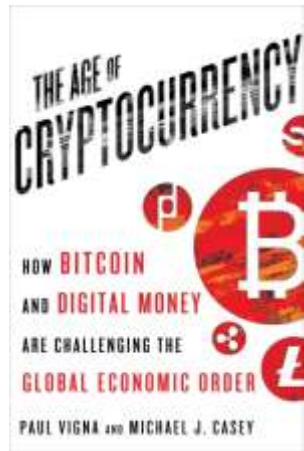


Thinking Beyond Bitcoin

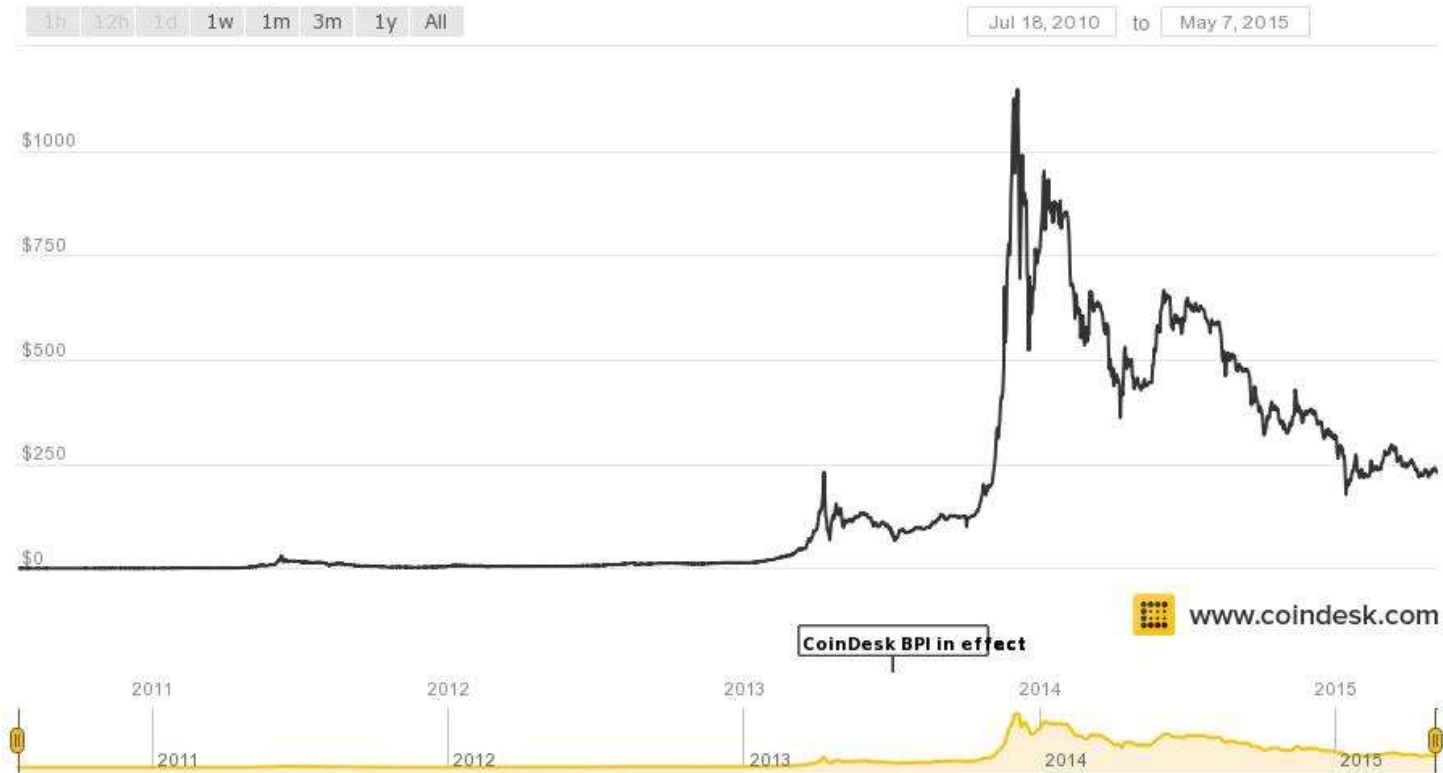
Michael Casey,

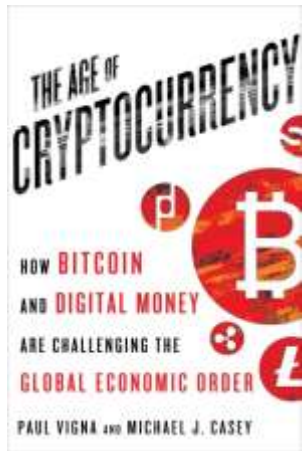
The Wall Street Journal

IFC SME Finance Forum, May 8 2015



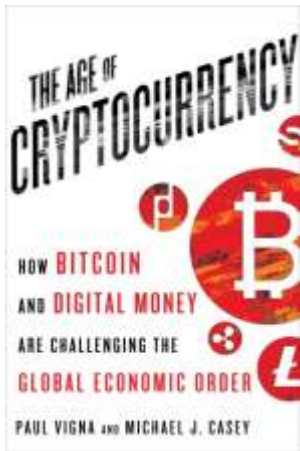
Tulips?





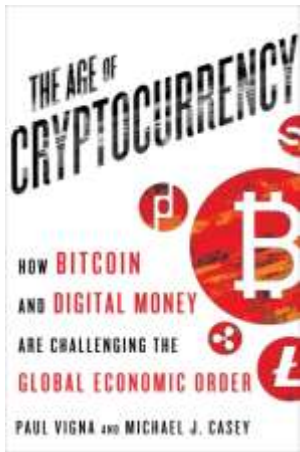
Working principles

- Programmable money
- Not just a currency.
- An exchange of value protocol
- “Blockchain” technology a major breakthrough
- Extensible platform, like TCP/IP
- Warp-speed innovation is underway.

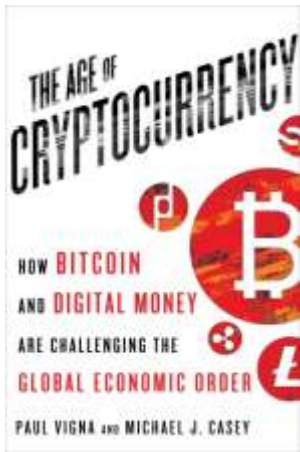


Blockchain attributes

- Decentralized (no one owns it.)
- Fully public, transparent
- Mobile (accessible from anywhere).
- Permanent*
- Irrefutable, inviolable*
- Unhackable*
- Multipurpose*

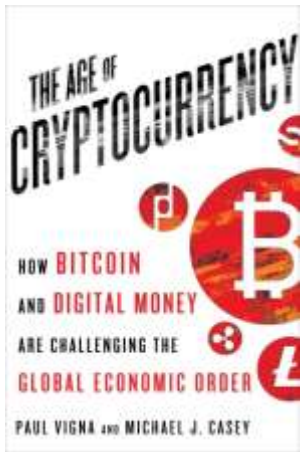


Blockchain 2.0 Applications



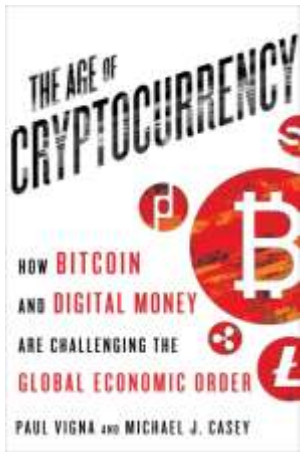
Blockchain 2.0 Applications

- Securitization/tokenization (Counterparty)



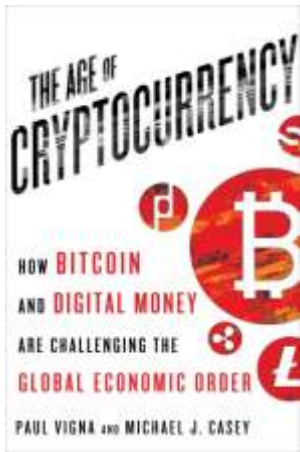
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- Real-time settlement (DAH)



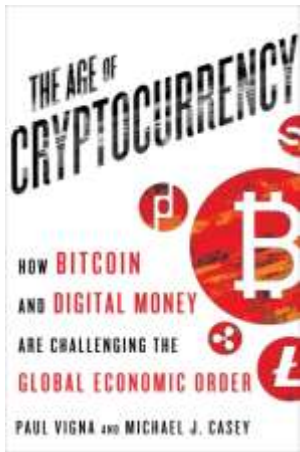
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- Time-stamped record-keeping
 - Easily auditable databases (Factom),
 - Copyright claims (Monograph)



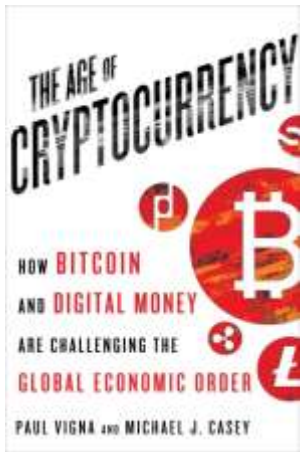
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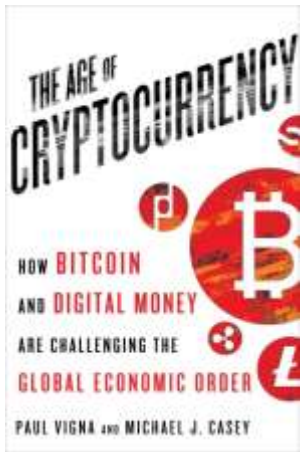
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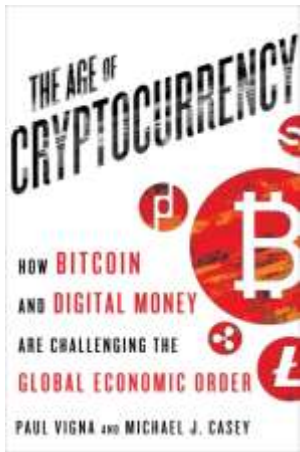
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- Asset registries



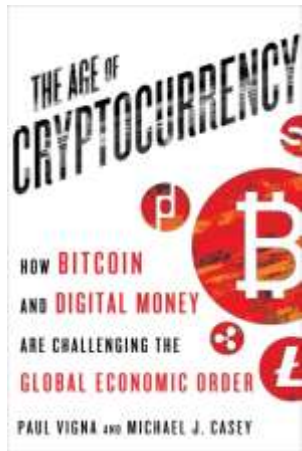
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- Smart contracts – escrow, assurance, CDS



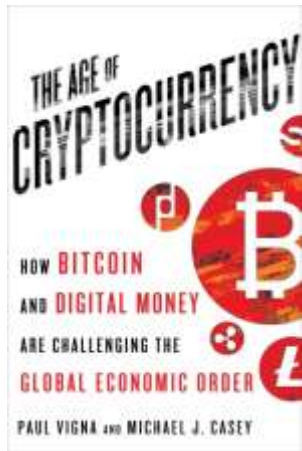
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- Smart contracts – escrow, assurance, CDS
- Sharing – storage (Storj), rides (La’Zooz)



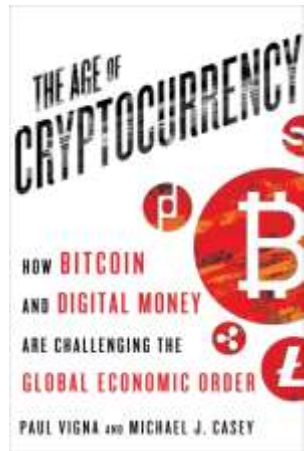
Intersecting Innovations

- Mobile telephony – (almost) global penetration
- Cross-border mobile payment systems (BitPesa).
- HFT for your smartphone – Abra
- Digital identity – MIT Media Lab, IDCubed
- Satellite imagery, mapping tools
- Multi-sig wallets, accounts -- custodial solutions
- Internet of Things
- Distributed networking – power grid.
- Decentralized supply chains – drones
- 3D Printing



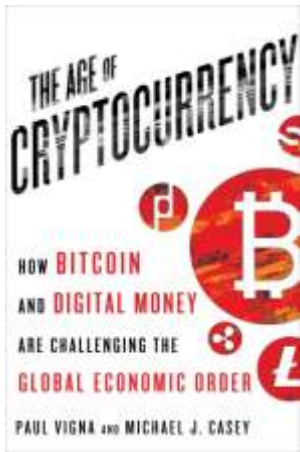
Developing world applications

- Remittances - \$500 billion market.
- The “unbanked”
- The informal economy – property titles.
- Credit scores
- Universal financial access -- 2020
- Financial inclusion – a human right?



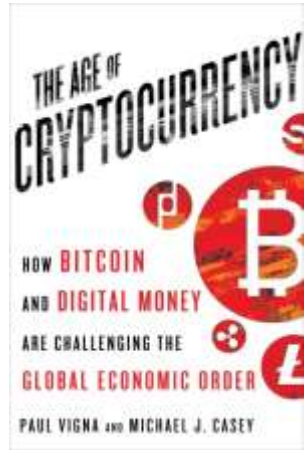
Developing world challenges

- Bitcoin price volatility – there's an app for that
- Broadband connectivity – Google, Facebook
- SMS solutions
- Tech, financial literacy – a killer app?



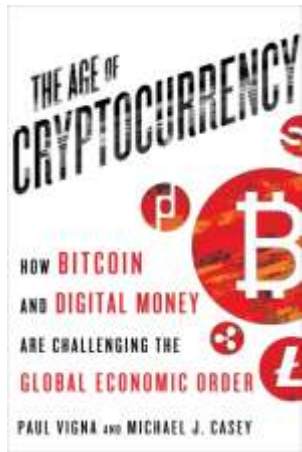
Regulatory challenges

- Square peg meets round hole. (Auger)
- Towards tech-savvy regulation.
- Using the blockchain to (self) regulate
- Mining concentration, opacity.



The future?





How about...self-owned cars?



THE AGE OF CRYPTOCURRENCY

HOW **BITCOIN**
AND **DIGITAL MONEY**
ARE CHALLENGING THE
GLOBAL ECONOMIC ORDER

PAUL VIGNA AND MICHAEL J. CASEY

