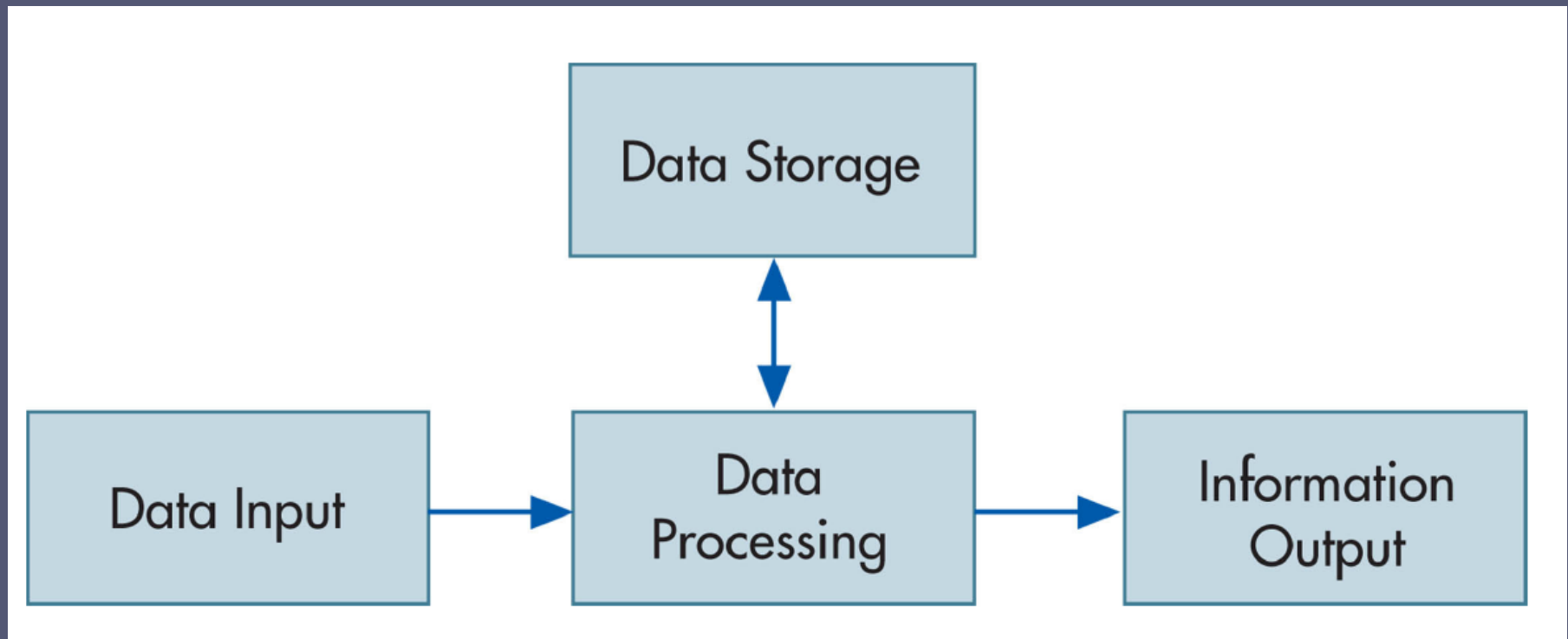


# Accounting Information Systems

Transaction Processing & ERP Systems



# Data Processing Cycle



# Data Input

## Steps in Processing Input are:

- Capture transaction data triggered by a business activity (event).
- Make sure captured data are accurate and complete.
- Ensure company policies are followed
  - (e.g., approval of transaction).



# Data Capture

- Information collected for an activity includes:
  - Activity of interest (sale)
  - Resources affected (inventory and cash)
  - People who participated in the activity
    - (customer and employee)
- Information comes from source documents.



# Source Documents

- Captures data at the source when the transaction takes place
  - Paper source documents
  - Turnaround documents
  - Source data automation
    - (captured data from machines, POS scanners at store)



# Data Storage

- Important to understand how data is organized
  - **Chart of accounts**
    - Coding schemas that are well thought out to anticipate management needs are most efficient and effective
  - Transaction journals (Sales)
  - Subsidiary ledgers (AR)
  - General ledger

Note:

One can trace the path of the transaction (audit trail)



# Coding Techniques

## Sequence

- numbered consecutively to account for all items
- Prenumber Forms

## Block

- block of number reserved for specific categories of data
- Laptops start with number 2

## Group

- 2 or more subgroups of digits
- VIN #

## Mnemonic

- Letters & # inter-spread
- Lap300W06





# Computer Based Storage

- Data is stored in master files or transaction files

	Customer Number	Customer Name	Address	Credit Limit	Balance	
4 entries 4 Records	12345	ABC Company	P.O. Box 48	3,000	24,770	→ Attributes
	67890	DEF Company	1233 Penny Lane	45,000	12,412	→ Data Values
	12233	XYZ Company	640 Book Bend Road	10,000	26,700	→
	44466	PIP Compnay	777 Money Road	65,000	44,777	→
						Each column is an individual field.





# Data Processing

Four types of processing (CRUD):

- **C**reating new records (e.g., adding a customer)
- **R**eading existing data
- **U**pdating previous record or data
- **D**eleting data



# Data Processing

- Data processing can be
- **batch processed**
  - (post records at the end of the business day)
- or in real-time
  - (process as it occurs).



# Information Output

The data stored in the database files can be viewed

- Online (soft copy)
- Printed out (hard copy)
  - Document (sales invoice)
  - Report (monthly sales report)
  - Query
    - question for specific information
    - Which division had the most sales?



# Enterprise Resource Planning (ERP) Systems

- Integrates activities from the entire organization
  - Revenue Cycle
  - Expenditure Cycle
  - Production Cycle
  - H/R Payroll Cycle
  - General Ledger & Reporting



# Advantages & Disadvantages of ERP Systems

## Advantages

- Integrated enterprise-wide single view of data
- Streamlines flow of information
- Data captured once
- Greater visibility

## Disadvantages

- Costly
- Time to implement
- Customizing or standardizing a business process



# Advantages & Disadvantages of ERP Systems

## Advantages

- Monitoring capabilities for management
- Improve access & control of data through security settings
- Standardization procedures & Repts

## Disadvantages

- User resistance
- Complexity



# Advantages & Disadvantages of ERP Systems

## Advantages

- Improves customer service
- Increases productivity through automation

## Disadvantages

