

Background

The innovators

Invention is one thing, but innovation, the ability of transforming an invention into a commercially viable product is another. The motor car has had an enormous impact on all our lives, and many businesses have played their part in its development. However, two great innovating companies stand out from the rest. The first is Ford which brought it to a **mass market**, and the second Toyota that has become a **benchmark** of quality and reliability that all car manufacturers try to *emulate.

Karl Benz invented the first petrol driven vehicle in 1885 and it gradually became adopted by the rich and social elite. It needed the organizational and production innovations of the great car maker Henry Ford to turn it into a mode of transport and an object of consumer aspiration for ordinary people. Ford's use of a moving assembly line, where one worker concentrated on a particular task, allowed his company to achieve efficiencies and **economies of scale** that meant a car came off the production line every fifteen minutes. He founded the Ford Motor Company in 1903 and introduced the model T Ford. His vision was to produce a vehicle that the ordinary working man could afford. By 1918 half the cars on the road were Model T Fords, even if the only colour in which it was available was black! 'Fordism' was the combination of modern production methods with high pay for workers (five dollars a day – at that time an enormous sum) that in turn encouraged consumption.

Kiichiro Toyoda, who was born in 1894, was a brilliant engineer who had trained at Tokyo University. After a tour of

British and American car factories, he became determined to produce world-class vehicles in Japan. He carried out some **reverse engineering** on American car engines and at the end of the 1930s launched the Toyota car company. Passenger car production began in 1947. He shortened the supply chain so that parts arrived '**just in time**'. When he left the company shortly afterwards, his long standing deputy and follower Eijii took over the reins. He and another colleague Ohno came up with the *kanban* system of labeling that meant the supply of parts could run smoothly. Kanban was a *precursor of bar coding. Eijii too went on a visit to America and became convinced that he could beat US car firms on quality. Toyota introduced and followed *kaizen*, the philosophy of **continuous improvement** and cost cutting, that has helped to make Toyota the *byword for quality and value for money it is today. By the time Eijii stepped down in 1994 at the age of 81 car executives from Detroit were visiting Toyota city.

In recent years, JIT and the Toyota way of doing things have become widely accepted not just in the motor industry but elsewhere too. However, even Toyota has suffered as a result of the recent economic crisis and is feeling the pressure from a new generation of hungry competitors. To make matters worse, its reputation has been tarnished by technical faults in some of the cars. It goes to show that the line between triumph and disaster is often a narrow one. One slip can lead to a mighty fall.

Glossary

**byword* = a typical example of

**emulate* = copy

**precursor* = something that comes before and influences something else

Exercises

1 Work with a partner and discuss these questions?

- 1 Do you think invention and innovation are the same thing?
- 2 Can you name any inventors / innovators from your own country?
- 3 What objects do you have with you that are the result of steps forward in innovation?

2 Read the first paragraph of the text quickly. What are the names of the two companies and why are they being written about?

3 Read the rest of the text and note down what these figures refer to.

- 1 1885: _____
- 2 15 minutes: _____
- 3 1903: _____
- 4 half: _____
- 5 \$5: _____
- 6 1894: _____
- 7 1947: _____
- 8 81: _____

4 List the important innovations and achievements that were made by the two companies.

5 Match 1–8 to a–h to make collocations from the text.

- | | |
|----------------|--------------|
| 1 commercially | a competitor |
| 2 enormous | b line |
| 3 assembly | c faults |
| 4 cost | d crisis |
| 5 technical | e cutting |
| 6 supply | f impact |
| 7 hungry | g chain |
| 6 economic | h viable |

6 Match the business concepts in bold in the text to definitions 1–6.

- 1 taking another company's product to pieces and examining it so that you can copy it: _____
- 2 the fact that the more units of something that are produced, the cost of each unit decreases: _____
- 3 the ongoing commitment to improvement and cost-cutting: _____
- 4 making sure that parts and components arrive a short time before you need them: _____
- 5 the great number of ordinary people with ordinary incomes who can buy a product or service: _____
- 6 the highest standard of quality or performance that others in the same industry try to follow: _____

7 Which concepts from 6 do you use, or could you use in your business?

8 Look back at the text and choose three words that you could use in your day-to-day work.

9 Work in a small group. Discuss how possible it is for a company to constantly improve and innovate. Is it inevitable that companies lose their market position over time?