

Blockchain Technology: Boon or Bane?

Welcome to Unit 4 of our FINTECH AND FINANCIAL ANALYTICS course. Today, we'll explore the emerging technology of blockchain, delving into its potential benefits and challenges. This unit will expand upon the previous presentation on fintech and financial analytics, examining how blockchain is reshaping financial systems.

DK

Dr. Maharajan K



Recap: Fintech and Financial Analytics

Financial Technology (Fintech)

We explored the rise of fintech and its impact on traditional financial institutions, examining key trends like digital payments, robo-advisors, and open banking.

Financial Analytics

We discussed the power of data-driven decision-making in finance, exploring the role of data visualization, predictive analytics, and machine learning algorithms.



Guess the Topic: Blockchain's Role in Finance

1

1. Decentralized Ledger

Imagine a digital ledger that is shared and synchronized across a network of computers.

2

2. Transparency and Security

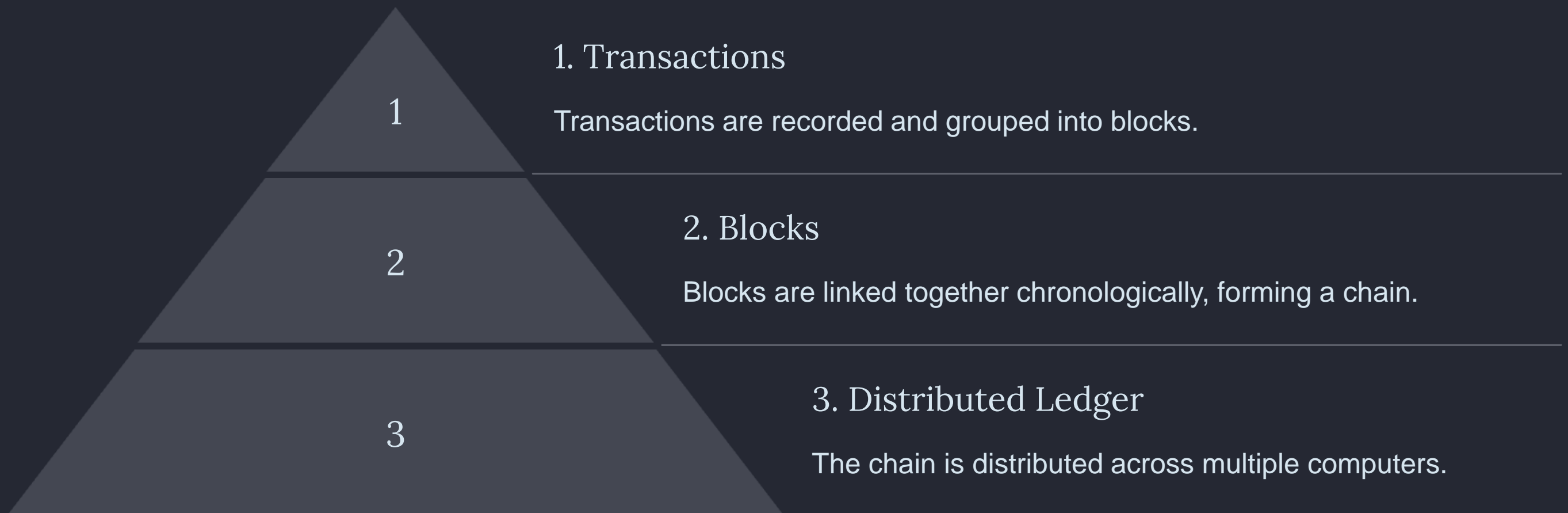
This ledger is secure and transparent, making it difficult to manipulate or alter information.

3

3. Financial Applications

Blockchain has the potential to revolutionize various aspects of finance, from payments to asset management.

Blockchain Basics: How it Works





Real-Life Case Study: Blockchain in Supply Chain



Transparency

Provides real-time visibility into the origin, movement, and condition of goods.



Security

Reduces the risk of counterfeiting, fraud, and product tampering.



Efficiency

Streamlines processes, eliminates paperwork, and enhances accountability.

Blockchain's Benefits: Transparency and Efficiency

1

1. Immutable Records

Once a transaction is recorded, it cannot be altered or deleted.

2

2. Increased Trust

Blockchain builds trust among participants by providing a verifiable and transparent record.

3

3. Reduced Costs

Eliminates the need for intermediaries and reduces administrative overhead.



Potential Drawbacks: Scalability and Regulation

Scalability

Current blockchain technologies can struggle to handle a high volume of transactions.

Regulation

Governments and regulatory bodies are still developing frameworks for blockchain.

Security Risks

Blockchain is not immune to cyberattacks, and vulnerabilities can still exist.



Student Learning Check: Blockchain Quiz

1

1. What is a blockchain?

A distributed ledger that records transactions.

2

2. What is a benefit of blockchain?

Increased transparency and trust.

3

3. What is a challenge of blockchain?

Scalability and regulatory uncertainty.



Summary: Key Takeaways

1

Transformative Potential

Blockchain has the potential to revolutionize finance and other industries.

2

Benefits

Increased transparency, efficiency, and trust.

3

Challenges

Scalability, regulatory uncertainty, and security risks.

References: Online Resources and Recommended Readings

