1 Business-to-Business Markets and Marketing

Learning outcomes

After reading this chapter you will:

- know what are the defining characteristics of business-to-business markets;
- be able to differentiate between business-to-business markets and consumer markets;
- understand how the characteristics of business-to-business markets affect the practice of marketing management;
- appreciate the changing balance between the agricultural, manufacturing and service sectors in the world's major economies;
- understand the nature and significance of derived demand in business-to-business markets;
- be able to explain the significance of an industry concentration ratio;
- understand the nature and the significance of the accelerator effect in business-to-business markets; and
- be able to apply two complementary classification schemes to the categorization of business products.

Introduction

Lying behind every consumer purchase in a modern economy there is a network of business-to-business transactions. The hair stylist who provides the client with a new look uses hair products that were manufactured by a cosmetics company from materials bought from chemical manufacturers, by equipment that was manufactured by an electrical products manufacturer using components purchased from a range of electrical engineering companies, and then arranges the client's next appointment using the salon's Wi-Fi network that was designed and installed by a computer systems firm around

equipment bought from various IT vendors. Even an apparently simple transaction at the supermarket is only made possible by a web of supporting business-to-business transactions. When you buy a few items of confectionery or some vegetables (in a healthier frame of mind) from your local supermarket, you may give some thought to the supplier of the product itself, but perhaps less to the shop-fitting company that designed and supplied the shelving, the geo-demographic consultancy firm that helped the supermarket decide where to locate its store, the IT systems company that installed the point of sale equipment, and many other businesses that made the simple transaction possible. This book is concerned not with the final consumer transaction – buying the services of a hair stylist, or buying some confectionery or vegetables – but with the network of business-to-business transactions, largely invisible to the final consumer, that underlie it.

In this chapter our aims are to clarify just what is meant by business markets, to explain why it is considered necessary to distinguish them from consumer markets, and to show how business products and markets can be classified. We begin by discussing the nature of business markets. In order to emphasize the message that business markets involve both goods and services we spend a little time looking at the industrial structure of modern economies, to see how influential the service sector has become. The subsequent section deals with the core idea of this chapter, namely that business markets can be differentiated from consumer markets along a number of dimensions. Those dimensions can be summarized as market structure differences, buying behaviour differences and marketing practice differences. The chapter then moves on to look at the ways in which business products can be classified. An approach based on the uses to which products are put is contrasted with an approach based on customer perceptions of the risk and the effort (including cost) involved in acquiring a product. The chapter concludes with a case study of the steel industry. The difficult business conditions of the steel industry in recent years have led to industry consolidation. The case study looks at the supply side of the industry by examining the merger of British Steel and Koninklijke Hoogovens in 1999 and the subsequent fortunes of the merged company, Corus. Despite over-capacity in the world steel industry, we see how Nissan encountered difficulties in buying all the steel it needed in 2004, leading to cut-backs in car production.

The Nature of Business Markets

The key distinguishing feature of a business-to-business market is that the customer is an organization rather than an individual consumer. Organizations and consumers often buy the same products. For example, both organizations and individual consumers buy DVD players, laptop computers, cleaning services, automobile repair services and light fittings. Therefore,

one cannot distinguish unambiguously between a business market and a consumer market on the basis of the nature of the product. It is true that there are certain products that are often bought by organizations and never by individual consumers, such as management consultancy services for a corporate merger, or – more prosaically – industrial cranes. On the other hand, it is difficult to think of anything that an individual consumer buys that would not be bought by some organization.

A brief observation on terminology is necessary at this point. The generally accepted term for the marketing of goods and services to organizations is 'business-to-business marketing'. This gradually superseded the older term 'industrial marketing' in the 1980s and 1990s. Industrial marketing is often considered to be a term that is exclusively applied to primary and secondary industries – primary industries include agricultural and the extractive industries like coal and iron ore mining, while secondary industries are those that manufacture tangible products such as cars, planes and furniture. In many modern economies the primary and secondary industries account for a relatively small share of economic activity, and it is the tertiary sector of the economy (the service industries) that contribute most to measures of national income (of which Gross Domestic Product (GDP) is probably the best known).

The expression business-to-business marketing is synonymous with 'business marketing'; these will be the two terms that we use throughout this book to refer to our subject matter. However, two other expressions are worth mentioning: 'B2B' and 'organizational marketing'. The term B2B is clearly just a contraction of business-to-business. What makes it important in its own right is that it is the ubiquitous term on the World Wide Web for business-to-business marketing and selling, to be contrasted with B2C, which stands for 'business to consumer'. The term 'organizational marketing' has been advocated by some authors (Wilson 1999) as superior to 'business marketing' because it explicitly includes *all* organizations, while 'business marketing' seems to exclude organizations that are not 'businesses'. This may be a legitimate distinction, since charitable organizations, other non-profit organizations and governmental organizations have different fundamental objectives from private enterprise businesses. However, the expression 'organizational marketing' has not yet proved popular, and we will stick to the conventional terms 'business-to-business marketing' and 'business marketing'.

It is important not to suppose that business-to-business marketing is synonymous with marketing goods and services to the manufacturing industries. Figure 1.1 shows a time series for employment in the UK economy, broken down by industry sector, over the period 1978–2003. There has been a prominent trend over this period away from manufacturing employment and towards service sector employment. In 1978 there were 6,920,000 people employed in UK manufacturing industries, and by 2003 this had declined to 3,455,000 – a decline of just over 50 per cent in 25 years. Over the same

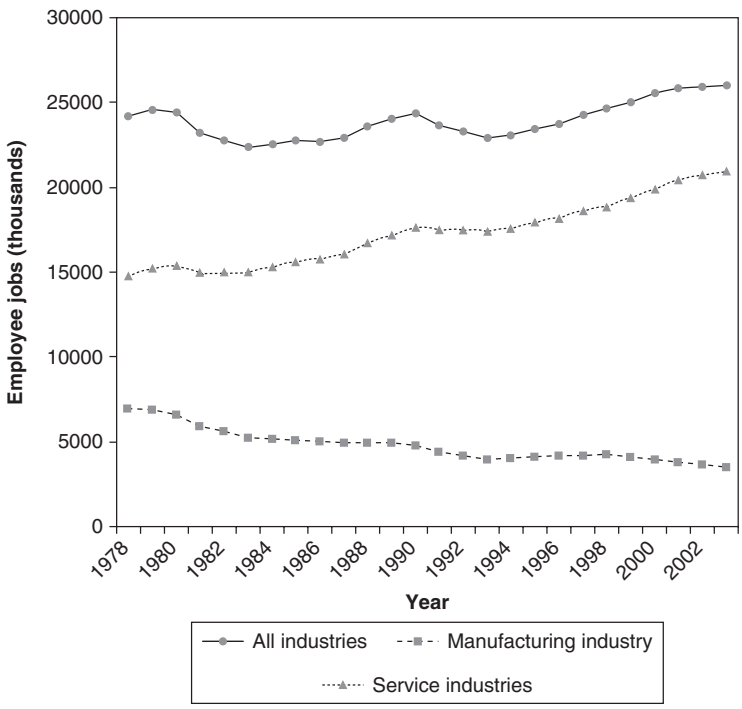

Figure 1.1 UK employment by industry sector Economic Trends Annual Supplement, 2004).

period, service sector employment increased from 14,802,000 to 20,928,000 – an increase of 41.4 per cent. The absolute number of jobs created in the service sector considerably exceeded the number of jobs lost in manufacturing, so that total employment in the UK increased over the period. Manufacturing jobs made up 28.6 per cent of British jobs in 1978 and 13.3 per cent of all jobs in 2003; over the same period service sector jobs increased from 61.2 per cent to 80.5 per cent of the total.

In itself this trend is a matter of widespread debate for UK economists and politicians (Hadjimatheou and Sarantis, 1998; Julius and Butler, 1998). In particular, an unresolved debate revolves around the question of whether manufacturing industry is especially important (for example, because it has a high propensity to export and exhibits more rapid productivity growth than the service sector), or whether it is a normal part of the developmental process for an advanced economy to see a shift of activity away from manufacturing and into the service sector. This has important economic policy implications: should the government try to slow down or reverse the decline in manufacturing? However, from the perspective of marketing professionals, the trend away from manufacturing industry and towards the service

Table 1.1 Industry sector employment trends in selected countries, 1990 and 2000

	Total civilian employment (thousands)	*Agriculture %*	*Industry %*	*Services %*
Australia				
1990	7850	5.6	25.4	69.0
2000	9048	4.9	22.0	73.1
Canada				
1990	12572	4.2	24.6	71.2
2000	14910	3.3	22.6	74.1
Germany				
1990	27946	3.4	39.8	56.8
2000	36978	2.7	33.4	63.9
Ireland				
1990	1115	15.0	28.6	56.4
2000	1664	7.9	28.6	62.8
Japan				
1990	62500	7.2	34.1	58.7
2000	64620	5.2	31.7	63.2
New Zealand				
1990	1472	10.6	24.6	64.8
2000	1779	8.7	23.2	67.7
Sweden				
1990	4508	3.3	29.1	67.5
2000	4159	2.4	24.6	72.9
United Kingdom				
1990	26577	2.1	29.0	68.9
2000	27677	1.5	25.4	72.8
United States				
1990	117914	2.8	26.2	70.9
2000	135208	2.6	22.9	74.5

Sources: OECD, 1993, 2003.

sector should be seen as an important element of the marketing environment, which suggests that the opportunities to market goods and services to the UK manufacturing sector may decline, and will certainly grow more slowly than opportunities in the service sector of the economy. In passing, it is worth observing that the decline in manufacturing employment in the UK has also been associated with a decline in the manufacturing share of GDP (Hartley and Hooper, 1997); although manufacturing productivity has grown faster than service sector productivity, it has not grown fast enough to compensate for the very substantial decline in manufacturing employment seen over the last few decades.

The trend away from manufacturing and towards the service sector is much more than just a UK phenomenon, as Table 1.1 shows.

Over the ten-year period from 1990 to 2000 virtually all of the world's major economies saw a decline in manufacturing employment and an

increase in service sector employment. A decline in employment in agriculture is also evident from Table 1.1. From the marketing point of view it is interesting to observe not only these trends, but also the different structural characteristics of these economies. Despite declines in agricultural employment, this sector remains a large-scale employer in Ireland, New Zealand, and, to a lesser extent, Australia and Japan. It is important to distinguish between percentages and absolute numbers, however. The UK, with the smallest proportion of the workforce employed in agriculture, nevertheless had more than twice as many agricultural workers in 2000 as either Ireland or New Zealand. Germany and Japan – two of the world's largest economies – have retained a large, if declining, manufacturing sector. Understanding such trends in the economic – environment is a useful foundation for more the more complex research and analysis that goes into preparing an international marketing strategy.

Business Markets: Defining Characteristics

Having established that it is not the nature of the product that is bought and sold that differentiates business markets from consumer markets, we move on to examine what are regarded as the defining characteristics of business markets. Many authors have sought to identify the *dimensions* by which business markets can be distinguished from consumer markets, and then the specific *characteristics* of business markets and consumer markets on each of these dimensions. Table 1.2 provides a synthesis of these dimensions and characteristics. The table is organized into three columns. The first column identifies the dimension against which business and consumer markets are thought to differ, the second column provides the characteristic expected of a business market, and the third column the characteristic expected of a consumer market.

Table 1.2 is also divided into three major sections, entitled respectively market structure differences, buying behaviour differences and marketing practice differences. In general, it is underlying structural differences between business and consumer markets that bring about important differences in buying behaviour. Marketing practice in business markets differs from that in consumer markets because of the underlying differences in markets structure, and because of the differences in buying behaviour. For example, it would be wrong to assert that business markets differ from consumer markets because the most frequently used promotional tool in the former is personal selling, while in the latter it is advertising. The extensive use of personal selling in business markets can be traced to the market structure and buying behaviour characteristics commonly found in business markets, which are usually not found in consumer markets. Specifically, in many business markets demand is concentrated in the hands of a few powerful

Table 1.2 Differences between business and consumer markets

Market Structure Differences		
Dimension	*Business marketing*	*Consumer marketing*
Nature of demand	Derived	Direct
Demand volatility	Greater volatility	Less volatility
Demand elasticity	Less elastic	More elastic
Reverse elasticity	More common	Less common
Nature of customers	Greater heterogeneity	Greater homogeneity
Market fragmentation	Greater fragmentation	Less fragmentation
Market complexity	More complex	Less complex
Market size	Larger overall value	Smaller overall value
Number of buyers per seller	Few	Many
Number of buyers per segment	Few	Many
Relative size of buyer/seller	Often similar	Seller much larger
Geographic concentration	Often clustered	Usually dispersed
Buying Behaviour Differences		
Dimension	*Business marketing*	*Consumer marketing*
Buying influences	Many	Few
Purchase cycles	Often long	Usually short
Transaction value	Often high	Usually small
Buying process complexity	Often complex	Usually simple
Buyer/seller interdependence	Often high	Usually low
Purchase professionalism	Often high	Usually low
Importance of relationships	Often important	Usually unimportant
Degree of interactivity	Often high	Usually low
Formal, written rules	Common	Uncommon
Marketing Pratice Differences		
Dimension	*Business marketing*	*Consumer marketing*
Selling process	Systems selling	Product selling
Personal selling	Used extensively	Limited
Use of relationships	Used extensively	Limited
Promotional strategies	Limited, customer-specific	Mass market
Web integration	Greater	Limited
Branding	Limited	Extensive, sophisticated
Market research	Limited	Extensive
Segmentation	Unsophisticated	Sophisticated
Competitor awareness	Lower	Higher
Product complexity	Greater	Lesser

Sources: Chisnall, 1989; Dwyer and Tanner, 2002; Ford et al., 2002; Lilien, 1987; Simkin, 2000; Webster, 1991; Wilson, 1999, 2000; Wilson and Woodside, 2001.

buyers (market structure), who employ teams of purchasing professionals to do their buying (buying behaviour). In most consumer markets demand is dispersed widely throughout the buying public and no single consumer has any real buying power (market structure), and buyers are not trained

professionals (buying behaviour). Personal selling makes sense in the first set of circumstances (concentrated demand, powerful buyers, trained professionals), since organizational buyers expect to hear a well-argued case specifically tailored to the needs of their organization, and the costs associated with employing a sales executive are justified by the high potential value of each order. Advertising makes sense in the second set of circumstances (dispersed demand, no powerful buyers), primarily because the relatively low value of a typical transaction only justifies low selling costs. Of course, specifically tailoring the message to the needs of the individual consumer, which was once effectively impossible, is becoming more and more feasible with the deployment of sophisticated IT and customer relationship management (CRM) software (Evans et al., 2004). Indeed, such technologies may bring about a degree of convergence between marketing practices, based around the Internet and CRM, between consumer markets and those business markets that have relatively dispersed demand.

Market structure differences

Derived demand

> Bread satisfies man's wants directly: and the demand for it is said to be direct. But a flour mill and an oven satisfy wants only indirectly, by helping to make bread, etc., and the demand for them is said to be indirect. More generally:
>
> The demand for raw materials and other means of production is *indirect* and is *derived* from the direct demand for those directly serviceable products which they help to produce. (Marshall, 1920: 316)

It is the convention in marketing to treat demand by consumers as *direct* and demand from businesses as *derived*. This idea originated with the economist Alfred Marshall (Eatwell et al., 1987). At its simplest, it is supposed that consumers only buy goods and services to satisfy their wants, whereas businesses only buy things to facilitate the production of goods and services. In this case, consumer demand is wholly *direct* while business demand is wholly *derived*. The word derived indicates that the demand for something only exists so long as there is a demand for the goods or services that it helps to produce. Businesses do not 'want' fork-lift trucks or computerized logistics system in the same way that consumers want fashion clothing or computer games. The demand for fork-lift trucks and logistics systems is derived from the demand for the products that they help to deliver. Of course, many industries have no contact at all with final consumers. For example, steel manufacturers (see case study at the end of this chapter) sell their products to other businesses, such as shipbuilders, car manufacturers and building firms. So we have a chain of derived demand. For example, final consumer demand (direct demand) for cars and diesel fuel creates a derived demand for steel (to manufacture cars), ships (to transport crude oil),

and many other goods and services besides. The derived demand for ships in turn creates a derived demand for steel, as well as a whole range of other products and services. The derived demand for steel creates many more forms of derived demand, including raw materials, transport services, and general business services such as accountancy and management consultancy. The whole chain of derived demand is driven by the direct demand of consumers. The metaphor of a river is often used to describe the chain of derived demand, with 'downstream activities' being those that take place in close proximity to the consumer and 'upstream activities' being those that take place far away from the consumer.

While it is convenient to think of consumer demand as direct and business demand as derived, the stark dichotomy is probably a little misleading (Fern and Brown, 1984; Simkin, 2000). Consumers do not generally buy washing machines because they 'want' a washing machine; rather it is because of the valuable services the machine provides. The consumer may 'want' clean clothes, or to be accepted socially by sending out their children looking smart, or to look good in a clean white shirt for a job interview. The machine is a means to an end, not the end itself, so that arguably the demand for the machine is derived. Equally, one can envisage a manager in a business organization using company funds to buy a particularly attractive painting for the office; while this would no doubt be justified in terms of creating the right ambience for effective working, it is easy to see it as a direct demand based on the intrinsic merits of the painting. Nevertheless, there is little doubt that the great majority of business expenditure represents derived demand. Firms do not buy such things as office buildings, factories, warehouses, raw materials, logistics support, cleaning services, lubricants and backhoe loaders for the pleasure that they give, but for their ability to facilitate the delivery of goods and services to customers.

The accelerator effect

The most straightforward implication of derived demand in business markets is that marketers must be aware of developments, both upstream and downstream, that may affect their marketing strategy. In particular, it is downstream demand that 'drives' the level of derived demand in a specific business market. Of course, this is intuitively obvious – if the demand for new housing increases then clearly, perhaps after a time lag, the (derived) demand for housing materials such as steel and wood will also increase. In due course, and probably after a longer time lag, the (derived) demand for capital equipment used in the construction industry, such as backhoe loaders and cement mixers, may well also rise. However, what is less obvious is that the percentage change in derived demand may be much larger, or much smaller, than the percentage change of original demand. This is a phenomenon that can occur in capital equipment industries, and is known as the accelerator effect. The illustration in Box 1.1 shows the basic arithmetic of the accelerator effect.

Box 1.1 *An illustration of the accelerator effect*

- Suppose that a house-building firm knows that it needs to own one backhoe loader for every 50 houses that it builds per year. Each backhoe loader is depreciated over five years. The company usually builds around 500 houses per year, and so owns a stock of 10 backhoe loaders. This means that it buys two new backhoes each year to replace machines that reach the end of their economic life.
- Now, suppose that because of a house-building boom the firm experiences a growth in demand to 600 houses per year. Let us assume that the managers of the house-building firm expect this increase in production to be permanent. They need to increase their stock of backhoe loaders to 12, as well as replace two worn-out machines. Rather than buying two backhoe loaders, this year they buy four.
- The increase in demand for houses experienced by the building firm was 20 per cent (that is, 100 ÷ 500), but the increase in purchases of backhoe loaders by the firm was 100 per cent (four instead of the usual two).
- The accelerator effect in this case is five (the 100-per-cent increase in demand for capital equipment divided by the 20 per cent increase in demand for houses).
- Notice that if the managers of the house-building firm expect the demand for housing to remain constant from now on, then this will be a one-time-only increase in the demand for backhoe loaders. The long-term demand for backhoe loaders will increase by 20 per cent, exactly in line with the permanent increase in demand for houses. In subsequent years the firm will replace, on average, 2.4 (12 ÷ 5) machines each year.
- What if the managers of the building firm expect their sales of houses to return to their previous level of 500 per year? The firm would temporarily own two more backhoes than it needed, and for one year only its demand for backhoes would fall to 0.4. The accelerator then works in reverse, and is entirely symmetrical, since sales of houses have declined by 16.7 per cent, and demand for backhoes has declined by 83.3 per cent, giving an accelerator of five (after allowing for rounding error).

The example in Box 1.1 is hypothetical and not intended to be realistic. It illustrates the principle of the accelerator only. A purely hypothetical example is needed because in practice things are never so clear-cut, and the underlying acceleration principle can be difficult to discern. In practice, managers will be cautious about investing in new equipment at the first sign of an increase in demand for their own products, since they cannot be sure that the new demand will be enduring. In the short term managers are very likely to spend a little more on maintaining old equipment (so continuing to use equipment even though it has been fully depreciated on the balance sheet) rather than investing in new equipment, to get a better picture of the trend in demand. Naturally, managers can choose to lease equipment rather than to buy it new – although this in itself does not make the accelerator principle incorrect, since the equipment leasing company has to get its equipment from somewhere. For the accelerator principle to work with full

effect we have to assume that capital equipment is being worked to full capacity; otherwise the building firm in our illustration could have chosen to work its existing backhoe loaders more intensively rather than buy new machinery.

Despite these various objections, there is considerable evidence that the acceleration principle plays a substantial role in explaining the demand for capital equipment. Almost all macro-economic models of the economy include a version of this principle to explain capital investment, indicating that the principle is valid (Eatwell et al., 1987). The key implication of the principle for business marketers is that, in capital equipment markets, the future trend in demand cannot be predicted straightforwardly from forecasts of demand in downstream markets. Changes in downstream demand can lead to much larger percentage changes in demand for capital equipment. The fact that this is very unlikely to happen with the simple arithmetic precision of our illustration, for the various practical reasons discussed, makes the forecasting job much harder. One task for the business marketer working in such an industry is to understand both the scale of underlying accelerator principle for the industry, and the moderating influences on the accelerator exerted by conditions in the market and the behaviour of managers in customer organizations.

Market concentration in business-to-business markets

Business-to-business markets in general are characterized by high concentration of demand compared to consumer markets. However, the degree of demand concentration varies from market to market, and it is important to have some means of comparing markets to establish just how highly concentrated they are. The standard measure that is used is the concentration ratio. A concentration ratio is defined as the combined market shares of the few largest firms in the market – what is known as the 'oligopoly group' of firms in the market. Quoted concentration ratios are usually based on the top three, four, or five firms; that is to say, the concentration ratio is the sum of the market shares held by the top three, four, or five firms. The 'five-firm concentration ratio' is the most common method of describing the extent to which a market is dominated by a few firms. For purposes of economic analysis and economic policy concentration ratios are important because it is supposed that the higher the concentration ratio, the more likely it is that firms in an industry will collude to raise prices above those that would be found in a truly competitive market. Economists also theorize that where concentration ratios are relatively high, industry will be less innovative and production volumes less stable. Empirical economic research has generally shown that prices do tend to be higher, and innovation less dynamic, in highly concentrated industries (Eatwell et al., 1987).

The perspective taken by economists, when studying concentration ratios, is generally that of the *customer* of the industry in question and the *economic*

efficiency of the structural conditions of the industry. To the business marketer it is the perspective of the industry *supplier* that is generally most relevant, along with the implications of the industry structure for *sales and marketing strategy*. While economists are generally most concerned about the *monopoly power* that businesses have over their customers because of the concentration of market share, business marketers are usually more interested in the *monopsony power* that businesses have with respect to their suppliers because of the concentration of buying power. The degree of monopsony power in the supply market is symmetrical with the degree of monopoly power in the customer market; those firms that control large shares of the customer market are also the largest customers for suppliers to the industry. So we can use the concentration ratio (concentration of market share) as a proxy for the concentration of buying power within an industry.

Illustrating concentration ratios

The concentration of market power in consumer markets is widely known and understood. For example, anyone who has studied consumer marketing in the UK knows that although there are many brands in the laundry detergent market, the market is in fact dominated by just two producers: Lever Faberge Ltd and Procter & Gamble Ltd. In 2003 the brands owned by Procter & Gamble Ltd had a combined share of 46.1 per cent of the UK market, while Lever Faberge brands had a combined share of 34.1 per cent (Euromonitor, 2004b). At the company level this market is highly concentrated, since two firms control around 80 per cent of the market, and can be reasonably referred to as a *duopoly*. Clearly, any business wanting to supply products or services to the UK laundry detergent market must take this factor into account when developing a sales and marketing strategy. If your aim is to obtain a substantial share of the business to supply the UK laundry products market, then it is essential to do business with at least one of the industry leaders. To have any chance of achieving this you must become very familiar with the business of those companies and adapt your products and services so that they exactly match their requirements, which may well involve specific investment in new technology or new systems. Throughout this book we will frequently return to the implications of this for the theory and practice of business marketing.

Tables 1.3 and 1.4 show the top five company market shares in two other consumer markets, the Western European market for beer and the German market for audio products. From these we can calculate the five-firm concentration ratio for each sector, which is 38.7 per cent for the beer market and 51.8 per cent for the audio products market. It is equally possible to calculate the three- and four-firm concentration ratios from the data; for example, the three-firm concentration ratio in the Western European beer market is 29.5 per cent. Both of these industries fall into the normal range of concentration ratios. While the German audio products market is more concentrated than the Western European beer market, both show typical levels of industrial

Table 1.3 Western European market for lager beer: volume company shares 2002

Company	*%*
Heineken NV	13.2
Interbrew NV SA	8.7
Carlsberg A/S	7.6
Scottish & Newcastle Plc	5.8
Grupo Mahou-San Miguel	3.4
Five-firm concentration ratio	**38.7**

Source: Euromonitor, 2004c.

Table 1.4 German market for audio products: volume retail company shares 2002

Company	*%*
Sony Deutschland GmbH	16.5
Panasonic Deutschland GmbH	10.1
JVC Deutschland GmbH	8.7
Pioneer Electronics Deutschland GmbH	8.7
Philips GmbH	7.8
Five-firm concentration ratio	**51.8**

Source: Euromonitor, 2004a.

concentration. Neither shows nearly as great a concentration of demand as the UK laundry detergents market, however. Business marketers aiming to develop a marketing strategy to supply products or services to either of these industries clearly need to be aware of the buying power of the top companies listed in Tables 1.3 and 1.4. However, there is great deal of scope to develop sales and marketing strategies based on other segments of these markets, rather than simply focusing on the major players. It is also noteworthy that while the beer market is dominated by relatively local producers, that is to say, by European companies, the German market for audio products is dominated largely by the local subsidiaries of Japanese firms.

Other market structure differences

An understanding of derived demand, the accelerator effect and concentration ratios provides a basis for analysing many of the structural differences between typical consumer and business markets. Table 1.2 listed a number of other dimensions, along which lines experts have proposed that there are systematic differences between business and consumer markets. Demand elasticity is one of these dimensions. First, it is argued that businesses have less freedom simply to stop buying things than consumers, so that business demand is likely to be less price elastic (that is, less responsive to price

changes) than consumer market demand. Second, and for similar reasoning, it has been suggested that there will be more instances of reverse (or 'perverse') price elasticity of demand in business markets than in consumer markets. Both of these hypotheses about demand elasticity arise from the nature of derived demand and assumptions about the availability of substitutes for the inputs to critical business processes. Businesses need critical inputs if they are to continue trading.

For example, if a computer manufacturing firm cannot gain access to the latest generation of microprocessors, then it cannot build machines that will sell and the very existence of the company is at risk. Should the purchasing professionals at this company see the price of microprocessors rising, then they may take this to mean that there is a shortage of supply (price tends to rise in markets where demand outstrips supply) and may therefore *increase* their orders in the short term in the hope of guaranteeing a sufficient supply of microprocessors to keep the business functioning. In effect this is a case of reverse elasticity, where a rise in price triggers an increase in demand. Even if the purchasing team at the computer firm do not believe that there is likely to be a shortage of microprocessors, price changes are unlikely to affect the volume that they purchase to any great extent. The volume of microprocessors that the company buys is primarily driven by their computer sales forecasts, and not so much by component prices. The expectation is that demand for microprocessors will be inelastic with respect to price.

From Table 1.2 we can see that business markets have been described as more heterogeneous, more fragmented and more complex than consumer markets. All of these characteristics are reflections of the enormous diversity of organizational forms found in business markets. Of course, the point is not that consumers are all alike. Rather, it is that organizations are even more diverse than consumers. For example, most private firms employ fewer than ten people, while many household-name firms employ tens of thousands of people at multiple locations across several continents. A local decorating business employing three or four people has almost nothing in common with, say, a global automobile manufacturer.

Buying behaviour differences and marketing practice differences

In this section we will discuss these aspects of the differences between business markets and consumer markets only quite briefly. The reason for this is that buying behaviour and marketing practice are the subject matter of the remainder of the book, and we wish to avoid repeating ourselves excessively! In the following chapters you will find detailed discussions of organizational buying behaviour and business-to-business marketing practice.

In essence, organizations tend to have more professionalized buying processes than consumers, often involving formal procedures and explicit decision-making practices, which in many organizations are implemented

by managers who are specifically employed as purchasing professionals. Transaction values can be very high. As a result, sellers tend to tailor their product offerings to the needs of the buyer, seeking to offer complete solutions to their business problems rather than just to sell them a product. The conventional tools of consumer mass marketing are not very appropriate under these circumstances. Promotional messages must be tailored to the specific needs of the customer. Sales executives (and, for the most important customers, Key Account Managers) are employed to develop and manage the relationship between the buying and selling organization. All of these aspects of buying behaviour and business marketing practice will be explained in much greater detail in subsequent chapters of the book.

Classifying Business Products and Markets

We have emphasized that the key difference between business marketing and consumer marketing is the nature of the customer rather than the nature of the product. In business markets customers are organizations. There are indeed many products that are purchased by organizations that one cannot envisage being bought by consumers, such as management consultancy services and heavy engineering equipment. Equally, there is a vast array of products bought both by organizations and by private consumers, such as personal computers and health insurance services. This raises the question of whether one can classify business products separately from consumer products, or whether a single classification system will function equally well for both.

The standard approach to classifying business products is to use a classification system that is quite separate from the usual consumer product classifications (Copeland, 1924; Kotler, 1972; Murphy and Enis, 1986). This classification is based on the use to which the products are put, and the extent to which they are incorporated into (or 'enter') the final product. Many things that organizations buy, such as office cleaning services, are not incorporated into the final product at all. Some things, such as the DVD drives that a computer manufacturer buys from an optical drive manufacturer, are incorporated directly and completely into the final product. The distinction between 'entering goods' and other types of purchase is based on the idea that something incorporated into the buying organization's final product contributes directly to the finished product quality and so directly to the customer's business reputation. Other purchases affect the buyer's own customer less directly, and so do not have such an immediate potential influence on the buying organization's business performance. The system of classification is as follows:

- *Installations* are major investment items such as heavy engineering equipment, which are treated as investment items by the customer, so that the costs involved in acquiring them are depreciated over their expected

economic life. Customers are expected to plan such investments carefully, perhaps involving the use of extensive financial analysis including discounted cash flow analysis, and scenario planning.

- *Accessory equipment* consists of smaller items of equipment such as hand tools. Larger items of accessory equipment may be treated as investment items and depreciated on the financial statements, while smaller items will be treated as expense items. The economic life of accessory equipment is usually shorter than that of installations.
- *Maintenance, repair and operating (MRO) supplies* are individually minor items of expenditure that are essential to the running of the organization. These would include such things as office supplies (for example stationery), lubricants and abrasives.
- *Raw materials* are unprocessed basic materials such as crude oil, coal and metal ores (the steel industry – see the case study at the end of this chapter – is a major buyer of coal and iron ore). These products are often traded on international exchanges (such as the London Metal Exchange) and are particularly prone to price fluctuations arising from the forces of supply and demand.
- *Manufactured materials and parts* include raw materials that have been processed (such as finished steel and prepared timber) and component parts (such as computer DVD drives and automobile windscreens) that are ready to be incorporated directly into the finished product.
- *Business services*, are often subdivided into maintenance and repair services and business advisory services.

From this classification of business products one can easily derive a commonly cited classification of industrial manufacturing organizations into original equipment manufacturers (OEMs) and others. OEMs are manufacturing businesses that buy component parts from other firms to incorporate into a finished product that is then sold under their own brand name to other businesses or to consumers. Car manufacturers (such as VW/Audi, Ford and Toyota) and computer manufacturers (such as Dell, Compaq and Fujitsu Siemens) are classic OEM businesses. One can then distinguish between the OEM market (sales of component parts to OEMs for incorporation into the final product when it is first manufactured) and the after-market (sales of component parts to the owner of the product *after* it has been sold by the OEM). In the after-market, for example, car owners may need to replace a shattered windscreen, and computer owners may choose to upgrade the RAM capacity of their desktop machine. OEM customers are by definition business customers. They usually buy in large quantities, and are typically large and powerful buying organizations. Customers in the after-market may be either organizations or consumers. Both organizations and consumers buy vehicles and computers, for example, for which they will buy spare parts or upgrades. The OEM market is therefore an exclusively business-to-business market, while the after-market includes both businesses and consumers.

In contrast to the standard classification system for business products that we have cited above, Murphy and Enis (1986) argued that only one classification system was needed for products, and that it could apply equally well to business and consumer products. They proposed a fourfold classification of products based on the buyer's evaluation of the effort involved in acquiring the product and of the risk of making a poor decision. Effort and risk are considered to be the costs incurred by the buyer when making a decision; effort is a variable that includes the amount of money, energy and time that the buyer is willing to expend to acquire a given product.

- *Convenience products* involve very little effort and negligible risk for the buyer. The maintenance, repair and operating supplies described previously would generally be classified as convenience products.
- *Preference products* involve a little more effort than convenience products but substantially more risk. In general, this means that they are a little more expensive than convenience products, but that the buyer perceives a much greater chance of making the wrong decision. Minor items of accessory equipment as described above would generally also be classified as preference products; Murphy and Enis also mentioned business travel as a characteristic preference product.
- *Shopping products* involve a great deal more effort and perceived risk than convenience or preference products. This would include major items of accessory equipment, manufactured materials and parts (that is, products that enter the final product completely), and market research services. Buyers are willing to spend a considerable amount of time and energy on acquiring these products because of their relatively high price and risk associated with possibly making the wrong decision.
- *Specialty products* are the highest ranked in terms of both buyer risk and effort. Installations (such as major new items of engineering plant) and highly specialized business services (such as the services of a top management consultancy firm) would fall into this category. The main distinction between specialty products and shopping products is effort, rather than risk. Buyers are prepared to invest great amounts of time and energy in seeking to make the right choice about these high-value purchases.

The two principal classification systems described above should be regarded as complementary rather than as alternatives. The first of them concentrates on the nature of the product, the way in which products are used and whether they enter the final product or not. It is a seller-orientated classification scheme. The Murphy and Enis classification is buyer-orientated, classifying products on the basis of dimensions that are considered meaningful to buyers. Although they are logically distinct, there is clearly a degree of consistency between them. For example, 'installations' will almost certainly fall into the category of 'specialty products', and MRO supplies almost certainly into the category of 'convenience products'. The Murphy and Enis classification has

the advantage of explicitly treating goods, services and ideas equally. In classifications of business products it is all too easy to relegate services to a single undifferentiated category, with the implication that services are relatively unimportant compared to goods. However, as we saw earlier in the discussion of Table 1.1, the service sector is a much larger employer than the manufacturing sector in the world's major economies, so it is important not to think of the marketing of business services as somehow less important than the marketing of industrial products.

Chapter Summary

- Business marketing is concerned with the marketing of goods and services to organizations. The key distinguishing feature of business marketing is the nature of the customer, rather than the nature of the product. Although there are products that are bought only by organizations and not by final consumers, there are many products that are bought by both organizations and consumers.
- Modern economies are becoming increasingly service orientated. The service industries accounted for close to 75 per cent of employment in such countries as Australia, Canada, the UK and the USA in 2000 – and the trend is towards even higher levels of service sector employment.
- Business markets can be distinguished from consumer markets along a wide range of dimensions, but those dimensions can be conveniently grouped into market structure, buying behaviour and marketing practice. At the most fundamental level, it is structural differences that tend to drive differences in buying behaviour and in marketing practice. In particular, demand in business markets is derived rather than direct, and levels of demand concentration in business markets are typically much higher than in consumer markets. As a result, buyer power in business markets can be much greater than in consumer markets. In turn, this often means that business marketers prefer relational marketing strategies, developing solutions tailored to individual customers rather than conventional marketing mixed strategies.
- A common classification for business products is installations, accessory equipment, MRO supplies, raw materials, manufactured materials and parts, business services. A key distinction is made between products that are incorporated into the final product (entering goods) and those that are not. Original equipment manufacturers combine components bought from other suppliers into a finished product that is sold to end-users. The after-market comprises sales of parts for repair and upgrade to products

that are already owned by an end-user. Business products can also be classified using the customer-orientated categories of convenience, preference, shopping and specialty products. This classification scheme is based on the risk and the effort that buyers perceive in acquiring a given product.

Questions for discussion

1 Why do we not differentiate between business markets and consumer markets on the basis of the type of product purchased?

2 Draw up an elementary chain of derived demand for the personal computer industry.

3 What is the accelerator effect and why is it important in business-to-business markets?

4 Are business markets fundamentally different from consumer markets?

5 What is a five-firm concentration ratio? What difference does it make to the business marketer whether this ratio is 30 per cent or 70 per cent?

Case study: Snapshots of the steel industry

The steel supplier

British Steel, 1999

The end of the millennium saw British Steel struggling to achieve financial success. In his Chairman's statement Sir Brian Moffat remarked: 'The past year was increasingly challenging for British Steel due mainly to the disruptive effects of the economic crises in the Far East and the continuing strength of sterling'. Indeed, the Group suffered an operating loss of £174 million on a total turnover of £6259 million, while only a year before it had achieved an operating profit of £265 million on turnover of £6947 million. In British Steel's most important market, the UK, market share was down to 55 per cent from 57 per cent, while there were contrasting fortunes in the main steel-using industries. Output stagnated in the electrical and mechanical engineering sector, and declined by 5.5 per cent in the metal goods sector, but UK car production was up by 3 per cent, while the construction sector

was stable. Other European markets showed an overall decline of 3 per cent in demand for steel. Even though the use of steel was not in decline, a surge in steel imports during 1998 had built up stocks. Demand for steel was suppressed as users chose to bring down their steel stocks before placing new orders. The USA market was growing, but Asian markets were still depressed following a severe Asian financial crisis.

Steel is a capital-intensive industry with extensive international trade. Producers strive to keep their production facilities working at high utilization levels. This means that geographical fluctuations in demand often lead to rapid changes in sales patterns as producers pursue market opportunities in order to keep their plants busy. In 1998/99 the decline in steel demand in their home markets caused Asian steel producers to look for export markets, primarily turning to the USA and Europe. As the elementary economics of supply and demand suggest, if there is excess capacity in an industry then competition is expected to drive prices down. World demand for steel declined in 1999, meanwhile there was an estimated 30 million tonnes of excess capacity, and international competition brought about the expected result as steel prices declined sharply. To aggravate the problem for British Steel, the period 1995–2000 saw a steady strengthening of sterling against the world's other major currencies. This directly reduced export earnings (since foreign currency earned was worth less in terms of sterling), improved the competitive strength of overseas competitors in the UK market (since they could charge lower sterling prices and obtain the same amount of revenue in their own currency), and adversely affected British Steel's UK manufacturing customers (so tending to reduce UK demand for steel).

British Steel responded to these adverse circumstances by striving to improve its marketing and purchasing operations. On the marketing side, British Steel was working with customers to develop new steel products that delivered improved manufacturing performance to their customers. For example, in partnership with a forging company an improved type of steel for manufacturing connecting rods was developed, which significantly improved machinability. On the purchasing side, British Steel reorganized its purchasing operations around networked supply hubs and continued to reduce the number of suppliers with which it worked. Substantial cost reductions were achieved.

The birth of Corus, 1999

In October 1999 British Steel merged with the Dutch company Koninklijke Hoogovens to form Corus. Industry commentators regarded this as an inevitable consolidation within the European steel industry to deal with the combined pressures from depressed demand, intense international competition and declining global steel prices. Over the course of the next few years Corus became the focus of intense public and political scrutiny as it implemented

the rationalization programme that was the main justification for the merger of the two companies. The main impact was on employment in the UK, where thousands of job losses were to follow in already depressed industrial regions such as south Wales and northern England.

Corus 2003

In 2003 Corus had an operating loss of £208 million on a turnover of £7953 million, compared to an operating loss of £446 million on a turnover of £7188 million in 2002. Sales turnover improved both because of improved sales volume and because of increased prices; average revenue per tonne of carbon steel increased from £285 in 2002 to £305 in 2003. In the UK, still the most important market for the merged company, there was a slight decline in the number of cars manufactured, but this was offset by growth in the construction industry. Sterling had weakened against the Euro, so that British manufacturing industries were having greater success in exporting to Europe, with consequent benefits for British steel manufacturing. Other European markets saw a decline in steel use, in particular from the domestic appliance industry, as a general decline in economic confidence caused European consumers to cut back in this area. Elsewhere in the world the USA experienced a decline in demand for steel and there was a small increase in Japan because of strong export growth achieved by Japanese manufacturing companies. However, the driving force behind the world steel market was undoubtedly China, with an estimated 20 per cent growth in steel demand during 2003. Chinese demand for steel in 2003, at 203 million tonnes, was estimated to be 21 per cent of global steel demand. Because of the strong demand for steel from China, the competitive pressures felt by British Steel in 1999 from Asian steel producers looking for alternative export markets in Europe were diminished. In the longer-term, a worry for other world steel producers was that the Chinese economy would inevitably, sooner or later, slow down from its hectic growth and that the massive increase in steel manufacturing capacity developed in China would be available to serve other world markets. One forecast suggested that by 2010 China would have a steel producing capacity of 63 million tonnes in excess of domestic steel demand.

Principal steel-using industries

- Aerospace
- Automotive (components industry and car manufacturing)
- Construction
- Consumer products (including domestic appliances)
- Energy and power generation
- Engineering
- Rail

- Packaging
- Shipbuilding

Case study

The steel user

Nissan 2004

In late 2004 Nissan Motor had to stop production at three of its four assembly plants in Japan because of steel shortages. In order to improve efficiency Nissan had cut the number of main Japanese steel suppliers it used from five to two, leaving it more dependent on the remaining two. While demand for cars was booming, Nissan did not have enough steel to maintain production. As a result, the production of up to 40,000 Nissan cars was delayed, just as Nissan was about to launch several new models in Japan. Sales revenue and profitability were adversely affected. Because the two preferred suppliers were already operating at full capacity, Nissan had to look elsewhere for high-quality steel. Indeed, across a large part of the region there was a scramble to obtain sufficient steel, with a construction boom in China, buoyant demand for ships from the shipyards of Japan and South Korea, and growing levels of production at other major car manufacturers such as Toyota. Steel producers in the region were already working to increase production capacity, but the construction of new steel manufacturing facilities takes some time. The steel industry has only limited flexibility to respond to fluctuations downstream in the chain of derived demand because it is so capital intensive. Building new steel manufacturing capacity is a massive undertaking with lengthy lead-time and heavy investment costs.

Case Study Questions

1. Explain how the chain of derived demand affects the demand for steel.
2. Explain the differences between marketing an industrial raw material such as steel and a fast-moving consumer good (such as washing powder) in terms of market structure differences, buying behaviour differences and marketing practice differences.

Sources: British Steel, 1999; Corus Group, 2003; The Economist, 2004, 2005.

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