

NATIONAL QUALIFICATIONS CURRICULUM SUPPORT

Business Management

Business Decision Areas I: Marketing *and* Operations

Revised Student Notes and Activities

[HIGHER]



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Section 1: Marketing

What is a market?

A market can be defined as a meeting place for buyers (consumers) and sellers. Markets can be set up in a shop, restaurant, over the telephone/internet, at a car boot sale, etc.

A market consists of the individuals or organisations who are actual or potential buyers of a product or service. Markets may be classified as consumer markets or industrial markets.

Consumer markets are made up of individuals who purchase goods or services for personal or domestic use. They make most of their purchases from retailers and buy a combination of consumable goods, such as food and durable goods such as cars, televisions, and clothes. Consumable goods are bought more frequently than durable goods.

Industrial markets are made up of organisations that purchase goods or services to use in the production of other goods and services. They buy a combination of consumable goods, such as raw materials and longer-lasting durable goods, such as machinery and equipment.

What is marketing?

Marketing Manager Required

Here is your chance to influence the spending habits of a discerning sector of the population and manage a world-famous cosmetics company. Reporting to Senior Management, you will develop and implement a marketing strategy for a range of brands. You will have responsibility for *market research, promotion and advertising, direct mail* activity and *preparation of publicity material*. Additional responsibility will be for *new product development* and *branding* in order to expand our market base.

The marketing activities contained in the above job advertisement are italicised in the text.

The Chartered Institute of Marketing defines marketing as ‘the process involved in identifying, anticipating and satisfying consumer requirements profitably’.

The role and importance of marketing in organisations

- **Identify**
- **Anticipate**
- **Satisfy**

1 To identify consumers’ requirements

Businesses must identify what exactly a consumer wants from a product or service. There is little point in providing something that does not meet consumers’ requirements – they simply will not buy it. Marketing departments aim to ensure that consumers buy products or services and that they continue to do so (that is, make repeat purchases).

Firms today face a lot of competition and consumers’ expectations are increasing and becoming more sophisticated. Requirements change frequently and the marketing department must make sure the product or service is developed or altered to meet these requirements. The role of marketing is, therefore, an increasingly important one in today’s business world.

Price and quality have always been important factors in whether or not a consumer will buy, but so too have prompt delivery, attractive packaging and after-sales service. Advertising and promotion play a big part in influencing consumers to buy.

2 To anticipate consumers’ requirements

The role of the marketing department is to find out what consumers want today and will want in the future. Consumer trends must be considered in order to anticipate future needs. This is especially important in markets where trends and fashions change rapidly (e.g. clothing, toys), or where technological changes occur frequently (e.g. computers). It may be necessary to develop new products quickly to stay ahead of competitors.

3 To satisfy consumers’ requirements

The consumer is the most important consideration for most businesses today – businesses are often said to be ‘consumer (or customer) focused’. Without

consumers the business would fail. Good service and quality products that offer value for money are essential.

Prompt delivery and good after-sales service are also important, as are well presented and packaged goods. It is vital that the product is available at the right price and at the right time.

These three aims, for the majority of businesses, must be achieved profitably. There is little point in spending large amounts of money on marketing if costs are greater than revenue. However, organisations do exist where profitability is not an objective. Schools, hospitals and charities also use marketing techniques in order to become more effective in satisfying consumers' requirements.

The importance of marketing

The importance of marketing can be illustrated by considering the contrasting responses of the American car industry and the Swiss watch industry to changes in market conditions.

The decline of the American car industry

For decades, motor cars manufactured by American companies were built on the principle that the American consumer preferred a long, roomy vehicle with large engine capacity. During the 1960s large heavy vehicles with names like Chevrolet and Buick, produced by American manufacturers, dominated the market. Roads were seldom graced by the sight of a foreign motor car and the American manufacturers tended to ignore trends taking place in the rest of the world where small, economical vehicles with lower engine capacities were capturing an ever-increasing share of the market.

American manufacturers believed that small cars would never sell in the US market. Japanese car manufactures, on the other hand, disagreed and recognised a major opportunity for market growth in the US. Marketing strategies were developed, research and development programmes carried out, factories built, and a workforce was trained in order that Japan could enter the American motor vehicle market.

During the 1970s world oil prices quadrupled, making fuel much more expensive. Increasing labour and raw material costs also combined to make large American cars expensive to buy and to run. American consumers rapidly switched their preference to smaller, economical cars, and sales of Japanese vehicles such as Datsun and Toyota rocketed because American manufacturers offered no alternative.

Even while this process was taking place, American car manufacturers decided against changing to small car production believing that the trend was only temporary and that their market share would recover when world oil prices fell. This never happened, and by the time American manufacturers finally changed to small car production, the Japanese manufacturers had a powerful grip on the market. They also faced severe competition from West Germany, Italy, France and Korea where technological advances in car production enabled competitors such as Volkswagen, Fiat and Renault to secure a market share.

Several American car producers went out of business and thousands of manufacturing jobs were lost. This led to the United States having a large balance of payments deficit with Japan due to the high volume of imported Japanese motor vehicles. The domestic American industry failed to anticipate the changes in consumer needs and never recovered.

The Swatch story

In contrast, the outstanding success of a Swiss watch manufacturer during the 1980s was the result of a careful and well-executed marketing plan, brought on by necessity.

For years the Swiss were world leaders in the watch industry. In 1974 their worldwide market share was 30%. Then the Japanese actively began to produce and market quartz watches, which the Swiss viewed as a passing fashion. Quartz digital watches were, however, no fad and by 1983 the Swiss share of world markets for watches had fallen dramatically to 9%.

The Swiss manufacturer SMH carried out extensive research in its watch markets and carefully analysed patterns of consumer behaviour. Marketing experts advised the company that a turnaround was possible if an inexpensive, good-quality quartz analog watch could be developed, since the market was saturated with digitals. Gradually, a marketing plan was devised and implemented resulting in the introduction of the Swatch in 1984, which has since revolutionised the world watch industry.

Based on their extensive analysis of consumer behaviour and lifestyle, SMH adopted a strategy that completely changed the concept of a wrist watch. Watches were to be a fashion accessory first and a watch second. They would also be analog rather than digital. Product planning developed a distinctive quartz analog watch in a wide range of fashionable colours and designs. New models were introduced rapidly and older ones quickly dropped. Because Swatches were sold as fashion accessories, consumers were encouraged to buy more than one (to match different sets of clothes or lifestyles). The average Swatch customer in Britain today owns three different models.

In Britain, Swatch watches were distributed mainly through department stores and speciality shops. They were not sold in high-street jewellery stores, which the company believed were an inferior point of sale for the product. The marketing strategy was based on carefully controlling distribution to avoid flooding the market, which would have resulted in consumers losing their desire to own a Swatch.

Today, Swatch watches sell for a relatively low price which appeals to a large number of consumers and encourages multiple purchases. The watches are highly distinctive. Extensive product promotion, which includes advertising on TV and in magazines, together with sponsorship of various concerts and sporting events, generates further sales.

Successful marketing has greatly increased market share and enabled the company to introduce new product lines, such as clothing and telephones, using the Swatch name.

The marketing function

In the case of Swatch, the strategic function of marketing was to attract and retain a loyal group of consumers through a unique combination of market research, product design, distribution, promotion and price factors.

Since many markets for goods and services have evolved to the point where the consumer has become of prime importance, businesses have responded by attempting to ensure that their products are produced to an appropriate standard, at an acceptable price, and distributed in a convenient manner. Marketing decisions, therefore, centre on four functional activities:

- product
- pricing
- distribution or place
- promotion (including advertising).

These decision areas, when combined, are known as the *marketing mix*.

Marketing as a strategic activity

Marketing is concerned with every aspect of an organisation's product or service, e.g. its design, price, distribution, selling and promotion, from its inception until it finally reaches the hands of the consumer. Even after the sale, marketing still has a job to do: it must ensure consumer satisfaction through the provision of after sales service, such as maintenance, repairs, instruction booklets, spare parts and quality guarantees. Marketing is far more than just selling the product. It is concerned with *what* is to be sold, *how* it is to be sold, *when* it is to be sold and *where* it is to be sold.

Amongst the most important functions of marketing is the assessment of the market to discover

- where the consumers of the product are to be found
- how many consumers there are
- the attitudes and preferences of the consumer
- the effectiveness of distribution methods
- the strengths and weaknesses of competitors.

The current position must be looked at along with the future position – marketing departments must anticipate what will happen in the future in order to allow adjustments to goods and services to be made and new goods and services to be produced. Profit is important to most organisations, but there may also be a need to improve brands in order to obtain or retain brand leadership or increased market share.

Today, marketing has come to be recognised as the discipline which coordinates and manages the total business function. In a consumer society, marketing decisions are often strategic decisions since they frequently determine the overall direction of the organisation. Other business functions such as production and human resource management are often influenced by marketing considerations.

Product-oriented organisations

These assume that the product or service being offered is the best on the market and will be very easy to sell. It is felt that there is no need for product change or development as there is no real competition. This might be the case with a new invention or a highly technical unique product, or even when a very strong advertising campaign can convince a consumer to purchase the product. Henry Ford in launching his Model T car said '*customers can have any color they want as long as it is black*'.

In today's competitive business world, this approach may be seen as complacent. Organisations operating like this may fail once competitors enter the market. An example can be shown by the demise of the British Motorcycle industry. BSA, Norton and Triumph, producing heavy, slow-revving, large capacity machines, were superseded by Kawasaki, Honda and Suzuki – they had failed to look at what these foreign competitors were producing and how they met the needs of the consumer more successfully.

Product orientation was predominant in the UK in the 1930s and 1940s when there was less competition, and customers' expectations were not so sophisticated. Consumers did not have such a large disposable income and their knowledge of products was more limited. Pressure from the media was considerably less.

Customer-oriented organisations

These constantly modify their products or services in response to changes in the market. They will make an effort to find out what customers want and what influences their purchasing decisions. These organisations realise that their profits and/or success depend on meeting the needs of the customer.

During the 1980s and 1990s, customers became increasingly aware of what is available on the market and the amount of competition has greatly increased. This has led to the customer being seen as the main focus of an organisation's activities.

Marketing ensures that the needs of the customer are considered before production takes place.

The marketing of products and services

Marketing applies to both products and services. Consumer goods (i.e. ones bought by end consumers for their own personal use) are commonly used to give examples to illustrate marketing. It is important to remember, though, that marketing also applies to industrial goods and to services. The main principles of marketing (covered later in this text) apply in all cases, but the ways in which they are used may differ between consumer goods, industrial goods and services. This section considers industrial goods and services.

Industrial goods are distinguished from consumer goods according to the purpose for which they are bought. They are purchased for use in a business, e.g. raw materials and machinery. In some cases, the same goods can be both industrial goods and consumer goods. Cars, for example, may be industrial

goods when bought by companies for use by sales representatives, but are consumer goods when bought by private individuals for their own use. From a marketing point of view, the marketing of industrial goods is influenced by several factors:

- Crucial considerations when buying industrial goods include product performance and quality in terms of wider company requirements – the technical specification of industrial goods may then be an important feature of marketing them.
- The link between the seller and the buyer is usually much closer with industrial goods – for this reason, mass advertising is not often used for industrial goods and marketing tools such as branding may be less common.
- Personal selling tends to be more common for industrial goods than for consumer goods.

Services (e.g. hairdressing, car repairs, bank accounts) are distinguished from goods in the following ways:

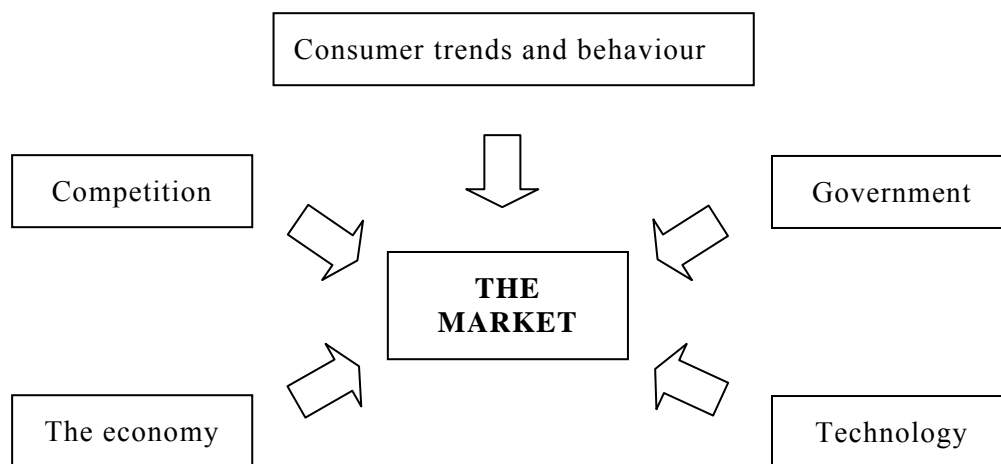
- They are intangible – as a result, they cannot be displayed like products nor can they be handled, tested etc. before they are bought.
- They are usually sold and consumed at the same time – products can be produced, then stored and consumed at a later date, but the production and consumption of services cannot usually be separated.
- They are perishable and, unlike products, cannot be stored.
- Their quality may be variable – products can be produced in constant conditions so that quality can be closely controlled. Services are often provided on the spot and quality may depend on the person providing the service. Although people can be trained to follow very detailed job procedures (such as those used by McDonald's in their fast food restaurants), quality control of services is generally more difficult than it is for products.

These factors mean that the marketing of services often concentrates on ensuring that the quality of the service is as consistent as possible so that consumers get the same experience wherever the service is provided.

The marketing environment

Organisations operate in an environment that is constantly changing. It is vitally important that marketing decisions take account of the forces that shape that environment in order to compete more effectively.

The factors that determine and influence the marketing environment can be shown as follows:



They are the same kinds of factors that influence all aspects of the behaviour and activity of an organisation.

The consumer

What influences the consumer to purchase one product instead of another, e.g. why buy Pepsi and not Coke? The main determinants are:

Age distribution of population

The UK is said to have an ageing population, i.e. there is an increasingly larger proportion of middle-aged and elderly people.

Many organisations have responded to this change and have seen new market opportunities, e.g. Saga Holidays provide package holidays exclusively for the over 50s. Conversely, the baby boom of the mid 1980s resulted in market opportunities for the manufacturers and sellers of baby clothes and toys.

Gender

Males and females spend in different ways. Females spend more on cosmetics, clothes and jewellery than males, while males spend more on cars, leisure and alcohol.

Disposable income

Real disposable incomes have risen steadily over the past 30 years leading to increased spending on housing, home furnishing, holidays, medical care, recreation and transport. The percentage spent on tobacco, clothing and jewellery has declined substantially. This does not mean that people are spending less on tobacco, clothing and jewellery in absolute terms; only that they are spending a smaller proportion of a larger income.

Household status

An increasing number of households are made up of people living on their own (single, divorced, widowed). This has led to a demand for smaller homes. Products specifically designed for the single household are also on offer, e.g. ready meals in one-size portions.

Social class

One way of understanding how customers will respond to marketing activities is to divide them into socio-economic groupings based upon the types of jobs they do. The underlying assumption is that, as particular jobs tend to have certain life-styles attached and if the market can be divided by job classification, then more appropriate products and services can be targeted towards particular groups.

For the purposes of marketing, socio-economic grouping provides a reliable picture of the relationship between occupation and income. Members of each group have similar priorities, which influence their wants and needs. For example, we would expect those in groups A, B and C1 to spend some of their income on private education, private health care, new car, etc., while those in groups C2, D and E would spend more of their income on necessities.

Socio-economic group	Social 'class'	Most likely types of occupation	Examples
A	Upper or Upper Middle	Managerial/ Professional	Surgeon/Director
B	Middle	Intermediate Bank Manager	Managerial/ Professional
C1	Lower Middle	Supervisory	Bank Clerk
C2	Skilled Working	Skilled Manual	Joiner
D	Working	Semi-Skilled	Driver
E	Lowest Subsistence Level	Low Paid	Casual Worker

The reclassification of class tables

Classification based on skills, or on whether an employee is a manual or non manual worker, has been replaced by a system that reflects more accurately employment conditions such as job security and career prospects.

Since before the First World War, government statisticians have ranked people by the nature of their employment in six classes: professional; managerial and technical; skilled non-manual; skilled manual; partly skilled; and unskilled. The reclassification has seven bands – with an eighth into which are placed people who wish to work but never have.

The government table differs from the ABC classification used by market researchers, which emphasises income differentials.

The official definitions are intended to help government statisticians to evaluate better the allocation in health and social services.

For instance, where an individual is located on the social scale can help to determine whether he/she is more or less likely to die early of a heart attack or cancer. People in Class 6, semi-routine occupations, are twice as likely to suffer from a limiting and long-term illness as those in Class 3.

Class table	
1.	Higher managerial and professional
2.	Lower managerial and associate professionals
3.	Intermediate occupations
4.	Small employers and own account workers
5.	Lower supervisory, craft and related occupations
6.	Semi-routine occupations
7.	Routine occupations

Taste, fashion and lifestyle

These factors have become increasingly important influences on consumer behaviour. The vast majority of consumers are easily persuaded to buy goods that are popular with other consumers at a particular time; the clothing market in particular experiences rapid change as different colours and styles become fashionable while others fall from favour. The persuasive power of advertising and promotion can increase the appeal of a product and demand will rise.

Marketing experts are aware of the importance of understanding the life-styles of consumers. A life-style is a behaviour pattern adopted by a particular community or a sub-section of it. By identifying and understanding life-styles, businesses can develop products and target them to this group.

Increasing consumer awareness of health and nutrition during the 1990s created new markets as others contracted. Sales of bicycles, exercise equipment, beauty-aid products and nutritional foods increased rapidly, while the market for cigarettes and goods high in saturated fats declined. Manufacturers were forced to alter their food products to meet these changes in life-style and demand.

The increasing importance of environmental issues has also proved to be a major agent of change. Manufacturers and marketers were forced to respond by introducing environmentally friendly products, such as Eco washing powder, bio-degradable disposable nappies and ozone-friendly aerosols. The market for home insulation, solar energy and energy-saving products grew rapidly to reflect the increasing consumer demand for efficient use of the earth's diminishing natural energy resources.

The government

Government is also in a position to influence markets through legislation and economic policy. This is particularly true in relation to consumer protection laws that influence the provision of goods and services in Britain. For example, in the area of minimum standards of safety furniture producers have been forced to alter manufacturing specifications to take account of legislation relating to combustion and poisonous gases.

The deregulation of the financial services market during the 1980s allowed banks to offer a wider range of financial services, such as mortgages, and competitive rates for savings. Building societies, traditionally only mortgage lenders, are now able to offer current accounts, cheque books and cash-dispensing machines.

Technology

Technological advances create new markets and cause the inevitable decline of others. The development of compact disc players during the 1980s created a rapid growth in sales of music on laser disc, to the extent that by 1991 major retailers no longer stocked albums in vinyl form.

Economic forces

Economic forces affect different markets in different ways. The relatively low interest rates of the past 10 years have fuelled the housing market and consumer demand for goods and services.

Branding

This is one of the methods that organisations can use to target consumers. The name given by a producer to a product or range of products is known as a *brand*. It can be the name of the company, e.g. Heinz, Virgin or Coca-Cola, or it can be the name given to a range of products which are not connected to the company name, e.g. Mr Kipling or Fairy. The aim is to distinguish the product from its competitors and to make it instantly recognisable to the consumer. The product may well be different, but often it is differentiated in the mind of the consumer by its specific packaging and advertising.

A brand name has such an influence on purchasing decisions that brand names themselves are sold for considerable sums of money, e.g. Nestlé paid £2.3 billion for Rowntree Mackintosh when it was valued at £1 billion. This purchase enabled Nestlé to gain the names Kit Kat, Polo and Smarties.

Brand loyalty

Some consumers are faithful to one particular product. A marketing department must make sure that consumers believe the product to be better than all of its competitors. It is difficult to persuade brand loyal customers to switch products. A branded product may also command a higher price, but despite this brand loyal customers are reluctant to change.

Manufacturers are able to launch new products much more easily if they use an existing brand name. Consumers believe that the new product will meet the same standards as the products they already know and like to buy.

Unique selling point (USP)

This is a feature that allows a product to stand out from its rivals. It should offer the consumer some unique benefit that may motivate them to switch from the brand they normally purchase. For example, the USP of the Dyson was that it was the first bagless vacuum cleaner.

Own brands

This is the term for products branded with the name of the store stocking the product, e.g. Tesco, Sainsbury's or Boots. The product may well be manufactured by someone else. The responsibility for marketing the product is passed to the retailer. Retailers can have products made to their own specification and it may be offered as a cheaper alternative to the consumer.

Many organisations maintain a product portfolio with different products at different stages of development.

The marketing mix

For marketing to be successful, an organisation has to combine all the marketing activities to create a combination of benefits considered to be the most suitable to meet the needs of a selected market. These factors can be split into the four Ps:

PRODUCT
PRICE
PLACE
PROMOTION

Each of these factors has an influence on attracting the customer to the product. Each can be varied to suit the needs of the consumer, e.g. place needs to be considered when setting the price of a product – expensive meals can be sold in up-market type restaurants, but not a local café.

Product/service

The *product* must meet the needs of consumers – actual and potential. Existing products may have to be adapted to meet these needs. Products are not necessarily tangible: the bank, travel agent, insurance company and architect all offer products – normally referred to as *services*. The quality of a product is capable of wide variation depending on how it is designed, the materials used in manufacture, the method of manufacture and how it is packaged.

Products are the means by which a business provides benefits for its customers. For example, what the consumer wants when buying washing-up liquid is clean dishes; a gardener buying insecticide wants to get rid of insects. A product is useless unless it provides a benefit for the user.

Core, actual and augmented product

Core

This is the basic product or service – the means by which a business provides benefits for its customers.

Product	Basic function
Shampoo	to clean hair
Trainers	to protect feet while playing sport
Video recorder	to record TV programmes

Actual

The vast majority of products, however, are not purchased to meet a single need; the ownership and use of a product involve a whole range of factors that make up a *product concept*.

This is the actual product. As its name suggests, it is the product that the business provides for sale. In the above example, the product would be the shampoo, the trainers or the video recorder. Each actual product will have a number of characteristics including design, brand name, particular features and distinctive packaging.

Augmented

Firms realise that in order to gain a competitive edge they must add to the attractiveness of their product. This can be done by offering additional features, improving after-sales service, reducing delivery times, offering 0% credit terms, extending guarantees, improving style, colour, packaging and quality. Use of a brand name quite often enhances the product image to the consumer.

Applying this to the above examples:

Product	Augmented feature
Shampoo	image enhanced by designer name, e.g. Charles Worthington range
Trainers	brand name/label, air soles
Video recorder	Nicam stereo, long-playing tapes

Over a period of time, augmented features become standard specifications as firms keep up with their competitors and consumers come to take the features for granted, e.g. remote control to operate a television.

Product life cycle

In a modern industrial society, such as Britain, changes are continually occurring in the market place. They can be brought about by technological developments, fashion, political pressures, economic circumstances and many other factors. The consequence of change is that all products sooner or later become obsolete. Some products have longer lives than others, e.g. chart topping records have a life of weeks whereas Cadbury’s Dairy Milk was launched in 1905 and is still going strong.

Changes in the marketing environment dictate that there will always be a demand for new products while, at the same time, old ones will decline. The notion of a product life cycle has emerged and helps organisations to analyse

the process by which their products emerge, grow, stabilise and decline over time.

The product life cycle concept is based on the assumption that, from the time it is launched on the market until it is finally withdrawn, a product passes through a number of recognisable phases (see page 41 for diagram). These are:

Development

The product is undergoing research and development during this initial stage. This can be a costly and time-consuming period, prototypes may have to be developed and extensive testing may take place. No revenue is generated during this stage but costs incurred may be high.

Introduction

In the introductory phase, growth is slow and sales are low because of limited consumer awareness of the product. It may also be very difficult for the organisation to persuade consumers to switch brand loyalties from competing products. The high costs of holding stocks and advertising the product heavily almost always result in losses being made on sales of the product during this phase.

Growth

In the growth phase, sales increase rapidly as more consumers become aware of the product. It is usually during this phase that the product earns the firm the highest unit profits, since there is likely to be little competition on the market.

Maturity

By the third stage, the fully established product is faced with competition from other contenders for a share of the market. The presence of competition may force the organisation to increase marketing expenditure in order to hold its market share, and it is also likely that it will be forced to cut prices. Gradually, supply may outstrip demand and the market becomes saturated.

Decline

Finally, competition becomes even fiercer and some brands will be forced to drop out of the market as prices are further reduced and sales and profits decline. It is also likely at this stage that the product is becoming obsolete

and that technological advances or innovations have given birth to new products, to which consumers will inevitably switch.

The following table provides an illustration of products at different stages of the life cycle.

Stage	Products
Introduction	Digital TV, peel off nail varnish
Growth	MP3 players, photo-phones
Maturity	DVD players, automatic washing machines
Decline	Video recorders, push lawn-mowers

There are a number of brands that seem to go on for ever, without any sign of decline. Such products include Oxo, Bovril, Hovis, Persil, Heinz Baked Beans, Kelloggs Cornflakes and Smarties.

The pocket calculator is a good example of a product that has moved through the life cycle. It went from an exclusive, expensive item to a widespread, moderately priced item to a mass-marketed, inexpensive item in just a few years.

The product mix

In practice, there are very few single-product organisations. Most offer a range of products or a product line, which is a broad group of products intended for basically similar uses and with similar characteristics. Procter & Gamble, for example, offer a related product line that includes Ariel washing powder, Daz liquid detergent and Fairy washing-up liquid, together with a large number of dishwasher powders, fabric conditioners and soaps.

There is, however, no need for a direct relationship between the items in an organisation's product mix. In very large organisations a wide spread of product lines can be part of a deliberate strategic plan. Imperial Group, Britain's sixth largest company, illustrates this. Its spread of activities ranges from tobacco through plastics and packaging to food and brewing. The food division alone has a very wide product mix that includes motorway service stations, frozen chickens, potato crisps and pet foods.

Product innovation

The development of new products is essential if businesses are to replace those that go into decline. There are a number of stages before a new product is developed:

- Generation of idea from research (scientific or market) or brainstorming;
- Analyse idea – will the customer buy it? Is it technically possible to produce? Is it cost effective? Are there any legal restrictions?
- Produce a prototype and test it;
- Test market;
- Adapt product, solving any problems found when test marketing;
- Launch product.

There is, however, an extremely high failure rate – for every fifty new product ideas only one becomes successful. Organisations spend huge sums of money on product research and development over a long period of time.

Some products are years in the planning before they even begin the introductory phase. In 1965, for example, the American pharmaceutical company Searle discovered Aspartame – a chemical alternative to sugar. It took eight years to develop Aspartame into a low-calorie sweetener, and a further eight years to be granted permission by the American Federal Drug Administration to manufacture it. Finally, in 1983, the chemical (called Nutrasweet) became an ingredient in the manufacture of Coca Cola and various other food products. The entire process took eighteen years.

Price

Price is only one of the factors that affect the purchasing decision. It is, however, an important indicator of quality and image and provides consumers with a way of making judgements about value for money, e.g. the conclusion that if one pair of training shoes costs more than another, the more expensive pair must be superior.

The importance of price

The importance of price in the marketing mix varies from one market to another. In the market for white emulsion paint, price is considered to be the most critical element in the purchasing decision. In the fashion clothing market, however, price can be one of the least relevant factors, being outweighed by style and design.

Decisions regarding price need to be made when:

- a price is to be set for the first time, e.g. when a new product is launched on the market;
- it becomes necessary to adjust the price of an existing product according to its stage in the product life cycle or what competitors are charging for a similar product.

Pricing strategies

The strategies and tactics adopted in pricing a product will generally depend on the objectives of the organisation at the time. An organisation that has an objective of profit maximisation may adopt a pricing strategy different to one that has an objective of sales maximisation. A publicly funded organisation may have different objectives from a private company and thus adopt a different pricing strategy.

Pricing strategies that organisations could consider include:

Low-price strategy

The price is set below that charged by competitors. Organisations tend to use low-price strategies when the competition in the market is strong and consumers respond very positively to small, downward changes in price, e.g. with washing powder.

Market-price strategy

There are situations when one or more of the following conditions exist:

- products are bought frequently by consumers;
- competitive products are very similar;
- a few large companies dominate supply in a specific industry.

The market for petrol is a good illustration of market-price strategy in operation. Companies such as BP, Esso and Shell tend to set prices at an identical market level. Each is aware that they could quickly lose all their business if they set and held prices above the competition. Conversely, if they lower prices, their competitors are forced to follow suit for fear of losing their market share. There is very little to be gained from either lowering or raising the price of petrol and price is not a significant factor in the marketing mix. Consequently, the petrol companies attempt to gain market share by

offering superior services at their petrol stations and by tempting drivers with free gifts and other special promotions.

High-price strategy

This can be either a long-term or a short-term policy. A long-term policy means the organisation seeks to sell a high-quality product to a select market. High prices are an essential feature of up-market products and the exclusive image is reflected in the price. Porsche cars, Timberland shoes and champagne are all examples of products whose manufacturers operate a long-term, high-price strategy.

A short-term policy is based on situations where the organisation has a temporary advantage over competitors gained, for example, by a patent. The Swiss pharmaceutical company Hoffman la Roche was able, for a number of years, to set the price of its tranquilliser drug Valium at a high level because, under international patent laws, no other organisation was permitted to manufacture these tranquillisers for a set period of time. The high price reflected the lack of competition and also the need for Roche to make substantial profits to recoup the high research and development expenditure associated with Valium.

Short-term pricing tactics

In order to gain a competitive edge, an organisation may employ a range of short-term pricing tactics which include the following:

Skimming pricing

This is a tactic used during the introductory phase of the product life cycle. At the launch of a new product, there will frequently be little competition in the market, so demand will not be greatly affected by the price (i.e. it is relatively price inelastic). Skimming involves setting a high price for a new product. Once the first segment of consumers is saturated, the manufacturer will lower the price in order to tap fresh segments of the market. The process continues until a large section of the total market is catered for. By operating in this way the organisation avoids the risk of underpricing the product.

Penetration pricing

This is an appropriate tactic when the seller knows that the demand for a new product is likely to be affected by price (i.e. it is price elastic). A low price is set to attract customers to the product and to penetrate an existing market where there is likely to be strong competition. A policy that combines a low

price with low sales may initially result in losses, but it may be the only way to overcome strong brand loyalty and persuade customers to switch to the new product.

A good example may be seen in the highly competitive market for breakfast cereals. In 1990 Nestlé launched a new product called Golden Grahams. In the knowledge that brand loyalty for breakfast cereals is strong, and that a wide range of similar products already competed in the market, Nestlé adopted a policy of penetration pricing, selling Golden Grahams at an initial price of 90p. As the product rapidly penetrated the market, sales and profitability increased and the price crept up. Within eighteen months, the price of Golden Grahams had reached £1.50, representing a price increase of 67%.

Destroyer pricing

This is a tactic employed to undermine competitors' sales. It involves reducing the price of an existing product to an artificially low level. While this may result in short-term losses, it is designed with a view to long-term market success. It is more likely to be successful when the organisation that initiates it has lower unit costs than its rivals and it is frequently used by established companies to prevent new companies or products entering the market. When the competition has been eroded or eliminated, the price is raised to previous or higher levels.

Destroyer pricing has been used by airlines such as British Airways and British Midland to prevent smaller airlines competing in the lucrative shuttle route market.

Promotional pricing

This is a tactic used to inject fresh life into an existing product or to create interest in a new product. Prices are lowered for a short period of time in the hope that consumers will purchase increased quantities of the product. In the DIY market, Texas Homecare regularly advertise periods where all the goods in their stores are reduced by 20% in an attempt to promote brand loyalty for Texas at the expense of competitors such as B&Q and Great Mills.

Another form of promotional pricing is the use of *loss-leaders*. Supermarkets frequently use loss-leaders to boost sales. A loss-leader is a product whose price is substantially reduced by the supermarket so that it is probably contributing no profit at all. Only a small number of items sold by the supermarket are loss-leaders. The aim of selling them cheap is to give the impression that all items in the store are cheap. A shopper, seeing that Kit-

Kats are 10p per packet cheaper in one supermarket, may wrongly expect all prices to be cheaper in that store.

Demand-oriented pricing

Some organisations charge different prices for a product at different times, depending on the level of demand. When demand is high, high prices are charged. Conversely, low prices are charged when demand is low. This is known as *price discrimination*. BT, for example, charge a higher rate for telephone calls during peak periods of the working day. Holiday companies also vary the price of holidays according to the time of year.

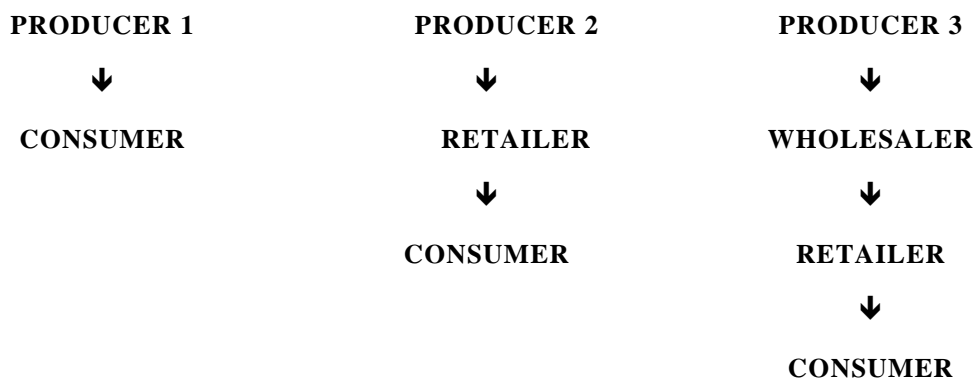
Price and the marketing mix

Organisations may vary the prices of their products in the short run to achieve certain marketing objectives, but in the long run, pricing decisions are seldom taken in isolation from the other factors in the marketing mix. Alterations in price will frequently be accompanied by changes in promotion, advertising, packaging and product specification.

Place

The nature of the product or service will determine where a firm decides to sell. This is usually referred to as *distribution*.

The channel of distribution is the route taken by a product as it passes from the producer to the consumer. The channel refers to the route taken by the ownership of the product, not the physical movement of the goods.



The above can be applied to the sale of potatoes:

1. Customer stops at a farm and buys bags of potatoes from farmer.
2. Customer visits local shop which has purchased bags of potatoes from the farmer; customer is now able to purchase as little or as much as he/she wants.
3. Customer visits supermarket and is able to buy potatoes in many sizes of bag, some pre-washed or chipped, and has a choice of many different types.

For some products or services, e.g. holidays, *agents* may be involved in the distribution process. Agents provide a link between the buyer and the seller in exchange for commission. Agents are often used by organisations trying to enter a foreign market: a local agent will have knowledge about the laws of the country and its trading practices.

Brokers too provide a link between buyers and sellers in such markets as insurance and share dealing. They are also involved in international commodity markets such as coffee and metals.

Direct marketing (where there are no agents, brokers or middlemen) is becoming increasingly common in the insurance market and in computers, e.g. Direct Line, Dell Computers.

The organisation must decide which channel or channels provide the most effective means of getting the product from the factory to the consumer. The method selected may have an important influence on public perception of the product. A company making soup intended for a wide market would not choose to sell it through exclusive department stores, while an expensive and exclusive perfume would not normally be distributed through a supermarket chain. How best to distribute products is not an easy decision, and failure to choose the most appropriate channel will damage sales of the product.

Physical distribution decisions

The organisation must decide on the most cost-effective method of physically moving the product in order to match the perceived needs of its customers. In this respect, the distribution management will need to take into account the projected level of demand for each of the organisation's products, and the geographical spread of that demand. Seasonal and other likely fluctuations will need to be anticipated. The optimum methods of stock control, warehousing and transportation will be considered and implemented.

Organisations need to consider the relative costs and speed of the different methods of transport available to them. The nature of the product will influence this decision, e.g. if the product is one that will deteriorate quickly, it may well be cost-effective to use air transport instead of road.

New products present particular problems. If they are unlike anything that is on the market, there are no immediate guides to their distribution either from past experience or from competitors' methods. Products in the introductory stage of their life cycle are frequently distributed through specialist wholesalers and retailers. This helps to maintain greater control over the advertising and promotion that may be crucial to the initial success of the product and allow skimming pricing strategies to be implemented. During the growth and maturity stages, a greater number of intermediaries may be used in order to increase market penetration.

Factors affecting distribution

Type	Channel	Example	Reason
Large and dispersed	wholesalers, agents and retailers	CDs	to ensure wide distribution
Small and local	direct	farmer selling fresh eggs	dealing with small quantities, so not cost effective to have intermediaries
Segment	various	various	consider location and image of the targeted segment shop, also geographical influence here

The following also affect distribution:

- *Legal restrictions*

Alcohol cannot be sold in UK petrol stations or to the under-18 age group. Certain drugs cannot be sold without a prescription.

- *Changes in buying habits and life style*

Increased car ownership has meant people are willing to travel away from town centres to do their shopping.

Increased ownership of freezers has led to the establishment of specialist frozen-food shops (e.g. Iceland).

- *Existing buying habits*

If people tend to make most purchases of car wax in specialist hardware retailers rather than supermarkets, then the manufacturer will choose to distribute a new car shampoo primarily through specialist retailers, such as Halfords. Market research will also indicate changes taking place in consumer buying habits.

Larger companies often set up their own distribution networks. They can afford to invest in their own lorries and warehouses.

The main channels of distribution

The wholesaler

The general function of the wholesaler is to buy goods from the manufacturer and then sell them on to the retailer. Manufacturers sell to wholesalers for the following reasons:

- The wholesaler buys in bulk which relieves the manufacturer of the cost of making a large number of small deliveries. This cuts the cost of transportation, the number of sales staff required and also the volume of paperwork – e.g. invoicing.
- The wholesaler bears the risk of holding large stocks. If it were not for the existence of the wholesaler, the manufacturer would need to tie up more capital in holding stocks of his product and would incur further costs through the need for greater storage space.
- The wholesaler breaks down the bulk supplies he receives and offers a wide variety of goods in relatively small quantities to the retailer. The wholesaler will sometimes finish off the packaging and labelling of goods.
- The wholesaler provides advice to the manufacturer. By being in the middle of the distribution process, wholesalers know what goods are selling well and they are well placed to advise retailers on what to buy and

what not to buy, and manufacturers on what to produce and what not to produce.

Since distribution via the wholesaler would appear to offer such advantage, why is it that so many manufacturing organisations now cut out the wholesaler and prefer to sell direct to the retailer? The answer lies in a fundamental change that has taken place in the marketing of consumer goods. The development of product branding has been accompanied by a desire amongst manufacturers to maintain far greater control over the marketing of their products. By going direct to the retailer, a manufacturer is able to coordinate better the efforts of his sales force with advertising, promotion and in-store merchandising. The manufacturer no longer has to rely on the wholesaler to carry out this function.

In the food sector, for example, the gradual extinction of many small independent retailers and the growth of large supermarket chains, together with rapid improvements in long-distance road haulage, have made it easier for manufacturers to make deliveries direct from factory to retailer.

The retailer

The role of the retailer in the modern pattern of distribution is complex and varied but it is essentially that of a local supplier offering a direct service to the public. In general, retailers perform four distinct functions:

- The retailer breaks down bulk supplies of an assortment of goods and services from a range of suppliers and offers them for sale to the public.
- The retailer provides information to consumers through advertising, displays and signs, and trained sales personnel.
- The retailer stores goods, prepares them for sale, marks prices on them and displays them on the sales floor.
- The retailer physically sells these goods to consumers and offers a range of related services such as credit facilities, hire-purchase, after-sales guarantees and delivery.

The last twenty-five years have seen a revolution in the structure of the retail trade. The growth and dominance of the supermarket and the hypermarket during the 1970s and 1980s led to the extinction of a large number of independent traders. Increasingly, these powerful enterprises are moving away from the town centre to greenfield sites, where adequate car-parking facilities provide an additional customer service.

Some manufacturers can eliminate intermediaries by owning their own retail units, e.g. oil companies that own petrol stations. In practice, however, this type of channel is rare and most manufacturers rely heavily on Britain's wide shopping infrastructure to sell their products to consumers.

There are a number of different types of retailer:

- *Independent retailers*

An independent retailer operates only one outlet and offers personal service, a convenient location, and close customer contact. Almost 80% of all retailers are independents, including many hairdressers, dry cleaners, furniture stores and corner shops. Groups of independent retailers might join together in order to benefit from bulk purchasing of stock or joint advertising. They are known as *voluntary chains*, e.g. Spar, Mace. They do so in an attempt to compete with the larger chains.

- *Multiple chains*

A retailing company that operates more than ten branches is known as a multiple chain. Some multiples are classed as specialist stores – concentrating on a narrow range of items such as clothing (e.g. Top Shop, Dorothy Perkins and River Island). Others are variety chains that provide a range of goods, like Marks & Spencer, Dixons and Boots.

- *Supermarkets*

A supermarket is defined as a store with at least 2,000 square feet of selling area and at least three check-out points. Supermarkets have been a key feature of shopping since the 1990s. They offer consumers a very wide range of food and other products at low prices, operating on the principle of low mark-up and rapid turnover.

Large supermarkets are known as hypermarkets or superstores and offer an even wider range of household goods at discount prices. In addition to food and clothing, they stock product lines as diverse as DIY equipment, motoring accessories, cosmetics, toys and gardening equipment. The aim of a hypermarket is to provide cheaply for all the basic shopping requirements of an average household under one roof.

- *Consumer co-operatives*

These stores are owned by 'members' rather than shareholders and profits are distributed to customers in the form of dividends instead of being paid to shareholders.

- *Department stores*

Department stores like Jenners in Edinburgh have a large number of different departments and employ more than twenty-five people. They tend to have an up-market image and charge higher prices for goods, many of which are exclusive and not intended for the mass market. This type of store has declined substantially in recent years.

- *Specialist stores*

A number of specialist organisations, such as Comet, concentrate on selling large quantities of specialist products. Often these are consumer durables but they also include DIY products (e.g. B&Q) and furniture (e.g. IKEA). Such stores are typically located on the outskirts of town where overheads are low. The resulting economies together with their ability to buy in bulk ensure that these stores are able to attract consumers by offering lower prices than their city centre rivals.

- *Franchises*

A franchise is a licence to market a product in a specified area. The person taking out the franchise puts up a sum of money as capital and is issued with equipment by the franchise company to sell or manufacture the product in which the company deals. Franchise agreements are very common in the fast-food business (e.g. McDonalds and Perfect Pizza) but there are plenty of examples in other areas of retailing (e.g. Benetton clothing shops; Dyno-Rod plumbing services; Body Shop; British School of Motoring).

A manufacturer has some control over the quality of the product or service offered by the franchise. If standards are not maintained, the franchise may be withdrawn.

Direct selling

Direct selling is based on the principle that by cutting out the middle-men (wholesalers and retailers), organisations can sell their goods at competitive prices. Examples of direct selling are mail-order, direct response advertising, television selling. Increasingly, the Internet is becoming a method of selling direct to the consumer.

Mail-order

Mail-order companies sell goods through agents or through members of the public ordering from a free catalogue. They usually buy goods in bulk from

the manufacturers and display them attractively in a glossy colour brochure. They range in size from giant organisations such as Great Universal Stores to small businesses, many of them run from private homes. Product lines are extremely varied and range from wines, tools and kitchen equipment to clothing, books and recorded music.

Direct-response advertising

A number of producers place advertisements in newspapers or magazines, describing the product being offered, together with an illustration. Consumers respond directly to such adverts and place orders by post or telephone. Products sold successfully in this way tend to be those that:

- are easily recognisable to the public;
- do not require lengthy description;
- have a unique selling proposition;
- have high profit margins to offset costly advertising;
- are easy to transport and unlikely to suffer damage in transit.

Telephone selling

This involves telephoning people at home and trying to sell them the product or service, e.g. double glazing or insurance. It has the advantage that the seller is dealing directly with the consumer but it also has the serious disadvantage that many consumers find it intrusive.

Television selling

Television selling is already big business in the USA, Australia and elsewhere. On a 24-hour television shopping channel, manufacturers present their products in an informative and entertaining way (usually about four minutes for each product). During this time, viewers can use a freephone telephone line to order something and pay by quoting their credit card number.

Promotional strategies

Promotion is any form of communication used in an attempt to draw attention to a product or service. An organisation may promote its product or service to gain new customers or to retain existing ones.

The three main aims of promotion are:

- *persuading* – to persuade consumers to purchase the product;
- *informing* – to tell consumers about the product;
- *reminding* – to remind consumers that an established product still exists.

There are two main types of promotion:

- *Above the line* – Use is made of independent media such as television and newspapers, enabling businesses to reach large audiences easily. Obviously there will be those who are not really interested in the product at all so, to a certain extent, the promotion can be said to be wasted.
- *Below the line* – This type of promotion is directly controlled by the business, e.g. sales promotions, direct mail, trade fairs and personal selling. It allows businesses to target the consumer they hope will be interested in their product more directly.

Advertising

Advertisements are messages sent via the media and intended to inform or influence the people who receive them. Advertising can be classified into two broad categories: informative and persuasive. Typically an advertisement contains elements of both.

Informative advertising

When a product is first launched, sales are low because very few people know that it exists. The role of advertising here may be to inform the public of the product's existence and its particular uses. The same applies when a product has been modified or improved. In other cases, e.g. car advertising, the nature of the product may be such that a large amount of technical information has to be given and advertising again may have to be informative. Advertising that informs and educates consumers gives them greater knowledge on which to base their choice of goods and services.

The government uses advertising to inform the public – e.g. health warnings, availability of job training schemes, notification of the need to complete tax forms, etc.

Persuasive advertising

Persuasive advertising is used to persuade consumers to buy a particular product. It is often based on qualitative information and may contain statements of opinion rather than fact, e.g. 'Carlsberg – probably the best lager in the world'. Persuasive advertising is normally associated with consumer products and is used heavily where differences between products are minor and demand is elastic.

Advertising decisions

An organisation has to make a number of important decisions in relation to advertising.

1. What effect does the advertising have on sales? It can influence a product's sales but it is difficult to measure the effect precisely.
2. Who is the organisation selling to? The advertiser needs to know who buys the product, why, where and when they buy it and for what purpose.
3. Why do consumers *not* buy the product or service?
4. Which medium or combination of media will work best?

Market research is the key to providing answers to these questions and determining how best to target consumers.

Advertising media can be categorised under three broad headings:

- Print media:
newspapers, magazines, journals
- Broadcast media:
television, radio, cinema
- Outdoor media:
fixed posters, hoardings, on transport.

MARKETING: STUDENT NOTES

The effectiveness of advertising will often depend on selecting the most appropriate media to reach the target segment of the market.

MEDIUM	ADVANTAGES	DISADVANTAGES
Television	Exposure on a national scale	Expensive
	The advert reaches all socio-economic groups	There may not be a nationwide interest in the product, so TV advertising would not be appropriate
	Sound, vision, movement and colour can all be used	
Daily newspapers	Exposure on a national scale	Only read by particular groups
	People tend to believe what is in the papers	Can be expensive
	They have high attention value	
	Market segments closely identified with readership	
Sunday newspapers	Greater attention value since people have more time to read them	Expensive
	Large circulation	Difficult to define market segment of readership
	Advertising in colour supplements is attractive	
Local newspapers	Readers tend to scrutinise local papers more closely than they do the nationals	Local papers do not have the authority of national papers
	Greater density of readership on a local basis	Newsprint is sometimes of poor quality
Direct mail	Good for targeting market used with mailing lists	Poor strike rate if target if audience is not carefully selected
	Good for exclusive products and particular interest groups	Many consumers view it as an 'invasion of privacy'
Independent radio	Less expensive than press and television	Relies on messages being communicated by voice – high 'noise' factor
	'Captive' audience	Difficult to target specific segments
		Listeners tend to 'switch off' when the adverts come on

Cinema	Messages can combine voice, image and colour	Limited market coverage
	Effective for targeting local markets and segments	Expensive to produce 'quality' adverts
Outdoor media	High visual impact	May go unnoticed – i.e. part of the scenery
	Frequently seen by passers by	High levels of environmental 'noise'
	Wide choice of locations	Can be expensive – e.g. hoardings in a football ground

The choice of advertising method will be affected by:

- cost
- the audience reached
- the advertising used by competitors
- the impact
- the law (restrictions on tobacco advertising)
- the marketing mix (may be used along with other promotions).

Controls on advertising

Advertising Standards Authority (ASA)

This is a voluntary body set up to monitor advertising in the UK. It is responsible for making sure advertisers conform to the British code of advertising and sales promotion practice. Advertisements must be legal, honest, truthful and not cause offence.

Independent Television Commission (ITC)

This is a body which controls advertising on television and radio. Some of their restrictions include current newsreaders not being allowed to endorse products, and actors not being used in commercial breaks during programmes in which they appear.

Pressure groups

Certain pressure groups seek to influence advertising, e.g. FOREST who aim to defend the rights of tobacco firms to advertise. Women's groups protest against advertisements they consider to be sexist.

Trades Descriptions Act 1968

This law states that the products must match the claims made about them in the advertising.

Other forms of promotion

Advertising alone does not sell goods and services. At best it can only stimulate interest. This interest must be converted into a buying decision by means of other marketing tools such as merchandising, distribution channels and packaging appeal.

Advertising is not even the only available promotional strategy. There are a number of others.

Sales promotion

Sales promotion describes techniques which are designed to encourage customers to make a purchase. They usually complement advertising campaigns but the essential feature of a sales promotion is that it is a short-term inducement to encourage customers to react quickly, whereas advertising is a much more long-term communication process designed to build brand image and loyalty.

There are two main types of sales promotion:

Into the pipeline

This is a promotion designed to enhance sales of a product to trade outlets and to help them sell the product to their customers. Examples include *point of sale* (POS) material, such as displays, posters, promotional videos, etc., and *sale or return* arrangements under which the supplier agrees to take back unsold stock.

Out of the pipeline

This is a promotion that helps trade outlets to persuade their customers to make a purchase. Examples include free trial packs, bonus packs and money-off coupons.

Personal selling

There are some situations where customer needs can only be satisfied by personal contact between buyer and seller, for example:

- where the customer needs special advice in the selection of the product, e.g. life insurance;
- where the customer needs special benefits not provided by the standard offering;
- where the price the seller wishes to charge and the price the buyer is prepared to pay are not in accord, and negotiation is required.

In these situations, advertising and promotion alone will not result in a sale. Where satisfying the individual needs of the customer is paramount, personal selling is essential.

Personal selling involves persuasive communication between a seller and a buyer and is designed to convince the consumer to purchase the products or services on offer. The objective of personal selling is, therefore, to *make the sale*, and it is the final piece in the jigsaw of marketing activities which have taken place beforehand.

Public relations

This is when an organisation tries to communicate with customers, shareholders, employees and the government – all of whom form the organisation's 'public'. The aim of public relations is to improve the image of its products and the image of the organisation itself.

PR activities might include:

- charitable donations;
- event sponsorship of sporting and cultural events, e.g. the Lombard RAC Rally.
- product endorsement, e.g. pop stars or sports personalities;
- press conferences and press releases.

Publicity

Public relations cost time and money. Publicity, on the other hand, does not always have to be paid for and can be generated outwith the organisation as well as from within.

For example, the mention of a company's name on a news broadcast or in a magazine article generates publicity. While this indirectly promotes the organisation and its products, the publicity may also present a threat: the media often find disasters (fires, scandals, product side-effects) more newsworthy than routine statements distributed by the organisation.

In summary, PR and publicity together can

- provide the public with information about the organisation;
- build confidence in the organisation and awareness of its products;
- develop goodwill in the community and present the organisation in a positive way;
- support and enhance other areas of the promotional mix such as advertising and selling.

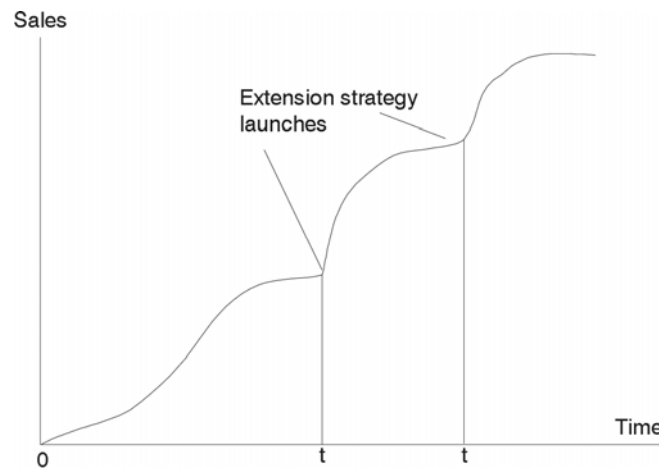
Extending the product life cycle

During the life cycle of a product the ingredients of the marketing mix may be altered in order to prolong its life. A readjustment of the mix might include:

- changing or modifying the product – possibly its shape, colour or formulation, e.g. diet drinks, Orange Kit-Kats, Pepsi Max cans;
- new variants, e.g. fun sized Mars Bars;
- altering the packaging to appeal to a different market segment;
- altering the channels of distribution;
- changing prices;
- altering the methods of promotion and advertising, e.g. special offers, free gifts and competitions.

There are many instances of 'new' or 'improved' versions of products launched on the market, usually with a great deal of publicity.

The effect of periodic injections of new life on the life cycle of a product can be illustrated as follows.



Lucozade – the rebirth of a product

Invented in 1927 by a Newcastle pharmacist, the bottle wrapped in yellow cellophane won considerable success in the convalescent drinks market, to such an extent that by 1938 it had been bought by Beechams.

The brand did well during the 1950s and 1960s, but as the nation became more health conscious during the 1970s, its high sugar content appealed less to consumers and sales declined. It had to be repositioned. Key to its rebirth was a new advertising campaign featuring decathlete Daley Thompson and more recently Liverpool footballer John Barnes. Lucozade came in smaller bottles with different flavours and was promoted as an all-round healthy solution for active, healthy lifestyles by replacing lost energy. Lucozade Light was born and more recently Lucozade Sport – the isotonic drink which promoted its constituent fluids as being perfectly in balance with body fluids.

Lucozade Sport with its innovative packaging has nearly 90% of the UK market for sports drinks and is worth £32 million a year.

Product portfolios

Most large companies produce a range of products, each of which has its own life cycle. By using life cycle analysis, companies can plan when to introduce new lines as old products go into decline. The collection of products that an organisation produces is known as its *product portfolio*.

Target markets

Businesses may attempt to target all consumers or they may choose to target specific groups.

Undifferentiated marketing or *mass marketing* is where one product or service is sold to the entire market. Costs are low due to the organisation being able to benefit from economies of scale with high volume production.

Differentiated marketing is where different products or services are sold to different groups of people within the overall market.

Market segmentation

This is where the market is broken down into identifiable groups of people with similar needs. In Kotler's words, it is 'the breaking down of markets into increasingly homogeneous sub-groups that can be targeted with a specific marketing mix'.

Breaking a large market down into a number of segments has several advantages:

- It enables the seller to meet the requirements of buyers more closely, e.g. a car can be designed for families with children, for use in city traffic, etc.
- It can make advertising and promotion more focused, e.g. Saga Holidays can advertise in publications read by older people.
- It can enable companies to specialise in particular segments and develop expertise in meeting the needs of customers in these segments (e.g. 18–30 holidays).
- It can help a company achieve higher sales and build up a stronger market position.
- It can help to increase the profits of a company.

Methods of segmentation

In order to segment the market, most businesses try to identify broad classes of buyers, all members of which have similar requirements. Markets are usually segmented by identifying relevant buyer characteristics. They can be segmented according to:

- age

- sex
- socio-economic group
- education level
- income
- religion
- ethnic grouping
- family characteristics
- residential area/region
- lifestyle preferences (hobbies, political voting preference, personal values, opinions).

The producer may make a range of products, e.g. a manufacturer of canned drinks may make a caffeine-free version for the health conscious and a diet version for those concerned about their weight.

In any situation, the seller will segment a market on the basis of those buyer characteristics which are most relevant to the product or service concerned. It is important, however, that the result is an effective segment which can be successfully targeted. For example, it is essential to make sure that any segment chosen is big enough or profitable enough to be worth targeting. This means that it must have sufficient consumers or those involved must have a lot of purchasing power. Similarly, there is no point in identifying several segments if the company lacks the resources to target them or cannot adapt the product or service to meet the needs of those in the various segments.

Personal selling

Market segmentation enables the firm to distinguish between the needs of various different customer groups. By means of the marketing mix, it is possible to create a standard package of benefits designed to match the perceived needs of any one particular segment. Even the smallest segment, however, may consist of several thousand consumers and a standardised marketing package cannot hope to have equal appeal to every single individual.

Niche marketing

This is when an organisation concentrates on selling to a specific market segment. It is commonly used by smaller companies that concentrate their limited resources on establishing themselves in their chosen niche. Large firms tend to be less active in niche markets; they tend not to bother chasing such a low volume of sales.

However, if an organisation is very successful in a niche market, competitors may choose to enter the market at a later time, possibly undercutting the original producer. Also, the organisation may face problems if their business provides only one product or service. Customers who initially purchased the product may choose to purchase an alternative. This is especially true if the product turns out to be a passing craze.

Market share

The percentage of total sales of a product or service achieved by one organisation is known as *market share*. It is often considered by businesses to be an indicator of their success – the larger the market share, the larger the profits. The advantages of having a large market share are:

- High market share companies have the power to buy their raw materials in bulk, which will reduce costs. This may be passed on to the consumer in the form of cheaper prices, thus edging smaller competitors out of the market. Otherwise, the firm will make higher profits.
- High market share companies may be able to make special components or ingredients for themselves, rather than buying them from other firms. This again will prove to be a saving in costs.
- If larger profits are made, more can be reinvested in the organisation. Additional research and development may give the company a competitive edge.
- Costs, such as marketing and transport, are spread over a larger output – making expenditure on advertising, etc. much more worthwhile.

Market growth

An organisation may be selling in a high- or low-growth market. Markets that are growing offer more potential for products to develop than declining or static markets do. High-growth markets are attractive to organisations that wish to increase their market share. It becomes very difficult to gain market share from established market leaders when market growth has slowed down.

Market research

What is market research?

Marketing managers require information to make decisions. They need to know about the market in which the organisation is operating. Market research provides information about:

- consumers' needs and wants;
- competitors.

The cost of a wrong decision can be very high financially and in terms of missed markets. Without market research the organisation may not have enough information to come to the correct decision – they may charge a higher price than the consumer is willing to pay, or the promotion used may not appeal to the targeted market segment. Therefore, market research can provide information that allows the organisation to produce exactly what the customer wants and to produce a product which customers prefer to the competitors' products. As a result, it can increase the organisation's profits.

Two definitions of market research:

'Market research is the systematic gathering, recording and analysing of data about problems relating to the marketing of goods and services.'

'Market research is the means by which those who provide goods and services keep themselves in touch with the needs and wants of those who buy these goods and services.'

The need for market research

An organisation will carry out market research in order to:

- Predict changes which will be required in its product or service
A change in the customer's lifestyle or income may mean changes have to be made to a product, e.g. long-haul holidays.
- Identify what is selling
Which of the organisation's products are successful?
- Identify the types of customers buying the product or service
Who is buying the product or service?
- Explain why things are happening in the market
Why are people no longer buying a product? Why has the market segment changed?
- Investigate possible courses of action
Will people be interested in a new product?
- Identify the size of the market
*Is the distribution effective?
Is the product satisfying the consumer?*
- Discover what consumers think of the product
*Should it be modified?
Is the competitor's product better?*
- Discover how much consumers are willing to pay
Is the pricing of the product or service appropriate?
- Discover if the promotion is appropriate
Is the choice of promotion increasing sales?
- Discover if the packaging is appropriate
Is the packaging creating the correct image?
- Identify what competition exists – now and in the future
What action has to be taken to compete effectively?

Methods of research

There are two main types of research:

- **Primary research**
This is information collected by the organisation itself or by a paid market research agency.
- **Secondary research**
This is information already collected for another purpose, e.g. government statistics.

Primary data

Primary data is gathered by **field research**. Field research is:

- gathered by observation or asking people questions
- up-to-date
- collected for the exact purpose required by the organisation
- not easily available to competitors
- time consuming to gather
- expensive to gather

The techniques of field research

Questionnaire

A questionnaire is a systematic list of questions designed to obtain information from respondents about their attitudes, values and beliefs. A questionnaire ensures that all respondents are asked the same questions in the same way.

Checklist for questionnaire design:

- write a clear, persuasive introduction, stating the purpose of the questionnaire and why the person should participate;
- assure confidentiality;
- keep questions clear, short, easy to understand and relevant;
- avoid jargon;

- don't ask questions which rely too much on the respondent's memory – people may give unreliable information as they cannot remember mundane matters, e.g. how many bottles of washing-up liquid they purchased last month;
- don't ask leading questions – where you strongly influence the answer given;
- start with easy questions and move on to more complicated ones later;
- keep sensitive questions until the end, e.g. age or income;
- group questions into topics and arrange them in a logical sequence;
- use a variety of question types to maintain interest;
- make sure instructions are clear;
- avoid terms such as 'regularly' or 'occasionally' as they mean different things to different people;
- use groupings for age or income as people are often reluctant to answer this question directly;
- close the interview with a 'filter question' – this allows you to place the respondent within a market segment according to age, income, job, etc.;
- test the questionnaire.

The following table, which contains examples of questions and their weaknesses, illustrates how difficult it is to design good questionnaires.

Question	Faults
1. Do you buy crisps regularly?	What type of crisps and what does regularly mean? To some people the word regularly may mean every day. To others it could mean once a week or twice a month.
2. How many times last month did you buy Tudor crisps?	This is relying too heavily on the respondent's memory and the answers are likely to be very approximate.
3. Do you think Tudor crisps are reasonably priced?	What is meant by a reasonable price? To some people it could be 20p, to others it may mean 35p.
4. Would you buy Tudor crisps if they were available in a wider range of flavours and in more colourful packaging?	The question involves two issues. First, the flavour; and second, the packaging. The answer to the first part might be 'yes' while the answer to the second might be 'no'. This question should be split into two questions.
5. Which flavours do you like best?	The question is ambiguous. One person might reply, 'cheese and onion', while another might reply, 'strong flavours'.
6. Do you think crisps are good for you?	The concept is too vague. Does the question relate to diet, nutrition or general enjoyment?
7. Do you eat crisps: Very often? Hardly ever? Frequently? Mainly at week-ends? Rarely? Never? Sometimes?	The categories of response appear in an illogical order. It would also be difficult for the respondent to distinguish easily between 'very often' and 'frequently'.
8. How much do you earn?	This is a personal question which may cause offence to many respondents.
9. Are your children allowed to eat more than one packet of crisps a day?	This is a question which may produce a negative reaction from the respondent who may feel that to answer 'yes' would convey an impression of being a parent who is unconcerned about the child's diet and nutritional requirements.

Personal interview

This is an interview in which information is obtained face to face.

Advantages	Disadvantages
Allows two-way communication between researcher and respondent	Interviews may be time consuming and it is difficult to find people to give up their time
Interviewer can encourage respondent to answer questions	Expensive – interviewers have to be trained and paid
Questions can be made clearer by interviewer if misunderstood	Takes time to find respondents who have the desired characteristics – age, sex, income bracket, occupation, etc.
Allows interviewees to give detailed responses if they wish and if it is appropriate to the research	Follow-up to answers given is possible

Personal interviews can vary enormously. A questionnaire in the street is less friendly and detailed than an interview in the home of the respondent and each will yield different results. A street interview will be brief and involve a broad sample group of consumers, whereas a home discussion can be exactly the opposite – detailed, personal and using a tightly defined sample group. The interviewer, rather than the interviewee, will fill out the questionnaire.

Telephone interview

This is an interview where questions are asked over the telephone.

Advantages	Disadvantages
Cheap	Many people find it an invasion of privacy and therefore negative or hostile responses are received
Immediate response	Only short questions may be asked – detailed questioning is impossible
Quicker than visiting people at home	
Wider geographical area can be covered	

Test marketing

This may involve selling a product in a small section of the market (e.g. a limited geographical area) to assess consumer reaction before the full launch.

Advantages	Disadvantages
Modifications can be made to the product before the full launch	The correct market for the product may not be chosen for the test

Assessment of customer requirements

There are a number of other market research techniques by which an organisation can assess the requirements of its customers.

Postal survey

Questionnaires can be sent out by post for people to complete themselves and return. Free gifts or entry to prize draws are often included to encourage people to reply.

Advantages	Disadvantages
No need for trained interviewer	Questionnaire cannot be as comprehensive as that used for a personal interview – the questions must be easy for people to understand as there is no interviewer to explain them
Cheap	Response rate is low (less than 10%)
Wide geographical area can be covered	
No interviewer bias	

Consumer panel

This is a group of people who are consulted on their reactions to a product over a period of time. For example, a panel of people using washing powder would typically consist of about 2,000 respondents recruited by personal interview. Each would be supplied with a diary in which they would be asked to keep a record of all their purchases of certain branded goods. At the end of the week (or month) the person would return the diary to the market researcher and receive a new one.

Sometimes the information is recorded electronically, e.g. a number of households throughout the country have the TV programmes they watch monitored electronically. This is fed into a central computer to provide viewing figures.

Advantages	Disadvantages
Can establish how consumer reaction changes over time	Difficult and expensive to choose and keep a panel for a long period of time – people get tired of filling in the diary
	Diary entries may be inaccurate or incomplete

Consumer panels are often run by large market research organisations such as Gallup to provide information for a group of product manufacturers.

Secondary data

Secondary data is obtained by *desk research*, i.e. by reading through documents containing data collected for a different purpose and probably by someone else. It may therefore have to be adapted for an organisation’s own purposes. Sometimes it may be insufficient on its own. However, it is much cheaper to collect than primary data.

Sources of secondary information can be split into *internal* and *external*.

Internal sources:

- Sales figures
- Stock figures
- Accounting records
- Customers' comments and complaints
- Sales representatives' reports
- Market research data gathered earlier.

External sources:

- Government and official publications – e.g. *Social and Economic Trends*, *Annual Abstract of Statistics*, National Income figures, Population Census figures;
- Competitors' information – e.g. *annual reports*, *promotional materials*, *price lists*;
- Trade directories and journals – e.g. *Kelly's Directory*, *The Grocer*, *Petroleum Review*;
- Market research organisations – e.g. Mintel;
- Newspapers, magazines, CD-ROMs;
- International publications – e.g. European Union, World Bank, IMF publications;
- Retail audits – e.g. Top 20 Single and Album Charts.

Information technology and market research

The way in which marketing information is collected has changed as a result of information technology. There are new sources of information available to organisations such as:

- *databases* compiled by market research agencies;
- *electronic point of sale (EPOS)* information is collected when customers make a purchase, e.g. a shop till can record how many of a particular product line are sold in a day and at what time. Bar coding has made this easier;

- *supermarket loyalty cards* can match the products being purchased against the information already held about the card holder – age, where they live, etc.

Increasingly, organisations are using computers to link stock records with consumer demand and purchasing habits. Software designed for stock control purposes can also be used to provide a great deal of information. Mail-order companies, for example, can have a complete breakdown of the purchase of their customers, what they bought, how much of it, the sizes, colours and qualities. This data can be analysed in terms of the area of the country, the age of the customers and, with other information, the income group to which they are selling. This enables organisations to determine more exactly the different segments of the market and plan their advertising and promotion accordingly.

Only as a last resort should an organisation undertake its own surveys or commission an agency to find out specific information. The cost of questionnaires and surveys is high and they take time to construct and carry out. The use of resources in this way is only justified if the information is important and cannot be obtained from any other source.

Sampling

It would be very costly and time consuming to interview *every* consumer. Therefore a representative group must be chosen, i.e. a sample of the population. It is assumed that the tastes, preferences and habits of a sample of the population represent those of the whole population. If the chosen sample is not representative, then the findings are likely to be invalid.

Sampling methods

Random sampling – The sample is selected at random, each person having an equal chance of being chosen. The main advantage of this is that no bias is involved in selection. However, it assumes that all members of the population have the same characteristics – which is clearly not the case and unless care is taken an un-representative sample will be selected.

Stratified random sampling – The sample is divided into segments based on previous knowledge about how the population is made up, e.g. income groups. A representative sample from each group could then be selected to participate in the research. This method of sampling makes the sample more representative of the population thus improving the accuracy of the research. However, it requires more administration, effort and time to carry out than simple random sampling.

Quota sampling – This method involves the population being segmented into groups which share specific characteristics. Interviewers are then given targets for the number of people out of each segment that they must interview. This method provides a more targeted method of sampling the population that may be interested in specific products or services.

Problems with market research

Market research does not *guarantee* success. For example, the research carried out before launching the new recipe for Coca-Cola (New Coke) indicated that the change would be welcomed by the public. This was not the case and the company returned to the original recipe. Likewise Levi's failed attempt to enter the market for men's suits was supported by positive feedback from research.

Market research is not always reliable. Unreliability may be due to:

- *Sampling bias*
Results from a small group of people may turn out to be completely at variance with the reactions of the wider population.
- *Human behaviour*
While the responses of the sample may be correct at the time of the research, opinions can change.
- *Interviewer bias*
The interviewer may have led the interviewee into saying what they think the interviewer wants them to say.

The larger the sample, the more reliable the information. Researchers do expect some deviation from the research and the figures may be adjusted (deviation formulae may be applied).

Market research data take a lot of time to gather and therefore can be very expensive. Information from secondary sources may be difficult to access and valuable time may be wasted.

Student Activities

Activity 1

Identify the three main aims of a marketing department. Apply each one in turn to a manufacturer of digital cameras.

Activity 2

Organisations continue to market products and services which are already a success. What do the following hope to gain by marketing?

- (a) Marks & Spencer (food products)
- (b) Procter & Gamble (Fairy Liquid)
- (c) Coca Cola (Diet Coke)
- (d) Whyte & Mackay (whisky)
- (e) Cadbury (Creme Eggs)

Activity 3

Read the story of Swatch and the American car industry from the student notes. Why did Swatch succeed in business and the car industry fail?

Activity 4

Choose a brand of washing powder. Describe its marketing environment under the following headings:

- (a) Consumer trends
- (b) Market competition
- (c) Technology
- (d) Government
- (e) Economic forces

Activity 5

Salvatore makes fresh spaghetti every day. He mixes the flour, eggs and water together and rolls it out. The dough is then passed through his much loved pasta machine which has been passed down through several generations of Italian pasta makers. The pasta is sold to friends and neighbours. They assure him that his home-made product is far better than any which is available in the supermarkets and suggest that he should increase the size of his operation and sell to supermarkets.

What would Salvatore have to consider when supplying an industrial market as opposed to a neighbourhood consumer market? What differences would there be in his operation? Make a copy of the following box for your answer. The first one is done for you.

	<i>Consumer</i>	<i>Industrial</i>
Scale of operation	Small-scale – made to order as customers enter shop	Fewer customers but large-scale mechanised production; recipes must be consistent
Quality assurance		
Quality of after-sales service		
Reliability of suppliers		
Transportation of product		
Type of customer		
Price he can charge		
Packaging		
Promotion		

Activity 6

The following are the readership figures for two newspapers, by social class:

<i>Social class</i>	<i>The Sun</i>	<i>The Times</i>
<i>A/B</i>	8%	61%
<i>C1</i>	21%	23%
<i>C2</i>	35%	8%
<i>D/E</i>	36%	8%
<i>Total readership (millions)</i>	9.9	1.3

In which of the two papers would you advertise:

- (a) a walking tour in the Swiss Alps?
- (b) a package holiday to Butlins?
- (c) Jaguar cars?
- (d) personalised number plates?
- (e) Harrods' Christmas hamper?

In which of the two papers would you promote:

- (f) a cheap coach travel promotion, i.e. collect five tokens (one issued each day) and travel anywhere in the UK for £5?
- (g) a collection of classical music CDs – buy two get one free?
- (h) collect two vouchers for a free can of beer?
- (i) a free pair of sunglasses if you purchase another pair for £2.99?

Give reasons for your choices.

Activity 7

'There are four departments in my organisation – Finance, Operations, Personnel and Marketing. No single department plays a more important role than any of the other four in determining business strategy.'

The above statement was made by the Managing Director of a company that manufactures bicycles. In the light of this statement, explain why some writers believe that marketing is the most important function in determining business strategy. Make reference to the case of Swatch watches (see Student Notes).

Activity 8

A school canteen decided to remove chips from its lunch-time menu, replacing them with what the catering company saw as healthy alternatives – salads, baked potatoes, etc. The customers – the school students – voted with their feet! Takings fell dramatically as students chose to walk 500 metres each lunchtime to the local chip shop. The canteen thought it was their duty to provide students with 'good, nourishing food', but one student when interviewed about why he no longer used the canteen said, 'they're not filling any more, I'm starving by 2 o'clock'.

The catering company decided to offer chips once more but were surprised to find the students still did not return. They decided to issue questionnaires to the students to discover why. The findings showed:

- the chip shop was cheaper;
 - the food at the chip shop was hotter;
 - there was more choice at the chip shop;
 - students were rushed out of the school canteen by janitors as soon as they had finished their meal;
 - the canteen seats were not comfortable;
 - there weren't enough tables in the canteen for everyone to sit down when they had collected their food.
- (a) Identify whether serving salads was an example of product or market orientation?
- (b) How might the canteen have avoided the mistakes it made in marketing new products?

- (c) What evidence of market research is shown?
- (d) How might the canteen convince students to return?
- (e) How did the objectives of the canteen and the chip shop differ?
- (f) Is either of them likely to achieve its objectives?

Activity 9

In what ways do marketing activities in a high-growth market differ from those in a low-growth market? Give four examples and make specific reference to the 4 Ps.

Activity 10

Nescafé, a brand of instant coffee owned by Nestlé, was introduced in 1938. This product has a very well known brand name and the manufacturers market it emphasising its supposedly superior quality and value. This is important as there are many cheaper brands on the market.

- (a) Why is it important for Nestlé to build on the Nescafé brand name?
- (b) Supermarkets offer coffee in plain packaging (e.g. Tesco's basic range includes coffee in a blue, white and red bag). What advantage would this offer the consumer? What disadvantage does this type of packaging mean for the consumer?
- (c) At what stage of the product life cycle would you place Nescafé?
- (d) How have Nestlé extended the coffee product line?
- (e) Supermarkets offer own brand 'look-alike' coffee – in jars that look remarkably like Nescafé. What features of Nescafé do you think they would try to copy?
- (f) If you were the marketing manager of Nestlé, what action would you take against the copiers?
- (g) Suggest some promotional activities you might undertake to increase sales of Nescafé.

Activity 11

Under the headings of the four Ps, describe how a University uses marketing techniques.

Product
Price
Place
Promotion

Activity 12

Hula Hoops are a hoop-shaped savoury snack produced by KP. Their TV advertising showed Harry Enfield saying:

‘Oi *no* . . . you will *not* change the shape of Hula Hoops.’

In the case of Hula Hoops, the actual product is ‘a simple, ring-shaped snack, made from real potato’. The core product is that it provides a fun way to eat.

Select another five branded products under the following headings and identify what you see as the core value of each of these products and also the augmented value.

<i>Type of product</i>	<i>Name of product i.e. actual product</i>	<i>Core product</i>	<i>Augmented product</i>
A chocolate bar			
A car			
An item of clothing			
A drink			
A perfume/after shave			

Activity 13

Designer fashion shops display goods in their window with no price tag. The thinking behind this is ‘if you need to know the price, you can’t afford it’. Why is price not a critical element in the designer fashion market?

Activity 14

You are Marketing Manager for a package holiday company specialising in exotic holidays to the Caribbean. When pricing the holidays:

- (a) What factors will you consider when developing a pricing policy?
- (b) What pricing strategies are available to you when entering the market?
- (c) What risks will you face if you pursue
 - a low-price strategy?
 - a high-price strategy?

Activity 15

Sharkie Mark opened a fish-and-chip shop, selling fish suppers for £1.80 – 20p lower than the only competitor in town. The competitor reacted by lowering his price to £1.80. Sharkie Mark then put up a poster:



The competitor closed down.

- (a) What pricing tactic was used by Sharkie Mark?
- (b) What enables larger, established companies to operate this form of pricing?
- (c) Assuming Sharkie Mark was a small-time operator, how did he manage to operate this pricing tactic, and still remain in business?

Activity 16

What are the names given to the following types of pricing?

- (a) A night-club charging £10 for entry after midnight and £8 before midnight;
- (b) A kilt manufacturer charging for a 'tailor-made' kilt;
- (c) A market stallholder charging 5p per kg less for apples than the neighbouring stallholder.

Activity 17

You are a manufacturer of chocolate bars. Operating in an increasingly competitive market, you decide the only way to compete is to reduce the price of your product from 40p to 30p per bar. You are unsure if sales will increase sufficiently to pay for this price reduction, so you decide to make some other savings. In order to save money, what could you do to:

- the packaging of your product?
- the product itself?
- the promotion?

What does this tell you about altering one element of the marketing mix in the long run?

Activity 18

Select one advertisement for either a car or a food product, and prepare a presentation highlighting how the advertisement specifically targets families. Bring in a copy of your advertisement (either magazine or video form).

Activity 19

You are an Assistant to the Advertising Manager who has asked you to look at the organisation's current advertisement and to recommend how their product can be made specifically appealing to children. Choose a product (e.g. a chocolate bar, toy, etc.) and write a report to the Manager stating what could be done in the way of advertising and promotion to make children interested in your product. Make reference, where you can, to other products you know about on the market.

Activity 20

Types of retailer

What types of retailer exist in your local area?

- (a) Find out how long they have been in business.
- (b) Are they independent or operated under a franchise agreement?
- (c) Are there any out-of-town shopping developments near you? Name them. What do they sell?
- (d) How easy is it to park at
 - (i) your small local shop?
 - (ii) your out-of-town retail centre?
- (e) How do out-of-town developments attract the non car-owning customer?
- (f) What do local shops offer the consumer that out-of-town developments do not offer and vice versa? Copy the box underneath, and make two lists.

What local shops offer	What the out-of-town development offers
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Activity 21

Distribution channels

This activity requires you to plot the distribution of apples, cars, socks and chocolate from manufacturer to consumer. Draw up a table as follows and, working from left to right place the correct statement under the various headings. An example for carpets is completed for your information at the end.

<i>Manufacturer</i>	<i>Wholesaler</i>	<i>Retailer</i>	<i>Consumer</i>
Kate buys a new car	Asda's fruit department	Booker Wholesale Foods	Hartwell's Renault Garage
Woolly Socks Ltd	David buys a bar of chocolate	Renault Cars	Fruit wholesaler
Apple farm		School tuck shop	Chocolate factory
The Sock Shop	Linda buys apples	Socket (sock wholesaler)	Brian buys socks

Example:

<i>Manufacturer</i>	<i>Wholesaler</i>	<i>Retailer</i>	<i>Consumer</i>
Woolly Carpeting Ltd	Karpit (carpet wholesaler)	Cosy Carpets (High Street furniture store)	Customer

Activity 22

Which distribution channel would be used for each of the following and what are the factors influencing the choice? Copy and complete the table with your answers.

<i>Product/Service</i>	<i>Channel</i>	<i>Influencing factors</i>
farmer selling fresh strawberries		
a network of computers		
a suit for a 6 foot 5 inch man		
bars of soap		
perfume		
karate equipment		
X-ray equipment		

Activity 23

Bring in two advertisements from magazines, *one* which is informative, and *one* which is persuasive.

- (a) When do organisations use informative advertising and when do they use persuasive advertising?
- (b) Who are the target audiences for these advertisements?
- (c) How do the advertisements use image, design, colour and text to achieve their purpose?

Activity 24

Your marketing company has been approached by a manufacturer that specialises in ski-wear and equipment. The products are of good quality and the expensive price tags reflect this. They are aimed at the serious skier in social groups A and B. The manufacturer asks your advice as to which advertising medium would be most appropriate for their products. Comment on the suitability of:

- (a) national television
- (b) national daily newspapers

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- (c) Sunday newspapers
- (d) local newspapers
- (e) direct mail
- (f) poster/billboard
- (g) local radio
- (h) a quality women's magazine.

Activity 25

Advertising

Pepi's Pizzas is a chain of twenty pizza restaurants throughout Scotland. You have been employed to carry out some marketing work and have found that it would be worth Pepi's while to open a further two restaurants in the country this year. You have also found from your research that customers would like a take-away service and to be able to buy bottles of soft drinks with their take-away pizza. Pepi agrees to the latter and asks you to carry out the promotion on his behalf. He agrees to let you have a budget of £6,000.

Decide which type of promotion you think Pepi should use. Write a short report to Pepi telling him of your recommendations and the reasons for your decision.

The costs of advertising are:

Sponsorship of local sports teams	£2,500 per team
Leaflet drop	£1,000 per town
Local celebrity	£1,000 per appearance
Radio voice-over	£150 per play
Regional newspaper advertisement	£300 per day
Regional TV advertisement	£3,000 per day
Sandwich board	£40 per day
Bill board	£300 per board per week
National newspaper advertisement	£3,500 per day

Mention any other forms of promotion you might want Pepi to consider.

Activity 26

How does sales promotion differ from advertising?

Activity 27

Many organisations sponsor professional football teams in return for which their name is printed on the shirts worn by the team. The cost of this sponsorship can run to millions of pounds. You are the Marketing Manager of a local radio station. What arguments could you put forward to convince your Board of Directors that sponsoring the local team would be a sound business strategy, despite the high costs? Present your case in the form of a short memo to the Board, highlighting how the radio station could benefit from this sponsorship.

Activity 28

In what ways might a police force become involved in public relations? Why might they do so?

Activity 29

Give examples of products which have been on the market for more than twenty years. Why have they never entered the decline stage of the product life cycle?

Activity 30

Name four ways of extending a product life cycle. Support this with an appropriate diagram (from page 41).

Activity 31

Give examples of products where you know the manufacturer has attempted to extend the product life cycle. What methods have they used to do so?

Activity 32

What are the various stages of product development? Apply the stages to the launching of a new variety of soup.

- Think of a recipe (something different!)
- Give it a suitable name.

What else will you have to consider?

Apply the same approach to a service (e.g. opening a new restaurant). What similarities are there and what differences?

Activity 33

'We've got to cut costs somehow. The money spent on market research seems a bit pointless.' This was a statement made by the Managing Director of your organisation where you hold the position of Marketing Director. Defend your position in the form of a report to the Managing Director, pointing out the benefits of market research to the company and how you feel the expense involved is justified.

Activity 34

A company trying to sell cable TV is carrying out desk research.

- What sources of desk research will be useful to them?
- What type of information will they obtain by carrying out desk research?
- Why should they carry out desk research before using questionnaires and surveys?

Activity 35

Nitelands, a local night club, cannot understand why their market share has fallen dramatically in the past six months. They decide to carry out field research to find out why.

- (a) Suggest which field technique would be the most appropriate for them. Give reasons.
- (b) Who would they question?

- (c) How many people would they need to ask?
- (d) The popularity of one night club over another changes very quickly. Is there any real benefit to a nightclub from gathering information and using it to make decisions?

Activity 36

Give three advantages and three disadvantages of each of the following field research techniques:

- Personal interview
- Telephone interview
- Postal survey

Activity 37

When might it be worthwhile to set up a consumer panel?
How reliable is the information obtained from a consumer panel? What problems might you encounter when using a consumer panel?

Activity 38

- (a) Why do supermarkets allow people to try samples of new food products?
- (b) How is the information they gather recorded?

Activity 39

Why might an organisation decide to test market a new product? What influences where they choose to test market the product?

Activity 40

- (a) The following questionnaire appeared in the *Aberdeen Herald and Post*. Complete the questionnaire:

Would you attend a roadshow in Montrose?
 YES NO

Would you attend a roadshow in Aberdeen?
 YES NO

Would you prefer to pay for a special coach from Aberdeen to Montrose rather than make your own way to the venue?
 YES NO

How much would you expect to pay for a coach seat? £

How much would you expect to pay for a roadshow ticket? £

Should the roadshow be held indoors or outdoors?
 IN OUT

Should the roadshow be held during the day or at night? DAY NIGHT

Which main acts would you like to headline the roadshow? (remember we're not talking about huge bands like Boyzone/Spice Girls, more on the level of Code Red, OTT, North & South, etc.)

Which up-and-coming acts would you like to see at the roadshow? (Ecos, Awesome, Fab)

■ **If you have any other comments, please add them on a separate piece of paper.**

- (b) Did you find any of the questions difficult or impossible to answer?
- (c) *Group activity*

Collate your responses either on the board or on a flip chart. This may show that there are faults in the questions if students have answered the questions in different ways.

- (d) Rewrite the questionnaire in a more acceptable form.

(e) *Additional task*

As practice for report writing collate the data, commenting on each statement. Bring out conclusions and make suitable recommendations.

Activity 41

Read the following article, and then answer the questions which follow:
Cadbury's loses Swiss chocolate bar wars

Cadbury's loses Swiss chocolate bar wars

BY ROBIN YOUNG

CADBURY'S was ordered to withdraw its Swiss Chalet bars from sale yesterday after losing its High Court case against the Swiss chocolate industry.

A complaint was made by a Swiss manufacturer that the public would be misled into thinking that the bar was genuinely Swiss. Cadbury's were allowed two months to dispose of remaining stocks. The High Court judge said:

'I have come to the conclusion that a substantial number of members of the public who regard Swiss chocolate as the name for a group of products of repute will be confused into thinking that Swiss Chalet is a member of that group by reason of the use of the name Swiss Chalet. It is likely that the number who think that will be smaller than the number for whom there will be no confusion but, in my view, it is still likely to be a substantial number.'

The Swiss Chalet bar, with a mountain scene on the label, is made of honey-flavoured milk chocolate with pieces of almond nougat.

The Judge said:

'The front of the packaging bears upon it in large, gold-rimmed red letters the words *'Swiss Chalet'* and, in slightly smaller size, the well-known script form of the word *'Cadbury'*. The packaging also carries a picture of the snow-capped Matterhorn in Switzerland with a chalet in a valley below it and the Cadbury's 'glass-and-a-half' logo.' He concluded that the words 'Swiss chocolate' had 'acquired a distinct reputation in the UK'.

His ruling followed a vote by the European Parliament in favour of obliging British manufacturers to change the description of their milk chocolate because of its vegetable fat content. The Swiss claimed that Cadbury's Swiss Chalet bars had less cocoa in them than Swiss chocolate, contained vegetable fat which was permitted but not used in Swiss production, and had chocolate which was not as smooth as theirs. The judge claimed that Cadbury's was trying to trade on a Swiss reputation to which it was not entitled.

Adapted from *The Times*, 30 October 1997

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1. What is meant by 'genuinely Swiss chocolate'?
2. Why was 'Swiss Chalet' being accused of misleading the public into believing that it was genuinely Swiss?
3. Which market segment do you think this chocolate was being aimed at?
4. How much would you have expected to have to pay for the product?
5. Why do you think a list of some of the ingredients appears on the front of the packaging?
6. The lettering of the words 'Swiss Chalet' is red and trimmed with gold. Does this support the image the product is trying to project? Give reasons for your answer.
7. Can you find out why the 'glass and a half' was used as a logo by Cadbury?
8. How do you think this High Court judgement would affect Cadbury's profits?
9. Why do organisations like Cadbury launch new products when they already have so many on the market?
10. What other chocolate bars would you place Swiss Chalet alongside on the shelf?
11. Which of Cadbury's products are aimed at:
 - (a) very young children;
 - (b) children of secondary school age?
12. Why does the word 'New' appear on the label?
13. Why are manufacturers likely to be unhappy about the European ruling regarding the need to change the description of the product to reflect the fact that it contains vegetable fat?
14. If you were given the job of renaming this product, what would you call it? Give reasons for your choice.

15. Would an article such as this be likely to affect Cadbury's reputation in any way?
16. **Additional task**
 As a class, collect some wrappers from chocolate bars. In particular, look for any which project the idea of being 'Swiss'. Discuss their country of origin, the name of the product, the name of the manufacturer, the packaging, the shape of the product, the price of the product, and any advertising or promotions associated with the product.

Activity 42

Read the following article, and then answer the questions which follow:

McVitie's axes Jane Asher to hobnob with the trendies

Jane Asher, actress and cake-making heroine to the middle classes, is to be dropped as the public face of McVitie's biscuit company because it wants to be more trendy.

Her image has been used to promote the company's biscuits, whose brands include Hob-Nobs and Homewheat digestives, since 1994. But now it seems Miss Asher, 51, has fallen victim to plans to spice up the image of products more usually associated with vicars' tea parties.

McVitie's has already employed the television comedians Steve Coogan and Vic Reeves to give a more modern gloss to its advertising campaigns. According to the advertising industry magazine *Marketing*, it is looking for a replacement for Miss Asher in a similar vein.

Earlier this year the actress tried to adopt a more saucy approach to promoting

digestive biscuits. Putting aside her usual pinny and pudding basin, Miss Asher allowed a body artist to paint her in a chocolate ballgown in which she posed next to a packet of digestive biscuits.

To no avail. McVitie's confirmed yesterday that she would not be featuring in its 1998 advertising campaign. A spokeswoman said that the company was now looking to 'create impact' with its biscuits, but that Miss Asher's age was 'categorically not an influencing factor'. She would continue to endorse a range of McVitie's biscuits, cakes and frozen desserts.

One advertising executive was sceptical that the decision would pay dividends. 'McVities is talking about getting a fresher and trendier look – but how trendy can you make a chocolate digestive?'

Adapted from *The Sunday Times* (1998)

MARKETING: STUDENT ACTIVITIES

1. What market segment do you think Jane Asher would fit into?
2. Which market segment have McVitie's Hob-Nobs and Digestives been associated with in the past, according to the passage?
3. What is meant by 'spice up the image of the products'?
4. How might this be achieved?
5. What type of packaging do McVities's use for Hob-Nobs and Chocolate Digestives?
6. At what stage in the product life cycle would you place Chocolate Digestives?
7. What might you do to inject new life into Hob-Nobs and Chocolate Digestives?
8. What other forms of promotion might be used for these biscuits?

Activity 43

Read the passage and then answer the questions that follow.

Smarties

Since Smarties were launched in 1937, demand has increased and they have become a strong brand in an established part of the confectionery market.

Competition emerges

Every business must be aware of its competitors. For most of their life Smarties had been considered a relatively safe brand, because they are a unique product quite distinct in taste, colour and image. Over the years there had been little direct competition, though they still had to compete generally with all other sweets. For this reason they have always had advertising support, to ensure they kept their position as the most popular children's line. In the late 1970s and early 1980s the volume sales of Smarties fell back from previous heights. This trend was typical of that for many products in the UK where many businesses were feeling the effects of a world recession in demand for goods and also of a declining birth rate.

Despite the decline in sales volume in the late 1970s and early 1980s, Smarties continued to make healthy profits for the Rowntree group (now owned by Nestlé). They maintained a high profit and remained the leading children's brand in the 'bite-sized' market.

The competition tests the market

Mars is another of the major chocolate and sweet manufacturing groups in the UK. In July 1985 Mars prepared to launch M&Ms in the UK. The product was already a major seller in the US and other countries. M&Ms are brightly coloured, chocolate-centred buttons and the closest thing to Smarties available.

M&Ms were originally test marketed in the Tyne Tees television area. The packaging material used was different to that of Smarties and prices were set at a competitive level.

MARKETING: STUDENT ACTIVITIES

Mars followed up the test launch with a full-scale national advertising campaign targeted at the 8-to-teenage group. This is a slightly older range than the main target group for Smarties.

Shortly before the introduction of M&Ms in the Tyne Tees region, Smarties' share of the 'bite-sized' confectionery market was 29% in sales value. The remaining 71% of sales was shared between Chocolate Buttons (Cadbury's), Maltesers (Mars) and Minstrels (Mars). The launch and subsequent promotion of M&Ms quickly saw this brand gather a 43% share of sales value of the Tyne Tees market.

However, because of increased promotion and an increase in interest in the 'bite-sized' market, total sales of all 'bite-sized' brands increased by one third. Although Smarties' share of the Tyne Tees market dropped by almost a third, sales of most other 'bite-sized' products dropped by half.

1. What is the objective of a market led company, such as Rowntree or Nestlé (who purchased Rowntree)?
2. Define 'brand'.
3. What are/were the USPs (Unique Selling Points) of Smarties?
4. What effect did the recession have on sales of Smarties?
5. Is it likely that the recession had the same effect on all products on the market?
6. From your own knowledge, how does the packaging of M&Ms and Smarties differ?
7. What is meant by a 'competitive price'?
8. In what ways did both companies make use of 'market segmentation'?
9. Explain what is meant by 'market share'.
10. Why did M&Ms choose to launch in the Tyne Tees region only?
11. What relationship, according to the text, does there appear to be between promotion and sales?

12. For many years Smarties had never had a direct competitor and had never had to respond to any direct competition. To what extent do you think this was a good thing?

13. If you were the Marketing Manager of Rowntree, how would you use the marketing mix to enable Smarties to survive the competition from M&Ms? *You may want to 'brain storm' this question in a group.*

Solutions to Activities

Activity 1

The three main aims of a marketing department are:

(i) to identify consumers' requirements	what do customers want when they buy a digital camera? what do they need it for? consider the quality of picture required, the different features, how much they are prepared to pay, the ease of use, the size and weight of the camera.
(ii) to anticipate consumers' requirements	what will consumers want in the future – possibly digital cameras will take over completely; films which can be loaded into PCs etc.; possibly further development of the disposable camera.
(iii) to satisfy consumers' requirements	a good quality camera offering value for money; good after sales service; guarantees; good presentation – gift boxes with film, carrying case, etc.; clear manuals.

Activity 2

Successful companies and products continue to use marketing techniques in order to

- increase sales revenue and profits;
- increase and/or maintain market share;
- maintain or improve image of product;
- target a new market or market segment;
- develop new and improved products (e.g. 'new recipes').

Activity 3

Swatch anticipated the changes in the market; the American car industry did not.

Activity 4

- (a) Consumer trends: automatic washing machines now common, fabrics worn which may require special care, powders required which maintain colour of fabric, no time to iron!, expectation of ability of powder to remove stains.
- (b) Market competition: a lot of good competition. Although there is an oligopolistic market, there are many brands and there is a lot of promotional activity.
- (c) Technology: new, advanced washing machines; washing powder and liquids for particular fabrics, etc.
- (d) Government: environmental concerns.
- (e) Economic forces: price of product is important, perhaps more so in time of recession. However, it is an essential product. Perhaps some of the product line may face reduced sales – fabric conditioners, etc.

Activity 5

	CONSUMER	INDUSTRIAL
Scale of operation	Small-scale – made to order as customers enter shop	Fewer customers but large-scale mechanised production Recipes must be consistent
Quality assurance	Customer will make comment directly – easy to see customer’s reaction Small-scale – easier to control	Absolutely essential to meet Health and Safety regulations. The product has to be the same every time and standard weight in packets, etc. Probably production will be inspected by supermarket.
Quality of after-sales service	Realisation that it is essential – ‘the customer is always right’	If the supermarket is unhappy, they will purchase elsewhere

MARKETING: SOLUTIONS TO ACTIVITIES

Reliability of suppliers	Not a real problem – flour, etc. probably purchased in bulk. Alternative suppliers available	For a large-scale production, a reliable supplier is essential. Production cannot be held up. Quality must be consistent as must price
Transportation of product	None. Made on the premises	Large-scale. Price, speed and Health and Safety issues
Type of customer	Local. Probably from middle/upper socio-economic group – someone who is prepared to visit a specialist shop	Supermarket is main customer, which then has many consumers visiting its stores
Price he can charge	Type of consumer is probably willing to pay a premium price	Dictated by supermarket – they can go elsewhere
Packaging	Simple. Paper bag possibly bearing name of shop	Sealed packs which stack well in a chilled cabinet. Ingredients listed on packaging, sell-by dates, bar codes, name of manufacturer, name of supermarket, etc.
Promotion	Local advertising. Tastings in shop possibly	Opportunities for larger-scale promotions – buy one get sauce free, advertising in store magazines, posters, etc., price promotions, money off coupons, etc.

Activity 6

The choice of advertising and promotion reflects the socio-economic group of the reader.

One would expect a *Sun* reader to be interested in:

- a package holiday to Butlins;
- personalised number plates;
- free can of beer;
- free sunglasses.

One would expect the *Times* reader to be interested in

- a walking tour in the Swiss Alps;
- Jaguar cars;
- personalised number plates;
- Harrods' Christmas hamper;
- classical CDs.

Note: some may appear in both and perhaps it would be expected that the cheap coach travel promotion would appeal to the *Sun* reader – it did actually appear in *The Times*.

Activity 7

Marketing departments try to identify what customers want now and will want in the future. They work in cooperation with other departments in an organisation to modify existing products and develop new ones to meet consumer demand. Because an organisation has to sell its products to survive, the role of the marketing department (that is, to sell the products) is crucial. If it did not do its job, there would be nothing for any of the other departments to do. Swatch successfully identified market trends, and as a result produced a range of watches that proved popular with customers.

Activity 8

- (a) This was market orientation. Salad was being forced on the students. They were not given a choice.
- (b) It could have asked the students if they would buy them. It was a bad move to remove chips from the menu completely. If the canteen wanted to get students to eat more healthily, it could have reduced the size of a helping of chips, and introduced salad gradually.

MARKETING: SOLUTIONS TO ACTIVITIES

- (c) Interview and questionnaire.
- (d) By restoring what students wanted to eat; by installing some method of keeping the food hot (hot plates, special lights, etc.); by increasing and improving the seating; by reducing prices; through some form of special promotion, such as offering coupons for free drinks.
- (e) The chip shop's objective was to make a profit. The canteen's was to encourage students to eat a healthier diet.
- (f) The canteen will not achieve its objective if students choose to eat elsewhere. The chip shop will make its profit so long as it continues to offer its customers what they want.

Activity 9

In a high-growth market, marketing expenditure will be high in such areas as advertising, displays, free samples, etc. In a low-growth market, the emphasis is on reminding consumers of the organisation's product(s), with the aim of stopping them switching to a rival's product(s). It is to an organisation's advantage to build and maintain customer loyalty. If a product is in decline, it may not be worth spending on promoting it, though some account still has to be taken of competitors' promotional activities.

Activity 10

- (a) It is a well known and trusted brand. Customers like it and know what to expect.
- (b) The supermarket's own brand usually offers customers a cheaper alternative. However, the quality may not be so good, or customers may think they are being offered an inferior 'substitute'.
- (c) Maturity
- (d) By introducing new variations (Gold Blend, Decaffeinated, etc.)
- (e) They will copy the jar shape, labelling, etc.
- (f) You can take legal action to prove that the supermarket is 'passing off' its own brand as your product, that is, it is hoping customers will think they are buying the same product.

- (g) Promotional activities could include ‘buy one, get one free’; offering money-off or gift coupons; on-label competitions with prizes, etc. It is important that the type of promotion is appropriate to the image of the product and for the ‘customer profile’.

Activity 11

Product: the courses that the University offers its student;

Price: the fees it charges;

Place: open days, appearance at careers conventions, etc. Promotion: it may issue brochures, advertise in the press and in specialist publications, and promote itself in other ways.

These days, universities and other educational establishments compete with each other to attract students.

Activity 12

TYPE OF PRODUCT	NAME OF PRODUCT	CORE VALUE	AUGMENTED VALUE
A chocolate bar		A tasty, satisfying sweet	Sophisticated Galaxy, macho Yorkie
A car		a means of transport	image, safety, high performance, economy
An item of clothing		a means of keeping warm	provides an image
A drink		a means of quenching thirst	image
A perfume/after shave		a means of making a person smell nice	image

Activity 13

It is assumed that customers will be well enough off to be able to afford designer clothes. The shop wants to project an 'exclusive' image and attract customers from the higher socio-economic groups.

Activity 14

- (a) Prices need to reflect the high quality of the holidays offered and to attract customers from the higher socio-economic groups. It is assumed that better off consumers will want to pay for some degree of exclusivity (that is, they are not interested in mass-market holiday destinations).
- (b) When entering the market, however, it may be necessary to consider promotional or destroyer pricing policies.
- (c) To pursue a low-price strategy might be to attract the wrong sort of customer, and revenue may not cover costs, in which case your business may make a loss. Pursuing a high-price strategy may risk turning customers away, especially if rivals offer the same holidays at lower prices.

Activity 15

- (a) Sharkie Mark used destroyer pricing.
- (b) Larger, established companies are able to use this pricing strategy because they have already made profits and have cash resources to cover their costs.
- (c) He may have borrowed in the short term, knowing that once the competition had been priced out of the market, he would be free to put his prices up again.

Activity 16

- (a) Discriminatory pricing;
- (b) Cost plus pricing;
- (c) Competitive pricing.

Activity 17

The packaging can be used to inform the customer of the price cut (words such as ‘10% extra for the same price’ may appear in large, bold lettering). Alternatively, cheaper packaging could be introduced.

The product itself might be made from cheaper ingredients or in a smaller size. It would be important, though, not to give customers the impression that they were being offered an ‘inferior’ product, even if the price is reduced.

Promotion is expensive, but without it sales may fall. The organisation may want to try less expensive methods in the short term.

Activity 18

Visual advertising will probably show a mother and child, or possibly a whole family enjoying the product. Until recently, Oxo’s television advertising showed the same family in different situations, almost like a mini soap opera. Safeway’s promotion featured two young children, Harry and Molly. This form of advertising is very effective because of its ‘recognition factor’.

Products can be packaged in such a way as to suggest that they are aimed at families. The ‘value-for-money’ element is a common feature in this sort of promotion.

Activity 19

A product can be made appealing to children in several ways, for example:

- by shaping it to look like a favourite character or form (e.g. a dinosaur, letters of the alphabet);
- by making it brightly coloured;
- by using popular characters, songs, nursery rhymes, etc. in the advertising;
- by offering free gifts inside the packaging or to send away for.

It is important to remember that manufacturers have to be licensed to use well known characters (e.g. Noddy, ET, the Teletubbies) in their promotions, because these are the ‘intellectual property’ of other people.

MARKETING: SOLUTIONS TO ACTIVITIES

Activity 20

Answers to this activity will vary according to where students live. They should be aware of the trend towards out-of-town shopping centres, and the advantages and disadvantages of these.

Activity 21

MANUFACTURER	WHOLESALER	RETAILER	CONSUMER
Renault Cars		Hartwell's Renault Garage	Kate buys a new car
Apple farm	Fruit wholesaler	Asda's fruit department	Linda buys apples
Chocolate factory	Booker Wholesale Foods	School tuck shop	David buys a bar of chocolate
Woolly Socks Ltd	Socket (socks wholesaler)	The Sock Shop	Brian buys sock

Activity 22

PRODUCT/SERVICE	CHANNEL	INFLUENCING FACTORS
farmer selling fresh strawberries	direct	handling time reduced
a network of computers	direct	technical advice needed
a suit for a 6 foot 5 inch man	direct	narrow range of consumers
bars of soap	retailers	need to be widely available, heavy competition
perfume	selective	exclusivity, image, high profit margin
karate equipment	direct/specialist retailer	narrow range of consumers
X-ray equipment	direct	technical advice, narrow range of consumers

Activity 23

- (a) Organisations use informative advertising when their product is new and they want to let consumers know of its existence. Persuasive advertising aims to get consumers to buy the organisation's product(s) rather than a rival's.
- (b) and (c) Answers will vary according to what advertisements have been chosen for study.

Activity 24

- (a) Advertising on national television is very expensive, and the promotion would reach a great many people who had no interest in buying ski equipment.
- (b) National daily newspapers could be a worthwhile medium provided the readership profile matched that of potential purchasers of the goods.
- (c) The same applies to Sunday newspapers.
- (d) Local newspapers would not reach a wide enough audience.
- (e) Direct mail could be a very effective promotional tool. It could be targeted at exactly the right audience, for example readers of skiing magazines, members of ski clubs, etc.
- (f) Billboards and posters are more suitable for mass market products.
- (g) Like local newspapers, local radio would not reach a wide enough audience.
- (h) A women's magazine would not be an appropriate medium, not because there are not a lot of women skiers, but because it would not be read by men who ski.

Activity 25

The promotion needs to achieve national coverage, so regional newspaper advertising might be appropriate. UK-wide newspaper advertising would be a waste of money, as a lot of it would be reaching people in areas where Pepi's Pizzas has no outlets. Regional television and radio advertising would be appropriate, but it is very expensive, and would probably not be first choice. An appearance by a local celebrity could benefit the restaurant(s) in the immediate area, but might not promote the others. A celebrity will expect an appearance fee, and this could get expensive if he/she is asked to appear at all twenty restaurants throughout Scotland. Sponsoring local sports teams has to be viewed as a long-term commitment; the benefit to the business can take a long time to be felt. A leaflet drop might be worth doing, but would have to be restricted to areas that had a Pepi's Pizza restaurant within easy reach. A sandwich board promotion would be more appropriate than the use of billboards, which are expensive and can't be moved around.

Other forms of promotion could include money-off coupons, a free drink on the first visit, etc.

Activity 26

Advertising *is* a form of sales promotion, but there are many other promotional tools an organisation can use to complement its advertisements. These can range from free T-shirts through buy-one-get-one-free offers to competitions.

Activity 27

The name of the radio station would appear on the players' shirts and other equipment. It would, therefore, be seen wherever they played. If matches were televised, the exposure would be even greater. The radio station will be seen by supporters as having made a positive contribution to the team's success and should in turn generate a 'brand loyalty' towards itself.

Activity 28

A police force might visit schools and give talks on road safety, drugs awareness, etc. They might put on displays of dog-handling or motor cycle riding at local events. The intention is to promote good relations between the police and the public, so that an atmosphere of trust is built up and the police force is seen in a positive light.

Activity 29

Just because a product has been around for a long time does not mean that it has to enter the decline stage of its life cycle. Some become so familiar that people cannot imagine life without them. Examples include Oxo, Kellogg's Cornflakes, Hovis bread and Mars Bars. They are liked and trusted by consumers. Brand loyalty is very strong. People who are adults now remember these products from when they were children.

However, it is very important that producers do not take their customers' loyalty for granted. Even for these well known, established brands, millions of pounds are spent on advertising and other promotional activities – often more than is spent on promoting new products.

Activity 30

The life cycle of a product can be extended by:

- changing or modifying it (its shape, colour, flavour, etc.);
- introducing new varieties (flavours, shapes, colours, etc.);
- changing the packaging – it is the same product but in a different 'wrapping';
- changing the price (up or down);
- changing the channels of distribution (putting it on sale in different, non-traditional outlets);
- trying new types of promotion.

Activity 31

New variant: Mars Bars in ice cream version, as a drink, and in miniature;
 New packaging: soft drinks that used to come in bottles, now available in cans, and vice versa (e.g. Irn Bru);

Changed channels of distribution: CDs sold in clothes shops, Häagen Dazs ice cream sold in video rental shops; greeting cards sold by Marks & Spencer;

Price changes: Televisions and pocket calculators are relatively much cheaper than they used to be.

New promotion: products promoted by celebrities (e.g. Walker's Crisps by Gary Lineker).

Activity 32

The stages of product development are:

- generating the idea;
- analysing the idea;
- producing a prototype;
- test marketing;
- adapting the prototype if necessary;
- launching the product.

A soup manufacturer will also have to consider pricing, promotion, and channels of distribution (where is the soup going to be sold). They will also have to think about Health and Safety issues and, of course, whether or not the consumer is going to be interested in the new product.

For someone thinking about opening a restaurant, some of the same stages will be appropriate. However, it is not possible, for example, to produce a 'prototype' of a restaurant (instead, changes may be required once customers have started to use it: perhaps the menu is not quite right).

Activity 33

Market research provides the organisation with information it would not be able to find any other way. It enables the organisation to predict any necessary changes to its products or services; to identify what is currently selling in the market, the size of the market, and the types of customer who already buy the product(s). It can help the organisation to understand market trends, and obtain customers' thoughts and opinions, how much they are willing to pay, and whether or not packaging and promotion are right. It also identifies competitors – both existing and future. All of this information helps an organisation to keep ahead of its rivals, increase its sales and generate higher profits. The expensive investment in market research, therefore, is well justified.

Activity 34

Desk research will aim to pinpoint those areas that do not already have cable television. It could start with street maps showing where population is densest. It would be useful to have some idea of the income levels of people living in these areas; it might be possible to judge that by the quality of the houses they live in, and that may help to answer the following questions: can these people afford cable TV?, and do they have time to watch it?

Questionnaires and surveys are expensive to conduct, so it is wise to obtain as much information as possible before commissioning them.

Activity 35

- (a) Some kind of questionnaire, possibly involving a one-to-one interview to establish where the club's target market choose to spend their leisure time.
- (b) They would need to question young people, perhaps in pubs, or in universities and colleges. (It is unlikely that they would be allowed to carry out their research on their rivals' premises.)
- (c) Depending on the size of the club, and how many people they need to attract each night to keep the business operating profitably, the survey, to be cost effective, might have to cover anything from 100 to 500 people.
- (d) Although clubs go in and out of fashion remarkably quickly, it is useful to any provider of a service to know as exactly as possible what consumers want (and don't want).

Activity 36

TECHNIQUE	ADVANTAGES	DISADVANTAGES
Personal interview	allows two-way communication between researcher and respondent	time-consuming
	interviewer can clear up any misunderstandings arising from the questions	expensive
	detailed responses can be given if required	takes time to find people with the desired characteristics for the sample (age, sex, occupation, etc.)
Telephone interview	cheap	people find it an invasion of privacy
	immediate response received	only short questions can be used
	quick	people might not be at home
Postal survey	no need for trained interviewer	questionnaire cannot be very detailed
	cheap	low response rate
	wide geographical area covered	delay in receiving all the replies

Activity 37

It is worth setting up a consumer panel if you want to monitor consumer reaction over an extended period of time. This allows the consumer to test a product for a reasonable length of time and comment on it (rather than giving an instant reaction). This approach would be particularly appropriate with any product that might take time to work or get used to (e.g. a moisturising cream for the skin, or a complicated piece of equipment such as a PC).

The information is relatively reliable, because time is allowed for the consumer to give considered answers, not off-the-cuff reactions. There is, however, a danger that the consumer will become bored with the whole exercise, or will forget to write down his/her thoughts. Information that is collected electronically is very reliable.

It can be difficult to find people willing to keep a diary of their reactions to using a product over an extended period of time. They may start well, but grow bored or forgetful, and the information gathered is, therefore, less useful to the organisation.

Activity 38

- (a) Supermarkets let customers sample new food lines to test their reaction, but also to encourage them to buy. They may be especially tempted if there is some other incentive, such as a money-off voucher. A food tasting promotion tends to attract attention and interest during the otherwise boring, mundane chore of shopping.
- (b) The customer may be interviewed by someone asking a list of questions. Just as often no opinion is asked for.

Activity 39

They may test market a product to gauge consumers' reactions before the full launch. The product can be modified before being launched. It is therefore more likely to meet consumers' requirements and be a success.

Factors that influence where they test market the product include:

- the nature of the product (new computer software via the Internet to target existing users);
- the need to find a manageable area with a representative social mix;
- the need to find an identifiable (and not too large) catchment area (e.g. Border Television region).

Activity 40

- (b) Students may or may not find difficulty answering the questions. Some of the questions do not really lend themselves to YES/NO answers. For example, is the roadshow free? (A later question suggests it is not.) If respondents have no real concept of the distance involved, they cannot easily suggest how much they would be prepared to pay for a coach seat. (It would be better to suggest options.) Whether the roadshow is held indoors or out- doors would depend on factors like weather, time of day, etc. If it is to be held at night, at what sort of time – early, late?
- (d) Generally, the layout is uninviting and the questions are open to too many different answers. And people are very unlikely to go looking for a separate piece of paper to add 'other comments'.

Activity 41

1. Chocolate that is made in Switzerland.
2. The name and the packaging were designed to give the impression that 'Swiss Chalet' was made in Switzerland when it was not. Swiss chocolate has a reputation for high quality.
3. An adult, sophisticated market who can afford higher prices.
4. Similar types of chocolate bar were retailing at around 89p at the time.
5. Honey-flavour and pieces of almond nougat sound tempting to the consumer. There is a suggestion of natural ingredients, associated with country areas and, by implication, health.
6. Yes. Gold in particular suggests an image of luxury.
7. The 'glass and a half' was extensively used in Cadbury's advertising. The suggestion was that it took a glass and a half of milk to produce a bar of Dairy Milk chocolate. Again, the impression created is one of health and natural products. The theme was extended into a supermarket promotion in which a hamper and a half of chocolate bars could be won.
8. It would not be likely to make a huge difference to Cadbury's profitability. It would have been a minor setback for such a large organisation. And the company is free to relaunch the same product under a different name and with different packaging, so their investment in it was not completely wasted. Although the publicity from the court case could be described as 'negative', it nevertheless kept Cadbury's name in the public eye.
9. All organisations need to maintain a product portfolio. Some products become less popular over time, and consumers want to try something new. Launching new products can help a company to 'steal' their rivals' customers.
10. Those designed for a sophisticated, adult market.
11. (a) Chocolate Buttons
(b) Mars Bars

12. The word 'New' is prominently displayed on the packaging and in the promotion of new products. It is considered a 'trigger' word that will catch the eye of the consumer and will persuade him/her to try it. The hope is that he/she will then continue to buy the product.
13. Some manufacturers would rather consumers did not know what went into their products, especially when it comes to food. While there may be nothing wrong with vegetable fat, the words do not make food sound very attractive. Legislation is increasingly making producers come clean about what they put into their products.
14. There may be many different answers to this question.
15. Not in the long term. Cadbury is a well known and trusted company and the court ruling is unlikely to harm its reputation. Consumers have short memories and there was no suggestion that anyone's health was put at risk.

Activity 42

1. Jane Asher is seen as a sophisticated, well-off woman, aged 51.
2. These biscuits have been associated with an older set of people ('Vicar's tea parties').
3. Make the image more appealing – possibly to a wider and younger age group.
4. Through magazines aimed at women (seen as the purchasers of biscuits) – *Family Circle, Best, Good Housekeeping*.
5. The biscuits are stacked in a roll and wrapped together
6. Chocolate digestives would be at the maturity stage.
7. Change shape, packaging, price; make them individually wrapped possibly for the school lunch box.
8. Collect labels for free mugs with the log on the mug, attach free biscuits to jars of coffee, etc.

Activity 43

1. The objective of a company such as Rowntree is to maximise its profits by anticipating and satisfying consumer demand.
2. It describes a product with a strong identity in the consumer's mind.
3. The packaging and colours of the sweets; that they appealed especially to young children.
4. Like many other products, Smarties suffered a fall in sales.
5. All products might have been affected, but not equally. Even in a recession, people may not be able to reduce the amount of gas or electricity they use significantly, but they can and do put the purchase of new 'white goods' (such as cookers and washing machines) or soft furnishings (such as carpets and sofas) on hold until better times.
6. Smarties come in tubes and boxes; M&Ms come in packs.
7. A price that is the same or lower than the competition.
8. They appealed to different age groups: Smarties to young children; M&Ms from 8 to teenage.
9. The percentage of total sales of the same or similar products that an organisation achieves.
10. It is small enough to offer a manageable 'catchment area'.
11. Effective promotion increases sales and may reduce competitors' sales.
12. To some extent this is a matter of opinion. But students should consider factors such as price competition.
13. Answers will vary.

Section 2: Operations

The role and importance of operations in organisations

Operating systems

‘An Operating System is a configuration of resources combined for the provision of goods and services.’

Ray Wild, *Essentials of Production and Operations Management* (2nd edn.)

Access to raw materials, machines and workers does not guarantee that you will obtain the outcomes you require – organisation is essential. Procedures must be established which control and direct what is done, whom it is done by and when. This is known as an *operating system*.

All operating systems have three distinct phases:

INPUTS

Raw Materials
+
Labour



PROCESS

Using different amounts
of different resources
in order to produce a
different end product



OUTPUTS

The actual goods
or services for
sale

Operations management

‘Operations Management is concerned with the efficient conversion of an organisation’s resources into the goods or services that it has been set up to provide.’

Howard Barnett, *Operations Management*

This can be subdivided in three key areas:

- (a) The *purchase* and *storage* of raw materials;
- (b) The *production* and *storage* of finished goods;
- (c) The *distribution* of the finished goods.

Production systems

‘The production function exists in all types of organisation; service industry as well as manufacturing. It is concerned with the transformation of a variety of inputs such as information, people, materials and finance into a variety of outputs such as goods, services, customer and employee satisfaction. Viewed in this way, all organisations can be shown to have a production system irrespective of their primary objective.’

David Needle, *Business in Context (An Introduction to Business and its Environment)* (2nd edn.), International Thomson Business Press, 1994

Hence, although many of the examples used here are of manufacturing production, similar principles apply to the production of services, for instance the provision of insurance.

An example of manufacturing production

Before looking at each of the stages in more detail, let us consider the following example that describes the production process of a large biscuit manufacturing company.

The product: Chocolate-covered crunch biscuits

<p>Stage 1</p> <p>Raw materials flour, sugar, fat, syrup, water, raising agents, flavours.</p>	<p>Input issues</p> <p>The purchasing mix considerations include:</p> <ul style="list-style-type: none"> • best price • dependence on suppliers (reliability, etc.) • delivery time • availability of quality • usage (quantity required each day) • storage space available.
<p>Stage 2</p> <p>Stages of production blending, rolling, cutting, baking, enrobing (covering with chocolate), cooling.</p>	<p>Process issues</p> <p>Production considerations include:</p> <ul style="list-style-type: none"> • average demand per week • production capacity available • working procedures (health/safety/hygiene) • storage available for finished product • efficiency/productivity • payment systems • quality issues • stock control.

<p>Stage 3</p> <p>Stages of distribution boxing, wrapping, storing, despatching.</p>	<p>Output issues</p> <p>Distribution considerations include:</p> <ul style="list-style-type: none"> • packaging individual items and groups of items • nature/size of containers • storage space available before despatch • organising customer orders • transporting (to further storage or to customers) • customer requirements.
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Input, process and output

Throughout the operations process of an organisation decisions have to be made about the nature of that process. An organisation will have to decide what production system to use, how to establish and assure quality, what stock to buy, in what quantities and from whom, what quality standards are to be met, who is responsible for purchasing, and what methods of payment will be used. All of these issues will be studied in detail in this unit. Again, these decisions apply to organisations providing products and services, although most of the following examples refer to manufacturing.

Production systems in manufacturing

The organisation must decide on the system that most suits its needs. This decision will then affect every other operations decision made by the organisation. Both practical and economical implications will be considered before selecting the system that offers the greatest benefit to the organisation.

The main factors taken into consideration in deciding which production system to use are:

1. ***The nature of the product:*** producing washing machines, bread, a house or an atlas are all likely to require different production systems as the finished goods are very different.
2. ***The quantity to be produced:*** the production of large numbers of standardised products will be best suited to one type of production process, whereas producing a unique stained glass window for a church will need a different one.

3. ***The resources available:*** the choice of production system will depend on the availability of:
 - materials;
 - people;
 - buildings and equipment;
 - finance;
 - time.

4. ***Labour:*** a labour-intensive system is one where the organisation relies more heavily on its workforce than on machinery to complete production. Examples include strawberry picking and clothing production. A labour-intensive system is most common in organisations where:
 - labour is cheap relative to the cost of machinery;
 - production requires skilled craftsmen and women;
 - the use of machinery is impractical due to the working environment, lack of mobility or lack of flexibility of use;
 - high quality production depends on the ability to think, reason, act on initiative and make decisions;
 - production requires flexibility.

5. ***Capital:*** where the production system places more emphasis on machinery and other capital equipment than it does on labour, then it is said to be capital-intensive. Many durable consumer goods are made in this way, for example, family cars, washing machines and televisions. A capital-intensive system is most common where:
 - the supply of labour is limited;
 - production processes benefit from machine efficiency and consistency of output;
 - the use of equipment offers cost benefits;
 - the use of equipment offers higher quality or improved accuracy in production;
 - the production process is routine and repetitive.

There are a number of other factors, all of which have to be taken into account when deciding on the system to be used in an organisation. These include:

- methods of production system;
- quality assurance
 - standards
 - methods of application;
- stock control;
- purchase of materials;
- payment systems;

- distribution and delivery
 - warehousing
 - transport systems;
- scheduling.

Only once all of the factors affecting production have been assessed and considered can the organisation make a decision on the best system for them at any particular point in time.

Types of operation

Job production

Here each 'job' is completed in its entirety before another job is completed. Thus, a single product is made at a time.

Examples: boat building
 house building
 individually designed wedding gowns, road construction, etc.

The emphasis is on individuality. Frequently found in smaller business units where product differentiation is easily maintained.

Batch production

All stages in the production process are completed at the same time. Products will have a marked degree of similarity, although different ingredients may be used for different products.

Examples: tinned foods (Baxter's soups, Heinz spaghetti)
 bakery goods (bread – white, French, wholemeal), etc.

In this case a number of products (i.e. a batch) are produced at once. Each product in each batch is the same, but products may vary from batch to batch.

Batch production occurs most frequently in food production businesses, but it is becoming more common in industries such as the building trade, where a row of new houses will all have their foundations dug at the same time.

Flow production

This process uses the production line and the product passes through various stages along the line with component parts being added at each stage. This is

OPERATIONS: STUDENT NOTES

most frequently seen in large mass production businesses where standardisation of products is essential.

Examples: motor cars
white goods (washing machine, fridges, etc.)
newspapers.

In flow production there is continuous output of products, all of which are much the same.

Each of the three types of operation has advantages and disadvantages. They are summarised in the following tables:

Job production	
<p><i>Advantages</i></p> <ul style="list-style-type: none"> • organisation of production is relatively simple • suitable for 'one-off' orders which can be designed specifically for the requirements of a particular customer • specifications can sometimes be changed during production • workers are likely to be involved in the whole process – they can see the results of their efforts and may be more motivated 	<p><i>Disadvantages</i></p> <ul style="list-style-type: none"> • production costs may be high – there are a few, if any, economies of scale; wages may be higher as workers may require highly developed skills • production may take some time, e.g. each job will have to be set up separately, may require individual design, etc. • producers require versatile equipment in order to produce a range of different outputs

Batch production	
<p><i>Advantages</i></p> <ul style="list-style-type: none"> • flexibility – individual batches can be designed to meet the requirements of particular customers • some scope for specialisation which can reduce costs, e.g. workers can concentrate on one stage in the process; more specialist machinery can be utilised • stocks of partly finished good can be built up – this can help firms respond quickly to new orders 	<p><i>Disadvantages</i></p> <ul style="list-style-type: none"> • small batches can mean higher costs of production per unit • if batches differ from each other, delays may occur in changing machinery, etc. • production of different batches has to be co-ordinated which may be a difficult and time-consuming task

Flow production	
<p><i>Advantages</i></p> <ul style="list-style-type: none"> • economies of scale can be gained through specialisation of machinery, workers, etc. which can lead to lower costs • automation becomes easier, e.g. use of robots on production line • costs of stockholding, etc. can be reduced through systems like just-in-time, etc. • quality systems can be built into the process and standard product specifications can be maintained 	<p><i>Disadvantages</i></p> <ul style="list-style-type: none"> • standardised product which may not meet requirements of all customers • start-up costs are high • mass production requires mass consumption – if demand falls the whole system may be threatened • if part of the system fails, the whole system may not be able to function • work on production lines tends to be repetitive and boring

These advantages and disadvantages may not apply in any particular case and they change over time. For example, the development of modern computer controlled machinery makes it much easier to vary output in flow production systems so that changes can be made in standardised products. Computer controlled machinery is often more versatile than traditional equipment which makes it easier for firms using job production to produce a greater range of products.

Factors affecting quality

- *Quality assurance*
- *Quality control*
- *Quality standards*
- *Total quality management*

In today's highly competitive global market **quality** has become one of the key decision areas in operations. Quality is an extremely difficult term to define as it can mean different things to different people.

From the consumer's point of view quality may be:

- quantity provided for the price paid;
- reliability or lifetime of the product;
- the extent to which the product or service satisfies a customer's particular requirements, for example, technical features, appearance, and how well the product/service compares with its marketing description.

From the producer's point of view quality may be:

- meeting exact specifications;
- a highly skilled workforce;
- no customer complaints.

Quality assurance

Quality assurance is an attempt to make sure that quality standards are set, agreed and met throughout the organisation. The aim is to ensure customer satisfaction and reduce the return of faulty goods.

Quality control v Quality assurance

Often thought to mean the same thing, these terms in fact describe different approaches to managing quality.

Quality control is historic, reactive and based on power. Consequently it often leads to waste, and the scrapping and re-working of products. This approach has some significant psychological implications. It works by failure, by denying the possibility of getting things right.

'Control' *assumes* that there will be wastage and scrap as inevitable parts of the production process. Up to 25% of output can be wasted in a company that practises a system of 'control' in which quality is checked at the end of the manufacturing process. This has led to the 'Friday car syndrome', which can result in heavy costs in raw materials and manpower.

An example of a quality control system was found in Kellogg's, where samples of breakfast cereal are removed from the production line every half-hour, around fifty samples per day, and tested for quality. The cereals are graded from 1 to 10 by a small group of trained staff. A grade of 10 is perfect. A grade between 9.8 and 7 means that there is no visible reduction in quality as far as the customer would notice. The cereals all also undergo a series of other tests – looking at nutritional values, texture, taste, colour, etc.

Quality assurance is based on prevention. Requirements are determined in advance, thereby minimising the risk of error, or non-conformity to specifications. It aims to create a situation in which 'right first time, every time' becomes a real possibility. This system, in which quality is checked at every stage of the manufacturing process, has been known to reduce wastage and scrap to 5% or less. As a result, in most organisations there is less and less dependence placed on quality control and far more placed on quality assurance systems.

In today's highly competitive market place, the resulting increase in profits, the reduction in costs, and, above all, the improvement in customer satisfaction are all vital.

Factors that the organisation will consider when assessing if they can provide quality in their operating systems include:

- the time, effort and technological input into the design process;
- the quality of supplies of materials and components;
- the commitment and skill of the workforce;
- the system of monitoring and controlling the operating process;
- the ability to meet delivery deadlines;
- the after-sales service provided.

Quality standards

From much that we read about recent business organisations and their operations we might think that the concept of quality has dominated the thoughts of all management teams, regardless of the type or size of the organisation. From schools finding themselves on league tables, and general practice doctors' surgeries having to fulfil a Patient's Charter in their performance, to all types of consumer goods being branded as 'quality' products, all producers and service providers seem to be involved with 'Total Quality Management'.

The traditional view of quality is that there is some conformity with specifications of standards. However, modern thinking now broadens this view to emphasise the importance of the perspective of the customer in the setting of quality definitions. In this way, quality is seen more as fitness for purpose or intended use. This might include measures of appearance, safety, availability, value for money, ease of use, consumer after sales support, the reputation of the product and the organisation, and even the way staff deal with customers.

In recent years the government, through the British Standards Institute, has defined quality assurance as an all-embracing concept involving all stages and all people in the production process. This is a significant move away from the previously held notion of quality control, where the emphasis was on detection and the remedial treatment of faults.

The government further pushes organisations to adopt Quality Standards such as BS5750 by stating that they will only award contracts to those organisations that hold the certificate.

There has to be general agreement within the organisation about the quality standards that it is to aim for in its operations. Quality manuals have to set out policy and procedures on quality assurance and identify the quality standards set down by the organisation. Inspections will be made into current procedures and working practices to ensure that what is laid down in the manual is being put into practice. If these are of a sufficiently high standard there is a recognised quality standard award certificate that can be made to manufacturing industries, allowing them to incorporate the standard into their marketing literature.

British Standard 5750 is the standard that has been developed as a benchmark for quality in the United Kingdom. Consequently BS5750 and its international equivalent, the International Organisation for Standardisation's ISO9000, are recognised as the mark of quality in over ninety countries worldwide. Other award schemes also exist whereby TQM can be recognised, for example, through the European Foundation for Quality Management (EFQM).

Other organisations award their own quality assurance marks. These include the British Standards Institution Kite Mark, the Association of British Travel Agents (ABTA) symbol, and the pure new wool symbol of the Wool Marketing Board.

Investors In People (IIP) is another recognised quality standard that can be achieved by organisations that provide training and other development opportunities for all staff.

Total Quality Management (TQM)

The main aim of Total Quality Management is to produce a perfect product or service every time in order to meet customer requirements. In the UK the system was first seen more than twenty years ago when the Ministry of Defence set out the specifications or standards that their suppliers had to meet before the Ministry would buy from them. Gradually over the years similar standards have evolved to cover a wide range of industries.

Total Quality Management uses the principles of 'Quality Assurance' but takes a fundamentally different view of quality. The principle upon which this system operates is that in order to achieve 'quality', the requirements, specifications, and needs of the customer or client come above everything else. The culture shift must be made from 'we know what quality is' to 'You tell us what you want and that will be our definition of quality'.

In practical terms TQM assumes that the next person with ‘ownership’ of the good, or the next person to use the good, are customers or clients – not simply the person who ends up purchasing the good for his/her own use.

Quality is therefore essential at each and every step in the production of a good, or, for that matter, in the provision of a service, to which the same principles apply.

For example, on the production line in a factory, the next person down the line from *you* is *your customer or client*. You must therefore ensure that when the part-assembled car leaves you to move on to the next worker, any work you have done on it is of the highest standard and quality – just as you will expect to receive the car parts from the worker in front of you.

It is felt that, although it is initially costly to establish, TQM can achieve savings in the long run by reducing wastage to around 3%. This can make a considerable difference to an organisation.

TQM requires:

- the understanding that this is a core corporate philosophy focusing on the needs of the consumer;
- a commitment by top management, and therefore the provision of the necessary resources;
- that every member of the organisation be consulted and involved in setting standards (*every member of the organisation* means just that, from the receptionist, office cleaner and store-man to top management);
- a focus on teamwork and creative thinking to identify future improvements;
- that it be viewed as a long-term concept;
- a quality plan to be established which offers a structured, disciplined approach to quality;
- emphasis to be placed on the collection and analysis of information;
- employee training to be treated as essential;
- a constant checking of performance (quality standards) by individuals;
- a constant search for improvement;
- focus on the total quality of output, in which case cost savings can be considerable.

Introducing and implementing quality assurance or TQM systems

Quality assurance requires four elements to be managed:

1. The definition of 'quality' at each and every stage of the process;
2. The commitment of *all*;
3. A system in which this quality can be assured;
4. A measure of the ability to meet quality requirements.

1. *The definition of quality*

Ultimately this lies with the customer in terms of defining a specification of the desired product/service and may include specific reference to, for example:

- intended usage,
- required outcomes,
- standards of safety,
- efficiency,
- quality of the finished product,
- cost.

It is up to the supplier to clarify the customer's definition and confirm his ability to supply to these requirements.

Suppliers must take responsibility for helping their customers to articulate precise requirements. Vague definitions of ideas will be impossible to implement, as these lead to misunderstandings and errors that, by the nature of the system, must be eradicated.

Only if instructions are specific at every stage of the process can quality be assured, and for this specifications must also be precise.

2. *The commitment of all*

- a clear commitment to quality in the mission statement of the organisation,
- a quality manual/handbook which outlines the specific components of each job within the organisation,
- a clear definition of the responsibility of every individual within the organisation to deliver quality on every occasion to every customer,
- the drawing up and implementation of a 'contract' to confirm the mutual obligation of the supplier and the customer,
- the establishment of 'standard operating procedures' (schemes of work, checking procedures, etc.) to help ensure consistency,

- the use of quality audits to establish the integrity of provision against the set specifications,
- the use of quality circles,
- the use of benchmarking.

3. *A system in which this quality can be assured*

Effective management for quality assurance will require organisations to set up systems and processes that will include:

- systems to help in the definition and specification of products/services,
- systems for checking and monitoring the process and quality at all stages in production/provision,
- using appropriate documentation to set out requirements and to record progress and quality achieved,
- keeping records,
- designating individual responsibility for ensuring quality throughout the organisation,
- reviewing, monitoring and feedback from operatives,
- staff appraisal,
- settings of specific targets of achievement,
- providing comprehensive job descriptions,
- providing comprehensive and clearly understood instructions and information at all times.

4. *A measure of the ability to meet quality requirements*

This can be carried out in a number of ways, both qualitatively and quantitatively. It may be made on customer's perceptions, or on objective measurements – both are valid indicators of conformity.

Benchmarking

This is a process of *quality assurance* that sets performance standards against which work can be measured. These standards are set using the achievements of the most efficient producers in a particular market place or industry. The benefit of this is that production managers assess the performance of their operations against that of the market leaders in a truly competitive environment. The 'best industry standard' organisation can be identified by asking several sources, for example customers, industrialists, business analysts or journalists.

One drawback is that there may be resistance from the market leaders to providing their performance figures to be used by competitors. A second is that organisations must continue to benchmark their processes – even when

they become industry leaders – as competitors will also be trying to produce better quality goods and thereby increase their market share.

Benchmarking is seen as a vital element in the success of an organisation in a global and highly competitive market.

Quality circles

There are two principles behind the concept of quality circles in the work place:

- no one in the production process knows more about the problems that might arise than shop floor workers;
- workers will appreciate and be motivated by the opportunity to use their knowledge and talents alongside management in a problem-solving environment.

A quality circle is a group that meets regularly to identify and resolve problems about quality in the production process. Their remit includes the consideration and recommendation of suitable alternative practices that are then put to management. The members of the quality circle will largely consist of shop-floor workers, but may also include engineers, quality inspectors and members of the sales team who are there to present the customer's angle.

Like a number of successful modern management techniques, the idea of quality circles originated in the Japanese manufacturing industries. Toyota Motor Company was the first to establish quality circles in the 1950s.

The inclusion of quality circles in the workplace is seen as a successful way of bringing both *consultation* and *job enrichment* onto the shop floor.

Summary of factors affecting quality

‘Quality, reliability and cost are all interconnected. With enough expenditure anything can be endowed with high quality . . . and with adequate expenditure almost anything can be made to be very reliable. It follows, then, that a company can provide a product or service at different quality levels, each of which necessitates a different price. There is no simple level of quality; nor is there an absolute quality level. Nothing will be perfect, no matter how much it costs. In general, costs rise steeply for increasing quality, but beyond a certain level, value to the customer increases more slowly.’

Ray Wild, *Essentials of Production and Operations Management*, 2nd edn.

From the above we can develop simple definitions as follows:

Quality:

The quality of a product or service is the degree to which it satisfies customers’ requirements. This is influenced by:

Design quality:

The degree to which the specification of the product or service satisfies customers’ design requirements; and

Manufactured quality:

The degree to which the product or service, when made available to the customer, conforms to specification.

Stock control

In any organisation the control of stock is essential. Stock is an expensive item to an organisation – sometimes accounting for as much as 30% of the total assets held. Any stock management system will try to balance the needs of the production department with the costs of holding stocks. The 3 main categories of stock within an organisation are:

- raw materials and components for the product or process;
- work in progress;
- finished stock.

Aspects of stock control are described below.

Issuing stock

This should only be done on the production of an authorised *requisition card*.

Monitoring stock levels

This can be done in a variety of ways:

- (a) by recording (manually, using a *bin card system*);
- (b) by using a *database* or *spreadsheet*, changes in stock are recorded as they take place, giving a running balance total which should be accurate at any point in time and reduces the need for physical stock counting prior to re-ordering. Many such systems now allow automatic re-ordering when re-order level is reached, with no need for operator input.

A physical stock count (stock taking) **MUST** be carried out at least once per year in order to provide closing stock figures for the Final Accounts.

Deciding on the quantities of stock held

Having the correct quantities of materials at any one time is essential. If stock levels are too low, production might be delayed, or even stop. If stocks are too high, the firm has unproductive money, tying up funds that could more profitably be used elsewhere. One method of calculating stock levels is given below.

Stage 1 Set the ECONOMIC STOCK LEVEL

This is the stock level that permits activities to continue without interruption but incurs the minimum cost for the company.

Example:

To ensure that production continues without interruption for a 20-day period where 100 units are used daily, the ESL would be:

$$\begin{aligned} \text{ESL} &= 20 \text{ days} \times 100 \text{ units} \\ &= 2,000 \text{ units} \end{aligned}$$

Stage 2 Set the MINIMUM STOCK LEVEL

This is the stock level that ensures that there will always be stocks for production, allowing for ordering and delivery times.

Example

- (a) Usage = 100 units per day
- (b) Orders take 5 days to be delivered
- (c) Add a reserve of 3 days' stock to cover for unforeseen delays, weekends, etc.

$$\begin{aligned} \text{MSL} &= 5 + 3 \text{ days} \times 100 \text{ units} \\ &= 800 \text{ units} \end{aligned}$$

Stage 3 Set the RE-ORDER LEVEL

This is the level at which new stock should be ordered. Usually calculated on the basis of usage per day, minimum stocks held + *lead-time* (delivery time for new stock).

Example

- (a) Minimum stock level = 800 units
- (b) Lead time = 5 days
- (c) Average usage = 100 units per day

$$\begin{aligned} \text{R-OL} &= \text{Minimum stock} + \text{lead time} \\ &= 800 \text{ units} + (100 \text{ units} \times 5 \text{ days}) \\ &= 800 + 500 \\ &= 1,300 \text{ units} \end{aligned}$$

Stage 4 Set the RE-ORDER QUANTITY

This is the amount of stock required to return stock levels to economic stock level on the same day that new stocks are received. Normally the re-order quantity is automatically ordered as soon as the re-order level is reached. The quantity re-ordered should return the stock levels to that of the economic stock level.

Example

- (a) Economic stock level = 2,000 units
- (b) Minimum stock level = 800 units

$$\begin{aligned} \text{R-OQ} &= \text{Economic S L} - \text{Minimum S L} \\ &= 2,000 - 800 \text{ units} \\ &= 1,200 \text{ units} \end{aligned}$$

Once these levels are set and agreed, the correct amount of stocks should always be available to maintain continuous production.

Storage of stock

Traditionally there are two ways of storing stocks – either in one central area (*centralised storage*) or in different locations throughout the organisation depending on where the items are to be used (*decentralised storage*).

A number of companies are moving away from these traditional methods to the Japanese production process *Just-in-time* which uses the *Kanban system*. Raw materials intake, work in progress and goods dispatch are kept to a minimum to match exactly the quantities demanded by customers. This stock control system uses cards to inform operators how much is to be produced at each stage in the process and the precise quantity of stock each process should withdraw from the previous stage. The previous stage may be another process, a stores area or even a supplier.

Just-in-time aims to get the highest volume of output at the lowest unit cost. It is really a method of *production control*. Using a ‘pull-through’ approach the advantages claimed for this system include:

- a smoothing out of production flows;
- a reduction in inventory levels;
- a reduction in unit costs of production;
- much easier production planning for management;
- ease in meeting delivery deadlines;
- elimination of waste;
- no over-production.

The concept is very simple. If there is no demand for the product there is no production. It is the anticipated or planned consumer demand – often initiated by the sales or marketing department – that triggers the production process. Finished goods are produced just in time to be sold to the customer. Component parts are assembled just in time to become finished goods. Materials are purchased just in time to make component parts.

Each system of stock control has both advantages and disadvantages. And, as with all management decisions, each organisation must choose the storage system most appropriate to its needs.

Centralised storage

Advantages:

- improved security
- supervised by specialist staff
- agreed procedures for issue/receipt
- agreed procedures for ordering

- bulk ordering/storage may be cheaper
- increased efficiency in distribution

Disadvantages:

- time wasting going to and from stores
- cost of specialist staff
- cost of dedicated storage area

Decentralised storage

Advantages:

- stock always 'on hand' when required
- orders of stock will reflect actual usage
- faster turnover of smaller amounts of stock reduces likelihood of deterioration/decay

Disadvantages:

- less rigid control – theft and loss more likely
- takes up space in production areas

The Kanban system

Advantages:

- stock usage exactly matches production requirements
- savings are made on both purchase and storage costs of unused stocks
- production delays are prevented
- close ties with suppliers are established

Disadvantages:

- there is a high dependency on suppliers and their ability to conform to your requirements
- suppliers must be willing to participate.

Purchase of materials

The importance of purchasing varies according to the size and nature of the organisation. For example in service industries, such as hairdressing, there is very little purchasing and 'production' depends upon the skill of the staff, rather than the shampoo or perm lotion that they use.

However, in manufacturing industries, where large amounts of raw materials or component parts are used to produce the final goods it is very likely that the firm will have a purchasing department and employ a team of specialists. In order to remain competitive this department is responsible for obtaining

the best quality materials, at the lowest cost and delivered in the correct quantities at the correct time. This is known as the *purchasing mix*.

The purchasing mix

Broken down further, we can look at the decisions to be made firstly in terms of quantity to be purchased, and secondly in terms of the choice of supplier to use.

When fixing the *quantity to be purchased*, it is necessary to consider factors such as:

1. the stock of raw materials currently available
2. the time between this order for your products and any further orders
3. the amount of raw materials required to meet output demands
4. the availability and cost of storage space.

Such factors as the following are considered when deciding on *choice of supplier*.

1. Price: lowest? discount for bulk buying? discount for regular customers? credit terms available?
2. Quantity: acceptable for needs? consistently available?
3. Availability: dependence on sources? reliability of delivery systems? confidence in supplier?
4. Location of Supplier: additional transport requirements? insurance costs?

Payment systems

The search for a way to motivate, reward and even control labour has led managers to devise a variety of payment systems.

Time-rate payment systems

These are simple payment systems where the workforce receives a basic wage or salary. Workers are rewarded for the amount of time they spend at work, and for most workers in Britain this is the average working week of thirty-six hours. In addition, holidays with pay are usually included. The system is very common in many jobs from teachers to bank workers and shopkeepers. It provides a simple method of calculating payment for employees, whether they are paid hourly, weekly, or monthly. It also overcomes difficulties that might arise when trying to work out the exact value of an employee's work, for example a doctor. From the employee's point of view such a system guarantees income.

Overtime

There are instances where employers operate a time rate system, but also offer overtime payments when individuals work for more than their normal number of hours per week. Overtime payment systems are common in the construction industry, for example.

Piece-rate payment systems

In manufacturing industries the most common method of payment is some form of payment by results, or a productivity related scheme. In some instances this can simply be payment to the worker for each item he or she makes/produces. This system was very common in the soft fruit industry where workers would be paid by the weight of each basket of strawberries or raspberries they picked. It is also felt to offer the greatest incentives to employees to maximise their output – the more they produce the more they get paid. However, a system that *only* offers piece-rate payments may result in little or no income for employees, because of breakdowns in machinery or other unplanned stoppages.

Piece rates plus a basic or fixed pay element

To avoid the problems mentioned above, some employers calculate pay using a system made up of two elements. Firstly, they will pay a basic or fixed-rate wage calculated on a time rate basis, and then to this they will add a variable, piece-rate element, calculated on output.

Commission payments

When looking to establish payment systems for a sales force, it is very common to base this too on a flat-rate wage supplemented by some form of commission based on sales volume or value achieved. In some organisations the greatest part of the wage received by the sales force comes in the form of commission paid. This has led to complaints that such workers may use pressure tactics in order to achieve sales – and maintain their own income levels.

Fringe benefits and non-financial payments

This covers any payments other than wages and salaries that an employer might make. They include private medical insurance, subsidised meals, company cars or loan and mortgage facilities. Since the 1960s fringe benefits have increased in importance, particularly in the managerial and professional sectors.

Bonuses

Another common production payment system is one that operates with a flat rate of pay that is then supplemented by a bonus directly related to the output

each worker, or group of workers, achieves. Such bonuses might be related to setting targets for:

- volume of output,
- quality standards achieved,
- reductions of wastage,
- improved machine use,
- reduction in the loss of working days through workplace accidents. (This last example is very common in the North Sea oil industry.)

Incentives to professionals

It is generally accepted that professional employees, for example dentists, doctors and other health service specialists, receive a basic salary from their employing health authority, but can enhance this by undertaking private patient work for which they receive payment on an individual case basis. There has also been an increase in 'no win no fee' legal cases in recent years. Based on a system devised in the USA, and particularly common in civil law suits for damage claims, the client only pays the lawyer a fee if the outcome of the case is in his favour. The percentage rate of the fee will be set out and agreed before the legal action is started.

Contract employment

It is becoming more and more common for employers to hire staff on a contract basis. This may be for the completion of a job or project, for example the building of a new stretch of dual carriageway, or may be for a fixed time period of, say, one university academic year. The employer can make substantial savings using a contract basis for employment – it is unlikely that he will offer paid holidays, pay for days lost through sickness, maternity pay or a company pension scheme. From the employee's point of view the rate of pay is often higher than for those on permanent contracts. But there is a high degree of uncertainty and risk of loss of income when the contract ends.

Profit-sharing schemes

Although not widespread in Britain, there has been a move in recent years for employers to use systems that include a share of pre-tax profits as part of the payment made to the workforce. Some employers feel that this system is likely to increase the commitment from the workforce, not only in terms of output, but also in overall terms to the organisation itself. However, others are less enthusiastic and feel that the relationship between daily output and annual profit-share payments is too remote to be an effective motivator.

Employers will have several objectives that they want to achieve when devising payment systems for their employees. These include:

- *Motivation*
Many people believe that workers are motivated by money, and this is reflected in the number of employers who use performance related payment systems.
- *Cost*
As one of the objectives of the employer is to maximise profits he will wish to keep the cost of labour as low as possible. The procedures for calculating, recording and making payments to employees should also be cost effective.
- *Prestige*
Employers may want to have the reputation of being ‘good payers’ rather than ‘poor payers’. This improves their ability to recruit and retain workers, which, in the long term, is cost effective for the organisation.

Employees will also have a number of objectives that they want to be able to meet from the payment they receive.

- *Purchasing power*
The higher the wage the employee gets the more he can buy and the higher his standard of living will be. Workers will always try to win wage increases *higher* than the present (or expected) level of inflation – as this means that they will continue to be able to raise their standard of living.
- *Recognition and fairness*
Most employees like to have the value of their work recognised. Many see the level of their wage or salary as the main indicator of such recognition. They also want to see fairness between payments they receive and payments made to other workers doing similar work or holding similar qualifications. For example, the pay of nurses is often compared to that of teachers or the police.
- *How payments are made up*
Many workers are interested in the way in which their total remuneration is made up. For example, they might be very happy to settle for a lower annual salary provided that the employer is making a contribution into a pension fund on their behalf. Benefits such as a fully funded company car may be worth as much as £4,000 or £5,000 per year to the employee, although he/she will almost certainly have to pay more in tax.

Distribution and delivery

Warehousing

Despite the efforts of management to relate the production output of a product to its forecast sales figure, under normal circumstances it is impossible to match output to demand exactly. At different times, sales will exceed those forecast or fall below it. However, since sales occur after the finished product is produced, any response to changes in sales tends to be too late to influence output. Consequently, it is necessary to store stocks of finished goods in a location that offers security and a suitable environment (for example, dry not damp).

Most production units store finished goods in *warehouses* that may be centrally situated or decentralised. The main aspects of warehouse planning and organisation are:

(a) *Design and layout*

The design and layout of the warehouse is of major importance if stock is to be handled efficiently. Ideally, the warehouse should be on ground level only as this speeds up handling time. Those goods that are 'moved' most frequently should be located in a readily accessible area, and a stock rotation system should operate to avoid deterioration in quality.

(b) *Mechanical handling*

Although specialist stock handling equipment can be very costly to purchase, benefits from its use can be substantial in terms of use of space, time required to 'move' stocks, and costs.

Pallets offer benefits in that they are easily moved with the aid of a forklift truck and help to avoid deterioration by keeping items off the floor.

(c) *Transportation*

Organisations may own or hire transport or use public transport. It is essential for an organisation to consider carefully their needs prior to determining their transportation policy. Owning its own transport offers an organisation complete control of its vehicles and drivers, but incurs high capital and running costs, and requires careful route planning if under- or over-utilisation is to be avoided.

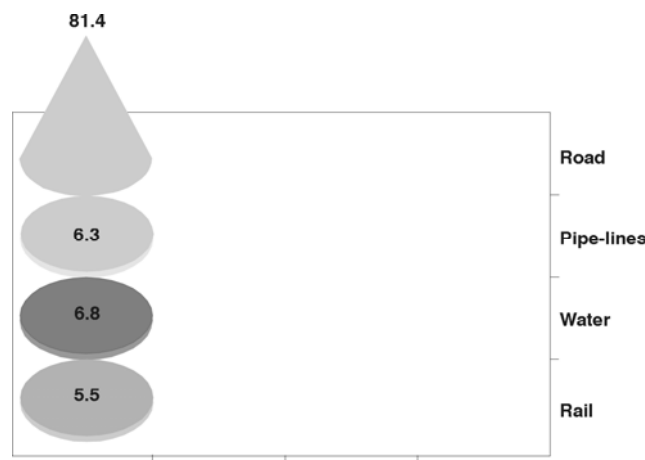
Reliance on outside transport avoids any capital outlay and offers the potential for increasing or reducing transport requirements at short notice

(hence saving costs), but control of the system and reliability may be reduced.

Warehousing facilities, transportation and stocks of finished goods are all essential elements in an organisation's distribution practices.

Transport and delivery

The most common methods of transporting goods in Britain are shown below in graph form.



(Source: based on CSO *Annual Abstract of Statistics*, 1995)

In the UK over 80% of all goods are delivered by road. Motorways make it easy to deliver raw materials, component parts and finished goods from door to door, even in the most remote locations. Until recently the great majority of freight going to the Continent also went by road transport, although the railways have increased their levels of freight carrying since the opening of the Channel Tunnel. Improved transport links have given organisations much more freedom in decision-making about the location of factories, offices and retail outlets.

Organisations have to assess the costs and benefits of each method of transport. If you have to have fresh strawberries at Wimbledon each morning, and the strawberries are being picked in Blairgowrie, you may have to consider refrigerated airfreight – despite its high cost. If you are transporting fish from Peterhead to the London fish markets, the most cost-effective method is by refrigerated lorry.

Scheduling

It doesn't matter what goods you are producing or what service you are offering your customers, it is essential that all of the factors of production and distribution are working in a co-ordinated fashion. The bringing together of raw materials, components, workers, machinery, transport systems and sales outlets has to be organised in such a way as to make sure that the work flows through the stages of production and delays and redundant resources are avoided. This means that the operations function of an organisation, be it in manufacturing or service industries, a multinational corporation or a sole trader business, will have a central role to play and will have to maintain close relationships with other departments.

Student Activities

Each of the activities that follow could be tackled by individual students or by students working in pairs or groups.

Activity 8, in particular, is designed so that students can begin with individual work, but then progress into group work, discussion and possibly reporting back to the class as a whole.

Activity 1

Read the case study below and then answer the questions that follow.

Newheaths Nurseries

Newheaths is a small nursery garden business situated in the central belt of Scotland. Selling to both retail and private customers, they pride themselves on being specialists in growing heathers.

Heathers come in all shapes, sizes and colours. Some flower in spring, some in summer and some in the autumn. There are varieties with pink flowers, with red flowers, with golden flowers and, of course, with white ones. Newheaths sells heathers from Scotland as well as from places as far away as Japan, China and New Zealand.

Sisters, Pat and Sue Sprouting run the nursery. They are proud of the success they have had in growing on the tiny plants they buy in, and then selling them to customers who visit the centre, and by mail order to customers from all over Britain. They guarantee their plants will succeed anywhere.

- (a) Why is it true to say that Newheaths Nurseries has a production function?
- (b) What are the three stages in any production process?

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- (c) Give three examples of the raw materials that Newheaths might use.
- (d) Give three examples of the types of things that might be done at Newheaths during each of the stages of production.

Activity 2

The three main types of operation are:

1. Job production
 2. Batch production
 3. Flow production
- (a) Identify a product that Pat and Sue would use in their organisation that would be made by each of the three different methods of production.
 - (b) Say what *key features* of each type of operation method make it most suitable for the production of that particular product.
 - (c) What factors will affect the choice of operation method used by an organisation?
 - (d) What type of operation method would be most suitable for Newheaths Nurseries and why?

Activity 3

Read the following article and answer the questions that follow.

‘Well, we’ve lost that contract. What are we going to do now?’ Pat asked.

‘The one thing we can’t do is rest on our laurels,’ replied Sue, giggling nervously. ‘Rest on our laurels ... plants ... you know we sell plants...’ she trailed off. Pat scowled, obviously not in the mood for jokes.

Newheaths Nurseries had just lost a big contract to supply all of the heathers needed for the Council displays in Dunfermline, something that they had done for the past five years. The big question was WHY?

‘They’ve never asked for quality certificates before. Our own standards have always been good enough. We take PRIDE in the high quality plants we produce. Why is that not good enough for them now?’ Pat continued as if Sue had not spoken. ‘What is this BS5750 anyway?’

- (a) Why is *quality* felt to be important to organisations today?
- (b) How might a *customer* judge quality?
- (c) How might a *producer* judge quality?
- (d) Producers will benefit in a number of ways if they can produce quality products.

Give three factors that Pat and Sue have to consider when assessing their organisation’s ability to produce quality goods or provide a quality service to their customers.

- (e) BS5750 is one quality standard recognised in Britain. What other signs or symbols might an organisation use to show that it is meeting recognised quality standards?

Activity 4

Pat and Sue decide to find out more about different standards of measuring, achieving and recognising quality in order to discover which method would best suit their operation.

- (a) Help Pat and Sue by preparing a short summary of the *key features* of:
- Quality Assurance,
 - Total Quality Management,
 - Quality Control,
 - Benchmarking,
 - Quality Circles.
- (b) Pat and Sue decide to implement a process of Total Quality Management.
1. Why might this give rise to *extra costs* for Pat and Sue?
 2. How might this *reduce costs* for Pat and Sue?
- (c) What factors, *outwith their control*, might affect the quality of the heathers that Pat and Sue sell?

Activity 5

‘Where are all the *Erica carnen* plants?’ Pat asked Sue one Wednesday. ‘You know, the lovely Springwood White variety that is so popular. I’ve had Mr Jessop from Exeter on the phone wanting ten more sent down today.’

‘Oh, there are plenty in the west store area, aren’t there?’ replied Sue. ‘I’m sure I saw some there ... was it last week ... or no, maybe it was the week before.’

‘Well, I checked there, and in the south store and in the barn. I also went through all of the garden displays and could only find three plants ... two of them are in the main display at the front gate,’ said Pat.

‘Who do we get them from? I’ll phone and get some more ordered,’ offered Sue. ‘As long as it’s a Scottish supplier we’ll have them here by Friday. Mr Jessop will get them on Monday. That’ll be OK won’t it? Either that or we can send him the Cornish *Erica vagans* ... I was wondering how to get rid of it. We seem to be left with such a lot of plants this season,’ she continued.

‘Not this time, Sue.’ Pat looked upset. ‘Remember the last time he ordered plants from us there was a delay. The order was for five of the New Zealand *Erica arborea*, but he couldn’t wait the four weeks for us to get more and we lost the order. If it happens again he might not come back at all.’

Stock control is very important to a business. Pat and Sue seem to be having difficulties with their stock control. Although all of their plants are labelled and have a bar code on them which identifies the name, variety and selling price of the plants, they appear to have no idea what stock is available in the nursery. They have decided to do something about this and have asked for your advice.

- (a) What are the key issues that they must consider when setting up a system for stock control?
- (b) Why is having too much stock as big a problem for a business as having too little stock?

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All of the plants in the nursery have a **bar code** on their pots. This identifies the variety and common name of the plant, as well as the selling price.

- (c) How might Pat and Sue use this **bar code** to help their stock control system?
- (d) What are the main advantages and disadvantages of using a computerised stock control system?

Activity 6

Newheaths uses two different storage systems for their stock. The production equipment and raw materials – potting compost, fertilisers, pots, labels, potting trays, wheelbarrows, hoses and other items that they do not sell on to their customers – are all stored in the large barn at the north end of the property.

The plants themselves, from the very small seedlings to full-grown display plants, are stored in two main areas. The one to the south of the property is used mostly for British varieties, and the one to the west for those from overseas. There are also plants throughout the display stands and display gardens, which make up most of the central area. Customers can browse through this area and see the heathers planted out in pots in a variety of garden settings that show them at their best. Sometimes customers want a specific plant that is then removed from a display; sometimes they will ask for the variety they have seen and Pat or Sue will fetch a heather from one of the stores.

This system of stock storage works very well for Newheaths. However, other organisations use different methods of stock storage.

Outline the advantages and disadvantages of:

- (a) Centralised stores
- (b) Decentralised stores
- (c) The Kanban system is another method of stock storage and control. Describe the advantages and disadvantages of this system.
- (d) Would such a system be appropriate for use at Newheaths?

- (e) In order to remain competitive, organisations have to obtain the best quality raw materials, at the lowest costs and delivered in the correct quantities at the correct time. Although the ‘production’ of the plants that Pat and Sue sell on is very dependent on their own skill in horticulture, they have to be careful that they can maintain a high standard of quality at all times.

What are the main factors that Pat and Sue should consider when deciding on their *purchasing mix*?

Activity 7

During the summer Pat and Sue have to employ three extra staff to help them in the nursery. Read the following advertisement and answer the questions that follow.

NEWHEATHS NURSERIES

Require the following temporary staff for May, June, July, August

Office Assistant:

To work in the office, taking orders, placing orders, attending to all of the administration and doing basic book-keeping. The successful applicant should be competent in all aspects of administration and basic book-keeping. Knowledge of Microsoft 95 or 98 would be an advantage. The hours of work for this post will be 9.00 am – 4.30 pm, Monday to Friday.

Dispatch Clerk:

To assist with the packaging and dispatch of plants. This person must be flexible, normal hours of work are 10.00 am – 5.30 pm, but these will vary depending on orders received. The successful applicant must be prepared to work overtime as and when required.

Horticultural Assistant:

To help the proprietors with the propagation of healthy heathers throughout our busy summer growing season. The task involves the re-potting of plants into larger containers, as they grow. Some experience in nursery work would be an advantage, but full training will be given. Working a five-day week from 8.30 am to 4.30 pm the successful applicant will have one weekend off in four.

- (a) Outline each of the various different payment systems that Pat and Sue could use for their new staff.
- (b) Identify, giving reasons for your choice, which payment system would be best suited to each post.

Activity 8

** This activity might be best started off on an individual basis. By ensuring that all of the operators are investigated it would then be possible to form groups and within these to discuss the best option for Newheaths from the information within each group. There could then be a plenary session with each group reporting back to the class as a whole.

Pat and Sue have decided to look closely at their delivery arrangements as part of their commitment to Total Quality Management. At present they are using Parcelforce, but would like to investigate whether or not this is the best option available to them.

- (a) Investigate the parcel delivery service offered by three of the following companies.

TNT Parcelforce City Link Amtrak
Red Star
Goldstar
PDQ Couriers
DHL UPS

The local address and telephone number of all of these organisations can be found in your Yellow Pages telephone directory. Some of these organisations may also be found on the Internet.

Useful sites: <http://www.tnt.co.uk/>
<http://www.parcelforce.co.uk/>
<http://www.citylink.co.uk/>
<http://www.dhl.co.uk/>

- (b) Prepare a short report (around 100 words) making recommendations to Pat and Sue that suggest which carrier would be the most suitable for their operation.

Case Study for Activities 9-12

A newly formed Young Enterprise company, 'Blocks Away', has come to you for help and advice with their production process. They have decided to make wooden toys for the 3-5-year-old market. Initially they hope to raise £250 by selling shares in their company and to sell their product throughout the school and to the surrounding community.

Activity 9

By highlighting the central role that production plays in any organisation, give examples of what Blocks Away should consider under each of the following headings.

Innovation

Purchasing

Marketing

Finance and Accounting

Human Resources

Scheduling

Activity 10

Prepare a report for the Production Director of Blocks Away describing the Just-In-Time production system and why you think it would be an appropriate system for the organisation to implement.

Activity 11

One of the competitions that Blocks Away wants to enter is the Junior Quality Scotland Competition. Young Enterprise companies here are judged on the quality of their product, at every stage from design to final user.

Blocks Away has decided that their quality slogan will be:

To provide products that don't come back for customers who do.

- (a) Why should Blocks Away adopt a quality *assurance* strategy, rather than a quality *control* one?
- (b) The *four* key issues behind the implementation of a quality assurance or Total Quality Management system are:
- the definition of quality,
 - the commitment of all,
 - a system in which quality can be assured,
 - a measure of the ability to meet quality requirements.

Taking each of the four issues in turn, suggest how Blocks Away might implement a system of TQM in their production process.

- (c) The Production Director decides to carry out a method and work study of the production process the organisation is using, as she feels that there are ways that productivity could be improved in the run-up to Christmas.
- (1) What do each of these studies measure?
 - (2) Why does the Production Director feel that the information she gets from these studies might help her?

Activity 12

The Production Director is aware of the need to keep a strict control on stocks held by Blocks Away. As the firm has very little start-up capital, the quantity of sheets of wood that they can buy in is limited. Cash to purchase more stock will not be available until some of the first products are sold, but it is essential that they do not run out of wood and have to halt production, especially in the run-up to the peak sales period at Christmas.

She has asked for your help to construct a model of stock control that might identify key stock levels for the production team.

She gives you the following information:

- four sheets of wood are used each week;
- the maximum stock level is to be ten sheets of wood;
- the minimum stock level is to be two sheets of wood;
- stock is to be re-ordered when the stock level reaches four sheets;
- the suppliers take two days to deliver more stock.

Using graph paper and picking appropriate scales, draw a stock control model based on this information.

Solutions to Activities

Activity 1

- (a) The production function exists in all types of organisation; service industry as well as manufacturing. It is concerned with the transformation of a variety of inputs such as information, people, materials and finance into a variety of outputs such as goods, services, customer and employee satisfaction. Viewed in this way, all organisations can be shown to have a production system irrespective of their primary objective.
- (b) Input
Process
Output
- (c) Heather plants
Potting compost
Fertiliser
Pots
- (d) Input
- buying of small plants
 - buying of compost
 - buying of various sizes of pots
 - buying of fertiliser
 - working to prepare planting sites
- Process
- re-pot plants
 - prepare display stands
 - prepare display gardens
 - advise customers
 - provide customers with information
- Output
- prepare plants for packaging
 - package plants in boxes
 - give plants to delivery company
 - send invoices to customers
 - put plants into customer's car after purchase

Activity 2

- (a) A storage shed
The young heather plants
A wheelbarrow

(b) ***Job production***

Here each 'job' is completed in its entirety before another job is started. The emphasis is on individuality. Frequently found in smaller business units where product differentiation is easily maintained.

A shed would need to meet specific requirements in terms of size and location for Pat and Sue. It may also have to have special non- standard features such as lighting and heating, or specific shelving installed.

Batch production

All stages in the production process are completed at the same time. Products will have a marked degree of similarity, although different ingredients may be used for different products. Most frequently seen in food production businesses, but becoming more common in industries such as the building trade, where a row of new houses will all have their foundations dug at the same time.

The young heather plants will be grown in batches. Seeds are only available at certain times of the year, and particular heathers will need planting out and will grow and flower at different times.

Flow production

This process uses the production line and the product passes through various stages along the line with component parts being added at each stage. This is most frequently seen in large mass production businesses where standardisation of products is essential.

A wheelbarrow is a standardised mass-produced product.

- (c) Factors include
- the nature of the product
 - the resources available
 - whether it is labour or capital intensive
 - stock control
 - distribution and warehousing
 - the quantity to be produced

- the quality required
- payment systems used
- scheduling

(d) Batch production

The young heather plants will be grown in batches. Seeds are only available at certain times of the year, and particular heathers will need planting out and will grow and flower at different times.

Activity 3

- (a) In today's highly competitive global market *quality* has become one of the key decision areas in operations. Quality is an extremely difficult term to define as it can mean different things to different people.

Quality Assurance is an attempt to make sure that quality standards are agreed and met throughout the organisation. The aim is to ensure customer satisfaction and reduce returns of faulty goods.

- (b) From the consumer's view, quality may be:

- quantity provided for the price paid;
- reliability or lifetime of the product;
- extent to which the product or service satisfies a customer's particular requirements, for example, technical features, appearance, and how well the product/service compares with its marketing description.

- (c) From the producer's view quality may be:

- meeting exact specifications;
- a highly skilled workforce;
- no customer complaints.

- (d) The time, effort and technological input into the design process; The quality of supplies of materials and components; The commitment and skill of the workforce; The system of monitoring and controlling the production process; The ability to meet delivery deadlines; The after-sales service provided.

- (e) ISO9000

IIP

The Kite Mark

ABTA

The Wool Mark

Activity 4

(a) Quality Assurance:

Quality Assurance is an attempt to make sure that quality standards are agreed and met throughout the organisation. The aim is to ensure customer satisfaction and reduce returns of faulty goods.

TQM:

The main aim of Total Quality Management is to produce a perfect product or service every time in order to meet customer requirements. The principle upon which this system operates is that in order to achieve 'quality' the requirements, specifications and needs of the customer or client come above all else. The culture shift must be made from 'we know what quality is' to 'You tell us what you want and that will be our definition of quality'.

Quality Control:

Quality control in many organisations has meant inspecting people's work *after* it has been completed. This process assumes wastage, scrapping and re-working of products and a degree of failure on the part of the workforce. Up to 25% of manufacturing output can be wasted in an organisation that only implements a quality control system where quality is checked at the end of the process.

Benchmarking:

This is a process of *quality assurance* that sets performance standards against which work can be measured. These standards are set using the achievements of the most efficient producers in a particular market place or industry. The benefit of this is that production managers assess the performance of their operations against that of the market leaders – in a truly competitive environment. The 'best industry standard' organisation can be identified by asking several sources, for example customers, industrialists, business analysts or journalists.

Quality Circles:

A quality circle is a group that meets regularly to identify and resolve problems relating to quality in the production process. Their remit includes the consideration and recommendation of suitable alternative practices that are then put to management. The members of the quality circle will largely consist of shop floor workers, but may also include engineers, quality inspectors and members of the sales team who are there to present the customer's angle.

- (b) 1. It requires
- more paper work and recording,
 - purchase of best quality raw materials,
 - maintenance of quality standards at all times.
2. It might reduce costs by:
- reducing wastage,
 - reducing returns from customers.
- (c) The weather;
The quality of young plants;
The quality of other raw materials.

Activity 5

- (a) Issuing stock,
Monitoring stock,
Deciding on quantities of stock to be held,
How stock should be stored.
- (b) Having too much stock costs the company money in storage costs. Also money used to buy stock is not available for any other use.
- Having too little stock may mean that production has to stop because stocks have run out.
- (c) They could set up a computerised stock control system. All new stock could be recorded in by reading the bar code. All stock sold could be recorded by reading the bar code. Stock ordering can be done automatically by the computer programme. Invoices can be generated and issued by computer when stocks are sold.
- (d) It is accurate. It reduces the need for frequent physical stock counting. It will save time spent on administration for Pat and Sue.

Activity 6

- (a) Centralised stores:
Advantages: improved security, supervised by specialist staff, agreed procedures for issue/receipt, agreed procedures for ordering, bulk ordering/storage may be cheaper, increased efficiency in distribution.
Disadvantages: time wasted going to and from stores, cost of specialist staff, cost of dedicated storage area.
- (b) Decentralised stores:
Advantages: stock always 'on hand' when required, orders of stock will reflect actual usage, faster turnover of smaller amounts of stock reduces likelihood of deterioration/decay.
Disadvantages: less rigid control – theft and loss more likely, takes up space in production areas.
- (c) The Kanban system:
Advantages: stock usage exactly matches production requirements, savings are made on both purchase and storage costs of unused stocks, production delays are prevented, close ties with suppliers are established.
Disadvantages: there is a high dependency on suppliers and their ability to conform to your requirements, suppliers must be willing to participate.
- (d) Not really, as it would be very hard for them to predict the demand for their products. There are also a number of external factors, such as the weather, that can affect both the supply of young plants and the demand for grown ones.
- (e) A *the quantity to be purchased*
the stock of raw materials currently available;
the time between this order for your products and any further orders;
the amount of raw materials required to meet output demands;
the availability and cost of storage space.

B which supplier to choose

PRICE	lowest? discount for bulk buying? discount for regular customers? credit terms available?
QUALITY	acceptable for needs? consistently available?
AVAILABILITY	dependence on sources? reliability of delivery systems? confidence in supplier?
LOCATION OF SUPPLIER	additional transport requirements? insurance costs?

Activity 7

- ***Time rate payment systems***

There are simple payments systems where the workforce receives a basic wage or salary. Workers are rewarded for the amount of time they spend at work and for most workers in Britain this is the average working week of thirty-six hours. In addition, holidays with pay are usually included. This system is very common in many jobs from teachers to bank workers and shopkeepers. It provides a simple method of calculating payment for employees, whether they are paid hourly, weekly, or monthly. It also overcomes difficulties that might arise when trying to work out the exact value of an employee's work, for example a doctor. From the employee's point of view such a system guarantees income.

- ***Overtime***

There are also instances where employers operate time rate pay, but also offer overtime payments when individuals work for more than their normal number of hours per week. Overtime payment systems are common in the construction industry, for example.

- ***Piece rates payment systems***

In manufacturing industries the most common method of payment is some form of payment by results or productivity related scheme. In some instances this can simply be payment to the worker for each item he or she makes/produces. This system was very common in the soft fruit industry where workers would be paid by the weight of each basket of strawberries or raspberries they picked. It is also felt to offer the greatest incentives to the employee to maximise their output – the more they produce the more they get paid. However, a system that *only* offers piece rate payments may result in little or no income for employees, through breakdowns in machinery or other unplanned stoppages.

- ***Piece rates plus a basic or fixed pay element***

To avoid the problems mentioned above, some employers calculate pay using a system made up of two elements. Firstly, they will pay a basic or fixed rate wage calculated on a time rate basis, and then to this they will add a variable, piece rate element, calculated on output.

- ***Commission***

When looking to establish payments systems for a sales force it is also very common to base this on a flat rate wage supplemented by some form of commission based on sales volume or value achieved. In some organisations the greatest part of the wage received by the sales force comes in the form of commission paid. This has led to complaints that such workers may use pressure tactics in order to achieve sales – and maintain their own income levels.

- ***Fringe benefits and non-financial payments***

This covers any payment other than wages and salaries that an employer might make. They include private medical insurance, subsidised meals, company cars or loan and mortgage facilities. Since the 1960s fringe benefits have increased in importance, particularly in the managerial and professional sectors.

(b) Office Assistant

Time rate payment system

The office assistant works a regular week completing both routine and non-routine tasks that, individually, are difficult to give the exact value of.

The Dispatch Clerk

Time rate + overtime

There is a basic working week. However, overtime is likely to be a feature of this job.

The Horticultural Assistant

Piece rate payments

Although working regular hours this person will concentrate on one task only – the re-potting of plants. This is easily quantifiable yet, to a large extent, only semi-skilled. In such a job, payment by results, or by output, is often a very good incentive to give high levels of productivity.

Activity 8

In this activity the solution will depend on the current offers and prices available from each of the parcel delivery organisations. It will also largely depend on the format the class teacher has taken for this activity.

Activity 9

Innovation

At the heart of new product development, production capacity and capabilities must be considered at the design and development stage. For example Blocks Away have designed a new wooden toy for 3-5-year-olds. Before they finally decide to manufacture this new product they must find out if they can have access to the craft and design rooms in the school. They must also make sure that they have the skills themselves to operate the lathes, cutting equipment and sanding tools needed to produce the toy.

Purchasing

Having decided that it will be possible to make the new toy, the company now has to source its raw materials. The requirement is for a wood that is reasonably easy to work with, yet strong enough to make a robust toy – given the age group this product is aimed at. The price needs to be low enough to allow Blocks Away to make a good profit, but it is unlikely that they will be buying enough to qualify for bulk, or regular, customer discounts.

Marketing

Blocks Away will have to conduct some market research in order to decide just how many of their toys to make. They may wish to test market a prototype with the younger brother or sister of one of their directors, or a primary one class in a local primary school. Gauging initial reactions might indicate that the product would sell very well at trade fairs, as well as at Christmas time – their main target market. There might even be the possibility of export orders, if someone has contacts! But it would be very difficult to get accurate market research in *this* market segment. Only once they know the demand for their product can they produce it with the full confidence that what they make will sell.

An additional marketing factor that Blocks Away will have to consider is the quality of customer service and customer guarantee that they hope to provide. They know that these will be strong marketing points for their company, but

to a large extent they will depend upon the skill of the production team to make a quality product to meet customer order delivery deadlines.

Finance and accounting

Our company is operating on a very limited budget in its initial stages. It will only have the share capital that it can raise by persuading investors (parents, teachers, and fellow pupils) to part with their hard-earned money. The total the company can raise is £250 – not a great deal when there is all that wood to buy for the production team and the marketing team want a prototype, questionnaires, order forms, posters and a receipt book – all of which have to be bought. Sales cannot be counted until the money has been received; yet bills will have to be paid. The control of company finances and in particular a rigorous check on the cash flow situation will be vital for Blocks Away.

Human resources

Let us not forget the vital, unique factor that allows Blocks Away to be a very successful Young Enterprise company – the people who make up the company. Human resources will appoint directors, arrange skill trials and recruit members to the various ‘departments’ within the company ensuring that they get the best people to do each job in each department. They will arrange training for the production, marketing and financial teams, provide work schedules for all members and design payment systems that compensate fairly for effort put in.

They will be responsible for implementing a company Health and Safety Policy and making sure that safety training is provided for the production workforce who will be using machinery and equipment. They may have to settle disputes between workers, or between workers and directors, and may even have to negotiate with trade union representatives!

Scheduling

All-important to the success of Blocks Away is their ability to perform all of the above tasks, all so closely inter-linked with the production of the toy they are selling, in the correct order and at the correct time.

Activity 10

Just-in-time production

There are several key requirements of a successful JIT system:

- efficient ordering systems and delivery reliability,
- carefully planned scheduling and flow of resources through the production process,
- co-operation rather than confrontation with the workforce,
- re-organisation of the workforce into teams.

Just-in-time aims to get the highest volume of output at the lowest unit cost. It is really a method of *production control*. Using a ‘pull-through’ approach the advantages claimed for this system include:

- a smoothing out of production flows,
- a reduction in inventory levels,
- a reduction in unit costs of production,
- much easier production planning for management,
- ease in meeting delivery deadlines,
- elimination of waste,
- no over-production.

The concept is very simple. If there is no demand for the product there is no production. It is the anticipated or planned consumer demand – often initiated by the sales or marketing department – that triggers the production process. Finished goods are produced just in time to be sold to the customer. Component parts are assembled just in time to become finished goods. Materials are purchased just in time to make component parts.

Just-in-time production is most often controlled by an information system known as ‘Kanban’. This is a system of cards that inform operators what quantities of materials and component parts need to be withdrawn from the previous stage in the process. Therefore, the amount of stock, work-in-progress, and finished goods will depend on the number of cards, and this, in turn, will depend on the information about customer demand coming from the sales department.

If this system is to work perfectly, the firm must be able to match demand exactly. This means either that demand must be stable, or very easy to predict, or the production process must be extremely responsive and efficient to meet changes that take place in demand. This can be difficult to achieve.

Just-in-time systems require a simple, product based workflow with high degrees of quality control (*total quality management*), as there is little room for error in production.

This system would be very appropriate for a Young Enterprise company to implement for several reasons.

- Market research should give a good indication of demand.
- Several ‘demonstration models’ can be made in advance to assist with market research – these can then be sold as the first orders come in to avoid customers having to wait for products.
- In order to assist with record keeping, orders should be placed on standard order forms.
- Production can be accurately matched to definite orders.
- Orders are likely to be for small quantities and therefore easily produced.

Activity 11

- (a) *Quality control* is historic, reactive and based on power. Consequently it often leads to waste, and the scrapping and re-working of products. This approach has some significant psychological implications. It works by failure, by denying the possibility of getting things right.

‘Control’ *assumes* that there will be wastage and scrap as inevitable parts of the production process. Up to 25% of output can be wasted in a company that practises a system of ‘control’ in which quality is checked at the end of the manufacturing process. This has led to the ‘Friday car syndrome’, which can result in heavy costs in raw materials and manpower.

Quality assurance is based on prevention. Requirements are determined in advance, thereby minimising the risk of error, or non-conformity to specifications. It aims to create a situation in which ‘right first time, every time’ becomes a real possibility. This system, in which quality is checked at every stage of the manufacturing process, has been known to reduce wastage and scrap to 5% or less.

In today’s highly competitive market place, the resulting increase in profits, the reduction in costs, and, above all, the improvement in customer satisfaction are all vital.

(b) ***The definition of quality:***

Ultimately this lies with the customer in terms of defining a specification of the desired product/service and may include specific reference to, for example:

- intended usage
- required outcomes
- standards of safety
- efficiency
- quality of the finished product
- cost

It is up to Blocks Away to clarify the customer's definition and confirm their ability to supply to these requirements. A carefully worded questionnaire could find out this information.

The commitment of all:

- All members of Blocks Away must be committed to quality in the mission statement of the organisation;
- A quality manual should be drafted that outlines the specific jobs within the organisation – Young Enterprise provide a job description for each of the Directors of the organisation;
- A clear definition of the responsibility of every individual within the organisation to deliver quality on every occasion to every customer;
- The written orders taken from customers become the 'contract' to confirm the mutual obligations of the supplier and the customer;
- The establishment of 'standard operating procedures' (schemes of work, checking procedures, etc.) to help ensure consistency will be needed in the production stage of the toys – both for quality and for Health and Safety;
- Someone must take the responsibility for checking the quality of each toy produced;
- If faults are found the production team and the Directors and other workers should come together to try to solve the problems identified;
- The organisation could use a product, similar to their own produced by a reputable toy manufacturer, to provide a benchmark for their product.

A system whereby this quality can be assured:

Effective management for quality assurance will require organisations to set up systems and processes that will include:

- Systems to help in the definition and specification of products/ services – this may come from the Marketing Director and the results of market research carried out on the intended customer group;
- Systems for checking and monitoring process and quality at all stages in production/provision – given the product specifications laid out;
- Using appropriate documentation to set out requirements and to record progress and quality achieved;
- Keeping records of sales, and returns and faulty toys produced;
- Designating individual responsibility for ensuring quality throughout the organisation – someone **MUST** be in charge of checking the quality of the toys produced;
- Reviewing, monitoring and feedback from the Blocks Away sales team who should report back good and bad comments from customers;
- Providing comprehensive job descriptions – these are available from Young Enterprise for the Directors, but should be written up for each of the workers as well;
- Providing comprehensive and clearly understood instructions and information at all times – through meetings and discussions between *all* of those involved with Blocks Away.

A measure of the ability to meet quality requirements:

This can be carried out in a number of ways, both qualitatively, by recording the number of toys returned from customers who are less than satisfied, and quantitatively in the total number of sales and the % of returns to sales made.

- (c) Method study looks at current working practices and tries to establish the best ways of doing each job.

Work study looks at the optimum time that a trained worker would take to do each job.

She may be able to improve production methods, and possibly quality as well as reduce the time taken by each worker to produce each toy.

Activity 12

Stock control model

