

# Sourcing Strategies

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## Learning Objectives of the Session

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1. Roles of Outsourcing and Procurement in the supply chain
2. Make or Buy decision
3. When to Outsource?
4. Procurement Strategies

- Outsourcing components have increased progressively over the years

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    - Cisco (major suppliers across the world)

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    - Cisco (major suppliers across the world)
    - Apple (over 70% of components outsourced)

## **Make Or Buy**

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## Benefits of Outsourcing

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- Economies of scale
- Risk pooling
- Reduce capital investment
- Focus on core competency
- Increased flexibility

## Risks of Outsourcing

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- Loss of Competitive Knowledge
- Conflicting Objectives

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## Risks of Outsourcing contd..

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### Conflicting Objectives

- Demand Issues
- Product design issues

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    - ii. Conflict can be addressed by buyers who are willing to make long-term commitments to purchase minimum quantities specified by a contract
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- Product design issues
  1. Buyers insist on flexibility
  2. Suppliers focus on cost reduction

## Outsourcing Problems: IBM

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- PC market entry in 1981
- Outsourced many components to get to market quickly
- 40% market share by 1985 beating Apple as the top PC manufacturer
- Other competitors like Compaq used the same suppliers
- IBM tried to regain market by introducing the PS/2 line with the OS/2 system
  - Suppliers and competitors did not follow
  - IBM market share shrunk to 8% in 1995

## Framework for Make/Buy Decisions

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  - How can the firm identify what is in the core?
  - What is outside the core?

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- Dependency on knowledge
  1. Firm does not have the people, skills, and knowledge required to produce the component
  2. Outsources in order to have access to these capabilities

## Outsourcing Decisions at Toyota

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- Vehicle electronic systems
  - Designed and produced by Toyota's suppliers
  - Company has dependency on both capacity and knowledge

## Outsourcing Decisions at Toyota contd..

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- Toyota seems to vary its outsourcing practice depending on the strategic role of the components and subsystems
  - The more strategically important the component, the smaller the dependency on knowledge or capacity

## Product Architectures

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- Integral product

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  - Components are interchangeable
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## Hierarchical Model for Outsourcing Decisions

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- Customer Importance
- Component Clockspeed
- Competitive Position
- Capable Suppliers
- Architecture

# Examples of Decisions

Criteria	Example 1	Example 2	Example 3	Example 4
<b>Customer Importance</b>	Important	Not important	Important	Important
<b>Clockspeed</b>	High	Slow	High	Slow
<b>Competitive Position</b>	Competitive Advantage	No advantage	No advantage	No advantage
<b>Capable Suppliers</b>	X	X	Key variable to decide strategy	
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DECISION	Inhouse	Outsource	Inhouse, Acquire supplier, Partnership	Outsource with modular; Inhouse or joint development with integral.

# Procurement Strategies

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## Procurement Strategies

- Impact of procurement on business performance 2005 profit margins for Pfizer (24%), Dell (5%), Boeing (2.8%)
- Reducing procurement cost by exactly 1% of revenue would have translated directly into bottom line, i.e., net profit.
- To achieve the same impact on net profit through higher sales
  - Pfizer would need to increase its revenue by 4.17 (0.01/0.24)%
  - Dell by 20% and Boeing by 35.7%
- The smaller the profit margins, the more important it is to focus on reducing procurement costs.

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  - What are the capabilities needed for a successful procurement function?
  - What are the drivers of effective procurement strategies?
  - How can the firm ensure continuous supply of material without increasing its risks?

## Kraljic's Supply Matrix

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- Firm's supply strategy should depend on two dimensions
  - profit impact:
  - supply risk

## Kraljic's Supply Matrix

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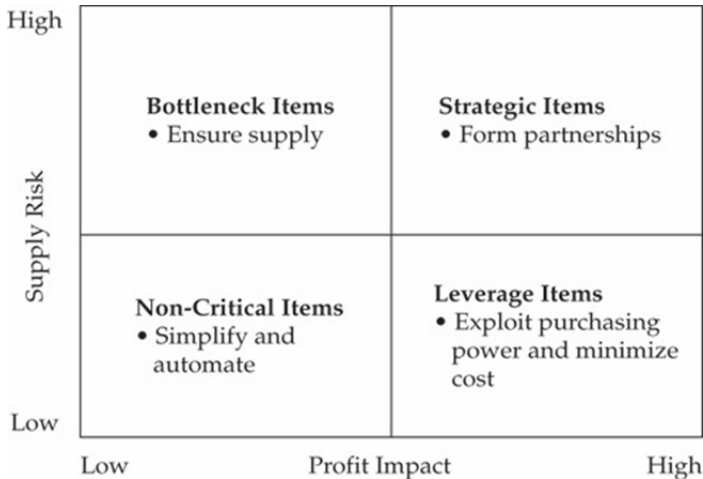
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  - profit impact: Volume purchased/ percentage of total purchased cost/ impact on product quality or business growth
  - supply risk: Availability/number of suppliers/competitive demand/ make-or-buy opportunities/ storage risks/ substitution opportunities

# Kraljic's Supply Matrix



**Figure 1:** Kraljic's supply matrix

## Type of Products

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- Functional Products
- Innovative products

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  - Diapers, soup, milk, tiers
  - Appropriate supply chain strategy for functional products is push
  - Focus: efficiency, cost reduction, and supply chain planning
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## Procurement Strategy for the Two Types

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# Fisher's Supply Chain Matrix

		Product Nature	
		Functional	Innovative
Supply Chain Strategy	Efficiency	Match	Mismatch
	Responsiveness	Mismatch	Match

Source: Fisher (1997)

Figure 2: Fisher's Framework

## Integrated Framework

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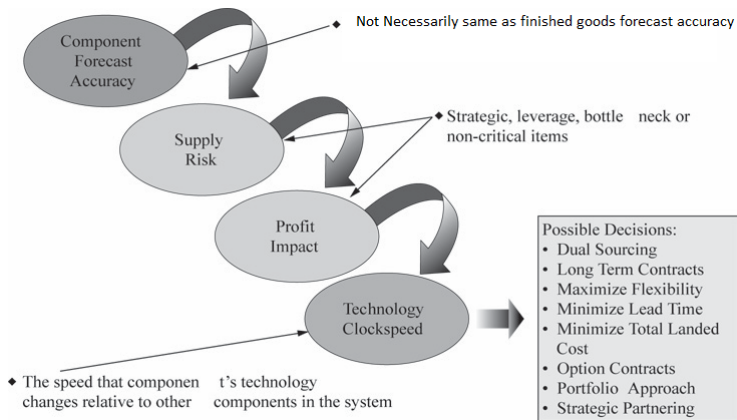
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# Qualitative Approach to Sourcing Strategy



**Figure 3:** A qualitative approach for evaluating component sourcing strategy

## Summary

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- Outsourcing has both benefits and risks
- Buy/make decisions should depend on multiple aspects
- Procurement strategies vary from component to component
- Four categories important in selecting suppliers: component forecast accuracy, clockspeed, supply risk, and financial impact