

Ethical Issues in AI

Welcome to Unit 5 of AI for Logistics and Supply Chain: Ethical Issues and Sustainability. Today, we'll explore the ethical considerations surrounding Artificial Intelligence (AI) and its implications for the logistics and supply chain industry.

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Recap: Key Takeaways from Previous Presentation

AI in Logistics

We discussed the various applications of AI in logistics, such as route optimization, demand forecasting, and warehouse automation.

Benefits of AI

We explored the potential benefits of AI, including increased efficiency, cost savings, and improved customer satisfaction.

Guess the Topic: Can You Identify the Key Ethical Challenges?

Bias

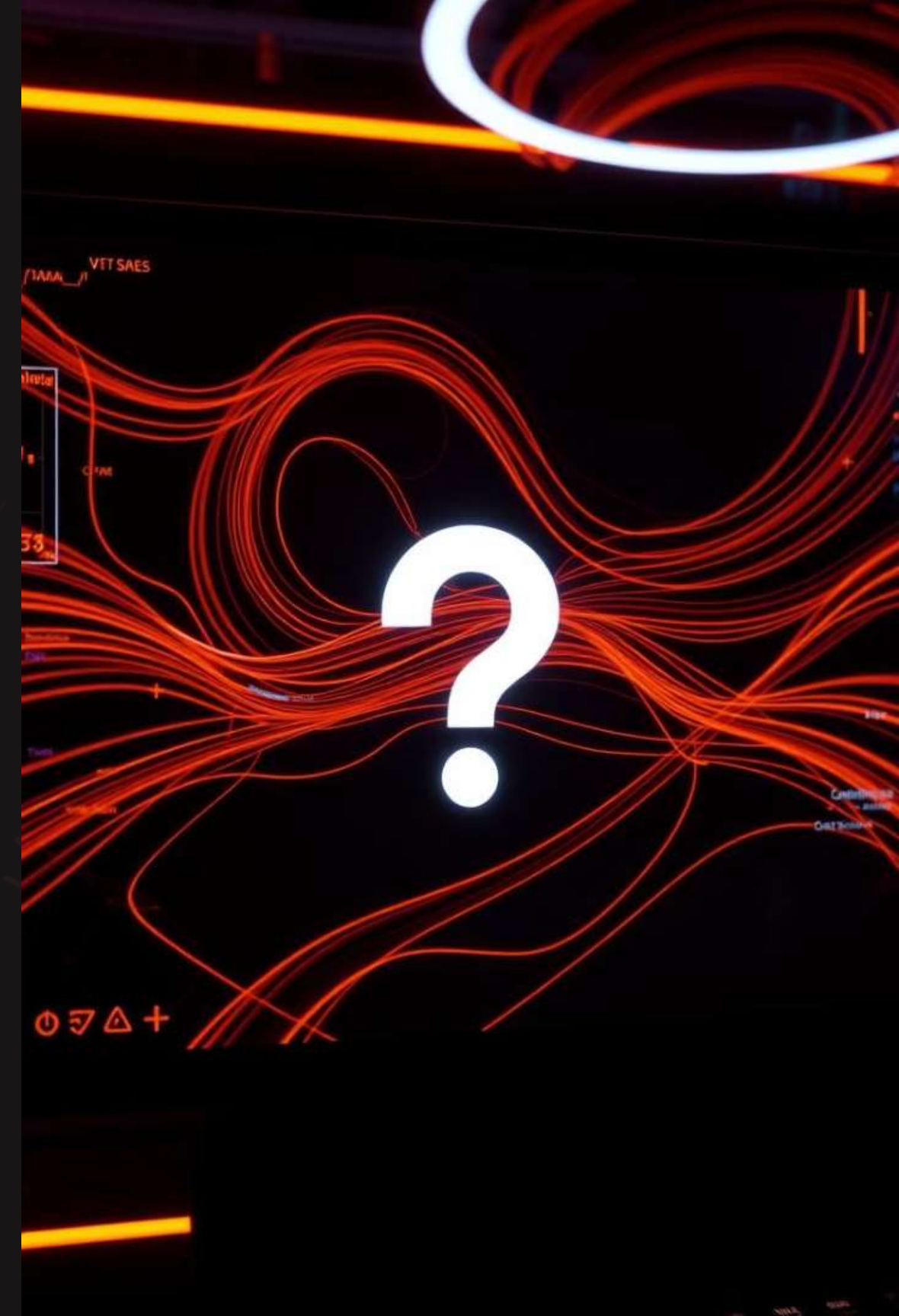
Can AI systems perpetuate existing societal biases?

Privacy

How can we protect sensitive data used by AI systems?

Accountability

Who is responsible when AI makes a mistake?





Bias in AI: Examples and Implications

1

Algorithmic Bias

AI algorithms can perpetuate existing biases, leading to unfair outcomes.

2

Impact on Logistics

Biased AI can lead to unfair hiring practices, discriminatory pricing, and skewed resource allocation.



Privacy and Security Concerns with AI



Data Collection

AI systems collect and analyze vast amounts of personal data, raising concerns about privacy.



Security Risks

AI systems are vulnerable to cyberattacks, which could compromise sensitive data.



AI Transparency and Accountability

1

Explainability

It's crucial to understand how AI systems arrive at their decisions.

2

Responsibility

Who is responsible for the decisions made by AI systems?

3

Regulation

Developing ethical guidelines and regulations for AI is essential.



Ethical Dilemmas in Autonomous Vehicles

1

Collision Avoidance

How should autonomous vehicles choose between different collision scenarios?

2

Liability

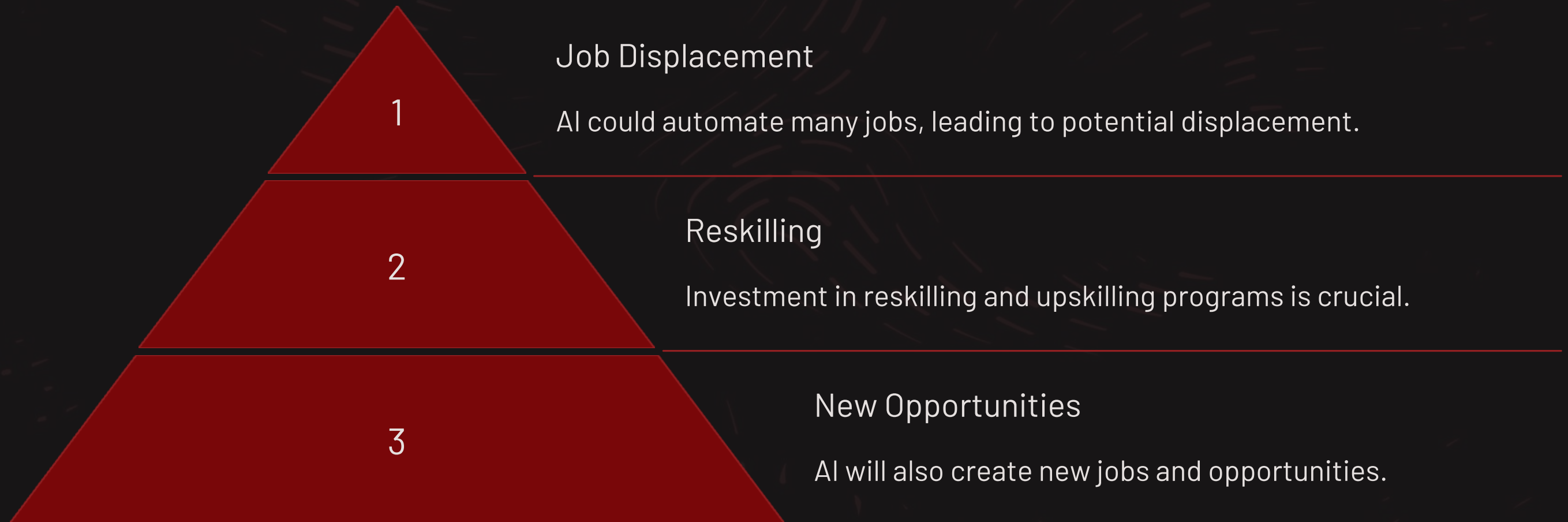
Who is responsible for accidents involving autonomous vehicles?

3

Privacy Concerns

How to protect passenger data collected by autonomous vehicles?

AI and the Future of Work: Displacement and Reskilling



Test Your Knowledge: Interactive Quiz

1

Bias

What are the potential consequences of biased AI in logistics?

2

Privacy

How can we protect sensitive data used by AI systems?

3

Accountability

Who is responsible for the decisions made by AI systems?





Conclusion and Key Takeaways

AI presents both opportunities and challenges. Ethical considerations are crucial for responsible development and deployment of AI in the logistics and supply chain industry. As we move forward, it's important to prioritize transparency, accountability, and fairness in the development and use of AI.