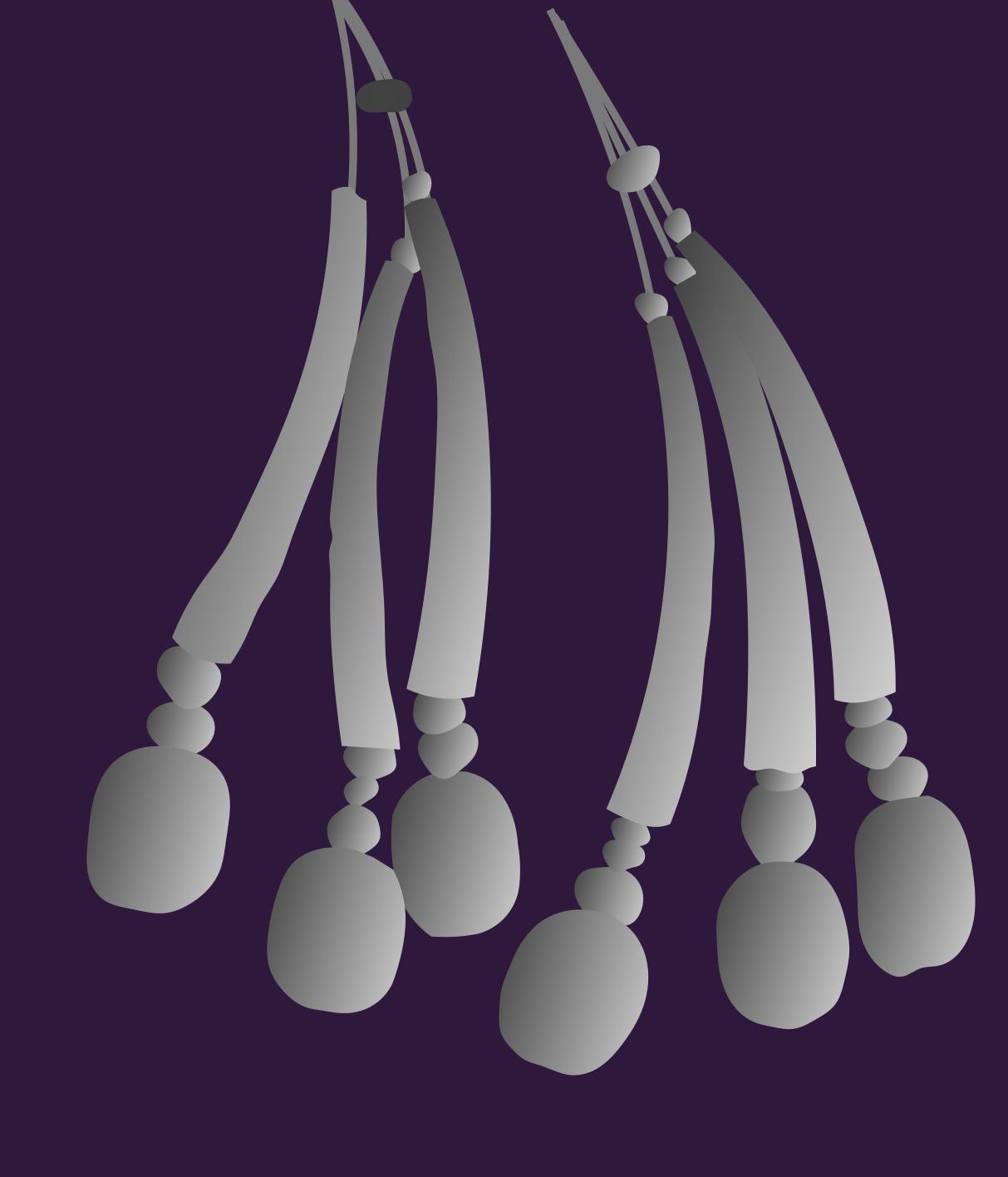
### FINANCIAL EXECUTIVES INTERNATIONAL CRYPTOCURRENCIES





### UNIT OF ACCOUNT SUMERIAN TABLETS





### MEDIUM OF EXCHANGE YUROK DENTALIUM



### STORE OF VALUE MARIA THERESA

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F

2



### FIAT Song Jiaozi



### REPRESENTATIVE POUNDS STERLING



### DISTRIBUTED RAI STONES

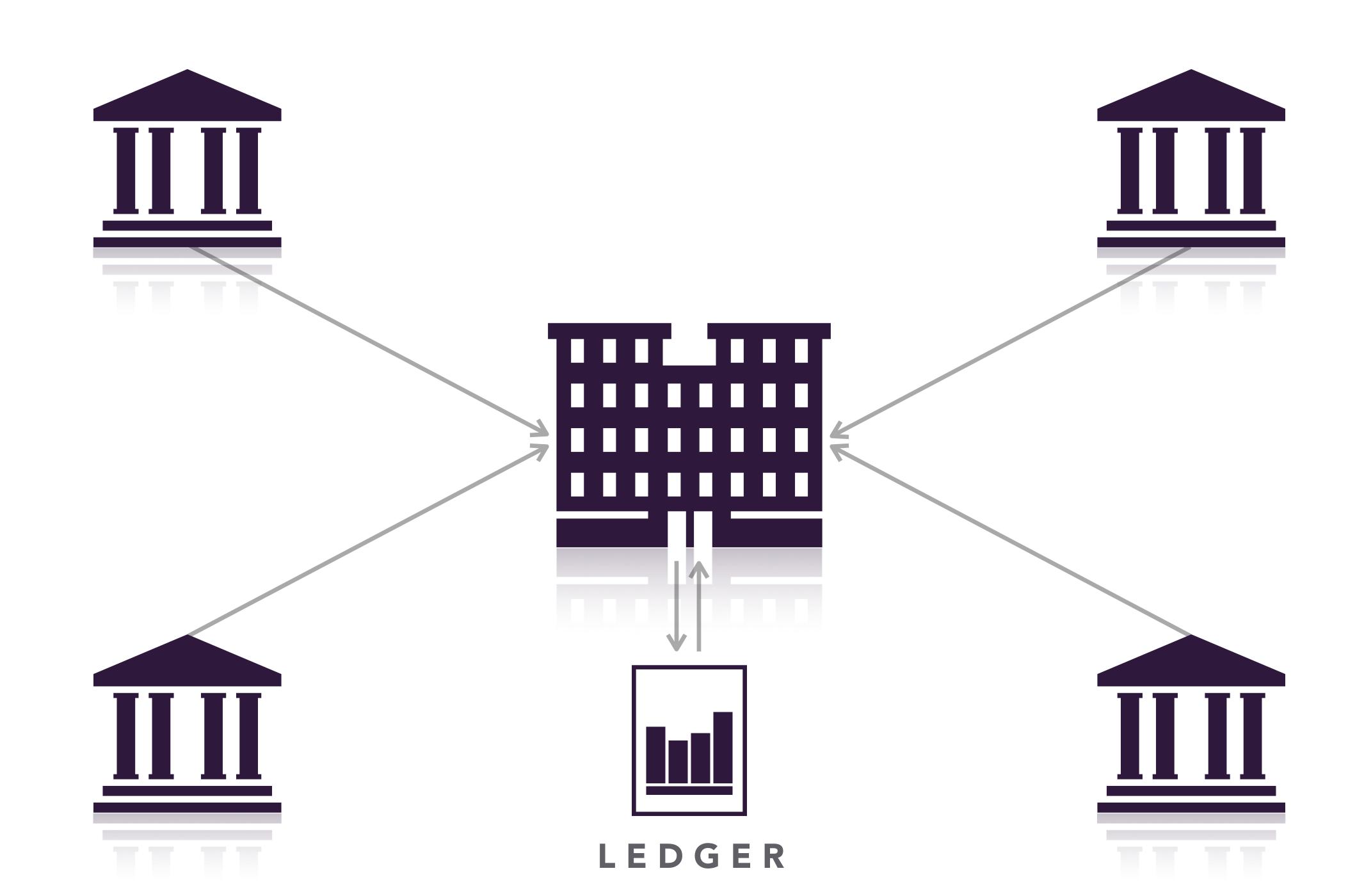
### DIGITAL CURRENCIES DIGITAL REPRESENTATION OF VALUE

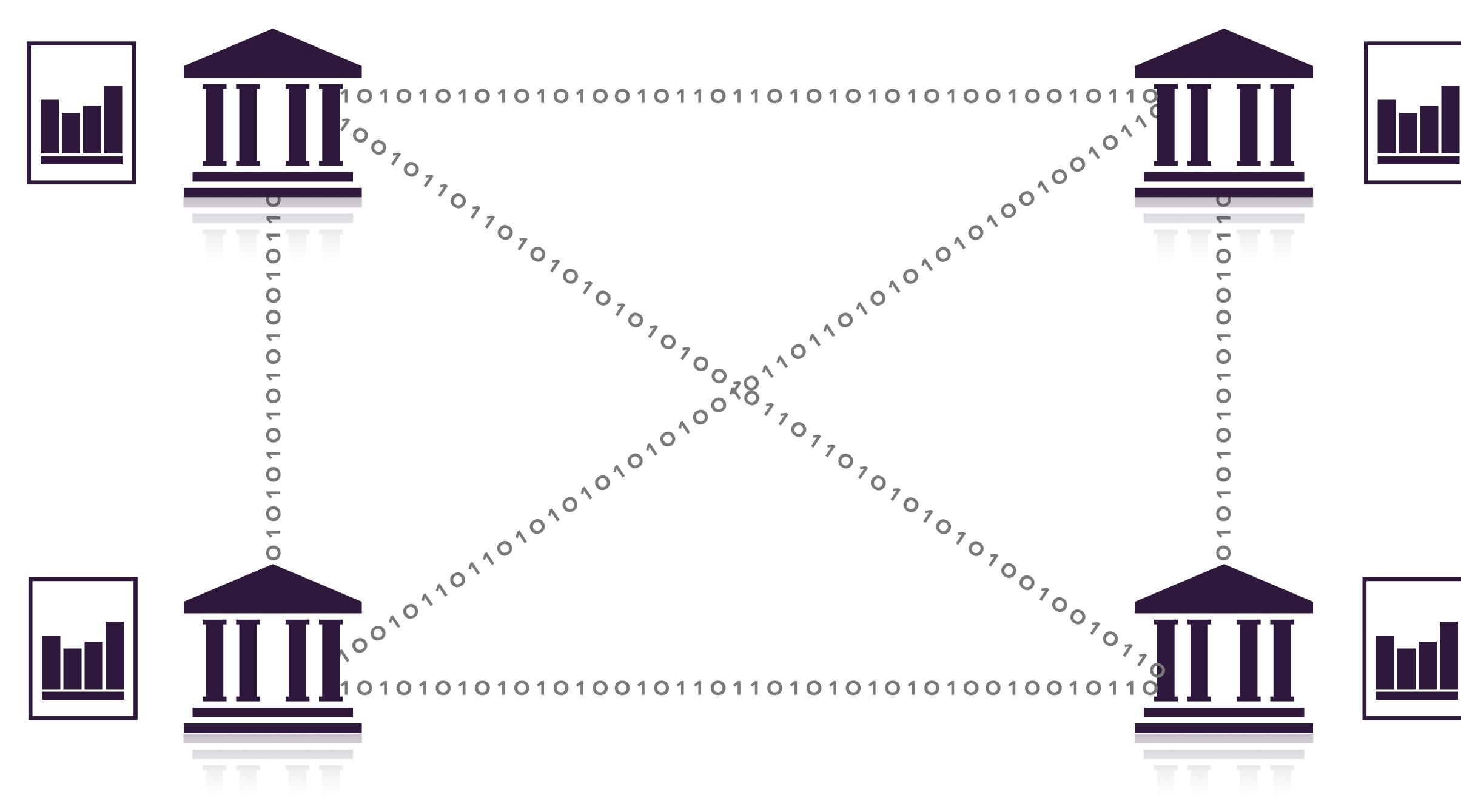
### VIRTUAL CURRENCIES NOT DENOMINATED IN LEGAL TENDER

### CONVERTIBLE CURRENCIES CONVERTIBLE INTO REAL-WORLD GOODS AND SERVICES

DECENTRALIZED CURRENCIES NO CENTRAL AUTHORITY

### **CRYPTOCURRENCIES** CRYPTOGRAPHICALLY VALIDATED









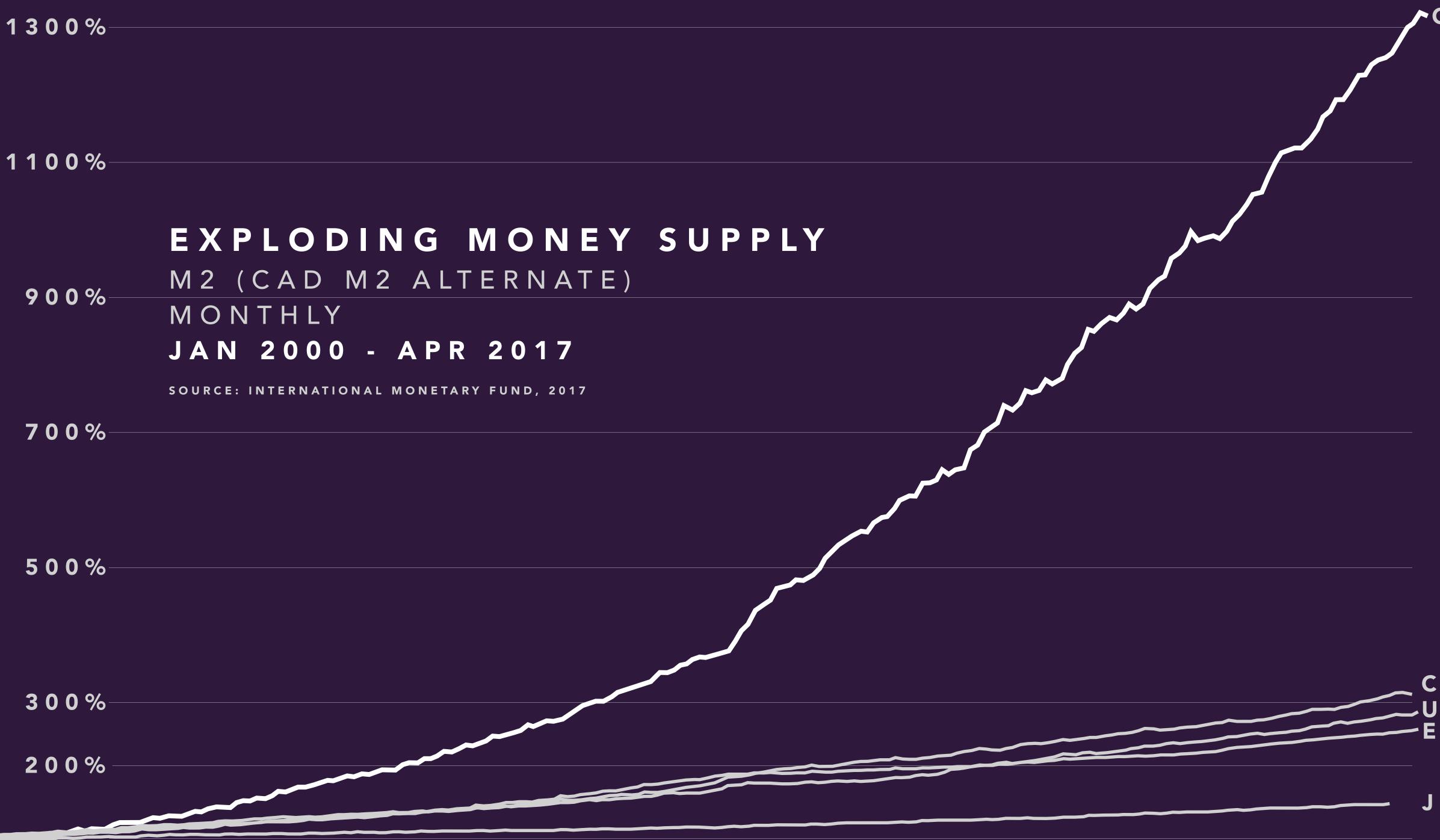
### SOARING VALUATIONS MARKET CAPITALIZATION 650 CRYPTOCURRENCIES, USD JAN 1, 2013 - JUN 6, 2017

SOURCE: COINMARKETCAP, 2017

-----

-100bn -**80bn** 60bn 40bn 20bn

1300%-





CAD USD EUR



### TIGHTER ONSHORE RATES LENDING RESTRICTIONS **RENMINBI APPRECIATION**

INDIVIDUAL TRANSACTIONS CAPPED FOREIGN ACQUISITIONS LIMITED PROFIT REPATRIATION FROZEN



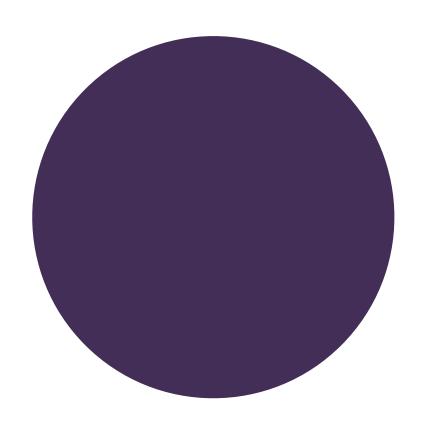
### PROCESSING

**RMB** 

### CRYPTO1001011011010101010CRYPTO

# 

### BUBBLE, BUT...



### AUTOMOBILE 1921-1929

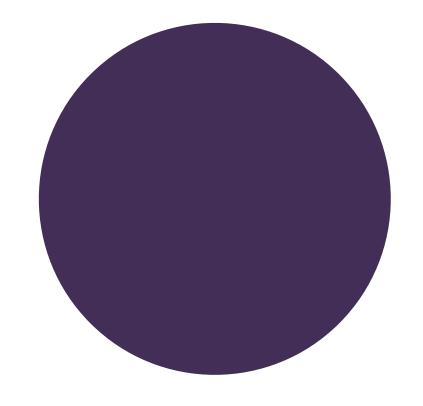
### RAILWAY

1825-1854



### CANAL

1770-1804



TELEGRAPH

1851-1864





SOURCE: GARTNER, 2017

TRIGGER ΡΕΑΚ TROUGH

### EMERGING TECHNOLOGY HYPE CYCLE

ENLIGHTENMENT

PRODUCTIVITY



### MARC ANDRESEN

BITCOIN GIVES US, FOR THE FIRST TIME, A WAY FOR ONE INTERNET USER TO TRANSFER A UNIQUE PIECE OF DIGITAL PROPERTY TO ANOTHER INTERNET USER, SUCH THAT THE TRANSFER IS GUARANTEED TO BE SAFE AND SECURE, EVERYONE KNOWS THAT THE TRANSFER HAS TAKEN PLACE, AND NOBODY CAN CHALLENGE THE LEGITIMACY OF THE TRANSFER.

THE CONSEQUENCES OF THIS BREAKTHROUGH ARE HARD TO OVERSTATE.

### What would happen if your country issued a digital currency like Bitcoin? -----





# FEI CANADA CONFERENCE: Reaching for the Peak, Whistler, B.C. **Cryptocurrency Ecosystem** What every CFO should know

Manie Eagar, CEO - DigitalFutures Chairman - Blockchain Association of Canada

June 16, 2017

- Chairman of the Blockchain Association of Canada.
- CEO DigitalFutures B.U.I.L.D. (Blockchain Usercentric Innovation & Leadership Development)
- First ever Blockchain & Fintech Study in Canada: Blockchain and Emerging Financial Technologies: Positioning British Columbia as a Global FinTech Hub.
- First ever crowdsourced FinTechBook contributing author - an Amazon bestseller.
- Legal background with an international career in investment management, financial services, telecommunications, information technologies and digital media; and the convergence with digital currencies and blockchain technologies.
- Advisor to a number of blockchain startups and ICOs.

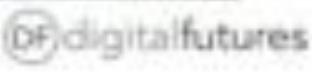






Blockchain and Emerging Financial Technologies: Positioning British Columbia as a Global FinTech Hub

### An Advantage BC Report In partnership with HQ Vancouver December 7, 2016



### **Cryptocurrencies: What Every CFO Should Know**

### Key Questions:

- What are cryptocurrencies, and where did they come from?
- How does cryptocurrency technology work?
- Why have cryptocurrencies become so popular, so quickly?
- How are companies and financial institutions protecting themselves against risk?
- What opportunities are being created for Canadian businesses?
- How could cryptocurrency technologies change the world?

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# What is a cryptocurrency?

- A type of digital token that relies on cryptography for chaining together digital signatures of token transfers, peer-to-peer networking and decentralization.
- There are currently over 850 types of cryptocurrencies. More than 100 of them have a market capitalization of over \$10 million each.
- The overall cryptocurrency market cap has passed \$120bn.





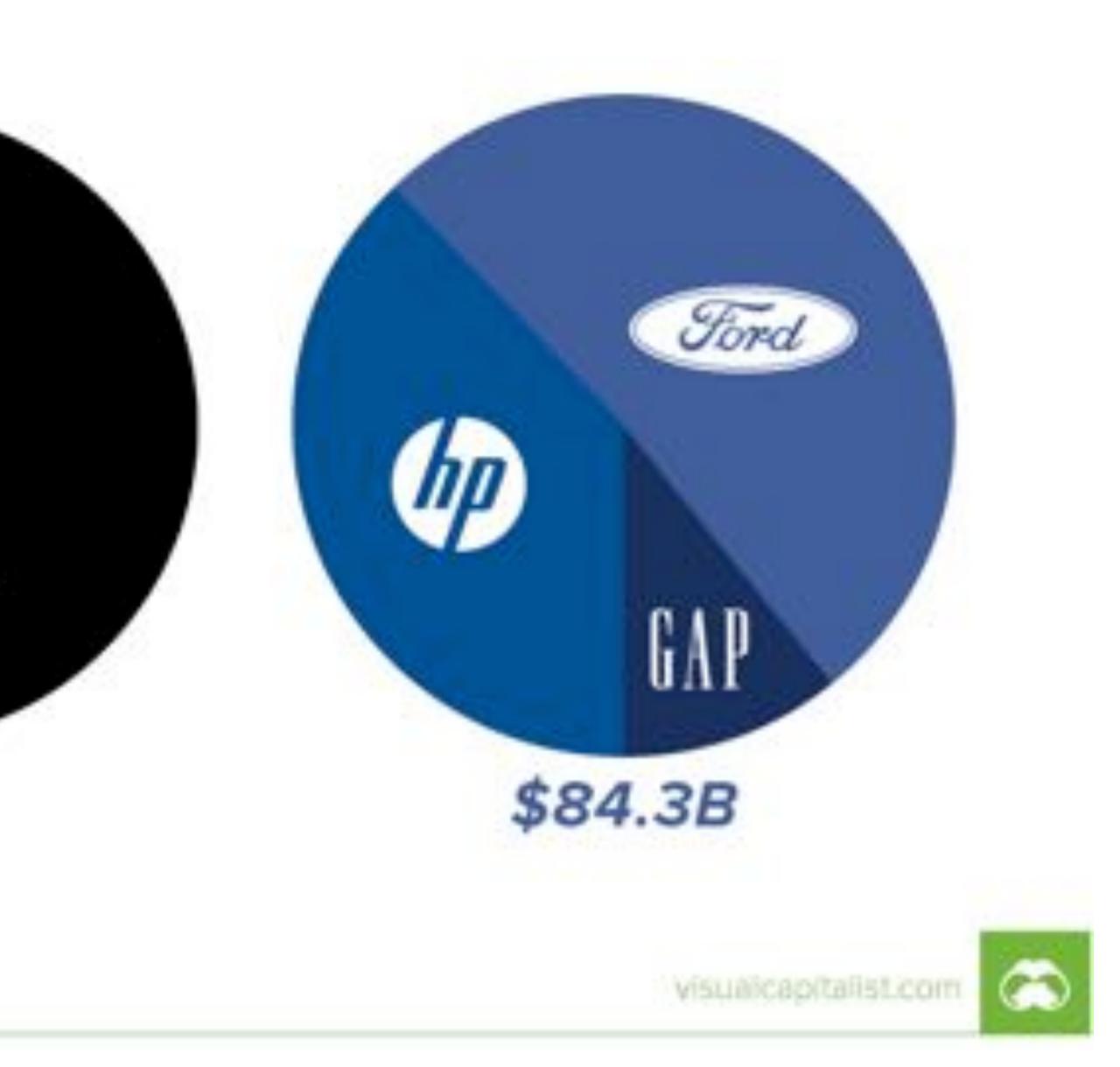
### MUSHROOMING COIN VALUES

All of the top cryptocurrencies experienced gains in 2016, and their combined valuation is beginning to rival some of America's largest corperations. ethereum •tripple Bbitcoin

AND ALL OTHER CRYPTOCURRENCIES

\$76.5B

SOURCE: Criminals, communitationcom. Market care retriesed on May 26th, 2017





- The first blockchain was conceptualised by Satoshi Nakamoto in 2008 and implemented the following year as a core component of the digital currency bitcoin, where it serves as the public ledger for all transactions.
- The invention of the blockchain for bitcoin made it the first digital currency to solve the double spending problem, without the use of a trusted authority or central server.
- The bitcoin design has been the inspiration for many other applications.

## The first cryptocurrency





# The Original Blockchain

### The bitcoin blockchain is:

- A distributed, secure, transparent, public ledger that establishes ownership and allows for the efficient exchange of ownership.
- Available to anyone for download on the Internet (decentralized)
- Does not depend on trust (controlled by no one monitored by everyone).
- Backed by strong cryptography secured by the world's most powerful network of computers.
- Miners provide security and are rewarded with new cryptocurrency.



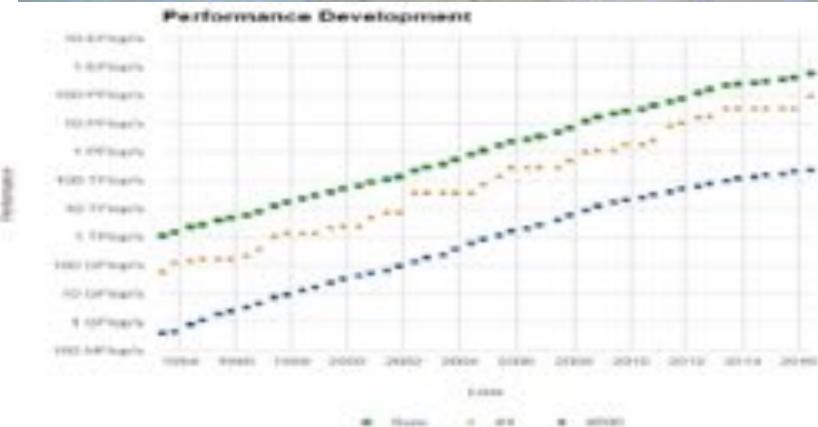


# How powerful?

- Currently 20,507,779 petaFLOPS.
- #1 supercomputer is Sunway Taihu Light at 93 PetaFLOPS.
- Sum of top 500 is only 593 petaFLOPS
- Blockchain uses specialized hardware • and floating point operations are not needed.
- Cost of the network power is about \$2 billion.

<u>http://bitcoincharts.com/bitcoin/ http://www.top500.org/ https://www.top500.org/statistics/perfdevel/</u> (20 zettaFLOPS)





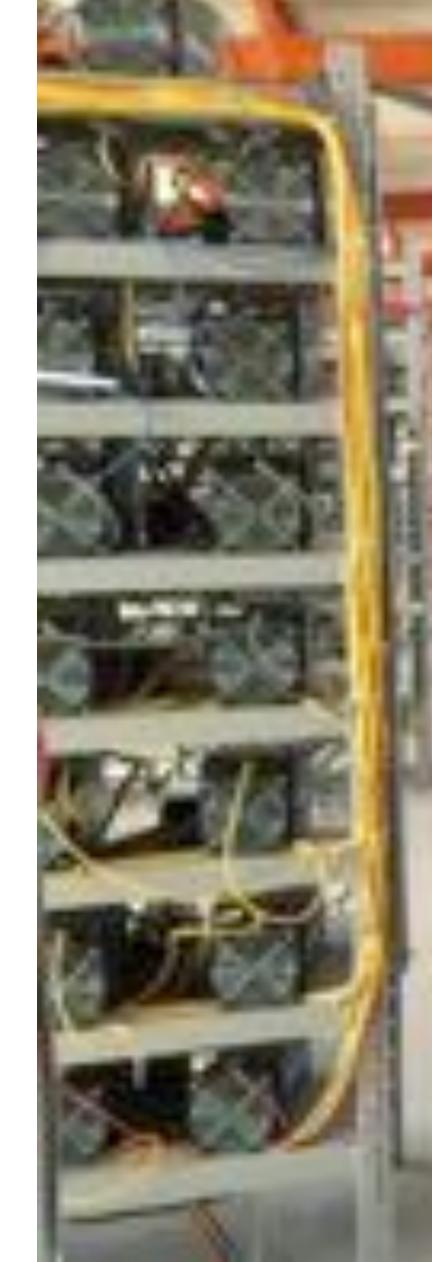
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### Chandler Guo, biggest bitcoin mining farmer in China



### Bitcoin puts Vancouver in the crypto money

### The world's first bitcoin ATM helps Vancouver make financial history.

The machine, which went into operation **Tuesday inside Waves Coffee House at** Howe and Smithe streets, converts bitcoins into dollars and dollars into bitcoins, an anonymous digital currency that is distributed online, peer-to-peer without any central authority and can be used at a growing number of Vancouver retailers and online merchants around the globe.

http://www.vancourier.com/news/bitcoin-puts-vancouver-in-thevirtual-money-1.678225#sthash.tAhFjDRa.dpuf



Vancouver Courier, October 30, 2013





# Digital Currency Canada

### **Bank of Canada**

- Project Jasper PoC (with Payments Canada)
- Discussion Paper: Central Bank Digital Currencies: A Framework for Assessing Why and How

### Senate Banking study

• Digital Currency – You Can't Flip This Coin

### **PROJECT JASPER**

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- artista · Taranta Canada
- **Financial Services**
- Jun-2014
  - Exploring the possibility of issuing, transferring and setting central bankissued assets on a distributed ledger network.
- Minister . CBC, Bank of Montreal, Royal Bank of Conada, TD Bank, Scotlabank, Bank of Canada, Payments Canada, R3.
- Leaders . Payments Canada, Sank of Canada

**Digital Currency:** You Can't Flip This Coin!

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### Bank of Canada Digital Currency Study

- Privately held digital currencies are a threat to the Canadian economy and that government intervention will be a requirement for both privately-issued and government-issued digital currencies.
- "...well designed and managed private digital currencies could circulate widely but only with appropriate government regulation to ensure their safety, soundness, and uniformity."

"Canadian Bank Notes and Dominion Notes: Lessons for Digital Currencies" Bank of Canada working paper, Feb 2017





# Global 'CoinLaws'

### B Perkins Cole CoinLaw PERKINSCOIE Argentina CoinLaw Australia Austria Belgium Int'l Coin Law Bolivia Brazil Bulcaria Canada China

### Canada

Virtual currencies are not legal tender in Canada and reportedly, virtual currency exchanges are not subject to money laundering regulations. Virtual currencies, however, are subject to goods and services and capital gains taxes, and money laundering and terrorist financing laws.



### The Cryptocurrency ecosystem e.g. Bitcoin & Ethereum

- Crypto assets: Digital products and services
- Crypto currencies: Bitcoin, altcurrencies, digital currencies, virtual currencies
- Crypto transactions: mining, transaction verification, clearing and settlements
- Crypto exchanges: Digital asset value exchanges; interexchanges • Crypto funding/finance: P2P lending, ICO/TGE, token based shares and investments, loyalty and rewards (redeemable?)





### The state of the cryptocurrency ecosystem

- There are <u>up to 6 million individual active users</u> of cryptocurrency. <u>Up to12 million wallets</u> "active" today with - 52% of wallets are integrated with currency exchanges.
- 80% of cryptocurrency payments linked to banking institutions and payment networks.
- National-to-cryptocurrency payments 2/3 of payment transaction volume.
- Europe, Japan, Denmark bitcoin tax free.
- IRS, Revenue Canada bitcoin taxed.
- More money raised through ICOs than traditional VCs.

"Global Cryptocurrency Benchmarking Study" Cambridge, 2017





# Should Invest in Bitcoin?

- Billionaire investor Mike Novogratz says he has 10% of his money in Bitcoin and Ether  $\bullet$ (a former hedge fund manager at Fortress Investment Group and a Goldman Sachs partner who made the Forbes billionaire list in 2008).
- Private and institutional investors are adding crypto assets and currencies to their ulletportfolios.
- Cryptocurrency funds are a small but growing share (5-10%) of a \$24B asset class.  $\bullet$ – Public buy and hold funds like GBTC (Grayscale's Bitcoin Investment Trust) are
  - the largest and best known.
  - Private buy-and-hold funds
  - Hedge funds.
- This market is predicted to grow exponentially over the next 3 years.  $\bullet$

https://seekingalpha.com/article/4052276-cryptocurrency-funds-arrived-bringing-wall-street-money



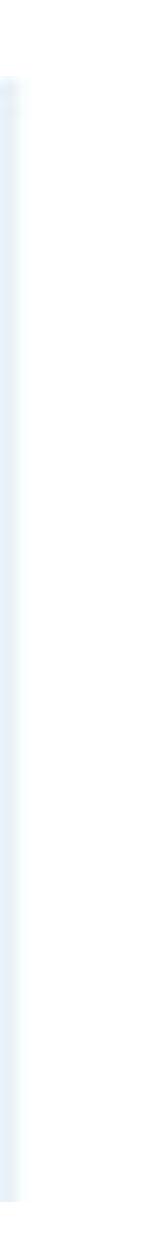


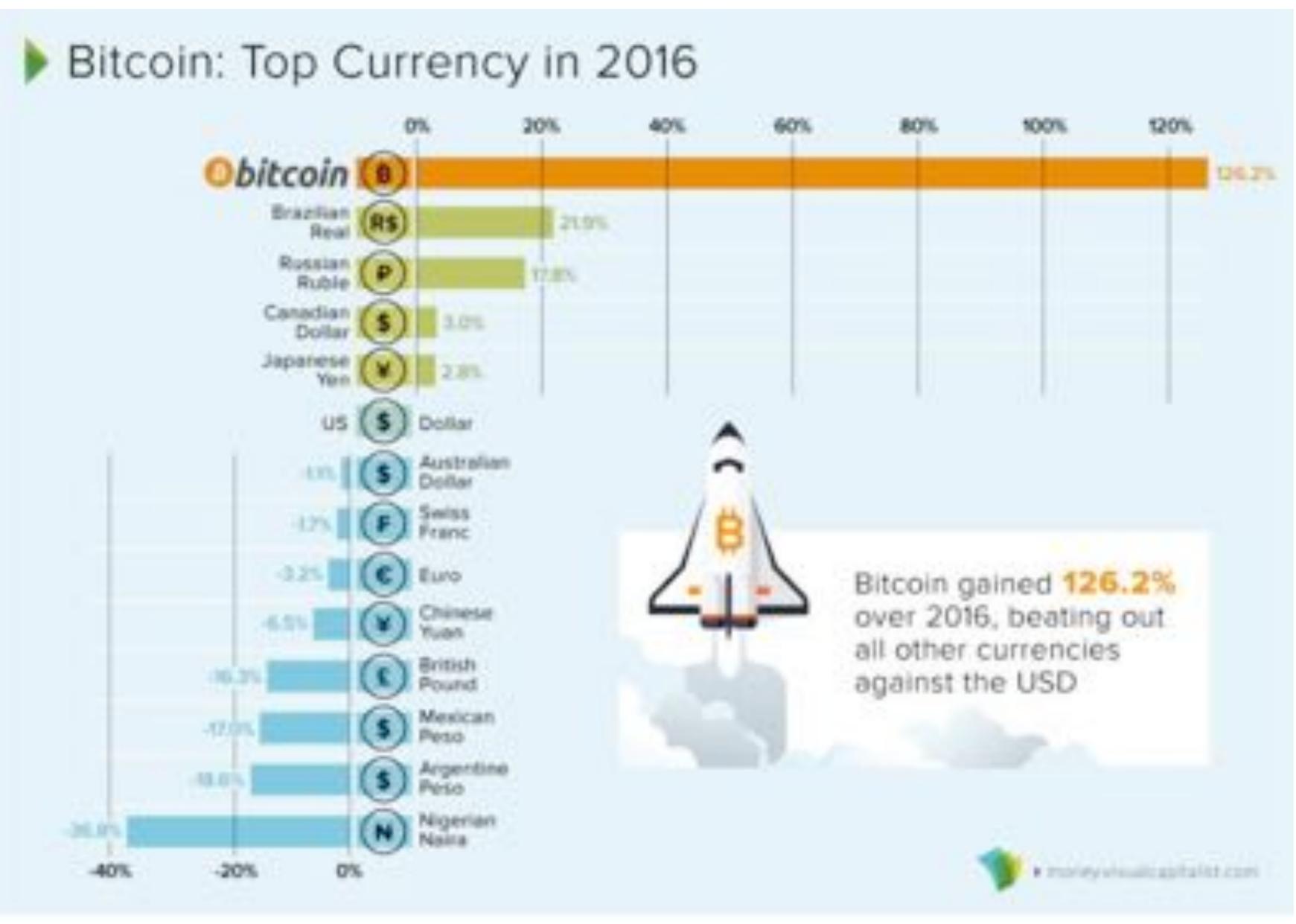




Bitcoin has seen some extreme swings in its short history.







### **Cryptocurrency will Fuel the Digital Economy**

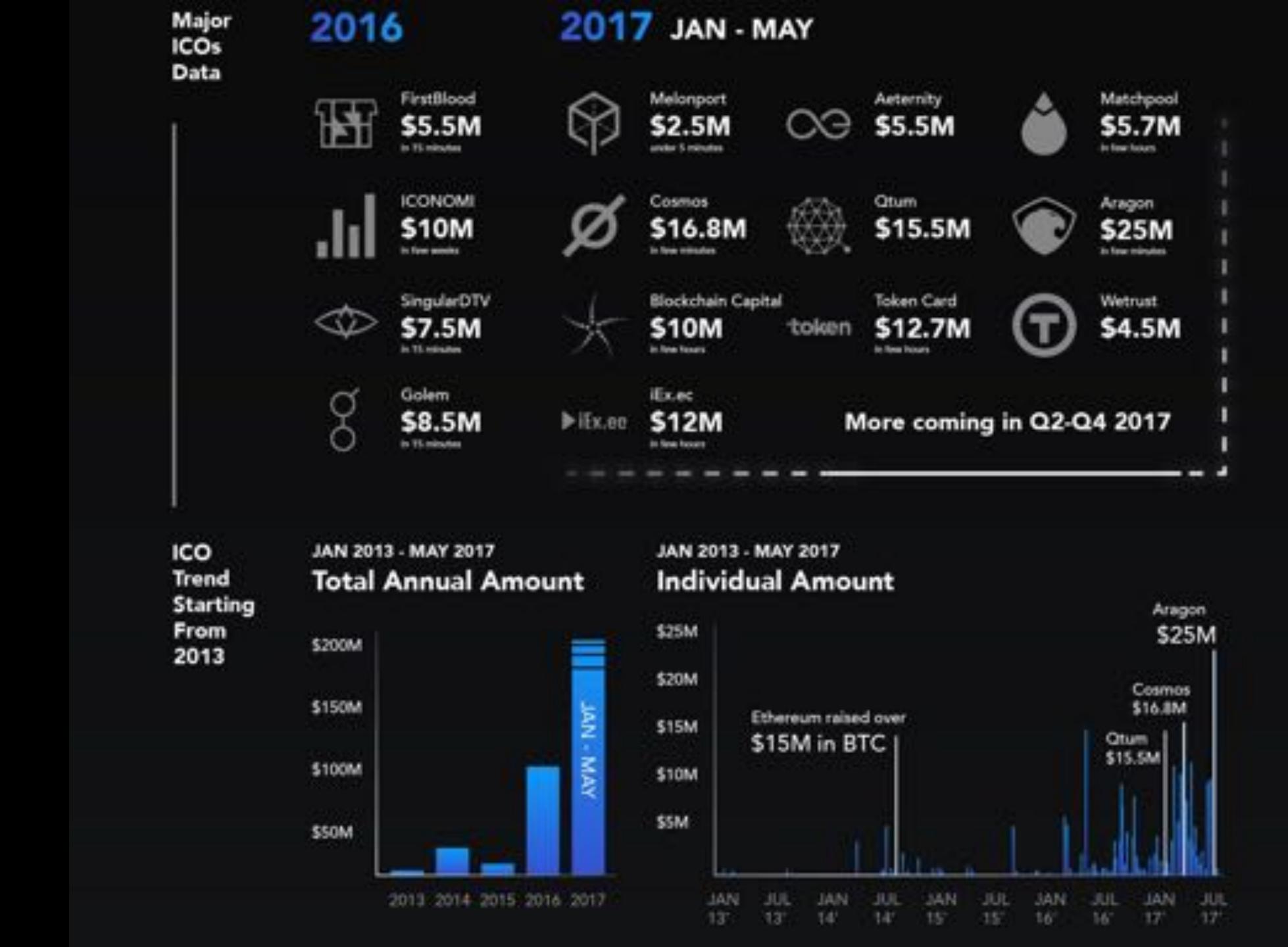
- Reaching the financially underserved 2,5bn people on the planet.
- Forex & Remittances.
- Trading & settlement.
- Micropayments.
- ICOs/TGEs overtaking VC funding.

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### 2017 already surpassed 2016! Growth of Crypto-Currency Industry is Accelerating.







### THE BLOCKCHAIN MEETS THE STOCK MARKET

### We're building a decentralized securities platform called... Equibit

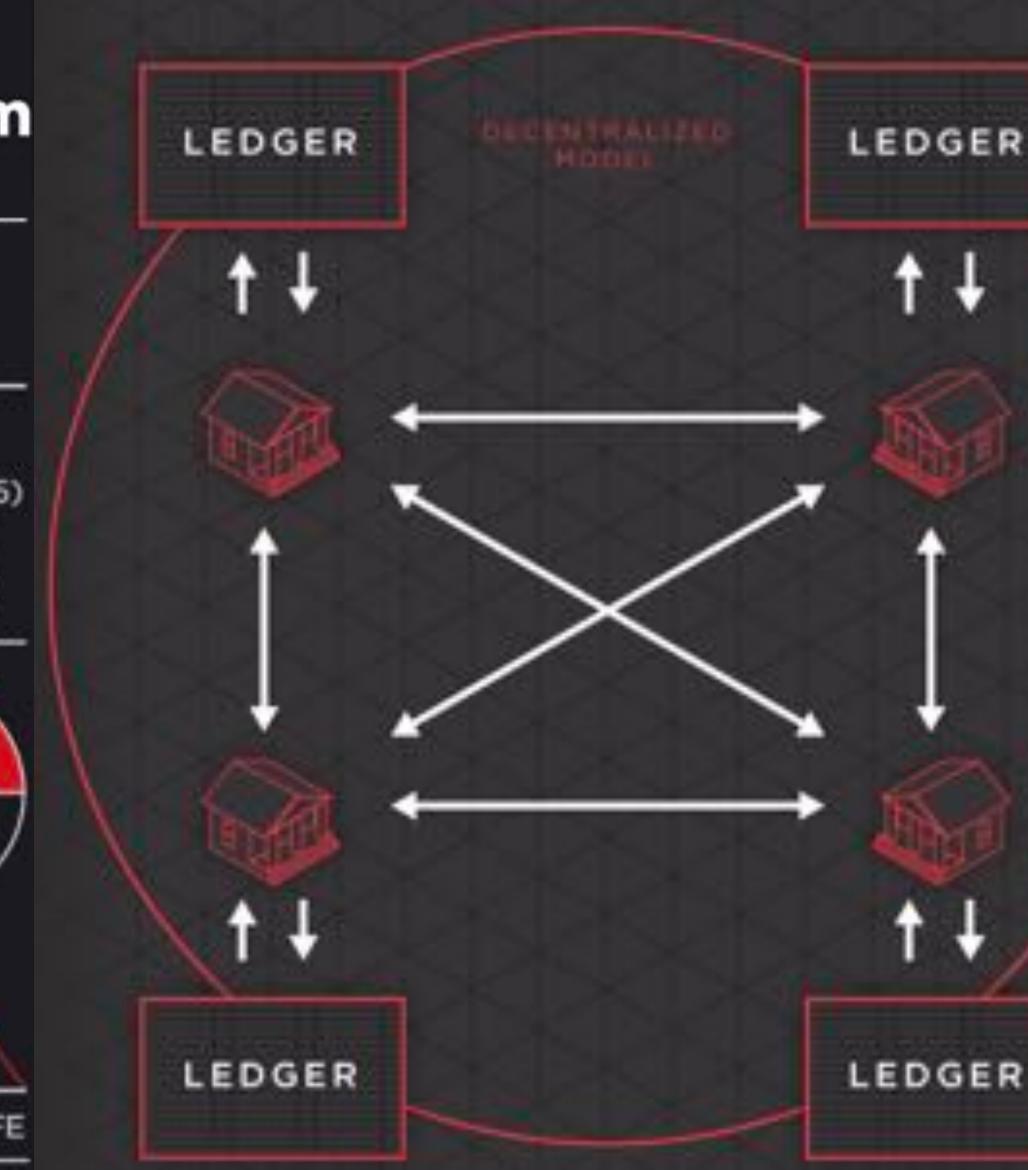
There are over 130 transfer agents in the USA and Canada, maintaining records of more than 100 million shareholders on behalf of 15,000+ issuers.

### MARKET TRANSFE AGENTS 1 OTC (N.Am.) 15,000+ (Oct 2015) 2 NYSE O USA & CANADA **3 NASDAQ** 4 TMX Group



KEEPING: 100.000.000 SHAREHOLDERS RECORDS Securities Transfer Association, WFE

Instead of putting all stock transactions through a centralized hub, the blockchain can be used to directly transfer share ownership between investors.



### # OF ISSUERS

2,446 (Oct 2015) 2,859 (Oct 2015) 3,590 (Oct 2015)





### Canadian FinTech & Blockchain Ecosystem (First Canadian Blockchain & Fintech study in BC)

Blockchain Shared ledger technology

Predictive Analytics Big Data

Digital (crypto) currencies Wealth Management Personal finance Loyalty

Digital banking Mobile payments Digital Identity Verification Security Accounting Auditing Financial Management Compliance

Crowd funding Investments Venture Capital

FinTech + Blockchain Securities Settlements Digital Asset Management & Value exchange

Foreign Exchange Remittances

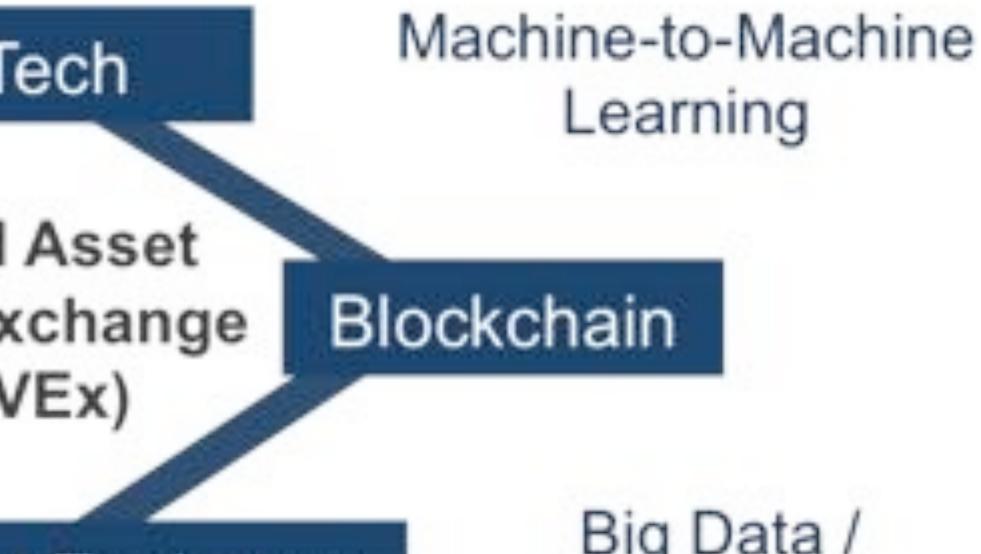
Payment Processing & Transfers

P2P Lending



### **Blockchain+ Convergence Enterprise ready?**

### Artificial Intelligence / FinTech Robo advisors **Digital Asset** RegTech Value Exchange (DAVEx) Internet of Things / **Digital Asset Exchange** Internet of Value **Digital Transformation Journey** (DF) digital futures



### Big Data / **Predictive Analytics**

### **Regulatory & Governance Ecosystem**

Regulators Legislators Jurisdictions

Developers Managers

Society Citizens Consumers

Platform Community

Standards Authorities

Jser Groups

Issuers Transaction Processing

Market Sectors Industry Players

### Crypto currencies

Traders Exchanges Investors

Public Protectors Interest Groups

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Business Partners

Governing Bodies



# (DF) digital futures B.U.I.L.D.

Blockchain User-centric Innovation & Leadership Development

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