

Edexcel
AS Level
Business studies
(Code: WBS11 01)
Unit 01
Marketing and people
Section 02 – The market



Chapter 04

1.4 demand

Demand is the amount of a product that consumers are willing and able to purchase at any given price. Demand is concerned with what consumers can buy (what they can afford to and would buy), rather than what they would like to buy.

Factors leading to a change in demand.

The price of a product has a significant influence on its demand. For most goods and services higher prices will tend to reduce demand and lower prices will tend to raise demand.

Prices of substitutes: Many goods sold by businesses have a substitute. Most consumers would consider these as good substitutes. The price of substitutes will affect demand. If the price of a substitute product falls, the quantity demanded of the substitute rises.

Prices of complements: Consumers sometimes purchase certain goods together. This is because the two goods are used together.

Changes in consumer incomes: The amount of money that people earn will influence the amount and types of goods that they buy. Generally, when income rises, demand for goods will also rise.

Fashions, tastes, and preferences: Over a period, demand patterns change because of changes in consumer tastes and fashion.

Marketing, advertising, and branding: Businesses try to influence demand for their products through advertising and other forms of promotion. If goods are heavily advertised demand for them is likely to increase.

Demographics: As population grows there will be an increase in demand for nearly all goods and services. However, demand is also affected by the structure of the population as well as its size.

External shocks: Factors beyond the control of businesses can have an impact on the demand for products. Some key examples are outlined below.

»Competition. If a strong new competitor enters the market for the first time, demand is likely to fall for the original firm's product.

»Government. A government can influence demand in several ways. Raising taxes, for instance, could decrease demand for many products because spending power would be restricted. New laws can affect demand.

»Economic climate. If the economy is growing, demand for most goods and services will tend to rise. In contrast, during a recession, demand for non- essential goods such as skiing holidays is likely to fall.

» Social and environmental factors. Demand for some goods might be affected by changes in society.

Chapter 05

1.5 supply

Supply is the amount of a product that suppliers will offer to the market at a given price. The higher the price of a particular product or service, the more that will be offered to the market.

FACTORS LEADING TO A CHANGE IN SUPPLY

The main determinant of supply is price. For most goods and services, when the market price rises suppliers are willing to supply more. This is because they are likely to make more profit at higher prices. However, several other factors can lead to a change in supply. Changes in these factors, which are outlined below, will shift the supply curve.

Changes in the costs of production: The supply of any product is influenced by the costs of production,

Introduction of new technology: As new technology becomes available many businesses will start to use it in their production processes. New technology is usually more efficient than older technology and will help to lower production costs, encouraging firms to offer more for sale.

Indirect taxes: Indirect taxes are taxes imposed by the government on spending. Value added tax (VAT) and excise duties, such as those placed on petrol and tobacco, are examples of indirect taxes.

Government subsidies: Sometimes the government may give money to businesses in the form of a grant. This is called a subsidy. Subsidies may be given to firms to try and encourage them to produce a particular product.

External shocks: Factors beyond the control of businesses can have an impact on the supply of products. Some examples are outlined below.

» World events. Global events can have an impact on the supply of some products. For example, in recent years, some areas of the Middle East have experienced political instability. Consequently, when the situation becomes hostile, supplies of oil are threatened and the price rises. This is because a significant proportion of the global oil supply comes from this region.

» Weather. The supply of agricultural products can be affected by the weather. Good growing conditions will result in high crop production and increased supply. However, bad weather, such as a long period without rain, can reduce crop production severely and cause shortages.

» Government. Government economic policies can have an impact on supply.

» Price of related goods. In some markets supply can be affected by price changes of related goods.

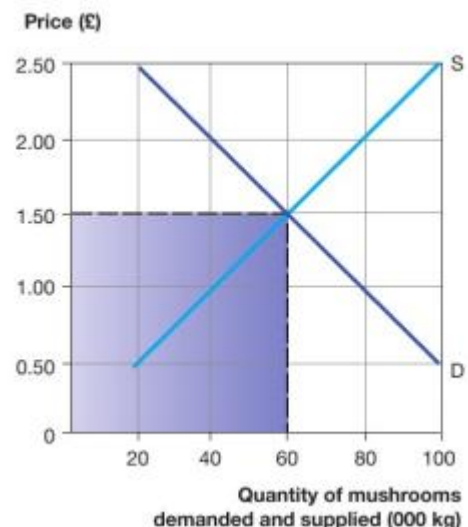
Chapter 06

1.6 Markets.

THE INTERACTION OF DEMAND AND SUPPLY

In any market the price is set where the wishes of consumers are matched exactly with those of producers. This price, called the **equilibrium price**, is where supply and demand are equal.

The equilibrium price is also known as the **market clearing price**. This is because the amount supplied in the market is completely bought up by consumers. There are no buyers left without goods and there are no sellers left with unsold stock. The market is cleared.

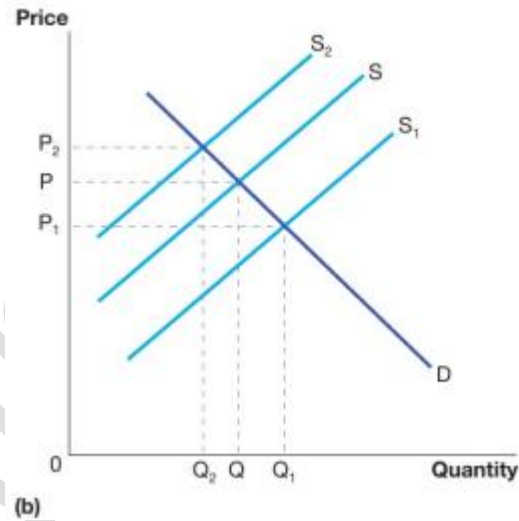
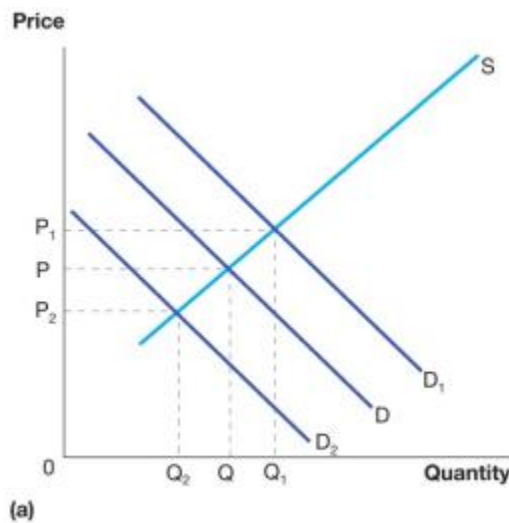


expenditure at the equilibrium price. Total revenue is the amount of money generated from the sale of output. It is calculated by multiplying price and quantity.

Total revenue (TR) = Price (P) x Quantity (Q)

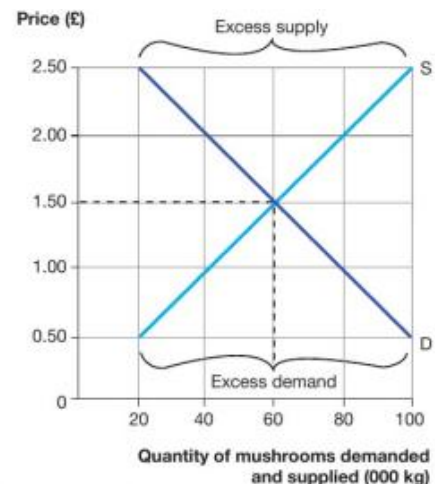
CHANGES IN DEMAND

If demand increases, price will rise. This is because producers react to rising consumer demand by putting up their prices. They can do this because customers want the product in higher numbers. In Figure 3(a), an increase in demand for a product is shown by a shift in the demand curve to the right, from D to D_1 . This changes the equilibrium price because supply and demand are now equal at a different point. The price is forced up from P to P_1 , and the amount sold in the market has gone up from Q to Q_1 .



CHANGES IN SUPPLY

A change in supply will also affect equilibrium price. For example, if supply increases the price will fall. In Figure 3(b), an increase in supply for the product is shown by a shift in the supply curve to the right, from S to S_2 , this changes equilibrium price because supply and demand are now equal at a different point. The price is forced down from P to P_1 , and the amount sold on the market has gone up from Q to Q_1 . If supply were to fall, the opposite would happen. The supply curve would shift to the left from S to S_2 , price would rise from P to P_2 , and the amount traded in the market would fall from Q to Q_2 .

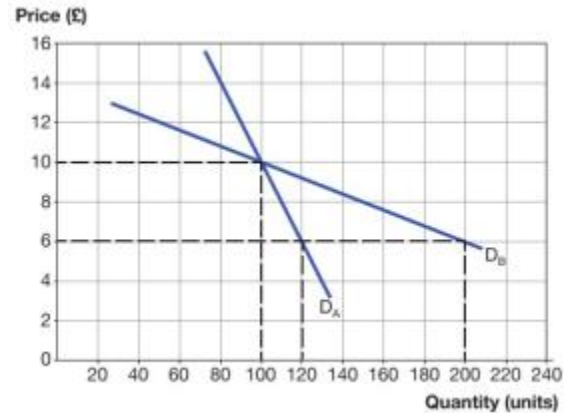


Chapter 07

1.7 Price elasticity of demand

WHAT IS PRICE ELASTICITY OF DEMAND?

Price elasticity of demand refers to the relationship between the responsiveness of demand and a price change, with some goods experiencing a larger change in demand and others experiencing a smaller change. For example, product B's demand curve is more responsive to price changes, resulting in a larger increase in demand for product B.



PRICE INELASTIC DEMAND

In Figure 1, for product A, the price change resulted in a less than proportionate change in demand. This means that the change in demand was not as big as the change in price. Price fell by 40 per cent (from £10 to £6) but demand only increased by 20 per cent (from 100 units to 120 units). When this happens, economists say that the product has price inelastic demand or that demand is price inelastic. A minority of goods, such as petrol, have price inelastic demand.

PRICE ELASTIC DEMAND

In Figure 1, for product B, the price change resulted in a more than proportionate change in demand. This means that the change in demand was greater than the change in price. Price fell by 40 per cent (from £10 to £6) while demand increased by 100 per cent (from 100 units to 200 units). When this happens, economists say that the product has price elastic demand or that demand is price elastic. Goods with elastic demand are more responsive to price changes. Most goods have price elastic demand.

CALCULATION OF PRICE ELASTICITY OF DEMAND

Price elasticity of demand = $\frac{\text{Percentage change in quantity demanded}}{\text{Percentage change in price}}$

THE FACTORS INFLUENCING PRICE

ELASTICITY OF DEMAND

The value of price elasticity of demand for a product is mainly determined by the ease with which customers can switch to other similar substitute products. Several factors are likely to determine this.

»**Time.** Price elasticity of demand tends to fall the longer the time. This is mainly because consumers and businesses are more likely to turn to substitutes in the long term.

»**Competition for the same product.** Some businesses highly face price elastic demand for their products. This is because they are in very competitive markets, where their product is identical.

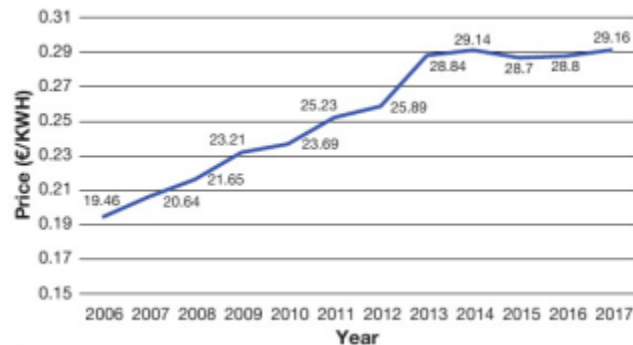
»**Branding.** Some products are branded. The stronger the branding, the less substitutes are acceptable to customers.

»**The proportion of income spent on a product.** For inexpensive products, where the proportion of a consumer's income spent on the transaction is very small, demand is likely to be price inelastic.

PRICE ELASTICITY OF DEMAND AND PRICING

A business may consider price elasticity of demand when setting the prices of its products. For a minority of products demand is price inelastic. This means that if a business raises its price there will be a less than proportionate fall in demand.

Since 2006 in Germany, the price of electricity has risen significantly. Figure 2 shows that the price has gone up by around 50 per cent over the time.



PRICE ELASTICITY OF DEMAND AND TOTAL REVENUE

When a business changes its price there will be a change in demand and therefore a change in total revenue. It would be useful for a business to know what effect a particular price change might have on total revenue. The value of price elasticity can help here. In Figure 1, the demand for product A is price inelastic and the demand for product B is price elastic. At the price of £10 the demand for both products are 100 units. However, when the price falls demand for product A rises to 120 units while the demand for B rises to 200 units.

Chapter 08

1.8 Income elasticity of demand

WHAT IS INCOME ELASTICITY OF DEMAND?

One of the main factors that can change the demand for products is the amount of income consumers have to spend. **Income elasticity of demand** measures the responsiveness of demand to a change in income.

Calculation of income elasticity demand

$$\text{Income elasticity of demand} = \frac{\text{Percentage change in quantity demanded}}{\text{Percentage change in income}}$$

Good	Income elasticity	Elastic or inelastic	Type of product	The effect of a 10% increase in income
Product W	0.6	Inelastic	Normal	Demand would increase by 6%
Product X	-2.4	Elastic	Inferior	Demand would fall by 24%
Product Y	1.9	Elastic	Normal	Demand would rise by 19%
Product Z	-0.8	Inelastic	Inferior	Demand would fall by 8%

NORMAL AND INFERIOR GOODS

The value of income elasticity can also show whether goods are normal goods or inferior goods. For normal goods, where an increase in income results in an increase in demand, the value of income elasticity will be positive (+). Products A and B above are both normal goods because income elasticity is positive in both cases. For inferior goods, where, for example, an increase in income results in a decrease in demand, the value of income elasticity will be negative (-). Some examples are shown in Table 1.

THE FACTORS INFLUENCING INCOME ELASTICITY OF DEMAND

The main factor affecting income elasticity of demand is whether goods are necessities or luxuries.

Necessities: These are basic goods that consumers need to buy. A study in Ukraine several years ago found that the income elasticity of demand for cigarettes was 0.06. It could be argued that cigarettes are a necessity once people become addicted to them.

Luxuries: These are goods that consumers like to buy if they can afford them. Spending on these types of goods is discretionary, which means that customers can choose whether to make these purchases. Demand for these goods is income elastic.

The price of a product relative to incomes: This can also influence income elasticity. Demand for products that are relatively cheap, such as pencils, will tend to be income inelastic. However, demand for expensive items, such as houses, will be income elastic.

THE SIGNIFICANCE OF INCOME ELASTICITY OF DEMAND TO BUSINESSES

Businesses may be interested in income elasticity of demand because changes in income in the economy can affect the demand for their products.

Businesses selling goods with high income elasticity: The demand for goods that are very sensitive to changes in income (i.e. highly income elastic)

Businesses selling goods with low-income elasticity: Demand for goods that are income inelastic tends to be more stable during the different phases in the business cycle.

Production planning: If businesses know the income elasticity of demand for their products they can respond to predicted changes in incomes. Businesses that produce goods that have income elastic demand will expect changes in income to affect demand.

Product switching: Some manufacturers have flexible resources and can switch from the production of one product to another.

Exam style questions

1) 2022 OCT/NOV question number 01 (b) P1 marks 02

(a) Explain one factor influencing the demand for the rental of electric scooters.

2022 OCT/NOV question number 02 (b) P1 marks 04

(b) Construct a supply and demand diagram to show the impact on the shoe market of a decrease in the cost of materials used in making shoes.

Extract A

The growth of the electric scooter market Over recent years, there has been a large increase in the popularity of electric scooters. These scooters are now a common sight on the streets and pavements of many cities around the world. They are used, mainly by younger people, for leisure use as well as by people travelling short distances to work. The scooters provide an alternative to electric bikes which have grown in popularity.

Supporters of electric scooters say they will help reduce the use of cars, buses, and trains, giving cities cleaner, quieter and safer streets. Opponents argue that they offer limited health benefits and can be a safety hazard.

Manufacturers of electric scooters are currently competing for market share. They sell business to business (B2B) to rental companies and business to consumer (B2C) for private sales. Globally, the supply of electric scooters is expected to peak in 2025 with a revenue value of £20bn.

In 2020 the UK Government allowed the trial of electric scooters by rental businesses. These businesses hire scooters for the public and charge an hourly fee. Unlike many countries, use of privately owned scooters remains illegal on roads and pavements in the UK. There has been an increase in the number of start-up businesses renting scooters in major cities of the UK.

Extract B

Total number of electric scooters available for hire in the UK



Extract C

About Birkenstock

Birkenstock is a German family-owned business founded in 1774. It produces high quality footwear that is sold globally at premium prices.

Birkenstock produces shoes, sneakers, boots and sandals for adults and children. They are used for leisure, walking and fashion. It has a wide range of designs in many colors and materials. The product portfolio includes a vegan collection of shoes which are made from plant-based materials. Its best-selling footwear is the Arizona sandal which has remained unchanged since 1973.

The high level of quality is the result of carefully selected materials. Birkenstock is known as the inventor of the footbed which refers to a unique shape to the sole of the shoe. The footbed provides a high level of comfort and has given Birkenstock a unique selling point (USP).

The business has received positive advertising from famous celebrities photographed wearing the Arizona sandals, which has contributed to the increase in revenue for the business. It was awarded footwear brand of the year in 2017 and 2020.

2) 2022 MAY/JUNE question number 02 (b) P1 (marks 4)

a) Using this data, calculate the total demand for VietJet Air seats each day. You are advised to show your work.

Extract C

The founder of VietJet Air Nguyen Thi Phuong Thao made history by becoming the only woman to have formed a major airline business. The success of VietJet Air has made her the first self-made female billionaire, and she is known as a workaholic.

The main reason for the success of VietJet Air is keeping costs low by seating more passengers on its planes. Its planes have 240 seats compared to competitors that have 180 seats on similar planes. On average, VietJet Air's flights are 88% full.

However, Nguyen faces many challenges such as a competitive airline market, congested airports, and a shortage of pilots and engineers.

3) 2022 JANUARY question number 01 (b) P1 marks 4)

(a) There is increasing publicity about animals suffering from waste plastic and other non-biodegradable waste in the oceans of the world.

Construct a supply and demand diagram to show the impact of increasing publicity on the biodegradable packaging market.

Extract A

Indian based Bambrew is helping to put an end to single-use plastic straws.

For Vaibhav Anant to see a tortoise struggling in pain because it was caught up in plastic waste, was a difficult sight to witness. Plastic waste, including plastic straws, is accumulating in lakes and oceans, becoming a global crisis. Anant used product innovation to help tackle this problem and formed his business Bambrew.

After researching for over a year and a half for materials that do not harm the environment, Vaibhav Anant found that bamboo was the best alternative material to plastic to make straws. Bamboo is available in high quantities in India. Bambrew developed a technology for making straws from bamboo fibres and bamboo waste. These materials are natural and biodegradable which means the products can decay naturally and do not have a negative impact on the environment.

Secondary research helped him to collect quantitative data. He found that there are about 137 bamboo species, but not all of them are suitable for making straws. He researched the best areas in India to source the bamboo and identified communities in India who could manufacture the straws.

Bambrew is now developing disposable bamboo food containers and packaging as well as straws and exporting these to the US, UK, and Canada. The marketing strategy used by Bambrew is business to business (B2B). Customers include Zomato, a food delivery business, and Lalit Hotels, a luxury hotel chain.

According to reports, the global biodegradable packaging market, which was valued at \$3.92bn in 2018, will be worth \$21bn by 2025.

4) 2021 October/ November question number 01 (b) P1 (MARKS 4)

(a) Milk and cream are used to produce ice cream.

Construct a supply and demand diagram to show the impact of a decrease in the price of milk and cream on the ice cream market.

2021 October/ November question number 01 (e) P1 (MARKS 10)

(b) During its market research, Oppo used two primary research methods, interviews, and product trials.

Assess the advantages to Oppo of using these methods when developing its brand.

Extract A

The Ice Cream Market

The global ice cream market value is expected to reach \$89bn by 2023 and is attracting many new businesses to the market. Unilever dominates the global market with a 22% share. It owns 8 of the 15 top selling brands. Its brands include Magnum, Cornetto, and Ben & Jerry's. Nestlé is Unilever's closest rival having 4 brands in the top 15.

The sales of low-quality ice cream have been declining, due to the increased demand for premium ice cream. There are many factors contributing to the growth of the ice cream market. These include innovative flavours and the rise in incomes. Niche markets are developing to cater for an increase in demand for organic and naturally sweet desserts. There is an increase in demand for ice cream from consumers above the age of 50.

Extract B

Oppo Ice Cream

Everyone loves ice cream. We all know it is a delicious treat but know it is not a healthy one. However, a business called Oppo has created an ice cream with 60% fewer calories and less sugar than standard ice cream. Oppo claims that one portion of its ice cream

contains fewer calories than an apple. Brothers Charlie and Harry Thuillier came up with the idea while on holiday in Brazil. When they returned home, Charlie left his graduate job to dedicate himself full-time to developing a healthier ice cream.

During their primary market research, the brothers used two methods, interviews, and product trials. They interviewed people who worked in the ice cream industry including a leading industry professional named Gary Martin who had worked on the Häagen-Dazs ice cream brand.

After months of experimenting with different recipes, Charlie and Harry developed a winning recipe that replaced cream and sugar with fresh milk, coconut oil and stevia leaf. Oppo initially conducted product trials in a few supermarkets to test if the product would sell, and now the ice cream is stocked in over 1,600 UK stores.

After two years of hard work in Harry's kitchen the brothers had achieved what they set out to do. Even though they were told by some industry professionals that they would not succeed, the pair persevered and their determination paid off. The business is now continuing to grow and is expanding internationally.

5) 2021 MAY / JUNE question number 01 (a) P1 marks 02

(a) Define the term 'demand'. (Extract A, line 4)

2021 MAY / JUNE question number 02 (b) P1 marks 04

(b) In 2018, incomes in Turkey increased by 6% and BiSU sales increased from 100,000 deliveries to 112,000 deliveries a month.

Using this data, calculate the income elasticity of demand for BiSU. You are advised to show your working.

Extract A

The global chocolate markets.

Chocolate is a multi-billion-dollar market and is expected to reach high levels of growth within the next few years. Rising incomes in many countries and the widespread availability of chocolate are leading to increased demand. However, uncertainty in the supply of cocoa, which is the main ingredient in chocolate, is likely to raise the cost of producing chocolate. This may be a major challenge for chocolate retailers.

There are suggestions in the media that there are health benefits from consuming chocolate, particularly dark chocolate that contains a larger proportion of cocoa. Analysts believe that as well as increased demand for dark chocolate, other areas of growth will be:

- Festive chocolate · Seasonal chocolate
- Organic chocolate · fair-trade chocolate

The global chocolate market is segmented by type and sale frequency. Based on chocolate type, the market is classified as milk chocolate, dark chocolate, and white chocolate. The milk chocolate segment remains the largest selling chocolate. Based on sale frequency, the market is categorised as daily chocolate, premium chocolate, and seasonal chocolate.

Extract B

BiSU Water Delivery

In Turkey, most tap water is not drinkable. Delivery services in the past were slow and not well organized. On-demand delivery services such as BiSU have changed the water delivery market in Turkey.

Customers can now order water using an app on their smartphone. They can have it delivered quickly and at a time to suit them. BiSU has a large team of delivery drivers. The business was launched in 2015 and has expanded to many cities in Turkey, receiving over 100,000 orders a month from 38,000 users. Water prices depend on the brand requested and the region the water is delivered.

Extract C

The top five global chocolate manufacturers (2018)

Company	Revenue 2018 (\$USbn)
Mars Wrigley Confectionery (USA)	18.00
Ferrero Group (Italy)	12.40
Mondelēz International (USA)	11.80
Meiji Co Ltd (Japan)	9.70
Hershey Co (USA)	7.80

(6)2020 OCTOBER/NOVEMBER question number 01 (a) P1 marks 04

A retailer decreases the price of a Samsung television from \$800 to \$780. Sales of that television increase from 9,000 to 9,450.

(a) Calculate the price elasticity of demand (PED) for the television. You are advised to show your working.

2020 OCTOBER/NOVEMBER question number 02 (b) P1 marks 04

(b) Construct a supply and demand diagram to show the impact of increased advertising by Lehman's on the handmade tools market.

Extract A

About Samsung

South Korean business, Samsung was founded in 1938. It designs and manufactures products including televisions, cell phones, tablets, and digital products. In 2017, it spent \$15bn on research and development of innovative products.

With more than a 20% market share of television sales in 2018, Samsung remained ahead of its competitors Sony, LG, and Toshiba. It kept its top ranking for television sales for the twelfth consecutive year.

In 2018, Samsung's new cell phone, the Galaxy Note 9, went on sale. The cell phone was launched at a New York press conference. On the day of the press conference, the cell phone was advertised in major cities around the world. The worldwide advertising detailed the innovative features of this new cell phone.

Samsung has set growth targets for 2020. These targets include annual sales of \$400bn and to become one of the top five most valuable global brands.

Samsung's new products

- A smartwatch with innovative technology that recognizes its owner by the pattern of veins on their wrist.
- The launch of Relumino, an application that will help people with poor vision to see more clearly when reading or viewing paintings.
- The first 360-degree video screen, installed in the basketball arena of the Atlanta Hawks in America.

Extract B

Lehman's: Who we are.

We sell simple, low-tech tools and equipment in a high-tech world. Most of the goods we sell are non-electrical such as wood-powered heaters and oil lamps. We are a family-owned business and have operated since 1955. We began by making tools for our local community. We now send our products to over 85 countries. Our success has been built on product differentiation and we are known worldwide for our range of high quality, non-electrical goods.

We make products including farm and garden tools, wooden toys for children, household equipment and outdoor furniture. We supply a wide range of tools that are no longer stocked elsewhere.

Our mission is to provide a simpler life based on good values and traditions. We have skilled craftsmen who handmake tools for everyday tasks as well as design products and gifts to meet the needs of individual customers. Most of our products are made locally by skilled workers, many of whom have worked at Lehman's for most of their lives. Many of our suppliers are based within 40 miles of our business in Ohio, America.

Our products, such as furniture, oil lamps and tools have been featured in many well-known American Hollywood films, such as The Gangs of New York, Back to the Future and Pirates of the Caribbean. We can provide furniture and products for the film sets that match the historical time periods of the films.