

# CHAPTER 1

Accounting Information Systems: Part 2

# ROLE OF THE AIS IN THE VALUE CHAIN

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**What is that “value-added,”  
and how do you convert it  
into dollars?**



# ROLE OF THE AIS IN THE VALUE CHAIN

**Blah—blah—blah—  
customer service—  
blah—blah--blah**



# ROLE OF THE AIS IN THE VALUE CHAIN

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- While “adding value” is a commonly used buzzword, in its genuine sense, it means making the value of the finished component greater than the sum of its parts.
- It may mean:
  - Making it faster
  - Making it more reliable
  - Providing better service or advice
  - Providing something in limited supply (like O-negative blood or rare gems)
  - Providing enhanced features
  - Customizing it

# ROLE OF THE AIS IN THE VALUE CHAIN

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- Value is provided by performing a series of activities referred to as the value chain. These include:
  - Primary activities
  - Support activities
- These activities are sometimes referred to as “line” and “staff” activities respectively.

# ROLE OF THE AIS IN THE VALUE CHAIN

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# ROLE OF THE AIS IN THE VALUE CHAIN

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- Primary activities include:
  - **Inbound logistics**

**Receiving, storing, and distributing the materials that are inputs to the organization's product or service.**

**For a pharmaceutical company, this activity might involve handling incoming chemicals and elements that will be used to make their drugs.**

# ROLE OF THE AIS IN THE VALUE CHAIN

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- Primary activities include:
  - Inbound logistics
  - **Operations**

**Transforming those inputs into products or services.**

**For the pharmaceutical company, this step involves combining the raw chemicals and elements with the work of people and equipment to produce the finished drug product that will be sold to customers.**

# ROLE OF THE AIS IN THE VALUE CHAIN

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- Primary activities include:
  - Inbound logistics
  - Operations
  - **Outbound logistics**

**Distributing products or services to customers.**

**For the pharmaceutical company, this step involves packaging and shipping the goods to drug stores, doctors, and hospitals.**

# ROLE OF THE AIS IN THE VALUE CHAIN

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- Primary activities include:

- Inbound logistics
- Operations
- Outbound logistics
- **Marketing and sales**

**Helping customers to buy the organization's products or services.**

**A pharmacy rep may visit with drug stores, doctors, etc. to inform them about their products and take orders.**

# ROLE OF THE AIS IN THE VALUE CHAIN

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- Primary activities include:
  - Inbound logistics
  - Operations
  - Outbound logistics
  - Marketing and sales
  - **Service**

**Post-sale support provided to customers such as repair and maintenance function.**

**A pharmaceutical firm will typically not be repairing its product (though the product may be periodically reformulated). The pharmaceutical company is more likely to be providing advisory services to pharmacists, etc.**

# ROLE OF THE AIS IN THE VALUE CHAIN

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# ROLE OF THE AIS IN THE VALUE CHAIN

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- Support activities include:
  - Firm infrastructure

**Accountants, lawyers, and administration.  
Includes the company's accounting  
information system.**

# ROLE OF THE AIS IN THE VALUE CHAIN

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- Support activities include:
  - Firm infrastructure
  - **Human resources**

**Involves recruiting and hiring new employees, training employees, paying employees, and handling employee benefits.**

# ROLE OF THE AIS IN THE VALUE CHAIN

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- Support activities include:
  - Firm infrastructure
  - Human resources
  - **Technology**

**Activities to improve the products or services (e.g., R&D, website development).**

**For the pharmaceutical company, these activities would include research and development to create new drugs and modify existing ones.**

# ROLE OF THE AIS IN THE VALUE CHAIN

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- Support activities include:
  - Firm infrastructure
  - Human resources
  - Technology
  - **Purchasing**

**Buying the resources (e.g., materials, inventory, fixed assets) needed to carry out the entity's primary activities.**

**In the pharmaceutical company, the purchasing folks are trying to get the best combination of cost and quality in buying chemicals, supplies, and other assets the company needs to run its operations.**

# ROLE OF THE AIS IN THE VALUE CHAIN

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- Information technology can significantly impact the efficiency and effectiveness with which the preceding activities are carried out.
- An organization's value chain can be connected with the value chains of its customers, suppliers, and distributors.

# ROLE OF THE AIS IN THE VALUE CHAIN

## **Smith Supply Co.**

Inbound Logistics  
Operations

Outbound Logistics

Marketing & Sales  
Service

**For example, the inbound logistics of Pharmaceuticals, Inc., links to the outbound logistics of its suppliers.**

## **Pharmaceuticals, Inc.**

Inbound Logistics  
Operations

Outbound Logistics  
Marketing & Sales  
Service

## **Customer Pharmacy**

Inbound Logistics  
Operations  
Outbound Logistics  
Marketing & Sales  
Service

# ROLE OF THE AIS IN THE VALUE CHAIN

## Smith Supply Co.

Inbound Logistics  
Operations

Outbound Logistics

Marketing & Sales  
Service

And the outbound logistics of  
Pharmaceuticals, Inc., links to the inbound  
logistics of its customers.

## Pharmaceuticals, Inc.

Inbound Logistics  
Operations

Outbound Logistics

Marketing & Sales  
Service

## Customer Pharmacy

Inbound Logistics  
Operations

Outbound Logistics  
Marketing & Sales  
Service

# ROLE OF THE AIS IN THE VALUE CHAIN

## Smith Supply Co.

Inbound Logistics  
Operations

Outbound Logistics

Marketing & Sales  
Service

The linking of these separate value chains creates a larger system known as a **supply chain**.

## Pharmaceuticals, Inc.

Inbound Logistics  
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## Customer Pharmacy

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The linking of these separate value chains creates a larger system known as a **supply chain**.

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Information technology can facilitate synergistic linkages that improve the performance of each company's value chain.

# ROLE OF THE AIS IN THE VALUE CHAIN

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- There is variation in the degree of structure used to make decisions:
  - Structured decisions

- Repetitive and routine
- Can be delegated to lower-level employees
- **EXAMPLE:** Deciding whether to write an auto insurance policy for a customer with a clean driving history.

# ROLE OF THE AIS IN THE VALUE CHAIN

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- There is variation in the degree of structure used to make decisions:
  - Structured decisions
  - **Semistructured decisions**

- **Incomplete rules**
- **Require subjective assessments**
- **EXAMPLE: Deciding whether to sell auto insurance to a customer with a tainted driving history.**

# ROLE OF THE AIS IN THE VALUE CHAIN

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- There is variation in the degree of structure used to make decisions:
  - Structured decisions
  - Semistructured decisions
  - **Structured decisions**

- **Non-recurring and non-routine**
- **Require a great deal of subjective assessment**
- **EXAMPLE: Deciding whether to begin selling a new type of insurance policy**

# ROLE OF THE AIS IN THE VALUE CHAIN

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- There is also variation in the scope of a decision's effect:
  - Occupational control decisions

- Relate to performance of specific tasks
- Often of a day-to-day nature
- **EXAMPLE:** Deciding whether to order inventory

# ROLE OF THE AIS IN THE VALUE CHAIN

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- There is also variation in the scope of a decision's effect:
  - Occupational control decisions
  - **Management control decisions**

- **Relate to utilizing resources to accomplish organizational objectives**
- **EXAMPLE: Budgeting**

# ROLE OF THE AIS IN THE VALUE CHAIN

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- There is also variation in the scope of a decision's effect:
  - Occupational control decisions
  - Management control decisions
  - **Strategic planning decisions**

- **The “what do we want to be when we grow up” types of questions**
- **Involves establishing**
  - **Organizational objectives**
  - **Policies to achieve those objectives**
- **EXAMPLE: Deciding whether to diversify the company into other product lines**

# ROLE OF THE AIS IN THE VALUE CHAIN

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- In general, the higher a manager is in the organization, the more likely he/she is to be engaging in:
  - Less structured decisions
  - Broader scope (i.e., strategic planning) decisions

# THE AIS AND CORPORATE STRATEGY

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- Corporations have:
  - Unlimited opportunities to invest in technology
  - Limited resources to invest in technology
- Consequently, they must identify the improvements likely to yield the highest return.
- This decision requires an understanding of the entity's overall business strategy.

# THE AIS AND CORPORATE STRATEGY

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- Michael Porter suggests that there are two basic business strategies companies can follow:
  - Product-differentiation strategy
  - Low-cost strategy

# THE AIS AND CORPORATE STRATEGY

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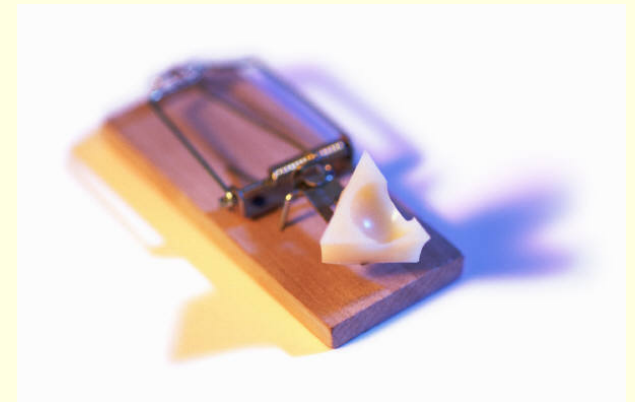
- Michael Porter suggests that there are two basic business strategies companies can follow:

- **Product-differentiation strategy**
- Low-cost strategy

# THE AIS AND CORPORATE STRATEGY

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- A product differentiation strategy involves setting your product apart from those of your competitors, i.e., building a “better” mousetrap by offering one that’s faster, has enhanced features, etc.



# THE AIS AND CORPORATE STRATEGY

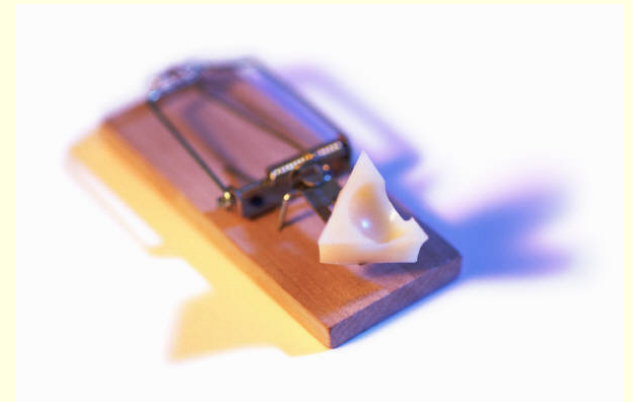
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- Michael Porter suggests that there are two basic business strategies companies can follow:
  - Product-differentiation strategy
  - **Low-cost strategy**

# THE AIS AND CORPORATE STRATEGY

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- A low-cost strategy involves offering a cheaper mousetrap than your competitors. The low cost is made possible by operating more efficiently.



# THE AIS AND CORPORATE STRATEGY

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- Sometimes a company can do both, but they normally have to choose.

# THE AIS AND CORPORATE STRATEGY

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- Porter also argues that companies must choose a strategic position among three choices:
  - Variety-based strategic position

- Offer a subset of the industry's products or services.
- **EXAMPLE:** An insurance company that only offers life insurance as opposed to life, health, property-casualty, etc.

# THE AIS AND CORPORATE STRATEGY

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- Porter also argues that companies must choose a strategic position among three choices:
  - Variety-based strategic position
  - **Needs-based strategic position**

- **Serve most or all of the needs of a particular group of customers in a target market.**
- **EXAMPLE: The original Farm Bureau-based insurance companies provided a portfolio of insurance and financial services tailored to the specific needs of farmers.**

# THE AIS AND CORPORATE STRATEGY

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- Porter also argues that companies must choose a strategic position among three choices:
    - Variety-based strategic position
    - Needs-based strategic position
    - **Access-based strategic position**
- **Serve a subset of customers who differ from others in terms of factors such as geographic location or size..**
  - **EXAMPLE: Satellite Internet services are intended primarily for customers in rural areas who cannot get DSL or cable services.**

# THE AIS AND CORPORATE STRATEGY

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- Porter also argues that companies must choose a strategic position among three choices:
  - Variety-based strategic position
  - Needs-based strategic position
  - Access-based strategic position
- **These strategic positions are not mutually exclusive and can overlap.**

# THE AIS AND CORPORATE STRATEGY

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- Choosing a strategic position is important because it helps a company focus its efforts as opposed to trying to be everything to everybody.
  - EXAMPLE: A radio station that tries to play all types of music will probably fail.
- It's critical to design the organization's activities so they reinforce one another in achieving the selected strategic position. The result is synergy, which is difficult for competitors to imitate.

# THE AIS AND CORPORATE STRATEGY

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- The growth of the Internet has profoundly affected the way value chain activities are performed:
  - Inbound and outbound logistics can be streamlined for products that can be digitized, like books and music.
  - The Internet allows companies to cut costs, which impacts strategy and strategic position.
  - Because the Internet is available to everyone, intense price competition can result. The outcome may be that many companies shift from low-cost to product-differentiation strategies.
  - The Internet may impede access-based strategic positions.

# THE AIS AND CORPORATE STRATEGY

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- The AIS should help a company adopt and maintain its strategic position.
  - Requires that data be collected about each activity.
  - Requires the collection and integration of both financial and nonfinancial data.

# THE AIS AND CORPORATE STRATEGY

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- The authors believe:
  - Accounting and information systems should be closely integrated.
  - The AIS should be the primary information system to provide users with information they need to perform their jobs.

# SUMMARY

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- What we've learned so far:
  - The meaning of ***system***, ***data***, and ***information***
  - What an AIS is
    - Why it's an important topic to study
    - What its role is in the value chain
    - How it provides information for decision making
  - What are the basic strategies and strategic positions an organization can pursue
    - How these interact with the AIS