


Chapter 12

The Accounting Information System

- Data Processing
- AIS Characteristics and Functions
- AIS Systems and Sub-Systems
- DFD Examples


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The CBIS have generally evolved in the sequence presented.

| | |
|-----|----------------|
| AIS | 1954 - present |
| MIS | 1964 - present |
| DSS | 1971 - present |
| OA | 1980s |
| ES | 1980s |


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What is Data Processing?

- Manipulation or transformation of symbols for the purpose of increasing their usefulness.
- Data processing (DP) and transaction processing (TP) are often used interchangeably.
- Applied to business data

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Accounting Information Systems (AIS)

- Gathers data describing a firm's activity
- Transforms data into information
- Makes information available to users inside and outside the firm

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Data Processing Tasks

1. Gather data

- Each transaction is documented
- What happened?
- When did it happen?
- How much (volume, value)?
- Transactions describe
 - Internal actions
 - Environmental transactions

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Data Processing Tasks [cont.]

2. Manipulate data

- Classify (use codes)
- Sort
- Calculate
- Summarize

3. Store data

- Describes each transaction
- Represents most of the database

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Data Processing Tasks [cont.]

4. Document preparation

- Triggers
 - By an action
 - By a time schedule
- Hardcopy or on-screen

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Characteristics of the AIS

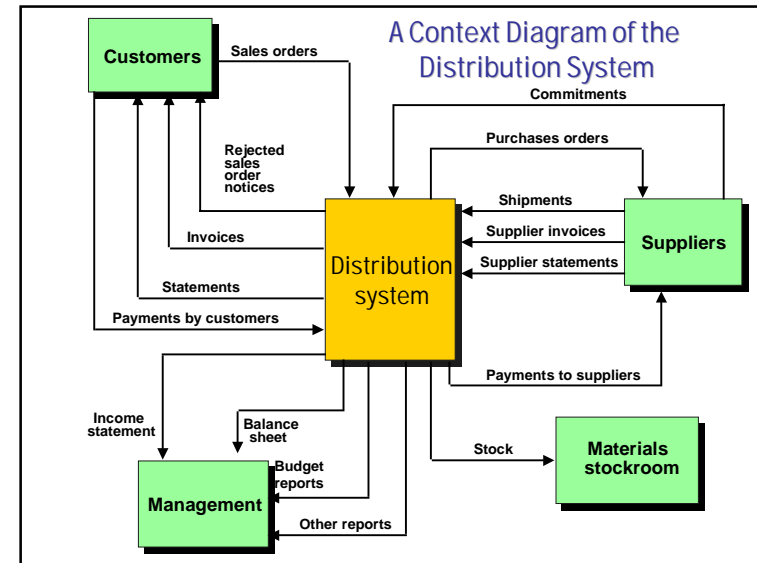
- Performs necessary tasks
- Standard procedures
- Detailed data
- Historical focus
- Provides minimal problem-solving information

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DFDs

- Data flow diagram
 - Document a system in a hierarchical manner
 - Data flows, processes, environmental elements
- Context level is overall system within environment
- Leveled and Balanced DFDs

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Leveled DFDs for Distribution System

Level 0 = Figure 0 Diagram

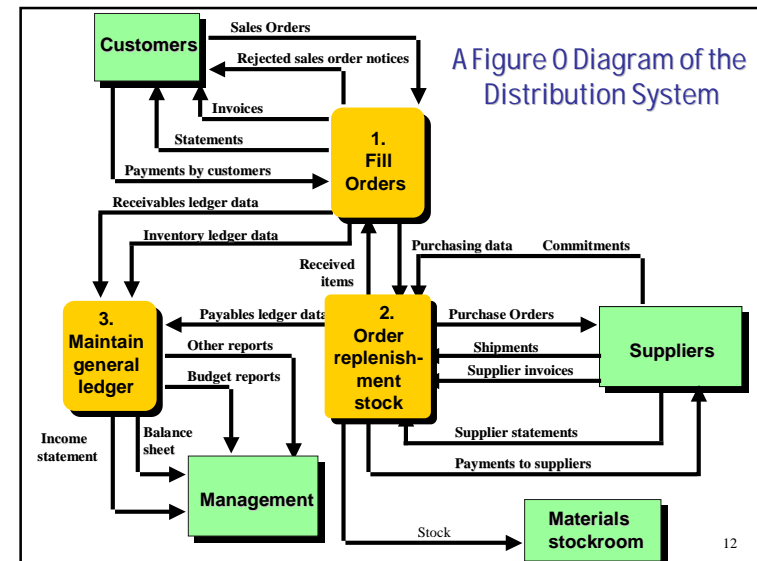
Figure 11.3

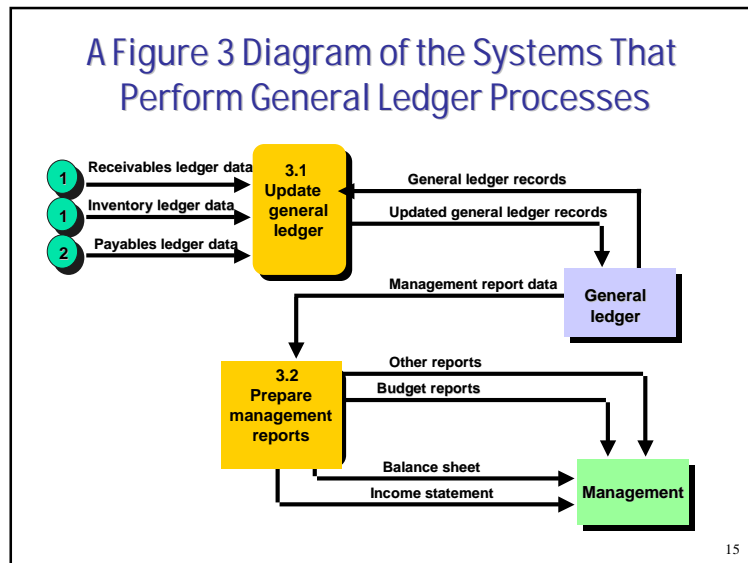
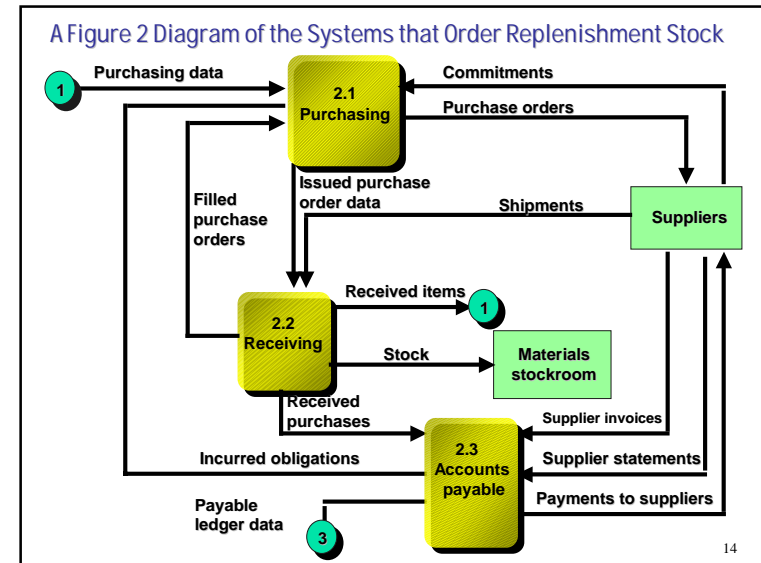
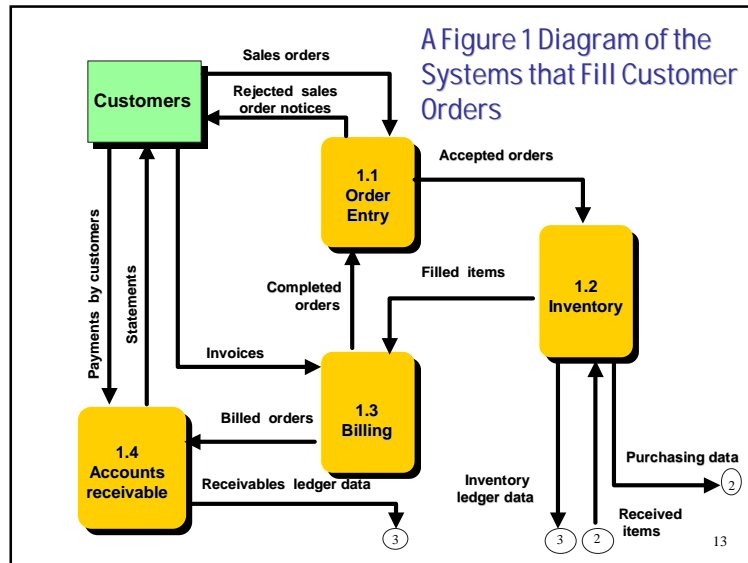
Top Hierarchy

Defined Three Major Subsystems

1. Fill Orders
2. Order Replenishment Stock
3. Maintain General Ledger

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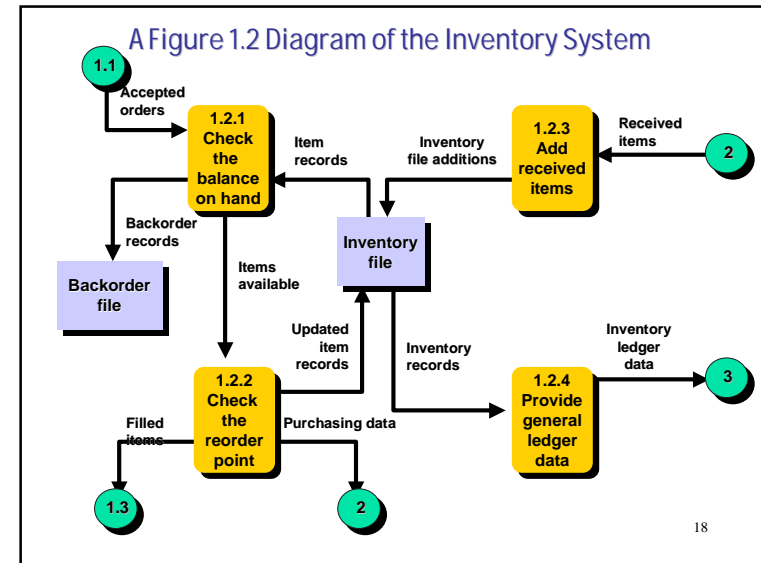
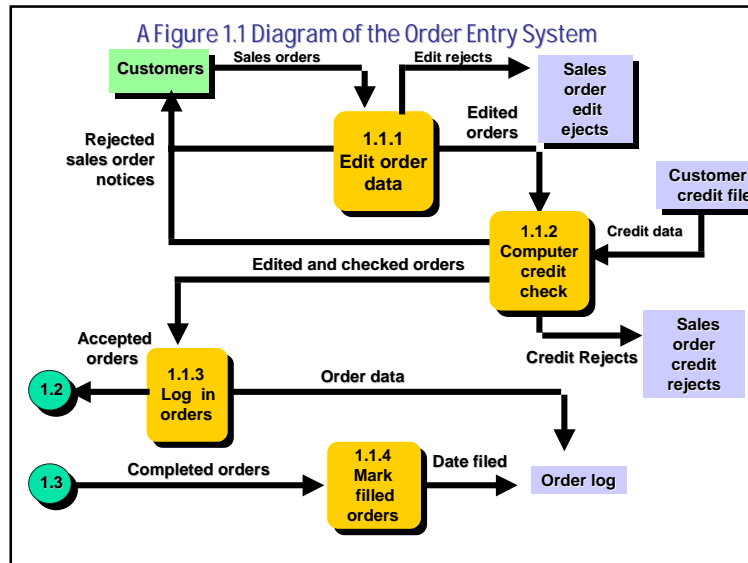




Fill Customer Orders

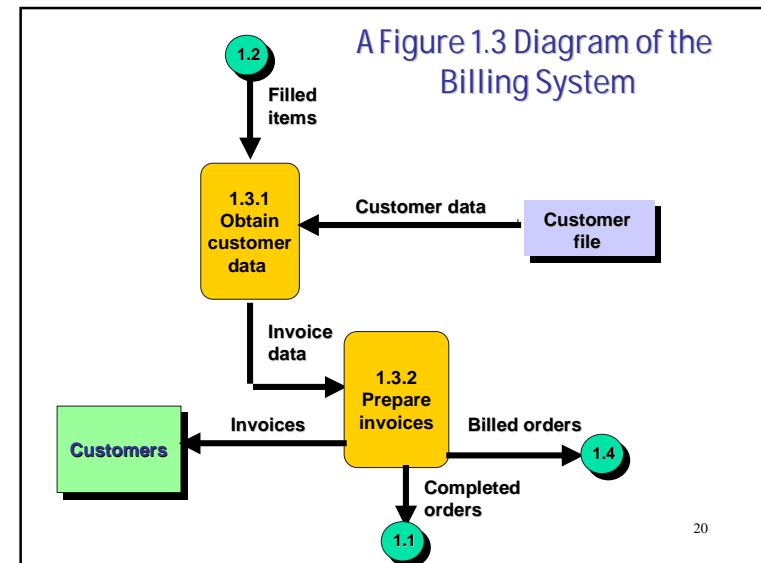
- Order entry
 - Sales order form
- Inventory
 - Process sales
 - Process receipts
 - Feed general ledger

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Billing

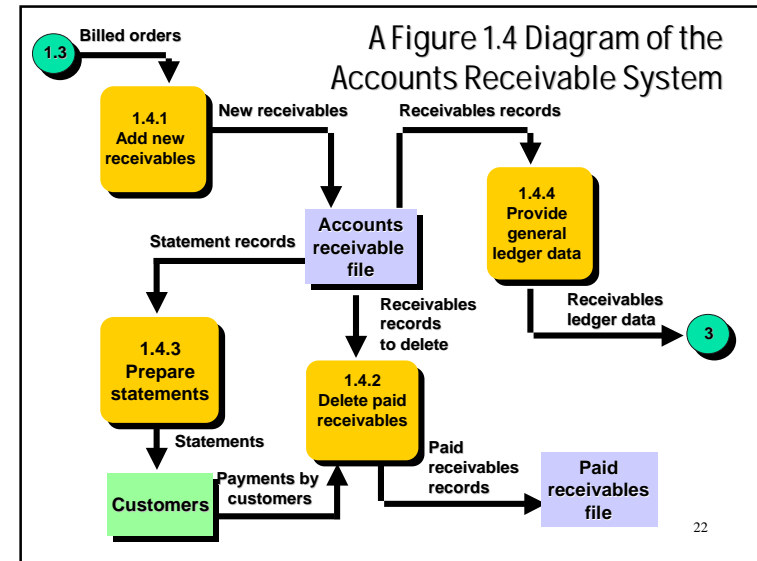
- Invoice
 - Note:
 - 1. Customer data
 - 2. Item data



Accounts Receivable

- Four separate triggers
 - Today's sales
 - Today's payments
 - Time to send statements
 - Need to provide general ledger data

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AIS is the Foundation System

- The AIS must be implemented first
 - MIS
 - DSS
 - ES

Depends on a well-designed AIS

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Summary

- AIS maintains financial records of the firm
- Data processing components
 - Data gathering
 - Data manipulation
 - Data storage
 - Document preparation
- AIS Subsystems
- AIS contributes to problem solving

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