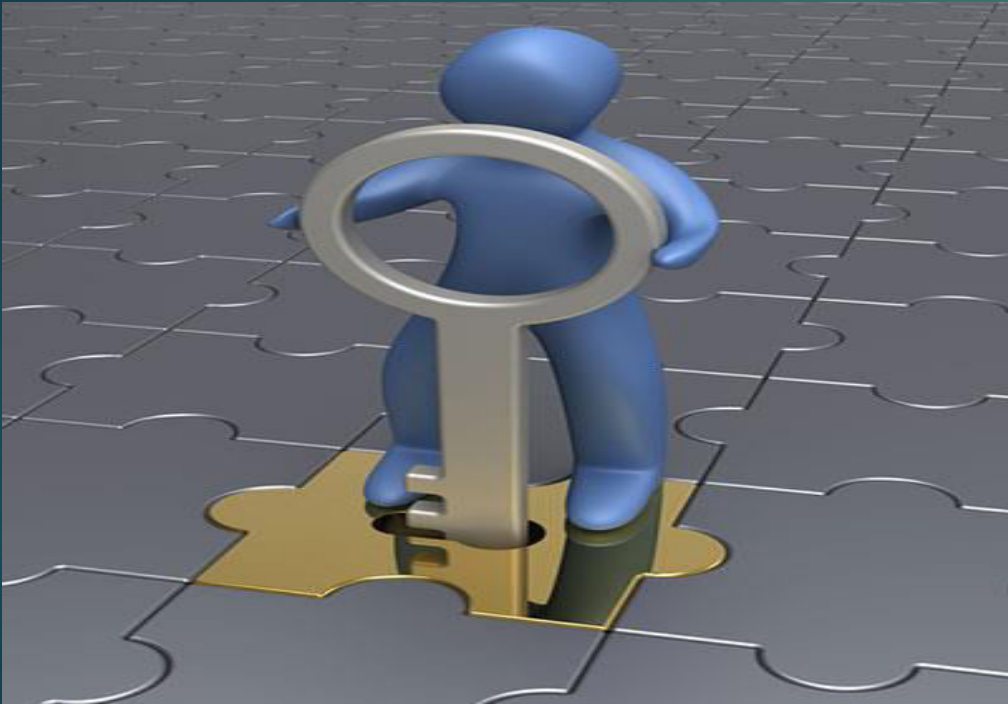


# Unit 5: Supply Chain performance: Achieving Strategic fit and scope



Prepared by: Rjee Rakhal

# Competitive and Supply Chain Strategies

- ▶ Competitive and Supply Chain Strategies
- ▶ Achieving Strategic fit
  - ▶ Understanding the customer
  - ▶ Understanding the supply chain
  - ▶ Achieving strategic fit
- ▶ Obstacles in achieving strategic fit

# Competitive and Supply Chain Strategies

## ▶ Competitive strategy:

- ▶ Relative to its competitors, defines the set of customer needs a firm seeks to satisfy through its products and services
- ▶ *E.g; to provide high availability of variety of products in reasonable quality at low prices ( Walmart, Bhatbhateni)*
- ▶ *McMaster-Carr (MRO) • More than 500,000 different products (through a catalog and Web) • Convenience, availability, responsiveness • Not competing based on low price*
- ▶ Examples of Competitive Strategy
  - Low price
  - Availability
  - Convenience
  - Customization
  - Other

# Competitive and Supply Chain Strategies

## ▶ Functional strategies

- ▶ *Product development strategy*: specifies the portfolio of new products that the company will try to develop
- ▶ *Marketing and sales strategy*: specifies how the market will be segmented and product positioned, priced, and promoted
- ▶ *Supply chain strategy*:
  - determines the nature of material procurement, transportation of materials, manufacture of product or creation of service, distribution of product
  - Consistency and support between supply chain strategy, competitive strategy, and other functional strategies is important

# Value Chain Analysis



# THE VALUE CHAIN – PRIMARY ACTIVITIES

## ▶ **Inbound Logistics**

- ▶ include the receiving, warehousing, and inventory control of input materials

## ▶ **Operations**

- ▶ are the value creating activities that transform the inputs into the final product

## ▶ **Outbound logistics**

- ▶ are the activities required to get the finished product to the customer, including warehousing, order fulfillment etc.

# THE VALUE CHAIN – SUPPORT ACTIVITIES

## ▶ **Procurement**

- ▶ – the function of purchasing the raw materials and other inputs used in the value-creating activities

## ▶ **Technology Development**

- ▶ includes research and development process automation and other technology development used to support the value chain activities

# THE VALUE CHAIN – SUPPORT ACTIVITIES

## ▶ **Marketing & Sales**

- ▶ are those activities associated with getting buyers to purchase the product, including channel selection, advertising, pricing etc.

## ▶ **Service activities**

- ▶ are those that maintain and enhance the product's value including customer support, repair services etc.



# THE VALUE CHAIN – SUPPORT ACTIVITIES

Prepare

## ▶ **Human Resource Management**

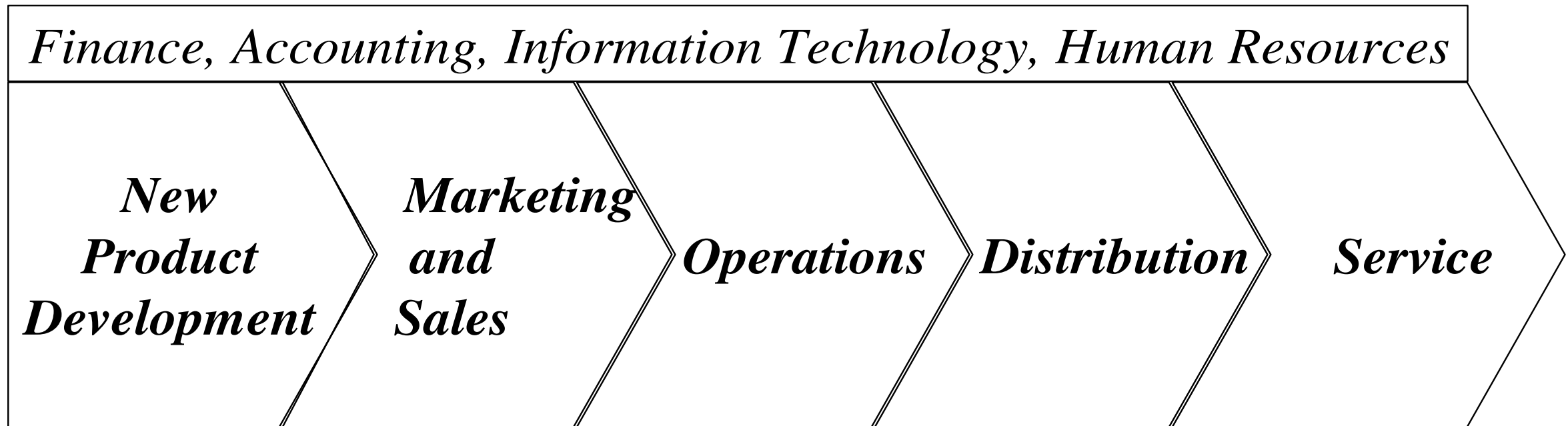
- ▶ – the activities associated with recruiting development and compensation of employees

## ▶ **Firm Infrastructure**

- ▶ includes activities such as finance, legal quality management etc.

# The Value Chain: Linking Supply Chain and Business Strategy

To analyze the specific activities through which firms can create a competitive advantage, it is useful to model the firm as a chain of value creating activities.



# Achieving Strategic Fit

- ▶ Introduction
- ▶ How is strategic fit achieved?
- ▶ Other issues affecting strategic fit

# Achieving Strategic Fit

- ▶ Strategic fit:
  - ▶ Consistency between customer priorities of competitive strategy and supply chain capabilities specified by the supply chain strategy
  - ▶ Competitive and supply chain strategies have the same goals
- ▶ A company may fail because of a lack of strategic fit or because its processes and resources do not provide the capabilities to execute the desired strategy
  - ▶ E.g. marketing is publicizing a companies' ability to provide a large variety of products quickly; simultaneously, distribution is targeting the lowest cost means transportation

# How is Strategic Fit Achieved?

- ▶ **Step 1:** Understanding the customer and supply chain uncertainty
- ▶ **Step 2:** Understanding the supply chain
- ▶ **Step 3:** Achieving strategic fit

# Step 1: Understanding the Customer and Supply Chain Uncertainty

- ▶ Identify the needs of the customer segment being served
  - ▶ Quantity of product needed in each lot
  - ▶ Response time customers will tolerate
  - ▶ Variety of products needed
  - ▶ Service level required
  - ▶ Price of the product
  - ▶ Desired rate of innovation in the product

# Step 1: Understanding the Customer and Supply Chain Uncertainty

- ▶ Overall attribute of customer demand
  - ▶ *Demand uncertainty*: uncertainty of customer demand for a product
  - ▶ This can be impacted by many things such as; in holiday season demand may be high, summer vs winter and this has impact on supply chain
  - ▶ *Implied demand uncertainty*: resulting uncertainty for the supply chain given the portion of the demand the supply chain must handle and attributes the customer desires

# Customer Needs and Implied Demand Uncertainty

Customer Need	Causes Implied Demand Uncertainty to ...
Range of quantity required increases	Increase because a wider range of the quantity required implies greater variance in demand
Lead time decreases	Increase because there is less time in which to react to orders
Variety of products required increases	Increase because demand per product becomes more disaggregate
Number of channels through which product may be acquired increases	Increase because the total customer demand is now disaggregated over more channels
Rate of innovation increases	Increase because new products tend to have more uncertain demand
Required service level increases	Increase because the firm now has to handle unusual surges in demand



# Implied demand uncertainties and attributes

	Low Implied Uncertainty	High Implied Uncertainty
Product margin	Low	High
Average forecast error	10%	40% to 100%
Average stockout rate	1% to 2%	10% to 40%
Average forced season-end markdown	0%	10% to 25%

*Source:* Adapted from “what is the right supply chain for your product?” Mrshall L. Fisher, *Harvard Business Review* (March-April 1997) 83-93

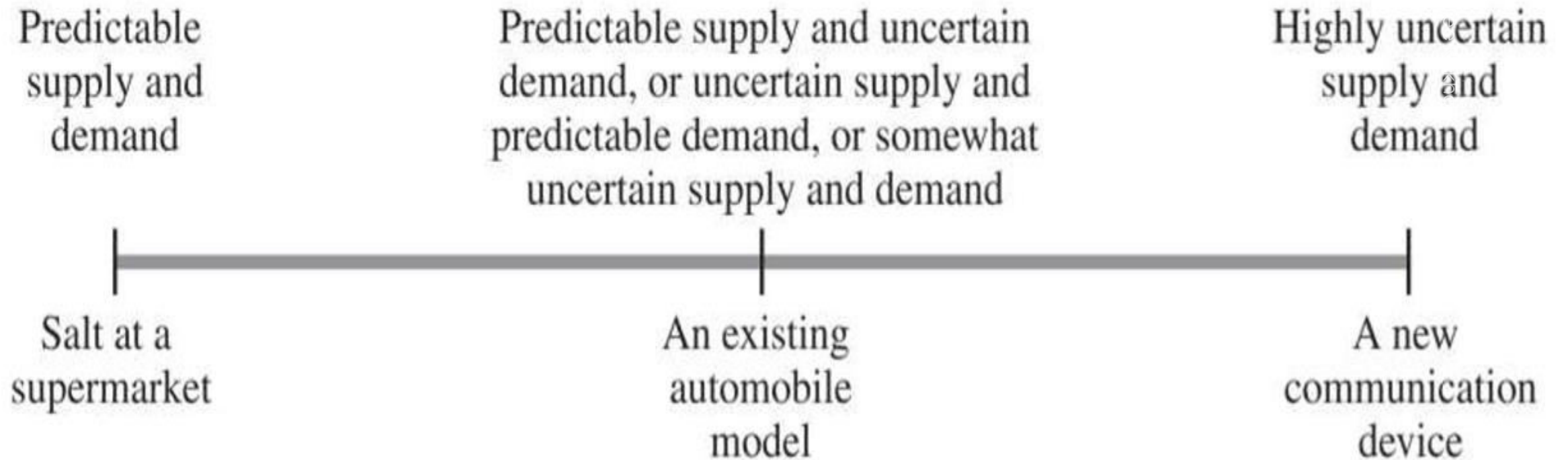


# Impact of Supply Source Capability

<b>Supply Source Capability</b>	<b>Causes Supply Uncertainty to...</b>
Frequent breakdowns	Increase
Unpredictable and low yields	Increase
Poor quality	Increase
Limited supply capacity	Increase
Inflexible supply capacity	Increase
Evolving production process	Increase

Table 2-3

# Levels of Implied Demand Uncertainty



Implied demand uncertainty spectrum

# Step 2: Understanding the Supply Chain

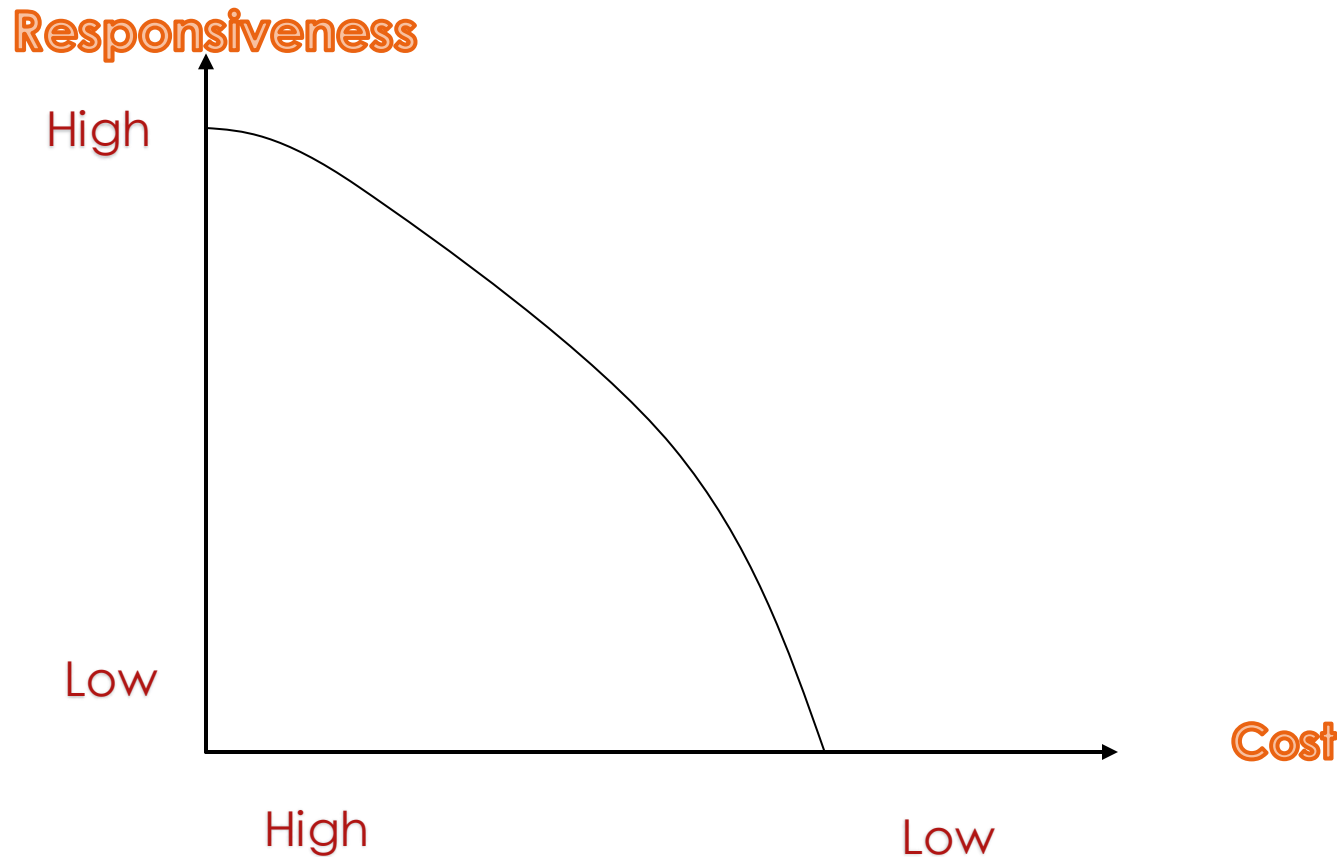
- ▶ How does the firm best meet demand? In the given uncertain environment
- ▶ Dimension describing the supply chain is supply chain responsiveness
- ▶ Creating strategic fit is all about creating a supply chain strategy that best meets the demand a company has targeted given the uncertainty it faces
- ▶ Supply chain responsiveness -- ability to
  - ▶ *respond to wide ranges of quantities demanded*
  - ▶ *meet short lead times*
  - ▶ *handle a large variety of products*
  - ▶ *build highly innovative products*
  - ▶ *meet a very high service level*

## Step 2: Understanding the Supply Chain

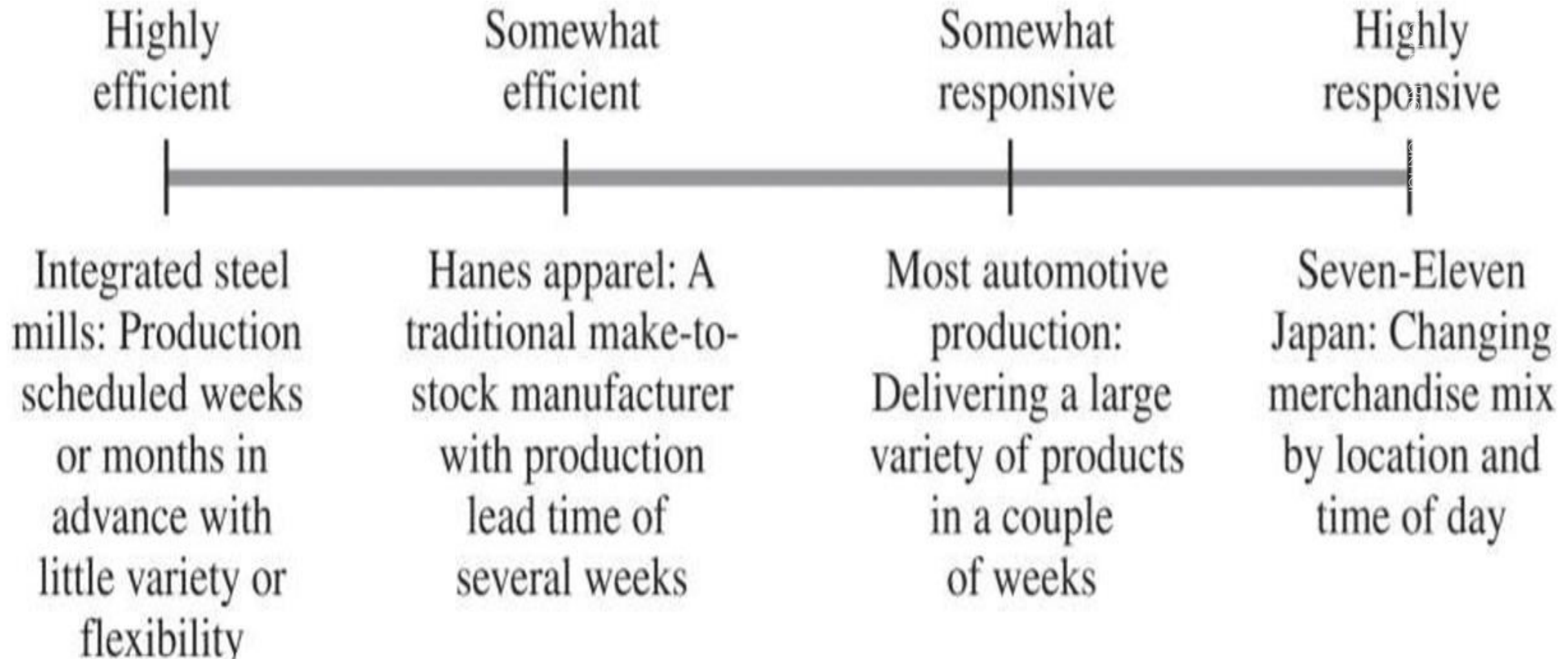
- ▶ There is a cost to achieving responsiveness
- ▶ Supply chain efficiency: cost of making and delivering the product to the customer
- ▶ Increasing responsiveness results in higher costs that lower efficiency
- ▶ Second step to achieving strategic fit is to map the supply chain on the responsiveness spectrum

# Understanding the Supply Chain: Cost-Responsiveness Efficient Frontier

The cost-responsiveness efficient frontier curve shows the lowest possible cost for a given level of responsiveness



# Responsiveness spectrum



# Step 3: Achieving Strategic Fit

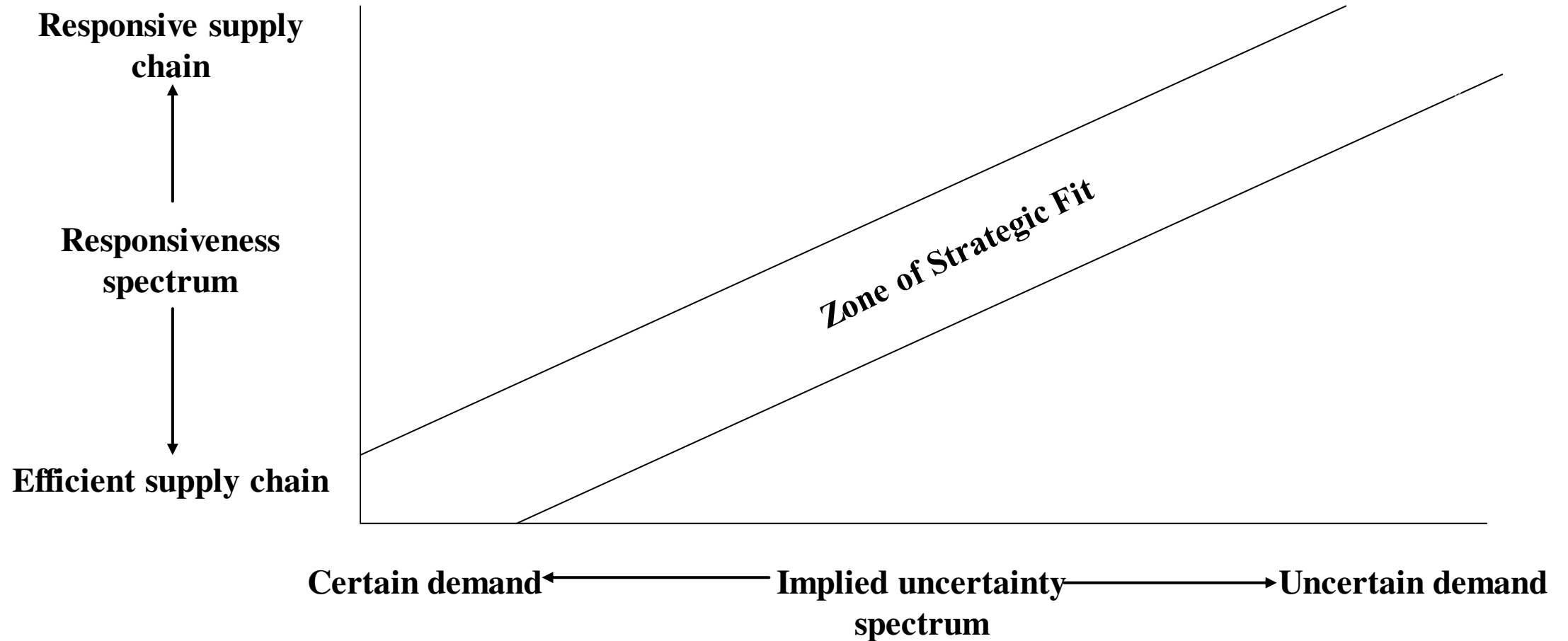
Pre

- ▶ Step is to ensure that what the supply chain does well is consistent with target customer's needs



# Achieving Strategic Fit Shown on the Uncertainty/Responsiveness Map

edp



## Step 3: Achieving Strategic Fit

- ▶ All functions in the value chain must support the competitive strategy to achieve strategic fit
- ▶ Two extremes: Efficient supply chains and responsive supply chains
- ▶ Ensure that the degree of supply chain responsiveness is consistent with the implied uncertainty

# Step 3: Achieving Strategic Fit

- ▶ Assign roles to different stages of the supply chain that ensure the appropriate level of responsiveness
- ▶ Two key points
  - ▶ there is *no* right supply chain strategy independent of competitive strategy
  - ▶ there *is* a right supply chain strategy for a given competitive strategy

# Comparison of Efficient and Responsive Supply Chains

	Efficient	Responsive
Primary goal	Lowest cost	Quick response
Product design strategy	Min product cost	Modularity to allow postponement of product diffn.
Pricing strategy	Lower margins	Higher margins
Mfg strategy	High utilization	Capacity flexibility
Inventory strategy	Minimize inventory	Buffer inventory
Lead time strategy	Reduce but not at expense of greater cost	Aggressively reduce even if costs are significant
Supplier selection strategy	Cost and low quality	Speed, flexibility, quality
Transportation strategy	Greater reliance on low cost modes	Greater reliance on responsive (fast) modes

OBSTACLES TO  
ACHIEVING  
STRATEGIC FIT



# Obstacles in Achieving Strategic Fit

## 1. Increasing demanding customer

- ▶ Customers are constantly demanding improvements in delivery lead time, cost, and product performance
  - ▶ Delivery Lead time: decrease efficiency and have to change strategic fit (transportation cost increase and effects in efficiency)
  - ▶ Product performance: e.g after sales service (customers demand customer service center and decreases efficiency)

# Obstacles in Achieving Strategic Fit

## 2. Increasing product variety

increasing variety of products –Increasing trend of customization among companies

- ▶ The increase in product variety complicates the supply chain by making *forecasting much more difficult i.e. creates uncertainty*
- ▶ Cg: wai wai in the beginning ..veg, quicks (varieties)
  - ▶ *needed different strategic fit for each variety product*
- ▶ E.g Microsoft
  - ▶ *Windows os replaced by new one and achieving success.*
- ▶ Apple has had great success limiting its product variety while continuing to introduce new products

# Obstacles in Achieving Strategic Fit

## 3. Decreasing product life cycles –

- ▶ Quick change in stages of product life cycle
- ▶ e.g. iphone 7 and elimination of it by introducing 8/10
- ▶ Nokia and new smartphones: customers replaced nokia, because of frequent update in smartphones
- ▶ Needed diff strategy for each cycle
- ▶ Markdown in price



# Obstacles in achieving strategic fit

## **4. Fragmentation of supply chain ownership:**

- ▶ New ownership, in which the chain is broken into many owners,
- ▶ Each has its own policies and interests, the chain is more difficult to coordinate.
- ▶ Potentially, this problem could cause each stage of a supply chain to work only toward its own objectives rather than overall
- ▶ Therefore, resulting is the reduction of overall supply chain profitability.

# Obstacles in achieving strategic fit

## 5. Globalization and Increasing Uncertainty,

- ▶ Globalization and increasing uncertainty – Significant fluctuations in exchange rates, global demand, and the price of crude oil
- ▶ Global supply chains creates many benefits such as ability to source from a global base of suppliers who may offer better or cheaper goods than were available in a company's home nation
- ▶ Globalization making coordination much more difficult
  - ▶ Because facilities within the chain are farther apart
- ▶ Globalization has also increased competition
- ▶ Companies that once protected has to find time for responding to needs of customer that arise due to competition

# Obstacles in achieving strategic fit

## 5. Changing technology and business environment

- ▶ – Customer needs and technology change may force a firm to rethink their supply chain strategy
- ▶ dell started selling laptops from retail outlets

# Obstacles in achieving strategic fit

## **6. The environment and sustainability**

- ▶ Growing in relevance and must be accounted for when designing supply chain strategy
- ▶ Regulations has been driving changes
- ▶ E.g. use of material in packaging, public health issues, and others
- ▶ Plastic packaging replaced by paper or other and have to change supplier and strategic fit must be updated

Overcoming these obstacles offers a tremendous opportunity in terms of untapped improvement within supply chain. The increasing impact of obstacles has led to supply chain management becoming a major factor in the success or failure of firms.

“When obstacles arise, you change your direction to reach your goal; you do not change your decision to get there.”

**Thank You**