

Using Information system to achieve competitive advantage

Lecture 3

The strategic role of information systems

The strategic role of information systems involves using **information technology** to **develop products, services, and capabilities** that give a company **strategic advantages** over the **competitive forces** it faces in the global marketplace.

Strategic information systems can be any kind of information system (TPS, MIS, DSS, etc..) that helps an organization **gain a competitive advantage** , **reduce** a competitive disadvantage, or **meet other strategic enterprise objectives**.

:Competitive advantage Concepts

- **Competitive advantage** refers to the use of **information** to gain marketplace **impact**.
- **Porter** argues that firms **achieve** competitive advantage by providing one of the following:
 - **Products and services at a lower price.**
 - **Higher quality** products and services.
 - **Meeting the special needs of certain market segments.**
- An important point to recognize is that the firm's managers use both **conceptual** and **physical** resources to meet the firm's strategic objectives.

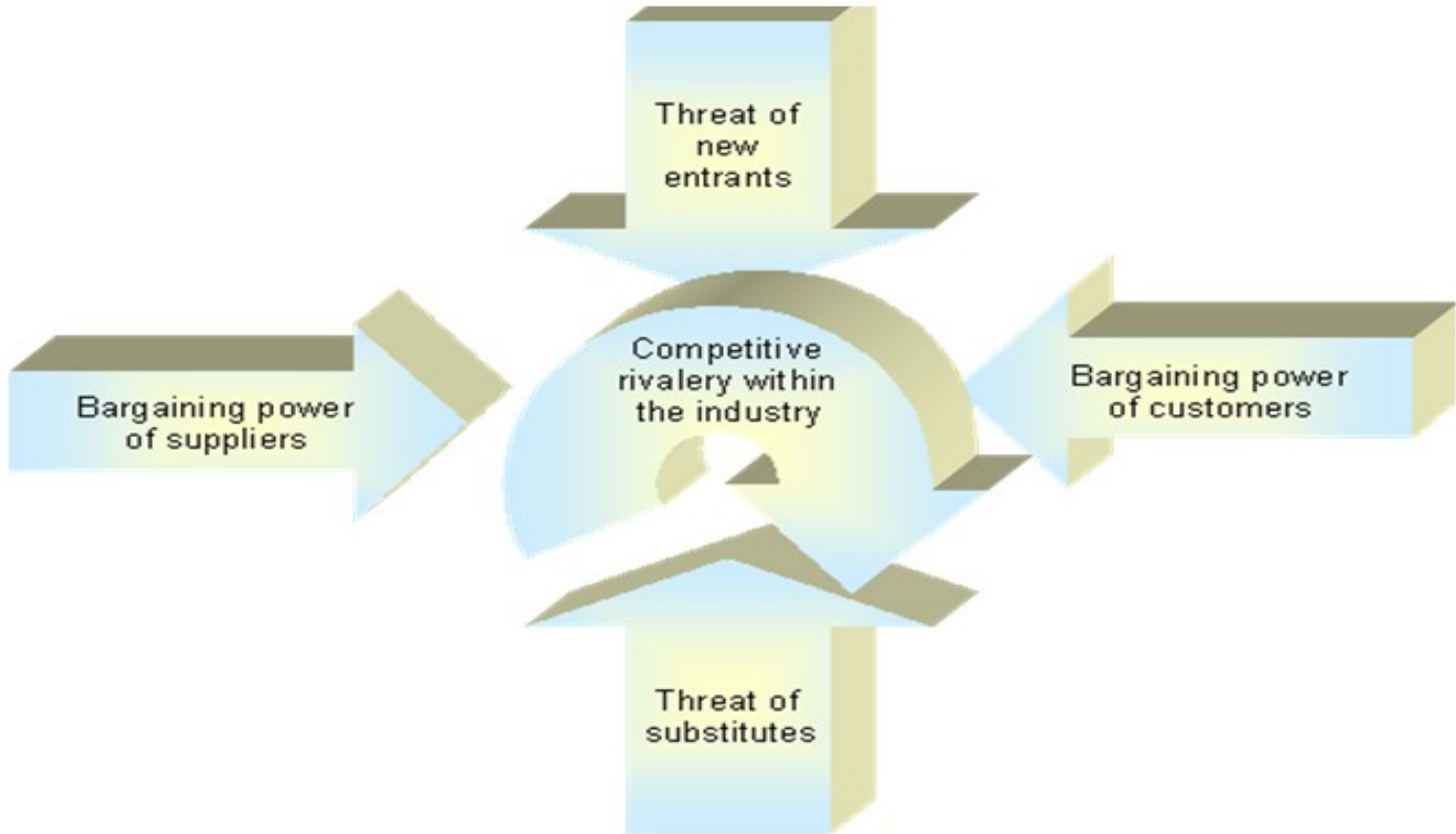
Porter's Model for Competitive Advantage

Conceptual frameworks for understanding and applying **competitive strategies** have been developed by *Michael Porter* and others:

1. Competitive forces model
2. Value chain model

Porter's Competitive Force Model

- A firm faces a number of external threats and opportunities:
 - .The threat of new **entrants** into its market (1)
 - .The pressure from **substitute products** or services (2)
 - .The bargaining power of **customers** (3)
 - .The bargaining power of **suppliers** (4)
 - .Rivalry of **competitors** within its industry (5)
- Competitive advantage can be achieved to **change the balance of power between a firm and other competitors.**



Competitive Strategies

- **Developing unique business relationships:** This effectively locks in customers or suppliers by creating "**switching costs**" that make it expensive or inconvenient for them to switch to another firm. Thus, competitors are also locked out by such strategies.
- **Barriers to entry,** businesses may try to develop legal, financial, or technological requirements that create "barriers to entry" that **discourage** firms from **entering an industry**, or make substitution unattractive or uneconomical.
- **Cost leadership strategy.** becoming a **low-cost producer** of products and services in the industry.

Competitive Strategies

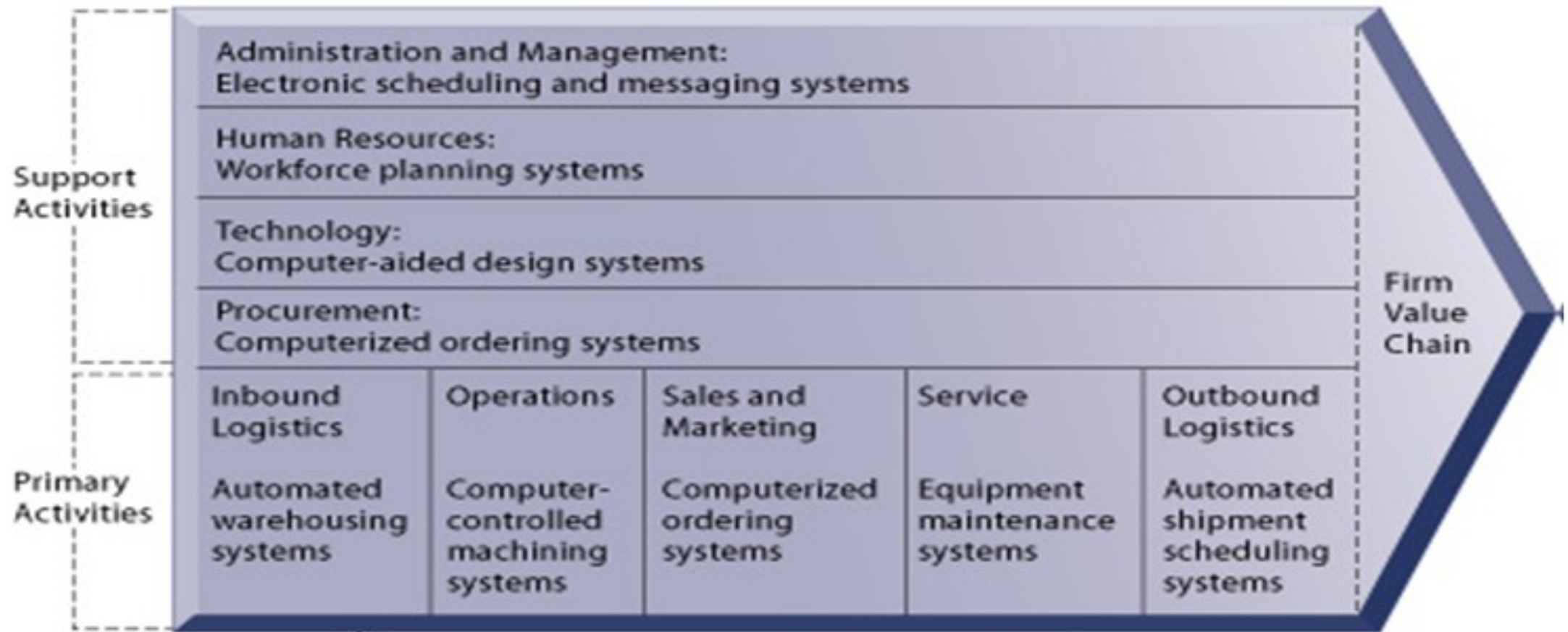
- **Differentiation strategy.** Developing ways to Differentiate a firm's products and services from its competitors' or reduce Differentiation advantages of competitors.
- **Innovation strategy.** finding new ways of doing business. This may involve the development of unique products and services, or entry into unique markets or market niches.
- **Growth strategies.** Significantly expanding a company's capacity to produce goods and services, expanding into global markets.
- **Alliance strategies.** establishing new business linkages and alliances with customers, suppliers, competitors, consultants, and other companies.

:Porter's Value chain Model

- The value chain model highlights **specific activities in the business** where competitive strategies can best be applied and where information systems are most likely to have a strategic impact.
- The value chain model identifies specific, critical leverage points where **a firm can use information technology** most effectively to enhance its competitive position.

Value chain Model Activities

- **Primary activities** are related to the **production and distribution** of the firm's products and services that create value for the customer. Primary activities include inbound logistics, operations, outbound logistics, sales and marketing, and service.
- **Support activities** make the delivery of the primary activities possible and consist of **organization infrastructure** (administration and management), **human resources**, **technology** (improving products and the production process), and **procurement** (purchasing input).



Sourcing and Procurement Systems

Customer Relationship Management Systems



Industry Value Chain