



BIG DATA & A.I.

“You’re either the one that creates the automation, or you’re getting automated.”

Tom Preston-Werner, American entrepreneur and founder of GitHub

1. Big Data Discussion

1. Why is data so important to business?
2. What insights can data give a business?
3. How does your company use data?
4. Do you use data in your job? What kind of data do you collect? How do you analyse it? What does it tell you?
5. What do you know about big data?
6. How does/can big data benefit businesses?
7. What are some of the dangers of big data?
8. Which social problems will big data help us solve?

2. Big Data & A.I. Vocabulary

- **big data** (noun) – *an extremely large amount of data.*
- **automation** (noun) – *technologies that reduce human action in processes.*
- **machine learning** (noun) – *a computer system that can learn and adapt to perform functions without being given instructions.*
- **data analysis** (noun – field), **data analyst** (noun – profession) – *the collection and interpretation of data in order to gain insights; a professional who conducts data analysis.*
- **data storage** (noun) – *the recording and retention of digital information.*
- **novel situation** (noun) – *a new or unfamiliar situation, not encountered before.*

Using the vocabulary words above, complete the following sentences (remember to use the correct form of the word, e.g. verb conjugation or plural noun)

1. As companies collect more and more data, they need bigger and better _____ facilities.
2. _____ are used by the police to make predictions about which areas are likely to experience an increase in crime in the future.
3. Machines will never be able to replace jobs that require dealing with _____.
4. Many manufacturing jobs have already been lost due to _____, and the ones that haven't been lost have mainly moved to countries like China or Bangladesh.
5. Thanks to _____, medical diagnoses can be performed to a much greater accuracy than if a doctor made the diagnosis.
6. Using _____, advertising agencies can produce personalised adverts unique to every member of the public.

Big Data & A.I. vocabulary comprehension questions

1. What are some of the best sources of big data?
2. Should companies use automation to reduce working hours or to increase profits?
3. How could your company use machine learning to improve its processes?
4. Does your company employ data analysts? If so, what do they do? If not, who, if anyone, analyses your company's data?
5. How can companies solve the problem of an ever-growing need for more data storage?
6. What novel situations might you encounter in your job?

3. Video: The Jobs We'll Lose to Machines

You are going to watch a TED Talk by Anthony Goldbloom called "The jobs we'll lose to machines – and the ones we won't."

Watch the video here: <https://youenglishpal.com/blog/business-english-conversation-lesson-plan-big-data-artificial-intelligence/>

Watch the video and after, discuss the following questions:

1. What tasks can computers currently do better than humans?
2. Which of your current work tasks will a computer be able to do better than you in the future?
3. Which professions will be replaced by machines in the future?
4. Which jobs will be safe from automation?
5. Do you think your profession will be threatened by automation in the future? Why or why not?
6. What degree subject would you recommend a child study at university to prepare themselves for the future?

4. Artificial Intelligence Conversation Questions

1. How is artificial intelligence helping businesses today?
2. Do you think artificial intelligence could help businesses make better decisions than humans? Why or why not?
3. How would you feel about having an AI as a colleague? Do you think this will ever happen in the future?
4. Are you concerned about artificial intelligence in any way? What are some ethical concerns about the use of artificial intelligence?
5. How will artificial intelligence, machine learning and automation revolutionise the transport and logistics industry?
6. How will artificial intelligence change the defence sector?
7. If automation is fully implemented in manufacturing, will this sector return to developed countries? Why or why not?
8. How will big data, artificial intelligence and automation affect the global economy of the future?

5. Big Data & A.I. Writing Task

Your CEO has asked you to research the prospect of using artificial intelligence technology in your company. Write a short report outlining what AI technology is currently available and how it could be used to benefit the company.

6. Big Data & A.I. Answers

2. Vocabulary

1. data storage
2. Data analysts
3. novel situations
4. automation
5. machine learning
6. big data