Chapter 1: The Study of Accounting Information Systems

Slides Authored by Somnath Bhattacharya, Ph.D.
Florida Atlantic University
What Is Accounting?

- It is the principal way of organizing and reporting financial information. It has been called the “language of business.”
- Accounting and information systems comprise the functional area of business responsible for providing information to the other areas to enable them to do their jobs and for reporting the results to interested parties.
- To that end, an accounting system is used to identify, analyze, measure, record, summarize, and communicate relevant economic information to interested parties.
What Is a System?

A **System** is an entity consisting of interacting parts that are coordinated to achieve one or more common objectives. Systems must possess

- **Organization:**
  Transactions-Journals-Ledgers-Financial Statements

- **Interrelationships:**
  The relationship between Subsidiary ledgers and the General Ledger

- **Integration:**
  Individual transactions to Financial Statements

- **Central Objectives:**
  Financial Reports, Budgets, Management Reports
Data Versus Information

- **Data** are raw facts and figures that are processed to produce information.

- **Information** is data that have been processed and are meaningful and useful to users. The terms “meaningful” and “useful” are value-laden terms and usually subsume other qualities such as timeliness, relevance, reliability, consistency, comparability, etc.
Functional Steps in Transforming Data into Information

- **Data collection** - capturing, recording, validating and editing data for completeness and accuracy
- **Data Maintenance/Processing** - classifying, sorting, calculating data
- **Data Management** - storing, maintaining and retrieving data
- **Data Control** - safeguarding and securing data and ensuring the accuracy and completeness of the same
- **Information Generation** - interpreting, reporting, and communicating information
What Is an Information System?

- An **Information system** is a framework in which data is collected, processed, controlled and managed through stages in order to provide information to users.
- It evolves over time and becomes more formalized as a firm grows and becomes more complex. It can be a manual or computerized system.
- Firms depend on information systems in order to survive and stay competitive.
The Universal Data Processing Model

Storage

Processing

Consumers

Exchange Events
Internal Events
Environmental Events

Data

Input

Information

Output
An Accounting Information System is a unified structure that employs physical resources and components to transform economic data into accounting information for external and internal users.
Objectives and Users of AIS

- **Support day-to-day operations**
  - Transaction processing
- **Support Internal Decision-Making**
  - Trend Analyses
  - Quantitative & Qualitative Data
  - Non-transactional sources
- **Help fulfill Stewardship Role**
Resources Required for an AIS

- **Processor(s):** Manual or Computerized
- **Data Base(s):** Data Repositories
- **Procedures:** Manual or Computerized
- **Input/Output Devices**
- **Miscellaneous Resources**
AIS as an MIS Subsystem

AIS

Sales/Marketing → AIS

Production Info → AIS

Personnel → AIS

Finance → AIS
Relationship of AIS & MIS

- Finance
- Sales/Marketing
- Production
- AIS
  - Order entry/Sales
  - Billing/A. Rec./Cash receipts
  - Purchasing/A. Pay./Cash disb
  - Inventory
  - Payroll
  - General ledger
  - Production
- Personnel
Reasons for Studying Accounting Information Systems

- Career accountants will be users, auditors, and developers of AIS
- Modern-day AIS are complex because of new technologies
- Concepts studied in AIS are integrated into every other accounting course
Information-Oriented Professionals

- An array of professionally trained persons from different fields of study have focused on providing information to users.
- These professionals include system and managerial accountants and auditors, system analysts and industrial engineers.
- Professional certifications are increasing. These include Certified Computing Professional, Certified Information Systems Auditor, Certified Managerial Accountant, Certified Fraud Examiner, etc.
Roles of Accountants With Respect to an AIS

- **Financial accountants** prepare financial information for external decision-making in accordance with GAAP.

- **Managerial accountants** prepare financial information for internal decision-making.
Roles of Accountants With Respect to an AIS

- **Auditors** - evaluate controls and attest to the fairness of the financial statements.
- **Accounting managers** - control all accounting activities of a firm.
- **Tax specialists** - develop information that reflects tax obligations of the firm.
- **Consultants** - devise specifications for the AIS.
Ethical Standards for Consulting

- Professional competence
- Exercise due professional care
- Plan and supervise all work
- Obtain relevant data to support reasonable recommendations
- Maintain integrity and objectivity
- Understand and respect the responsibilities of all parties
- Disclose any conflicts of interest