



Sistem Informasi  
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# Transaction Processing System & ERP

**Pengampu:**

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## Transaction

An exchange involving goods or services that recorded

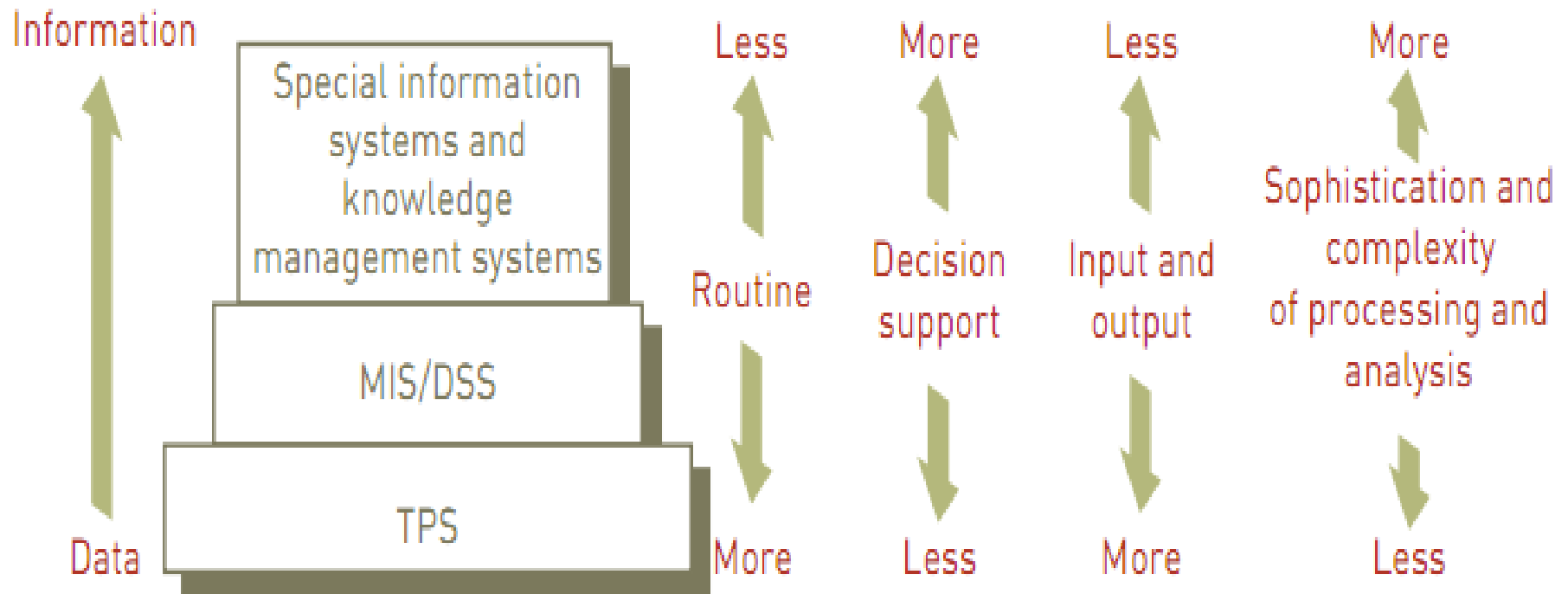


## Transaction Processing System

Computerized system that performs and **records the daily routine transactions** necessary to conduct the business; these systems serve the **operational level** of the organization

These systems include order entry, inventory control, payroll, accounts payable, accounts receivable, and the general ledger

## TPS, MIS/DSS



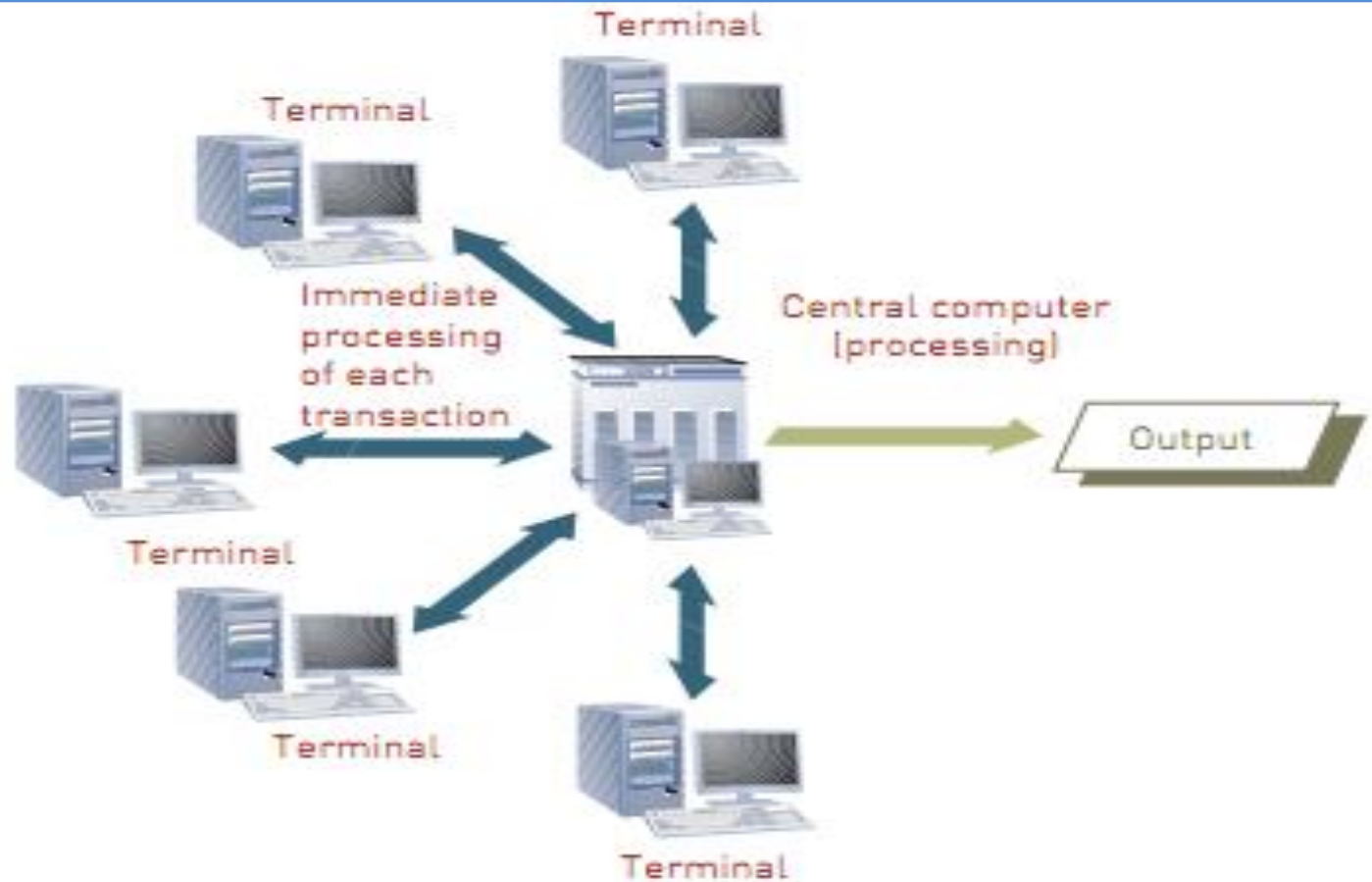
## Transaction Processing

### ❑ Batch Processing

- ❑ A form of data processing where business transactions are **accumulated** over a period of time and prepared for processing as a single unit or **batch**

### ❑ Online Transaction Processing

- ❑ A form of data processing where each transaction is **processed immediately**, without the delay of accumulating transactions into a batch
- ❑ At any time, the data in an online system reflects the current status



## TPS typically includes the following types of systems

### **Order processing system**

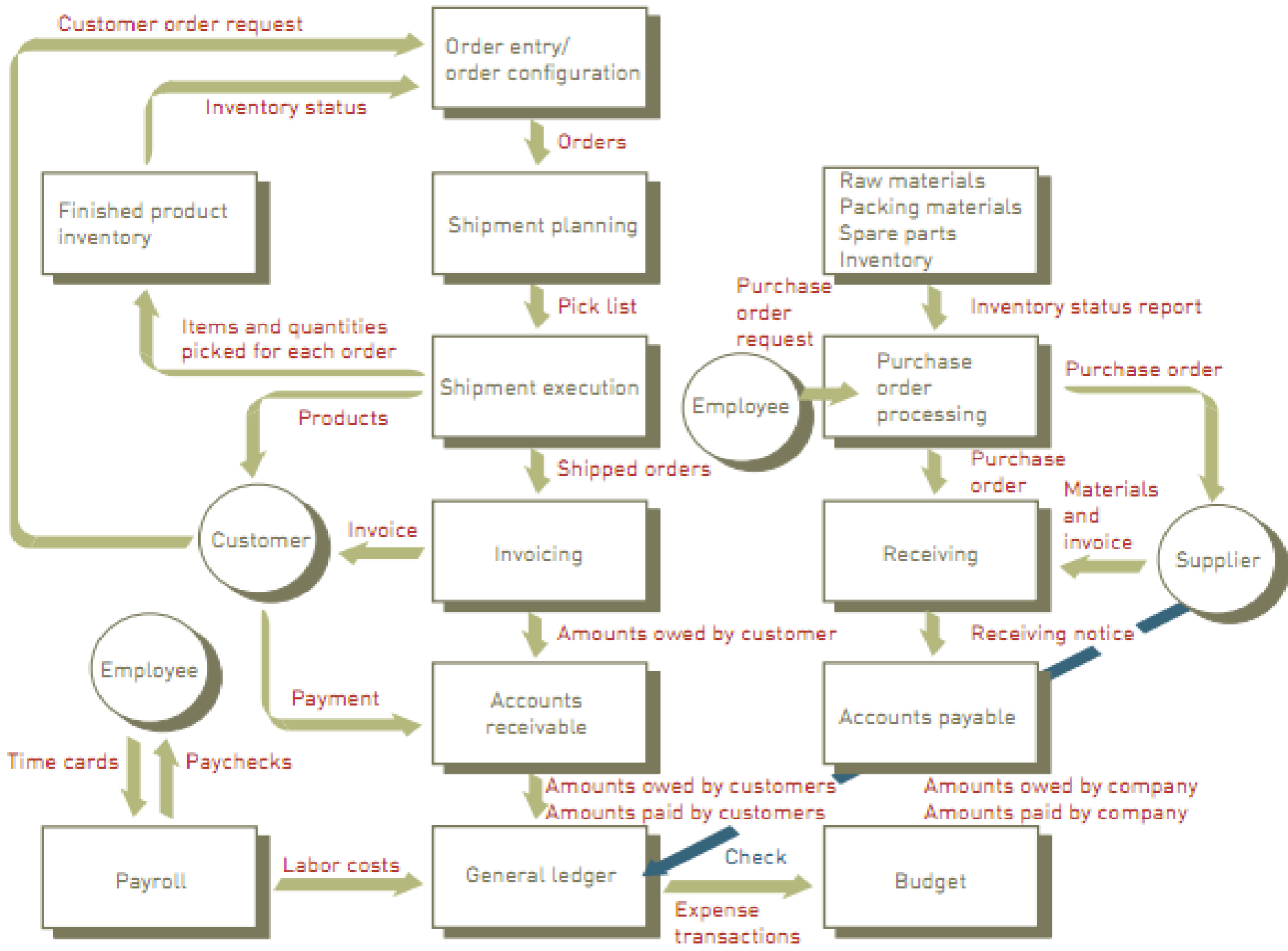
Begins with the receipt of a customer order, If sufficient inventory is available, the customer shipment is planned, A product pick list is printed at the warehouse. order is complete and sent, customer's invoice is created

### **Accounting system**

Track the flow of data related to all the cash flows that affect the organization.

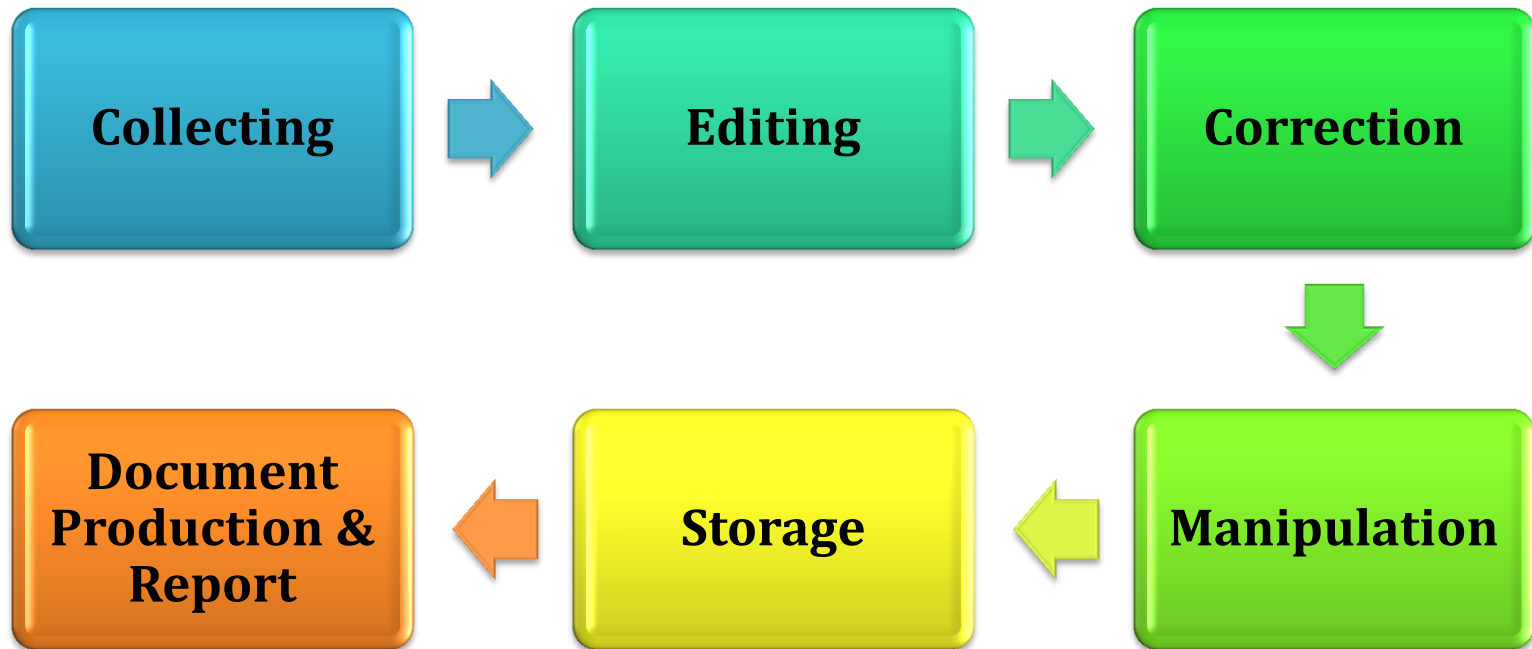
### **Purchasing system**

Support the purchasing business function include inventory control, purchase order processing, receiving, and accounts payable.





## Transaction Processing Activities



## Transaction Processing Activities

### **Data Collection**

Capturing and gathering all data necessary to complete the processing of transactions, in an electronic form

### **Data Editing**

The process of checking data for validity and completeness, such as data format.

### **Data Correction**

The process of reentering data that was not typed or scanned properly. Provide error messages that alert those responsible for editing the data

# Transaction Processing Activities

## Data Manipulation

process of performing calculations and other data transformations related to business transactions.

for example, calculating employee overtime payment

**Document Production and Reports**  
generating output records, documents, and reports.

## Data Storage

involves updating one or more databases with new transactions.

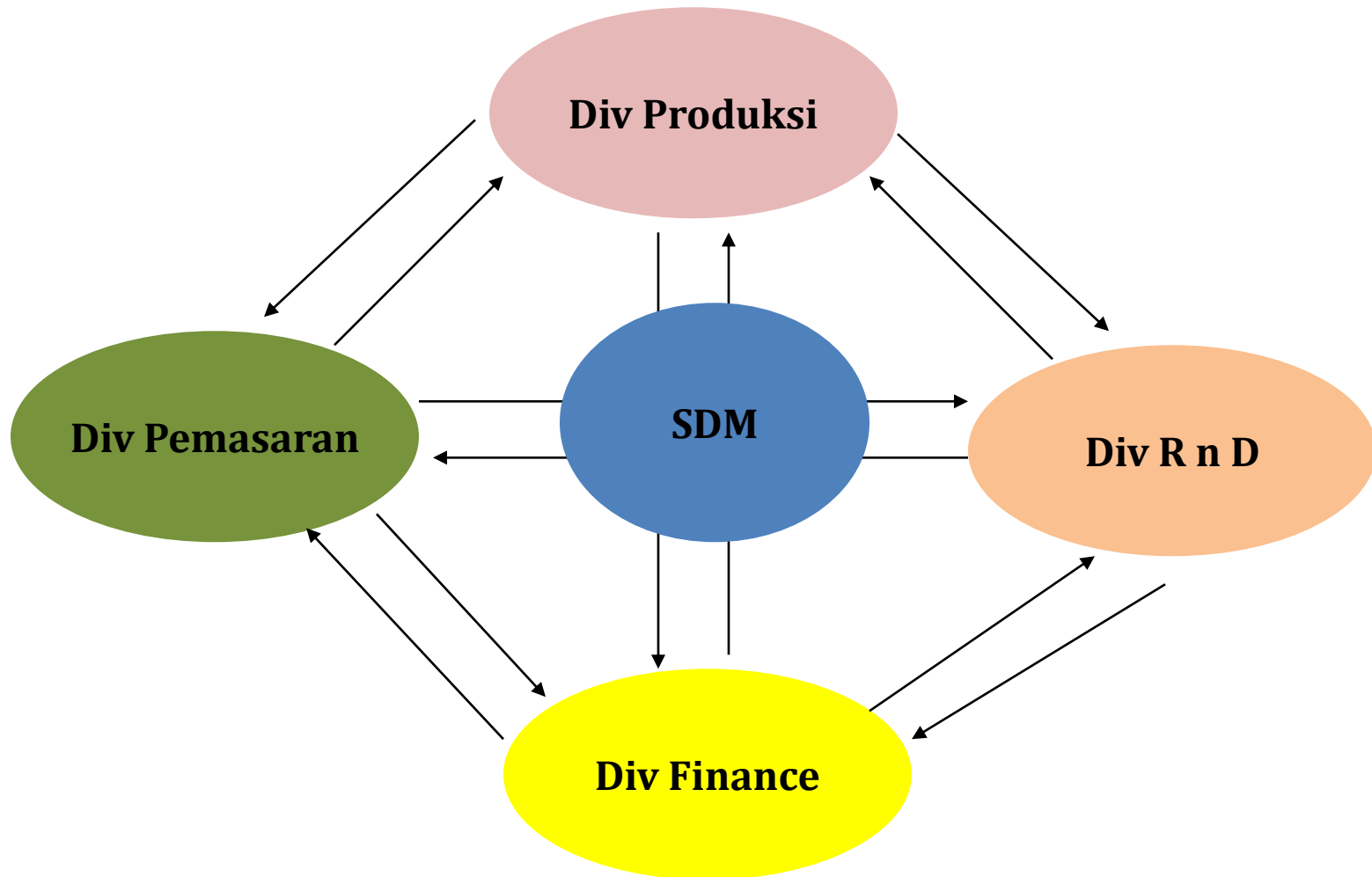
## Value of Transaction Processing System

1. **Speeds up** the execution of tasks, particularly communication and/or passing work from one station to another.
2. Reduce **Cost** (potential for better managed inventory, lower costs of communication, better coordination, information sharing)
3. Improve **coordination** with suppliers (efficient communication of detailed data, vendor-managed inventory)
4. Higher **effectiveness**, eliminate boring, distasteful jobs while increasing accuracy
5. Potential for customers to **customize** their account, perform their own data entry, and possibly track their order, or get account information

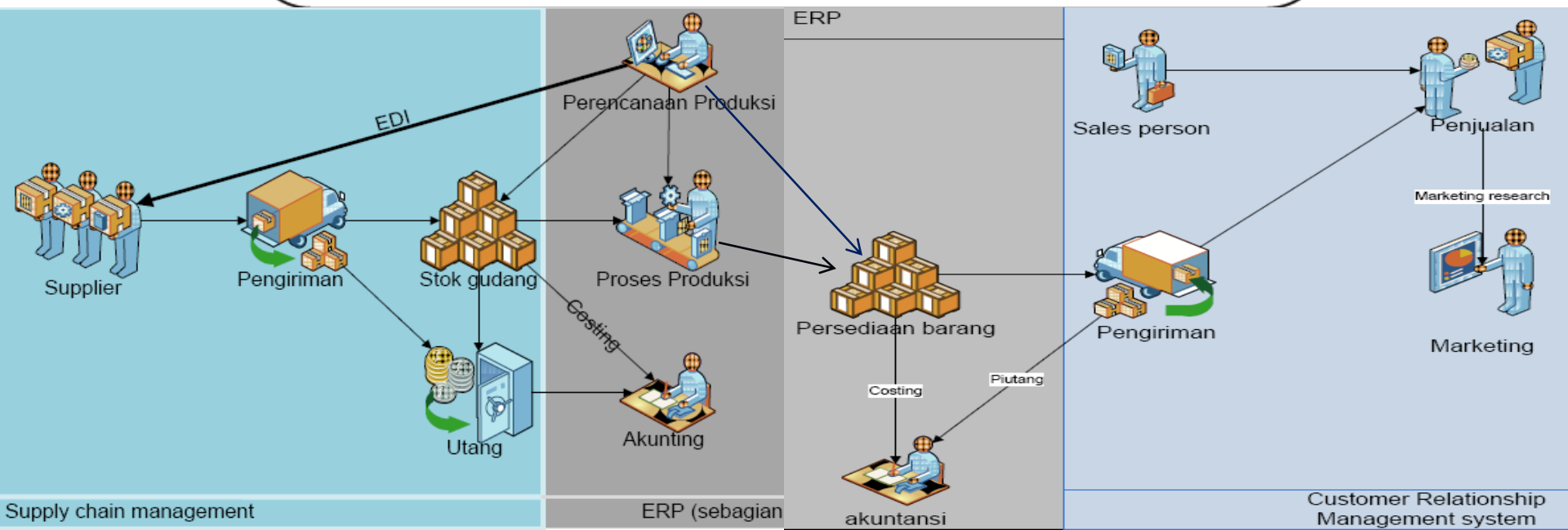
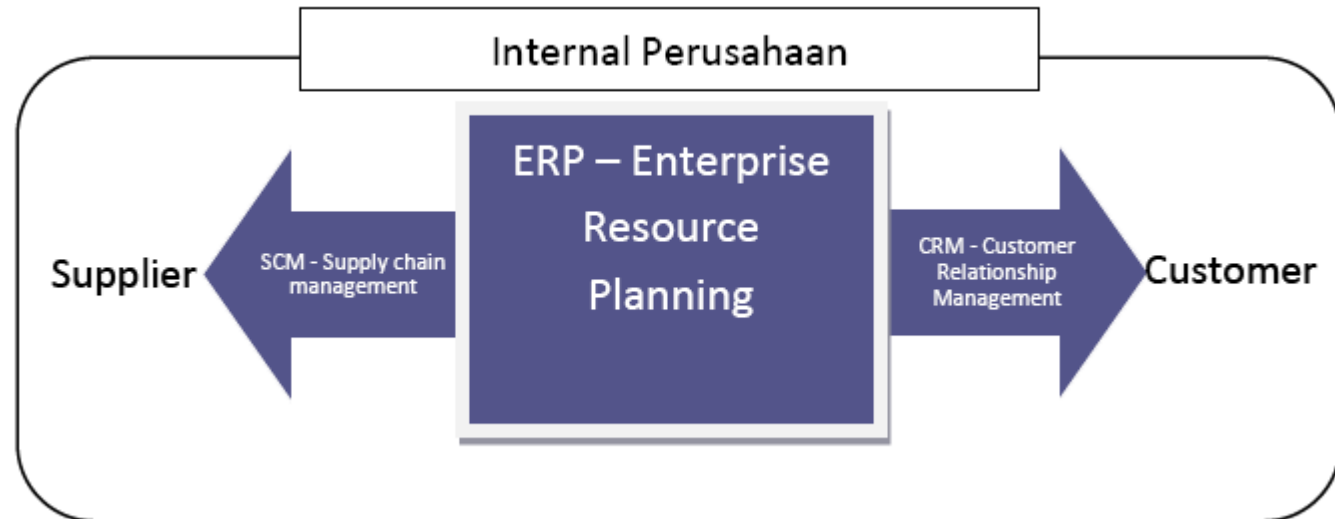
## Enterprise Resource Planning (ERP)

Planning and scheduling system with a computer tool that **integrates** all the functions of sales, production, accounting and distribution with the goal of **optimizing** all the **resources**: material, human resources and capacity of the machine.

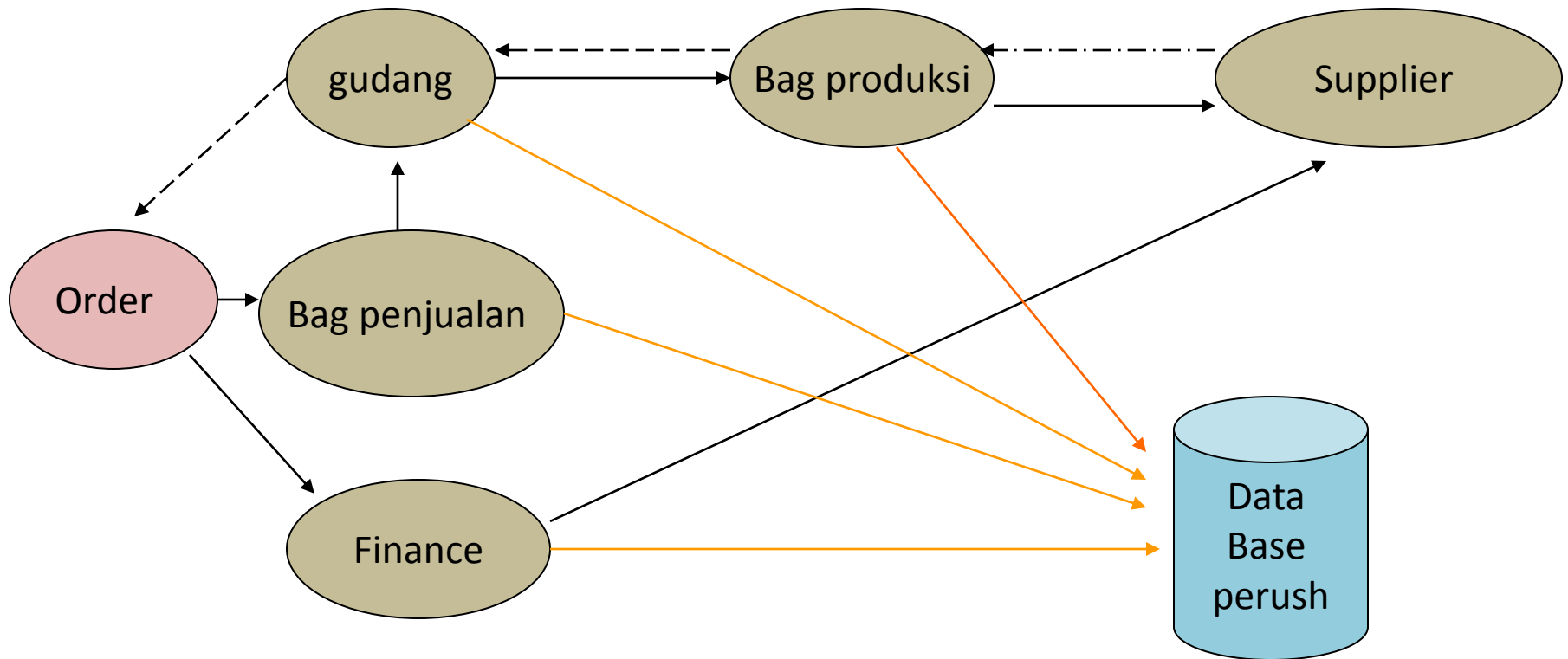
## ERP integrate all department



# Lingkup ERP



## Sistem kerja ERP diperusahaan:





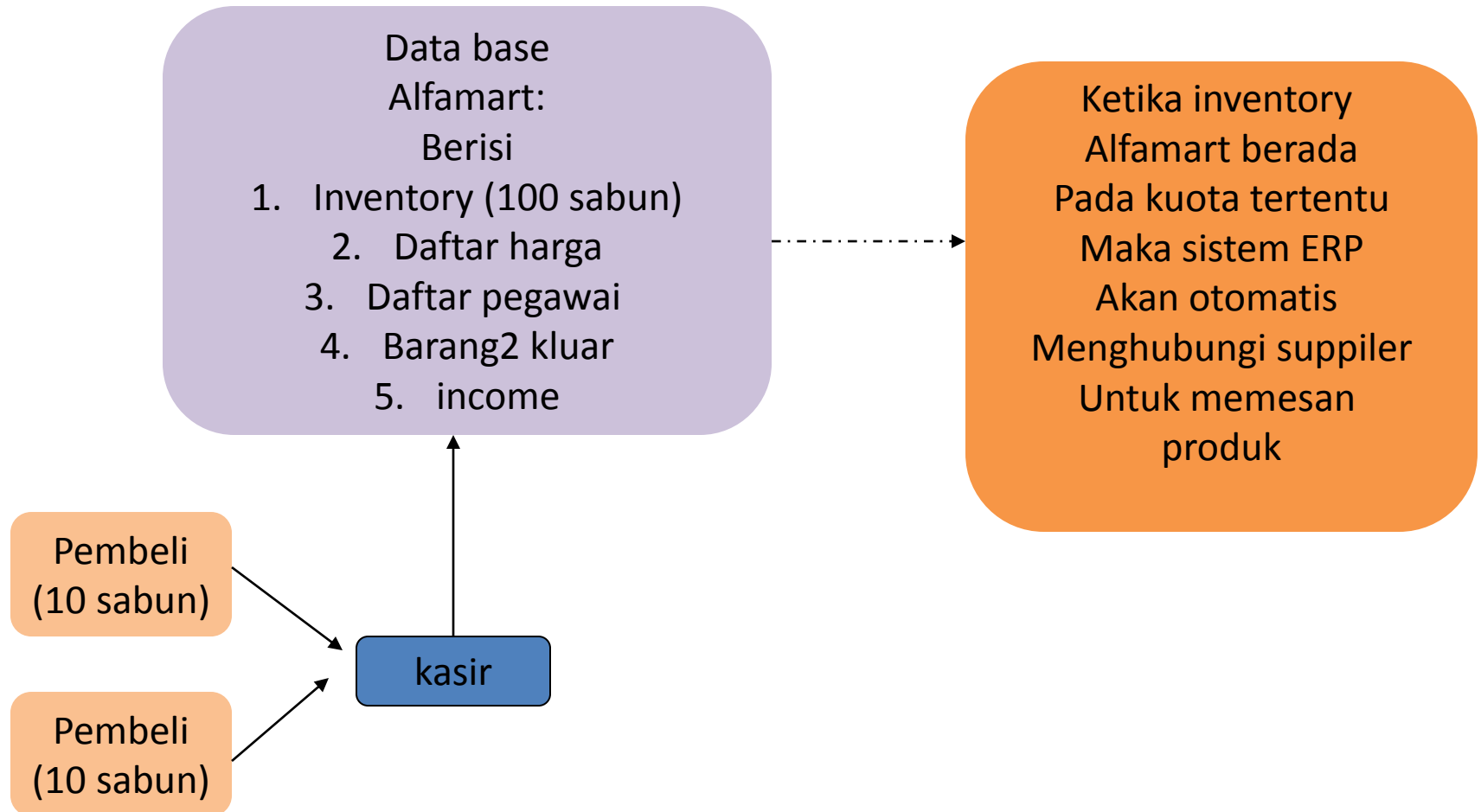
## **Sistem Kerja ERP:**

Berkurangnya jumlah barang di gudang secara otomatis akan diketahui pula oleh bagian perencanaan produksi. Jika jumlah barang mencapai kondisi tertentu, sistem akan membuat permintaan produksi. Saat itu, informasi mengenai bahan baku yang dibutuhkan telah pula disajikan oleh sistem. Setelah bagian perencanaan produksi me-review informasi dan menyetujuinya, secara otomatis informasi akan mengalir ke bagian pembelian, yang memungkinkannya menghubungi pemasok untuk negosiasi harga dan pengiriman. Saat itu, bagian pembelian juga mendapatkan berbagai informasi berharga mengenai kinerja para pemasoknya.

Sebagai contoh, order penjualan yang dicatat di departemen penjualan akan secara otomatis diketahui kapan harus dikirim oleh bagian gudang.

Begitu juga, bagian keuangan akan mengetahui kapan kas akan masuk dari pelanggan.

## Ilustrasi ERP pada Minimarket



## Open Source ERP System

Vendor	ERP Solutions
Apache	Open For Business ERP
Compiere	Compiere Open Source ERP
Openbravo	Openbravo Open Source ERP
WebERP	WebERP

