

Chapter 4: Supply Management



Supply Management Related Concepts

1. Purchasing: entails buying products + services from other firms in a legal or ethical manner. It is a functional activity that involves supplier identification/buying.

2. Sourcing: includes process of identifying, evaluating, selecting + managing suppliers. Wider concept of purchasing.

3. Supply Management: identification, acquisition, positioning and management of resources and the capabilities that a firm needs to meet strategic objectives.

Pursues strategic objectives that are aligned with overall vision/mission of the firm that have a major impact on long-term performance.

The role of supply management in logistics and supply chain management

Supply management plays an NB direct + indirect role on the supply chain. These contribute to the performance of the supply chain by impacting profits and linking departments.

1: Supply Management's impact on a firm's bottom line

Plays a huge role in increasing sales or reduces total costs.

2: Supply Management's role in increasing sales

Role in increasing the firm's sales. Strong internal relationships between supply management and other internal departments need to be in place.

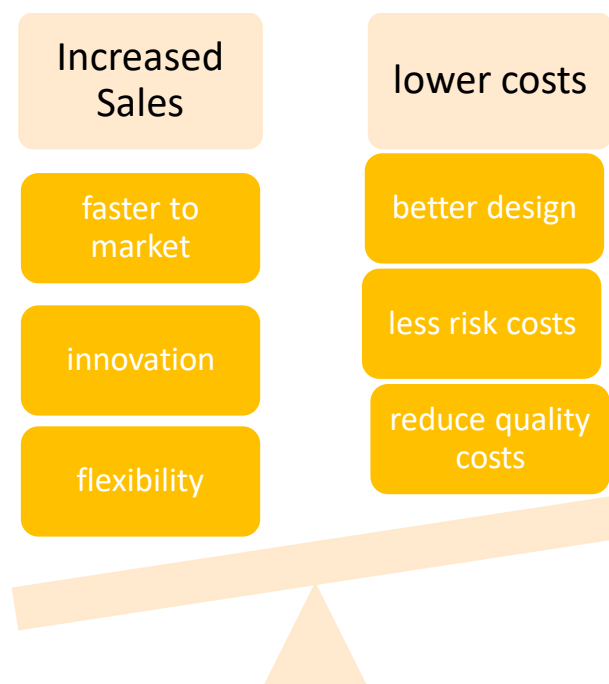
Help firm increase sales in the following ways:

- *Firms who enter the market first have a competitive advantage by being the "first movers". Customers become loyal to this*
- *Improving quality*
- *Providing pricing flexibility. When costs are reduced, this is created*
- *By being innovative*
- *By enhancing customer satisfaction. Buying the right materials or products result in shorter lead times, consistent deliveries, high fill rates and complete orders and fewer quality-related issues.*

Supply Management's role in reducing total costs

Total cost of ownership is sum of all costs of owning or acquiring a product.

- *Reducing the acquisition cost: using or developing more standardised specifications benefits from economies of scale. Implement good sourcing + pricing practices*
- *Improving Product Design: include trustworthy suppliers early in product design phase. Early supply management and involvement reduces costs because of more efficient designs and less waste.*
- *Reducing the cost of quality and downtime: select suppliers who can provide the right level of quality and costs will be reduced.*
- *Risk Cost: reduced by careful selection of supplier where they can deliver at the right time with no damage*
- *Shorter cycle time: effective procurement procedures result in this*
- *Overall supply chain costs: reduced by investing in technologies.*
- *Post-ownership Costs: reduce warranty costs or cost of lost sales*



Supply Management's links with other departments in the firm

- The total costs spent in the logistics department + supply department are significant as transporting and warehousing are included in the logistics department
- Supply management NB role in delivery of goods and services in supply chain
- Manufacturing and operations need supply management to order right materials for production schedules. Provide correct info concerning needs

- The engineering department is involved with new product developments + prepares initial specifications of the firm's products/services (ensure right material)
- The quality department should be involved in the firm's sourcing strategy with aim of minimizing quality problems throughout the supply chain
- The marketing department is successful when it generates sales by successfully introducing + promoting products to market in a timely manner
- The finance department is responsible for obtaining funds and overseeing their use. Cohesion in what is said about finances
- Information technology often outsourced with major impact on procurement processes. IT planned carefully with major impact on procurement process.
- Legal department is important for strategic business relationships with suppliers + lawyers

Strategic Sourcing Process



Explained as the development + management of supplier relationships to acquire goods and services in a way that aids achieving immediate needs of business.

Conduct a speed analysis

Firms must know how much and on which upstream suppliers they are spending their money.

Analysis helps in 3 ways

Analyse the supply market

Knowing where money goes

Upstream spending

Identifying suppliers



Conduct a supply market analysis to determine:

1. Number of possible suppliers who can provide p/s
2. Number of buyers who will potentially buy p/s
3. Nature of competition within these markets

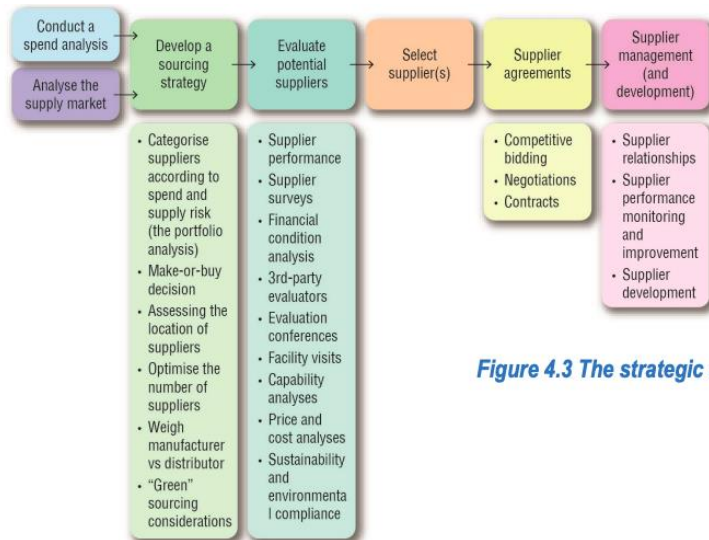


Figure 4.3 The strategic sourcing process

The following

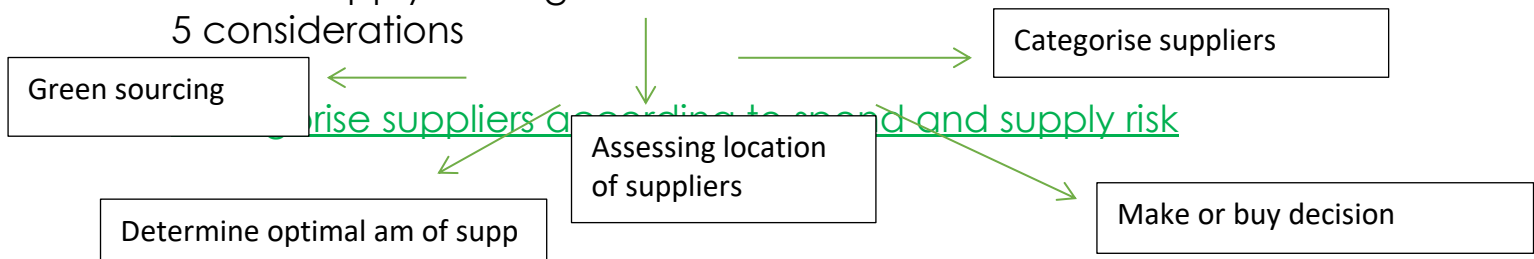
information sources can be used

1. Trade journals and trade directories: provide good leads and updates as to what is happening in various industries
2. Suppliers' websites and annual reports: linked to search engines and visited to find out more info
3. The internet and social media: provides a lot of information and useful leads
4. Supplier Catalogues: common source of supplier information
5. Suppliers' sales staff: knowledgeable about product
6. Trade Shows and Conferences: great opportunity to see new product and modifications to old product
7. Request for Information to conduct extensive research

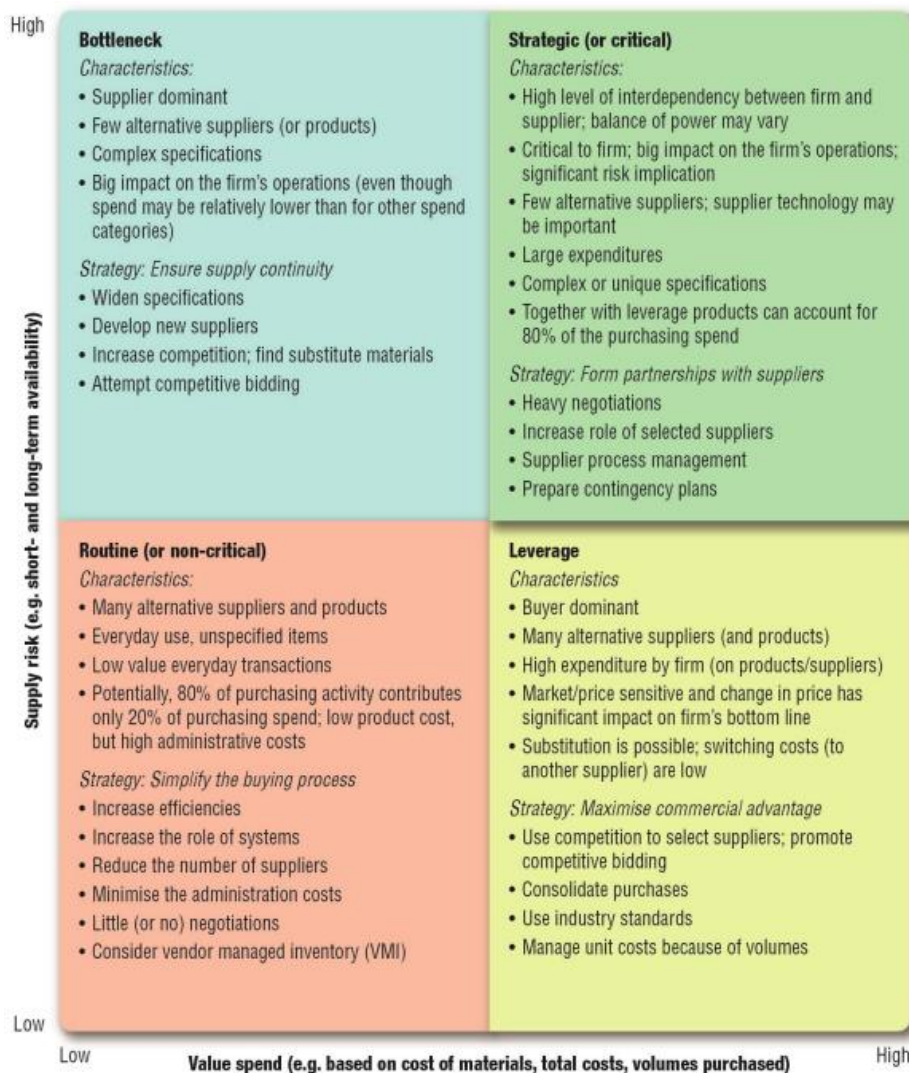
Develop a sourcing strategy

Needs to be developed to ensure that the right strategies are used in supply management

5 considerations



- Kraljic's portfolio matrix. Consists of 4 quadrants that are categorised by supply risk + profit impact
- Horizontal axis = value spent at supplier
- Vertical axis = supply risk displayed
- Strategy for strategic suppliers: in critical quadrant, supplier risk is high, and impact of bottom line is also high
- Strategy for bottleneck suppliers: in this quadrant, supply risk is high + impact on the firm's bottom line/ value spent at suppliers is low (risk high= few alternative suppliers)
- Strategy for leverage suppliers: low risk and high spend (competitive bidding)
- Strategy for routine suppliers: both supply risk and value is low



The make-or-buy decision

- Making product internally or buying product from supplier

- Insource-versus-outsource decision
- The buy decision (OUTSOURCING): External supply chain partners focusing on core competencies. May be cheaper
- The make decision (INSOURCING): Consider making products themselves which can save costs. Design secrecy and internal control

Assessing the location of suppliers

- Location of potential and current supplier needs to be considered
- Being close to a supplier = easier communication and collaboration with lower delivery costs
- Disputes easily resolved when local supplier
- Firms consider global suppliers who have access to advanced technologies to help provide superior quality and huge cost savings
- Very difficult to resolve disputes and firms need to be culturally sensitive

Determining the optimal number of suppliers to use

- If too many suppliers are used = complexity and communication will increase and control over suppliers becomes more difficult
- Build strong relationship with single supplier
- Dual/multiple sourcing may be appropriate too depending on the case
- Buying firms want to optimize their supply chain
- Supply base optimization happens when optimal number of suppliers are used so that work can continue efficiently and effectively

Deciding to use a manufacturer or a distributor

- Determine whether to deal with manufacturing directly or use a distributor
- Distributors used if specific capabilities or services that add value for the buyer
- Buy from one distributor instead of many manufacturers
- Distributors have more stock which means they fill orders quickly
- Directly with manufacturer needs to be transported which increases cost per unit.

Green sourcing considerations

- NB part of sourcing strategies
- Two components
- 1: purchase of materials and items that are recyclable
- 2: environmental + liability issues associated with the use and discharge of hazardous materials across the supply chain.
- Consumers put pressure on firms to produce goods and services in a sustainable way
- Three items in CSR: people, planet, profit
- People aspect focuses on providing good, safe, and healthy working conditions
- Planet aspect focuses on efficient use of natural resources
- Profit aspect focuses on finances

Evaluating potential suppliers

- Is the supplier or product being bought strategically important?
- Are there other short-term alternatives available?
- Evaluating supplier performance: potential supplier may already have a record with the buying firm
- Supplier Surveys: number of questions
- Financial condition analysis: financial stability of supplier analysed by means of key financial metrics and ratios (credit ratings also used)
- Third – party evaluators: independent and trained third-party firms conduct an analysis of potential suppliers
- Evaluation conference: buying firm and supplier meet and discuss more detailed issues
- Supplier's facility visits: reveals interesting things. Attitude and tidiness
- Analysis of Capabilities: thorough analysis of various capabilities should be conducted:
 - 1: process and design capabilities
 - 2: management capabilities
 - 3: quality management capabilities
 - 4: analysis of capacity
 - 5: analysis of information technology capability
 - 6: analysis of price and cost
 - 7: sustainability and environmental compliance

SUPPLIER SELECTION

Weighted points evaluation model uses different performance categories that are weighted according to importance.

Specific evaluation categories selected on base of NB to firm.

Weight allocated to each evaluation category.

Rated 1-5.

REACHING AGREEMENT WITH SUPPLIERS

1. Competitive bidding

- Request for bids from suppliers
- Request for quotation: formal request for qualified suppliers to prepare bids based on terms and conditions of buying firm. Tendering process.
- Open tender can bid where closed tender is limited to prequalified suppliers
- Used when there are very clear specifications about what is needed
- Request for proposal: used when there are more complex requirements than for an RFQ.
- Price considered and negotiated

2. Negotiations

- Bargaining process between a buyer & seller seeking to reach mutual agreement on aspects such as price of product or service that will be delivered.
- They can be ADVERSIAL NEGOTIATIONS: typically take place when there no ongoing relationship between buyer and supplier and quick solution is required
- They can also be COLLABORATIVE NEGOTIATIONS: take place when long-term + stable business relationship are required between buyers and sellers. Focus on interests of all parties

3. Contracts

- Signed with selective suppliers

- Deliverables: specified in a way that typically answers when/where/how questions. Clear about when ownership is transferred and risks associated with contract
- Terms of the contract: will it be a spot contract or termly
- Contract pricing agreements: pricing set during bidding process and whether the price will be fixed or dependent on fluctuations
- Penalty clauses and dispute prevention: eliminate any uncertainty and unnecessary conflict.

Supplier Relationships

Arms-length or transactional relationship: short-term and adversarial in nature. Not concerned with well-being and it's a win-lose relationship.

Collaborative Relationship: provides significant benefits to both parties and built on mutual trust/shared risks.

Supplier Performance Monitoring and Improvement

Manage performance and enhance the relationship of the supplier. Key performance indicators and measurement categories:

1. Price and Cost: how do prices compare to market
2. Quality: suppliers defect rate and quality standards/damage
3. Timeliness and responsiveness: on time with deliveries and reasonable change requests
4. Order completeness and correctness: has the supplier delivered the right order and delivered as per order
5. Social responsibility: do they develop the community and protect the environment?
6. Regulatory compliance: to what extent is supplier working within legal standards guidelines

Order of measurement performance: $(\text{total orders} - \text{error orders}) / \text{total orders} \times 100$

Supplier Development

Buyers trying to help suppliers improve performance

1. Make product or service in house
2. Find and select new supplier
3. Develop and help suppliers improve performance

THE PURCHASING CYCLE



Recognition and Description of a need

Ordering

- Purchase order released
- Purchase order is a simple document that authorizes a supplier to deliver a product/service
- Includes ts and cs
- Released electronically

Follow-up and expediting

- Supply management professional must follow up on orders placed
- If trustworthy = minimized

Receipt and Inspection

- Goods received and inspected to ensure that the right quantity of the product have been delivered with no damages in transit.

Invoice clearing and payment

- Buyer issues an authorization for payment so that supplier can be paid
- Payment done through accounts payable department

Maintenance of records

- Purchase recorded in the supplier performance database, which accumulates critical performance over extended period

Integrity and ethics in supply management

Ethical sourcing means that products and services are sourced in a responsible and sustainable way

Unethical behaviour:

1. Reciprocity: when a buying firm gives preferential treatment to suppliers who are also customers
2. Personal Buying: when purchasing department purchases materials or goods for personal needs of employees
3. Accepting supplier favors: gifts from supplier
4. Sharp Practices: requesting bids from unqualified suppliers
5. Financial Conflicts of interest: direct financial interest in suppliers' firm