CHAPTER 2

Putting the end-customer first

Objectives

The intended objectives of this chapter are to:

- **develop the marketing perspective on supply chain management;**
- **explain how customer segmentation works, and to emphasise its importance to logistics;**
- **explain the connection between quality of service and customer loyalty;**
- **show how current segmentation practice can be re-engineered to set logistics priorities.**

By the end of this chapter you should be able to understand:

- **how supply chains should compete by aligning logistics strategy with marketing strategy;**
- **how to use logistics strategy drivers to help redefine segments to achieve this alignment.**

Introduction

In Chapter 1 we looked at the logistics task from a perspective of material flow and information flow. We also saw how logistics contributes to competitive strategy and the performance objectives by which we can measure this contribution. But what is it that drives the need for flow in the first place? The key point to recognise here is that it is the behaviour of the end-customer that should dictate what happens. As stated in Chapter 1, the end-customer starts the whole process by buying finished products. It is this behaviour that causes materials to flow through the supply chain. Only end-customers should be free to make up their minds about when they want to place an order on the network – after that, the system takes over.

Quality of service addresses the process of handing over products and services into the hands of end-customers. Only after this process has been completed does the product/service reach its full value. And the handover process offers many opportunities for adding value. Instead of picking up a product from a distributor who is remote from the focal firm, there are opportunities during the sales transaction (for example, help and advice in using the focal firm's products), as well after the sales transaction (for example, after sales service and warranty).

This chapter probes the link between marketing strategy and logistics strategy. It introduces this link, and shows how it is possible to identify logistics priorities – the tasks at which logistics needs to excel.

Key issues

This chapter addresses four key issues:

1 **The marketing perspective:** the impact of rising customer expectations and the information revolution.

2 **Segmentation:** and its implications for logistics strategy.

3 **Quality of service:** the link between customer satisfaction and customer loyalty.

4 **Setting priorities for logistics strategy:** creating advantage by redefining segments in logistics terms.

2.1 The marketing perspective

***Key issue:* What are the marketing implications for logistics strategy?**

'Marketing' is a philosophy that can be applied to the network as a whole. Adapting Doyle's (1994) definition,

> **Marketing is the philosophy that integrates the disparate activities and functions that take place within the network. Satisfied [end] customers are seen as the only source of profit, growth and security.**

Marketing in practice is a series of plans and decisions that determines how the philosophy will be actioned.

'Satisfied customers' are increasingly hard to find. This has been caused by widespread changes that are affecting the world we live in. Two of the major changes are rising customer expectations and the information revolution (Doyle, 2000). We expand on these below. Sir Terry Leahy, Chief executive of Tesco plc, talks of harnessing customer power (2005):

> **The basic assumption that customers choose – that they know best what they want – means that they have become the centre of the retailer's universe. In the best businesses, their decisions drive everything. These choices are also judgements. They pick the winners and losers in retail and in manufacturing. This is not theoretical: they regularly pass verdicts, moving from product to product and store to store. These judgements send strong feedback – shocks might be a better word – forcing change.**

In Chapter 1, we referred to 'tier 1 customers' with whom a focal firm deals directly, and to 'end-customers' who are the individuals or businesses that buy the finished 'product' at the end of the supply network. It is therefore usual to refer to two types of customer:

- *business customers*: who represent the focal firm's immediate trading environment (see Figure 1.2)
- *end-customers*: who represent the ultimate customer for the network as a whole (see Figure 1.4).

We refer to these types of relationships as 'business to business' (B2B) and 'business to customer' (B2C) accordingly. In section 1.2.2 of Chapter 1, we referred to the need to integrate supply chain processes so that they are aligned towards end-customer needs. In this sense, B2B integration should be aligned towards the ultimate B2C process.

We also need to distinguish here between customers and consumers. Webster (2000) defines them thus:

- *consumers* are people who use or consume the product;
- *customers* are individuals or businesses who buy the product, meaning that they acquire it and pay for it.

It is usual in business today to refer to 'customers' as the next process in a supply chain. This includes 'all types of marketing intermediaries or channel members who buy for resale to their customers' (Webster, 2000).

2.1.1 Rising customer expectations

Expectations have risen among customers in line with a general increase in the wealth of developed countries over the latter half of the twentieth century. This increase in expectations has many causes, including:

- better levels of general education;
- better ability to discern between alternative products;
- exposure to more lifestyle issues in the media.

These expectations have led to customers not only aspiring to more desirable products, they are also demanding much better levels of service to be associated with those products.

Businesses are also expecting more from their suppliers. Suppliers need to pay increasing attention to the service aspects of their dealings with industrial customers. This is especially true when the customer has implemented more customer-centric management systems such as just-in-time (Chapter 6).

2.1.2 The information revolution

Of the many technological advances in recent years, the explosion in applications of Internet technology is having the most sweeping effects. Our study of the future impact of buyer–supplier Internet-enabled exchanges (Daniel *et al.*, 2003) highlighted three areas:

- *Procurement, supply chain management and new product development.* Exchanges are helping to reduce cycle times and to remove errors and duplication. Suppliers benefit mostly from reduced transaction costs, enhanced marketing presence and reduced errors. However, buyers are expected to reap greater benefits – particularly in the areas of procurement (reductions in the cost of goods,

in transaction costs, and in procurement cycles) and of supply chain management.

- *Buyer–supplier relationships*. Exchanges are increasing the level of trust between buyers and suppliers, which is key to good trading relationships. Rather than leading to an increase in the number of suppliers used by buyers, e-hubs are encouraging the continued trend of supplier rationalisation – resulting in longer-term relationships with remaining suppliers. The increased ability to share information between buyers and suppliers made possible by the use of e-hubs will result in increased joint problem solving. This will accelerate the trend of supplier-led innovation and increased outsourcing to suppliers.
- *Impact on industry structure*. Exchanges are contributing to the trend of reducing the number of manufacturers and suppliers in most sectors. Exchanges encourage the use of open book accounting, and reduce the traditional mark-ups associated with multi-tier supply chains. They support the trend of tier 1 suppliers acting as service providers and directing a network of subsuppliers.

Faced with rising customer expectations and the information revolution, supply chain partners are increasingly asking how they can act together to meet these challenges. The starting point is to analyse needs and wants in order to satisfy a supply chain's end-customers. The marketing perspective has a well-known way to help in this analysis – segmentation.

2.2 Segmentation

Key issue: **What is segmentation, and what are its implications to logistics strategy?**

Segmentation describes how a given market might be broken up into different groups of customers with similar needs. It means 'describing the market as simply as possible while doing our best to emphasise its variety' (Millier and Palmer, 2000). We start by considering market segmentation from a *customer* perspective in what are usually described as 'fast-moving consumer goods (FMCG)' markets. For example, segmentation of the market for suntan creams and lotions would begin with an understanding of:

- the benefits wanted (e.g. water resistance, oil/non-oil, sun factor);
- the price consumers are prepared to pay;
- the media to which they are exposed (television programmes, magazines, etc.);
- the amount and timing of their purchases.

Profiles of the segments and evaluation of their relative attractiveness to the focal firm can then be developed.

There are many possible ways in which markets can be segmented, including:

- *demographic*: such as age, sex and education;
- *geographic*: such as urban v. country, type of house and region;

- *technical*: the use that customers are going to make of a product;
- *behavioural*: such as spending pattern and frequency of purchase.

Of the various ways to segment markets, we have found that behavioural segmentation, which 'divides buyers into groups based on their knowledge of, attitude towards, and use of or response to a product' (Kotler and Keller, 2006) is a powerful way to bridge marketing and logistics. It is vital that the definition of segments is not a marketing-only task, but that logistics is involved. The key point is that there is no point in defining segments that cannot be served because logistics capability does not exist. For example, if most of the spending pattern is around Christmas, then logistics must be capable of supporting the huge surge in demand at that time. Case study 2.1 explains how a retailer views its behavioural segments.

CASE STUDY 2.1

Managing events and promotions in the retail sector

If consumers only purchased their requirements in line with their use, then it would be relatively easy to reorganise the end-to-end supply chain from shelf to national warehouse using lean principles (see Chapter 6). A simple demand–pull system replenishing tomorrow that which has been sold today, direct to shelf, would streamline store operations and reduce inventories significantly. Retailers like Wal-Mart in the United States and Tesco in Britain have pursued an everyday low price policy in an attempt to maximise this 'steady state' replenishment policy. However, in Europe, most retailers have found that customers enjoy promotions and that promotions boost sales. In any case, events like Christmas and back to school create huge surges in demand.

Events may be divided in two: seasonal events and promotional events, as shown in Table 2.1:

Table 2.1 Example seasonal events and promotions

Seasonal events	Promotions
• Valentine's Day • Mother's Day • Summer holidays • Back to school • Christmas	• Three for two • Buy one get one free • 10% off for a week • Happy hour – 20% • Triple loyalty card points • Gift with purchase

Retailers have no control over the timing of seasonal events and it is usually very difficult to forecast likely demand with normal levels of accuracy. In contrast, promotional events are planned by retailers and their suppliers. Consequently, while demand may be unpredictable, the timing of such events is known in advance. It is surprising, therefore, how often consumers will find that items on promotion are not on the shelf and that display aids and promotional material will be missing. The event which has the greatest effect is Christmas – where sales usually start growing in October, ramp up in November and peak in December. This is the *only* profitable quarter for many retailers. The product is frequently sourced from the Far East and once the order has been delivered there will be no further shipments. Retailers need to plan for this activity months in advance and cross their fingers that they will not miss sales through under-ordering

or buy too much with the consequent write-downs in the January sale. The position is further complicated in a national chain where demand patterns will be different store by store and region by region.

Many retailers allocate their Christmas merchandise to individual stores on the basis of previous year's sales for the particular product category and hope for the best. A lean design supply chain is unable to cope with such spiky demand, which will be affected further by marketing efforts and the latest fad. Retailers therefore need to be particularly agile in their approach in order to satisfy unknown demand.

Boots The Chemists (BTC) – the leading UK health and beauty retailer – has approached this problem by outsourcing specific Christmas merchandise deliveries. These deliveries are scheduled at different times of the day from 'normal' deliveries. In this way, while not dealing with the issues created by unpredictable demand, store operations can apply appropriate resources to unload vehicles and put away directly to shelf or indirectly to stockroom. Historically, promotional events in BTC were a fairly hit and miss affair with hundreds of products being promoted within a four-week window. There was a high reliance on good luck for all the elements to come together prior to the start of the promotional period. Inevitably some products, display aids and show material arrived late. Store operations at the end of the supply chain then had to try and mount the promotions with what had been delivered. Consumers were dissatisfied with the result and sales were lost.

The solution was to create a dedicated promotions team within the categories. The team masterminded the overall promotional plan and were made responsible for the delivery of products, display aids and show materials into the national distribution centres (NDCs). A successful trial was then conducted whereby most of the work required to mount the promotion was done by logistics staff in the regional distribution centres (RDCs) for each of the individual stores.

The trial comprised sending allocations of all the promotional requirements to the RDCs from the NDCs. Staff in the RDCs then picked products for a week's anticipated sales (based on historical data for that line by individual store) into totes for direct-to-shelf delivery together with appropriate display aids and show material. The totes were then placed on dollies, rolled on and off vehicles, and wheeled into the shop to the correct gondola end (end of free-standing 'island' shelf in a store). After three days, EPOS data was reviewed, and an accurate prediction of future sales to the end of the promotion was made. This was then used to calculate future replenishment requirements. Finally the merchandising teams were invited to devise clever ways to make shelves look full at the end of the promotion without using a lot of stock. This resulted in fewer 'remainders' from a promotion that had to be written down. BTC is currently implementing its design for a transformed end-to-end supply chain and the work described above is being gradually rolled out.

(Source: Philip Matthews, formerly Supply Chain Director, BTC)

Questions

1 List the logistics challenges of mounting promotions and events at a retailer such as BTC.

Activity 2.1

Figure 2.1 shows a Pareto analysis of the annual sales to 886 customers in the portfolio of a book stockist. What actions should the stockist take to segment its market? How could each segment best be served? What are the operational implications for the stockist? (Check out Chris Anderson,' 'The Long Tail' at http://www.thelongtail.com/about.html)

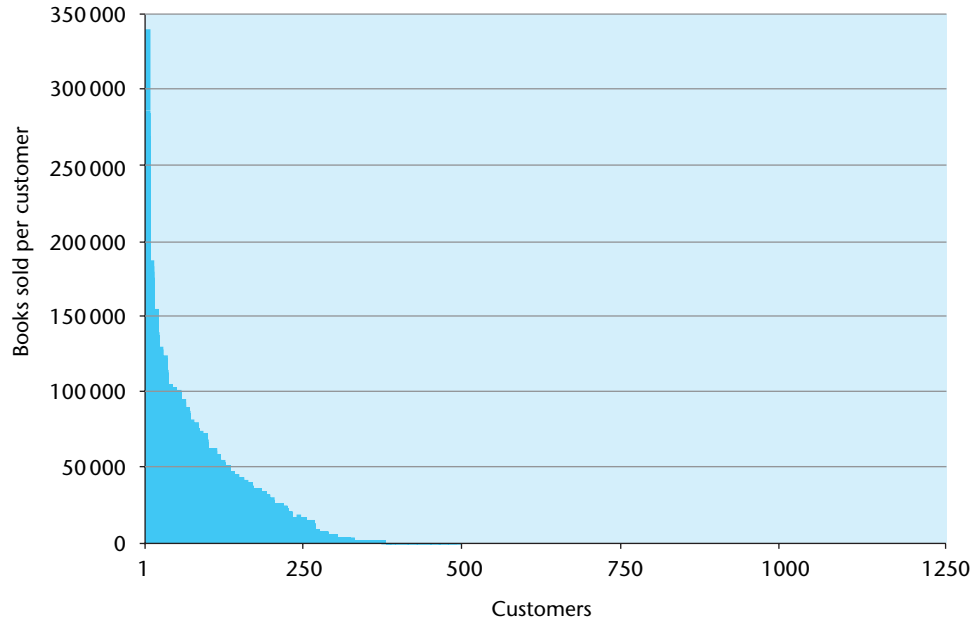

Figure 2.1 Annual sales per customer for a book distributor, shown as a Pareto diagram

The important characteristics of segments (McGoldrick, 2002) are that they must be:

- *measurable*: variables that can be easily identified and measured;
- *economically viable*: capable of producing the contribution that justifies the effort and cost of marketing;
- *accessible*: geographically or in terms of media communications;
- *actionable*: can be attracted and served effectively.

The next step is to select target segments and to identify how a focal firm is going to win orders in each. In other words, to define *differential advantage* that distinguishes our offerings from those of our competitors. In logistics terms, the important issues here are the order winning criteria (OWC), and qualifying criteria (QC) for the target segments. These help in turn to define the *marketing mix*.

The marketing mix is the set of marketing decisions that is made to implement positioning strategy (target market segments and differential advantage) and to achieve the associated marketing and financial goals. The marketing mix has been popularly termed the '4 Ps' (McCarthy, 1964):

- *product*: range, sizes, presentation and packaging, design and performance;
- *price*: list price, discounts, geographical pricing, payment terms;
- *promotion*: sales force, advertising, consumer promotion, trade promotion, direct marketing;
- *place*: channel selection, market coverage, distribution systems, dealer support.

Logistics contributes fundamentally to the 'place' decisions, as well as supporting 'product' and 'promotion' decisions. All too often, 'place' activities are viewed as the bit bolted to the back of production that gets inventory away from the factory and into stock-holding points such as warehouses. In order to achieve the goal of 'the right product in the right place at the right time', logistics systems and processes need to be designed to support products in the marketplace.

Segmentation principles can also be applied to industrial marketing. But 'there are distinct differences between the marketing of industrial products and consumer goods' (Millier and Palmer, 2000: 60), as summarised in Table 2.2.

Table 2.2 Comparison between consumer and industrial marketing

	Consumer	Industrial
Customers	Many, widely dispersed	Few, concentrated
Market	Consumers directly served by retailers and distributors	Derived demand Industrial chain, long and complex
Buying behaviour	Individual and family decision	Group decision Formal procedures High buyer power
Relationships	Low individual buying power	Formal procedures High buyer power
Product	Standard Positioned on emotional and perceptual factors	Technical complexity Specification important Bespoke and customised
Price	Low unit price Take it or leave it No negotiation	High unit price Tender and negotiation Standard items from price list
Promotion	Mass media advertising Role of the brand	Emphasis on personal selling Reputation important
Place	Established retail chain Stock availability Seasonality	Direct Made to order Standard items in stock

Let us turn to an industrial marketing example to illustrate how new segments can impact on logistics capability.

CASE STUDY 2.2

Powerdrive Motors

Tom Cross took over as Managing Director at Powerdrive Motors in South Africa three years ago. At the time, the company was an established manufacturer of small electric motors with a strong reputation for product reliability and technical leadership. On the

downside, it was also regarded in the trade as having high prices and variable delivery. Tom's first task was to tackle the huge product variety on offer. He saw this as the major problem in addressing the negative views in the marketplace, and also saw opportunities in streamlining design and production. The product range was replaced with a new generation of designs based on a few hundred 'modules', which could be assembled in many different combinations to give variety at low cost. This meant the loss of some customers who had gone to Powerdrive because they could rely on the company's technical leadership to produce designs that suited their particular needs. This was not considered important because the combined sales volume of such customers was under 5 per cent.

Using the new designs, Tom was now able to reorganise the factory into cells that produced major subassemblies such as rotors and stators. The work flow was transformed, and manufacturing throughput time was reduced from six weeks to just four days. Cost improvements meant that average price reductions of between 10 and 15 per cent could be offered.

Powerdrive's customer service policy was redrafted to offer quotations within a maximum of one hour of any enquiry, and for deliveries of finished product to be made within one week 'anywhere in northern Europe'. This new policy was explained to internal sales staff, and to sales representatives and agents employed by the organisation. If 'old' customers wanted special designs that were no longer in the range, the sales staff were instructed to explain Powerdrive's new policy and to politely decline the order.

At first, business soared. Impressed by the lower prices and short delivery times, customers flocked to Powerdrive and sales jumped by 50 per cent. But then things began to go sour. First, the factory could no longer cope with the demands being placed on it. The addition of a large order for lawnmower motors blocked out a lot of production capacity from January to June. Order lead times during this period in particular slid back to former levels. Second, a Brazilian supplier spotted the opportunity to enter the market with prices that undercut Powerdrive by 20 per cent. While only half of the product range was covered by this new entrant, it was the high volume products that were especially threatened. Further, the new competitor offered three-day lead times from stock that had been established in Europe. Third, some of the former customers who could no longer obtain their bespoke designs from Powerdrive were complaining within the industry that Powerdrive's technical leadership had been sacrificed. Although small in number, such customers were influential at trade fairs and conferences.

Questions

1 Evaluate the changes that took place in the segmentation of Powerdrive's market.

2 Characterise the changes using the concept of order winners and qualifiers.

Segmentation is often undertaken by adopting the easy way to group customers – by account size. While this is easily measurable, it fails on the fourth of McGoldrick's criteria listed above – it is not actionable in logistics terms. An example from our research in the FMCG sector illustrates the problems of poor alignment between marketing and logistics.

CASE STUDY 2.3

Segmentation at CleanCo

CleanCo is a Polish manufacturer of cleaning products that serves the European grocery retailing market. CleanCo currently segments its customers on the value of customer accounts. The primary division is between *national accounts*, for which 10 accounts constitute 70 per cent of sales by value, and *field sales,* which comprise a long 'tail' of more than 200 accounts that together make up only 30 per cent of sales. Due to the size of the field sales structure, a secondary classification groups accounts by channel type: neighbourhood retail, discount and pharmacy. CleanCo recognises the need to reduce the long customer 'tail' and is introducing distributors for orders below a minimum quantity. CleanCo's current approach to segmentation is summarised in Table 2.3.

Table 2.3 CleanCo – Current approach to market segmentation

National accounts	**Field sales**		
70% sales	30% sales, 200+ accounts		
10 accounts	**Neighbourhood retail**	**Discount sector**	**Pharmacy**

While CleanCo currently segments its retail customers by account size, its sales organisation has identified two significant types of buying behaviour displayed by the customer base, shown in Table 2.4:

- *volume-driven* buying behaviour;
- *margin-driven* buying behaviour.

Volume-driven customers are keen to capitalise on both product and supply chain cost savings in order to pass them on to their customers to drive volume sales. There are two variants of the volume-driven behaviour:

- everyday low price (EDLP);
- discount.

Retailers pursuing an EDLP strategy strive for continuous price reduction from suppliers like CleanCo to drive a fairly consistent, high volume of sales. This should result in a relatively stable pattern of demand in the washing and bathing sector. Discounters on the other hand are looking for bargains so they can 'stack 'em high and sell 'em cheap', a strategy more likely to result in a volatile demand pattern. Margin-driven customers are keen to add value for their customers by offering a wide selection of products and value-adding services. This strategy also results in a relatively stable demand pattern in this sector.

Table 2.4 CleanCo – potential for behavioural segmentation

Volume-driven	**Margin-driven**
Every day low price (EDLP)	
Discount	

A complicating factor when trying to deconstruct the buying behaviour of CleanCo's customers is that several secondary factors are used to support products in the marketplace. Such factors include product types (e.g. premium, mid, utilitarian), product range (e.g. current products, end of lines, 'b' grade), merchandising requirements (e.g. category captains) and promotions strategy (e.g. roll-back, 12-week, 4-week, Hi-Lo). Promotions are by far the most disruptive of these factors. Although the promotions are generally planned well in advance with the retailers, they cause significant disruption to the supply chain operations due to the peaks and troughs in demand that they create. Furthermore, the deeper the promotional activity the greater the volatility created and the greater the disruption to the supply chain. This has the effect of masking what is fundamentally a fairly stable demand pattern with somewhat artificial volatile demand.

Strategic alignment can only be achieved if the supply chain is aligned behind the segmentation strategy that CleanCo has adopted. This is not currently the case with the CleanCo supply chain. Each operation within the supply chain makes decisions or segments its customers based on the functional criteria that affect its part of the supply chain. We have called this lack of alignment 'matrix twist', because the matrix of business processes at each stage of the supply chain has been apparently twisted so that the processes fail to fit with each other. As illustrated in Table 2.5, the decision criteria for CleanCo and its suppliers and customers change at each stage. This not only complicates material flows, but becomes a minefield if one considers it in terms of behavioural segments.

Table 2.5 Supply chain segmentation criteria

Management process	Supply chain decision	Determined by
Source	Which suppliers?	Raw material commodity type
Make	Which manufacturing site?	Product family type
Deliver	Which manufacturer warehouse?	Historically a function of order size
		In process of being divided by export paperwork requirements and customer account (arbitrary split)
	Which customer RDC?	Product type and location of store to serve
	Which products to which store?	Demographics of the store's catchment area, which drives layout and range decisions

(Source: Godsell and Harrison, 2002)

We develop the management processes 'source', 'make' and 'deliver' in the next chapter.

Questions

3 What has caused the 'matrix twist' between CleanCo and its retail customers?

4 What actions are needed to straighten out the 'matrix twist'?

2.3 Quality of service

Key issues: **How do customer expectations affect logistics service? How does satisfaction stack up with customer loyalty?**

Most supply chains that involve physical products end with *service* processes such as retailing (grocery or apparel), healthcare (pharmaceutical and other medical goods) and distribution (motor cars). Service processes mean that the customer is present in some way, although distribution through web-based shopping, telephone and mail order mean that customers do not have to be physically present. Performance of service processes often differs between employees, between customers and from one hour to the next. If you want good service from the local supermarket, do not go on Saturdays or near to Christmas when the service is under severe capacity pressure: on-shelf availability is at its lowest, and queues at the checkout are at their longest. The key point is that 'service is the combination of outcomes and experiences delivered to and received by the customer' (Johnston and Clark, 2005).

Quality of service takes place during service delivery, which is the interaction between the customer (B2B or B2C) and the service process. 'Gaps' can emerge between what the service is supposed to be, what the customer expects it to be, and how the customer perceives it when it is delivered (Zeithaml *et al.*, 1988, Parasuraman *et al.*, 1991). We can illustrate these gaps as a simplified gap model (Figure 2.2):

- *Gap 1* refers to differences between customer expectations and how these have been developed into a service specification by the supplier.
- *Gap 2* refers to differences between how the specification was drawn up and how it was delivered.
- *Gap 3* refers to differences between what the customer expected and what s/he perceived was delivered.
- *Gap 4* refers to differences between how supplier and customer perceived the service delivery.

Gaps in quality of service can arise, as seen in the IKEA case study.

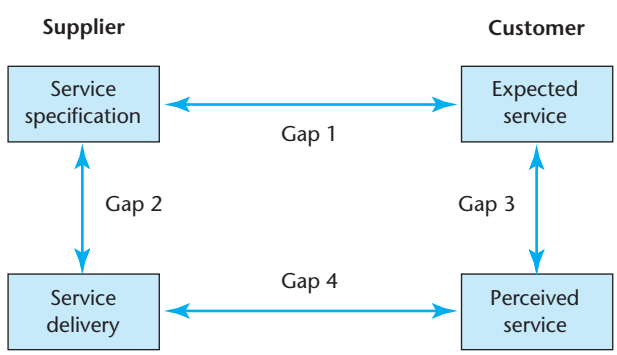

Figure 2.2 **Simplified service quality gap model**

(Source: After Parasuraman *et al.*, 1991)

CASE STUDY 2.4

Tears at teatime at IKEA

Next week, Jane Fillimore will move into a new flat. You can tell something about the 28-year-old music-industry publicist from Kilburn, north-west London, from the list of furniture she is buying. There is the Pax Brivic wardrobe, the Norden dining table and the Bonde media storage combination. Fillimore wants style – but on a budget. She is part of Generation Ikea.

Not that she wants to be. She hates the Swedish retailer, and only last Sunday had her worst shopping day ever at the firm's superstore in a drab retail park near the new Wembley stadium in London.

She wanted to pick up the Pax Brevic wardrobe she had ordered the week before. Easy, you might think, but just getting served was an ordeal. When she entered the store, an assistant told her to 'walk the mile of hell' past wannabe-stylish urban living rooms to the giant storage zone.

The store did not have her wardrobe and a salesman sent her back through road works to IKEA's nearby distribution centre. The distribution centre had the wardrobe, but could not give it to her without a receipt. To get one, she had to go back to the main store. But the main store had lost her order, so she had to go to customer service. This department is not called customer service at IKEA, it's called customer returns, and it took her half an hour to find.

By 4.30 pm, Fillimore was right back where she started. Exasperated, she put her head in her hands and burst into tears. 'I don't even like the wardrobe', she sobbed. 'I bought it because it's cheap. That's the only reason I come here.' By 5.00 pm, the store is closing, and she can only dream of getting her wardrobe by Friday. She could walk back through the little sets that represent the nation's living rooms to try one last time to find her wardrobe, but she can't face it. As she walks out, I ask her if she knows that Argos and Sainsbury's (two other UK retailers) are selling furniture. For the first time all day, she breaks into a smile.

'Really?', she grins. 'I'll go there tomorrow. I never want to come back to this place again.'

(Source: Based on an article by John Arlidge, *Sunday Times*, 26 October 2003)

Questions

1 When IKEA was founded 60 years ago by Ingmar Kamprad, he realised that customers did not mind queuing, collecting their purchases and assembling the furniture themselves as long as the price was right. Suggest why gaps in quality of service have opened up.

2.3.1 Customer loyalty

While plugging gaps in service quality helps to improve customer satisfaction, this is a 'qualifier' for long-term customer loyalty. The two concepts are not the same. Piercy (2002) distinguishes them as follows:

- *Customer satisfaction* is what people think of us – quality of service, value for money. It is an *attitude* (how does a customer feel about our product/service?).

- *Customer loyalty* is how long we keep a customer (or what share of their business we take). It is a *behaviour* (do they buy from us more than once?).

Nevertheless, the attitude of customer satisfaction is key to the behaviour of customer loyalty. Parasuraman and Grewal (2000) link the two concepts by proposing the 'key drivers of customer loyalty', shown in Figure 2.3. Also, note the connection to Tesco's core purpose on page 6.

The benefits of customer loyalty are potentially huge. The loyal customer should be viewed in terms of lifetime spending potential. Thus, a customer of VW Audi Group could be viewed as worth €300k rather than the €30k of today's sales transaction. As Johnston and Clark (2005) put it, loyal customers:

- generate long-term revenue streams (high lifetime values);
- tend to buy more than new customers;
- tend to increase spending over time;
- may be willing to pay premium prices;
- provide cost savings compared with attracting new customers.

The logistics challenge is to support the development of customer loyalty by designing and delivering quality of service. Of the three drivers of customer loyalty shown in Figure 2.3, quality of service is 'essential for excellent market performance on an enduring basis' (Berry, 1999: 8–9). The rationale for this is that 'service quality is much more difficult for competitors to copy than are product quality and price'. Supporting product availability through such means as channel selection, market coverage, distribution systems and dealer support all help to nourish customer loyalty. So does logistics support of product characteristics (such as variety or product range) and of marketing initiatives (such as promotions).

2.3.2 Value disciplines

Figure 2.3 refers to 'perceived value'. A development of the service quality–product quality–price model is that of *value disciplines*. Instead of competing on all of these fronts equally, Treacy and Wiersema (1997) argue that companies taking leadership positions do so by narrowing their competitive focus, not by broadening it. They propose three strategies, or 'generic value disciplines' that can be followed:

- *Operational excellence*. Here, the strategy centres on superb operations and execution, often by providing a reasonable quality at low price. The focus is on efficiency, streamlining operations, supply chain management, everyday low price. Most large international corporations use this discipline.
- *Product leadership*. Here, the leaders are very strong in innovation and brand marketing and operate in dynamic markets. The focus is on development, innovation, design, time-to-market and high margins in a short timeframe. 'It was the ability of Apple to innovate in many spaces – getting the music companies to agree to 99 cent pricing, creating wonderful iTunes software, making a ter-

rific physical product, the iPod, that just works in your hand – that gave Steve Jobs his success. It was building an ecosystem of innovation, not just the iPod, that did it.' (http://www.businessweek.com/innovate/NussbaumOnDesign/)

- *Customer intimacy*. Here, leaders excel in customer attention and customer service. They tailor their products and services towards individual or almost individual customers. The focus is on customer relationship management (see section 2.3.3): they deliver products and services on time and above customer expectations. They also look to life-time value concepts, reliability and being close to the customer.

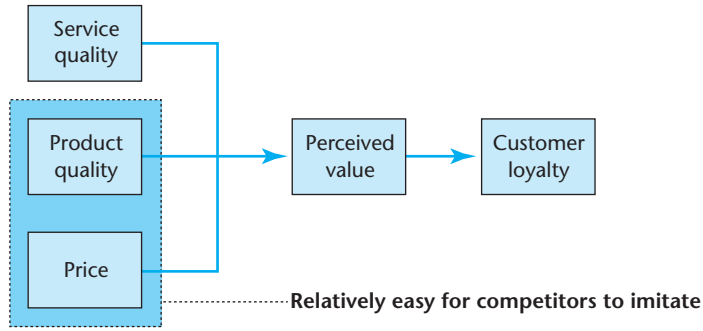

Figure 2.3 Key drivers of customer loyalty

(Source: After Parasuraman and Grewal, 2000)

While most organisations are under pressure to reduce prices, speed up delivery and improve customer service, the best will have a clear focus (page 27) as a key part of their competitive strategy. This focus needs to be improved and adapted over time.

Activity 2.2

Evaluate Treacy and Wiersema's value disciplines based on Porter's views on differentiating strategies (section 1.4.3).

2.3.3 Customer relationship management (CRM)

A development of customer intimacy is customer relationship management (CRM). The principle behind CRM is that marketing strategies are continuously extended in order to strengthen customer loyalty. Eventually, customer and supplier are so closely intertwined that it would be difficult to sever the relationship. In other words, the exit barriers become higher and higher. Figure 2.4 compares CRM thinking with traditional relationships that are limited to buying and selling functions of the organisations concerned (Payne *et al.*, 1995). We explore the issue of partnerships in the supply chain further in Chapter 9.

CRM software can be used to capture and monitor individual customer data from – for example – loyalty cards to enhance demand management (section 6.1.1). The next case study, Batman, illustrates the evolution of diamond-type relationships in an industrial setting.

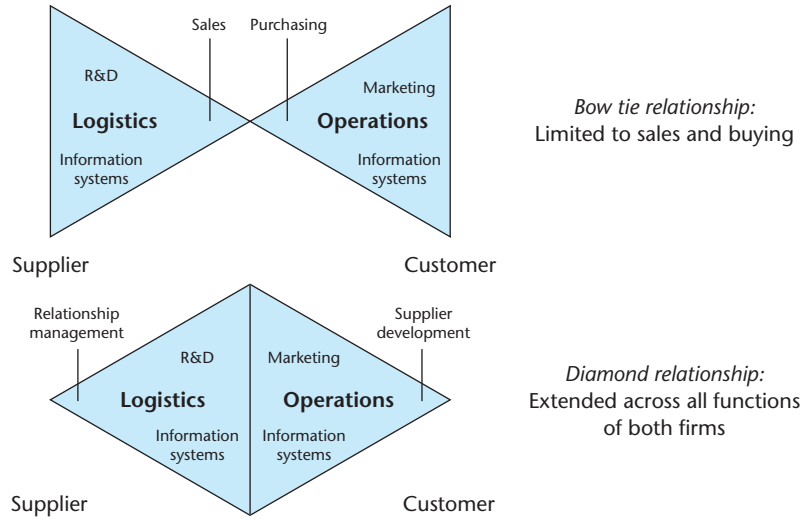

Figure 2.4 **Customer relationship management: bow tie and diamond**
(Source: After Payne *et al.*, 1995)

CASE STUDY 2.5

Batman – adding value through quality of service

Everglo Battery, the premier battery manufacturer and service provider in South Africa, looked back on the development of its marketing strategy in four stages. Each had been signalled by advancing the concepts of what is meant by 'quality of service'. Stage 1 had been the basic product: a sealed lead-acid battery for use in mining applications. Batteries were regarded by customers as a mature product and as a 'grudge buy'. Each year, the basic product was under heavy downward price pressure. Stage 2 had been the industry reaction to customer service: the addition of warranty replacement of defective products, of quality assurance (QA) audits of a supplier's design and manufacturing processes, and of parts and service provision.

Stage 3 had recognised the need to go much further in terms of customer service. A whole raft of additional services had been conceived with a view to adding value. Breakdowns were fixed at short notice by means of field service engineers. Everglo products could now be delivered and installed at customer premises. Price lists were simplified by including peripheral equipment, such as contactors, that had to be added to a battery rack in order to make it work. Advice and tips were added to help customers warm to Everglo products. In a proactive move, Everglo introduced charts and advice about the application of battery products in general, and the resulting tables became an industry standard. Parts and service in the field were upgraded to a '24-hour, no-nonsense back-up service'. And customer training built on Everglo's position as an industry leader. Rather than sales seminars, Everglo's were customer training seminars, where the company spoke on behalf of the industry rather than as a supplier.

In spite of having reached a pre-eminent position in mining power supply, Everglo recognised that the centre of Figure 2.5 was in effect a 'black hole'. Each year, competitors added more services to their basic products too. In effect, the second and to some extent the third circles were being absorbed into the 'commodity' category, and customer expectations increased all the time. A new stage 4 strategy was conceived to

take Everglo into a position that competitors would find even more difficult to follow. The new strategy was coined 'Batman': battery management for life. The aim was nothing less than a total, customer-oriented product management service that provides 'power for life'. The supplier takes over the task of managing the customer's assets, including problem identification, training and managing cash flow. The objective of 'Batman' is to look at the product the way the customer does, performing best at what the customer values most rather than at what the supplier values most.

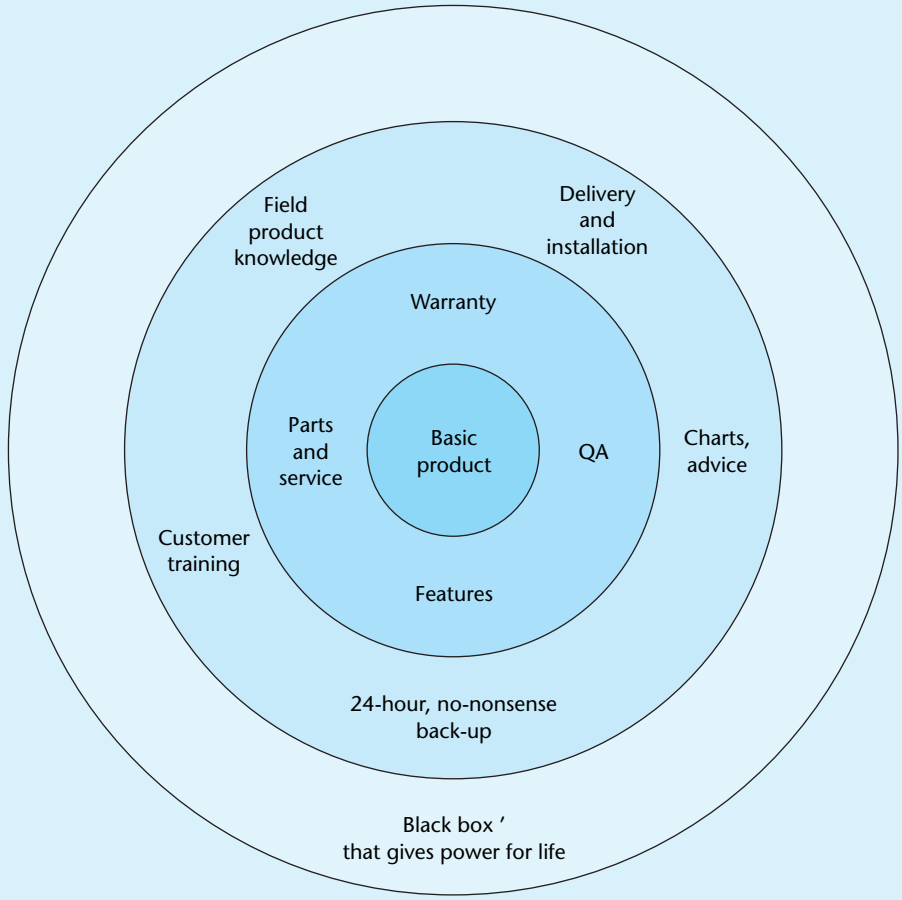

Figure 2.5 **Adding value by quality of service**

Questions

1 Has Everglo reached the end of the line in terms of its quality of service strategy?

2 As a competitor to Everglo, what would be your options in response to Everglo's latest moves?

2.3.4 Measuring service quality

Going back to the start of this section, it is helpful to have in place measures of performance of service processes. These can be used to monitor performance over time and to compare ('benchmark') the processes with others. Table 2.6 lists examples of service level measures used in retail supply chains (after Rafele, 2004).

2.4 Setting priorities for logistics strategy

***Key issues:* How can we segment our market to make it easier to supply? How can we use such knowledge to improve logistics strategy?**

Setting priorities to assure quality of service leads to establishment of performance measures. Priorities should be used to help ensure that:

- partners in a supply network focus on providing end-customer value;
- partners in that network can see how well the network as a whole is performing against this yardstick.

In this way they can judge whether performance is improving or declining, and assess the effect on quality of service of changes to the system.

In order to set priorities for quality of service, we begin by putting the end-customer first. The aim is to identify groups of end-customers whose needs can be serviced in focused, targeted ways. The needs define groups and give them an identity, as we explained in section 2.2 on segmentation. Because segments therefore have different characteristics, it is usually a mistake to take a 'one size fits all' approach to servicing them. Our research has shown that the starting point for segmentation is often conceived by marketing in isolation, and does not make any sense in logistics terms (Godsell *et al.*, 2006). Logistics is therefore left with an impossible task. Since logistics is actually part of the marketing mix (see 'place' under section 2.2 above), ability to provide quality of service is off to a bad start! As Gattorna (2006: 32) states, 'a real disconnect continues between the way that market-facing personnel view customers and the information they communicate back to non-market facing personnel'.

Our framework for creating logistics advantage (Harrison *et al.*, 2007), shown in Figure 2.6, therefore starts by reviewing and re-engineering the current approach to market segmentation.

2.4.1 Step 1: Diagnose current approach to market segmentation

Current approaches to segmentation may drive elements of logistics strategy to a limited extent, or they may have no relevance in logistics terms. Segmentation in the CleanCo case (Case study 2.3 above) was based on national accounts and field sales, that is, by account size. This was in line with the way that sales and

Table 2.6 Selected service level measurements

Inventory/availability	*Physical and accounting correspondence*: number of orders with mistakes divided by the total number of orders in the warehouse in the same period of time *Stock turnover*: quantity delivered or shipped divided by the average stock in the warehouse in the same period of time *Stockout*: number of orders out of stock divided by the total number of orders placed in the same period of time.
Flexibility	*Flexibility*: number of special/urgent/unexpected orders confirmed to the customer divided by the total number of special/urgent/unexpected orders required by the customer multiplied by 100 in the same period of time
Service care	*Punctuality*: number of orders delivered on time divided by the total number of orders delivered multiplied by 100 in the same period of time *Regularity*: number of orders delivered with a $\triangle t$ of delay/advance divided by the total number of orders delivered multiplied by 100 in the same period of time *Completeness*: number of full orders delivered divided by the total number of orders delivered multiplied by 100 in the same period of time *Correctness*: number of orders with mistakes dispatched divided by the total number of orders dispatched multiplied by 100 in the same period of time, or Number of codes/articles sent back divided by the total number of codes/articles sent multiplied by 100 in the same period of time *Harmfulness*: number of damaged orders dispatched in a period divided by the total number of orders dispatched in the same period multiplied by 100 *Delay*: number of days of delay (or number of days of delay divided by the number of days promised) multiplied by 100
Supply conditions	*Delivery frequency*: number of orders delivered in a certain period of time *Shipped quantity*: quantity shipped in a certain period of time or quantity dispatched for each shipment *Presentation*: method of packaging and of shipment, alignment with customer process
Lead time	*Total order cycle time*: occurring from the arrival of a customer order to the receipt of goods or cycle time of the single activities (order transmission, order processing, order composition, order transfer to the production plant, article production, warehouse delivery, final delivery to the customer) *Response time*: to order tracking requests, etc.
Marketing	Range completeness, information on products and selling assistance
Order management	Documents management (invoices and orders), client contacts and order advancement state, etc.
After sales	*Speed of response*: to back orders, claims management, use assistance and payment management, fulfilment of warranty conditions, etc.
e-information	Web site completeness, ease of making orders by network and data transmission security, etc.

(Source: After Rafele, 2004)

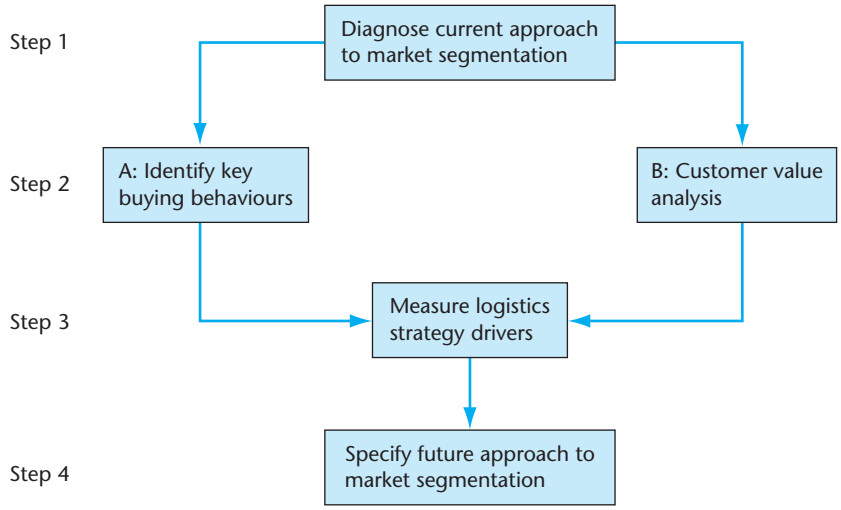

Figure 2.6 Creating logistics advantage: a four-step process

Source: (Harrison *et al.*, 2007)

marketing functions were organised. There were no effective links between marketing and logistics – in logistics terms, only the distribution function was differentiated according to channel.

Another example from our research is AutoCo, a manufacturer of automotive seat subassemblies which supplies seat manufacturers like The Lear Corporation, and automotive assemblers like BMW. AutoCo currently segments its customers firstly by the country from which customers purchase, and secondly by customer within that country. Customer facing teams (CFTs) comprise a sales manager, an engineer and a product designer. These teams deal with each of the segments, and place orders on manufacturing units (based in England, Poland, Norway and Sweden). Because CFTs are not coordinated between customer countries, the supply network is fragmented, and manufacturing units may compete with each other for business.

2.4.2 Step 2a: Understand buying behaviour

The CleanCo case (Case study 2.3) also shows that our focal firm's sales organisation has identified two significant types of buying behaviour by its retail customers: volume driven and value driven.

- *volume-driven behaviour* is driven by the retailers who want to offer low prices to end-customers in order to drive high volumes. The everyday low price (EDLP) variant of this behaviour places pressure on supply partners like CleanCo for continuous price reduction. In turn, this generates a relatively stable demand pattern for the supply chain – unlike a retailer who regularly promotes the same product by means of special offers.
- *margin-driven behaviour* is driven by offering a wide selection of products and value adding services. Cost savings were not necessarily passed on to the cus-

tomer but could be used to invest in additional value adding activities. This strategy also resulted in a relatively stable demand pattern.

Other behaviours by retailers are also possible – such as discounting and promotion. But the key point is that the different behaviours must be characterised and specified in terms of their logistics implications, along the lines of Table 1.1. Using order winners and qualifiers helps to bridge marketing and logistics perspectives. While there are dangers in a 'one size fits all' logistics strategy (low cost but low service) in the same way that there are dangers in over-customisation (high cost and complexity), the compromise solution is to specify three or four substantive segments (Gattorna, 2006).

Discussing the characteristics of customer behaviour within a cross-functional group in a workshop setting helps to spawn ideas on patterns. It is often easier to make sense of the data if they are used to plot graphs and charts. Venn diagrams such as the one shown in Figure 2.7 are helpful to illustrate patterns that may appear among the analysed data.

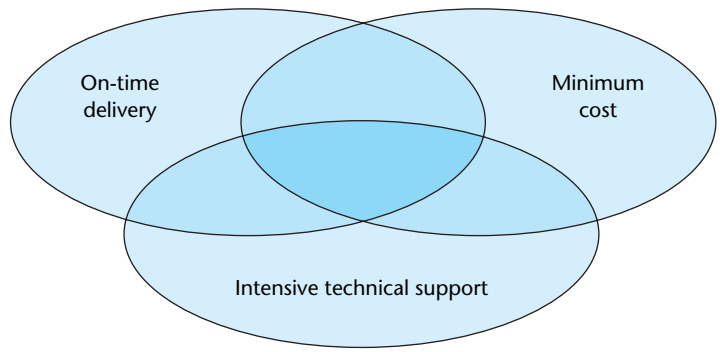

Figure 2.7 **Customer segmentation using order winners**

2.4.3 Step 2b: Customer value analysis

Customer value is the customer-perceived benefit gained from a product/service compared with the cost of purchase. In order to measure customer value, we need to understand what *aspects* of a product or service it is that a customer values (Johnson and Scholes, 2002). Here, we are primarily interested in aspects of customer value which impact on logistics strategy. Two aspects in particular relate to buying behaviours:

- *demand profile*: the characteristics of demand in terms of volume and variety, and of demand variability and uncertainty;
- *competitive profile*: how the focal firm chooses to compete in the marketplace (see section 1.3).

Customer value is assessed by means of a questionnaire to measure customer views of these aspects in terms of:

- *importance* (on a 0–100 scale);
- *performance* of the focal firm and a key competitor (0–5 Lickert scale);
- *price level* of the focal firm relative to the key competitor (0–5 Lickert scale).

Examples of customer value profiles for two customers of AutoCo (referred to in step 1 above) are shown in Figure 2.8. We return to the concept of 'value' in Chapter 3. Meanwhile, we will continue to use the AutoCo example to illustrate steps 3 and 4.

2.4.4 Step 3: Measure logistics strategy drivers

Here, we examine demand profile and competitive profile as drivers of logistics strategy:

- *Demand profile*. Usually, high volume products are associated with comparatively low variety (few skus) and low demand variability and uncertainty. Examples are washing powders in retail, and volume cars like Ford and VW's big sellers. Note that demand variability can be created by means of promotions. Low volume, high variety products – such as most automotive spare parts, and many health and beauty products – tend to have the opposite demand profiles.
- *Competitive profile*. This is based on the competitive factors we introduced in section 1.3 – hard objectives (quality, time and cost), supporting capabilities (controlling variability and dealing with uncertainty in logistics processes) and soft objectives (such as confidence and security). For example, Ford chooses to compete on low price and delivery speed (by making to stock), while BMW chooses to compete by making more expensive and highly specified cars to customer order while the customer waits. While they also appear in the demand profile as characteristics, we refer here to variability and uncertainty in terms of a focal firm's capability to cope with them better than the competition.

Both of these profiles have profound implications for logistics strategy, some of the key implications for which are summarised in Figure 2.9.

For example, the higher the demand variability and uncertainty, the greater the need for buffers. Buffers can be in the form of spare capacity, inventory and order lead times. If we want to shorten the time the customer has to wait, then it is necessary to make speculatively – perhaps finishing off (customising) the product once the final order details are known. Finally, planning and controlling the flow of materials across the supply chain needs to be carried out centrally when in high demand variability and uncertainty conditions in order to coordinate the response of supply partners. In more stable demand conditions, it is possible to relax controls and allow more local flexibility.

2.4.5 Step 4: Specify future approach to market segmentation

Using logistics strategy drivers it is now possible to revisit the customer value profiles in Figure 2.8 and develop a fresh approach to segmentation that makes sense in logistics terms. In Figure 2.10, we have analysed the two customers (A and B) in Figure 2.8 in terms of their key demand and competitive profiles. Customers

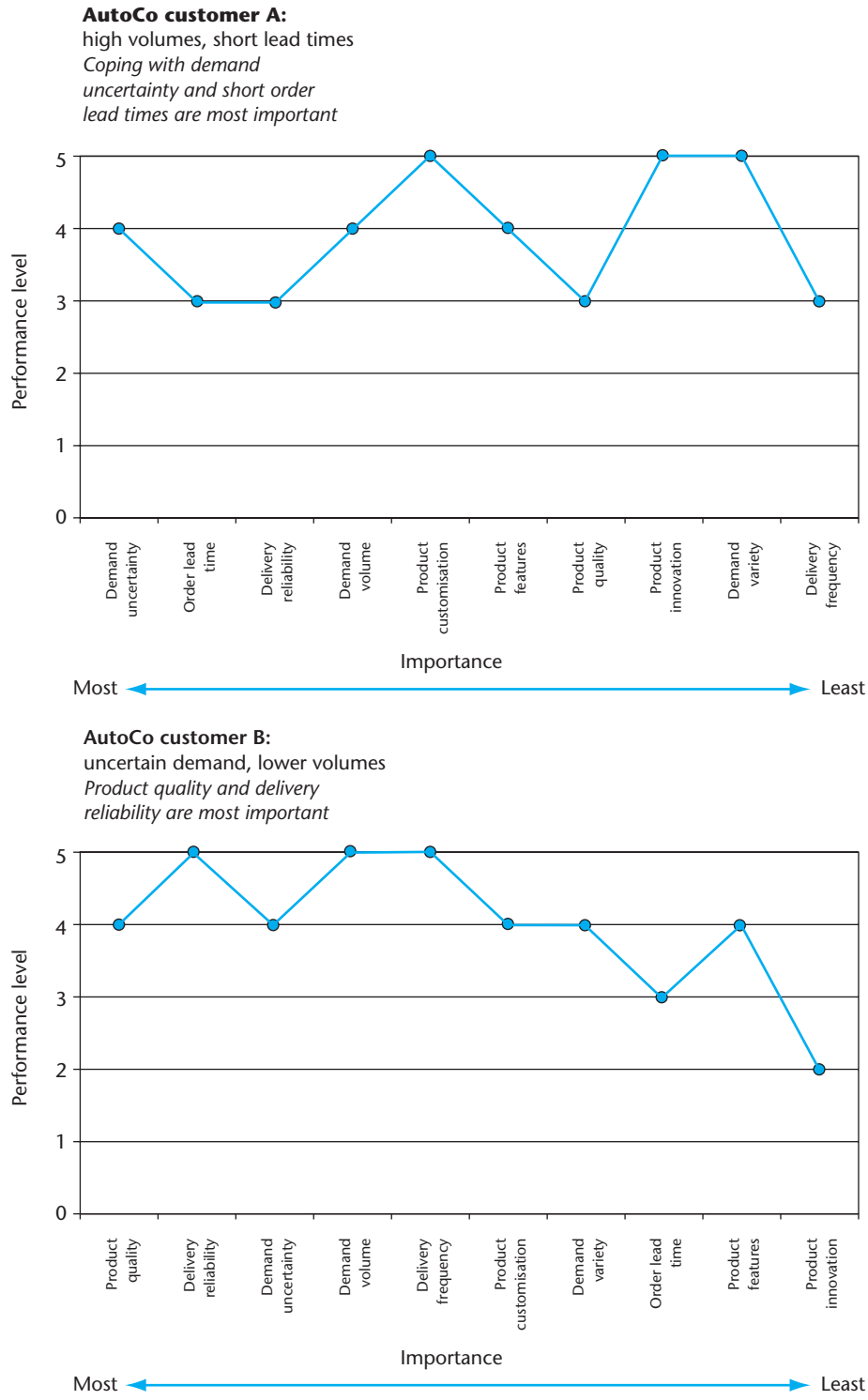

Figure 2.8 Customer value profiles for two AutoCo customers

Source: (Harrison *et al.*, 2007)

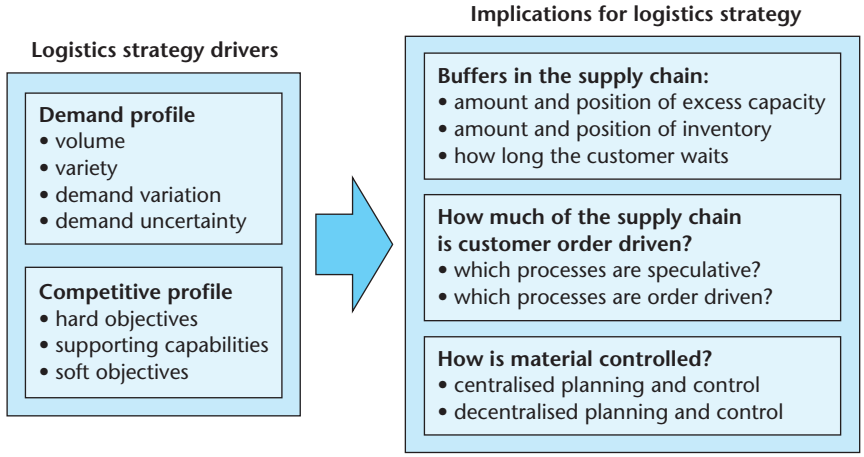

Figure 2.9 **Strategy drivers and their implications for logistics strategy**

A and B both want 100 per cent on time in full on quality delivery. However, customer A places priority on higher volumes on shorter delivery lead times with higher delivery frequencies. Customer B places priority on AutoCo's capability to meet uncertain demand, and on higher levels of customisation. It is now possible to describe the segments typified by customers A and B in terms of:

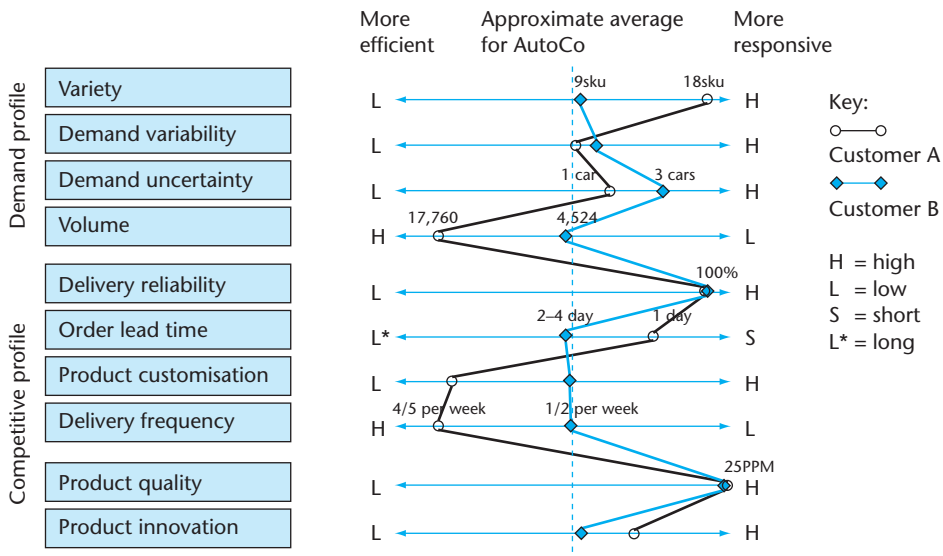

Figure 2.10 **Strategy drivers and their implications for segmentation**

Source: (Harrison *et al.*, 2007)

- buying behaviour relevant to logistics strategy;
- customer-perceived value;
- profile of logistics strategy drivers.

It is then necessary to evaluate all other major customers at AutoCo in similar terms to develop and refine an overall segmentation strategy for the focal firm.

As indicated earlier, the aim is to develop a 'compromise' strategy which – like segmentation itself – seeks to describe logistics strategy 'as simply as possible while doing our best to emphasise its variety' (Millier and Palmer, 2000).

Summary

What is customer service in the context of logistics?

- Business to business (B2B) refers to upstream relationships between members of a network. Business to customer (B2C) refers to handover to the end-customer. B2B relationships therefore need to be aligned towards B2C.
- Marketing is a philosophy that integrates the disparate activities and functions that take place within the network. Loyal customers are seen as the source of profit, growth and security. Marketing in practice starts with analysing segments, evaluating those segments and targeting them. Segments need to be measurable, economically viable, accessible and actionable. Marketing in practice continues by market positioning, which requires differential advantage to be defined, and the marketing mix to be formulated.
- The key logistics contribution to the marketing mix is in the 'fourth P', place. This includes decisions about factors such as channel selection, market coverage, distribution systems and dealer support. Logistics also supports product decisions (for example, product range) and promotion activity.
- Supply networks end with service processes, where the end-customer is present in some way. 'Gaps' can emerge between what the service is supposed to be, what the customer expects it to be, and how the customer perceives it when it is delivered. The size of these gaps has implications for quality of service, a major driver of customer loyalty.

How do we win and retain customers through logistics?

- The principle here is that loyal customers have many advantages over new ones. The logistics challenge is to reinforce loyalty by exceeding customer expectations via superior quality of service.
- Customer relationship management is based on the principle that marketing strategies should be continuously extended to strengthen customer loyalty. Phases of logistics development are needed, each phase placing increasing demands on the development of logistics capabilities.
- Setting logistics priorities should be carried out with market segments in mind. This is a joint task between marketing and logistics functions. Order winners and qualifiers by segment help develop a common language to assist this task.
- Often, the current approach to segmentation is unsatisfactory in logistics terms. We present a four-step model to diagnose the current approach, and to re-engineer that approach using the concept of logistics strategy drivers (demand profile and competitive profile).

Discussion questions

5 suggest ways in which logistics can play a part in the marketing mix for:
- **a** an airline;
- **b** a supermarket;
- **c** an automotive manufacturer;
- **d** a hospital.

In each case, specify the organisation you have in mind and explain the reasons for your suggestions.

6 The 'Batman' case (Case study 2.5) presents what might be described as a 'marketing wish list'. Analyse the likely logistics challenges at each stage of development, and suggest how these might be addressed.

7 Read the case study 'Global Lighting', and answer the study questions at the end.

CASE STUDY 2.6

Global Lighting

This case study contains information on how Global's expectations of quality of service from its suppliers evolved over a number of years. Further changes are affecting these suppliers as Global's own customers continue to demand higher levels of service. If you are unfamiliar with the term material requirements planning (MRP), it is explained in Chapter 6 (e.g. see page 175).

Global is one of Britain's largest manufacturers of lighting products. The market for architectural lighting, one of its major product lines, has become increasingly volatile and competitive in recent years. Pressure to supply products more cheaply and more quickly to a higher standard on an international basis has meant that Global has had to work hard on shortening product life cycles and reducing delivery lead times.

During 1996, the new managing director raised the profile of logistics by making an appointment at board level. Following this change in organisational structure, a 'lean' approach to supply chain management and manufacturing was implemented over the next three years. But recently the lean approach to managing the supply chain has been found to have serious shortcomings in terms of meeting increased demand for customised products such as architectural lighting. Consequently, Global's supply chain management strategy has evolved to accommodate the rapid growth in the market for these products. This change resulted in a multifaceted supply chain strategy, which increases Global's ability to meet the mass customisation needs of its customer base. This multiple strategy approach has created many challenges for suppliers.

Prior to 1996

Before 1996 Global's organisation and management of its internal and external supply chains was based on a single, familiar approach. Global managed internal manufacturing operations and material flow on a push principle driven by MRP.

The supply base was managed through an essentially adversarial approach. The supply base was broad, as the strategy of the buying function of the company operated on the principle of lowest price is best. Buyers routinely moved the sourcing of com-

ponents to a new supplier if the price was lower. New suppliers would be assessed on the basis of price and component quality only, and no obligation of repeat purchase was expected if the supplier did not retain the lowest price. Price, not cost, was the main objective of the buying group.

After 1996

During 1996, the managing director and his changed board of directors developed a new strategy to manage internal and external operations. Manufacturing was restructured to improve customer service and to increase profitability. Following an extensive programme of data collection and analysis, the production facility was segmented into two distinct sections. One section became a low-volume, irregular-demand factory employing operators with broad product knowledge. The other area became the high-volume, regular-demand factory, with focused and repetitive build tasks. These two areas also operated their internal supply chains in distinctly different formats. The low-volume area continued with a push (MRP) strategy, while the high-volume section operated a pull strategy using *kanban*, as shown in Table 2.7.

Table 2.7 Focused factory structure

	Low volume	**High volume**
Material control	MRP	*Kanban*
Product codes	> 5,000	< 800
Material flow	Push	Pull
Demand predictability	Low	High
Minimum order quantity	1	Pallet
Service offer	MTO	MTS

In addition to restructuring the internal supply chain, the historical approach to managing the external chain of suppliers was altered. Because materials constituted more than 80 per cent of the cost of sales, the decision was made to acknowledge vendors as an intrinsic part of the organisation. Improving the performance of the suppliers and the efficiency of the exchange between the firms was recognised as key to Global's success. In order to achieve the necessary improvements a four-phase plan was conceived. Figure 2.11 gives an overview of the four phases.

Phase 1: Supply base reduction

Before Global committed any substantial resource to develop its suppliers, it was necessary to reduce the number of companies that it dealt with. Reducing the number of direct suppliers was essential to maximise the limited time and resources available. In order to reduce the number of suppliers who dealt directly with Global, resourcing and tiering activities were put in place. Suppliers were selected for the ongoing supply base on the following criteria:

ppm defects (quality performance);
ability to operate with *kanban* system (delivery performance);
computer aided design/manufacture (CAD/CAM) facilities (new product development);

geographical location (new product development and delivery performance); price.

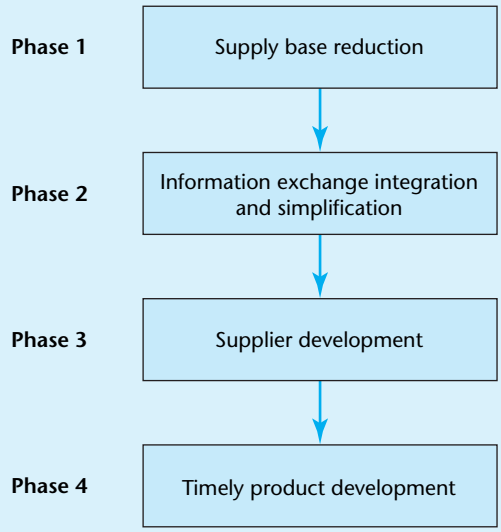

Figure 2.11 The four-phase plan for supplier improvement

If a supplier could not or planned not to operate in accordance with Global's quality, logistical or product development criteria, they were either delisted (and the components switched to another current supplier) or became a tier 2 supplier.

For example, the principal supplier of injection moulding components coordinated purchase and delivery of plastic parts from the other smaller suppliers, which had formerly all been tier 1. The 'before' and 'after' scenarios are shown in Figure 2.12.

The result of these activities was a reduction in direct supplier numbers from 267 to fewer than 100. This is shown in Table 2.8.

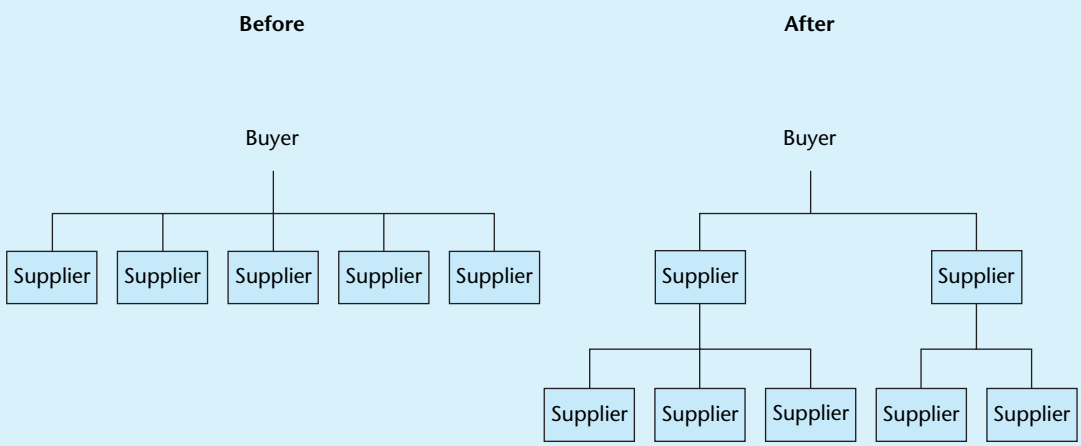

Figure 2.12 Restructuring the supplier base

Phase 2: Information exchange integration and simplification

Following the segmentation of the factory into low- and high-volume sections, and reduction of the supply base, it became possible to simplify communications between Global and its suppliers. The high-volume factory introduced, with the assistance and agreement of the suppliers, a two-bin, *kanban* material-ordering system. The support of the suppliers in introducing the simple material-ordering system was an early example of greater integration of working practices within the supply base. Only through the agreement of a new way of trading was it possible to stop posting weekly MRP schedules, which were out of step with 'real time' customer demand. Introduction of the *kanban* system reduced waste created by the delay in transmitting demand data. Similarly, waste related to inappropriate processing, unnecessary inventory, unnecessary motion, waiting and transporting was reduced.

Table 2.8 Supplier reduction figures

Year	No. of suppliers
1995	267
1996	198
1997	132
1998	106
1999	< 100

Phase 3: Supplier development

Introducing *kanban* proved to be an early and rewarding example of supplier development for Global and its suppliers. However, development was not limited to one-off, functional improvements. Before improvements were attempted in the more complicated arena of new product development, it was planned to introduce cross-functional teams between Global and its supply base through team-building weekends. For example, the managing director of the main die-casting supplier attended a team-building weekend with Global engineers, sales people, manufacturing managers and finance personnel. This weekend experience prompted the die-caster to introduce team building within its own operation, thus helping to reduce new product development times between the two companies.

Phase 4: Timely product development

Lead times for new product development in the lighting industry in 1996 were typically 18–24 months. For an industry that was becoming more and more fashion conscious the time from concept to product delivery was proving costly in terms of competitiveness in the market.

One of the prime driving forces for Global's new management approach towards suppliers was the desire to reduce time and cost to market drastically. Suppliers within this new ethos became involved at the concept stage for new products. Product development activities became concurrent rather than sequential. Designers and engineers of suppliers with CAD and CAM technologies began to interact directly with Global's designers and engineers at each stage of the development process. At the same time, shopfloor operators became involved with designers to bring cohesion between design

and build activities. The result of these changes in approach, internally and externally, was a reduction in development lead times for standard production items from 18 months to 14 weeks by early 1999.

Outcomes

Restructuring Global's approach to managing suppliers would have provided limited benefits if it had not occurred in conjunction with changes to Global's internal operations. For example, improvements in the efficiency of the supply chain in terms of introducing a concept such as *kanban* would not have been as effective if a restructuring of manufacturing had not taken place at the same time. Simultaneous internal and external changes propelled Global's performance forward in terms of product development, cost and lead-time reduction, as shown in Table 2.9.

Table 2.9 Changes between 1995 and 1998

	1995	1998	
		MRP	*Kanban*
Product codes	8000+	>5000	>800
Product development	24 months	6 months	6 months
Delivery lead times	8–12 weeks	2–4 weeks	0–2 weeks
Costs (1995 index = 100)	100	85	73
Sales volume (1995 index = 100)	100	110	125

The performance improvements shown in Table 2.9 were achieved through the efforts of both supplier and buyer alike. Integration of supply chain activities and information flows accelerated the implementation of lean practices such as *kanban*, which in turn reduced the uncertainty in demand and improved relationships. Operational improvements followed a consistent and deliberate strategy of developing confidence, trust and openness between Global and its suppliers. Those who were prepared to work in partnership to develop improvements gained additional sales volumes, which in turn increased the interdependence of the parties.

Improvements in relational as well as operational performance developed a virtuous circle for both parties. Implementing pull scheduling in the supply base necessitated the simultaneous implementation of a partnering strategy. The demise of the traditional 'arm's length' approach to managing the buyer–supplier exchange helped both parties to improve their business volumes and performance over this period.

(Source: Jim Aitken, visiting Fellow, Cranfield Centre for Logistics and SCM)

Questions

The next phase of development at Global addresses the continuing growth in demand for customised, non-standard products. Linked to an ever-increasing demand for customisation is the drive for shorter lead times and lower costs. With increasing globalisation of the lighting market, several parts of Global's product portfolio became commodity in nature. Customers in the United Kingdom now have the opportunity to purchase their lighting products from low labour cost countries such

as China. But supplying the lowest-price product is not the answer to this problem for UK companies. Instead of competing on price, companies must find alternative ways to retain their customers. One way is through the improvement of customer service.

1 What actions do you think Global could take to respond to the needs of its customers?
2 How will Global's own customer service priorities change as a result of this?
3 What are the opportunities and threats facing suppliers as a result of the likely changes to Global's quality of service priorities?

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