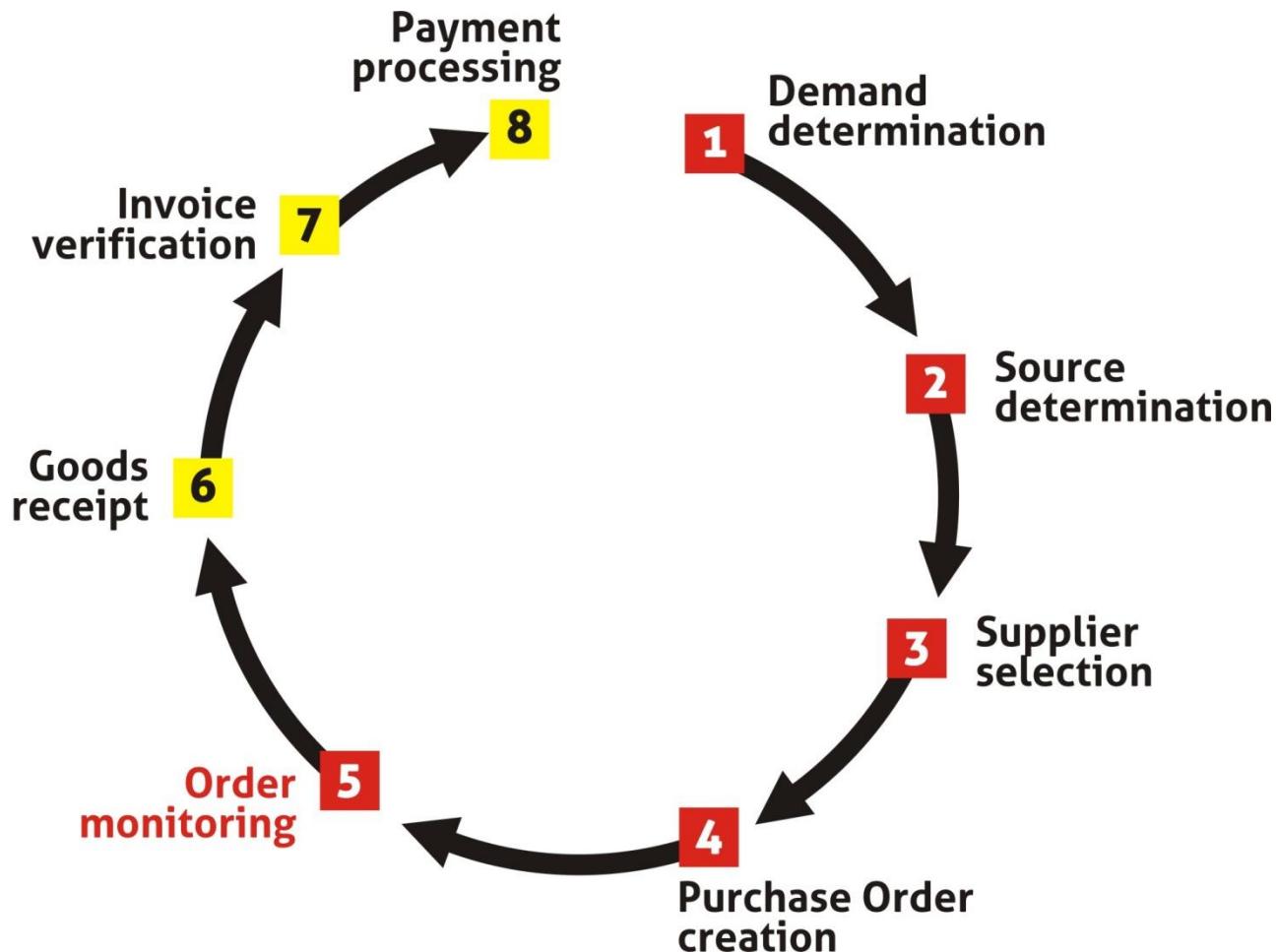
### Membuat pemesanan bahan baku

Setelah supplier ditentukan, perusahaan **membuat Surat Pemesanan (PO)** bahan baku yang dibutuhkan pada supplier, sekaligus menentukan penjadwalan penerimanya (tanggal dan lokasi gudang, jika ada).

# Procurement (PO) Document



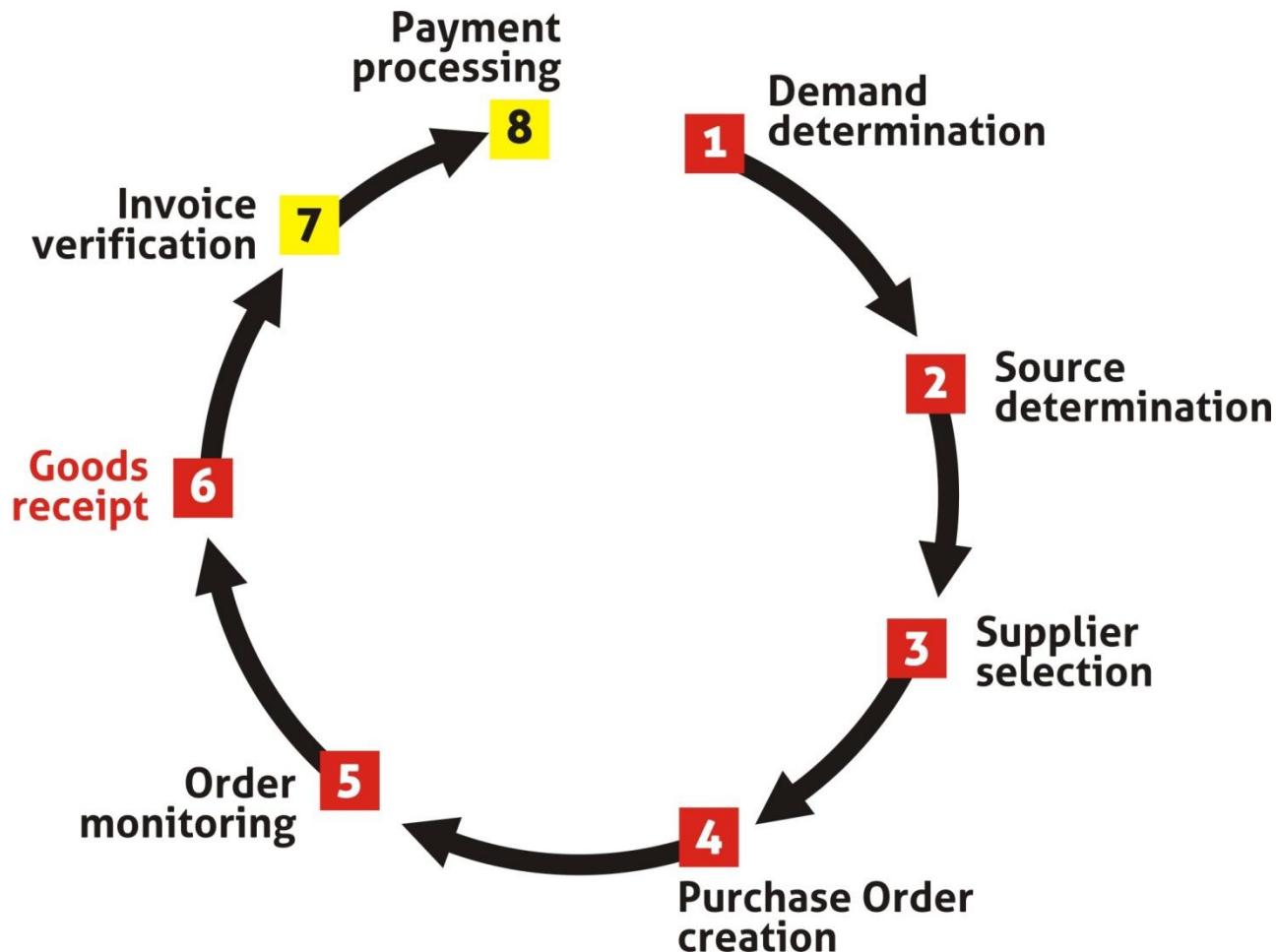
## PROCUREMENT PROCESS



### Memonitor pesanan

**Memonitor** kondisi pesanan, proses pengantaran, dan sebagainya pada interval tertentu. Di sistem SAP, akan muncul *reminder* untuk mengingatkan jadwal sampainya pesanan bahan baku, berdasarkan PO yang telah dibuat.

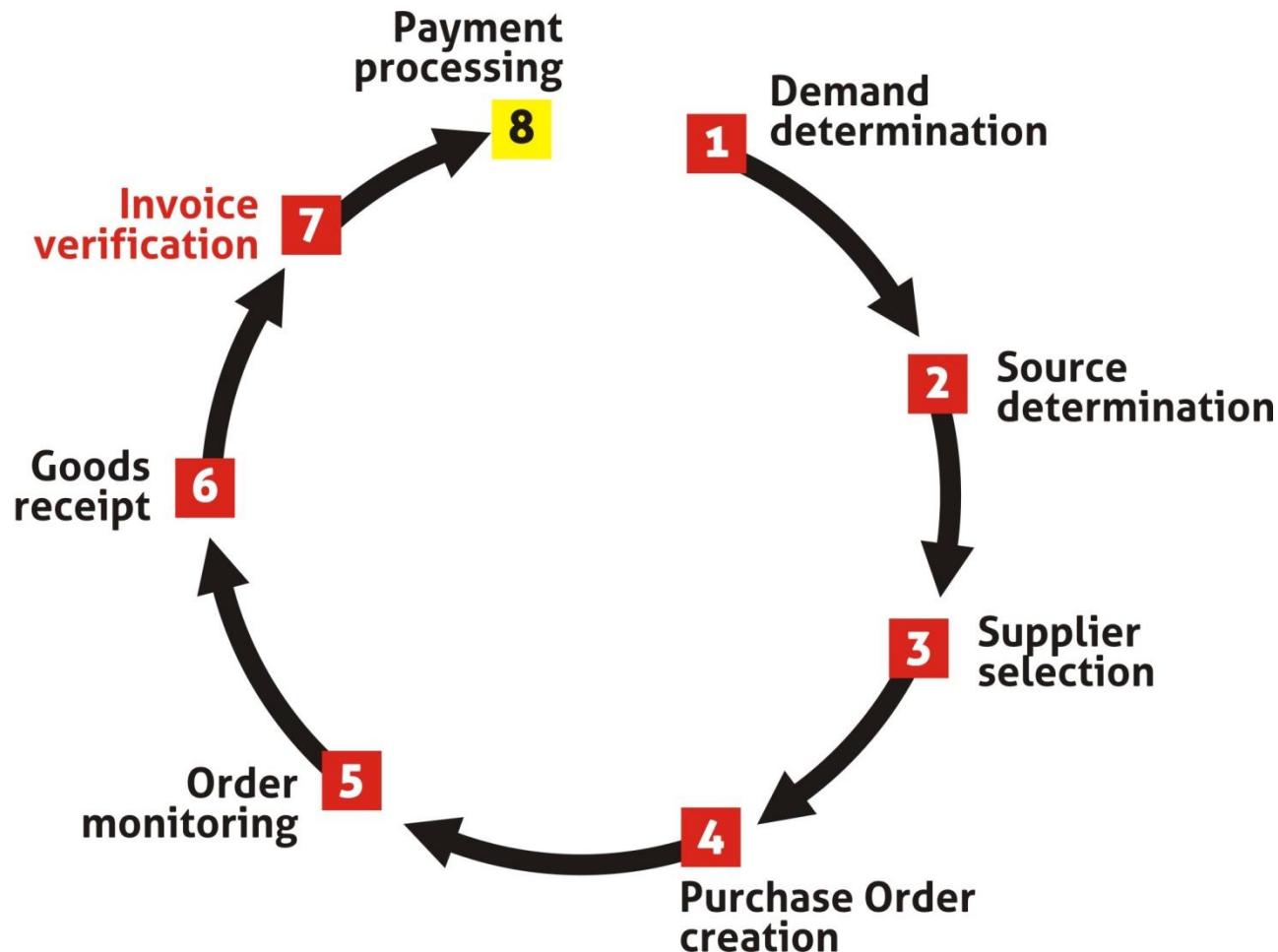
## PROCUREMENT PROCESS



### Penerimaan bahan baku ke gudang

Pesanan bahan baku **telah datang**. Bagian gudang akan memeriksa kondisi dan toleransi bahan baku, kemudian mengeluarkan surat penerimaan barang (**Goods Receipt/GR**), untuk selanjutnya disimpan di gudang.

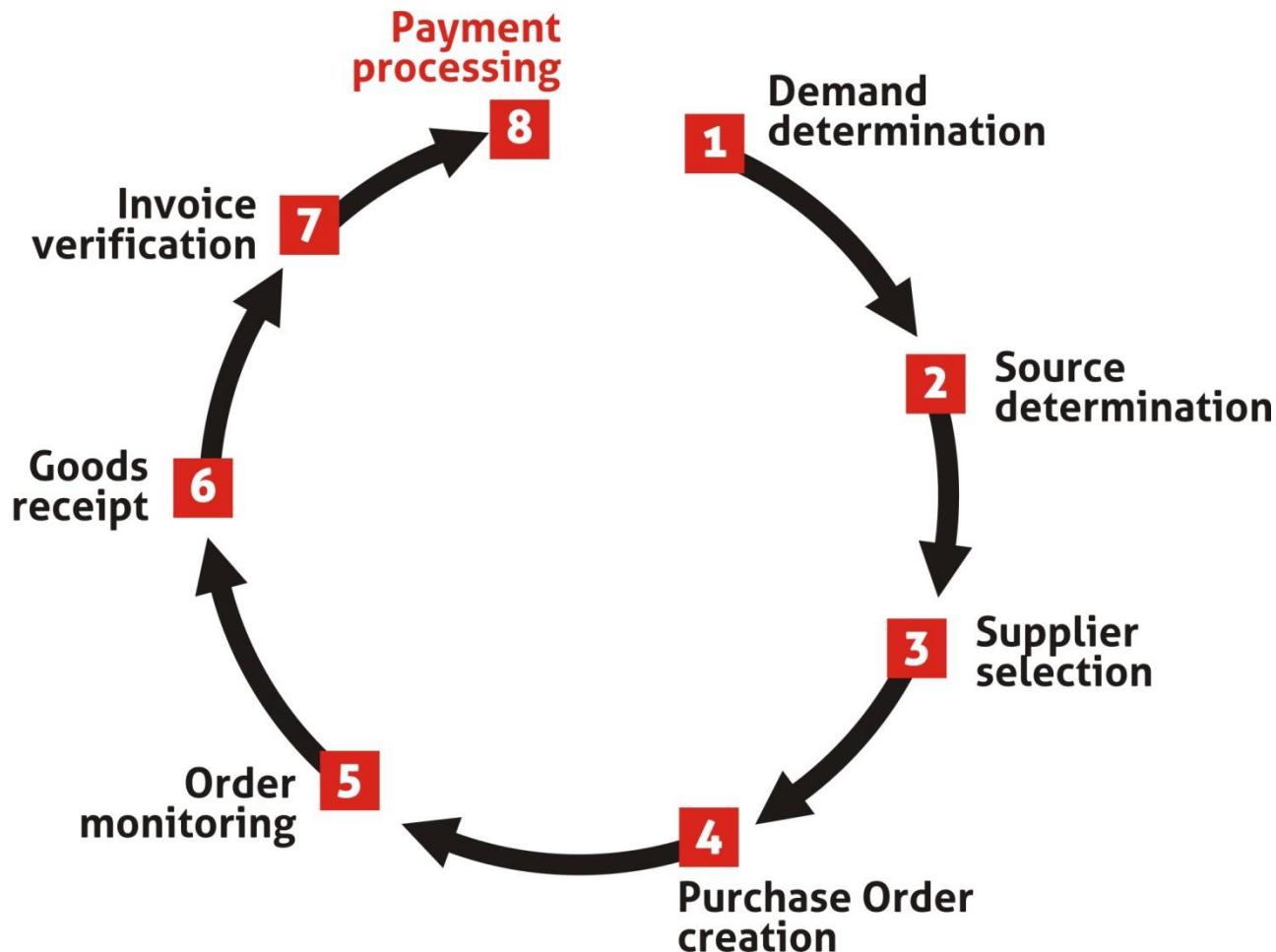
## PROCUREMENT PROCESS



### Pemeriksaan ulang tagihan

Berdasarkan PO dan catatan penerimaan barang pada GR, tagihan **dicek ulang** untuk menyesuaikan nominal atas *barang-barang yang rusak atau kompensasi keterlambatan, dan pajak-pajak yang diperlukan.*

## PROCUREMENT PROCESS



### Pembayaran tagihan

Setelah penyesuaian tagihan beres, sistem akan mengeluarkan **surat perintah pembayaran** pada supplier. Bagian **keuangan** perusahaan yang akan melakukan pembayaran ini.

# Procurement Process

## Procurement



Invoice verification

Post

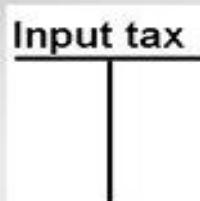
Invoice  
document

Material  
Quantity  
Amount  
Blocking  
reason

## Financial Accounting

Vendor

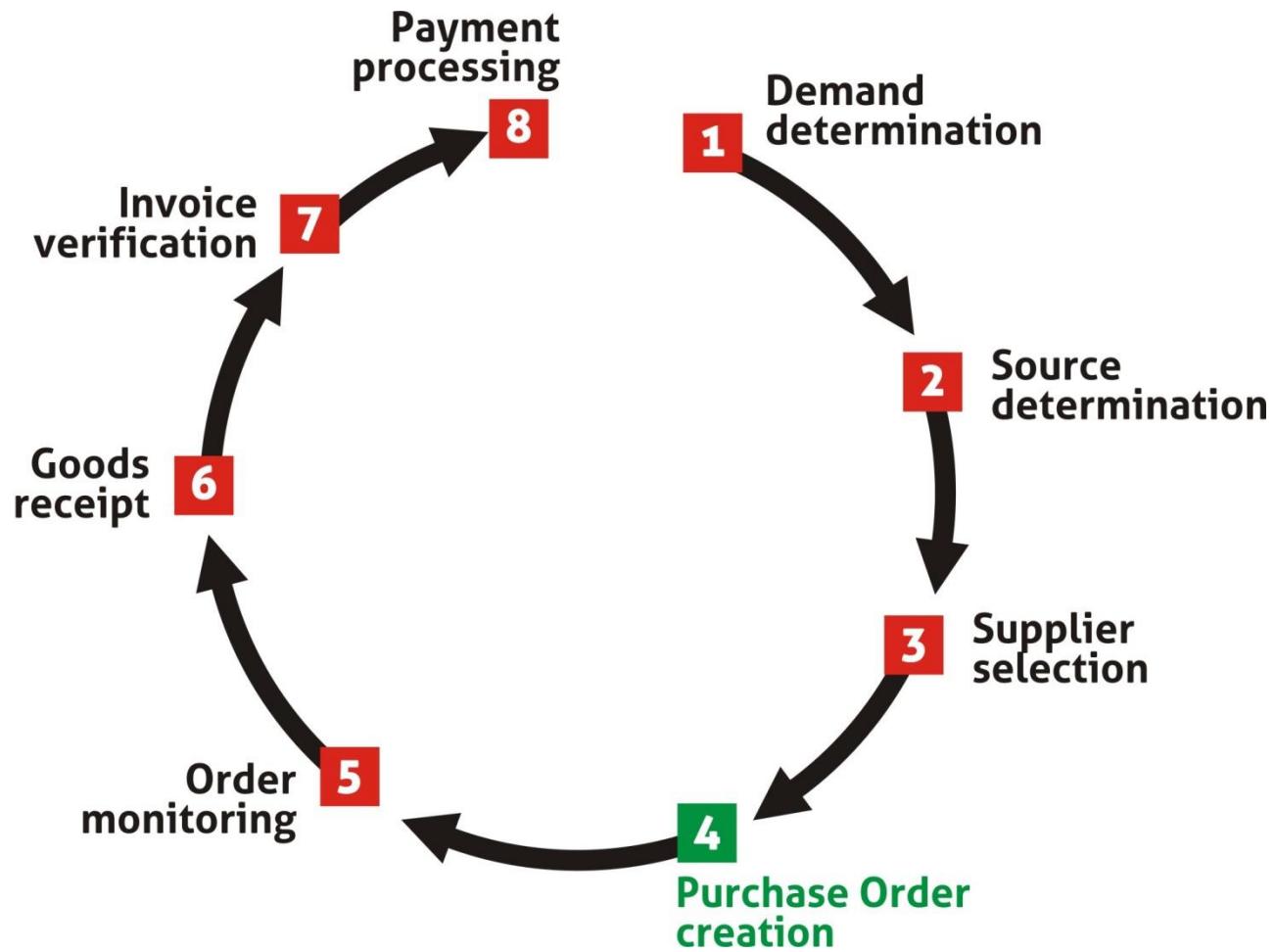
GR / IR



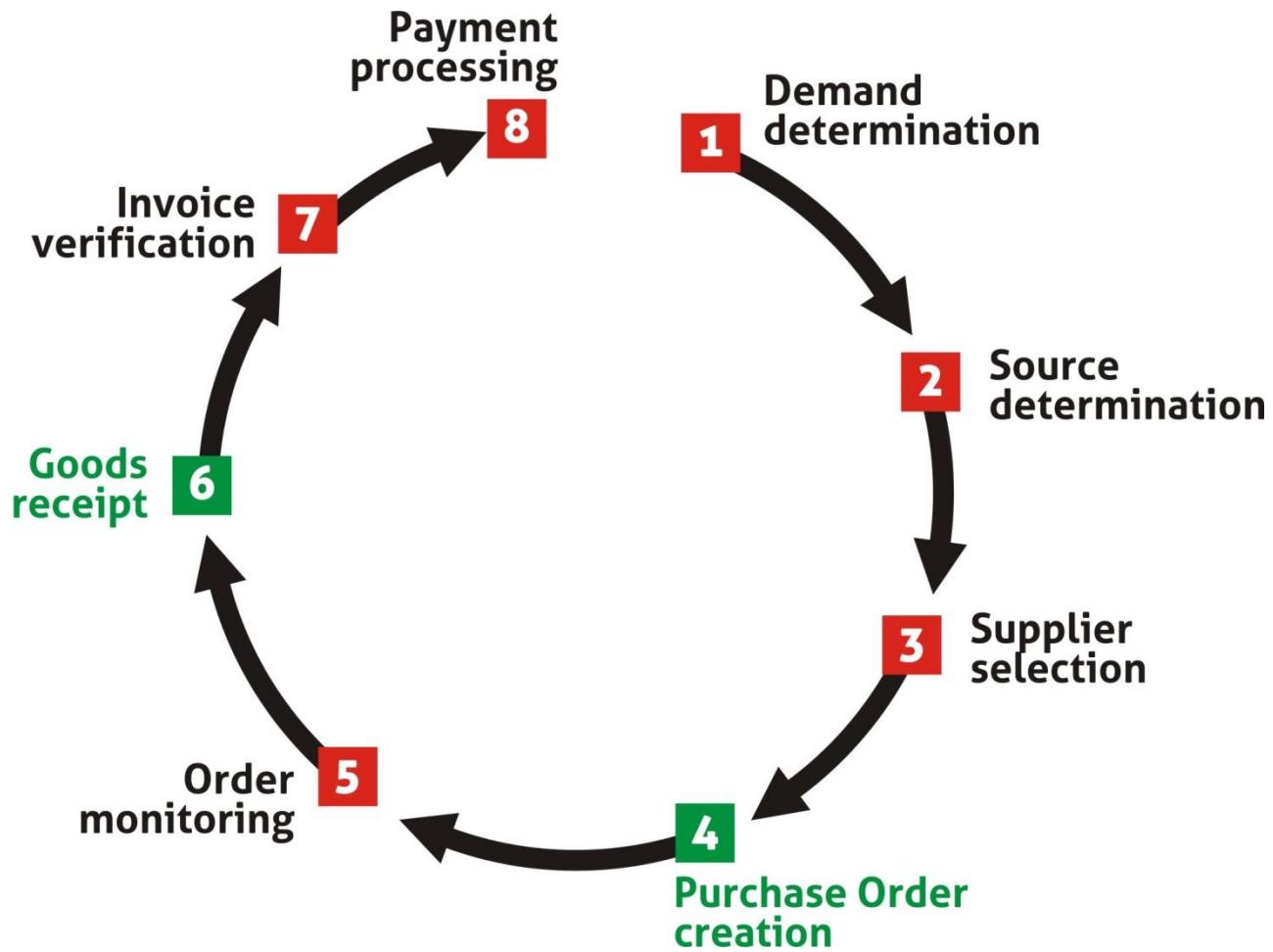
Account-  
ing doc.

Posting key  
Account  
Amount

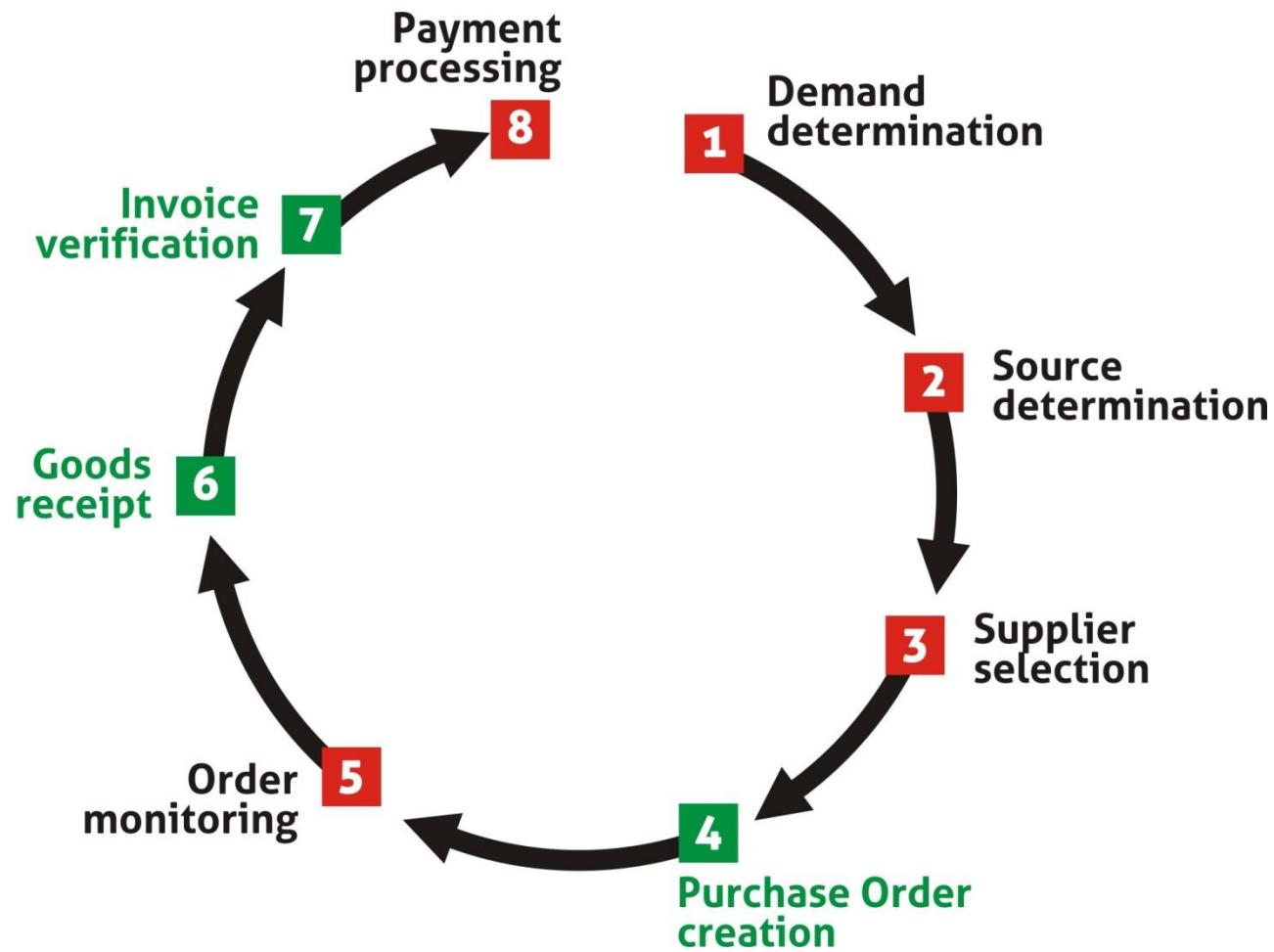
## PROCUREMENT EXERCISE



## PROCUREMENT EXERCISE



## PROCUREMENT EXERCISE



# Exercise

- IDES AG adalah sebuah perusahaan pembuat komponen dan spare part mesin industri; seperti pompa, sistem hidrolik dan sebagainya
- IDES: **Internet Demonstration and Evaluation System**

# Create a Purchase Order for a stock material

- **Exercise 4-1, hal. 4-9**
- Perusahaan memutuskan untuk memproduksi spare part mesin pada periode ini, dan membutuhkan beberapa bahan baku untuk dipesan dari Baltus AG.
- Buatlah surat pemesanan (PO)-nya
- **Add net price 50 EUR**
- **JANGAN LUPA catat nomor PO yang dihasilkan sistem**

# Create a Goods Receipt for the material

- **Exercise 4-2, hal. 4-12**
- Komponen yang dipesan sudah diantarkan ke gudang, buatlah surat penerimaan (Goods Receipt)-nya berdasarkan nomor PO yang sudah dibuat.

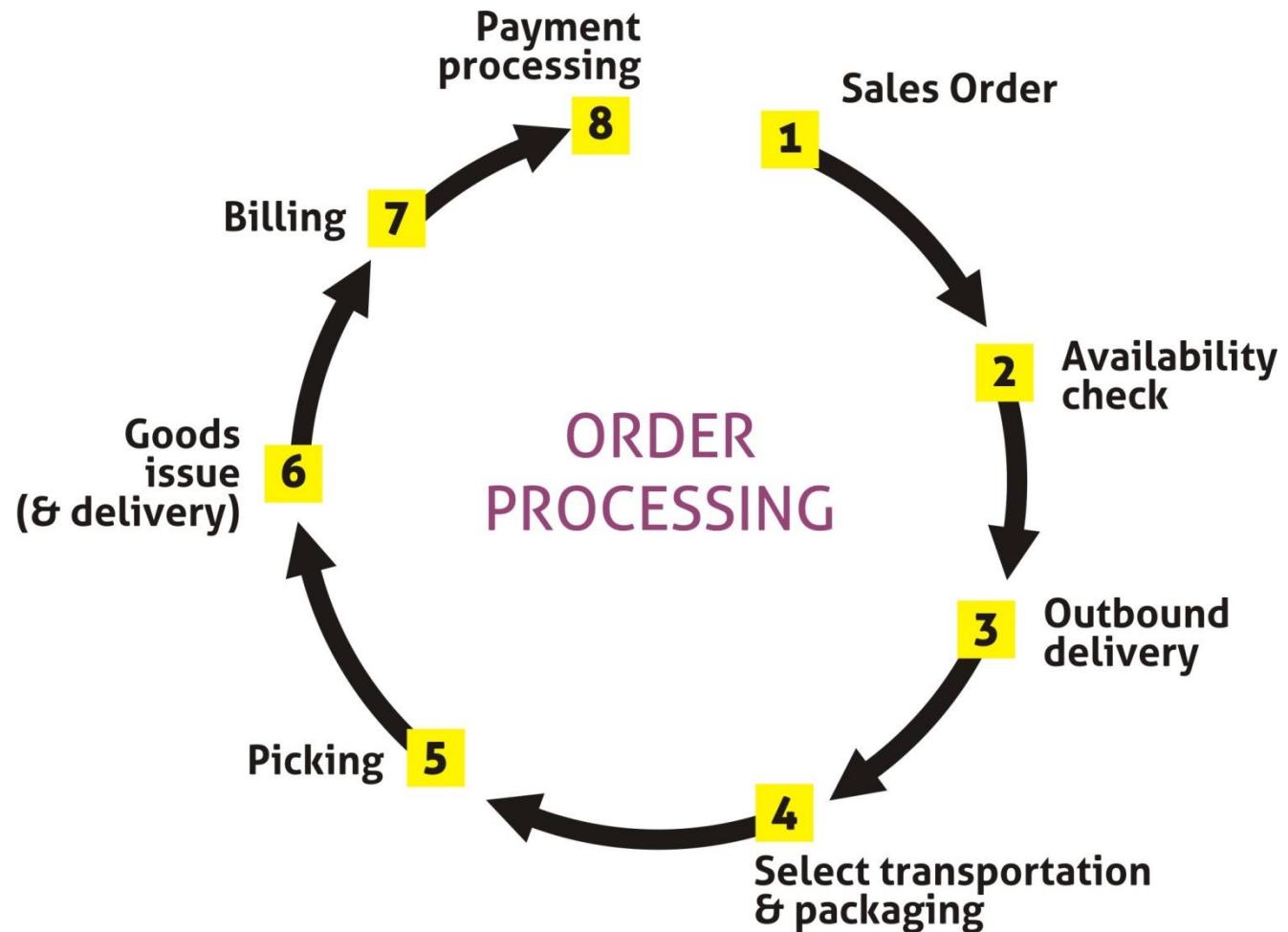
# Post an Invoice of the material to the system

- **Exercise 4-3, hal. 4-15**
- Masukkan tagihan yang didapat dari supplier ke sistem, berdasarkan PO yang telah dibuat.

# Sales Order Management

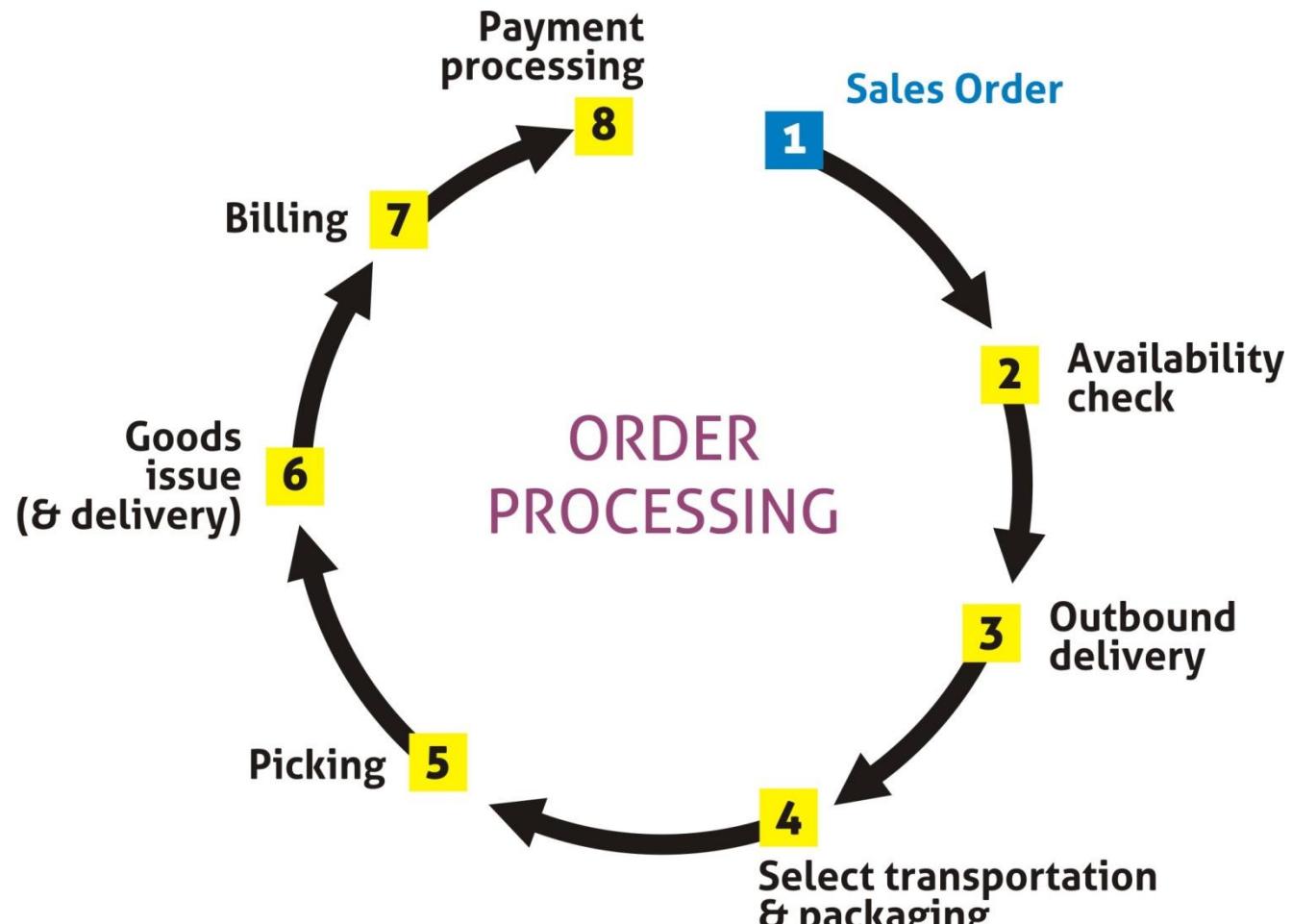
- Proses *pengelolaan pesanan dan penjualan barang* yang dihasilkan oleh proses produksi
- Pada umumnya barang hasil produksi disimpan di **gudang**
- Proses SOM dibagi dalam **8 tahap** juga

## SALES ORDER PROCESS



Delapan tahap proses **sales order management**

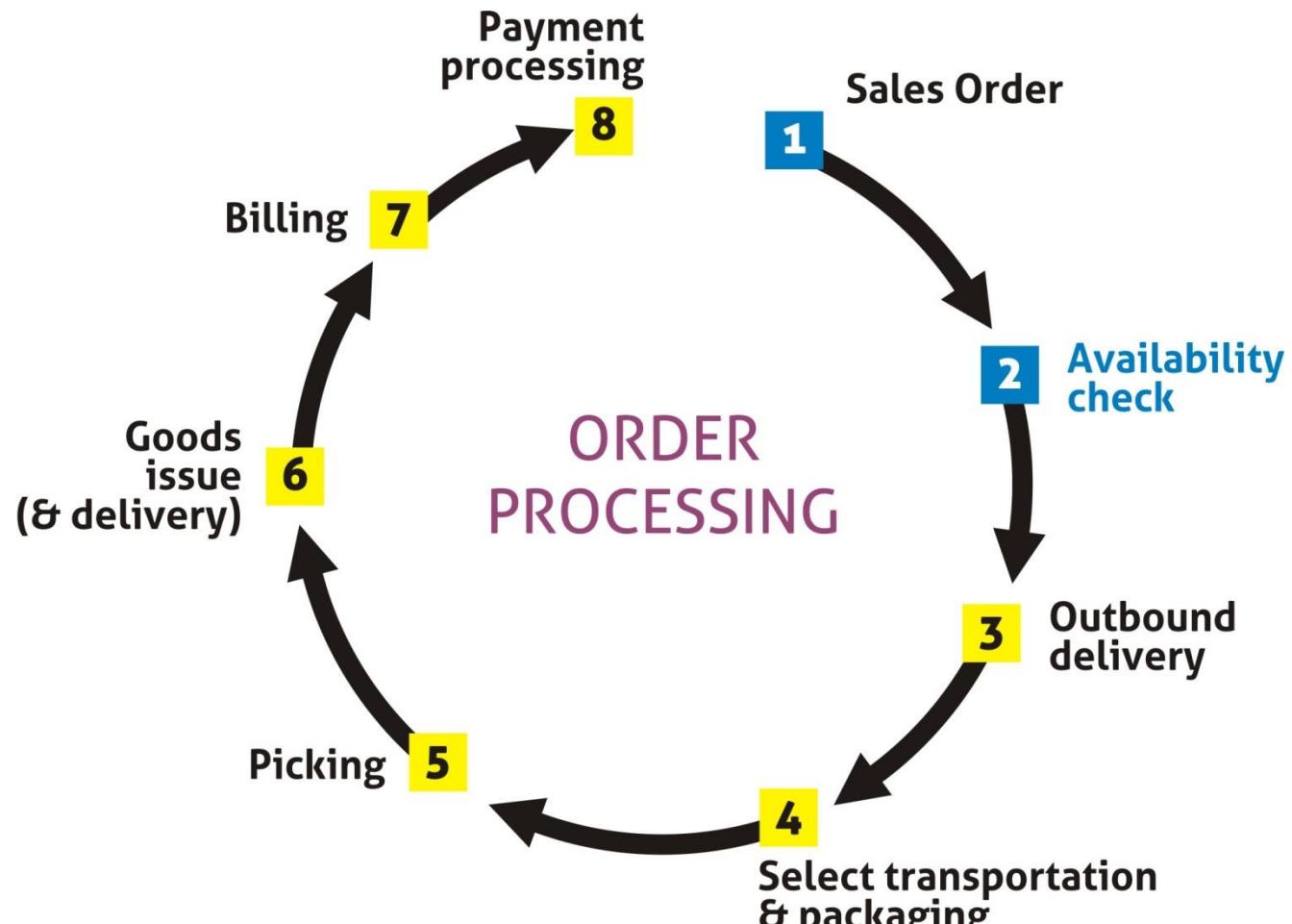
## SALES ORDER PROCESS



### Memasukkan pesanan barang

Pesanan barang dari konsumen didokumentasikan dalam Surat Perintah Penjualan (**Sales Order**) oleh CSR (Customer sales representative).

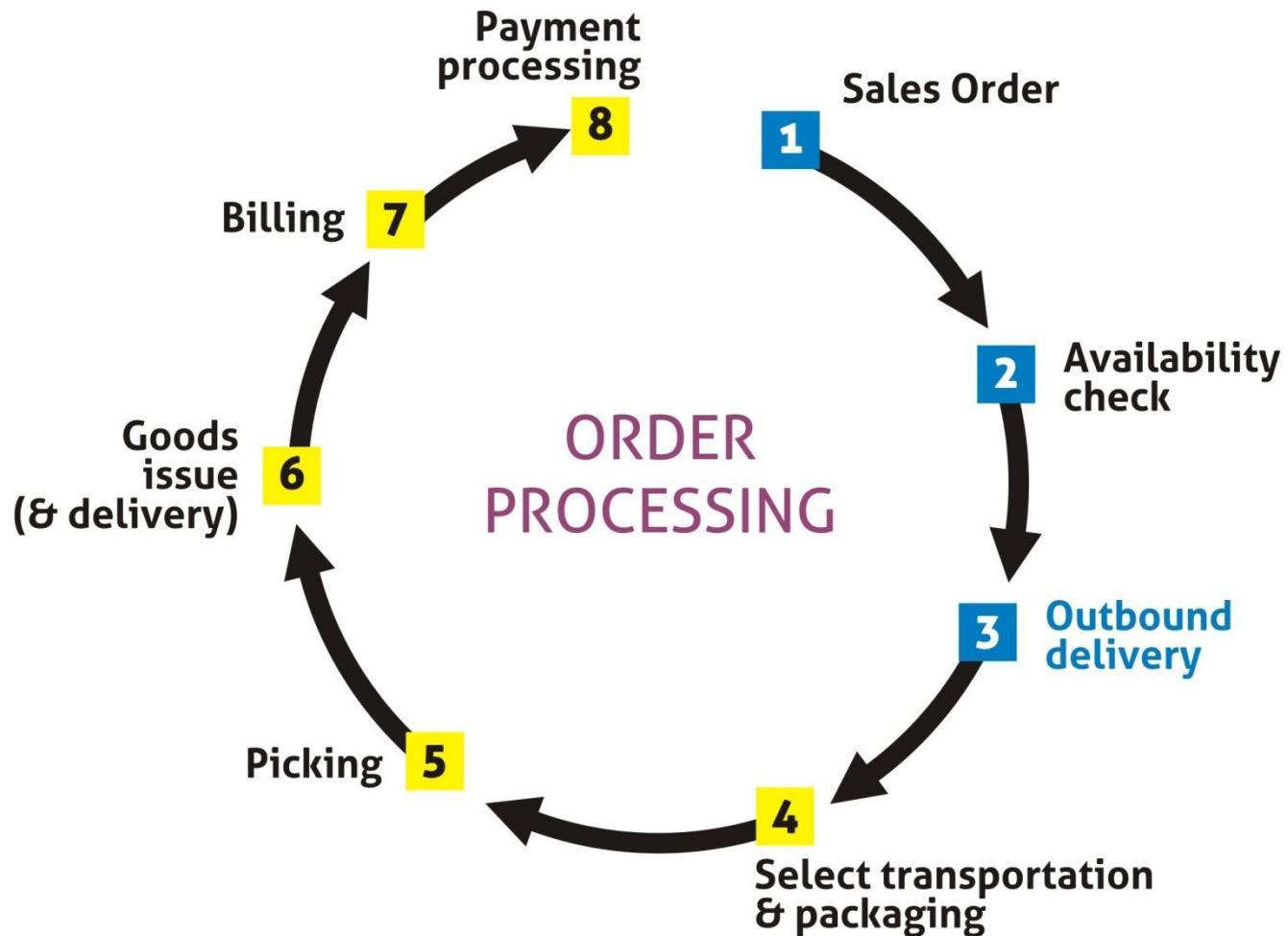
## SALES ORDER PROCESS



### Cek ketersediaan barang

SO yang telah dikeluarkan kemudian digunakan untuk **memeriksa stok** barang di gudang, apakah barang yang dipesan konsumen tersedia.

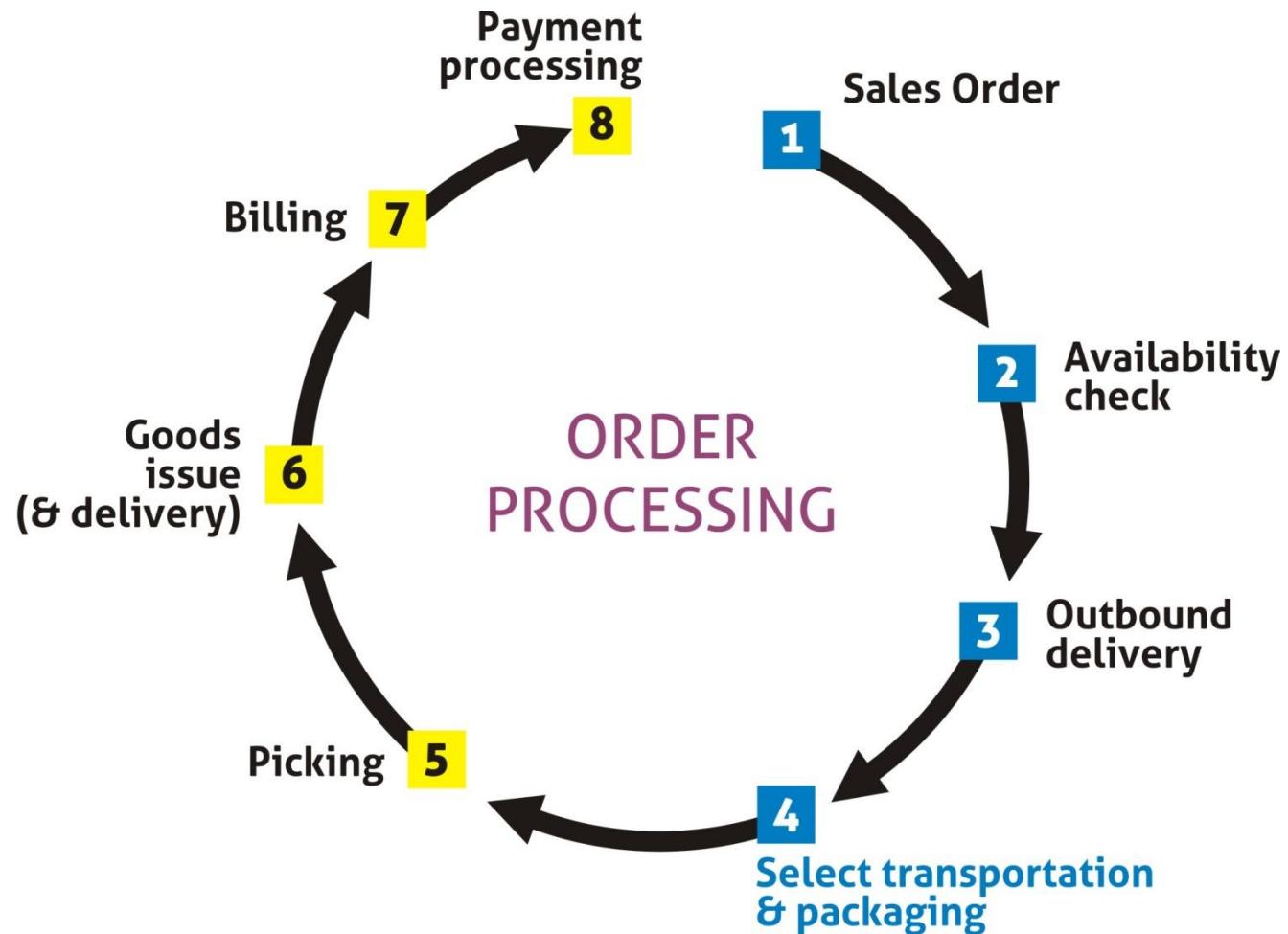
## SALES ORDER PROCESS



### Jadwalkan pengiriman

Jika barang pesanan tersedia di gudang, berarti barang bisa dijual, dan jadwalkan pengiriman barang ke konsumen.

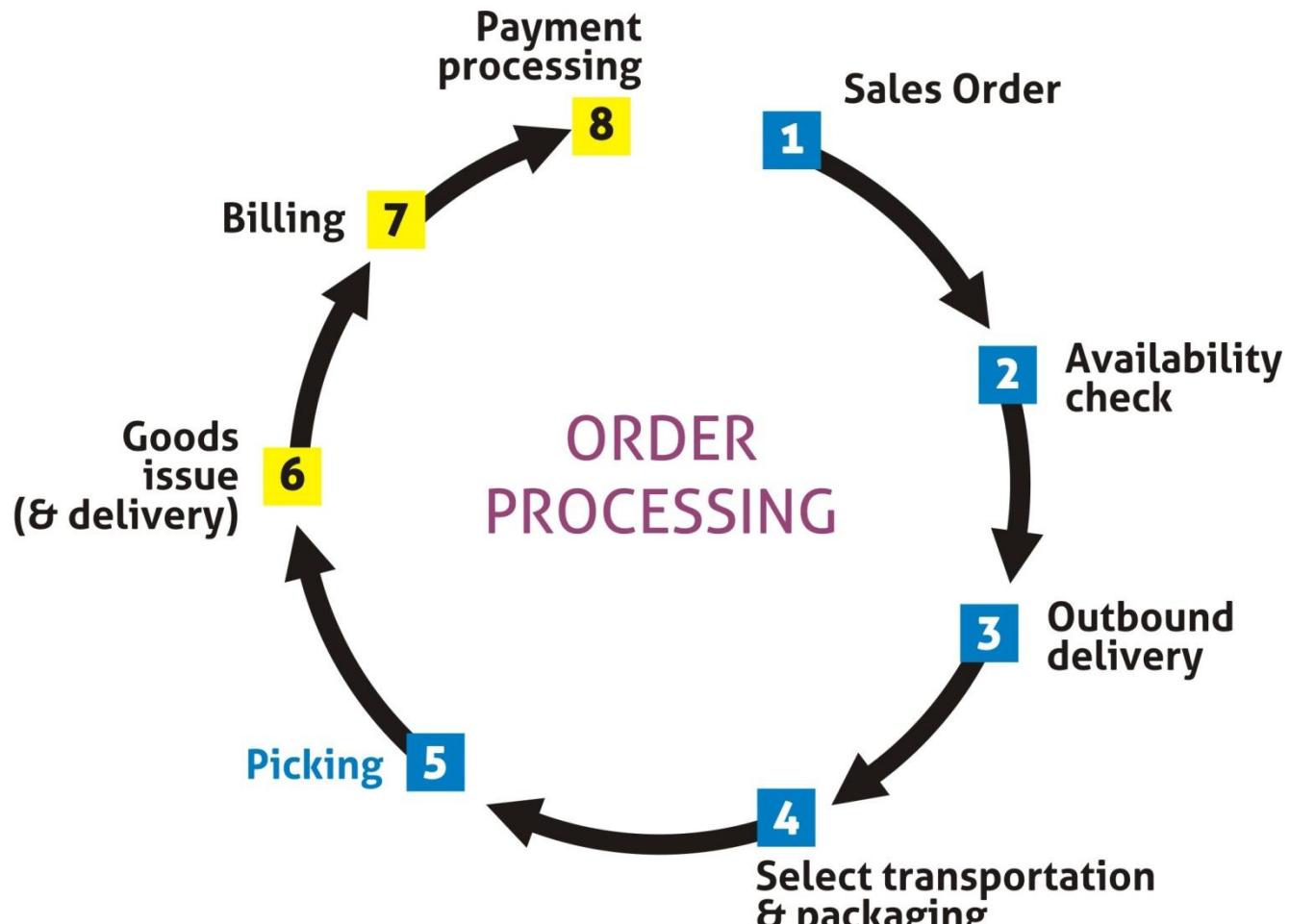
## SALES ORDER PROCESS



### Tentukan transportasi dan kemasan

Menentukan alat transportasi apa yang akan digunakan untuk mengirim barang ke konsumen, dan apakah ada perlakuan dan kemasan khusus yang dibutuhkan untuk pengiriman, sesuai sifat barangnya.

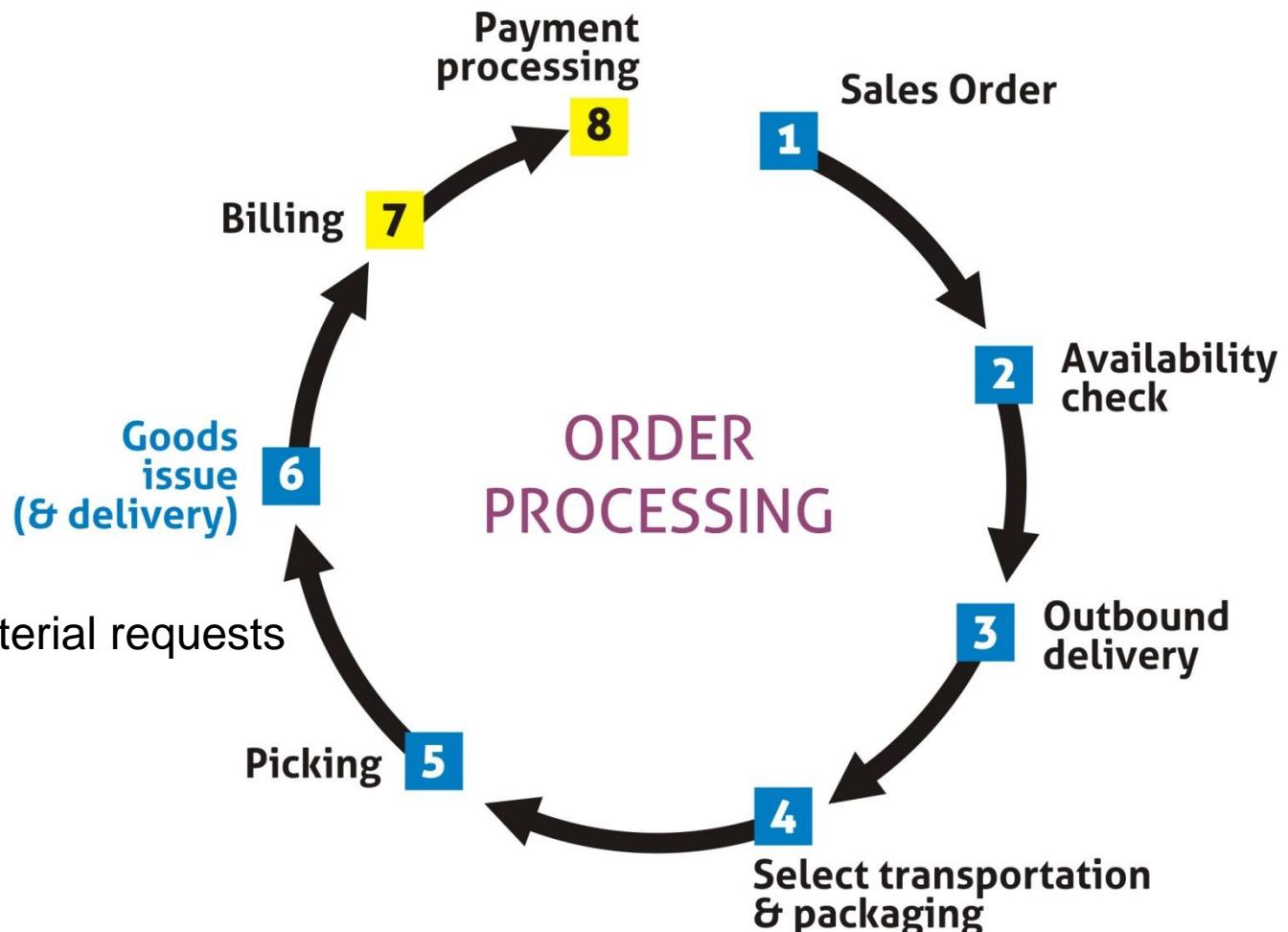
## SALES ORDER PROCESS



### Pilih barang dari gudang

**Menentukan** barang mana yang akan dikeluarkan dari gudang, mungkin berdasarkan tanggal stok atau kondisi barang, dan mengeluarkan barang dari gudang ke tempat pengemasan. Pada tahap ini barang sudah **dikemas** untuk pengiriman.

## SALES ORDER PROCESS



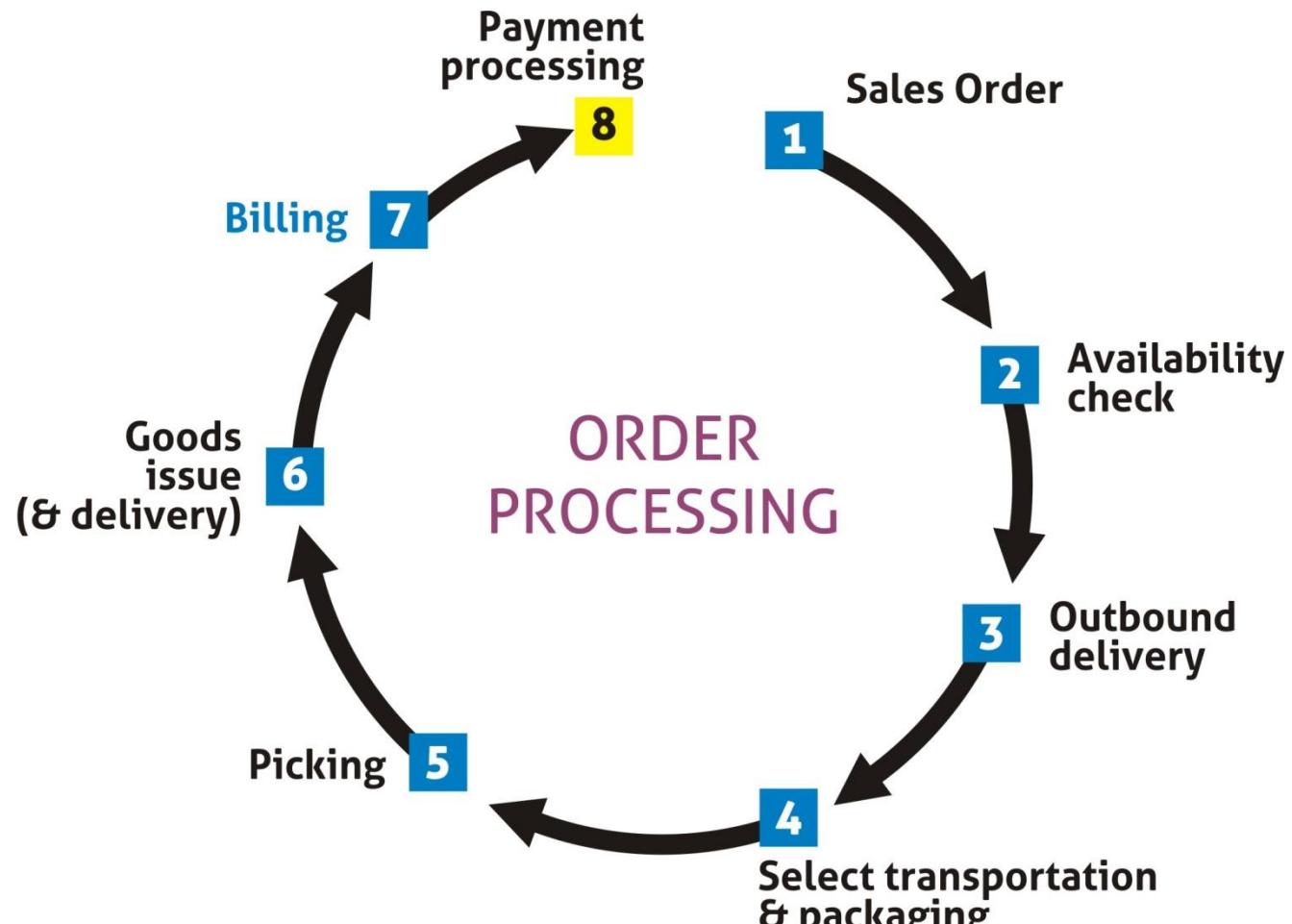
### Goods Issue

Secara harfiah berarti **pengeluaran barang** (dari gudang). Barang siap dikirimkan, diantarkan atau diserahkan ke konsumen. Pada tahap ini biasanya dikeluarkan Surat Jalan (**Delivery Document**), kemudian barang diantarkan atau dikirimkan ke konsumen.

# Saat good issue

- Warehouse stock of the material is **reduced** by the delivery quantity
- Value changes are **posted** to the balance sheet account in inventory accounting
- Requirements are **reduced** by the delivery quantity
- Goods issue posting is **automatically recorded** in the document flow

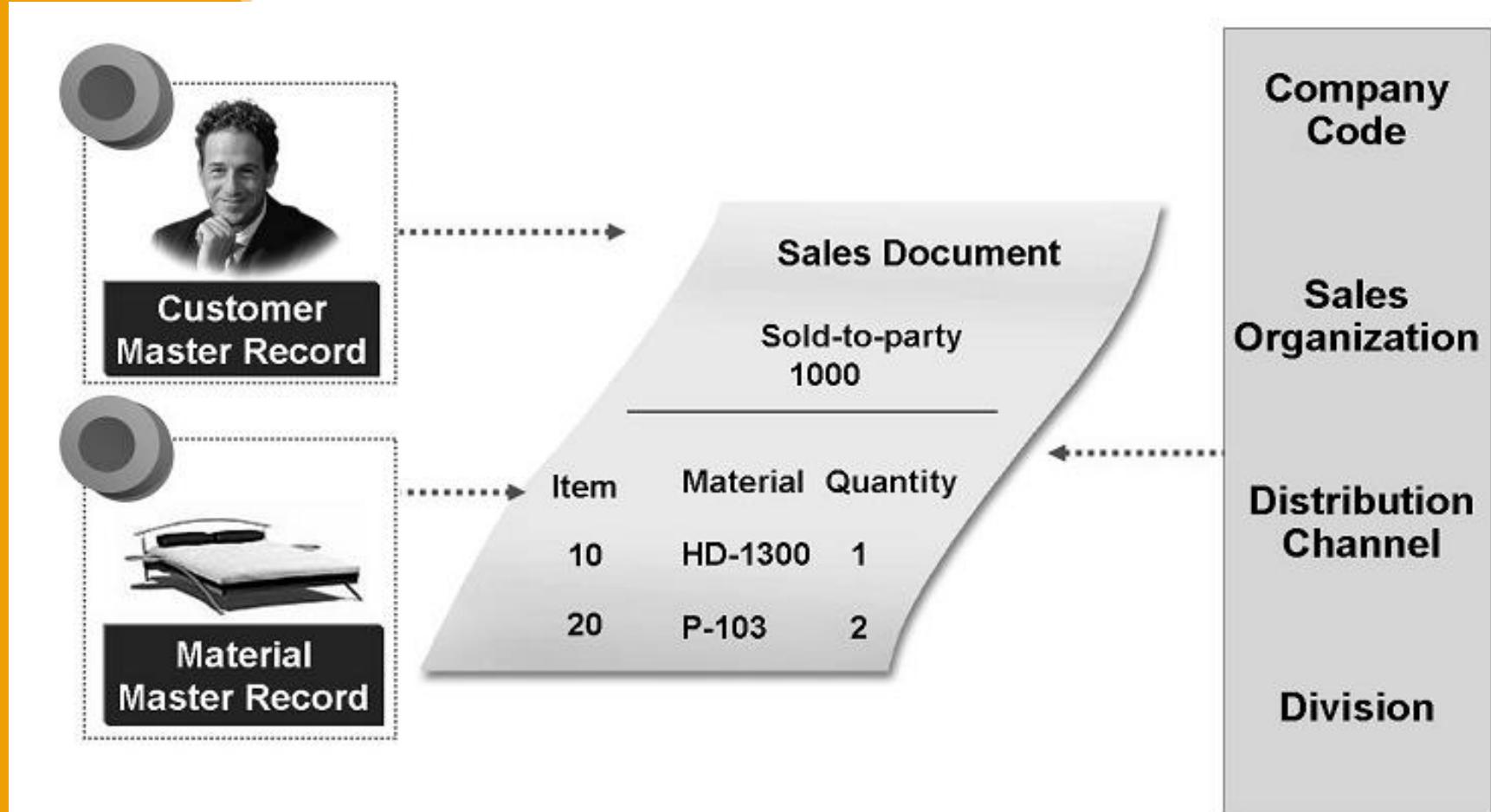
## SALES ORDER PROCESS



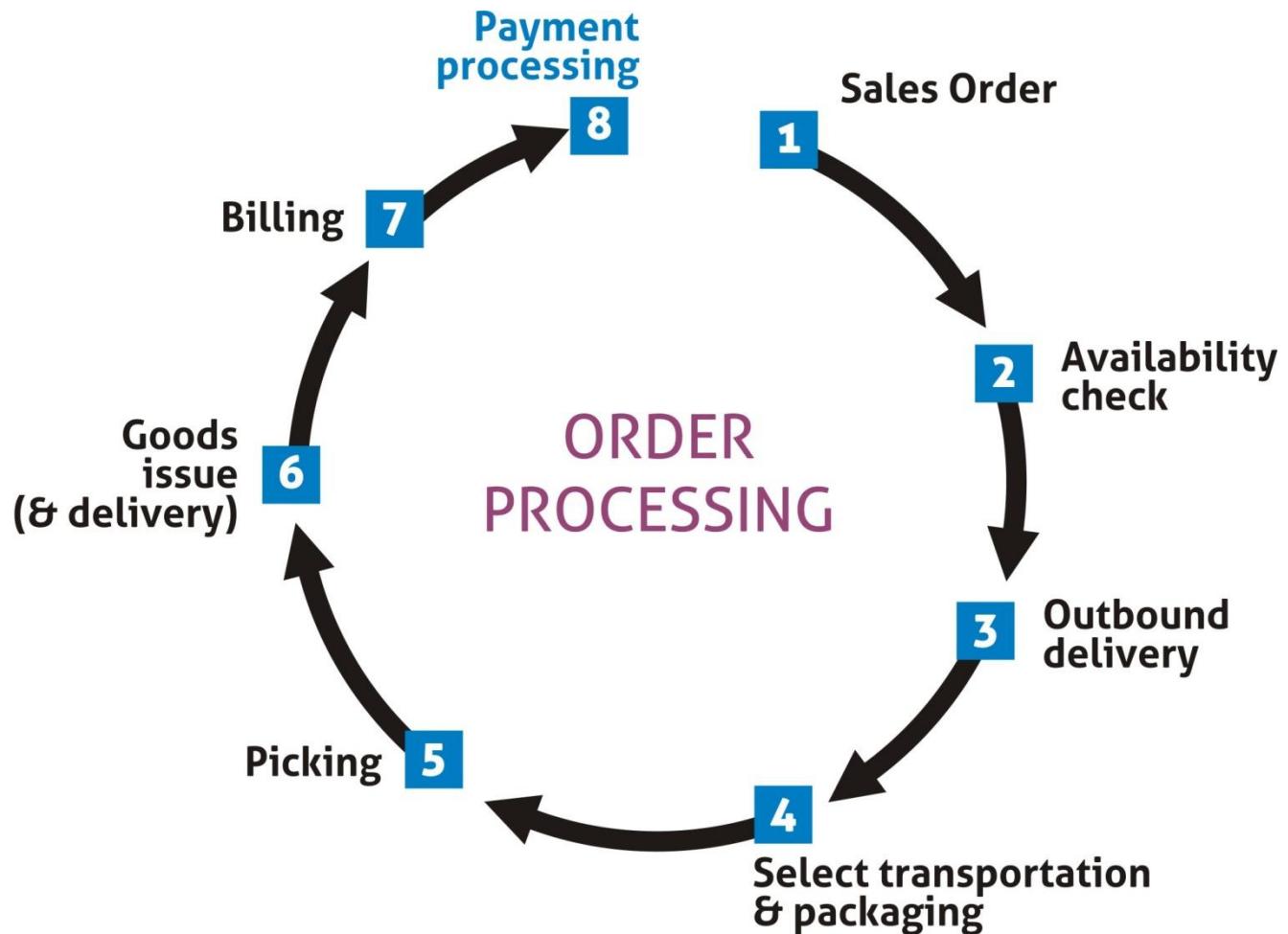
### Pembuatan Tagihan ke Konsumen

Dari SO dan DD yang sudah dibuat, disusun **tagihan** ke konsumen. Setelah tagihan diterima, konsumen akan verifikasi kondisi barang setelah diantarkan, dan melakukan penyesuaian tagihan seperti pada proses procurement.

# Sales order (Billing) document



## SALES ORDER PROCESS



### Pembayaran Tagihan oleh Konsumen

Setelah penyesuaian tagihan beres, konsumen akan **membayar** pada perusahaan. Bagian keuangan perusahaan yang akan mengurusi pembayaran ini.

# Billing & payment processing

## Sales Order Management



Invoice  
document

Material  
Quantity  
Amount  
Payment  
terms

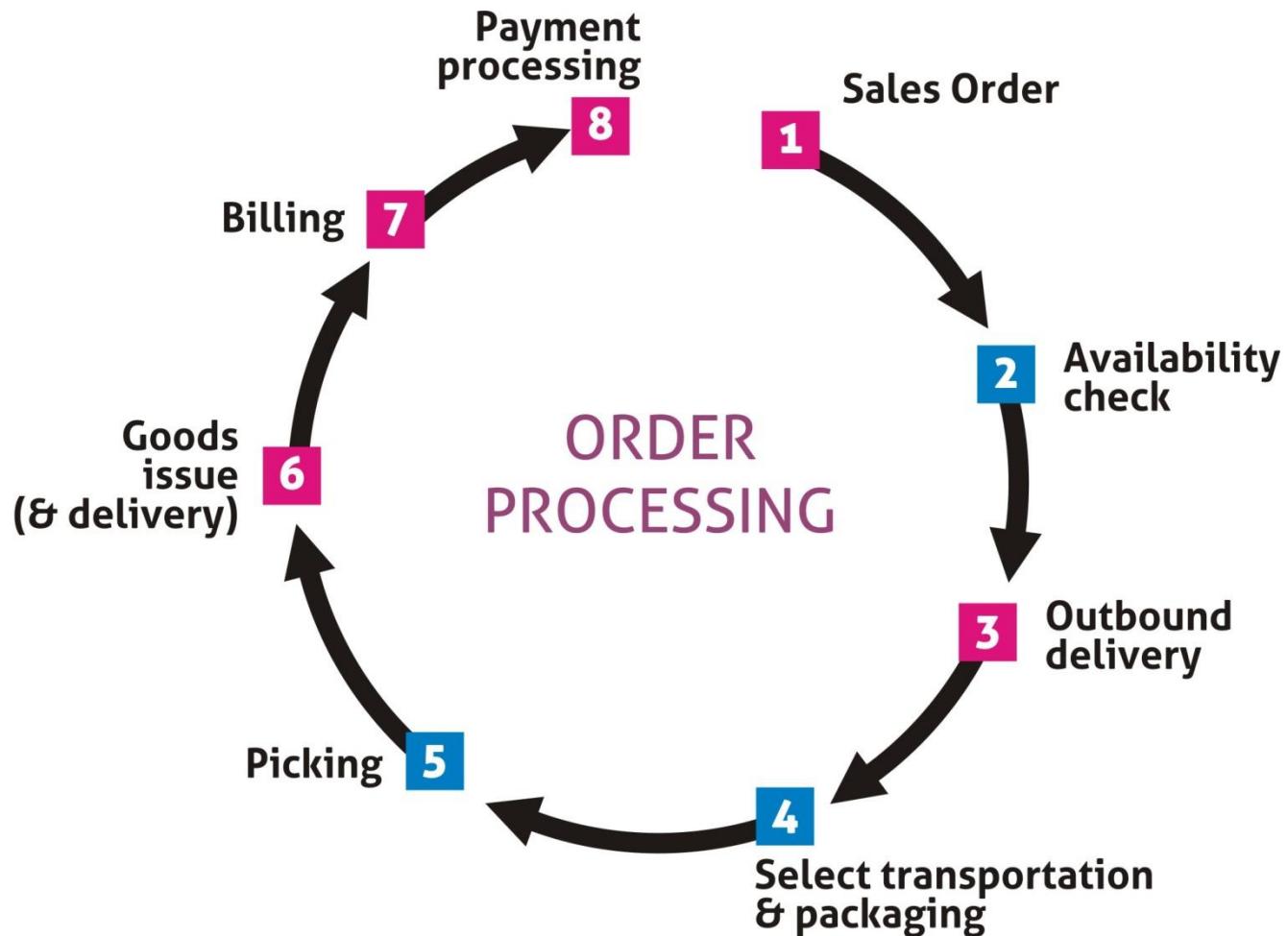
## Financial Accounting



Account-  
ing doc.

Posting key  
Account  
Amount

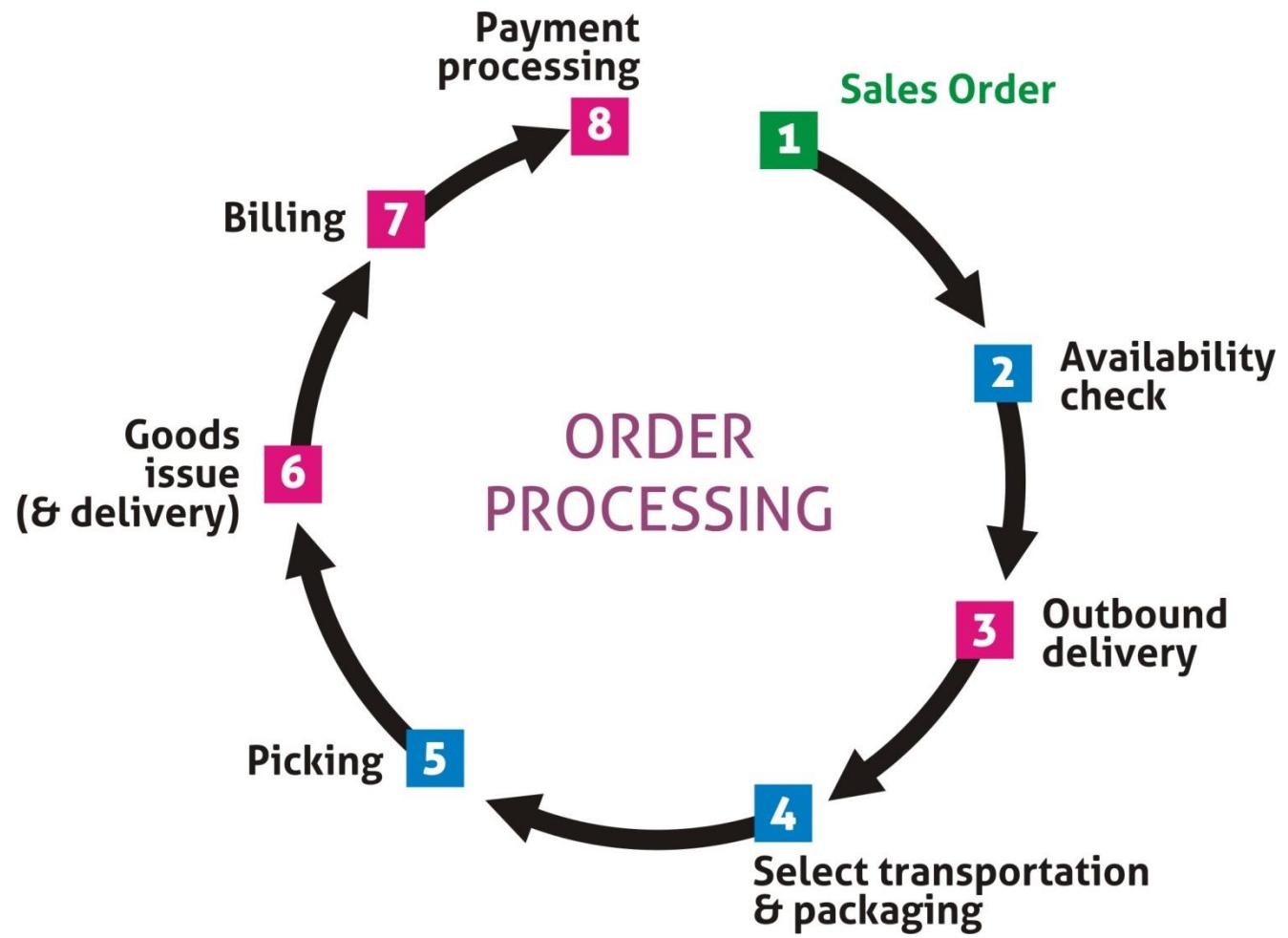
## SALES ORDER MUST DO



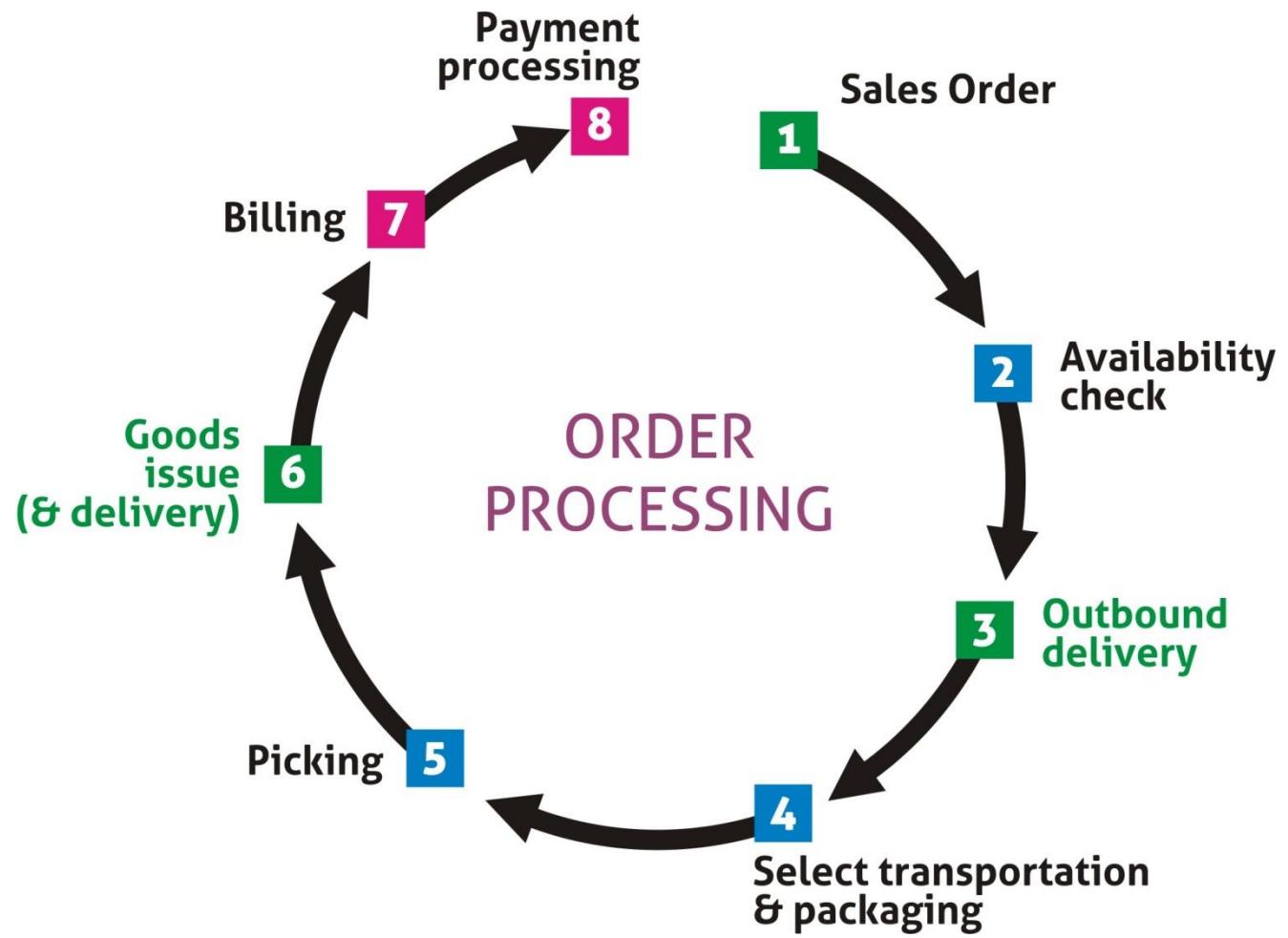
Tidak semua perusahaan menjalankan semua tahap

Tahap-tahap penting yang ada di hampir semua perusahaan hanya 1 – 3 – 6 – 7 – 8. SAP dapat mengakomodasi penyesuaian tahap ini.

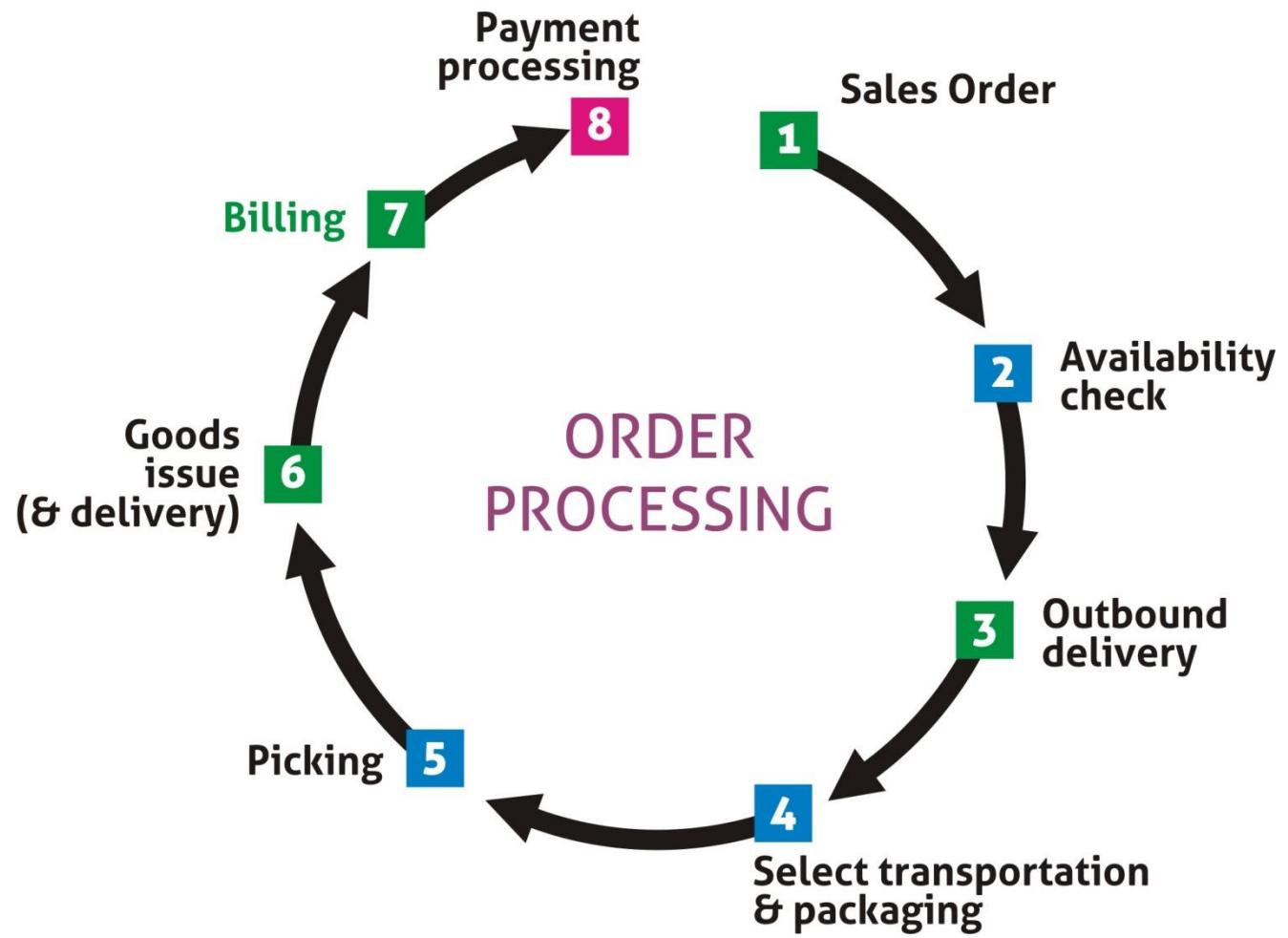
## SALES ORDER EXERCISE



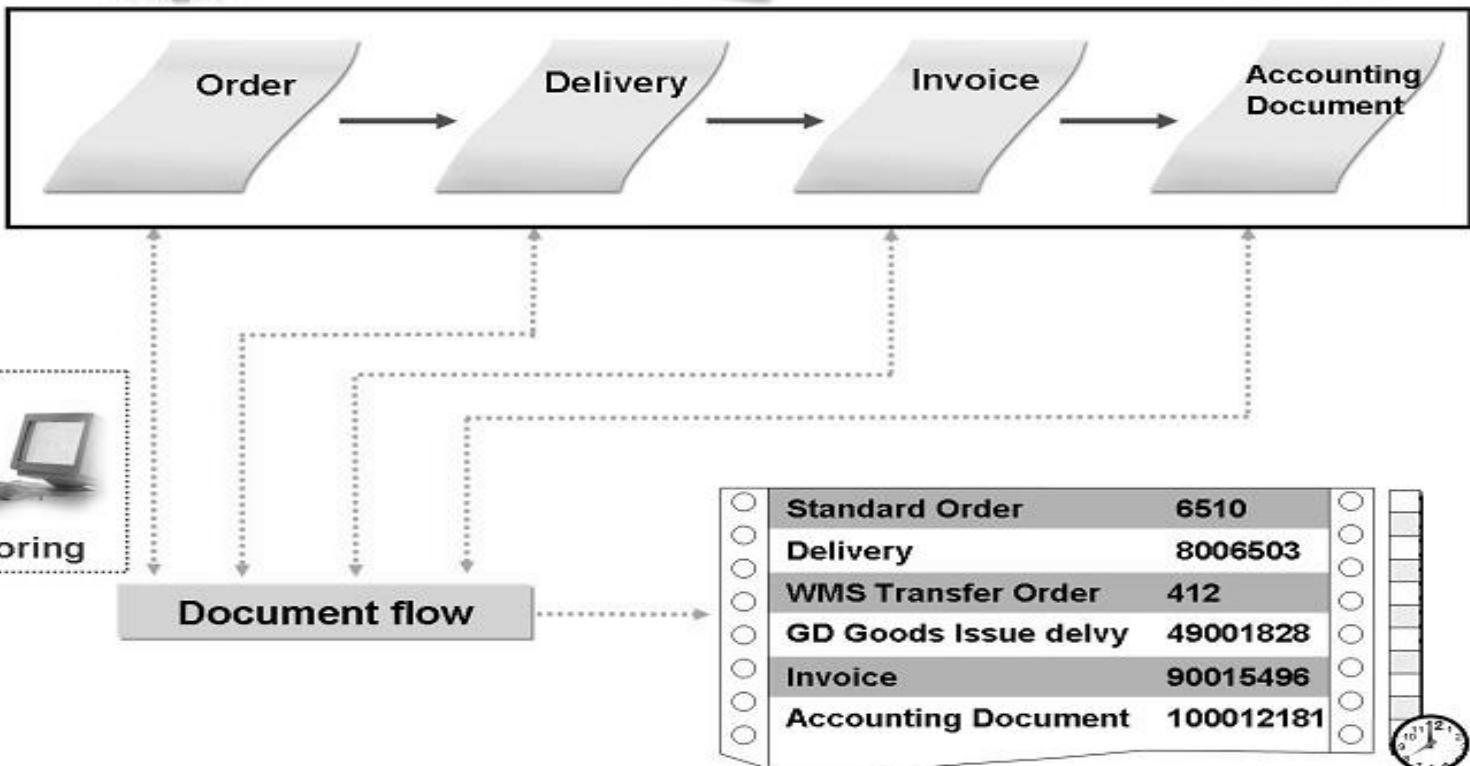
## SALES ORDER EXERCISE



## SALES ORDER EXERCISE



# Document Flow



# Create a Sales Order for a Goods

- **Exercise 4-4, hal. 4-31**
- Pihak konsumen (Rohrer AG) telah mem-fax sebuah pesanan pada perusahaan anda. Tugas anda sebagai seorang CSR untuk menginputkan pesanan tersebut ke dalam sistem
- **Catat** nomor Sales Order yang dihasilkan sistem

# Outbounds a Delivery and Create a Goods Issue

- **Exercise 4-5, hal. 4-34**
- Setelah dicek ke gudang ternyata pesanan konsumen tersebut tersedia. Berdasarkan SO yang telah dibuat, jadwalkanlah pengiriman barang dimaksud ke lokasi konsumen (Hamburg)
- Keluarkanlah Goods Issue untuk pengiriman tersebut

# Create the Billing Document for the Goods

- **Exercise 4-6, hal. 4-37**
- Berdasarkan SO dan DD yang telah dibuat, buatlah dokumen tagihan untuk dikirimkan ke konsumen.

# Next

- Capture dan kumpulkan!
- Logistics II - Production



# SAP 01

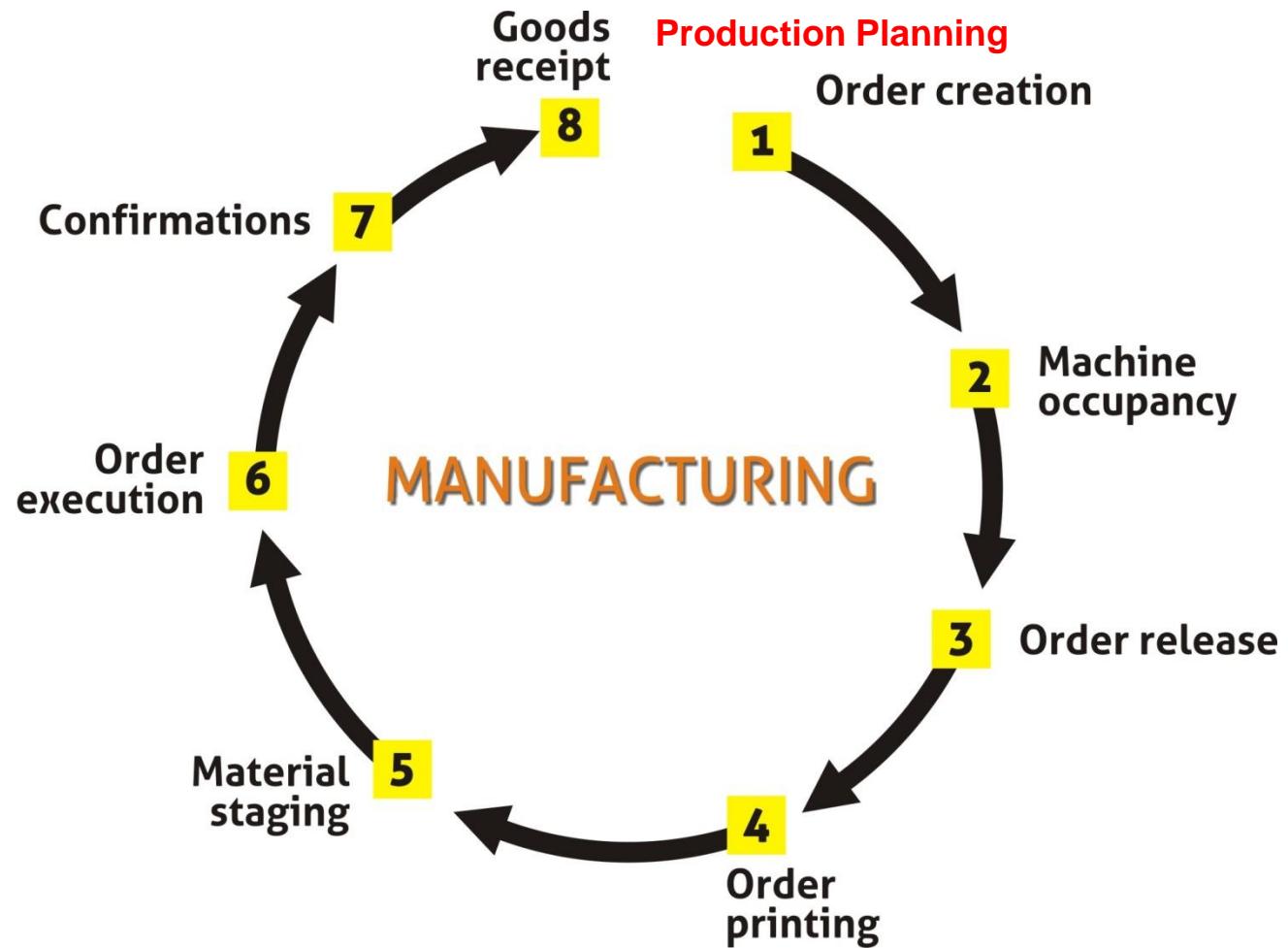
## LOGISTICS – PART 2



# Manufacture

- Proses produksi berdasarkan material (bahan baku) yang telah didapatkan pada proses *procurement*, berdasarkan **Bill of Material (BOM)** yang telah dibuat
- Hasil proses produksi akan menjadi bagian **stok gudang**, yang siap dijual melalui proses *sales*
- Manufacture dibagi menjadi **delapan tahap**

## MANUFACTURE PROCESS



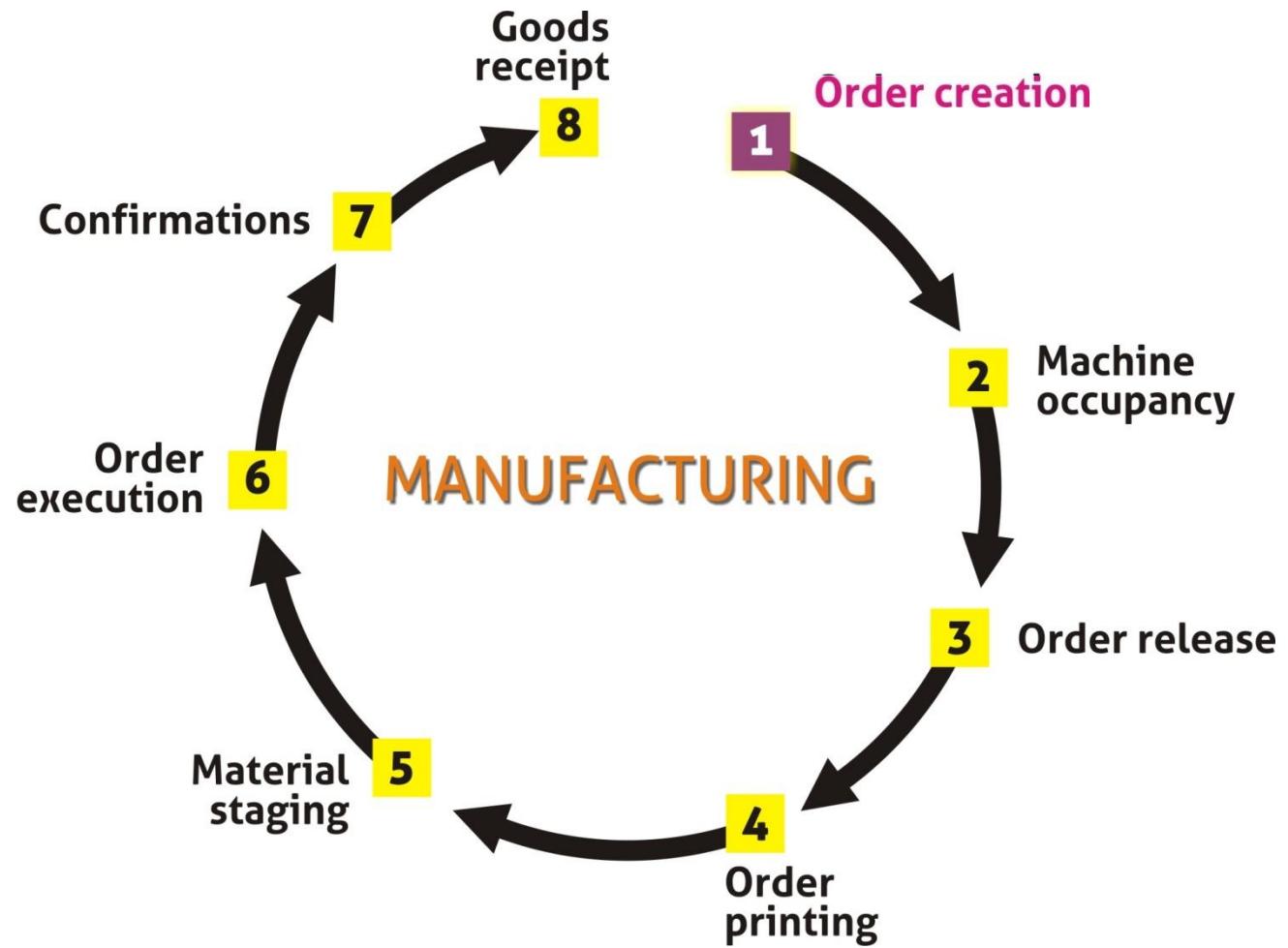
Delapan tahap proses manufacture

# Production Planning



- Demand Management = forecasting
  - Requirement quantities and dates for finished products and assemblies based on the plans from SOP are determined
- MPS = Master Production Schedulling
  - For Critical Resources to be planned with extra attention (optional)
- MRP = Material Resources Planning
  - Detail planning
  - Outputnya: planned order / purchase requisition

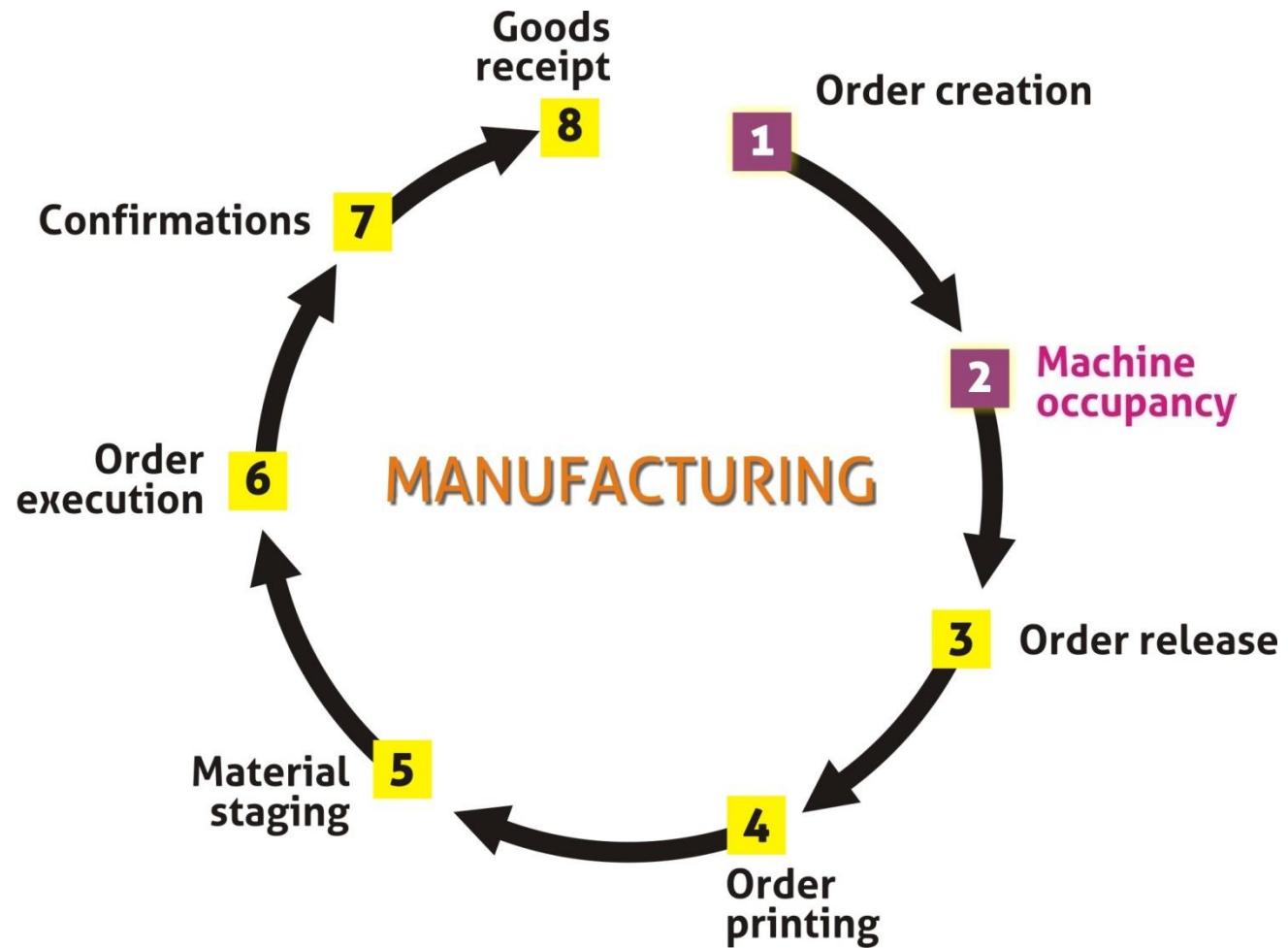
## MANUFACTURE PROCESS



### Pembuatan Surat Perintah Produksi

Pihak manajemen atau departemen perencanaan perusahaan, telah menentukan target produksi, dan mengeluarkan **Bill of Material** (procurement), maka di tahap ini dikeluarkan **perintah** untuk memproduksi sejumlah barang dengan material yang telah ditentukan.

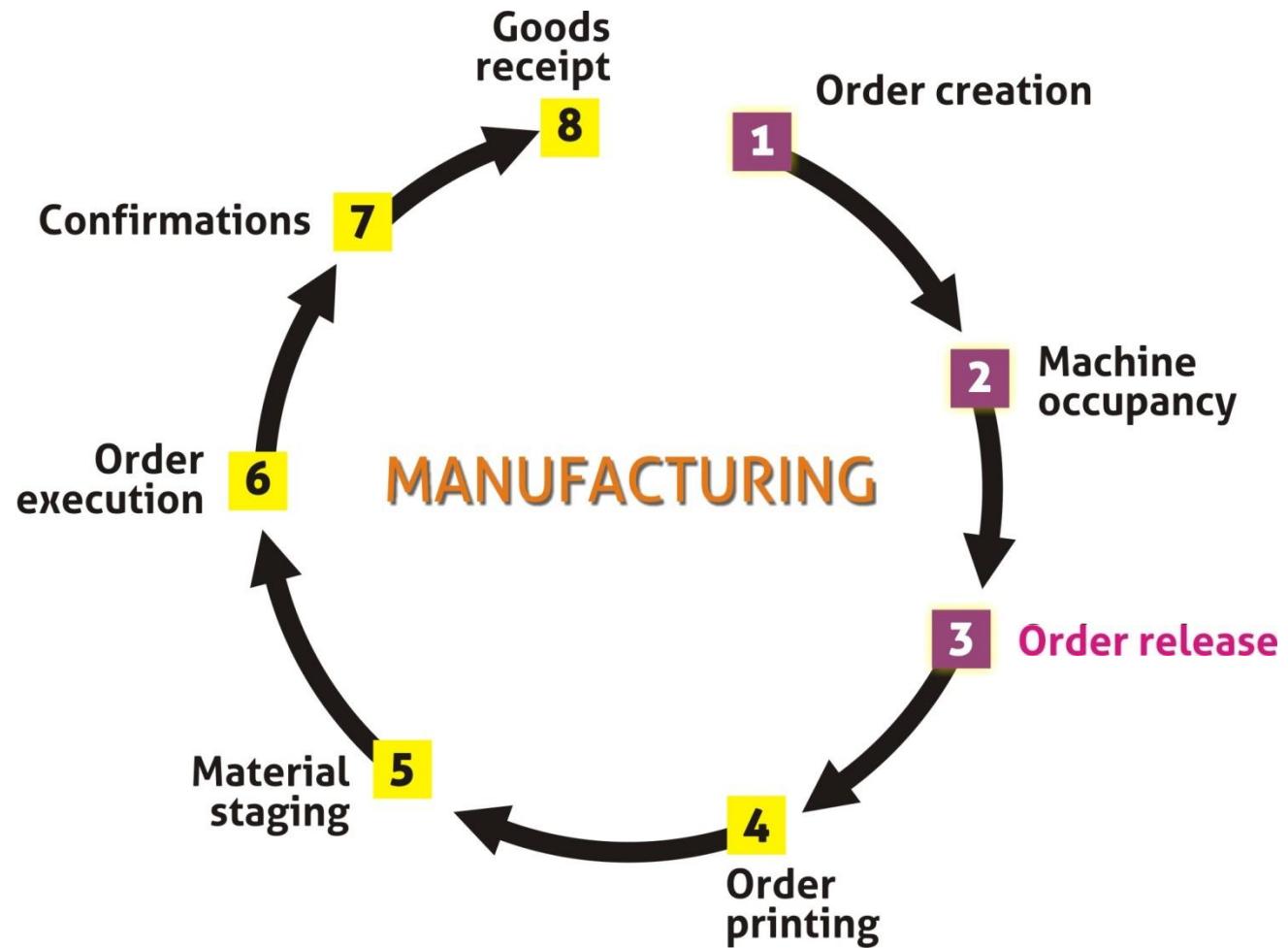
## MANUFACTURE PROCESS



### Menghitung Kemampuan Mesin Produksi & Pendataan

Berdasarkan **SPP** yang telah dibuat, bagian pabrik mendata **kondisi mesin produksi**, apakah mampu dan bisa untuk memproduksi barang sesuai dengan Surat Perintah Produksi.

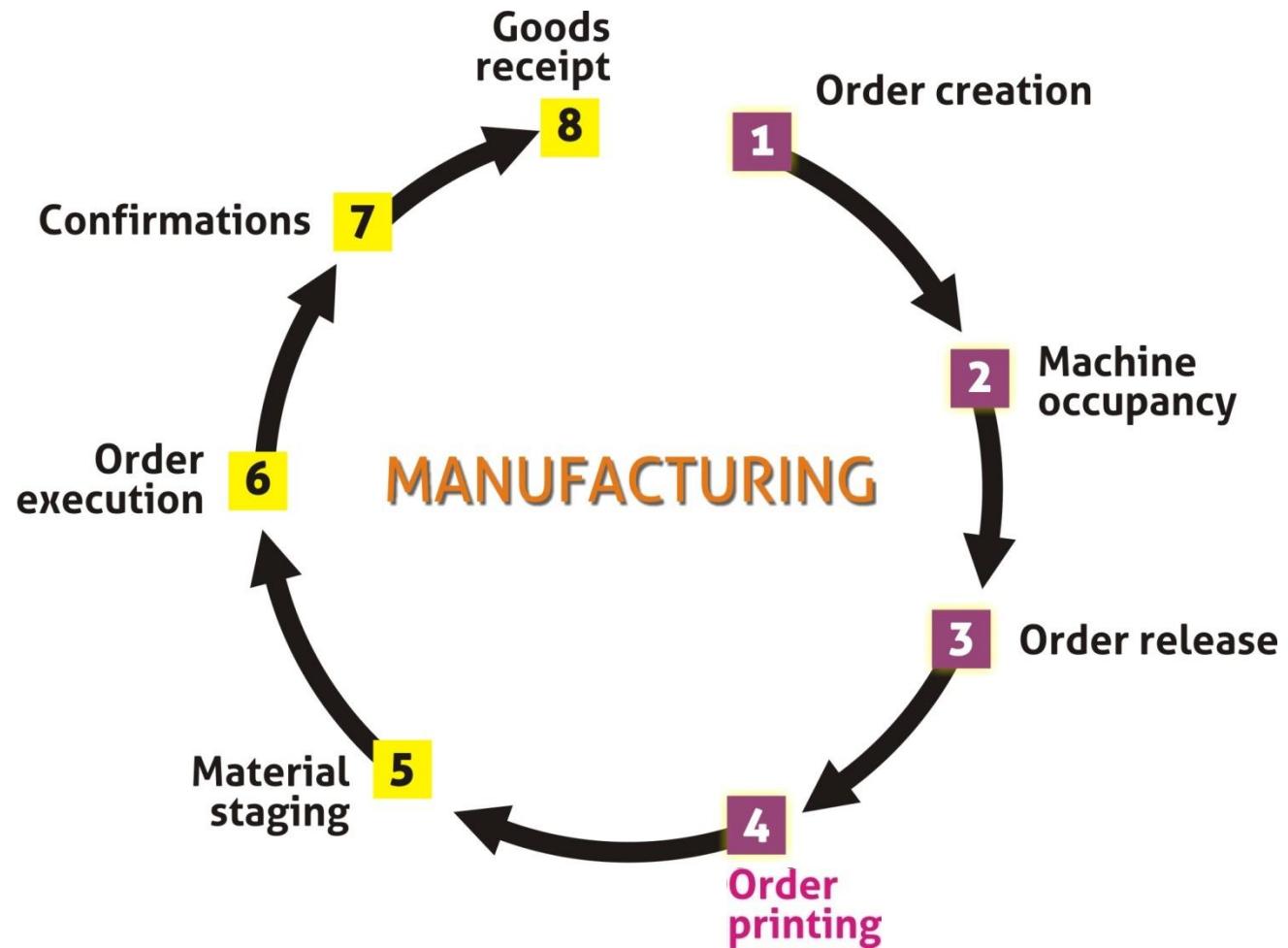
## MANUFACTURE PROCESS



### Persetujuan Kepala Produksi dan Mulai Proses Produksi

Setelah dilakukan pendataan, maka Kepala Produksi akan memberikan **approval dimulainya proses produksi**, sesuai dengan kapasitas mesin produksi.

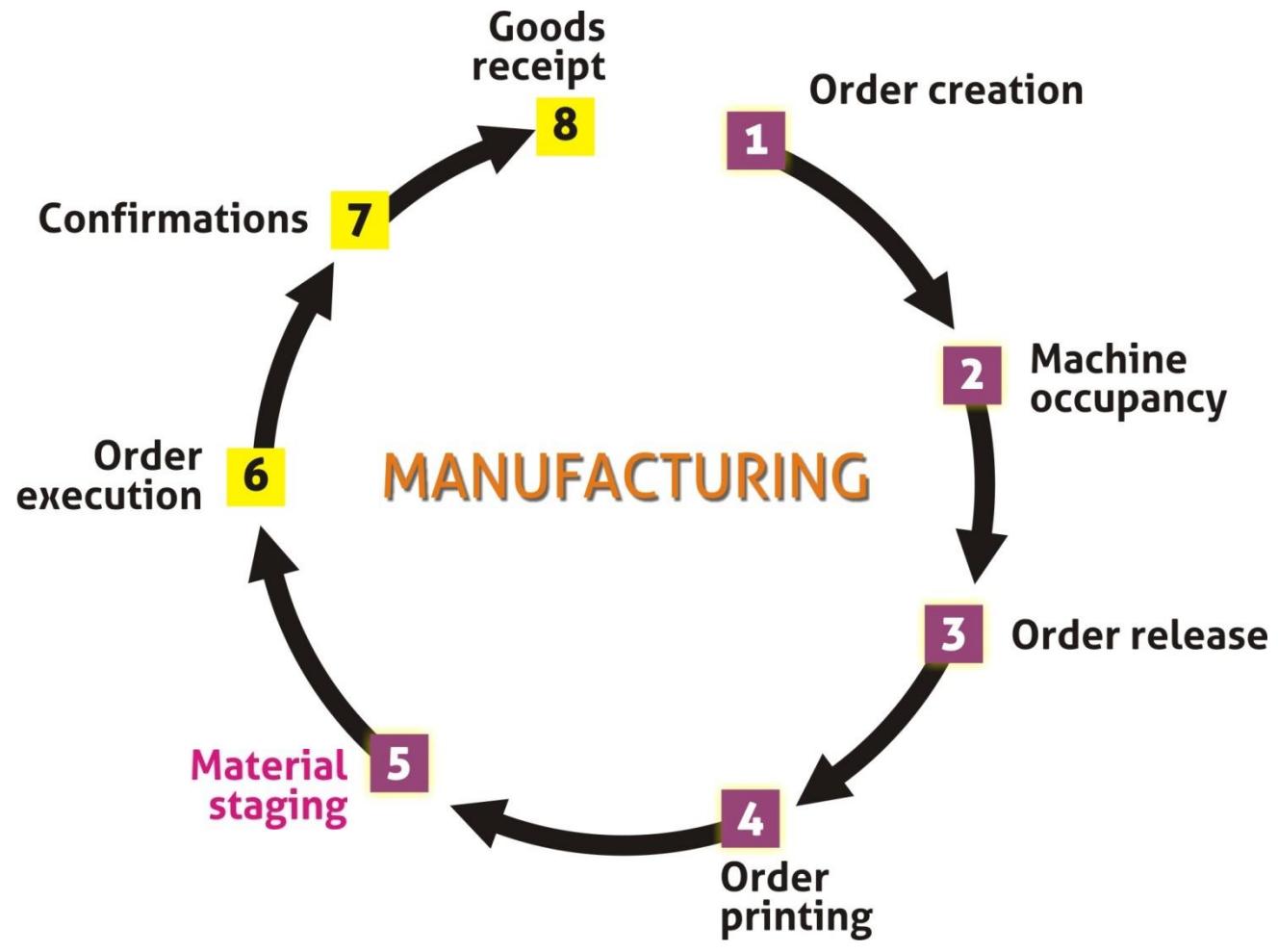
## MANUFACTURE PROCESS



### Pencetakan & Pengesahan Surat Perintah Produksi

Surat Perintah Produksi **dicetak** secara harfiah setelah disetujui, untuk didistribusikan pada pihak-pihak yang berkepentingan

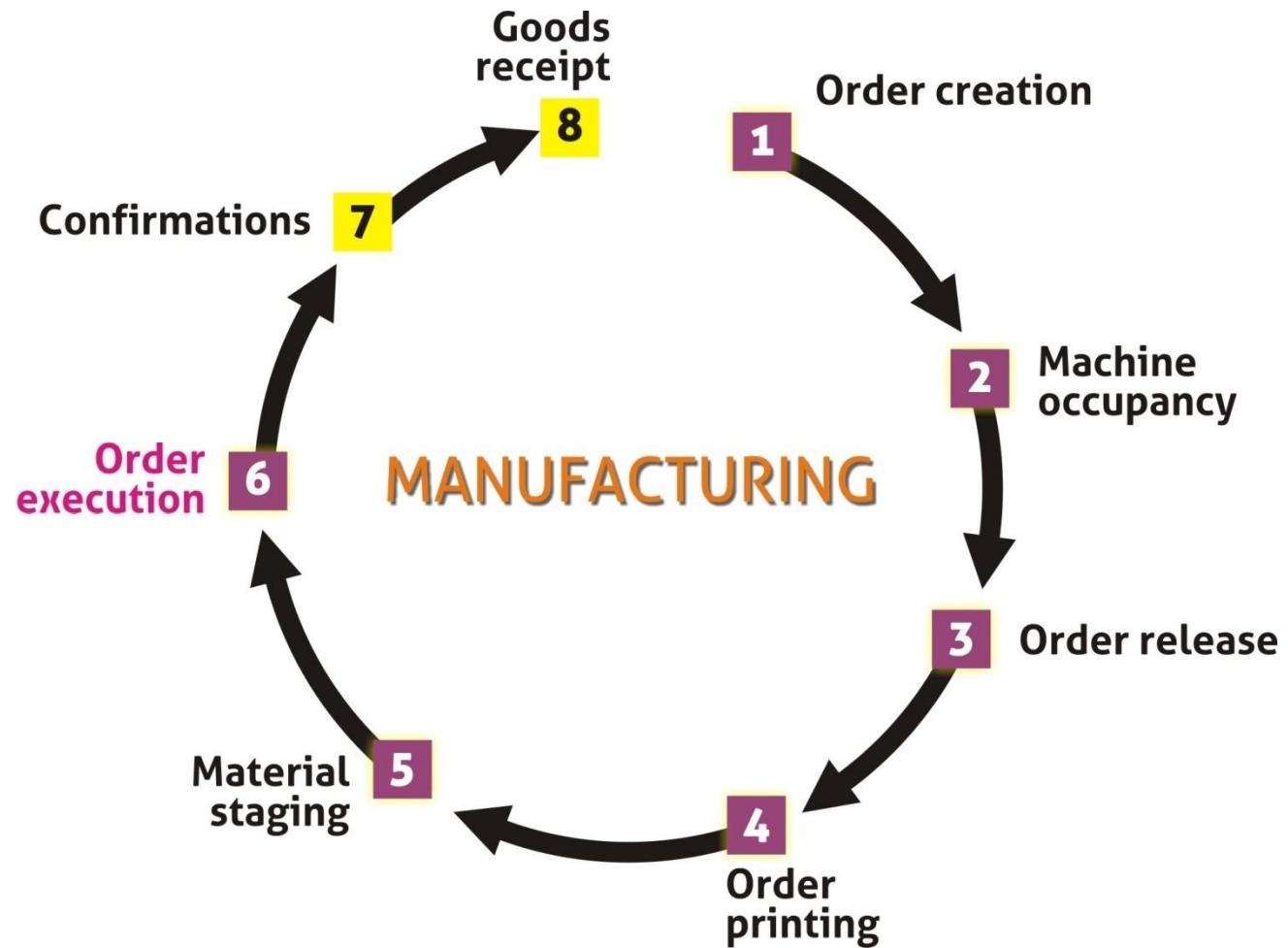
## MANUFACTURE PROCESS



### Memilah Bahan Baku

Mempersiapkan bahan baku (material) dan **dikelompokkan** berdasarkan mesin produksi dan urutan produksinya. Jika perlu **preprocessing** bahan baku, dilakukan pula pada tahap ini.

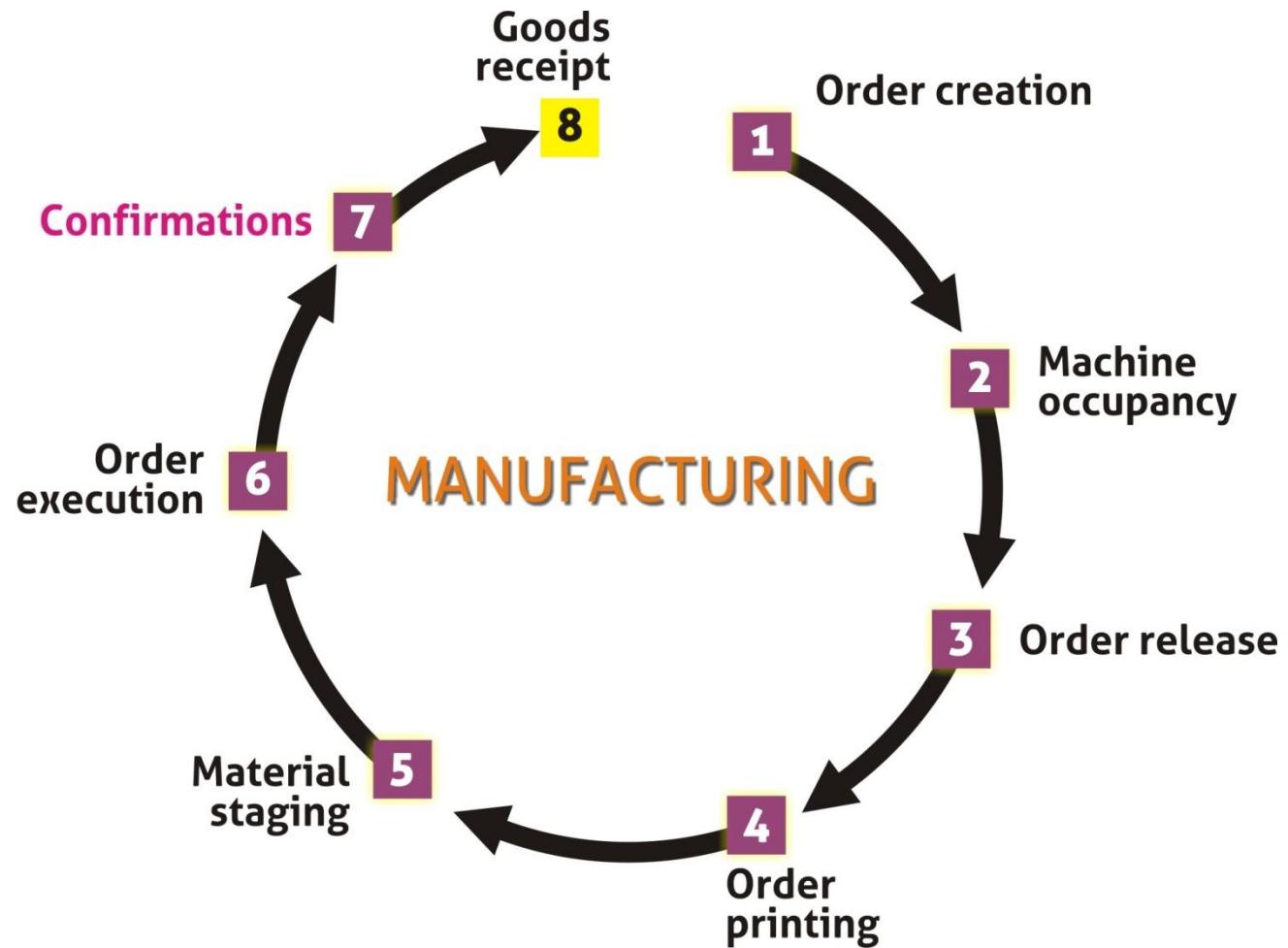
## MANUFACTURE PROCESS



### Pelaksanaan Proses Produksi

Mesin produksi mulai beroperasi sesuai dengan urutan produksinya masing-masing.

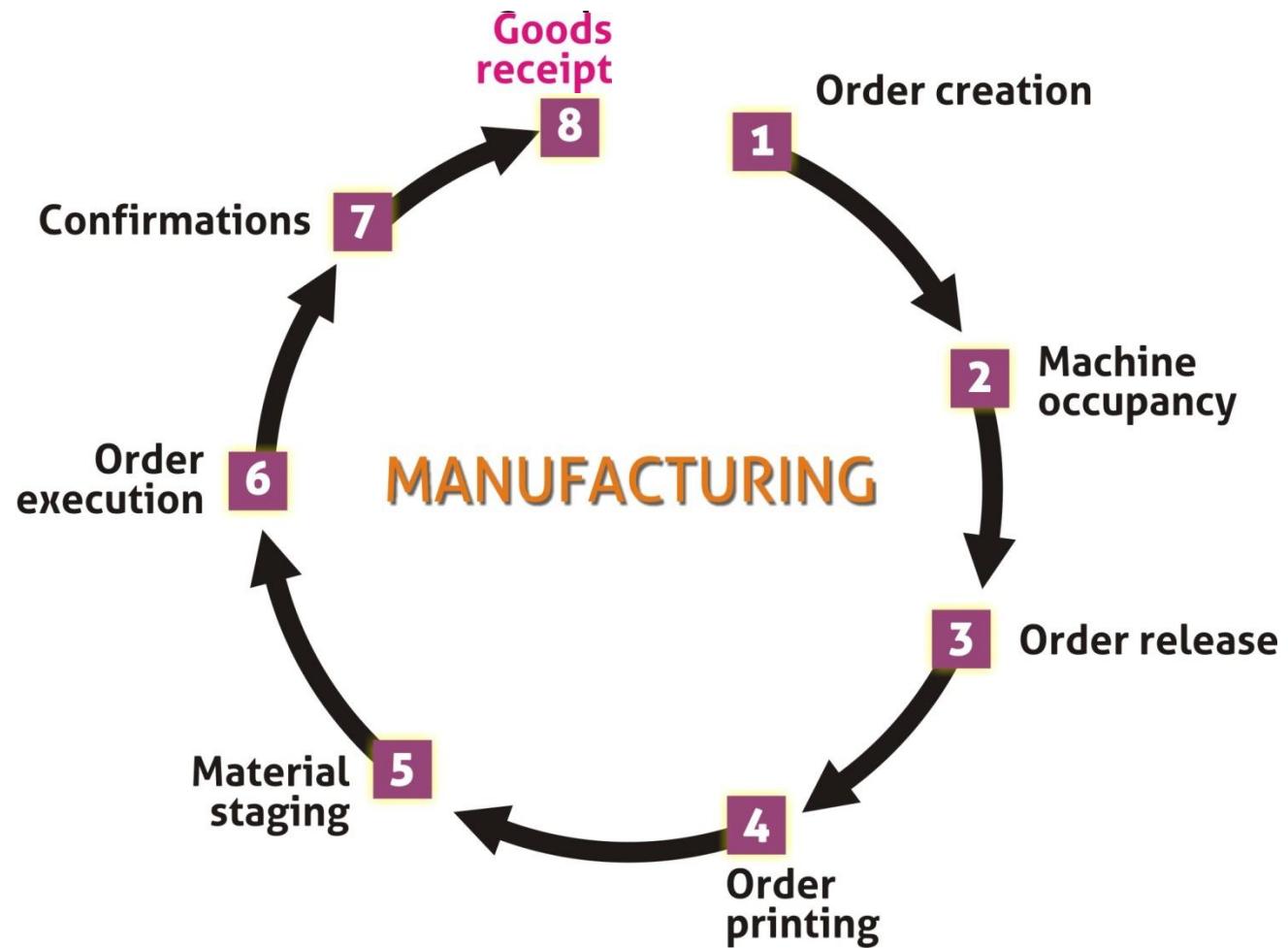
## MANUFACTURE PROCESS



### Pemeriksaan Hasil Produksi

Barang yang dihasilkan dari proses produksi sebelumnya, diperiksa sesuai dengan standar mutu yang telah ditetapkan. Barang yang memenuhi standar mutu, kemudian dipindah tangankan untuk menjadi **stok** gudang.

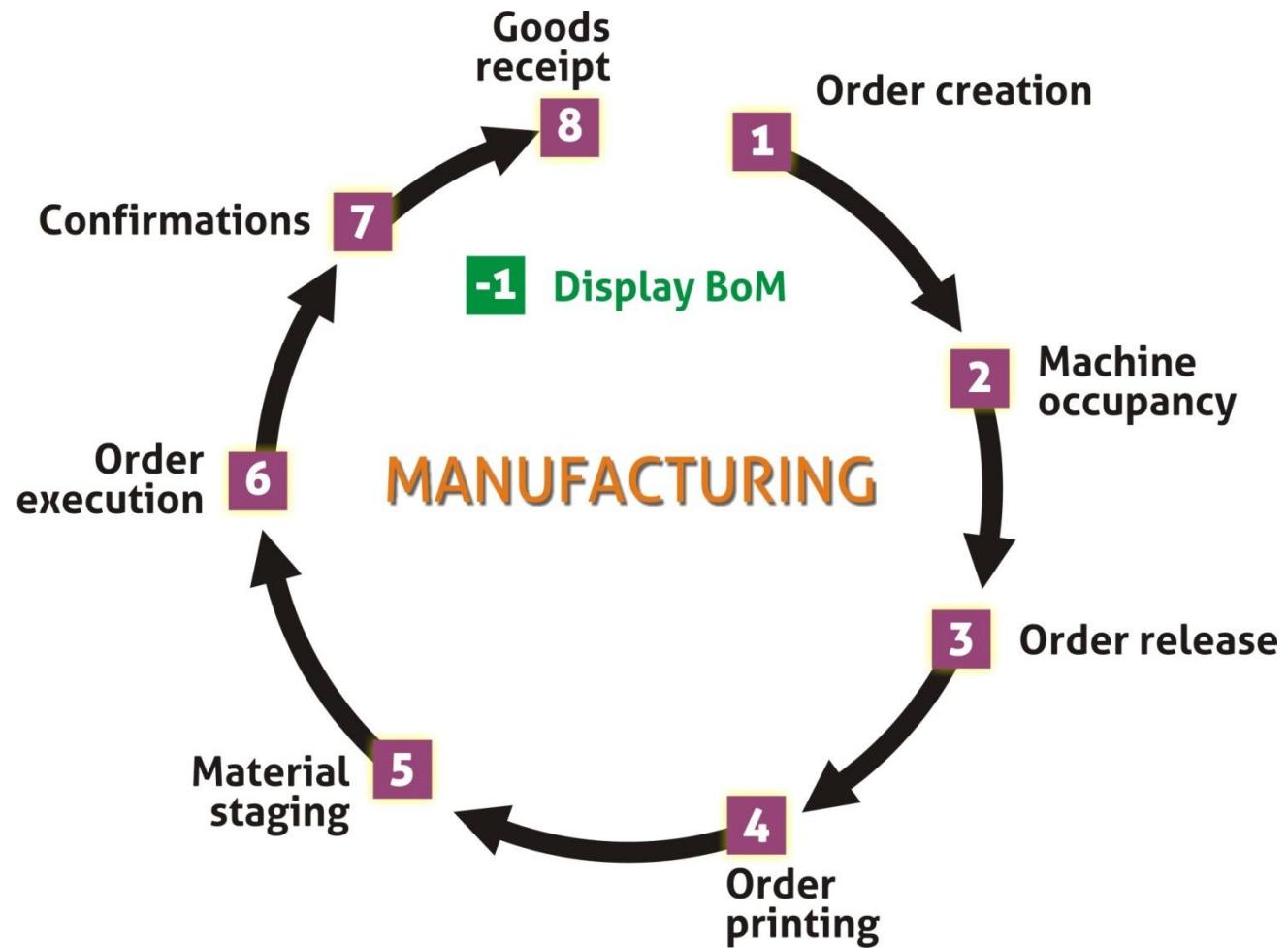
## MANUFACTURE PROCESS



### Penerimaan Barang oleh Gudang

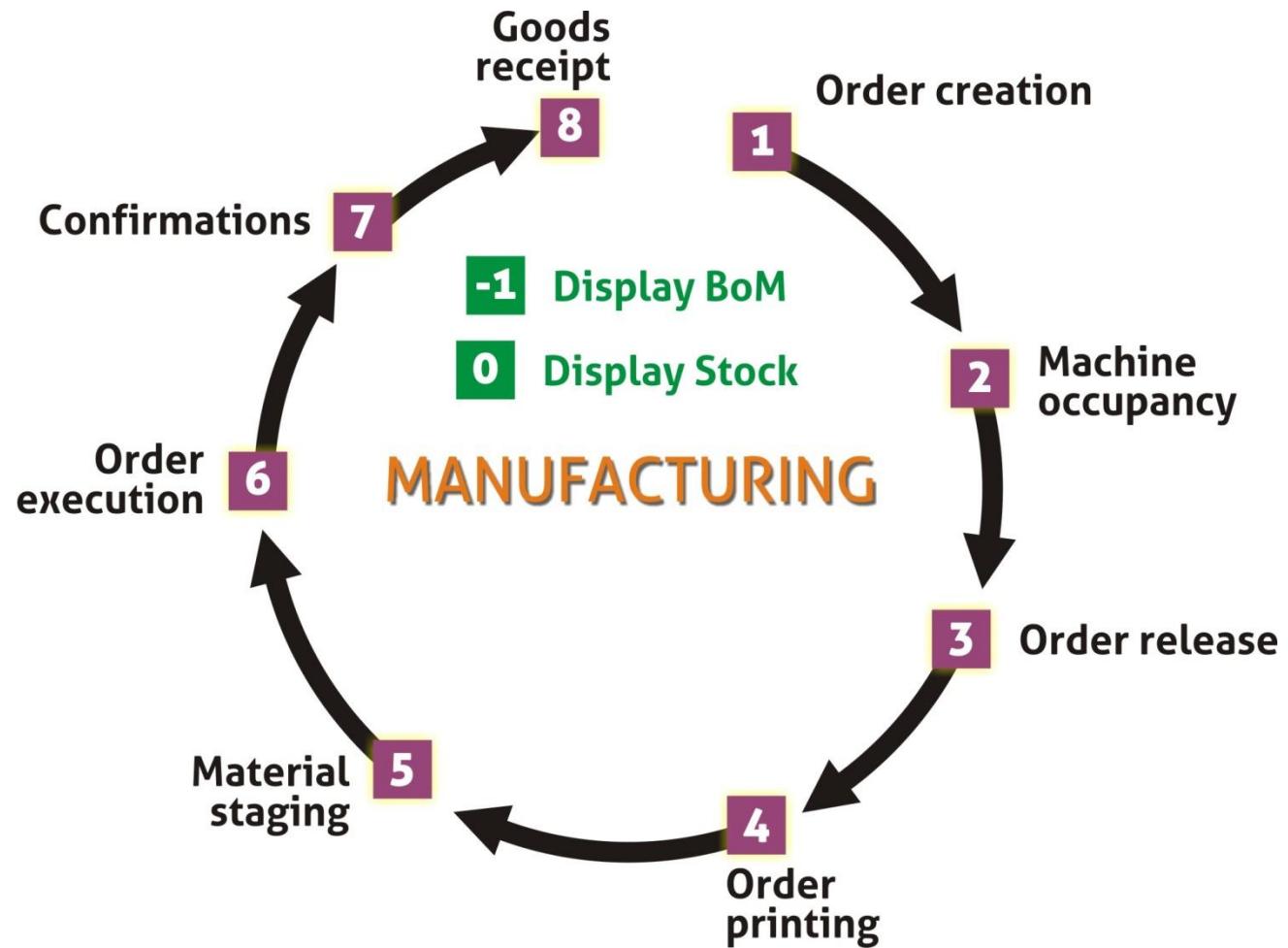
Secara resmi gudang menerima barang hasil produksi dan mengeluarkan bukti penerimaan barang (**goods receipt**).

## MANUFACTURE EXERCISE



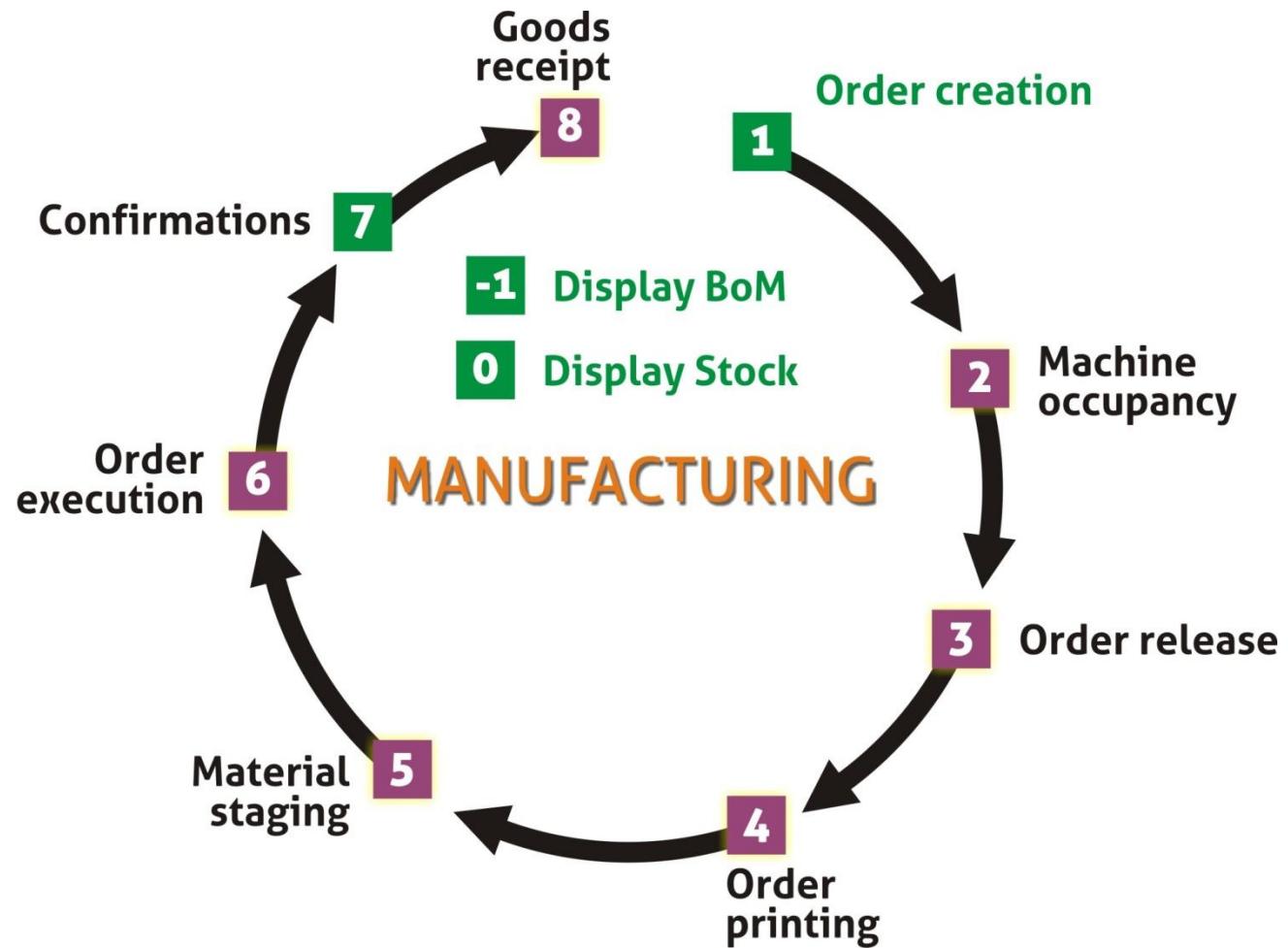
Menampilkan **daftar material** yang telah ditentukan pada proses *procurement*

## MANUFACTURE EXERCISE



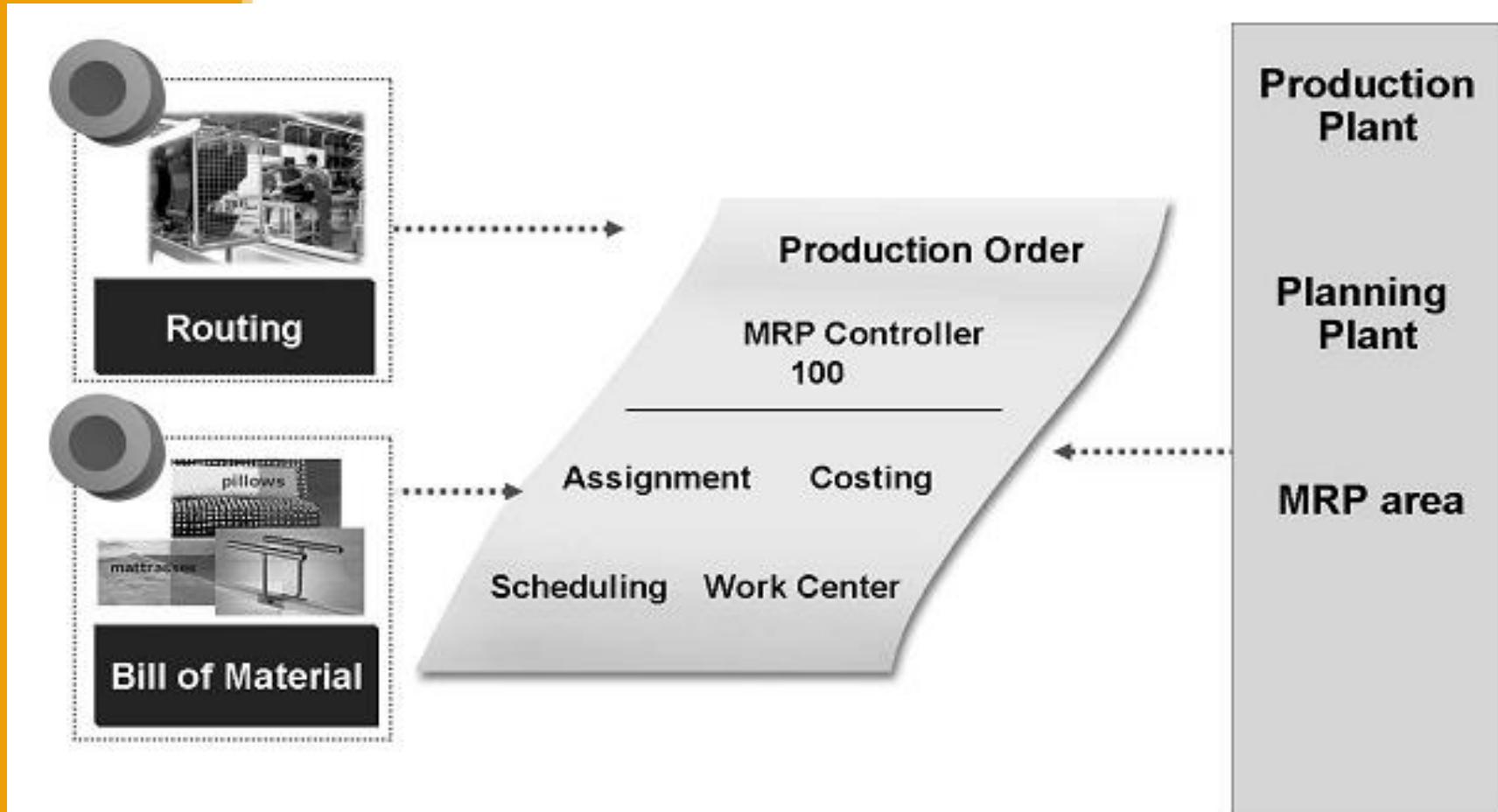
Menampilkan daftar material yang telah dipesan dan diterima ke gudang pada proses *procurement* beserta stoknya (*apakah memang perlu produksi?*)

## MANUFACTURE EXERCISE

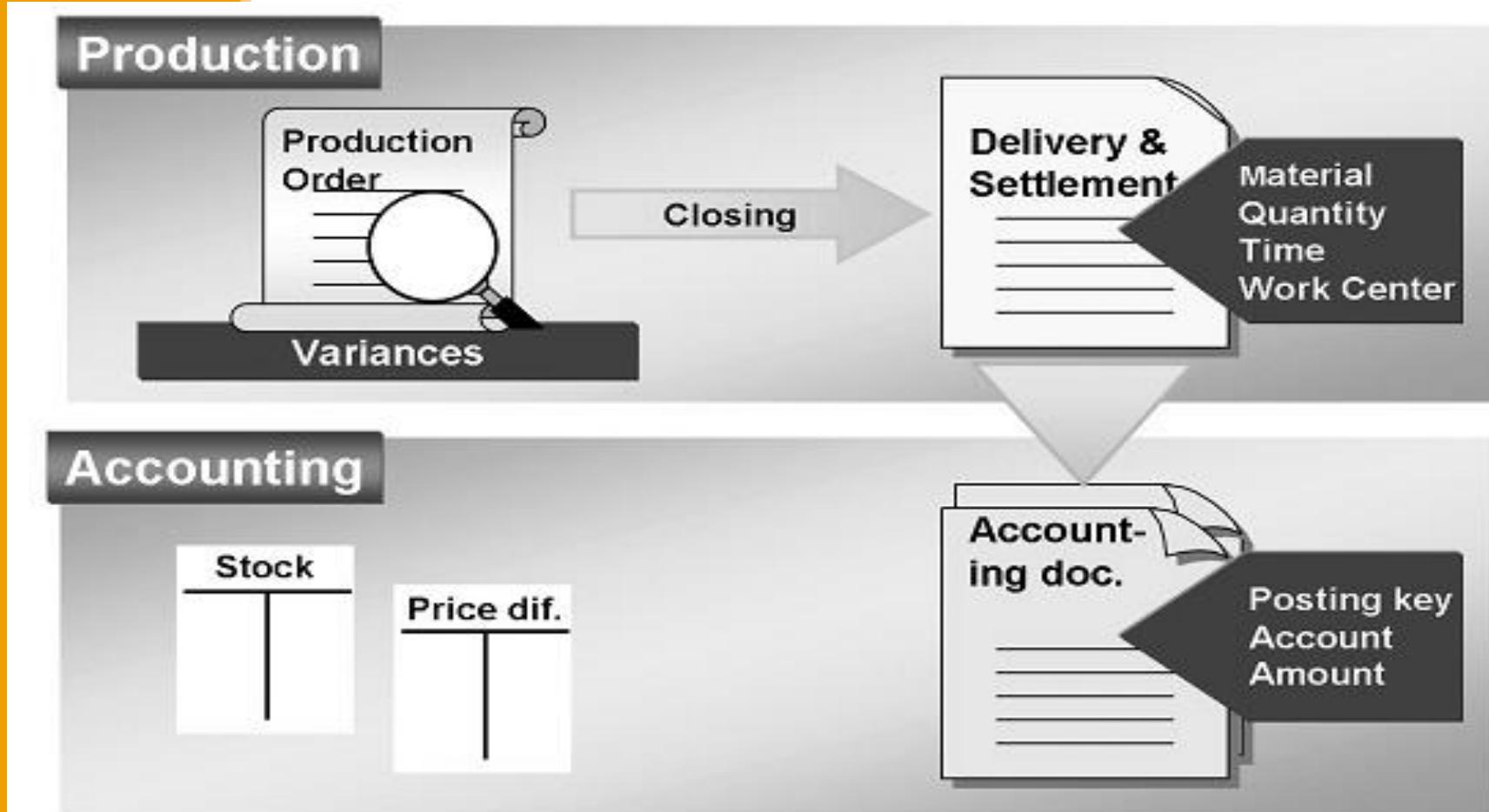


Menginputkan surat perintah produksi dan melakukan konfirmasi terhadap barang hasil produksi

# Production Order



# Production Document



# Exercise

- IDES AG akan memulai proses produksi sebuah barang, sesuai dengan apa yang sudah diputuskan oleh management **pada awal** proses procurement

# Display a Bill of Material

- **Exercise 4-7, hal. 4-61**
- Perusahaan memutuskan untuk memproduksi pompa pada periode ini, dan telah membuat daftar material (bahan baku) produksi → digunakan di procurement untuk memesan ke Baltus AG.
- Tampilkanlah **daftar materialnya**
- Catat **jumlah material** penyusun produk mesin tersebut

# Display a Stock/Requirements List

- **Exercise 4-8, hal. 4-63**
- Material yang dibutuhkan sudah ada di gudang (melalui procurement), lihat kondisi **stok** material yang tersedia.
- Cara ini juga dapat dimanfaatkan untuk **memantau stok** bahan baku selama proses produksi berlangsung

# Create and Confirm a Production Order

- **Exercise 4-9, hal. 4-65**
- Anda sebagai kepala produksi diperintahkan memproduksi **10 buah pompa**
- Anda akan menginputkan surat perintah produksi ke sistem, kemudian setelah selesai, melakukan konfirmasi untuk memindahkan unit hasil produksi sebagai stok gudang
- Kros cek lagi dengan langkah 4-8 untuk memastikan perubahan stok

# Next

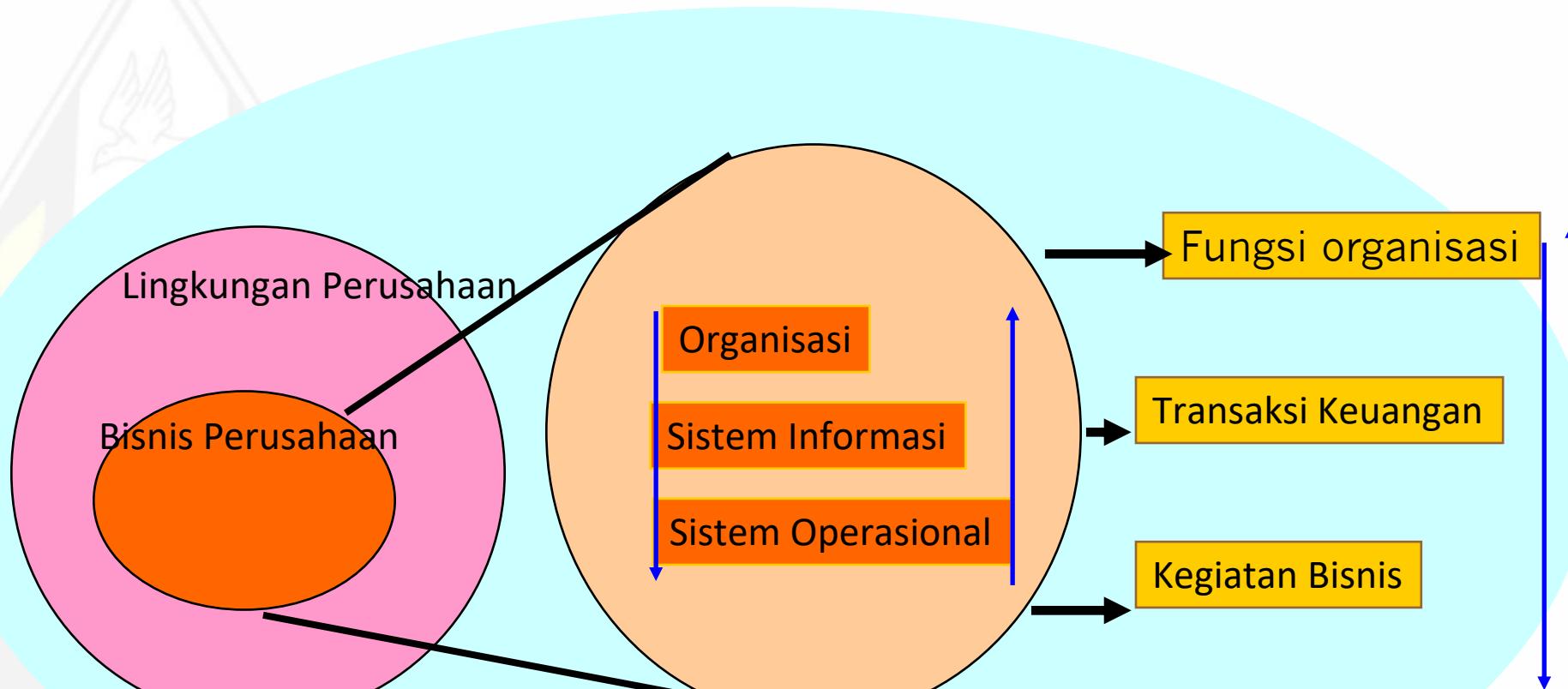
- Business Process in Financial
- UTS (Moodle)

# Finansial Business Process

Antonius Rachmat C



# Lingkungan Bisnis Perusahaan sebagai Sistem

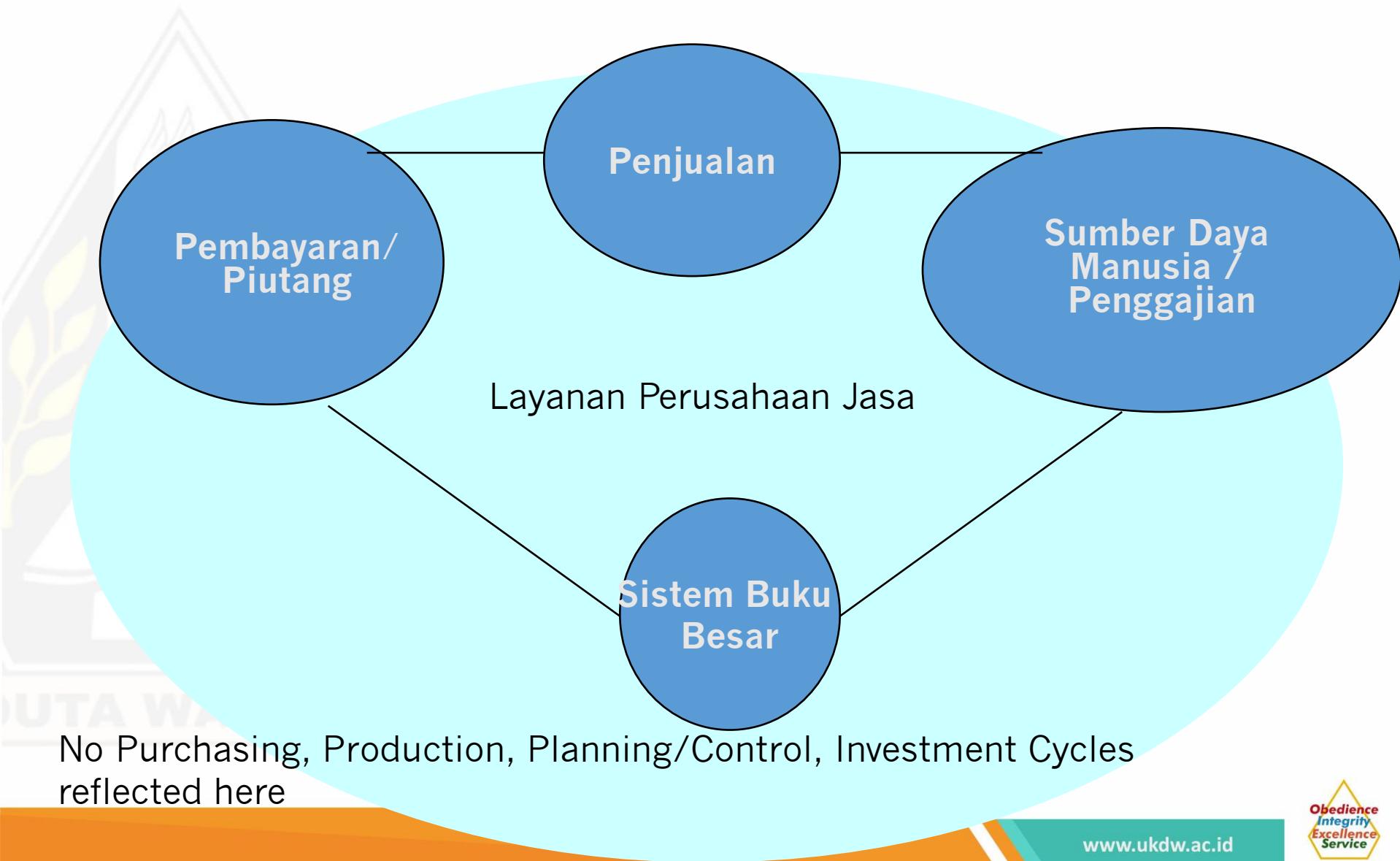


# Contoh Perusahaan Dagang: Manufaktur

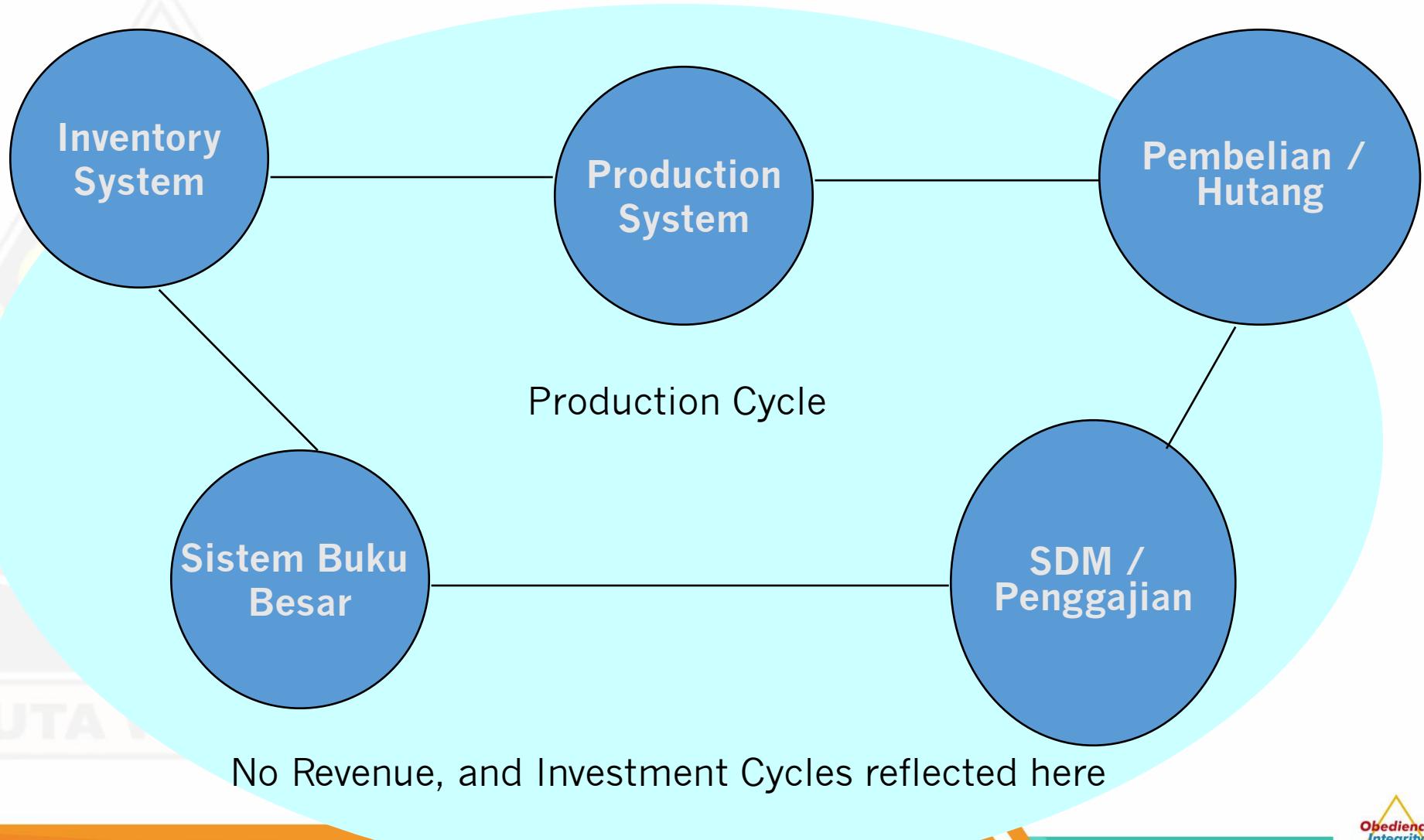


No Planning/Control, Investment, or Production Cycles reflected here

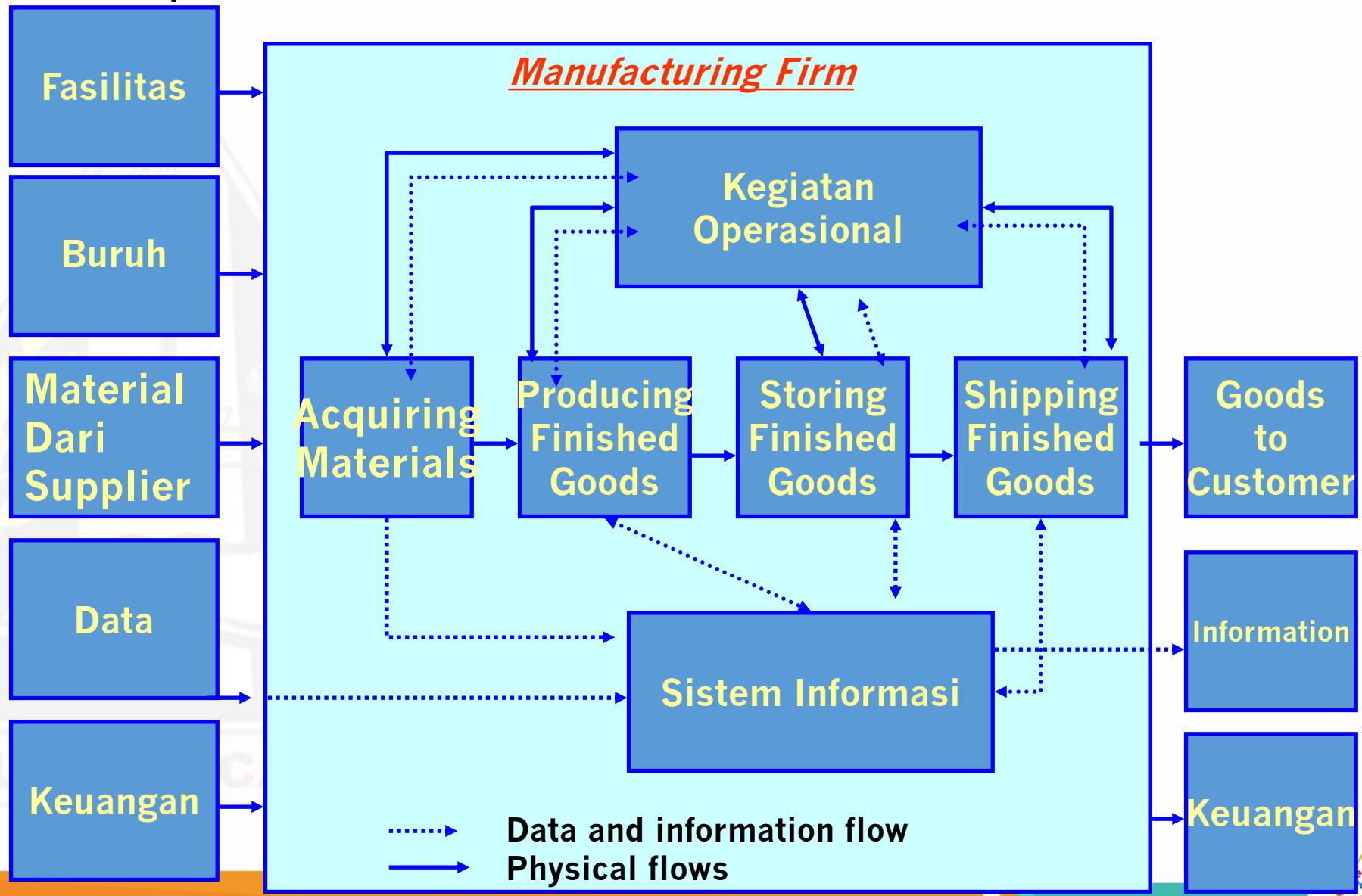
# Layanan Perusahaan Jasa



# Sistem Produksi

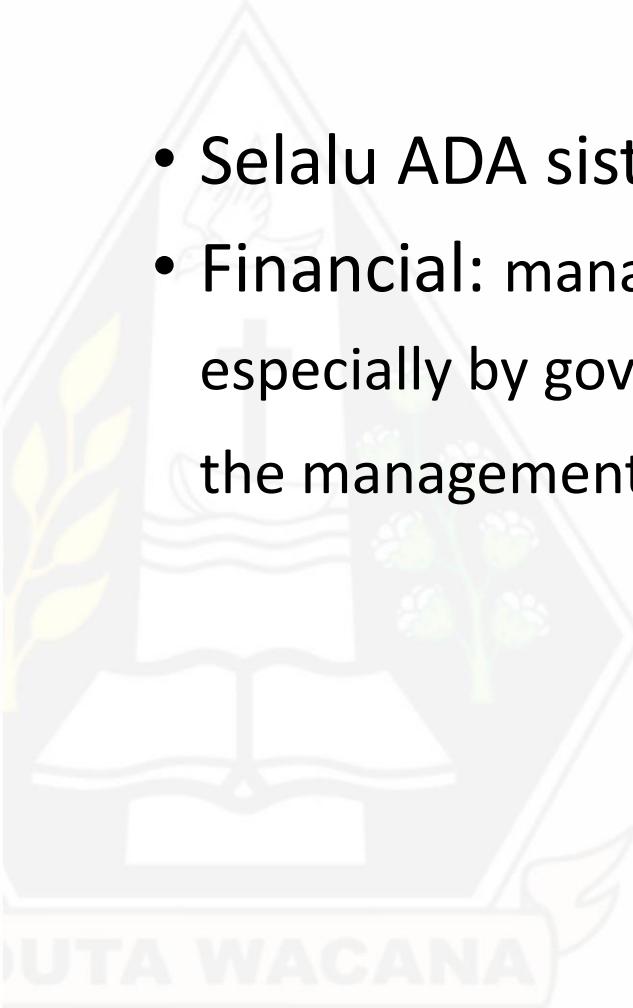


# Operasional Perusahaan Manufaktur



# Apapun sistem perusahaannya...

- Selalu ADA sistem **keuangan / finansial** perusahaan
- Financial: management of large amounts of money, especially by governments or large companies, science of the management of money and other assets

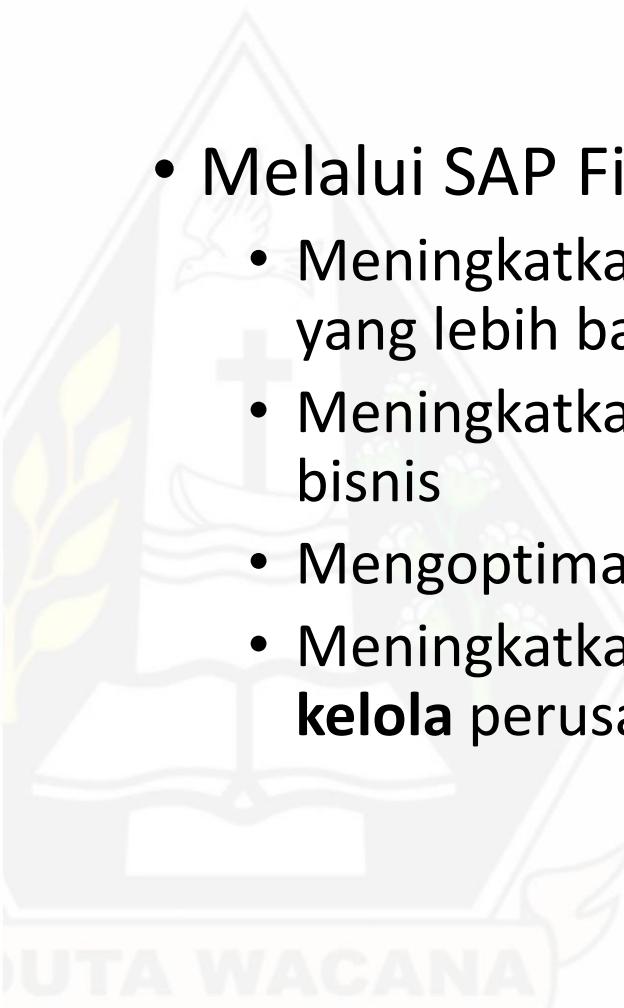


# SAP Financial

- SAP Financial berisi modul solusi manajemen finansial yang **lengkap** dan **terintegrasi** untuk memastikan performa bisnis yang bisa diprediksi.
- Menyediakan dukungan terhadap data: *accounts receivable, accounts payable, fixed assets, inventory dan cash accounting*
- **Sub-ledger** terintegrasi dengan SAP **General Ledger**, sehingga data financial selalu terrekonsiliasi dan semua laporan sangat akurat.
- **Laporan rugi laba (profit/loss)** dapat digenerate melalui berbagai dimensi bisnis – unit, profit centre, dan lokasi geografis

# SAP Financial

- Melalui SAP Finansial kita dapat:
  - Meningkatkan **insight** untuk pengambilan keputusan yang lebih baik.
  - Meningkatkan **produktivitas, efisiensi, dan responsif** bisnis
  - Mengoptimalkan **cash flow** perusahaan
  - Meningkatkan **kepatuhan/audit keuangan** dan **tata kelola** perusahaan

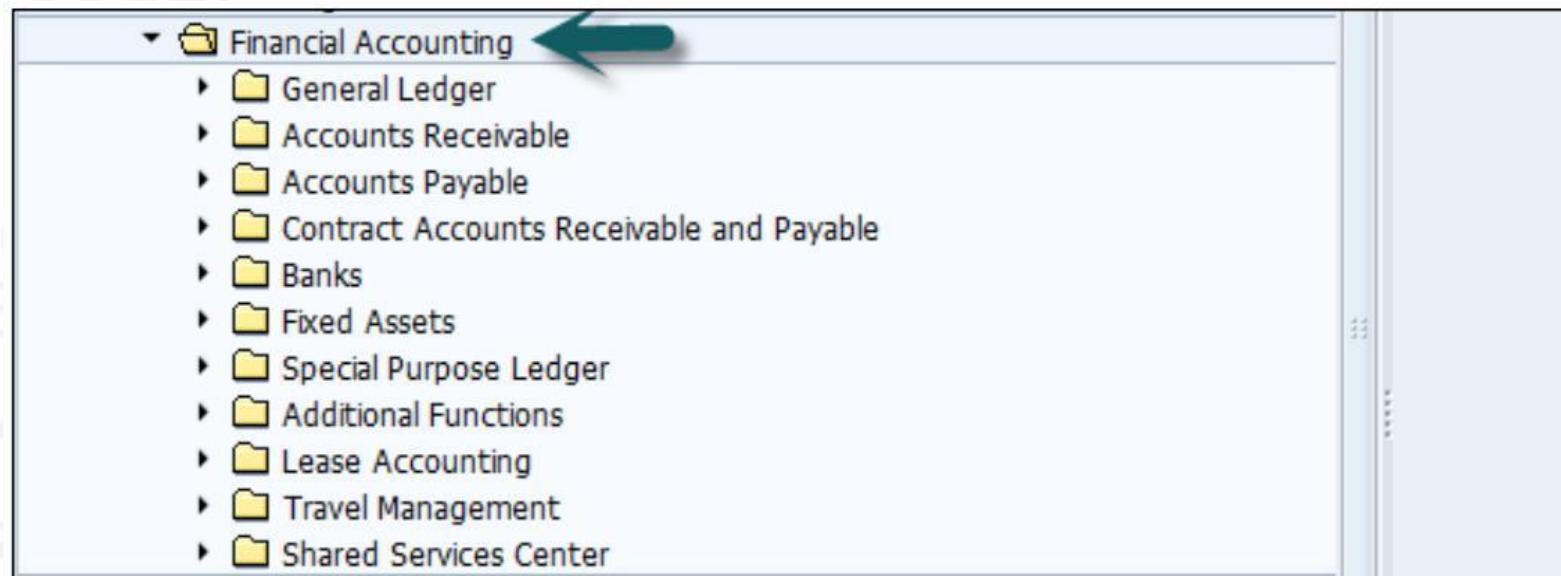


# SAP Financial

- Input:
  - Payment from customers
  - Account receivable
  - Account payable
  - Sales data
  - Production and inventory data
  - Payroll and expense data
- Output:
  - Payment to suppliers
  - Financial reports
  - Customer credit data

# SAP Financial Module

- Where to find SAP FI Modules?



UTA WACANA

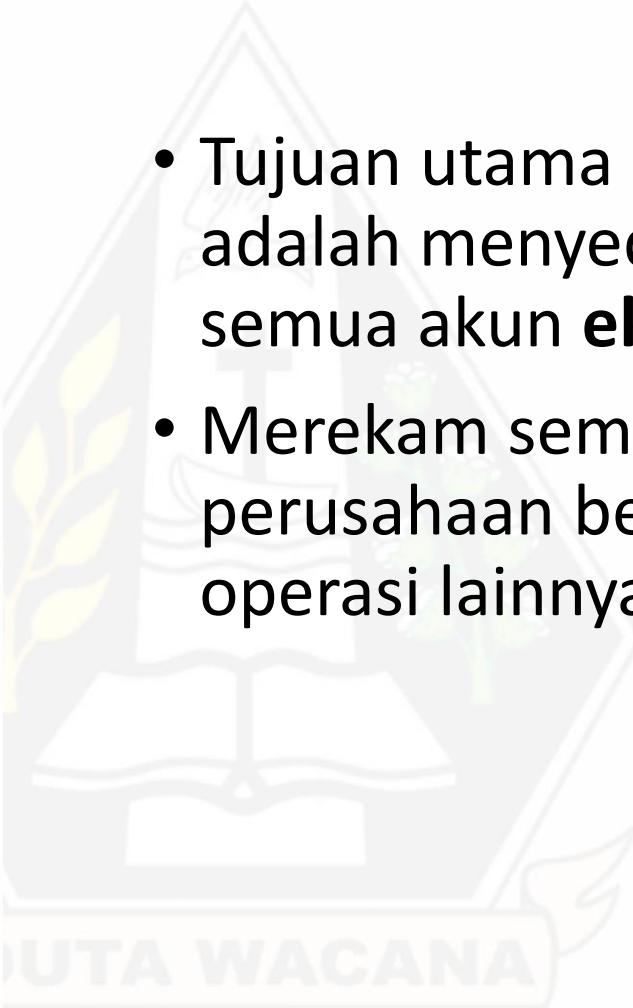
# COMPONENTS OF SAP FINANCIAL AND ACCOUNTING

- SAP General Ledger
- SAP Accounts Payable
- SAP Accounts Receivable
- SAP Bank Accounting
- SAP Asset Accounting
- SAP Funds Management
- SAP Travel Management

DUTA WACANA

# SAP General Ledger

- Tujuan utama dari SAP **general ledger accounting** adalah menyediakan sistem untuk mengelola semua akun **eksternal** dari suatu organisasi.
- Merekam semua **transaksi bisnis** dari suatu perusahaan bersama dengan berbagai bidang operasi lainnya dikelola oleh modul SAP Financial.



# SAP G/L

Document Edit Goto Extras Settings Environment System Help

Display Document: General Ledger View

Taxes Display Currency Entry View

Data Entry View

Document Number	19000000009	Company Code	V001	Fiscal Year	2011
Document Date	21.08.2011	Posting Date	21.08.2011	Period	2
Reference		Cross-CC no.			
Currency	AUD	Texts exist	<input type="checkbox"/>	Ledger Group	

Ledger OL

Doc.	19000000009	FiscalYear	2011	Period	2
------	-------------	------------	------	--------	---

Co... It... L.item PK SG Account Description Amount Cu Tx Cost Ctr Profit Partner PC Purch.Doc Ite...

V001	1	000001	31	211000	Trade Payables - Dom	110.00	AUD	P1		1200				
	1	000002	31	211000	Trade Payables - Dom	330.00	AUD	P1		1300				
	2	000003	40	650000	Postage	100.00	AUD	P1	1321	1200				
	3	000004	40	651000	Office Supplies	300.00	AUD	P1	1322	1300				
	4	000005	40	216000	Reserve For Deferred	10.00	AUD	P1		1200				
	4	000006	40	216000	Reserve For Deferred	30.00	AUD	P1		1300				

# G/L Posting in SAP

**Enter G/L Account Document: Company Code US00**

Tree on Company Code Hold Simulate Park Editing options

Basic data Details

Document Date	05/22/2010	Currency	USD
Posting Date	05/22/2010		
Reference	000		
Doc.Header Text	Transfer of Funds		
Cross-CC no.			
Company Code	US00	Global Bike Inc. Dallas	

Amount Information

Total deb. 5,000.00 USD

Total cred. 5,000.00 USD

COO

2 Items (No entry variant selected)

St...	G/L acct	Short Text	D/C	Amount in doc.curr.	Loc.curr.amount	T...	Tax jurisdictn code	WAssignment no.
<input checked="" type="checkbox"/>	101000	Alt Bank	S Debit	5,000.00	5,000.00			
<input checked="" type="checkbox"/>	1000000	Bank	H Credit	5,000.00	5,000.00			

Document 100000016 was posted in company code US00

# G/L Account Balance

**G/L Account Balance Display**

Activate Worklist Choose Ledger

Account Number	101000	to	<input type="text"/>		
Company Code	US00	to	<input type="text"/>		
Fiscal Year	2010				
Ledger	BL				

Period	Debit	Credit	Balance	Cum. balance
Bal.Carryforward				
1				
2				
3				
4				
5	5,000.00	175.00	4,825.00	4,825.00
6				4,825.00
7				4,825.00
8				4,825.00
9				4,825.00
10				4,825.00
11				4,825.00
12				4,825.00
13				4,825.00
Total	5,000.00	175.00	4,825.00	4,825.00

# SAP Accounts Payable and Receivable

- Akun **hutang SAP** mencatat semua komponen dan data untuk vendor:
  - Invoice, pre-payment, dan payment
- Akun **piutang SAP** mencatat semua komponen dan data untuk pelanggan:
  - Piutang dagang dan non-trade

# SAP Bank Accounting

- Modul ini digunakan untuk menangani semua transaksi akuntansi bank
- Mengelola **master data bank, manajemen saldo kas** untuk memproses pembayaran masuk dan keluar

Change View "Bank Accounts": Details

New Entries    

Dialog Structure:  
- House Banks  
  - Bank Accounts

Company Code	1000 IDES AG
House Bank	3000 1
Account ID	3050 4
Description	

Bank Account Data:  
Bank Account Number: 6189236 5      IBAN: 6  
Alternative acct no.:  
Currency: USD      Control key: 113550 7  
G/L: 113550 7  
Discount acct:

House Bank Data:  
Bank Country: DE 2  
Bank Key: 50010900 3

Address:  
Bank Name: Bank Of America  
Region: 06  
Street: Grüneburgweg 16  
City: 60322 Frankfurt  
Branch Office:

# SAP Asset Accounting

- Modul ini dirancang untuk mengelola **fixed asset** dari organisasi.
- Sistem keuangan SAP memungkinkan untuk **mengelola dan mengawasi** fixed asset bersama dengan menyediakan **data informasi** dan pelaporan yang terperinci
  - Fixed asset : Rumah, Gedung, Tanah
- Penambahan, penyusutan,
- Pembuangan, transfer
- Penyesuaian

The screenshot shows the SAP Fiori interface for 'Enter Asset Transaction: Acquis. w/Autom. Offsetting Entry'. The top section displays 'Assets posted( 1 )' with one row of data:

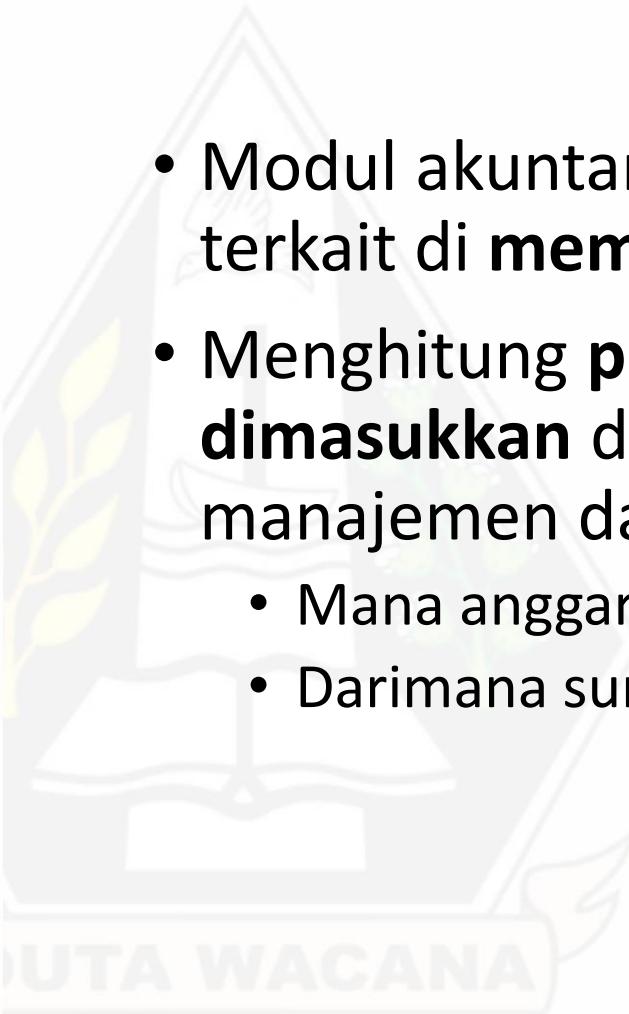
Co	Asset	SNo.	BusA	Acct.detrm	Asset description
Z	2031	0	0001	20000	description asset

The bottom section shows 'Asset line items: 000000002031-0000' with a table of transaction details:

Area	AsstVal date	TT	Amount posted	Currency	Crcy type
1	01.01.2011	100	12.000,00	BRL	10
20	01.01.2011	100	12.000,00	BRL	10
40	01.01.2011	100	5.400,00	USD	40
50	01.01.2011	100	5.400,00	USD	40
71	01.01.2011	100	4.126,69	EUR	60
81	01.01.20...	100	4.126,69	EUR	60

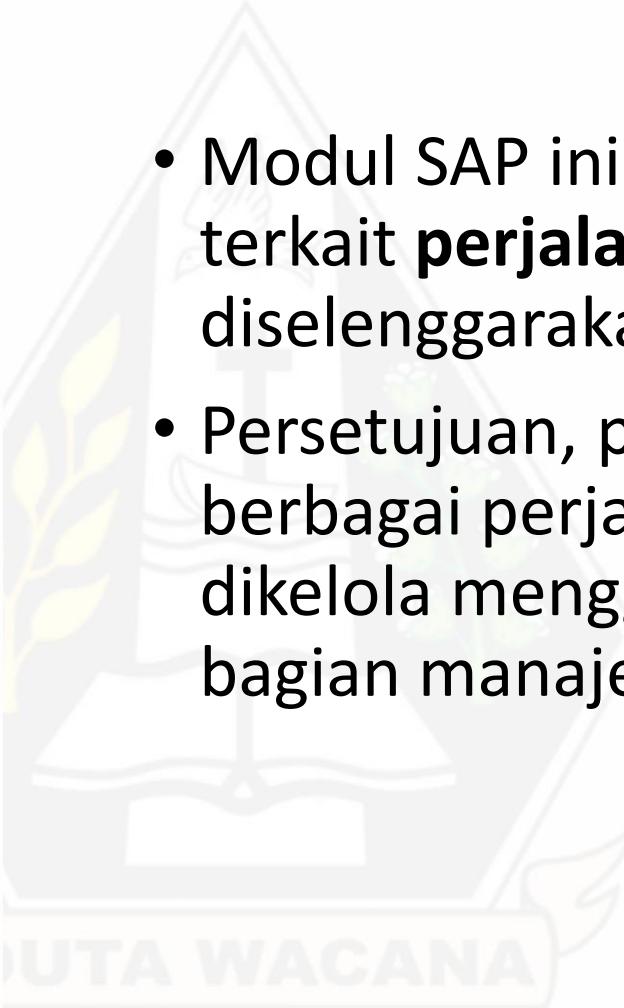
# SAP Funds (dana) Management

- Modul akuntansi SAP ini mendukung semua tugas terkait di **membuat dan mengelola anggaran**.
- Menghitung **pendapatan, pengeluaran dan dana dimasukkan** dalam daftar task SAP bagian manajemen dana
  - Mana anggaran yang perlu mendapat perhatian khusus
  - Darimana sumber anggaran



# SAP Travel Management

- Modul SAP ini mengontrol semua transaksi yang terkait **perjalanan dinas** perusahaan yang diselenggarakan di dalam dan oleh organisasi.
- Persetujuan, pemesanan, penyelesaian dan berbagai perjalanan pengeluaran dicatat dan dikelola menggunakan sistem perjalanan SAP pada bagian manajemen



# GOAL OF FINANCIAL ACCOUNTING (FI)

- Financial Accounting didesain untuk mengumpulkan **data transactional** yang digunakan untuk persiapan **report standard portfolio**
  - Secara general laporan ini digunakan untuk pihak **eksternal**
  - Standard reports include:
    - Balance Sheet (Neraca Saldo)
    - Income Statement (Pemasukan)
    - Profit and Loss (Rugi Laba)
    - Statement of Cash Flows (Arus Kas)

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# FI ORGANISATIONAL STRUCTURE

- **Client**
  - Sistem lingkungan yang independen (suatu penamaan)
- **Company Code**
  - Legal unit akuntansi dari suatu perusahaan
  - Bisa memiliki lebih dari 1 company code, e.g United States, Germany, United Kingdom, Australia, etc...
- **Chart of Accounts**
  - Skema klasifikasi akun / group akun di dalam Buku Besar
  - The G/L accounts bisa digunakan oleh lebih dari satu company codes

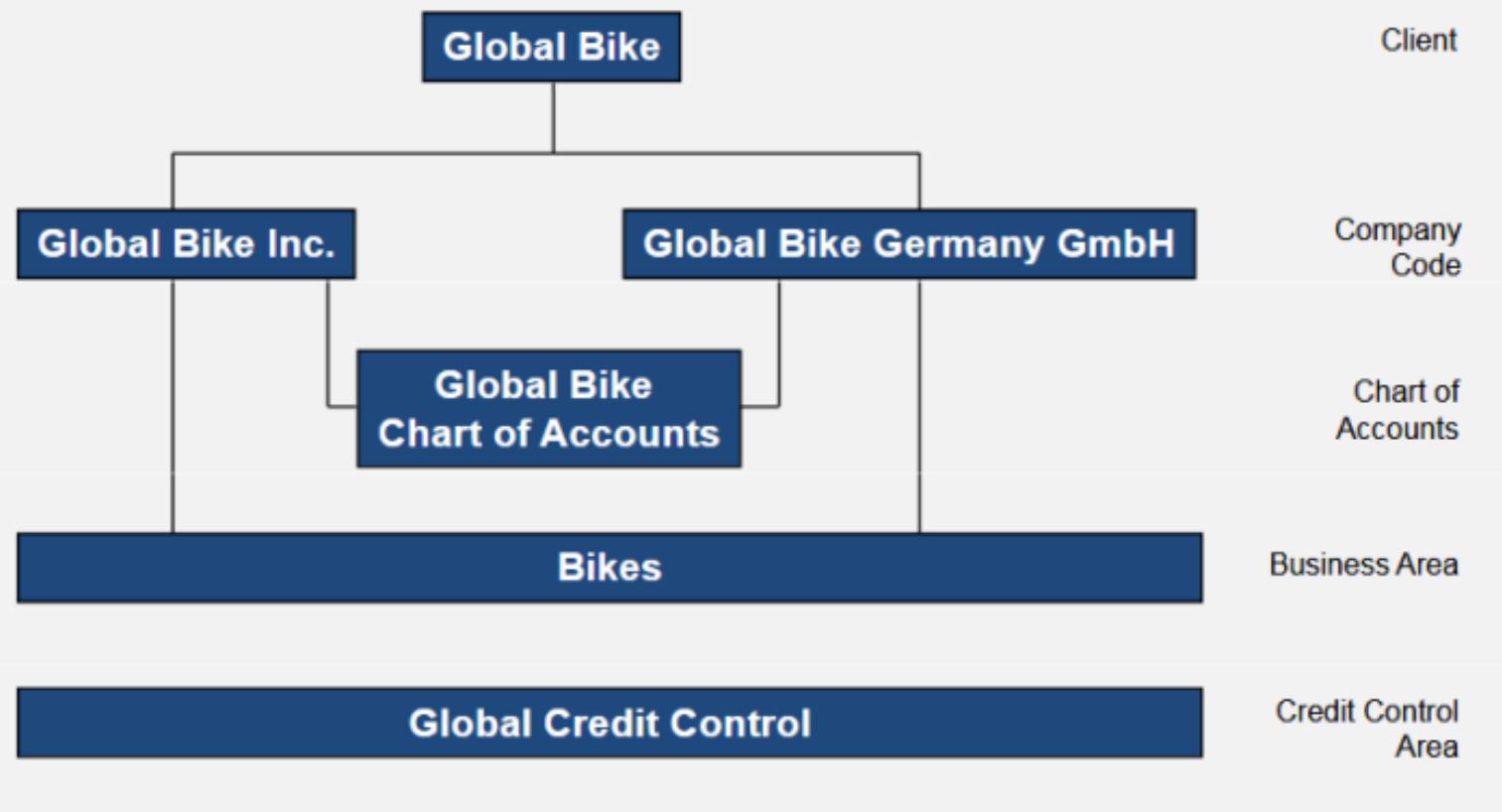
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# FI ORGANISATIONAL STRUCTURE (2)

- **Business Area**
  - Unit organisasi yang mewakili area operasi dalam suatu organisasi
- **Credit Control Area**
  - Entitas organisasi yang digunakan untuk memonitor credit limit untuk konsumen
  - Bisa digunakan untuk lebih dari satu company code

# Contoh Hirarki pada Finansial

Example: Global Bike Inc.



# Financial Master Data

- **General Ledger**

- Kombinasi unik dari **Company Code** dan **Chart of Account** dan disimpan di dalam data yang disebut General Ledger / Buku Besar
- Buku Besar berisi **daftar transaksi** yang mempengaruhi setiap akun di Chart of Account dan digunakan dalam persiapan statement financial accounting

- **Customer and Vendor Master Data**

- Customer and vendor account dikelola di FI dan terintegrasi dengan modul **accounts receivable** and **accounts payable**
- Financial postings untuk customers dan vendors dibuat secara langsung terhadap masing-masing individual accounts dan diposting otomatis ke dalam General Ledger

# Financial Master Data

- **Customer Accounts**
  - Master Records
  - Define account groups
  - Accounting clerk identification code
  - Industries
  - Customer Accounts
- **Vendor Accounts**
  - Master Records
  - Define Account Groups
  - Define screen layout
  - Accounting Clerks
  - Vendor Accounts
- **Business Transactions**
  - Incoming invoices/Credit Memos
  - Outgoing Payments

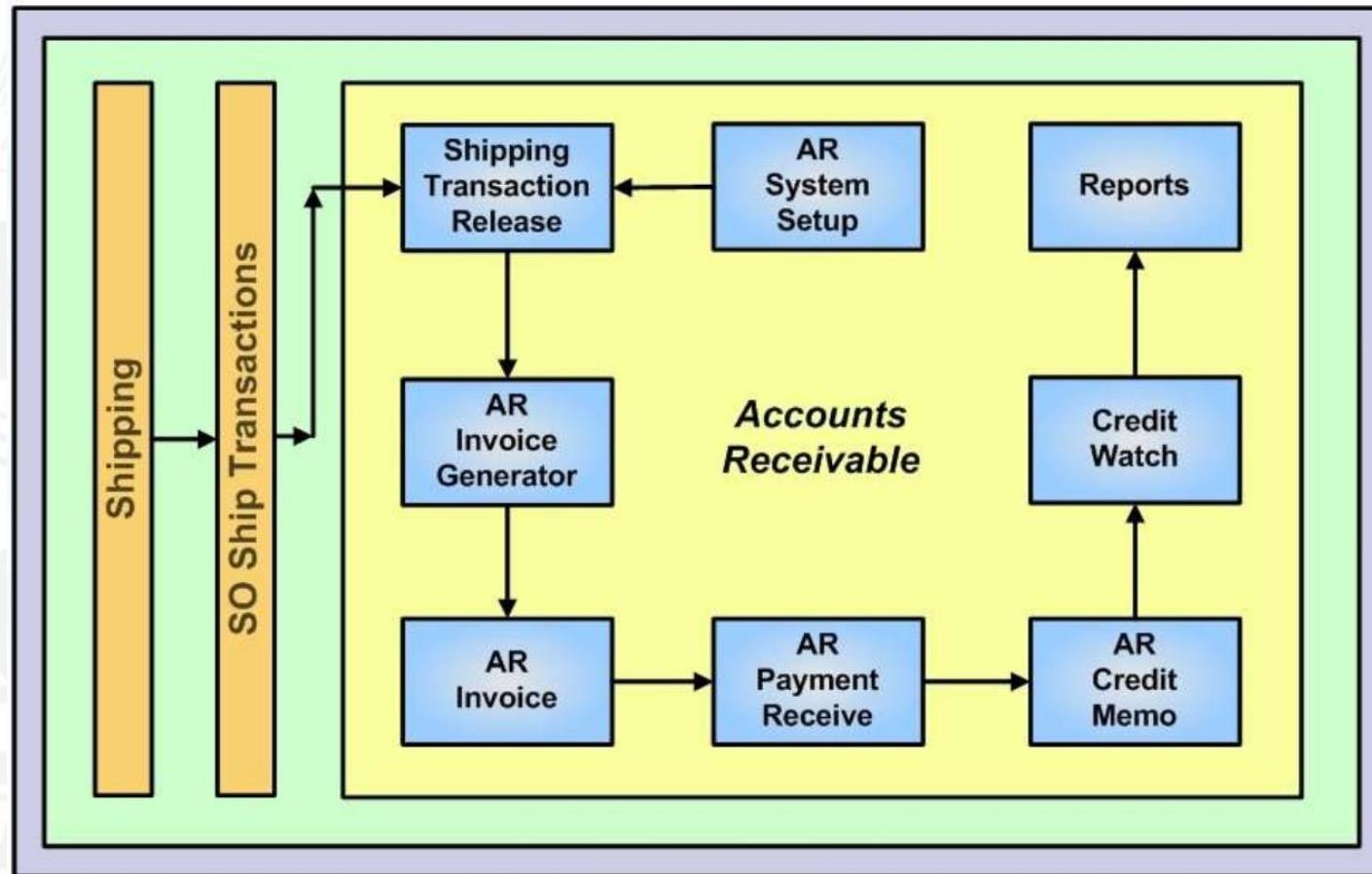
# Financial Master Data (2)

- **Accounts Receivable**

- Informasi tentang **customer** yang melakukan pembelian barang dan jasa yang akan menjadi **piutang dagang**
- Integrasi data antara **Sales, Distribution, dan Financial Accounting**
- Billing pada sales akan menghasilkan journal finansial otomatis untuk kegiatan penjualan



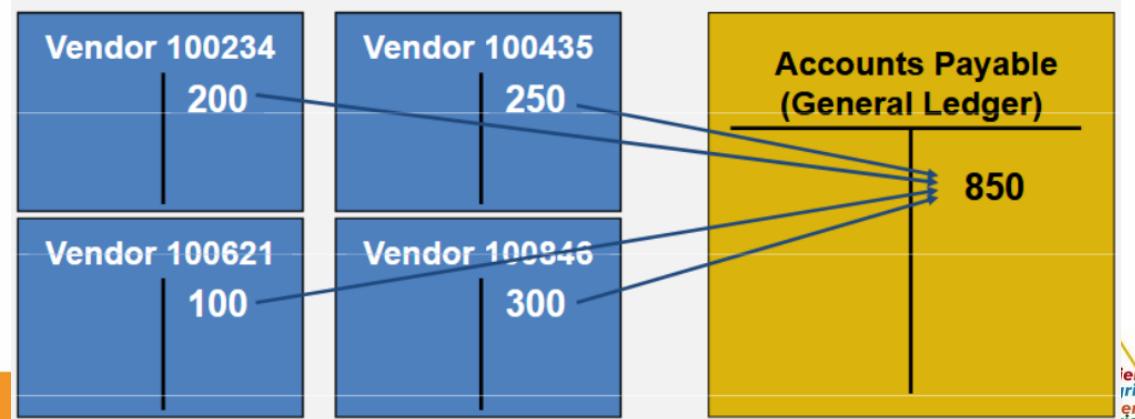
# Account receivable overview



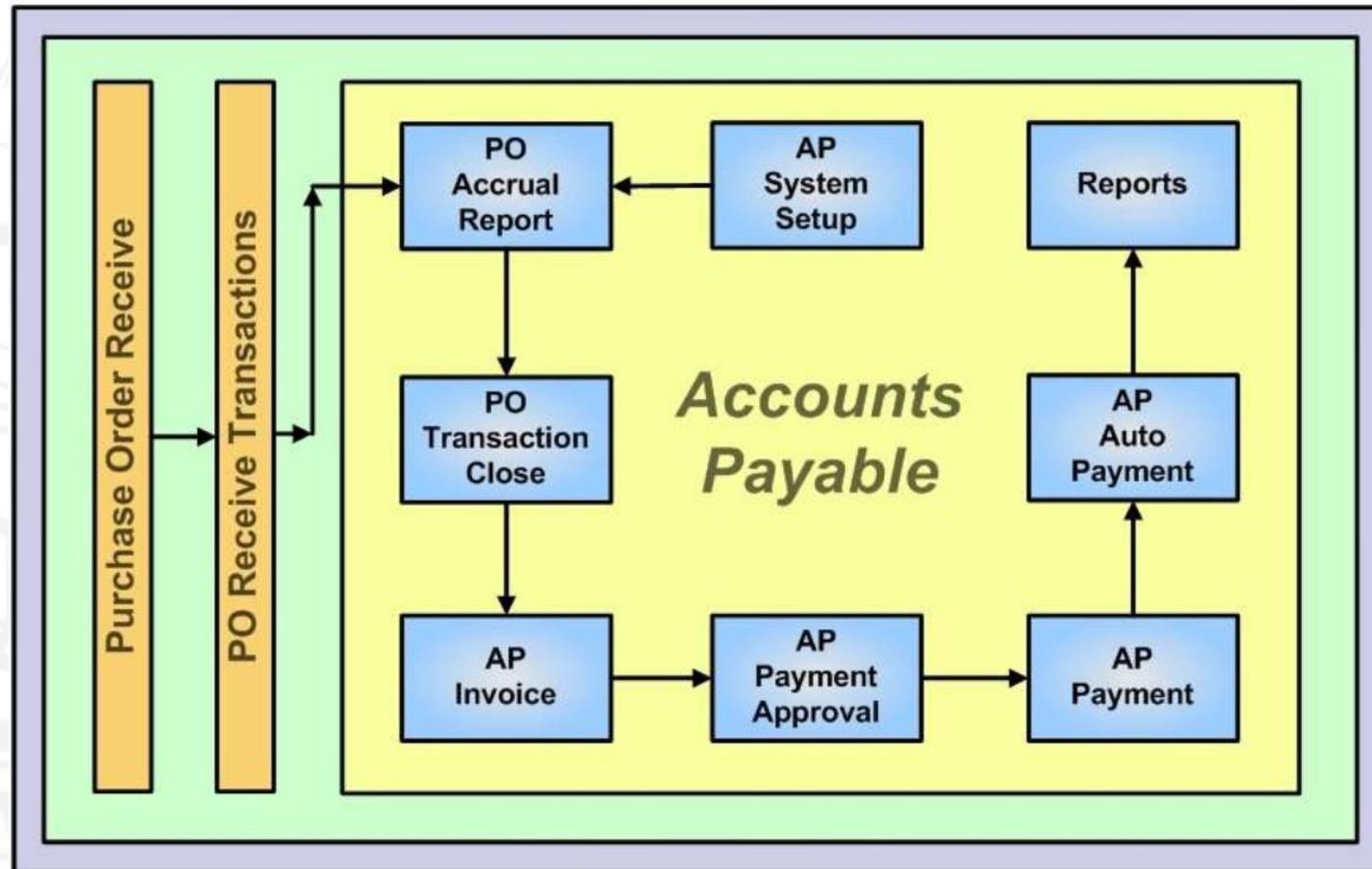
# Financial Master Data (3)

- **Accounts Payable**

- Informasi tentang **vendors** dimana perusahaan membeli barang dan jasa, seperti pembelian dan pembayarannya (termasuk **hutang**)
- Integrasi antara **Materials Management (MM)** dan **Financial Accounting (FI)**
- Pembelian dan goods receipt di dalam Material Management yang menghasilkan jurnal FI



# Account payable overview



# Example: Financial Impact of the Fulfillment Process

4.9A: When goods are shipped out

Income Statement		Balance Sheet	
Income		Assets	
Revenue from Sales	\$2940	Cash	\$0
		Accounts Receivable	\$2940
Expenses		Inventory	
Cost of Goods Sold	\$2170	Finished goods	\$2170
Net Income	\$ 770	Total Assets	\$ 700
		Liabilities	
		Accounts Payable	
		Total Liabilities	
		Equity	
		Retained Earnings	\$ 770
		Total Liabilities and Equity	\$ 770

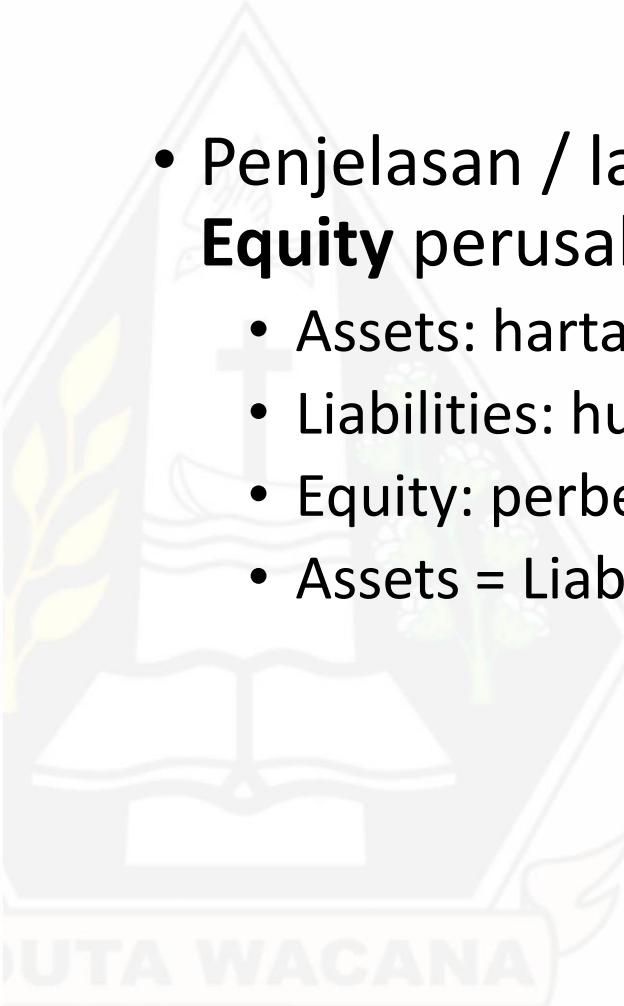
Financial (Accounting) changed!

4.9B: When payment is received

Income Statement		Balance Sheet	
Income		Assets	
Revenue from Sales	\$2940	Cash	\$2940
		Accounts Receivable	\$0
Expenses		Inventory	
Cost of Goods Sold	\$2170	Finished goods	\$2170
Net Income	\$ 770	Total Assets	\$ 700
		Liabilities	
		Accounts Payable	
		Total Liabilities	
		Equity	
		Retained Earnings	\$ 770
		Total Liabilities and Equity	\$ 770

# Financial Reporting

- Penjelasan / laporan tentang **Assets, Liabilities, dan Equity** perusahaan pada suatu waktu
  - Assets: harta
  - Liabilities: hutang
  - Equity: perbedaan antara Assets dan Liabilities
  - $\text{Assets} = \text{Liabilities} + \text{Equity}$



# Rumus: HARTA = HUTANG + MODAL

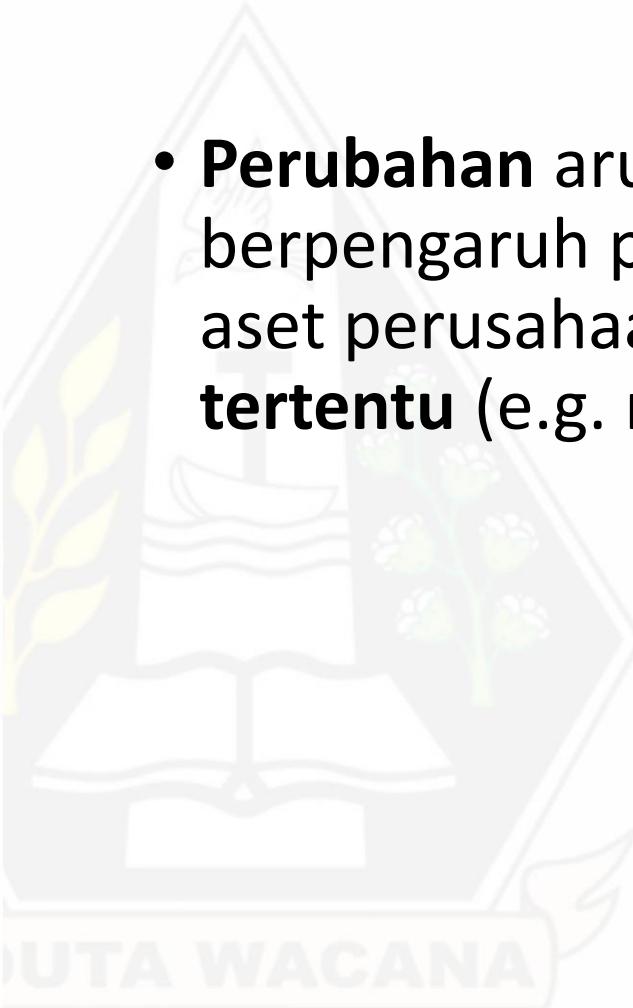
	Debet	Kredit
Harta (Kas, Gedung)	+	-
Hutang Pembelian	-	+
Piutang Jual	+	-
Modal	-	+
Pendapatan	-	+
Biaya	+	-
Retur Beli	-	+
Diskon Beli	-	+
Retur Jual	+	-
Diskon Jual	+	-

# Financial Reporting

- Laporan tentang pendapatan dan pengeluaran pada suatu periode tertentu (e.g. monthly, quarterly, or yearly)
- **Revenues**, pendapatan kas sebagai hasil dari penjualan barang dagangan atau aset perusahaan
- **Expenses**, pengeluaran kas sebagai hasil dari pembelian perusahaan untuk operasional
- $\text{Revenues} - \text{Expenses} = \text{Net Income}$

# Statement Cash Flow

- **Perubahan arus pemasukan dan pengeluaran yang berpengaruh pada kas** yang paling penting dalam aset perusahaan pada suatu periode **waktu tertentu** (e.g. monthly, quarterly, or annually)



# Balance Sheet

## Balance Sheet Example

### Assets

Cash	1,000
Accounts Receivable	3,000
Equipment	<u>500</u>
Total Assets	4,500

### Liabilities

Accounts Payable	1750
Taxes Payable	<u>500</u>
Total Liabilities	2,250

### Equity

Common Stock	2,000
Retained Earnings	<u>250</u>
Total Equity	2,250

Total Liabilities  
and Equity

4,500

# Income Statement

## **Revenue**

Sales	11,000
Deductions	<u>750</u>
Total Revenue	10,250

## **Operating Expenses**

Cost of Goods Sold	4,500
Operating Expenses	<u>3,750</u>
Total Expenses	8,250

Net Income Before Taxes	2,000
Taxes	<u>750</u>
Net Income	1,250



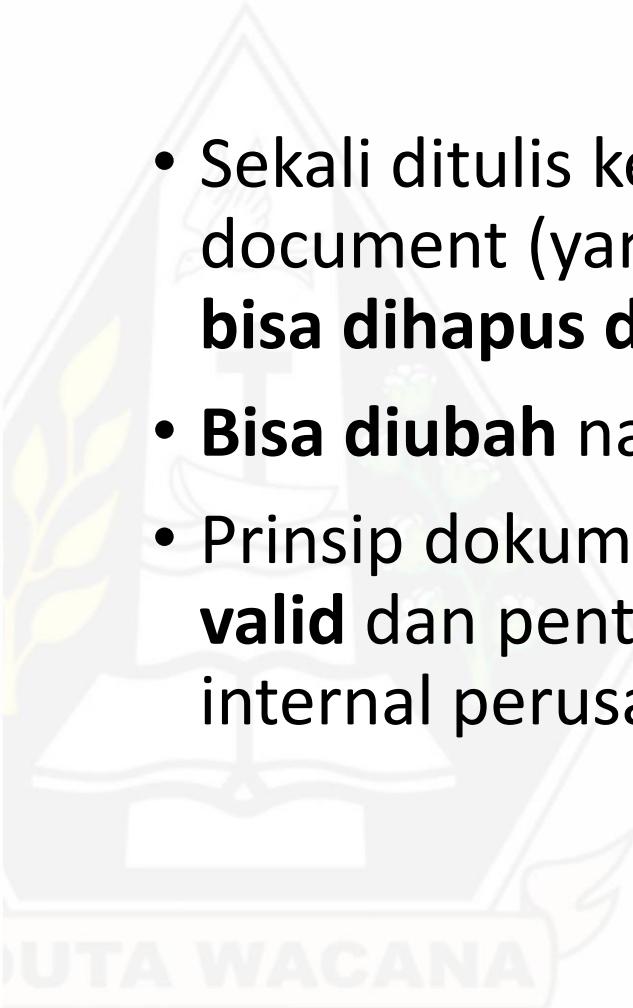
# SAP DOCUMENT PRINCIPLE

- Setiap transaksi bisnis yang mempengaruhi FI ditulis dalam SAP database dengan **nomor dokumen identitas unik**
- Nomor dokumen tersebut dapat digunakan untuk **memanggil kembali** transaksi lama
- Data tersebut berisi, misalnya:
  - Responsible person
  - Date and time of the transaction
  - Commercial content

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# SAP DOCUMENT PRINCIPLE (2)

- Sekali ditulis ke database SAP data financial document (yang berpengaruh pada finansial) **tidak bisa dihapus dari database**
- **Bisa diubah** namun harus ada tahapannya
- Prinsip dokumen SAP adalah dokumen tersebut **valid** dan penting untuk mengontrol sistem internal perusahaan untuk beroperasi di negaranya



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# Contoh Dokumen SAP

**Document List**

Document Header: US00 Company Code

CoCd	DocumentNo	Year	Type	Doc. Date	P
US00	1000000016	2010	SA	05/22/2010	0
	1000000017	2010	SA	05/22/2010	0

Document Type: SA G/L Account Document  
Doc.Header Text: Test for Change  
Reference: 000 Document Date: 05/22/2010  
Currency: USD Posting Date: 05/22/2010  
Ref. Transactn: BKPF Accounting document  
Reference key: 0100000016US002010 Log.System: A64CLNT400  
Entered by: WEIDNER Parked by:  
Entry Date: 05/22/2010 Time of Entry: 00:49:09  
TCode: FB50  
Changed on: Last update:  
Ledger Grp: Ledger:

**Document Changes : Overview**

Technical names on

Document 0100000016 Company Code US00 Year 2010

Date	Field	New	Old
05/22/10	Changed on	05/22/2010	00/00/0000
05/22/10	Document Header Text	Test for Change	Transfer of Funds



# SAP Financial Statement Example

Financial Statement (GBI)			
F.S. item/account	Tot.rpt.pr	tot.cmp.pr	Abs. diff.
OL Ledger			
10 Currency type Company code currency			
USD Amounts in United States Dollar			
2010.01 -2010.16 Reporting periods			
2009.01 -2009.16 Comparison periods			
ASSETS	244,208.44	0.00	244,208.44
Cash & Cash Equivalents	45,050.00-	0.00	45,050.00-
100000 Bank Account	52,550.00-	0.00	52,550.00-
110000 Trade Account Receivables	7,500.00	0.00	7,500.00
Short-Term Assets	30,925.10	0.00	30,925.10
200000 Inventory-Raw Materials	232,925.00	0.00	232,925.00
200100 Inventory-Finished Goods	133,400.00	0.00	133,400.00
200200 Inventory-Trading Goods	76,117.50	0.00	76,117.50
200500 Inventory-Suspense (Heaven)	411,517.40-	0.00	411,517.40-
Long-Term Assets	258,333.34	0.00	258,333.34
220100 Land	10,000.00	0.00	10,000.00
220400 Office Furniture	150,000.00	0.00	150,000.00
220500 Accumulated Depreciation-Offic	1,666.66-	0.00	1,666.66-
220800 Vehicles	100,000.00	0.00	100,000.00
LIABILITIES / EQUITY	202,015.00-	0.00	202,015.00-
Current Liabilities	202,015.00-	0.00	202,015.00-
300000 Payables-Trade Accounts	150,000.00-	0.00	150,000.00-
310000 Goods Receipt / Invoice Receipt	52,015.00-	0.00	52,015.00-

Figure 3-25: Financial statement version with balance sheet accounts. Copyright SAP AG 2011

# Referensi

- Financial Accounting, SAP University Alliances  
[http://www3.cis.gsu.edu/dtrux/courses/CIS8670/SAP%20homework%20and%20exercises/Exercise%205%20Finance/01\\_Slides/Intro\\_ERP\\_Using\\_GBI\\_Slides\\_FI\\_en\\_v2.30.pdf](http://www3.cis.gsu.edu/dtrux/courses/CIS8670/SAP%20homework%20and%20exercises/Exercise%205%20Finance/01_Slides/Intro_ERP_Using_GBI_Slides_FI_en_v2.30.pdf)
- Realtech – Financial Management  
<http://www.realtech.com/nz/sap-enterprise-consulting/sap-implementations-solutions/sap-financialmanagement.cfm>
- SAP Financials and SAP Accounting Modules - Eshna  
<https://www.simplilearn.com/sap-financials-and-accounting-modules-rar108-article>
- SAP FICO Tutorial – TutorialsPoint  
[https://www.tutorialspoint.com/sap\\_fico/](https://www.tutorialspoint.com/sap_fico/)