

Lesson outcome

Learners can use vocabulary related to disruption and change.

Lead-in

1 Work in pairs. Discuss the questions.

- 1 What changes or innovations have you seen in your organisation or sector in recent years?
- 2 What are the advantages and disadvantages of working in the cloud?

Reading

2 Read the article and complete the gaps with sentences A–D.

- A Mr Musk still has a significant edge.
- B warning that the carmaker risked being disrupted in much the same way Nokia had been by the launch of the iPhone.
- C that threatens to erode their existing, more profitable business model.
- D But responding effectively to a new way of operating is never easy.

3 Read the text again and answer the questions. Compare your answers with a partner.

- 1 What does Microsoft's chief executive forecast?
- 2 What term describes the problem companies have when threatened by a new business model?
- 3 What have incumbent car manufacturers failed to do so far?
- 4 Which two factors does the writer think have given Tesla the lead?

4 Discuss with a partner or in small groups.

- 1 What other kinds of disruptive technologies have changed the business world in the last ten years?
- 2 To what extent do you agree that the electric car is one of the most disruptive technologies of the decade?
- 3 What other kinds of companies are being disruptive at the moment?

Vocabulary

5 What do the expressions in bold mean? Choose the best option, a or b.

- 1 They tried to **counter the threat** from their competitors by lowering their prices, although the strategy didn't work.
 - a say something in order to try to prove that what someone said was not true
 - b do something in order to prevent something bad from happening or reduce its bad effects
- 2 Our rival is smaller but can adapt more quickly. However, we are steadily **closing the gap** and catching up with them.
 - a closing the space between two objects, especially because something is missing
 - b eliminating the differences

- 3 They **had a head start** in R&D compared to the competition because they managed to recruit leading specialists in the field.
 - a have an advantage that helps you to be successful
 - b start in a race in which you begin earlier or further ahead than someone else
- 4 Improving electric vehicles and batteries in order to **enhance** their **performance** is always a concern in the car industry.
 - a when products or services improve as a result of making them better
 - b when money that you earn for work is increased if you do your work very well

6 What do the words and expressions related to change mean? Match them to the correct definition. Two words are not used.

cloud	ground-shaking	incumbent	make the switch
responsiveness	shift	shockwaves	spurt

- 1 A _____ is a change in the way people think about something or in the way something is done. It is also used as a verb.
- 2 _____ are strong feelings that people feel when something bad happens unexpectedly, especially in the news.
- 3 The concept of _____ means reacting quickly, in a positive way, for example in customer services, or when using new technologies.
- 4 A short sudden increase of activity, effort, speed, or emotion is called a _____.
- 5 Work that involves making new discoveries or using new methods is referred to as _____ or ground-breaking.
- 6 _____ means to change from doing or using one thing to doing or using another.

7 Complete the questions using words and phrases from Exercises 5 and 6. Ask and answer the questions in pairs.

- 1 Can you think of any life-changing or _____ discoveries in technology or science?
- 2 When was the last time you _____ to a disruptor instead of continuing with a conventional method? How did it make your life or work easier?
- 3 How could your organisation improve its _____ when adopting new innovations and react faster to change?
- 4 How has disruptive technology _____ your _____ at work in the last few years? How has it helped you to work smarter?
- 5 Have you noticed a _____ or change in the way we interact with technology compared to the past?
- 6 Why do you think start-ups have a(n) _____ when it comes to taking on new technologies, compared to larger companies?

Speaking

8A Work in pairs or groups of four. You work for a public organisation which made the shift to working in the cloud last month in order to enable working from home. The disruptive technology has sent shockwaves throughout the organisation.

Student(s) A: you are enthusiastic managers who are new to the organisation.

Student(s) B: you are senior members of staff who are resistant to change.

Follow these steps:

- Consider your answers again to question 2 in Exercise 1.
- Read the comments from staff. Are they advantages or disadvantages?

'Working in the cloud means you can access your work files anytime, anywhere, 24 hours a day... I know it's meant to be ground-shaking but it's disrupting my family life.'

'I can see at a glance what members of my team are doing and have done, so I can focus on chasing up tasks. It's really enhanced our performance and responsiveness. We've already seen a spurt in productivity.'

B Now hold a meeting to discuss guidelines for using the cloud, giving more support to staff and how to adopt new technologies more effectively in the future. Here are some items for the agenda:

- benefits of using the cloud in terms of productivity
- disadvantages of 24h connectivity e.g. work-life balance
- staff training and support
- your own idea

FT

Why Microsoft and Tesla are the decade's big disruptors

The term "disruptive innovation", coined by Clayton Christensen of Harvard Business School, has been much misused in the tech world. Every start-up likes to style itself a disruptor.

But Christensen, who died in 2020, would have appreciated the shockwaves from two truly disruptive technologies that have reverberated through Wall Street in recent days. It can take years for the kind of ground-shaking new ideas that he had in mind to take hold. When they do, the shifts in value can be dramatic, as investors scramble to reposition themselves for a new era.

One type of disruptive innovation is the public cloud — the name given to the storage and processing of corporate information in centralised data centres. For years, this was deemed inferior to established practice in corporate IT. Though the cloud was cheaper, the demands of security, reliability and responsiveness all made it imperative to keep important computing workloads in a company's own facilities.

This makes the cloud a model of Christensen-style disruptive technology. The IT industry's incumbents felt they were selling a better technology and could always make the switch to the cloud when needed. ¹ _____

When a market like this tips, the effects are dramatic. Microsoft has reported that the cloud now makes up a third of its business and is seeing annual growth of nearly 40 per cent — an almost unimaginable spurt for a company with annual revenue of \$125bn that spent the first decade and a half of this century in the doldrums*.

By lowering prices and opening up access to new customers, technologies like this create new markets that are much larger than the ones they replace. According to Satya Nadella, Microsoft's chief executive, tech spending as a percentage of global GDP is expected to double over the next decade as digitisation spreads. As the platform for much of that new activity, the cloud has become the centre of the action.

Microsoft itself has beaten what Christensen called the "innovator's dilemma" — the difficulty incumbents** have in shifting to a new technology ² _____. But many of

the old powers of the IT industry, like HP and IBM, are still struggling to find an answer. When Mr Nadella took over in 2014, Microsoft was worth 70 per cent more than IBM. In 2020, at \$1.32 trillion, it is worth 11 times as much as its erstwhile rival.

The second kind of disruptive innovation centres on electric vehicles. By most performance measures, electric drive trains have long been inferior to internal combustion engines. They were also thought to represent much less of an engineering challenge. There seemed little advantage in being first. But this is starting to look like it might be another of Christensen's disruptive technologies.

Despite the big carmakers' confidence, they have yet to produce electric vehicles that can match Tesla's in terms of energy efficiency, or performance per dollar. The complacency in senior auto ranks is starting to turn to panic. The head of Volkswagen resorted to criticising his senior managers two weeks ago for not moving fast enough to counter the threat, ³ _____

How long will it take for the incumbents to catch up? Gene Berdichevsky, one of Tesla's first employees and now head of battery company Sila Nanotechnologies, says carmakers have seriously underestimated the many different innovations that go into the batteries and other design aspects that enhance performance in electric cars.

It has been over three years since the launch of Tesla's mass-market Model 3. Despite wasting a year or more as he struggled to tame his company's manufacturing operations, ⁴ _____ Mr Berdichevsky predicts it will take until the middle of the decade for other carmakers to start to close the performance gap.

Many other factors besides energy efficiency will determine which electric car customers pick. But having a clear head start in the core technology gives Mr Musk an important performance and cost advantage. How far he can ride that lead will make this one of the most significant disruptive technology stories of the decade.

* doldrums: when an industry or company is in the doldrums, it is not developing or doing well

** incumbent (n): someone who has been elected to an official position, especially in politics, and who is doing that job at the present time