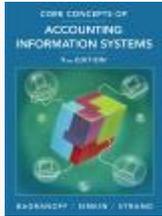


## Core Concepts of ACCOUNTING INFORMATION SYSTEMS

Moscove, Simkin & Bagranoff



Developed by:  
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John Wiley & Sons, Inc.

## About Me



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    - Chat time?
  - <http://www.muskingum.edu/~plaube/acct420/default.htm>

## Let's Get Started

- Syllabus
  - Book
  - Practice Set
    - Turn in printouts and questions from instruction book
    - Work due when we get to section of text book
    - OK to work ahead
  - Outline of course
    - No set dates
    - Course may adjust based on time available
    - Exams content and timing may change
- So it's important to be in class!

## Background of you

- Each person
  - Name
  - Prior Accounting
    - School/Classes
    - Job
  - Prior IT experience
    - School
    - Job
    - Fun (it's ok to be a geek)

## Chapter 1 Accounting Information Systems and the Accountant

- Introduction
- What are Accounting Information Systems?
- Accounting in the Information Age
- Careers in Accounting Information Systems



## Chapter Quotation

- “The accounting industry has always been paper-driven. Now it is becoming technology driven.”  
Maureen Link, “3G Technology Will Change the Way You Work,” Pennsylvania CPA Journal (Spring 2003), p. 19.
- “The American Institute of Certified Public Accountants (AICPA) has projected that two of the top technology issues facing the accounting profession during the first several years of the 21st century are:
  - Information security and controls within information systems, and
  - Electronic commerce



## The Information Age

- In the **information age**, fewer workers are making products, and a large segment of the employee population is involved in producing, analyzing, and distributing information.
- **Knowledge workers** comprise much of the labor force.
- A major contributor to the information age is the **Internet**.

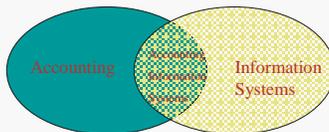


## An Information System

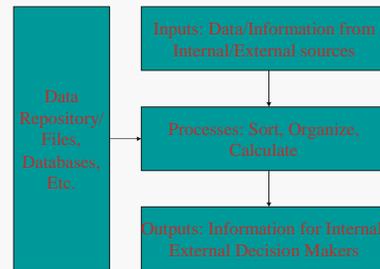
- A **System** is an entity consisting of interacting parts or components that attempt to achieve one or more goals.
- An **Information system** is a set of interrelated subsystems that work together to collect, process, store, transform, and distribute information for planning, decision making, and control.
- Firms depend on information systems in order to stay competitive.



## AIS: At the Intersection of Accounting and IS



## An Accounting Information System



## Data versus Information



- **Data** are raw facts about events that have no organization or meaning.
- **Information** is data that have been processed and is meaningful and useful to users.

## MIS versus AIS

- Historically, a **Management Information System**
  - Provided financial and nonfinancial information to internal users (management).
- The **Accounting Information System**
  - provided *financial* information to both external and internal users.
- Now, the two systems overlap
  - same information focusing on *business processes*.



## Accounting in the Information Age

- **Financial Accounting**
- **Managerial Accounting**
- **Auditing**
- **Taxation**



## Why Do Accounting Information Systems Fail?

- Hardware problems
- Software problems
- People problems
- Data problems
- Processing procedures

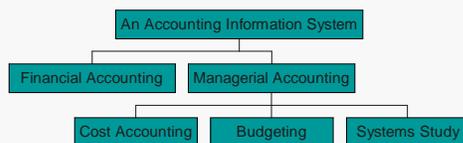
## What's New in AIS?

- Countering terrorism
- New accounting scandals
- The Sarbanes-Oxley Act of 2002
- The Jobs & Growth Tax Relief Reconciliation Act of 2003
- WI-FI Technology

## Examples of Recent Accounting Scandals

- Enron 2001
- Imclone 2001
- Arthur Andersen 2001
- Merrill Lynch 2002
- Tyco 2002
- Adelphia 2002
- Global Crossing 2002
- Parmalat 2003
- NYSE 2003
- WorldCom 2003
- HealthSouth 2003

## Taxonomy of Accounting Information Systems



## Financial Accounting

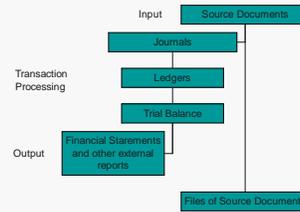
- The objective of **financial accounting**
  - provide relevant information to individuals and groups *outside* an organization's boundaries.
- Users include investors, tax agencies, and creditors.
- Objectives achieved through preparation of financial statements.



## The Financial Accounting Information System <sup>19</sup>

- **Inputs** – transactions measured in monetary units.
- **Audit trail** – enables information users to follow the flow of data through the system.
  - Parallels the **accounting cycle**,
    - which begins with a transaction
    - ends with producing financial statements
    - (and closing temporary accounts)
  - A good audit trail permits managers to follow source document data
    - from input through processing to the output report
    - (and vice versa)

## A Financial Accounting Audit Trail <sup>20</sup>



## Criticisms of the Financial Accounting Information System <sup>21</sup>

- **Lack of timeliness and usefulness**
- **Too much aggregation of information**
  - **Segment reporting** concerns reporting of disaggregated information.
- **Information overload**



## Managerial Accounting <sup>22</sup>

- **Objective of Managerial Accounting**
  - provide relevant information to a company's managers, who are *internal* users
- **Three components of managerial accounting are:**
  - Cost Accounting
  - Budgeting
  - Systems study



## Features of Managerial Accounting <sup>23</sup>

- **Information for internal parties, rather than external**
- **Mostly forward-looking**
- **Not regulated by GAAP**
- **Not mandatory to prepare**
- **Reports include non-monetary and financial data**
- **Information is flexible.**
- **Frequently involves non-routine reporting.**
- **Influenced by many business and non-business disciplines**

## Cost Accounting <sup>24</sup>

- **Cost accounting** assists managers in functions related to an organization's acquisition, processing, distribution and selling activities.
- **Activity-based costing systems** assign overhead to products based on cost drivers.
- **Responsibility accounting systems** help managers trace unfavorable performance to the department or individual that caused the inefficiencies.



## Budgeting

- A **budget** is a financial projection for the future and thus is a valuable managerial *planning* aid.
- Budgets are used for *managerial control*. Actual results are compared to budgeted results.
- The budgetary function in the AIS affects all the subsystems within an organization.



## Systems Study

- Because of managerial accountants' ability to understand internal financial systems, organizations may hire them to perform **system studies**.
- Many systems studies use the team approach.
  - The team may include marketing specialists, computer experts, production managers, engineers and industrial psychologists.



## Steps in Systems Study

- **Planning**
  - Develop strategic plans
- **Analysis**
  - Review current system
- **Design**
  - Design new system
- **Implementation and Follow-up**
  - Put the new system in place and continue to monitor it



## Auditing

- Auditing has become a mature industry?
- Accountants are focusing on additional **assurance** services in arenas other than financial reporting.
- **CPA WebTrust** is a service that provides assurance that a company engaged in **electronic commerce** can provide the goods and services purchased as promised.

## Assurance Services identified by the AICPA Special Committee

- Risk Assessment
- Business Performance Measurement
- Information Systems Reliability
- Electronic Commerce
- Health Care Performance Measurement
- Eldercare Plus



## Taxation

- Information technology enables the automation of income tax returns.
- Electronic tax libraries and on-line tax services make it easier for accountants to perform tax research.



## Careers in Accounting Information Systems

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- **Systems consultants**
  - Designing information systems, selecting hardware and software, or **reengineering** business processes.
- **Value-added resellers (VARs)**
  - sell a certain software program and provide consulting services to companies.



## Careers in Accounting Information Systems

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- **Information systems auditors** concern themselves with analyzing risks associated with computerized information systems.
  - Professional **hackers** can show organizations ways that their computer system could be penetrated.
  - Information systems auditors can be licensed as **Certified Information Systems Auditors (CISA)**.
    - **Information Systems Audit and Control Association (ISACA)** certifies a CISA.

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## Chapter 1

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