


Accounting Information Systems and the Value Chain



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The Value Chain

- The ultimate goal of any business is to provide value to its customers.
- A business will be profitable if the value it creates is greater than the cost of producing its products or services.

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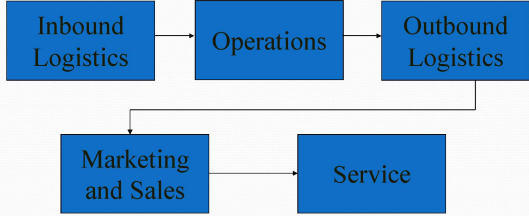
The Value Chain

- An organization's value chain consists of nine interrelated activities that collectively describe everything it does.
- The five primary activities consist of the activities performed in order to create, market, and deliver products and services to customers and also to provide post-sales services and support.

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The Value Chain

Primary Activities



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graph LR
    IL[Inbound Logistics] --> O[Operations]
    O --> OL[Outbound Logistics]
    MS[Marketing and Sales] --> O
    S[Service] --> OL
    
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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.

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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.

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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.

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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.

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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.

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The Value Chain

- The four support activities in the value chain make it possible for the primary activities to be performed efficiently and effectively.

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The Value Chain

Support Activities

Infrastructure	Technology
Human Resources	Purchasing

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Firm infrastructure

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

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Human Resources

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

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Technology

- Activities to improve the products or services (e.g., R&D, Web site development).
- For the pharmaceutical company, these activities would include research and development to create new drugs and modify existing ones.

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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.

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The Value System

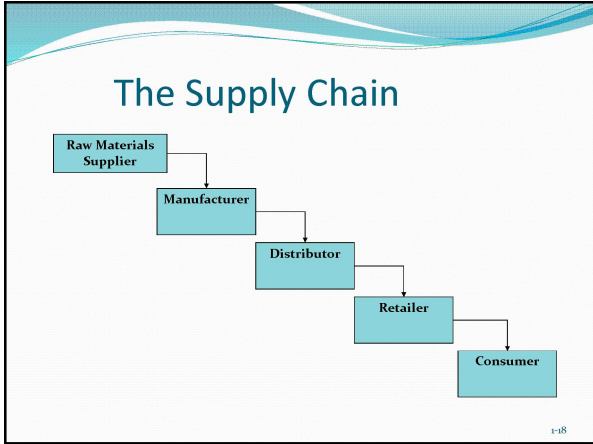
- Information technology can significantly impact the efficiency and effectiveness with which the preceding activities are carried out.

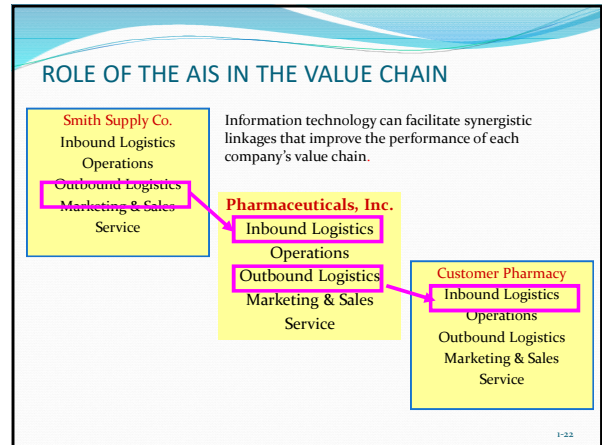
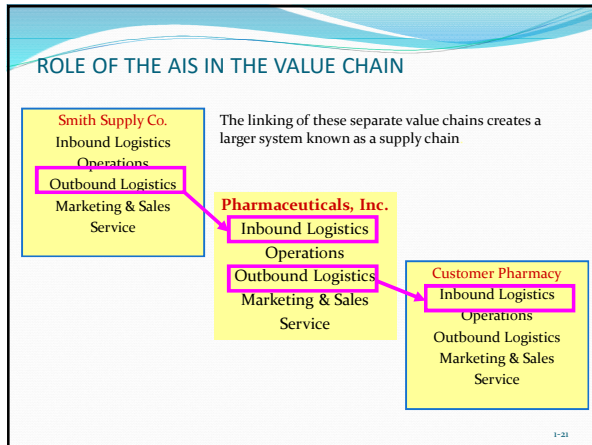
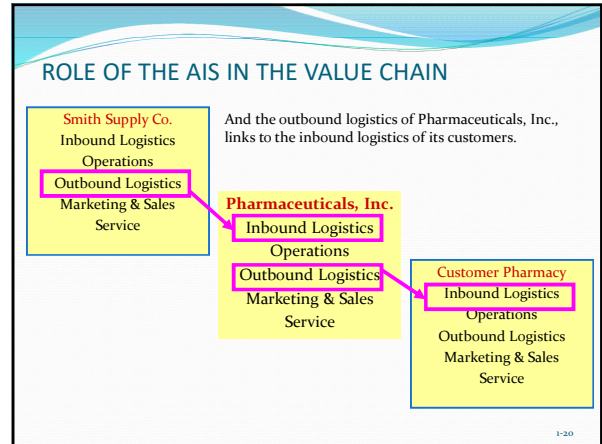
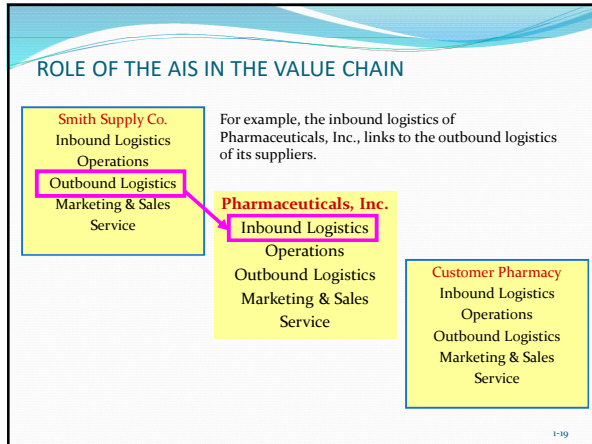
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The Value System

- The value chain concept can be extended by recognizing that organizations must interact with suppliers, distributors, and customers.
- An organization's value chain and the value chains of its suppliers, distributors, and customers collectively form a *value system*.

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- ### How An AIS Can Add Value To An Organization
- An AIS adds value...
 - by providing accurate and timely information so that five primary value chain activities can be performed more effectively and efficiently.
- 1-23

- ### How An AIS Can Add Value To An Organization
- An AIS adds value by:
 - improving the quality and reducing the costs of products or services.
 - improving efficiency.
 - Improving decision making capabilities.
 - increasing the sharing of knowledge.
 - A well-designed AIS can also help an organization profit by improving the efficiency and effectiveness of its supply chain.
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- Describe and contrast the basic strategies and strategic positions that a business can adopt.

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THE AIS AND CORPORATE STRATEGY

- There are two basic business strategies companies can follow:
 - Product-differentiation strategy
 - Low-cost strategy

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THE AIS AND CORPORATE STRATEGY

- 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.

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THE AIS AND CORPORATE STRATEGY

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

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THE AIS AND CORPORATE STRATEGY

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

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THE AIS AND CORPORATE STRATEGY

- 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.

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THE AIS AND CORPORATE STRATEGY

- 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.

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THE AIS AND CORPORATE STRATEGY

- 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.

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THE AIS AND CORPORATE STRATEGY

- 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 cable services.

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THE AIS AND CORPORATE STRATEGY

- Choosing a strategic position is important because it helps a company focus its efforts as opposed to trying to be everything to everybody.
- 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.

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THE AIS AND CORPORATE STRATEGY

- 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.

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THE AIS AND CORPORATE STRATEGY

- 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.

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THE AIS AND CORPORATE STRATEGY

- Predictive data analysis (data warehousing/mining) adds to competitive advantage by forecasting future events based on historical trends.
- EXAMPLE: You can view forecasts of airfares between major airports based on historical trends at

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THE AIS AND CORPORATE STRATEGY

- Conclusion
 - 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.

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