Digital technology and AI in business

Age range: 14-19

BARCLAYS | LifeSkills

Session overview

Time	Key learning outcomes	Resources
25 mins	By the end of this lesson students will be able to: • Understand how technology and AI are used by entrepreneurs and how it can be used to drive positive results. • Identify the benefits and challenges of utilising technology and the safety considerations. • Understand that AI and automation doesn't remove the need for human empathy and personality. • Understand how to use technology when creating a concept for a business.	• Digital technology and AI in business presentation slides.

BARCLAYS | Eagle Labs

This lesson has been created in collaboration with Barclays Eagle Labs, funded by the UK Government, as part of the Department of Science, Innovation and Technology (DSIT) Digital Growth Grant (DGG). The DGG aims to spur sustained and diverse growth within the UK tech sector. This lesson can be used as part of the **Enterprise project challenge** or separately, to approach the topics of entrepreneurship, using technology to be innovative and incorporating sustainability into business.

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This lesson will provide students with a wider understanding the role of technology and AI in modern businesses. They will develop a balanced view on the positive and potential pitfalls of AI and the challenges that entrepreneurs may face in the increasingly digital world. Students will then identify how they can use technology in an innovative way to reach their audience and how it can help to create a concept for a business.
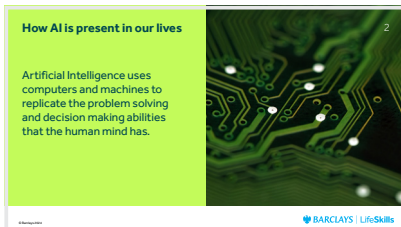
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Activity one

Everyday use of AI

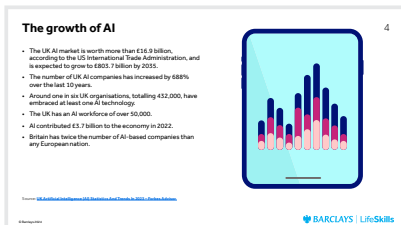### 1. Introducing how AI is present in our lives

- Introduce AI to your students by showing them **slide 2** and asking them, in pairs, if they know any examples of AI that are used by people every day or most days. After discussing examples, ask students:

  How do you think AI improves people's lives?

  Why do you think this technology has been created?

- Show students examples of AI on **slide 3** for any that they didn't get and briefly explain what they are if they have not heard of them. Let students know that the technology behind most of these products, such as voice recognition software in Siri, was often created first before the product that they see today.

2. The growth of AI

- Show students the statistics on **slide 4** about the use and growth of AI. As a class, discuss the statistics that most surprised them and what they think they mean for businesses.

Extension

Ask students to think of which typical jobs where they think AI could replace human workers. Then ask students to think about jobs that might be created because of new technology. Record student answers on the board. Then ask students if they can see any similarities with the various products previously listed on **slide 3**.

Activity two

Examining myths around AI

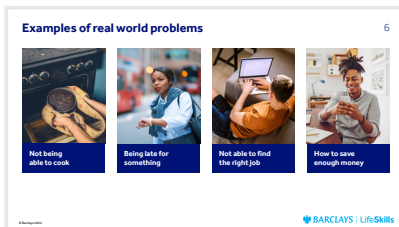### 1. Developing awareness and knowledge of AI

- The purpose of this activity is to assess students' prior knowledge and understanding of AI. The opportunity to engage all students through typical myths and 'dispelling' will raise their knowledge and awareness of AI, its growth and its use in the future.

- Working in pairs, ask students to take part in the True or False activity on **slide 5**. Explain that you will show some typical statements about AI, its growth and its use in the future. Students can raise their right hand for true and left hand for false as you go through each statement.

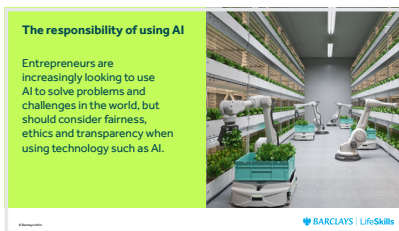| Statement	True or false	Teacher explanation
AI can be expensive to develop	True	AI often demands a lot of time, resource, knowledge and money to set up and maintain.
AI will make human workers obsolete	False	Yes for some certain industries and skill level of certain workers. But overall, no due to our human need and nature to interact and have relationships with one another. It will also help to create new jobs and develop industries.
AI is neutral and unbiased	False	AI can be biased based on the initial programmer and through the AI's absorption of data and learning algorithms.
AI can learn on its own	True	AI can learn from itself as more data is fed to it. AI can develop their own algorithms to enable them to perform more complex tasks and continue to learn and modify thereafter
AI devices (e.g., your smartphone) are always listening to you	True	Whilst devices do not have audio recordings of everything we say, devices will listen for certain keywords and terms, which can they influence what advertisements you are viewing on social media etc.

Activity three

The benefits and challenges of AI

1. How AI can solve problems

- Show **slide 6**. In pairs, ask students to choose one of the problems on the board or ask them to use a challenge they see in the world around them and write down how this might be solved by AI. Explain that students need to think about the nature of the problem, how AI could specifically solve it and the possible risks involved. After a few minutes discuss as a class the responses.

2. The responsibility of using AI

- Show **slide 7**. Explain that entrepreneurs are increasingly looking to solve problems and challenges in the world through the use of AI. However, entrepreneurs might consider fairness, ethics and transparency when using technology such as AI.

- Ask students:

> **How do you think AI will advance over time?**
>
> **What will humans need to do to adapt to AI?**

- Talk with students about the importance of AI and that it will continue to grow over time. However, it doesn't remove the need for human empathy. Human contact and relationships are important and can sometimes be forgotten when using AI. Core transferable skills such as leadership, listening and speaking and creativity will also be important in the future world of work.

Activity four

AI and technology within a business

1. How to implement AI in a digital business

- Ask students what they think a digital business is and how they think AI/technology can be useful for such a business. Explain that digital businesses use technology to bring advantages to the way their business operates.

- Show the digital business examples on **slide 8**, and in pairs ask students to think about how AI/technology could help these businesses to increase their productivity, profit and future success. Click to reveal the factors to consider.

	Forts Games	Quick Travel	WorldWide Ed	Ezy Vegan	Babee boutique
Background	A software developer that produces video games for the latest consoles	An online travel agents and booking services for European holidays	An online learning platform offering a range of short and long terms courses for people to upgrade skills and knowledge	An online food subscription service for vegans	A retailer that offers unique, high quality and chic baby clothing for sale online
Factors to consider	Growth of mobile app gaming, designing new and creative characters/ storylines, cloud base gaming, digital downloads	Secure payments online, tailoring of flight/hotel packages to the customer, checking flight availability	Range of courses available, accessing on multiple devices, ensuring courses match skills desired by employers	Online ordering of ingredients, recipes for customers, trends and fashions	Selling online via website and mobile app, reaching more customers, brand development

- Ask students how they think their business might implement the AI they've thought of and how they might get funding for it. Explain that these sources of funding could include: a bank loan, from investors or crowdfunding.

Summary

- Summarise that AI can be an important tool in driving positive outcomes, personally and professionally. That AI can be used to generate content, undertake research, provide answers to questions, offer solutions to challenges etc. Although as AI is constantly evolving the true extent of how AI will change the world around us is still fairly unknown.

- Reiterate that this can help to improve the productivity, performance and success of a business in a quicker and more cost effective manner.

- However, the use of AI should be accompanied with thought and skill. Reinforce the importance of human empathy and relationships that shouldn't be discarded.

Further support

- If you have time within the session or as a follow up for further insights around AI, you can signpost students to **Navigating the AI revolution** and **The power of AI**.

- If your students are keen to learn to code then **Barclays Code Playground** can help. Here you will find on-demand videos and lesson plans and even book onto online sessions.

- Support your students to communication digitally in the world of work with the below LifeSkills resources:

  Communicating digitally in the world of work lesson (11-16)

  Communication and digital skills at work (16-19)

- This **Money skills lesson four: Digital payments** lesson is designed to help students explore different types of technology that support money management.

- If your students are inspired to create a business idea, they can use our **Business start up planner** to help shape ideas.