Blockchain Introduction

What is Blockchain? How It Changes the Economy?

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About Svetlin Nakov

- Software engineer, trainer, entrepreneur, author of books, blockchain enthusiast

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- Portfolio of 3 successful training initiatives:
  - National Academy for Software Development (NASD)
  - Telerik Software Academy
  - SoftUni (the Software University)
What is Blockchain?

Distributed ledger

Peer-to-Peer network

Nodes hold ledger of facts + history of updates

Decentralized (no owner)

Secure

Transactions are verified by the entire network

Immutable
Blockchain == Chain of Data Blocks

Demo: https://etherscan.io
https://blockchain.info
Blockchain Applications

Cryptocurrencies

Digital money with no central bank

Decentralized applications

Removing the middlemen

Digital investments

Fund raising / ICO / token sales
Blockchain Platforms

Bitcoin
The first famous blockchain cryptocurrency

Ethereum
The first famous smart contracts platform

Litecoin
Ripple
Dash
Monero

https://coinmarketcap.com
Mining Farms

**Mining farms:** validate transactions + mine coins

Mining pools
Traditional Money (Fiat Money)

Traditional (fiat) money: Guaranteed by the real economy + central bank + government + army

Example: USD Guaranteed by the US economy + the US army

If a country rejects accepting USD, the "democracy" comes
Cryptocurrencies

Crypto-money:
Not guaranteed, virtual, highly risky, changeable

Example: Bitcoin
A bubble, driven by the people expectations

Some day the Bitcoin bubble will burst
Wallets

Cryptocurrency wallets:

Store securely public and private keys of your blockchain assets

Hold multiple addresses + private keys
May hold BTC, ETH, ERC20 tokens, etc.

Software wallets

Hardware wallets

Online wallets
Cryptocurrency Exchange Services
Smart Contracts

Smart Contracts

Code *(custom logic)* running in the blockchain network

Solidity

Blockchain programming language for the Ethereum network, running on EVM
How Smart Contracts Work?
ICO / Token Sale Events

ICO (Initial Coin Offering)
Funds raised for a new cryptocurrency venture

Example: LockChain

Token Sale Events
Digital tokens raised through a smart contract
Corporate Blockchains

Hyperledger

https://www.hyperledger.org/members

Azure Blockchain

https://azure.microsoft.com/solutions/blockchain

Why Corporate Blockchain?
Public immutable ledger: trust between businesses + b2b smart contracts
The Future of Blockchain

Blockchain Future

Democratization and decentralization
Remove middlemen
Disrupt many industries

Quantum Computers?
Blockchain will need a major transformation!
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Questions?
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