

In this chapter you will investigate how consumer decisions may have a positive or negative impact on people.

You are going to investigate the places and people that have been, and might yet be, involved with your mobile phone:

- the company who designed it
- the mine where the raw material came from
- the factory where it was made
- where it will go when you finish with it.

In each of these places you will consider whether mobile phones have made peoples' lives better or worse. What would they say if you could talk to them?



In 2006, the Mobile Life survey conducted by YouGov among adults in Britain found:

- + On average, people make 2.8 mobile phone calls a day
- + On average, people send 3.6 text messages a day
- + 92% of mobile phone users can't get through a day without using their phone
- + 14% of people have two or more phones they use
- + 9% of mobile phone owners have had their phone stolen
- + Most people think that mobile phones have improved their quality of life

No invention has ever spread around the world as fast as the mobile phone. When you were born mobile phones were still a bit of a luxury. Now, nearly everyone in Britain has one (or two, or three!). Worldwide, twenty new users connect to a mobile network every second. The number of mobile phone users reached 3.3 billion in 2008, about half the world's population! Yet, how much do we know about our phones?

investigate

- 1 Carry out a survey among your friends to find out how mobile phones affect their lives.
 - a Think of six questions you could ask. The facts around photo A should give you ideas.
 - b Use your questions to design a short questionnaire. Keep it simple.
 - c Interview at least ten friends using your questionnaire. Keep a record of their responses.
 - d Present your findings. Turn them into percentages or average figures and write a summary (like A), or draw them as graphs.
- 2 Compare the findings of your survey with the YouGov survey in 2006. What differences are there? Can you think of any reasons for these?

The life-cycle of a mobile phone

Material extraction and processing

A typical mobile phone weighs only 75g, but the raw materials it is made from require 30kg of rock! Metal ores are mined and processed to obtain pure metals, including copper, gold, lead, nickel, and tantalum. This mine in the Democratic Republic of Congo produces coltan, the ore from which tantalum is obtained.



Research and development

Most mobile phones are made by a few large companies. Nokia, alone, makes 40% of all mobile phones. The company's HQ is in Finland. It employs over 25,000 researchers, engineers and scientists, many of them in Finland, working on the development of new products.

Manufacturing

The main components in every mobile phone are the circuit board, which is the 'brain' of the phone controlling all its functions, the liquid crystal display (LCD), and the batteries. These are assembled in a factory. About half the world's phones are made in factories in China.

End-of-life

There are different ways to deal with a mobile phone once its useful life is over.

Useful life

Although mobile phones can now be found anywhere, the highest mobile phone ownership is still in rich countries, like Britain. 89% of adults here owned a mobile phone in 2006 and the number goes up every year. On average, people only use their phone for two years before changing it.

Recycling

Electronic waste – including mobile phones – is shipped to China for recycling. That means China then has the problem of what to do with the dangerous waste.

Disposal

Some people throw their mobile phone in the bin. It ends up at a landfill site or incinerator where the harmful chemicals find their way into the environment.



Reuse

Probably, the best solution is to find someone else who needs a phone and doesn't mind an old one! There is a market for old mobile phones in countries like Tanzania, in Africa.

800 000 Britons have their mobile phones stolen every year. **your world**

investigate

- 3 Make a map to show the life-cycle of a mobile phone.
 - a Find the countries, mentioned in the life-cycle, on a blank world map. Colour and label them.
 - b Draw arrows between the countries on the map to show the life-cycle.
 - c Annotate the map to describe what happens in each country.