Teacher Instructions

Students should understand:
- What is meant by innovation and invention
- The impact of technological change on production techniques, productivity / efficiency, market structure, the development of new products and markets, and the destruction of old markets / products
- What is meant by “creative destruction”

This resource will help students to explore these key, dynamic issues. The resource consists of 6 short case studies relating to industries in which there has been technological change and creative destruction. Students should read each case study, and then complete the 6 boxes around each case study with their thoughts relating to efficiency, creative destruction, market structures and so on.

Essential key terms
Creative destruction: a term originally used by the economist Joseph Schumpeter – Schumpeter described it as “a process of industrial mutation which incessantly revolutionises the economic structure from within, incessantly destroying the old one, incessantly creating a new one”.

Efficiency: in an economic sense this can include productive efficiency (producing at lowest average cost / cost per unit), allocative efficiency (producing where D = S, or AR = MC), or dynamic efficiency (improving products or processes so that average costs fall).

Invention: the creation of a new product or process for the very first time, such that it is completely different to any other product or process.

Innovation: an improvement on, or significant adaptation to, an existing product or process.

Productivity: output per person per hour.
How did the move from VHS to DVD affect the movie rental industry? 

What evidence is there of “creative destruction” in the movie rental industry? 

How did Blockbusters early strategies help it to be profitable? 

What was the impact of the Internet on production costs of movie rental companies? 

How has the market structure of the home movie rental industry changed? 

Blockbuster, the movie-rental company, reached its peak in 1994 with 9,000 stores and over 60,000 employees. Blockbuster started out life in Texas in 1985 and rapidly spread across the US and then the world, using a business model in which it customised its video selection to suit the local demographics. As video-on-demand becomes more popular, Blockbuster started to buy new Internet-based companies and roll them into the business. In 2000, Blockbusters management believed they could best use their $500m to buy a new internet-based company called Netflix, but they now seem to regret the decision. Blockbuster's management believed that the Internet could be best used for online DVD subscriptions – but by now they were playing catch-up. Blockbuster failed to adapt to movies-on-demand through home TV. In 2010, Blockbuster filed for bankruptcy.
How did Kodak initially maintain its monopoly position?

What internal factors contributed to Kodak’s demise?

What evidence is there of “creative destruction” in the photography industry?

Give examples from the Kodak case study of:

- Invention
- Innovation

What external / wider economy factors contributed to Kodak’s demise?

How has the market structure of the photography industry changed?

Kodak was founded in 1892, and used the so-called “razor and blades” model to become a huge and highly profitable company, selling relatively inexpensive cameras alongside “consumables” such as film with large margins. In 1976 in the US, Kodak had nearly 90% market share of camera film and 85% market share of cameras. However, from the mid-1980s onwards Kodak’s self-satisfaction began to outstrip its innovative abilities. This led to the official end of Kodak’s film monopoly in the US. Kodak had 90% market share of cameras in 1992, but used this to become a huge and highly profitable company. Kodak ultimately fell to the rise of cheap Chinese producers and the rise of digital photography. In the mid-2000s, its market share had dropped to just 20%. The rise of mobile phones, particularly smartphone users, is perhaps the biggest factor in Kodak’s demise. The rise of digital cameras also contributed to the decline of film photography. Kodak’s downfall is evidence of creative destruction. Kodak was a huge and successful company with a near-monopoly on film photography, but it ultimately fell to the rise of cheaper and more accessible digital photography. Its downfall is evidence of creative destruction.
Why was Borders such a popular bookstore for a decade in the UK?

How has the Internet resulted in lower costs for book suppliers?

What evidence is there of “creative destruction” in the books industry?

Is there any evidence of Borders being either inventive or innovative?

How has technology contributed to product development in the books industry?

How has the market structure of the books industry changed?

Borders UK was established as a “subsidiary” of the giant US company Borders in 1997. The company prided itself on its large stores, stocking all manner of books – not just those from major publishers, but also smaller academic titles and books from independent publishers. Staff were knowledgeable, and joked about being able to answer Google-type questions without needing to consult the Internet.

However, despite its roaring success for a decade, Borders closed its doors for the final time in 2009. So why did Borders fail? Analysts have suggested a number of reasons. Borders had a decent website in 1998, and had plans to sell books online before Amazon. Borders joined the e-book reader market far too late, trying to launch the Kobo, well after the launch of Amazon’s Kindle. Borders’ decision to also sell music in store backfired when most music sales ended up through digital downloads.

People were visiting Borders to browse, but rarely to buy. So Borders, and many independent bookshops, have closed.
Why is Uber so popular amongst customers in London?

How does Uber use technology to operate efficiently as a company?

What evidence is there of “creative destruction” in the taxi industry?

Is Uber an invention or an innovation?

How could London’s traditional black cabbies use technology to compete with Uber?

How has the structure of the London taxi market changed?

In October 2015 in a much-anticipated ruling, the High Court in London ruled that Uber was not breaking the law with its taxi-hailing app, causing fury amongst London’s black cab drivers. London’s black cabbies must go through a rigorous training period and background checks before they are allowed to operate a cab that runs on a meter and can be hailed down in the street. Uber drivers must be “booked” through the Uber app on smartphones – although waits can sometimes be so short that it is quicker than hailing a traditional cab. Around 1 million people are now signed up to use Uber in London, and there are 18,000 registered drivers – Uber gained a huge number of customers in July 2014 when black cabbies went on strike in a protest over Uber’s tactics, a move subsequently described as an “own-goal”. This was a huge gain for Uber, given that London’s taxi industry is worth around £2.7bn annually.

Transport for London said in response to the ruling that “Disruptive technology and new business models have radically changed the way that taxis and private hire services operate and have provided customers with greater choice. This is welcome.”

Just over a decade ago, there were over 2,500 minicab firms (pre-booked taxis) operating in and around London – experts believe that number will be around 5 firms in 2020, operating super-fleets of 5,000+ cars. It is not just the use of technology that has given Uber the power to get strong footholds in many cities – they have investment from Goldman Sachs (an investment bank) and the mighty Google. Uber’s market presence has forced down the price of taxis and made taxis available in areas that were previously under-represented by taxis. Of the back of its success, off the back of Uber’s presence, a number of car-sharing and lift-sharing apps have been developed, including blablacar and liftshare.
What evidence is there of Skype being innovative?

How does the existence of Skype allow businesses to be more efficient?

What evidence is there of “creative destruction” in the long-distance call industry?

What evidence is there of Skype being inventive?

What technological developments have led to Skype’s success?

How has the market structure of the long-distance call industry changed?

People all over the world use Skype, first developed in tiny but innovative Estonia in 2003. Skype uses a “freemium” business model, whereby most customers use its app for free Skype-to-Skype calls, but others pay for a premium service to be able to call landline or mobile numbers. Skype is working on the BBC, Disney and Universal Studios on developing more Mojis to make Skype calls more engaging.

In schools around the world, Skype has become an essential bridge between learners and native speakers. By 2014, the figure had reached over 15 million. Skype held 2.9% of the market share for international calls in 2005. By 2014, that figure had reached over 40%. Skype has revolutionised the traditional “long distance call.” By the end of the 1990s, the market for traditional long-distance calls was growing by around 15% per year. By 2014, growth had slowed to less than 5%. Industry experts predict that profit margins will remain static for the foreseeable future. The market for Skype-to-Skype calls, which account for 5% of all long-distance calls, is growing. Industry experts predict that profit margins will remain static for the foreseeable future.

Skype's success has provided inspiration for other communication innovations – Apple’s Facetime, and WhatsApp, for example. Skype's success has provided inspiration for other communication innovations – Apple’s Facetime, and WhatsApp, for example. Skype's success has provided inspiration for other communication innovations – Apple’s Facetime, and WhatsApp, for example.
How has technology changed the production of local news?

How does the existence of smartphones allow newspaper companies to be more efficient?

What evidence is there of "creative destruction" in the local news industry?

What technological developments have changed the local news industry for the worse?

What technological developments could change the local news industry for the better?

How has the market structure of the UK's local newspaper industry changed?

According to the National Union of Journalists, over 200 local newspapers have closed their offices since 2005 as the UK's four big media groups (Trinity Mirror, Newsquest, Local World and Johnston Press) try to slash costs amidst falling advertising revenue, their main source of income. The situation is not helped by falling demand for local newspapers, which has declined on average by 10% per year since 2008. The only local newspaper to see an increase in circulation in 2014 was the London Evening Standard, which is given away for free and read by many commuters. Many people in the UK believe that this decline has resulted in a democratic deficit – local people no longer get the chance to find out about important local issues. The big media groups are consolidating journalists into more centralised offices. In late 2015, Trinity Mirror bought out Local World in a deal worth £220m, aiming for better economies of scale. Many local journalists report that they are being "done out of a job" by so-called "user generated front desks", in which the general public send in their own stories and photos, and social media outlets such as Twitter are followed to get scoops on important local stories. This then has the effect of boosting demand – people like to see their own stories in print. Online traffic for most local newspapers has been on the increase, but they are struggling to work out how to generate enough revenue through their sites, since paywalls are really unpopular.