

Bursting the Filter Bubble

Cyber Safety Lesson Plan (Age 15)

This lesson helps teenage students understand and navigate the concept of filter bubbles in digital spaces, focusing on the role of recommendation algorithms in shaping online experiences.

Learning Objectives

Students will be able to:

- Illustrate the concept of filter bubbles and their impact on information consumption.
- Analyse how recommendation algorithms on social platforms shape content exposure and user experience.

Duration

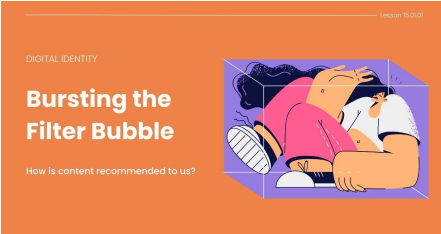
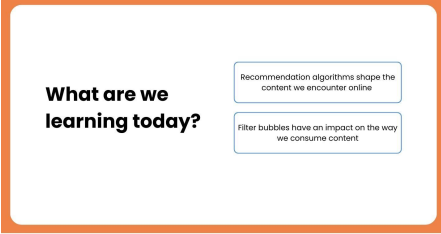
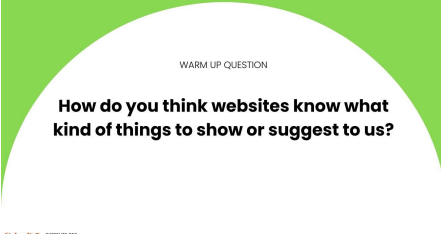
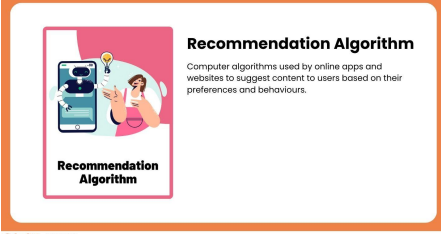
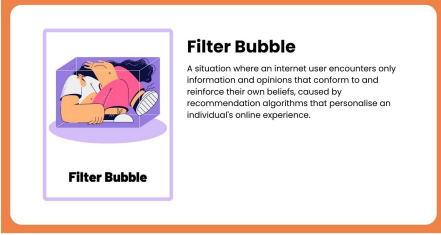
30 minutes

Key Concepts

- **Recommendation Algorithm:** Computer algorithms used by online apps and websites to suggest content to users based on their preferences and behaviours.
- **Filter Bubble:** A situation where an internet user encounters only information and opinions that conform to and reinforce their own beliefs, caused by recommendation algorithms that personalise an individual's online experience.

Internet Independent Framework


The learning objectives in this workshop are aligned with the Digital Identity pillar of the Internet Independent Framework. Visit cyberlite.org for more information.

LESSON SLIDE	WHAT TO SAY OR DO
 <p>Slide 1</p>	<p>Welcome students to the lesson and briefly explain that today's lesson is about recommendation algorithms and filter bubbles.</p>
 <p>Slide 2</p>	<p>Share the lesson objectives of what students will be learning today.</p>
 <p>Slide 3</p>	<p>Initiate a conversation about how websites might predict and suggest content for users, encouraging students to think about their online interactions and the data they generate.</p>
 <p>Slide 4</p>	<p>Define recommendation algorithms, and encourage students to share experiences of personalised social media feeds.</p>
 <p>Slide 5</p>	<p>Introduce the concept of a filter bubble and how it can impact our information consumption.</p>

What Are Recommendation Algorithms?

Recommendation algorithms are the behind-the-scenes mechanisms used by online platforms to suggest content, products, or connections to users.

They are designed to keep users engaged and offer content that aligns with their preferences.




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Slide 6

Explain why technology companies build recommendation algorithms to keep users engaged on their platforms. Discuss how these algorithms function on different social media platforms, highlighting how user interactions shape the content they see.

Example: YouTube



On YouTube, the algorithm works on a user's homepage and "Up Next" panel.

Recommendations may be determined by:


- Subscriptions to channels
- Similar content based on what you're currently watching
- Likes, saves, comments, and shares

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Slide 7

Explore and discuss the user interactions that may shape YouTube's recommendation algorithm.

Example: Instagram



On Instagram, the algorithm works on a user's feed and Explore page.

Recommendations may be determined by:


- The accounts the user follows
- Likes, saves, and shares by the user
- Information about the post, like how popular it is and how others are interacting with it

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Slide 8

Explore and discuss the user interactions that may shape Instagram's recommendation algorithm.

Example: TikTok



On TikTok, the algorithm works on a user's "For You" page.

Recommendations may be determined by:

- Types of videos a user has engaged with, like watch time and interactions
- Likes, saves, shares, and comments by the user
- Video information like captions, sounds, and hashtags

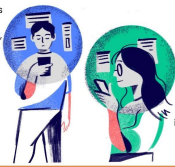
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Slide 9

Explore and discuss the user interactions that may shape TikTok's recommendation algorithm.

What is a Filter Bubble?

A filter bubble is a concept where your online experiences are personalised based on your past behaviour, interests, and interactions.



It results in only seeing content and information that align with your existing preferences.

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Slide 10

Introduce the concept of filter bubbles, explaining how personalised experiences online can limit exposure to diverse perspectives.

Recommendation Algorithms and Filter Bubbles at Work

1 You like a post from an influencer for a healthy green smoothie recipe.

2 The algorithm recommends a mix of content, and learns your preferences through your likes.

3 The algorithm learns that you like healthy eating and workout videos.

4 The app will prioritize health and fitness content since it thinks you'll enjoy it the most.

5 You end up in a filter bubble where your feed is filled with only health and fitness content.

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Slide 11

Discuss real-life examples of filter bubbles and their implications on information diversity and personal viewpoints.

Why Should You Be Aware of Filter Bubbles?

While recommendations can make your online experience more enjoyable, it also limits your exposure to diverse perspectives and ideas, reinforcing the filter bubble effect.

Filter bubbles can limit your exposure to diverse viewpoints and create a sense of information isolation. They may reinforce existing beliefs and lead to echo chambers.

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Slide 12

Explore the potential effects of filter bubbles on users, including the reinforcement of existing beliefs and limited exposure to differing opinions.

Breaking Out of the Filter Bubble

- Actively seek out content from diverse sources and engage with content that challenges your existing beliefs.
- Consciously diversify your online interactions.
- Counter the influence of recommendation algorithms and access a broader range of information.

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Slide 13

Offer strategies for escaping filter bubbles, such as actively seeking diverse content and engaging with challenging perspectives.

ACTIVITY

Filter Bubble Scenarios

Predict the filter bubbles these people might fall into and the impact.

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Slide 14

For this activity, separate students into pairs or small groups.

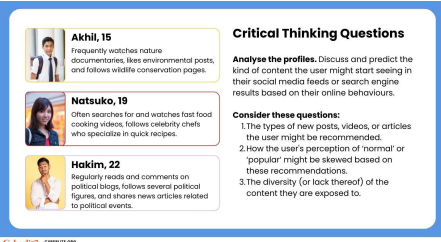

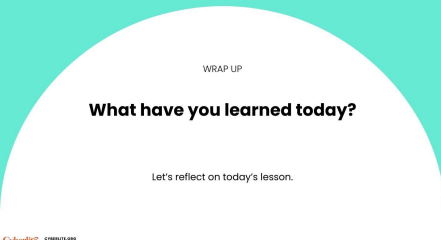
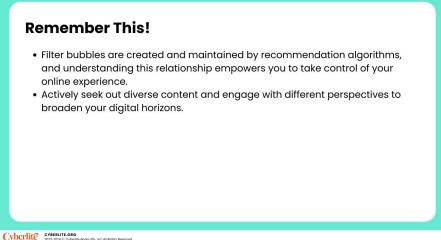

Instructions

1. Split into pairs or small groups.
2. There are three profiles to choose from. Choose a profile to work on.
3. In your groups, discuss the critical thinking questions.
4. Present your predictions to the rest of the class.

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Slide 15

Instruct students on the activity to identify potential filter bubbles based on different user profiles, encouraging critical thinking about online behaviour and its consequences.

 <p>Critical Thinking Questions</p> <p>Analyze the profiles. Discuss and predict the kind of content the user might start seeing in their social media feeds or search engine results based on their online behaviours.</p> <p>Consider these questions:</p> <ol style="list-style-type: none"> 1. The types of new posts, videos, or articles the user might be recommended. 2. How the user's perception of 'normal' or 'popular' might be skewed based on these recommendations. 3. The diversity (or lack thereof) of the content they are exposed to. <p>Akhil, 15 Frequently watches nature documentaries, likes environmental posts, and follows wildlife conservation pages.</p> <p>Natsuko, 19 Often searches for and watches fast food cooking videos, follows celebrity chefs who specialise in quick recipes.</p> <p>Hakim, 22 Regularly reads and comments on political blogs, follows several political figures, and shares news articles related to political events.</p> <p><small>Cyberlite © 2023-2024. All Rights Reserved.</small></p> <p>Slide 16</p>	<p>Students must read each profile carefully and analyse each character's online content consumption. Then in the pairs or small groups, they should predict what kind of filter bubble each character might fall into.</p>
 <p>Group Sharing!</p> <p>Share your work with the rest of the class.</p> <p><small>Cyberlite © 2023-2024. All Rights Reserved.</small></p> <p>Slide 17</p>	<p>Facilitate a discussion on the activity, prompting students to share their insights and the potential impacts of filter bubbles they identified.</p> <p>Discuss the importance of exploring a wide range of content and perspectives online, fostering a balanced and informed digital presence.</p>
 <p>WRAP UP</p> <p>What have you learned today?</p> <p>Let's reflect on today's lesson.</p> <p><small>Cyberlite © 2023-2024. All Rights Reserved.</small></p> <p>Slide 18</p>	<p>Guide students in a reflective discussion on how their online behaviours might contribute to or break filter bubbles, encouraging personal insights and sharing.</p>
 <p>Remember This!</p> <ul style="list-style-type: none"> • Filter bubbles are created and maintained by recommendation algorithms, and understanding this relationship empowers you to take control of your online experience. • Actively seek out diverse content and engage with different perspectives to broaden your digital horizons. <p><small>Cyberlite © 2023-2024. All Rights Reserved.</small></p> <p>Slide 19</p>	<p>Summarise the lesson's key points, reinforcing the importance of understanding and managing filter bubbles for a well-rounded online experience. Emphasise the role of critical thinking in navigating online spaces, especially in discerning the nature and intent of content within filter bubbles.</p>
 <p>Well Done!</p> <p><small>Cyberlite © 2023-2024. All Rights Reserved.</small></p> <p>Slide 20</p>	<p>Conclude with a reminder about the power of recommendation algorithms and the significance of actively seeking diverse viewpoints to expand digital horizons.</p>