

Chapter 2

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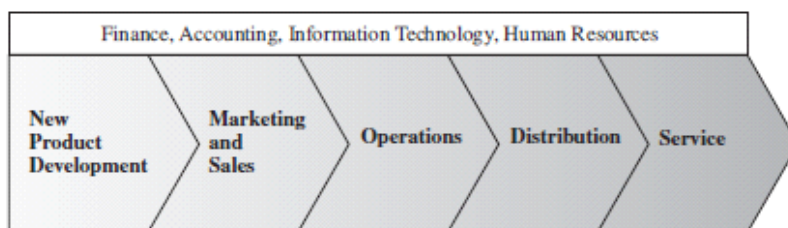
Competitive advantage strategy - relates the **key differences** in relative to competitors, the set of customers needs that the firm seeks to **satisfy** in their *product and services*.

- Defined based on its customers priorities

Type of strategies

- Convenience
- Availability
- Variety
- Service oriented
- Pricing

Value chain - set of activities that a firm will perform to achieve competitive advantage



Value chain of topical firms

Product development strategies - specify portfolio of new products a firm will develop

Marketing and sales strategies - how market will be segmented and how each product will be position, priced and promoted

Supply chain strategies - nature of procurement, transportation, manufacturing of products to provide for operations, services for post sales and whether these services are perform in-house or outsource

Strategy fit - ensure that the align goals of competitive and supply chain strategy are aligned

Achieving strategy fit

1. Competitive strategy and the firm function must be coordinated to fulfil the customer request
 - a. Support one another to complete the purpose of their goal
2. Each functions must be able to appropriately structure their process and resources to execute their strategies effectively
3. Design of overall supply chain and each role in each stage must be align to support their supply chain strategies

Strategy fit and alignment of supply chain strategies mismatch may cause seriously consequences of the firm

- Example; company publicizing large variety of products with unsupportive supply chain management to handle customers request

Basic steps to achieve strategy fit

Understanding the customer and supply chain uncertainty

1. Understand the customer needs for each targeted segment and the uncertainty of these needs will impose on supply chain
 - o Find the most profitable range of cost and services requirements
 - o Determine the unpredictable events to prepare for in the supply chain
2. Understand the supply chain capabilities
 - o Each type of supply chain are able to perform some task well compared with other specifications
 - Identify the task the supply chain will do well in.
3. Achieving strategic fit
 - o Identify the mismatch between firm competitive strategy and supply chain capabilities

- Restructure of supply chain
- Switch competitive strategy

Understanding the customer needs

- Identify the needs of the customers in that segment
 - Each segment may have different needs to serve
 - Quantity of product
 - Response time tolerance
 - Variety
 - Service level
 - Price
 - Desired rate of innovation

Implied demand uncertainty - demand uncertainty imposed on the supply chain because of the customer needs it seeks to satisfy

(demand uncertainty reflects the uncertainty of the demand for a product, whereas implied demand uncertainty is the resulting uncertainty for the portion of the demand the supply chain plans to satisfy)

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

	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%

1. Products with uncertain demand are often less mature and less direct competition
 - a. High profit margins
2. Forecasting becomes more accurate as uncertainty decreases
3. Increase implied demand uncertainty leads to difficult matching of demand and supply
 - a. Leads to oversupply or high stock-out rate
4. Markdowns are high for high implied demand uncertainty due to oversupply

Supply uncertainty

- The ability to produce the product in respect to the demand
 - Manufacturing of new components - design and production process are still evolving and developing
 - High breakdown
 - Low production process
 - Common parts - design and production process are much more complete and dictated
 - Tends to follow fixed routine schedule
 - Low uncertainty

Supply Source Capability	Causes Supply Uncertainty to...
Frequent breakdowns	Increase
Unpredictable and low yields	Increase
Poor quality	Increase

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

Understanding the supply chain capabilities

Creating the supply chain strategy to meet the demand of the targeted segment uncertainty of the market

Supply chain responsiveness:

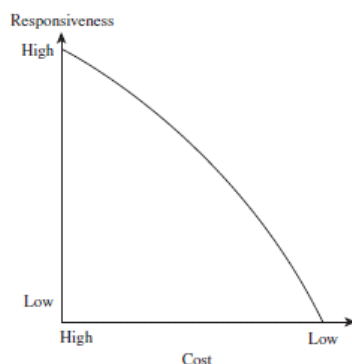
- The ability to
 - Respond to wide range of quantities demanded
 - Meet short lead times
 - Handle large varieties
 - Meet high service level
 - Build highly innovative product
 - Handle supply uncertainty

In order for the supply chain to be responsive, the cost incurred is relatively high

Supply chain efficiency - the inverse relationship of supply chain responsiveness

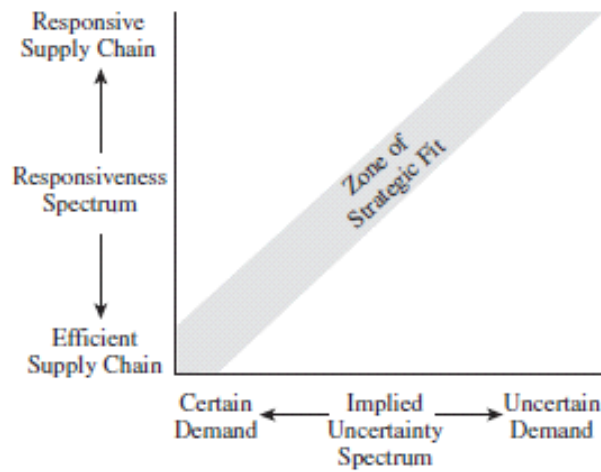
- Based on existing technology
- Cost-saving
- Low uncertainty
- Larger lead time

A firm will have to identify the needs of their supply chain requirements to meet their demand and fit these strategies according to the supply chain abilities



Achieving strategic fit

- Ensure that the degree of the supply chain responsiveness is aligned with the implied uncertainty
 - High responsiveness to high implied uncertainty
 - High efficiency to low implied uncertainty



- Assign roles to different stages of the supply chain that ensures appropriate level of responsiveness
 - o Desired level of responsiveness required across the supply chain may be attained by assigning different levels of responsiveness and efficiency on each stage
 - Making of one stage more responsive allow other stages to be efficient. Using the best combination, a successful supply chain strategy fit can be achieved
- Firm must also ensure that its function maintains consistent strategies that the support competitive strategy

	Efficient Supply Chains	Responsive Supply Chains
Primary goal	Supply demand at the lowest cost	Respond quickly to demand
Product design strategy	Maximize performance at a minimum product cost	Create <i>modularity</i> to allow postponement of product differentiation
Pricing strategy	Lower margins because price is a prime customer driver	Higher margins because price is not a prime customer driver
Manufacturing strategy	Lower costs through high utilization	Maintain capacity flexibility to buffer against demand/supply uncertainty
Inventory strategy	Minimize inventory to lower cost	Maintain <i>buffer inventory</i> to deal with demand/supply uncertainty
Lead-time strategy	Reduce, but not at the expense of costs	Reduce aggressively, even if the costs are significant
Supplier strategy	Select based on cost and quality	Select based on speed, flexibility, reliability, and quality

Tailoring the supply chain for strategic fit

- Have to factor multiple markets strategies
 - o Variety of products over different channels
- Requires sharing links with supply chains, while separating operation for others to fit different levels of supply chain needs (efficiency VS responsiveness)

E.g. Dell switching from customization (responsiveness) to low value finished products at Walmart (efficiency)

Life Cycle of the product and its concept to achieve strategic fit

1. Beginning stages
 - a. Demand is uncertain, supply uncertain
 - b. Margins are high, crucial for gaining sales
 - c. Product availability is need to capture market
 - d. Cost is secondary

Therefore, responsiveness is needed to capture the awareness and market share of the segment.

- High implied uncertainty

2. Later stages
 - a. Demand becomes more certain, supply is predictable
 - b. Margin is lower, increase in competitive pressure
 - c. Price becomes a factor in customer choice

Therefore, efficiency will play a better role to improve strategic fit

Creating a strategy fit to manage the product life cycle will create flexibility and balance to create a successful supply chain strategy

Expanding strategic scope

Scope of strategic fit - functions within the firm and stages across the supply chain that devise an integrated strategy with an aligned objective

- Each functions in the firm devise independent strategies to optimize individual performance
 - o Restricted to an operation within a stage of the supply chain
- Or, all functions work to align their strategies to manage supply chain surplus
 - o Collaboration with the entire supply chain

Scopes

1. Intraoperation scope
 - a. Devises their own strategy for each stage of supply chain
 - i. Results in an unaligned collection of strategies - results in a diminished in supply chain surplus
2. Intrafunctional scope
 - a. Firms attempt to align all operations within a function
 - i. All supply chain functions - sourcing, manufacturing, warehousing and transportation to align
 - Minimise total functional cost
 - b. Products could be sourced from a higher cost local supplier
 - i. Decrease in inventory and transportation cost outweigh the higher production cost of suppliers
3. Interfunctional scope
 - a. All functional strategies are developed to align with one another and the competitive strategies
 - i. Maximise company profit
 - b. Enjoy higher profits as their services and functions are aligned to the strategies to create a better and reliable product/services
 - i. High profit margin due to the customer willingness to pay
4. Intercompany scope
 - a. Collaborating with other firms in the supply chain to achieve supply chain surplus
 - i. Work together and share information with each other to reduce cost of inventory, transportation and information to improve the supply chain surplus
5. Agile intercompany scope
 - a. Achieving strategic fit across partners with supply chain stages that change over time (e.g. Manufacturers with production line of different set of products over time)
 - i. Needed to be more agile to match the supply chain strategic fit across many players in the changing dynamics of the competitive environment

Challenges to achieve and maintain strategic fit

1. Product variety and shrinking life cycle
 - a. Increase in growth of product variety and shorten life cycle
 - i. Increases uncertainty
 - ii. Reduces window of opportunity to achieve strategic fit
 - b. Introducing of new products while failing to eliminate older generations
 - i. Being forces to maintain production of older one, incurring cost and reducing the profit ability of the newer products
 2. Globalization and increasing uncertainty
 - a. Open up opportunities as well as higher risk for supply chain
 - i. Currency fluctuations
 - ii. Changing demands
 - b. Supply chain must be designed to be flexible to handle these changes
- E.g. Honda plants are able to handle manufacturing of CRV and small cars in the same line

3. Fragmentation of supply chain ownership
 - a. Companies shedding noncore functions and uses outsourcing to take advantage of their suppliers and customers competencies instead
 - i. Outsourcers are of different owners with different alignment of objective, making it harder to align firm strategic fit against these outsourcing parties
 - Reduces supply surplus
 - ii. All members in the supply chain must be aligned to achieve strategic fit
4. Changing technology and business environment
 - a. Fast advancement of technology forces firm to rethink their supply chain strategies
 - i. Once successful strategy can become a weakness in a changed settings (e.g. DELL)
 - b. Changing business environment also causes the need to be flexible to change in supply chain strategy
 - i. Outgrown and outdated business model (e.g. Borders)
5. Environment and sustainability
 - a. Regulations and pressing matters of environment and sustainability of their products
 - i. Forces old practises to be affected and result in a force change to meet these regulations
 - b. Creates opportunity to value-add their products to be environmental friendly
 - i. Lowering their cost like packaging to be more environmental friendly (save packaging cost)
 - c. Creates challenges across different members across the supply chain
 - i. Firms need to design strategy that engages entire supply chain to identify and address these opportunities for improve sustainability
 - ii. Requires great coordination to be effective