


Blockchain, recent developments beyond cryptocurrencies.

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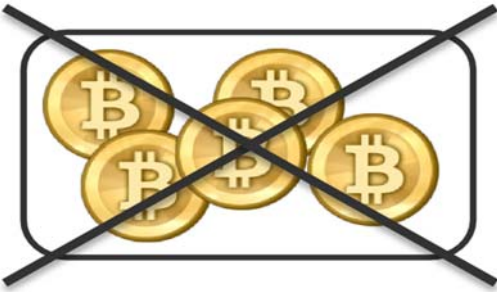



Quick Introduction


- Accounting and Business Law area Coordinator at Georgetown University.
- Hyperledger Meet-up Organizer
- Research Fellow at
 - French Military Police Academy (CREOGN)
 - Asian Bureau of Finance and Economic Research



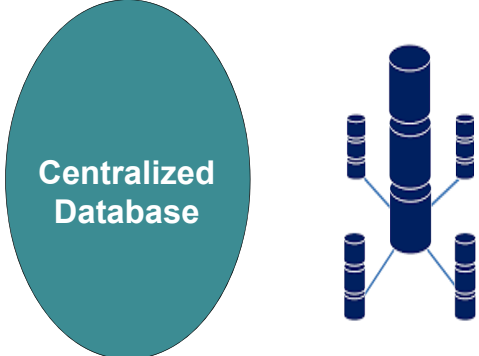

No Crypto-currency





What Is Blockchain?

What Is Blockchain?

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Centralized Database Decentralized Database

What Is Blockchain?

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Decentralized Database

What Is Blockchain?

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Distributed Ledgers Byzantine Fault Tolerant
Distributed Databases Fault Tolerant

What is Blockchain?

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Other DLT (e.g., DAG) Blockchains
Byzantine Fault Tolerant
Distributed Ledgers
Distributed Databases
Fault tolerant

Data Structures

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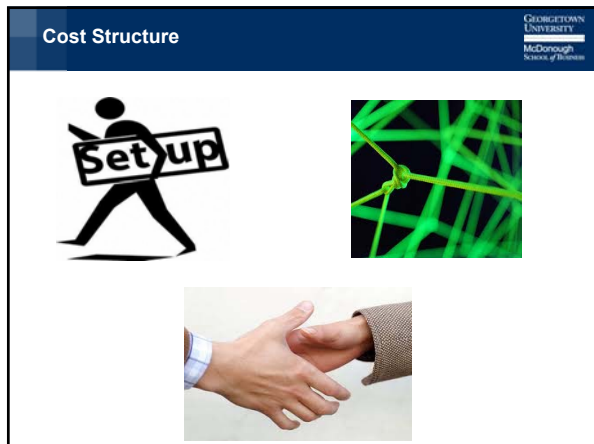
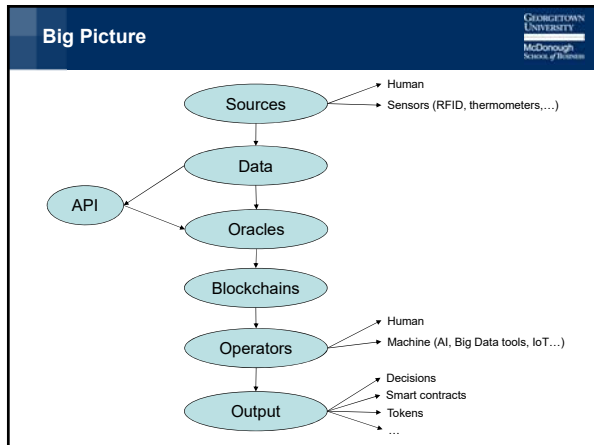
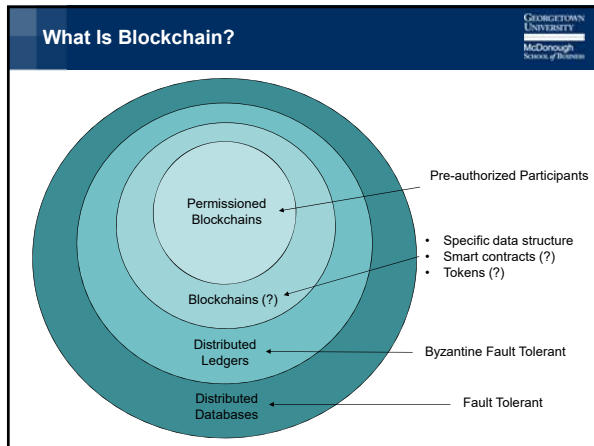
Alice Bob Carol Dave Ed

Time ↑

Multiple Copies

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Consensus Mechanism



Reasons

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Hype Cycle and Technology Adoption Lifecycle Plotted together

<https://spx.ca/btc/bitcoin-rt-3>

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Blockchain Plans

Q. What are your organization's plans in terms of blockchain?
Base: Total answering, excludes DK, n = 3,138
ID: 355300 © 2018 Gartner, Inc.

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Use Cases

Financial Services Swift Financial document exchanges	Insurance Consortium Re-Insurance operations	Retail Walmart Supply chain tracking
Energy TenneT Smart power grids	Automobile Toyota Telematics tracking data exchange	Pharmaceutical Nebula DNA materials exchange
Natural Resources Brilliant Earth Diamond tracking	Logistics Maersk Logistics documentation	Government UN Helping refugees & combating human trafficking

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Use Case

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The logo for HelloGold features a stylized yellow starburst on the left, with a white circle in the center containing a yellow 'G'. To the right of the starburst, the text 'HelloGold™' is written in a bold, black, sans-serif font.

Conclusions

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- **Blockchain is not just for cryptos.**
- **Emerging technology with potential.**
- **Not a cure for the common cold.**

Data Characteristics

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Volume (-)	Velocity (?) (real time)
Variety (+)	Veracity (+/?)

Thank You !

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