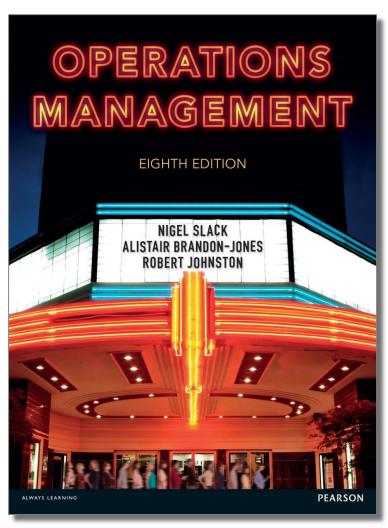
## **Operations management**

8<sup>th</sup> edition

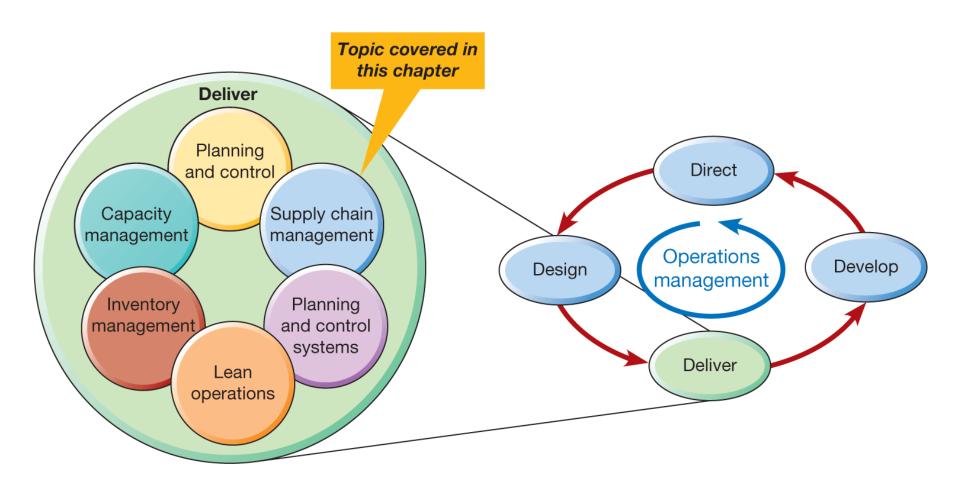


Chapter 12

Supply chain management



## Figure 12.1 This chapter examines supply chain management





### **Key questions**

In Chapter 12 – Supply chain management – Slack et al. identify the following key questions...

- What is supply chain management?
- ☐ How should supply chains compete?
- How should relationships in supply chains be managed?
- ☐ How is the supply side managed?
- □ How is the demand side managed?
- What are the dynamics of supply chains?

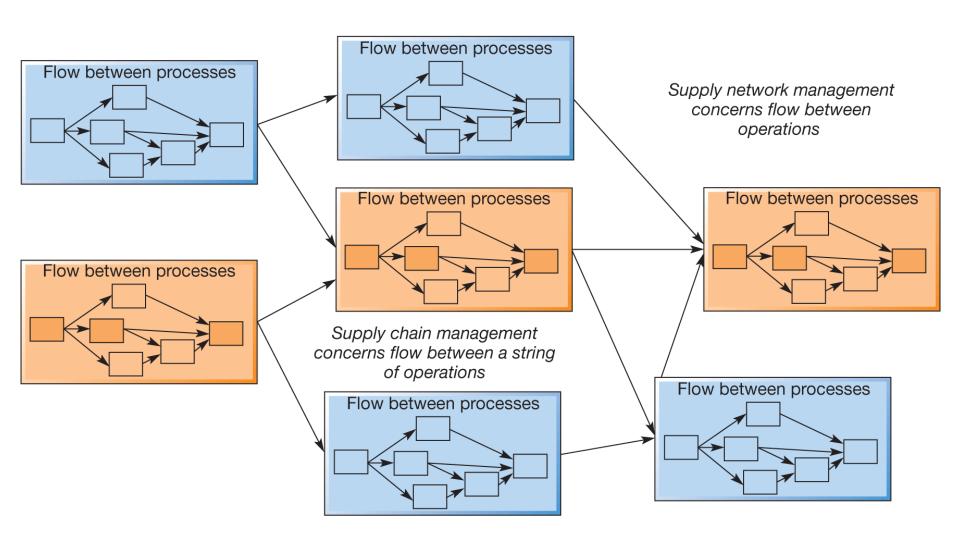


### What is supply chain management?

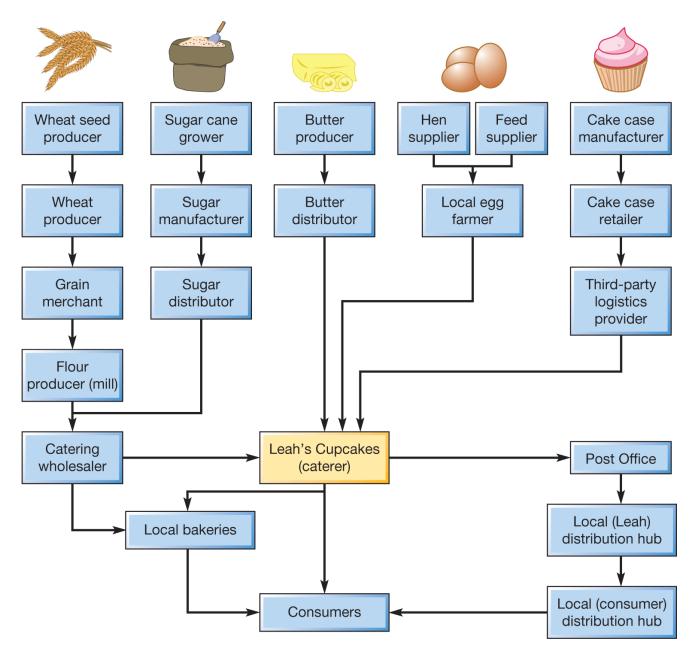
'Supply chain management is the management of the interconnection of organizations that relate to each other through upstream and downstream linkages between the processes that produce value to the ultimate consumer in the form of products and services'.



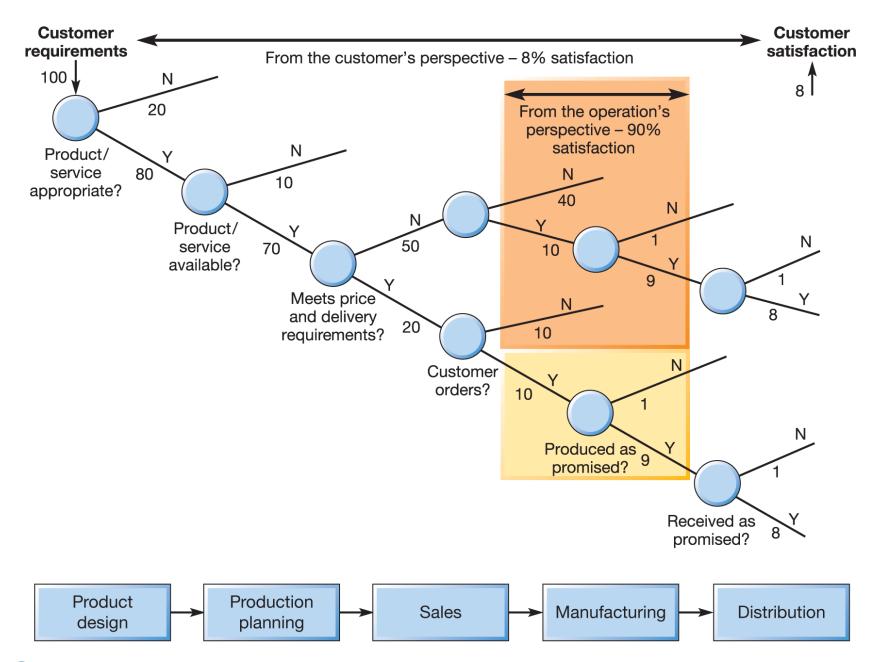
### **Supply chain management**











## Factors for rating alternative suppliers

Short-term ability to supply	Long-term ability to supply		
<ul> <li>Range of products or services provided</li> </ul>	Potential for innovation		
<ul> <li>Quality of products or services</li> </ul>	Ease of doing business		
Responsiveness	Willingness to share risk		
Dependability of supply	<ul> <li>Long-term commitment to supply</li> </ul>		
Delivery and volume flexibility	Ability to transfer knowledge as well as products and services		
<ul> <li>Total cost of being supplied</li> </ul>	Technical capability		
Ability to supply in the required quantity	Operations capability		
	Financial capability		
	Managerial capability		

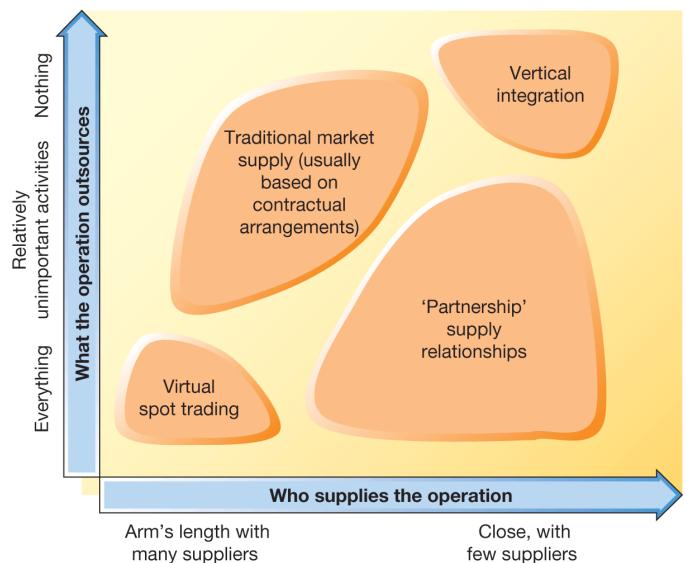


# Table 12.1 Weighted supplier selection criteria for a hotel chain

Factor	Weight	Supplier A score	Supplier B score
Cost performance	10	$8 (8 \times 10 = 80)$	$5 (5 \times 10 = 50)$
Quality record	10	$7 (7 \times 10 = 70)$	$9 (9 \times 10 = 90)$
Delivery speed promised	7	$5 (5 \times 7 = 35)$	$5 (5 \times 7 = 35)$
Delivery speed achieved	7	$4 (4 \times 7 = 28)$	$8 (8 \times 7 = 56)$
Dependability record	8	$6 (6 \times 8 = 48)$	$8 (8 \times 8 = 64)$
Range provided	5	$8 (8 \times 5 = 40)$	$5 (5 \times 5 = 25)$
Innovation capability	4	$6 (6 \times 4 = 24)$	$9 (9 \times 4 = 36)$
Total weighted score		325	356



# Figure 12.7 Types of supply network arrangement





# Figure 12.8 Supply arrangements are a balance between contracting and relationships

'Market-based' or 'transactional' supply arrangements

'Partnership' supply arrangements

Emphasis predominantly on relationships

Emphasis predominantly on contracting



# Figure 12.9 The value of partnership relationships

### Characteristics of partnership relationships

- High levels of trust
- Collaborative problem solving
- Frequent and effective communication
- Higher degree of mutual understanding
- Early conflict resolution
- Understanding of different cultures and competencies
- Emphasis on joint problem solving during failure episodes rather than assigning blame



#### **Dimensions of relationship value**

- Reduced transaction costs
- Reduced cost of compliance monitoring
- Generation of increased value through leveraging shared competencies
- Fewer quality failures and unanticipated failures
- Early failure identification and problem resolution





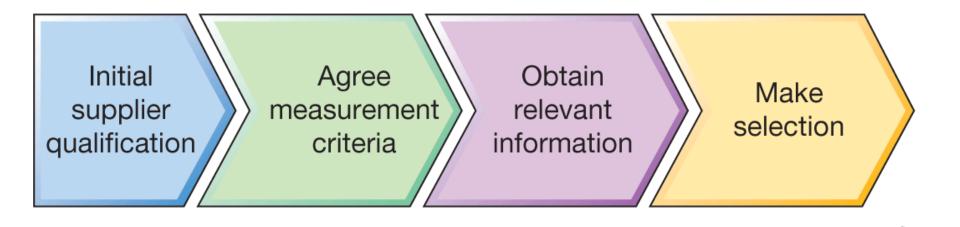
### 'Functional versus 'innovative' products

### FUNCTIONAL INNOVATIVE

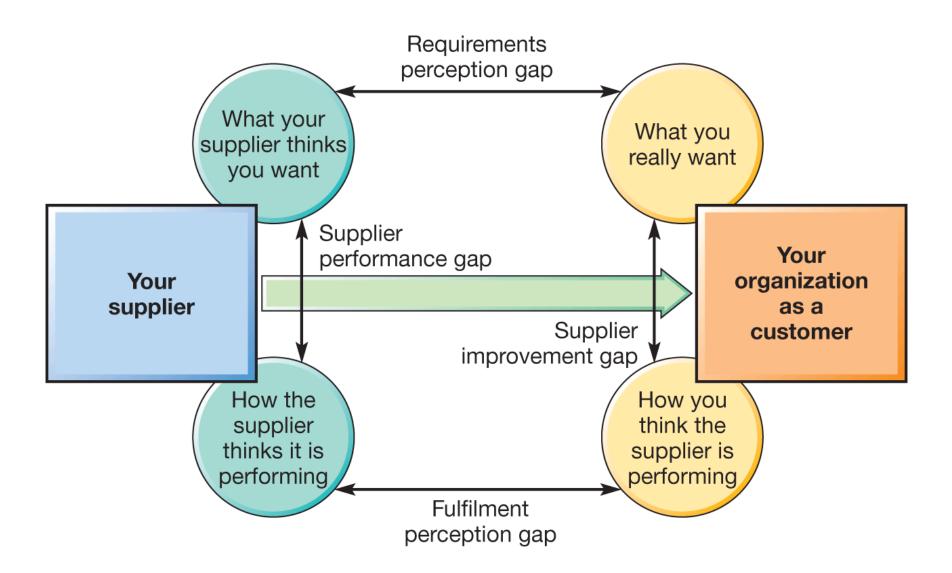
Product	Bucket	Bread	Mobile phone	Fashion handbag
Time between new product/ service introductions	10 yr+	1 yr–10 yr+	1yr–18 months	3–6 months
Profit margins	Tiny	Small	Very high	High
Volume and variety	High/very low	High/low	Moderate/ moderate	Moderate/ moderate
Demand volatility and uncertainty	Very low	Very low	Moderate	Moderate-high



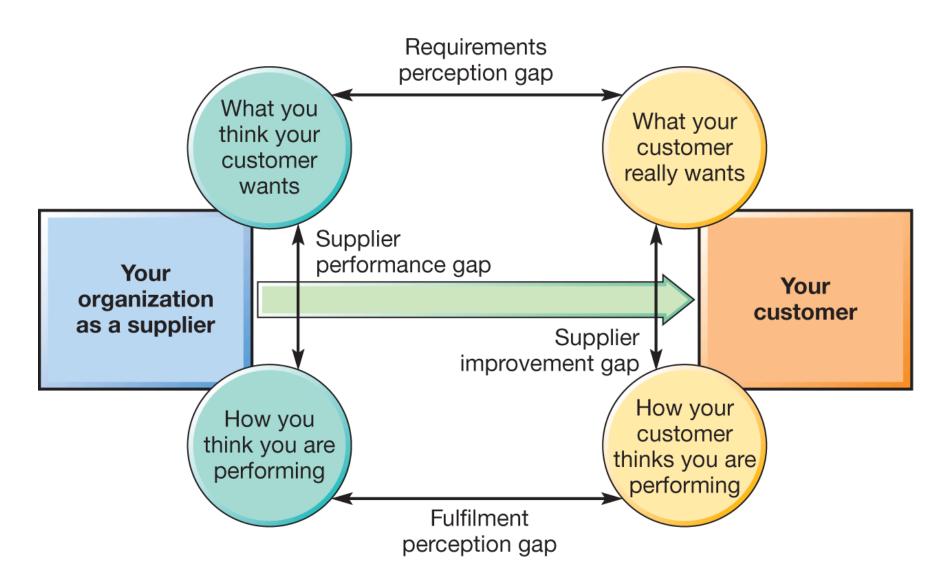
## Figure 12.11 The supplier selection process













Second-tier supplier Third-tier supplier First-tier supplier Original equipment mfr **Period Demand** Prodn. Prodn. Stock Stock Prodn. Stock Prodn. Stock Orders Orders Orders [ Orders OEM Market Items Items Items Items



### The bullwhip effect

