Data is the new oil

Possible Learning Intentions

- *Explain why information about people and their behaviours is valuable to companies.*
- *Analyse how certain types of data are used by companies.*
- *Learn three strategies for limiting individual data collection by companies.*
- *Identify how data can also be used for political and personal reasons.*

Lesson 1 Setting the scene

Task 1: Anticipation Exercise

Students complete the anticipation exercise below at the start of the unit of learning. This can be adapted as an online survey which allow for the answers at the start to be compared to the answers at the end.

Statement	Agree	Not sure	Disagree
Information is valuable			
Internet companies are the richest companies in the history of humanity			
Tools wait to be needed and used. Social media isn't a tool.			
"There are only two industries that call their customers 'users': illegal drugs and software" - Edward Tufte Social Media is a drug			
You vs the social media computer technology - it's not a fair fight			
Wikipedia gives everyone the same information. Social Media, Google etc. will give you the version you want to see.			
We accept the reality of the world with which we are presented, it is as simple as that.			
Fake news travels faster than true news			
Our online world is too big to change			
If you are not paying for the product, you are the product			
I'm happy for companies to collect my online data			

Task 2: Think-Pair-Share

Imagine you had the opportunity to design a brand-new product for teenagers. You could have any amount of money and materials you needed to make the product.
How would you come up with an idea? What questions would you ask?
Record your answers.

Lesson 2

Task 3: Group Investigation Task

Students read and discuss the information below. Each group then selects one or two questions from the list below to discuss and research and agree on a response to using the placemat template.

Behavioural Data

One common type of data is online behavioural data.

Companies want to know what their customers like to do, which sites they visit and which other products they buy. They use this information to design new products and to market existing products to new customers. There are many ways that companies get behavioural data: from their own websites, from other companies' websites and from companies that collect data about people's online behaviours.

Advertising and Target Marketing

Cookies and internet history are used to influence the advertisements and other websites recommended to users.

The sites pull data from lots of different sources and link it together so that advertising can be targeted more accurately at the consumer.

Social-networking sites invite users to 'like' things. These 'likes' are stored in databases and are used, along with cookies, to track users' interests.

How cookies track you video

Questions for research (HW or in school)

- What kinds of data do you think companies look at the most?
- How do companies collect and use data about you legally without your consent?
- Are consent pop-ups necessary?
- Is your smartphone spying on you?
- How important is it to you that your texts and direct messages are kept private.
- How often do you click on suggested links in social media?
- Would you prefer to see advertisements that are relevant to your shopping habits?
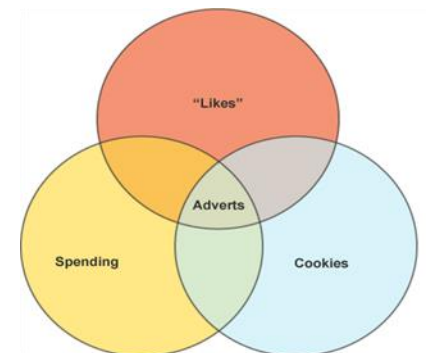
Collaborate in you group on a response using the placement template
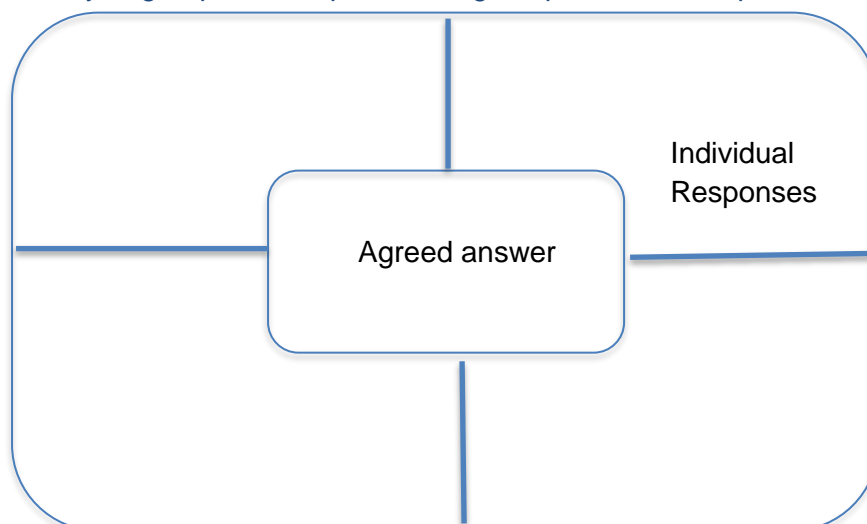
Lesson 3

Task 5 Online Tracking

Watch the video <u>Hot on Your Trail: Privacy, Your Data, and Who Has Access to It</u>

Thinking back to when you were thinking about creating a brand-new product for teenagers, how might you use the kind of data gathered on the girl in the video to inform your design?

Task 5 Mix and Match Key Vocabulary

Key Vocabulary	Definition	In your own words
Match the key word to the definition. Can you come up with your own definition?		
GDPR	Information that a website or app shows you based on what they think you want to see	
Cookies	A law that protects the online privacy rights of people that reside in the UK and EU countries	
Personalised Content	Small text files stored on a computer that keep track of what a person does on a website	
Targeted Advertisement	Advertisements that are shown to you based on information that has been collected about you (location, browsing history, interests, age, etc.)	
Data Broker	A person who buys products or services to use	
Consumer	Facts and statistics collected together to be used for different purposes	
Data	A person or company that buys and sells consumer data	

Lesson 4
**Task 6 Trendsetter Data**

Directions for students
You are in charge of new products at the clothing company "Trendsetter". The company is making plans to design and release a brand-new product.
Analyse the consumer data table below to decide what type of product it will be (jacket, shoes, hat, trousers, shirt, or something else) and what details it will include. Then draw or paste in a picture of what your product will look like.

Part 1: Consumer Data

The data shows ...	What might this mean for your new product?
Most customers come to Trendsetter to buy jackets.	
Many Trendsetter customers also shop for hats, scarves and boots.	
Most jackets that are bought in general are dark in colour: blue, black or charcoal.	
The majority of Trendsetter customers live outside of cities and in colder climates.	
The majority of Trendsetter customers are in the age bracket of 18-30.	

Part 2: Draw or Paste in Your Product
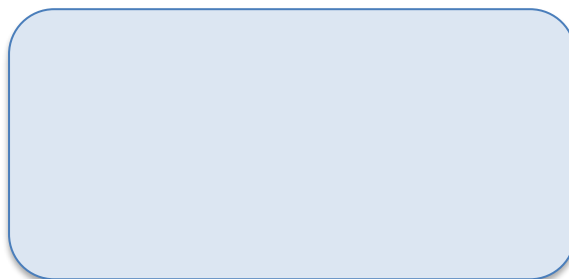
Part 3: Summarise
- Write one paragraph explaining how you used the data to choose and design your product.
- Thinking back to the on-line tracking video how could you use the information learned to reach your target audience?

Lesson 5
Task 7: Positives and negatives

Not to be confused with the internet, which had been evolving since the 1960s, the World Wide Web celebrated its 30th anniversary on 12 March, 2019.

Since 1991 external web servers have been up and running and today it is estimated that there are over 2 billion websites online.

While recognising the power of the web to transform governments, businesses, and societies for the better, inventor of the web, Sir Tim Berners-Lee used the occasion to highlight the abuse of his creation. "All kinds of things have gone wrong. We have fake news, we have problems with privacy, we have people being profiled and manipulated." He called for a 'contract' to reclaim the web as a force for the common good.

(Adapted from Irish Independent Editorial, May 16th 2019)

Complete a "pros and cons" list of the internet
What is good about it? How does it benefit you? What is not so good?

Pros	Cons

Task 8: Watch the documentary "The Social Dilemma" or for a shorter clip watch the TED Talk How a handful of tech companies control billions of minds every day | Tristan Harris

- Do you agree or disagree with the points made in the documentary/TED Talk?
- Outline how people can be profiled and manipulated on the world wide web.
- Discuss how this situation can be changed to protect people and society.
- What might prevent this situation from changing for the better?
- What might support a change for the better?

Lesson 6
Task 9: Reflect
Now that you know how economically valuable your data is to a company identify and analyse why your data would be considered valuable politically or personally to Third Parties/Apps or websites? What information about you would be of use to them and why?

- Identify at least 2 ways your data is gathered without your consent
- Describe 3 ways you can protect your data (hint: cookies, privacy settings)
- Find 3 articles or useful websites to help you protect your personal data.
- Action! Take three actions to protect your data on your personal device.

Task 10: Reflection Exercise

Students complete the exercise below and compare it to their responses at the start of the unit of learning.

Did their opinions change?

What did they learn that influenced their response to these statements?

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Resources

https://dataprotection.ie/

https://gdpr.eu/

https://www.bbc.co.uk/bitesize/guides/znkqn39/revision/4#:~:text=the%20web%20browser%20.-,Cookies,the%20user%20to%20accept%20permission.

How to clear your cache and cookies article   - PC Mag

How to handle your cookies - Irish Times

https://www.irishtimes.com/culture/tv-radio-web/jennifer-o-connell-don-t-be-a-zucker-for-social-media-in-2017-1.2914662