AI and the Ethics of Personal Marketing: Personalization or Intrusion?

Why?

This lesson helps equip students with a nuanced understanding of how technology intersects with everyday life. It introduces them to key concepts in modern digital marketing, and fosters critical thinking about the ethical implications of AI, such as privacy, autonomy, and fairness. By engaging with real-world scenarios and ethical dilemmas, students develop a deeper awareness of the digital landscape they interact with daily, preparing them for informed and responsible digital citizenship. This provides a crucial combination for students growing up in a rapidly advancing digital age, ensuring they become thoughtful consumers and ethical users of technology.

Materials Needed	Time needed
● Computers with internet access for students to use in the simulation	● Approximately 60 - 75 minutes

Objectives

- Students will be able to identify and describe ethical concerns associated with personalized marketing, including privacy and data security.
- Students will be able to evaluate the benefits and challenges of personalized marketing.
- Students will be able to propose solutions or strategies to address ethical dilemmas in AI-driven personalized marketing.

Key Concepts & Vocabulary

- **Personalized Marketing:** Tailoring marketing efforts to individual customer preferences and behaviors.
- **Echo Chamber:** Exposure to information aligning with one's existing beliefs, limiting diverse views.
- **Price Discrimination:** In this context, using demographic data to market differently-priced products to different people.
- **Data Security:** Protecting digital data from unauthorized access, corruption, or theft.
- **Data Transparency:** Openness and clarity about processes or operations

Lesson Components

1. **Before You Watch**: Connect lesson to background knowledge of AI-driven marketing and get students' attention
2. **Video**: Show the pedagogy.cloud video explaining the ethical considerations in the topic of personal marketing
3. **Case Study**: Detail a real-world scenario of Netflix using personal data to

provide future viewing suggestions.
4. **Simulation**: Lead students through an interactive activity exploring the idea of tracking web data.
5. **Discussion**: Ask whole-class questions to reflect on experience and consider perspectives.
6. **Assessment**: Verify student understanding with an exit ticket

1. Before You Watch

Mystery Shopping Bag Scenario
Tell the students you have a "Mystery Shopping Bag" (imaginary) that claims to know the perfect item for each student in the class. Ask students to "guess" what might be inside the bag for them. Then, lead them to ponder how the bag could possibly "know" their preferences.

While You Watch: Mention these topics and questions for students to look out for as they watch the video:
- What are two main benefits of AI-driven personalized marketing mentioned in the video?
- Identify the spot in the video where the concept of "data security" is mentioned. Describe what concerns are raised.
- When the video discusses price discrimination, what example is given? Explain how this represents fairness issues in AI marketing.

2. Video Summary

The video introduces the concept of AI in personalized marketing, highlighting its convenience in suggesting products based on online behavior. However, it then talks about complexities of AI tracking, raising concerns about privacy, data security, consumer autonomy, and fairness, such as in cases of price discrimination. The video concludes by emphasizing the need for a balanced approach that respects ethical considerations, ensuring AI in marketing serves our interests without compromising our privacy or values.

3. Case Study

Distribute or read Case Study handout.
Summary: Netflix's personalized recommendation system, powered by AI, analyzes users' watching habits to tailor content suggestions, offering convenience but raising concerns about privacy and the potential creation of echo chambers. This dilemma highlights the need for transparency in data usage and user control over personal data, as well as adjustments to the algorithm to introduce a wider range of content and prevent limiting viewers' exposure to diverse material. While Netflix's AI-driven personalization enhances user experience, it also prompts critical reflection on the balance between technological benefits and the preservation of privacy and content diversity.

4. Simulation

Internet Search and Tracking
Through this simulation, students will learn about data tracking in online behavior and its implications for personalized marketing, emphasizing real-time observation and ethical considerations.

Scenario
Divide the class into pairs, with each student alternating roles between being an internet user and a tracker.

Roles
- **Internet Users**: Students who conduct internet searches and read pages based on their interests.
- **Trackers**: Simulating AI algorithms, the trackers quietly observe their partner's search behavior and note down potential products or services that align with the interests shown.

Tasks
1. Internet Users start by browsing the internet on topics that interest them. They can visit news sites, online stores, or any other websites they choose.
2. Trackers discreetly observe and make notes on the types of websites visited, the content interacted with, and potential products or services that align with these interests. The Internet Users may forget that the tracker is there, which is ideal.
3. After a set period of time (perhaps 10 minutes), roles are reversed, allowing each student to experience both sides of the data tracking process.
4. Once both students have performed each role, have them compare notes on each others' searching. Students should read the list of possible product or service tie-ins they noted for their partners' web surfing.

Implementation Notes
- To maintain privacy, Trackers should not record any personal or sensitive information; they should focus only on general interests and potential product alignments.
- Internet Users should be instructed to avoid searching for sensitive or personal topics during the simulation.

5. Discussion

These questions are designed to be used in whole-class discussion. Ask questions that relate most effectively to the lesson.
1. How did it feel to have your searches observed in person?
2. How accurate were the trackers in identifying your interests?
3. Trackers, what challenges did you face in predicting products or services based on the searches?
4. How much does this activity reflect real computer tracking for marketing purposes?

5. What are the ethical boundaries of personal marketing in this way?
6. How could privacy be intruded upon by tracking algorithms?

6. Assessment

Exit Ticket: Provide a prompt for students to reflect on their learning, such as:
- What are three new things you learned today about AI-driven personalized marketing and its impact on consumer behavior?
- Do you have any remaining questions or areas of confusion about the ethical implications of AI in marketing? If so, what are they?
- How do you think AI in personalized marketing will evolve over the next five years, and what impacts might this have on consumer experiences?

Sources to Learn More

- Thorough blog post about the ethics of personal marketing: https://abmatic.ai/blog/ethics-of-personalized-marketing-considerations-and-guidelines
- Article including the well-known story about a situation where Target's predictive analytics determined a teenager was pregnant before her family knew: https://www.nytimes.com/2012/02/19/magazine/shopping-habits.html
- Article about Netflix's algorithm: https://www.diggitmagazine.com/articles/algorithmic-imaginary-netflix
- News article about a family who was interrogated by the FBI after their search history brought up multiple topics related to a prominent bombing: https://www.nbcnews.com/technolog/man-questioned-police-google-search-history-6C10824803

Case Study: Netflix's Personalized World

Imagine you're settling down for a movie night. You turn on Netflix, and it suggests a list of movies and shows that perfectly match your taste. Sounds convenient, right? But have you ever wondered how Netflix knows so much about what you like? This scenario brings us to a fascinating dilemma: while personalized recommendations make our lives easier, they also raise questions about privacy and the influence of AI on our choices.

Background Information: Netflix, a popular streaming service, uses Artificial Intelligence (AI) to analyze your watching habits. Every show you watch, every rating you give, and even the time you spend on each title, feeds into a complex algorithm. This algorithm is like a smart assistant, constantly learning your preferences to suggest content you might enjoy. While this personalization is helpful, it's essential to understand the implications of such extensive data collection and how it shapes our viewing habits.

Problem Analysis: The challenge revolves around two issues: privacy and the creation of "echo chambers." On the privacy front, the concern is about how much personal information Netflix gathers and what they do with it. It's like having someone who watches over your shoulder, taking notes on everything you watch! Then, there's the echo chamber effect. By always suggesting things based on your past choices, Netflix might limit your exposure to diverse content, potentially narrowing your worldview.

Possible Solutions: One solution could be more transparency from Netflix about their data use. If users better understand what data is collected and how it's used, they might feel more comfortable with the personalization. Another approach could be giving users more control over their data, like options to opt-out of certain types of data collection. On the echo chamber issue, Netflix could tweak its algorithm to occasionally suggest diverse content outside of the user's typical preferences. This way, viewers can discover new genres and ideas they might not have chosen on their own.

Conclusion: Netflix's use of AI for personalized recommendations is a double-edged sword. It brings convenience, but also raises critical questions about privacy and the diversity of our entertainment choices. As we embrace the benefits of AI in services like Netflix, we must also consider and address these challenges.

Questions
- Do you think the convenience of personalized recommendations is worth the potential privacy trade-off?
- How might watching only similar types of shows and movies limit our understanding of different perspectives?
- What other ways can AI be used responsibly to enhance our entertainment experiences without compromising our privacy or limiting our choices?

Video Script for Animator

Hello Young Innovators! Today we're discussing the ethics of personal marketing with AI.
Title screen

Welcome to the digital age, where Artificial Intelligence isn't just science fiction – it's part of our everyday shopping experiences. Have you ever stopped to think about how it knows so much about you?

[Socrat narrating throughout, facing the viewer.
Socrat is standing next to a table that has a globe on it. (Example Image: https://i.imgur.com/9UcD1tv.png) Socrat spins the globe, and the scene zooms in to a city street with people using cell phones and tablets. (Example Image: https://i.imgur.com/7Em7Sii.png)]

Today, we're exploring the world of AI in Personalized Marketing. This smart technology suggests products based on your past online behavior. It's super convenient. But there is more to the story.

[Socrat standing next to a person holding a tablet, who is facing away from the screen. There is a billboard above them with an ad for a piece of technology, such as a VR headset. The exact same ad appears on the person's tablet. (Example Image: https://i.imgur.com/4Eeo26I.png but the man should have his tablet visible.)]

Let's say you're searching for a new skateboard online. Soon, you're seeing skateboard ads everywhere. That's personalized marketing – AI algorithms using your search and browsing history to tailor ads specifically for you.

[Scene shifts to a house where a character, perhaps an African-American teen) is using a computer. Monitor shows an illustration of a skateboard on a site like Amazon. The person starts scrolling, and a smaller image of a skateboard keeps popping up. (Example image: https://i.imgur.com/02vygmP.png)] The person could pull out a cell phone, and a skateboard illustration is on that screen as well.

This kind of marketing can be pretty handy. It points you towards products you're likely to enjoy, saving you time from sifting through endless options.

[The person clicks on the skateboard ad on the computer, and a skateboard pops into the person's hand. The person grins, and he and Socrat exchange thumbs-up gestures. (Example Image: https://i.imgur.com/ohf0oBG.png except the monitor should show the skateboard, not the person.)]

For example, if you love to paint, AI might suggest the latest painting supplies or trending styles, making sure you're always up to date with your hobby.

[Scene shift to a painter's studio with a laptop. There is a painter character in the midst of a painting. She looks over at the monitor screen and sees ads for new paint supplies. (Example Image: https://i.imgur.com/fF3rbXi.png)]

But here's where it gets tricky. All this personalization is based on AI tracking what you do online. It raises important questions about privacy and data security. How comfortable are we with AI knowing so much about you? What happens if your data gets into the wrong hands?

[A magnifying glass (representing search tracking) appears over the painter's laptop. The scene zooms out and a large AI-looking robot (*not* resembling Socrat) is looking at the laptop from above. The painter shrinks away in fear from the magnifying glass. (Sort of example image: https://i.imgur.com/BKxhe3r.png except it should look more like the previous illustration.)]

Another concern is autonomy. By nudging you towards certain products, are these AI systems limiting your freedom to make independent choices? They could be influencing decisions you wouldn't have made on your own. Does this make you feel manipulated?

[On a street, Socrat and another character are walking down the sidewalk. They keep seeing the same ad over and over. (Example: https://i.imgur.com/geflsFK.png All of those ads should have the exact same picture)]

Personalized marketing also brings up issues of fairness. Imagine two people searching for the same things online. One person receives an ad for an expensive item. Another person searches for the exact same items, but gets ads for more affordable options. That's price discrimination in action.

[Split-screen showing two characters using computers side-by-side. They both have the same page on their monitors. They both click, and get different ads – One shows an illustration of a sports car, and the other shows an illustration of an old used car. (Example Image: https://i.imgur.com/C93ZoHL.png except the car on the right should be more run-down looking)]

So, how can we balance the benefits of AI personalization with these ethical concerns? Transparency in how our data is used and giving us control over it can be a start. As we navigate this AI-powered world of personalized marketing, we must weigh its convenience against the importance of our privacy, autonomy, and social equity. It's not just about what AI can do; it's about what it should do.

[Scene shifts to a fork in a path. Two or three characters stand there looking at a crossroads sign that has directions pointing one way to "Convenience" and the other to "Fairness."(Example Image: https://i.imgur.com/Heiy97g.png Words should be on the arrow signs)]

AI-driven personalized marketing offers undeniable convenience. But it's crucial to approach it with awareness of its impact on our privacy, decision-making, and social fairness. By striking a balance between technological advancement and ethical responsibility, we can embrace the benefits of AI without losing sight of our rights and values.

[Socrat walks up to the sign and removes the two directional signs, then pushes them together, and they become one, which he puts back up on the post. The new sign says "Ethical Innovation" and points forward. The two paths merge into one, and people start walking down the path. (Example Image: https://i.imgur.com/Sm3KMEB.png)]

Let's discuss: How do you feel when your computer suggests products you searched for a few days ago?
[Question to display on screen: How do you feel when your computer suggests products you searched for a few days ago?]

Video Script for Narrations

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