

"Bitcoin and Virtual Currencies: More Than Meets the Eye for Financial Managers"

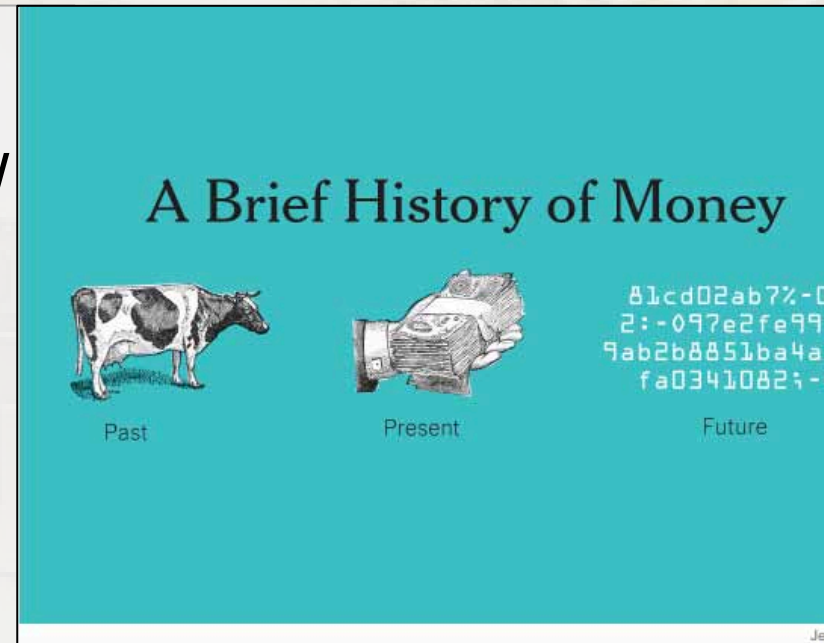
SoCal AFP Annual Expo
25 April 2014
Steve Mott
Principal—BetterBuyDesign

Intended Outcomes for Today

- *Attendees will gain insight on what the real prospects for Bitcoin and other virtual currencies are to revolutionize payment channels (pipes) to gain big efficiencies in B2B and other commercial transacting.*
- *Mathematical cryptography in software IS the future of payments, which is why Corporate Treasury departments are so interested.*
- *But getting security, auditing and commercial infrastructure 'wrapped around the new pipes' IS the challenge now.*
- *A view on emerging regulation and legal problems will be discussed in the context of the considerable push from lots of players to get virtual currencies into the mainstream quickly.*
- *Implications abound for everyone in the payment/transacting ecosystem.*

What You Need to Know About Virtual Currencies

1. What's all the fuss about?
2. Bitcoin: The Virtual Currency
3. Fit in Regulatory Environment?
4. The Virtual Currency Ecosystem
5. Bitcoin: The digital technology
6. What applications might exist for Finance/Treasury departments?



1. What's All the Fuss About?

- News captures public's fancy
- Current political environment invites a digital alternative to central bank 'whims'
- Celebrities get involved, and government steps in—softly at first
- Word of mouth spreads: YOU can make money
- ...and insist it's already going mainstream
- But failures and fraud problems abound, making following it *de rigueur* for the digerati

Information Stream Exploding



CoinDesk
The Voice of Digital Currency

CoinDesk Bitcoin Price Index ⓘ

\$124.46

£77.32

€91.93

Last updated: Sep 27, 2013 at 14:06 BST



NEWS

News & analysis

INFORMATION

What is bitcoin?

PRICE

Current bitcoin price



Who is right? Winklevosses for, Peter Thiel against bitcoin

Published on September 26, 2013 at 16:40 BST | By Daniel Cawrey | Analysis

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Share 1

It is quite evident that when **influential people talk about bitcoin**, the masses listen. Strike up a conversation about virtual currencies with an everyday person in your life, and they will recall information received from major news outlets. Mainstream media likes to put things in a neat package so they're easily understood.



A beginner's guide to bitcoin

Bitcoin is a digital currency that is being used increasingly all over the world. Find out more about how it works and how you can use it with our straightforward guides.



What is bitcoin?

It's a decentralized digital currency



Why use bitcoin?

It's fast, cheap to use, and secure

Bitcoin Founder Discovered?

DealBook: Newsweek Unmasks Bitcoin Founder, Stirring Ire: An article about a man in Southern California named



David McNew/Reuters The person whom Newsweek identified as Satoshi Nakamoto, the founder of Bitcoin, was surrounded by journalists at his home on Thursday. The man denied the claim. Updated, 9:42 p.m. | Even as it has grown into a new type of digital money worth billions of dollars, Bitcoin has always retained an air of mystery. Central to its cachet has been the mythic status of the system's creator. Its developer went by the name Satoshi Nakamoto, but that is all that Bitcoin's adopters seemed to know — or wanted to know. After all, Bitcoin was a project dedicated in

part to making it easier to avoid the all-seeing gaze of the government and corporate America. But the inventor of the virtual currency may not be quite the international man of mystery that some aficionados imagined him to be. Could he in fact be a model-train fanatic living with his mother in a modest hous...

Romantic Notion of Financial Libertarianism



Sean Gallup/Getty Images

TWO SIDES OF DEBATE A Berlin pub keeps the faith.

Advocates Seek Freedom to Make Money



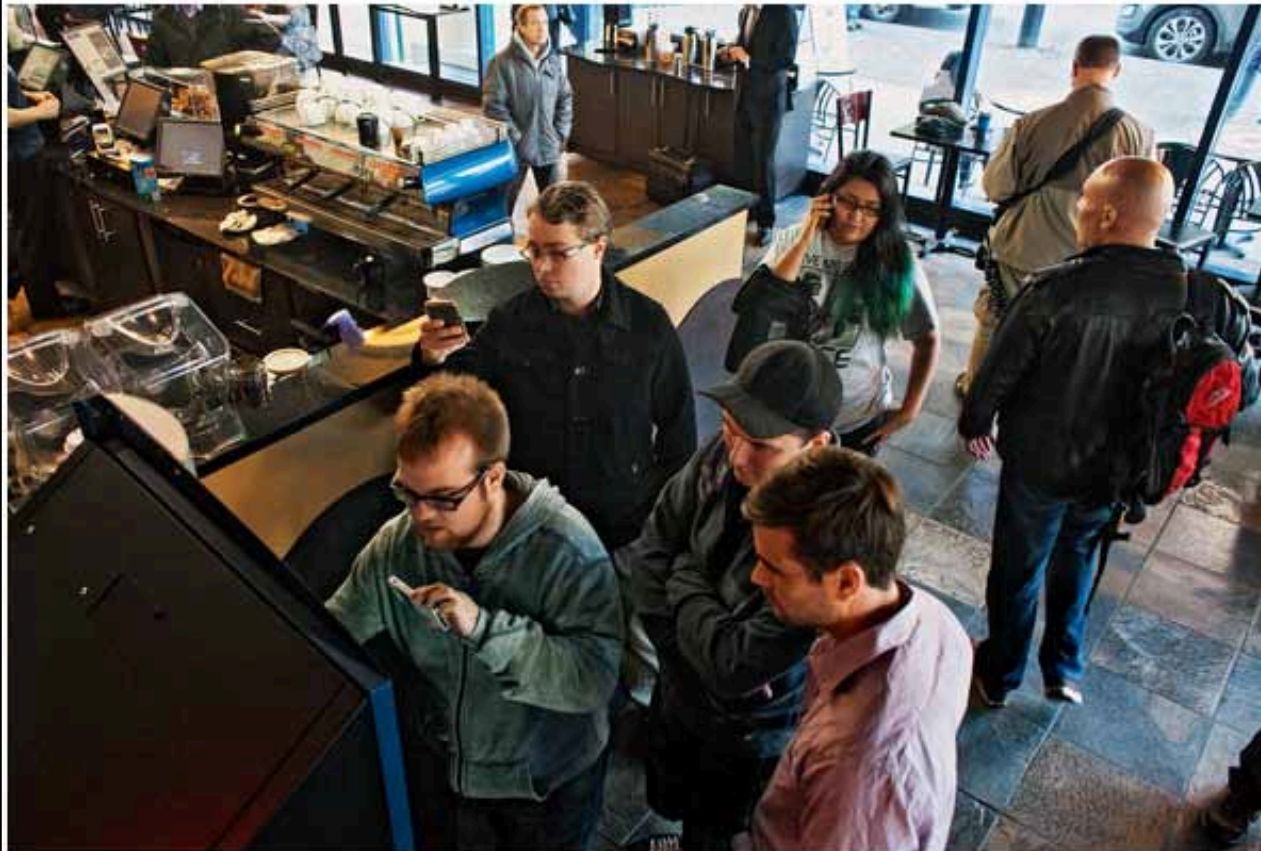
Lucas Jackson/Reuters

WITNESSES In January, venture capitalists and Bitcoin investors testified at a New York State hearing in Manhattan: left to right, Barry Silbert of SecondMarket and Bitcoin Investment Trust; Jeremy Liew of Lightspeed Venture Partners; Fred Wilson of Union Square Ventures; and Cameron and Tyler Winklevoss.

Movement to Mainstream Inexorable?

Makers of Bitcoin A.T.M.'s See a Not-Quite-Cashless Future

By NATHANIEL POPPER MARCH 31, 2014, 5:49 PM 6 Comments



David Ryder/Getty Images

GRABBING COFFEE, AND A FEW COINS Curtis Machek, left, uses a Bitcoin A.T.M. at a coffee shop in Vancouver.

Cryptex's Debit Card Aims to Widen Bitcoiners' Spending Options

ARTICLE COMMENTS (1)

BITCOIN



By MICHAEL J. CASEY CONNECT



—Agence France-Press/Getty Images

A new debit card-based digital currency service aims to get around one of the biggest problems faced by holders of bitcoin: the very limited number of outlets for spending or converting their digital currency.

Hong Kong-based startup Cryptex Card provides an online service for quickly converting bitcoins into dollars and loading them on a card that can then be used at ATMs and merchant-based point-of-sale card readers. The card, which will function like a prepaid debit card, will be issued under a license tied to Chinese card provider Union Pay, which is accepted in outlets all around the world including the Discover card network in the U.S. Cryptex co-founder and Chief Executive Officer Jamon Rahn estimates that holders of the card will be able to use it at 90% of the world's existing ATM and merchant outlets.

The project, which will be launched Monday at the "Inside Bitcoins" conference in New York, is the latest attempt to resolve bitcoin's so-called "gateway" problem. Converting bitcoins into traditional currencies for simple purchases has been a major headache for users of the cryptocurrency.

Cryptex: Just Load It on a Debit Card

"Bitcoin is the fastest way to transmit money but it is currently really prohibitive on what you can spend it and where you can turn it back into money for everyday use," said Rahn in a telephone interview from Singapore. "Cryptex allows people to have greater convertibility of their bitcoin holdings."

Other initiatives to attempt to make easier to convert bitcoins into traditional currencies include the special bitcoin ATMs developed by firms such as Robocoin and Lama and the network of local outlets providing exchange services managed by a firm called ZipZap.

Cryptex's backers argue that their plan would give holders of bitcoin considerably more flexibility and greater options for using the digital currency. That, in turn, will promote greater bitcoin adoption, they say.

Like many bitcoin businesses, Cryptex is grappling with an evolving regime of regulations as governments seek to take greater control over an industry that has been hit with money laundering charges and other scandals.

Cryptex customers will be put through identity checks in compliance with standard money-laundering and "know-your-customer" regulations, said Mr. Rahn, who like Hong Kong-based co-founder and Chief Technology Officer Andy Cheung, has a background in payment services.

In the U.S., Cryptex will impose daily limits on the amount of money that can be loaded on to a card in compliance with money transmitter rules. It's not clear what other U.S. rules Cryptex will have to meet. Federal regulators have insisted that bitcoin exchange and payment processors obtain state money transmitter licenses and register with the Treasury Department's Financial Crimes Enforcement Network.

For now, Cryptex can complete a conversion in around 24 hours. Mr. Rahn said he expects a fully automated process will be in place by the early summer to allow instantaneous conversion and card-loading for immediate use for ATM withdrawals and purchases.

Currently, the card can only load dollars but Mr. Rahn says there are plans to build capabilities for other currencies.

Cryptex charges no fee for producing or delivering the card. Much like a traditional currency broker or bureau de change, it profits by charging an exchange rate above the rate at which it purchases dollars on bitcoin exchanges. Mr. Rahn said that more favorable rates will be available for customers who make larger purchases. Separate ATM fees apply in most cases.

Seed investors in Cryptex include Tero Ojanperä, managing partner of Finland-based venture capital firm Vision+Fund and a member of the Executive Board of Nokia Corp. Ken Hertz, a senior partner at law firm Hertz Lichtenstein & Young and an early investor in music streaming service Spotify AB, and Michael Terpin, a member of the BitAngels network of digital-currency-focused angel investors.

"I have no doubt that there will be competitors to follow [Cryptex], when they are able to figure out their own secret sauce of finding a cooperative bank, a payment network and a payment processing technology that all seamlessly work together," said Mr. Terpin. In the meantime, Cryptex is positioned for fast growth."

But Failure and Fraud Problems Mount



Toru Hana/Reuters

TWO SIDES OF DEBATE Kolin Burges protests against Mt. Gox, the failed Bitcoin exchange based in Tokyo.

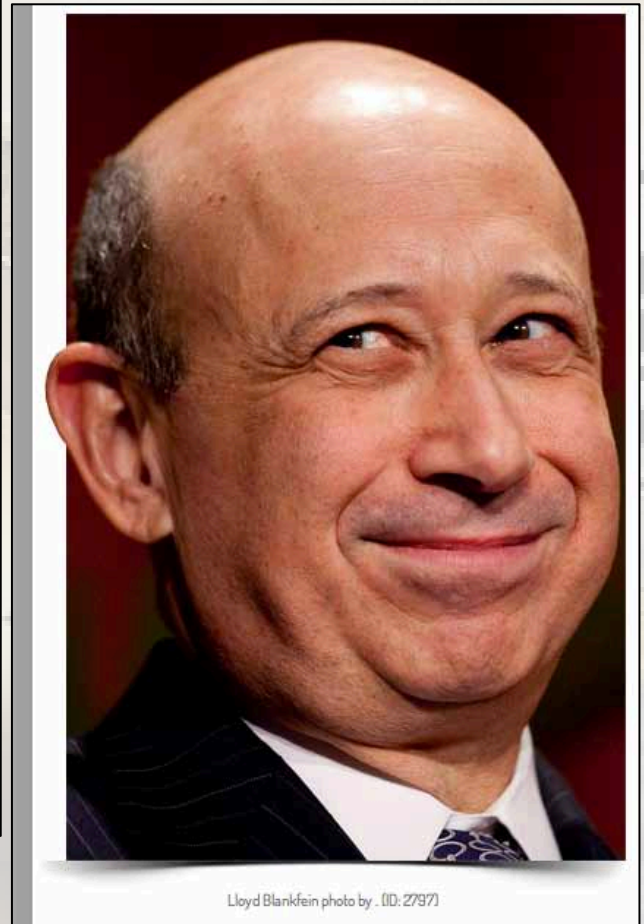
Fed Attacked, GS Doesn't Control it (yet)



Texas Straight Talk
September 16, 2013

*A Great Victory for
Peace & Liberty*

Ron Paul
REVOLUTION
The Revolution continues



2. Bitcoin the Virtual Currency

- **Not a New Concept:**
 - Private and local currencies go back centuries
 - Digital currencies proposed in 80s and 90s
 - Flooz, Beenz, DigiCash, CyberCash in the Internet Bubble
 - E-Gold: 1999: backed 100% by gold bullion, other precious metals
 - Merchant-specific: Facebook Credits, Amazon Coins
 - MintChip: Canadian government-backed digital currency
 - Liberty Reserve: Liberty Reserve Dollars and Euros tied to dollar and euro
- **So Why Now?**
 - 2008 Financial Crisis/Loss of faith in banking
 - Fiat Currency Crises in Cyprus, Greece, Argentina, others
 - Chinese currency exportation prohibitions
 - Continued irritation by corporate customers of bank payment inefficiencies and costs

What is Bitcoin?

What Bitcoin is:

- The first (there are dozens of others – Litecoin, Feathercoin, etc.)
- Open-source (non-proprietary code = strength in transparency)
- Decentralized (no issuing authority)
- Peer-to-Peer (cash-like electronic transactions, no intermediary)
- Digital (built for the Internet)
- An alternative (not a replacement) of fiat currencies
- Cryptographic (based on principles of proven cryptography)
- Currency (medium of exchange, unit of value, store of value)

What Bitcoin is not:

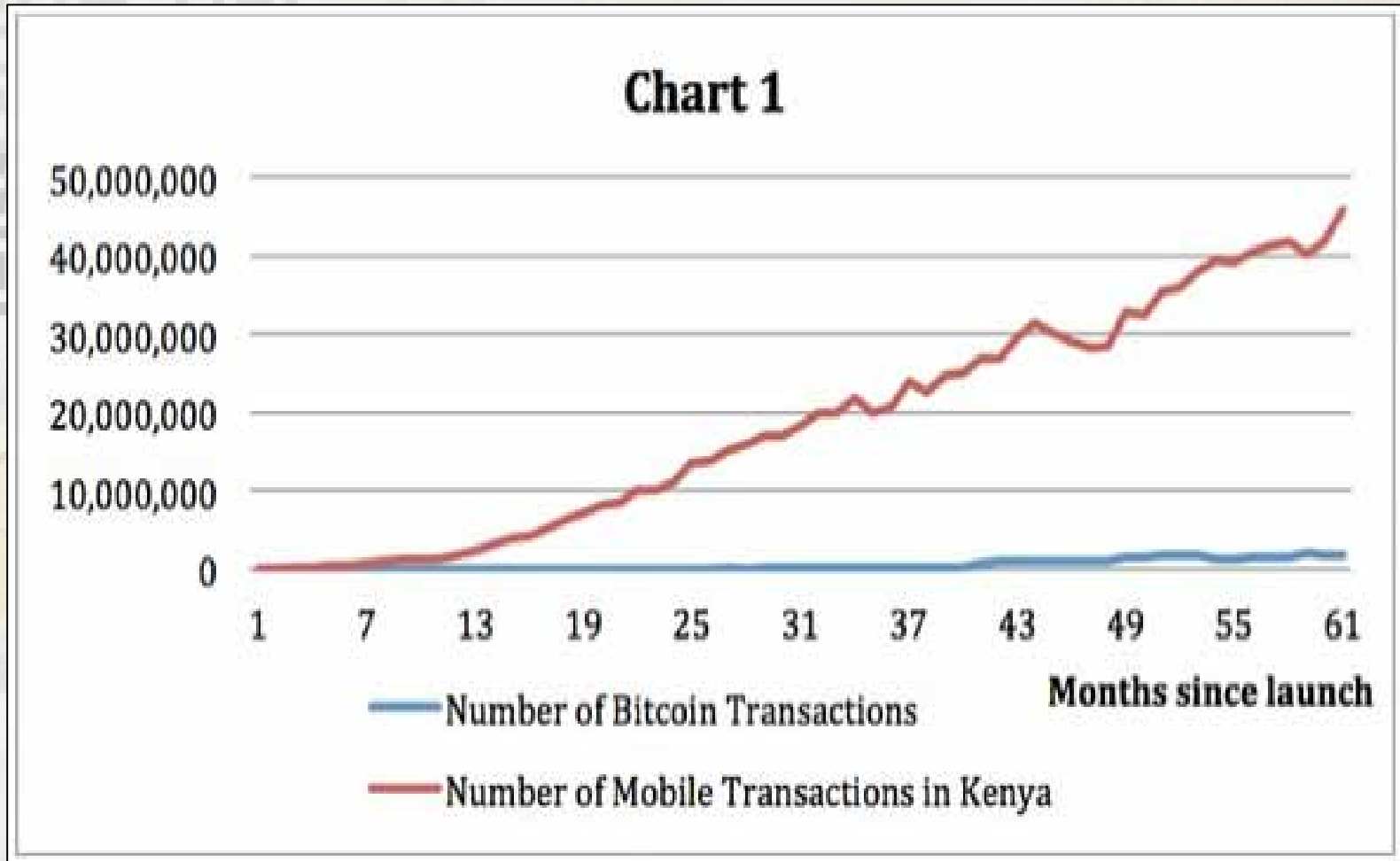
- Anonymous (but it is pseudonymous)
- Risk-Free (it can be stolen/lost/hacked, just like cash)
- A Substitute for Government/Banks/Payment Networks (complementary)
- Free
- Not a fixed-volume currency immune from inflation

Why Bitcoin Was Created

Limitations of Incumbent Payment Systems:

- **Limited Access:**
 - Credit/debit not universally accepted
 - 50% of world population has no access to banking systems*
 - Credit and savings vehicles not available to unbanked/underbanked
- **High Costs:**
 - Fees: Interchange, Bank Fees, Payment Networks, Processors, ISOs—all operating on aging physical infrastructure
 - Slow, confining infrastructure and high compliance investment (POS, PCI/Security, KYC)
 - Chargebacks, reversals, refunds, fraud
- **Liquidity “Islands”:** moving small amounts of money around the world quickly and cheaply is very difficult (e.g., wire transfers)
- **Privacy:** Internet transactions require sharing of personal data with third parties
- **Security:** inflation, devaluation, asset seizure, currency export controls

Bitcoin is a Bit Player in Payments

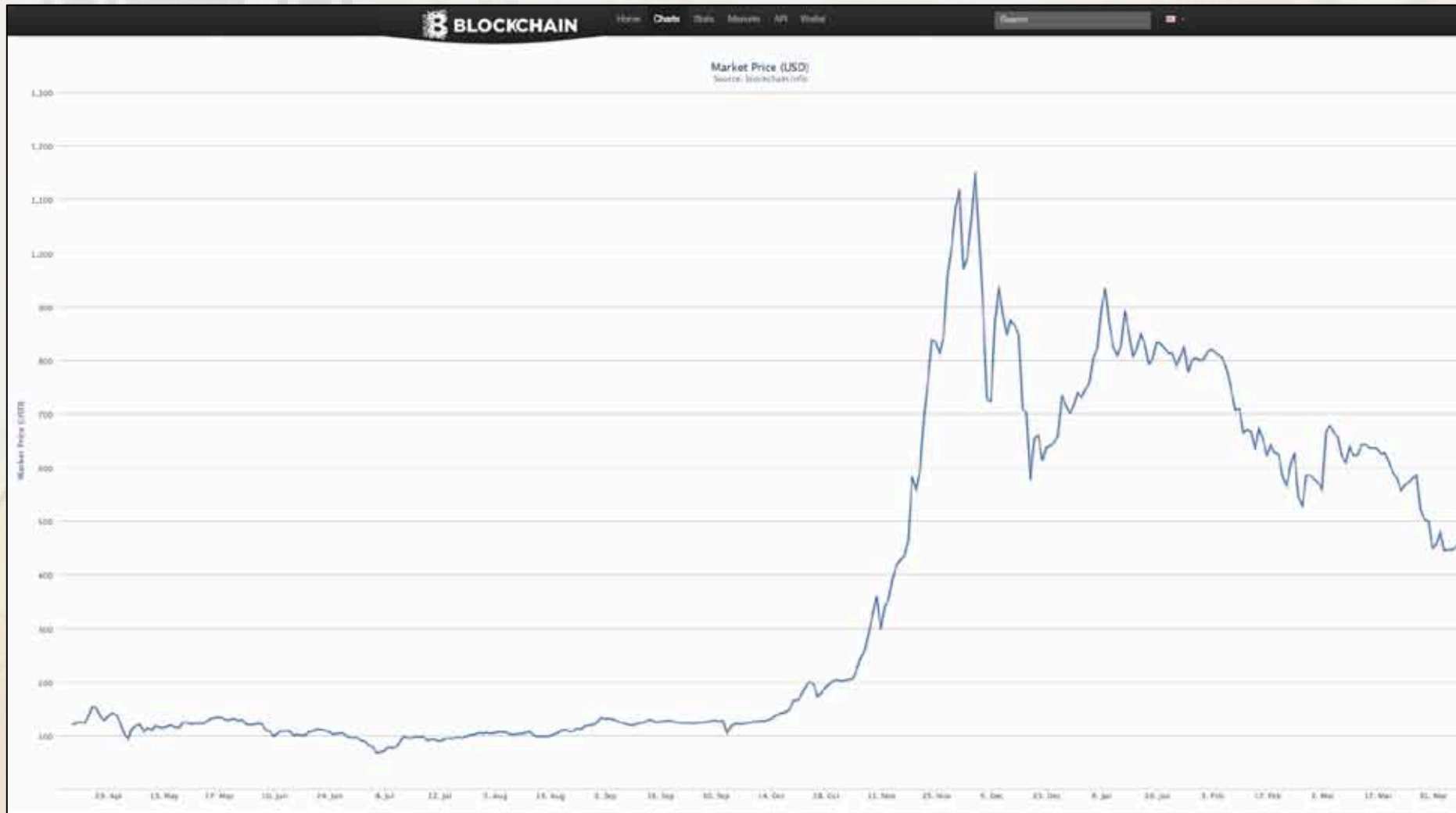


Source: Compilation, with data from [blockchain](#) for bitcoins and Central Bank of Kenya for mPesa (PYMNTS.com)

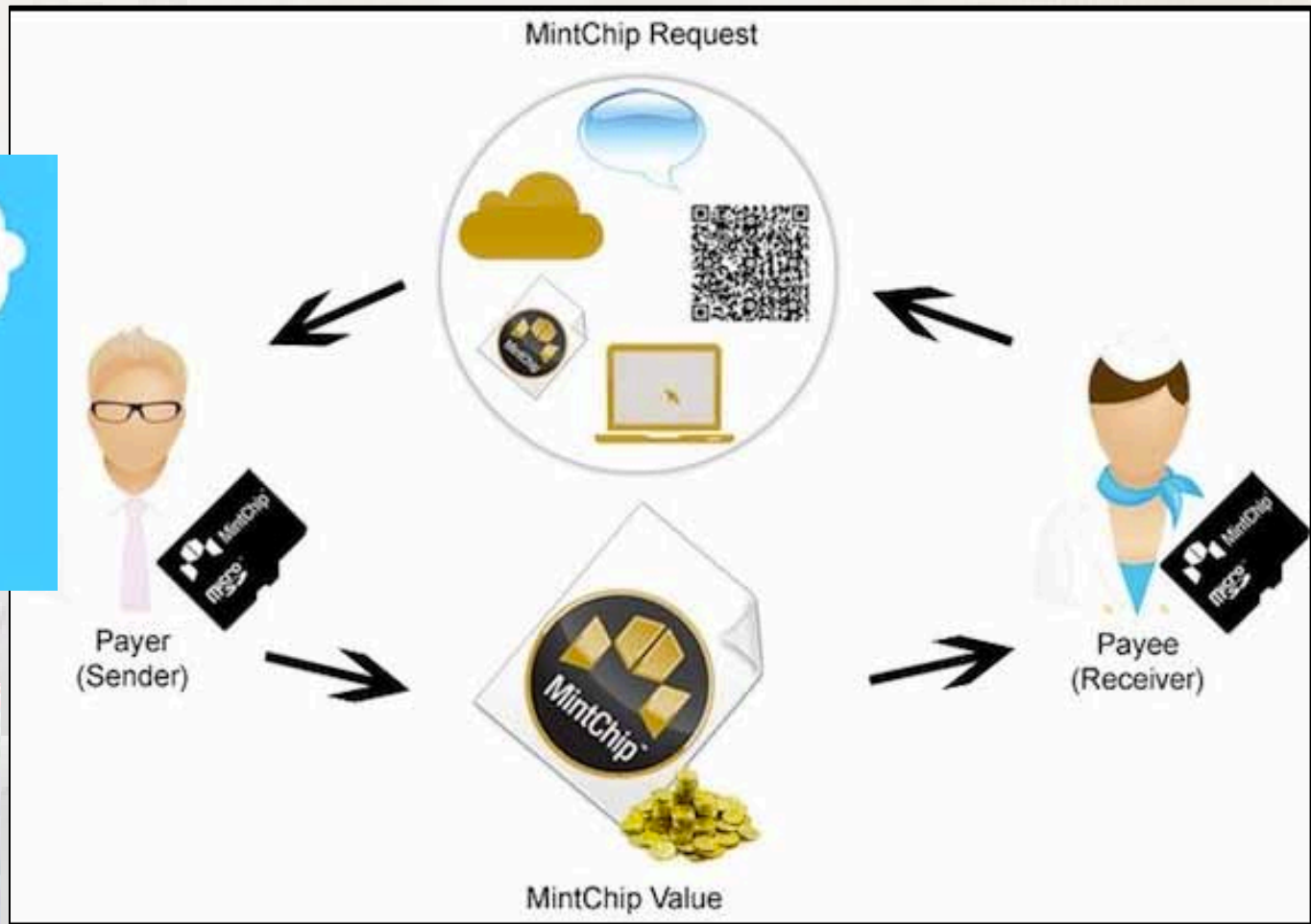
But Use is Growing with Infrastructure



Price Volatility is the Biggest Hurdle



MintChip: From the Royal Canadian Mint



Canada Puts Halt to MintChip Plans; Could Sell Digital Currency Program

ARTICLE COMMENTS

BITCOIN DIGITAL CURRENCIES ELECTRONIC PAYMENTS MINTCHIP ROYAL CANADIAN MINT

Email Print Facebook Twitter LinkedIn A A

By DAVID GEORGE-COSH CONNECT

Canada's experiment with creating its own digital currency appears to be over.

The Royal Canadian Mint said Friday it's halting development of its fledgling MintChip digital currency program and is now looking to sell the business.

The Mint had announced plans to develop MintChip back in April 2012 for use in small online payments. At the time, it described MintChip as the "evolution of physical money, with the added benefits of being electronic."

Mint spokeswoman Christine Aquino said plans regarding the virtual currency "matured" and that the Mint considers turning development over to the private sector one of MintChip's "natural next steps."

"The Mint is currently working with the [Canadian] Department of Finance to explore divestiture options," Ms. Aquino said in an emailed statement. "The Mint is also in the process of completing development of MintChip to package the assets for divestiture."

Canada's plans to sell MintChip, which is still in its infancy and has never reached the circulation stage, come amid surging interest in digital currencies such as bitcoin, which is still considered to be at an **early stage** of development.

The MintChip move is an abrupt turn from the Royal Canadian Mint, which had entered an **agreement** with SecureKey Technologies Inc. in February to develop software that would make transactions between MintChip users more secure.

It had also partnered with Ingenico SA **ING.FR +0.56%** to create a terminal that could be used by retailers to process MintChip transactions, demonstrating the terminal at a financial conference in New York in January.

The Canadian government said in its budget released in February that it planned to strengthen Canada's payments system by cracking down on **digital currencies' use** in money laundering and other criminal activity. Ms. Aquino declined to comment on whether the Mint's decision to end its development of MintChip was linked to any security-related concerns. Spokespeople from SecureKey and Ingenico weren't immediately available for comment.



— Bloomberg News

PREVIOUS
6 Takeaways from
Canada's March Jobs
Report

NEXT
Key Canada Events:
Week of April 7-11



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Business Schools Rank When CEOs Grade the Test
Obama Pushes NATO to Ease Russian Gas Imports, and More
Tesla Stock Hits the Skids

About Canada Real Time

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Breaking News

Canadian Bonds Pare Losses After BOC Retains Dovish Tone

Is the Bank of Canada Taking a Flyer on Oil Prices?

Canadian Dollar Erases Gains, Shifts Lower After BOC Rate Decision

Effort to Get Rid of Pennies Cut Short; Fear of Digital Currencies Overall Might Have Been the Reason...

Local Currencies Arise



Berkshires Berkshares: Buy Local/Keep Jobs



From virtual currencies to another form of alternative coin, we bring you the [BerkShares](#), a type of coin that can only be used in the Berkshires, a region in western Massachusetts (USA). According to the BerkShares website, more than 400 businesses located in the Berkshires area accept the currency, while 13 banks serve as exchange stations.

Merchant-Specific: Amazon Coins



Although it's a company-specific currency, Amazon Coins, were created after the boom of Bitcoin. They can be exchanged for some items sold on Amazon like Kindle Fire apps or games. Since it's a new thing, you can learn more about it [here](#).

- Launched 5/2013, this currency enables Kindle Fire tablet owners to buy games, apps and in-app items
- Prepaid type of currency could be extended to mainstream purchases
- Counters trend *away* from virtual currency by digital venues (e.g., Facebook credits retired last month, and Microsoft ending xbox video game points)
- New users got \$5 in coins (each coin is worth a penny); purchase of additional coins can generate a 10% discount
- Amazon has patented a virtual currency for mobile transacting...

3. Fit in the Regulatory Environment

Regulatory Issues: FinCEN Guidance: 3/18/2013

- **Currency:** “the coin and paper money of the United States or of any other country that (i) is designated as legal tender and that (ii) circulates and (iii) is customarily used and accepted as a medium of exchange in the country of issuance.” (Bank Secrecy Act definition)
- **Virtual currency:** “medium of exchange that operates like a currency in some environments but does not have legal tender status in any jurisdiction.”
- **Convertible virtual currency:** virtual currency that has an equivalent value in real currency, or acts as a substitute for real currency.
- Outlines regulatory treatment of persons engaged in virtual currency transactions under the definitions of **dealers in foreign exchange and money transmitters** under the Bank Secrecy Act

U.S. Treasury Pulls the Plug

- Ruling on digital currency issued by U.S. Department of the Treasury's Financial Crimes Enforcement Network (FinCEN)
- Seizure of Mt. Gox exchange's Dwolla funds and its subsequent decision to require authentication of its users
- Seizure and closure of Liberty Reserve—has been seen by some as the beginning of the end for such wild west monetary systems

[Fun fact: Mt. Gox is an acronym for Magic: The Gathering Online eXchange. Mt. Gox was originally a place for people to trade Magic: The Gathering Online cards. They switched to focusing on Bitcoins in 2010. Best pivot ever?]

On May 14, 2013 the Department of Homeland Security, acting in concert with FinCEN, seized the US assets of Mutum Sigillum and shuttered its business.



Liberty Reserve didn't register either. Liberty Reserve was a Costa Rican payment processor that did not use bitcoin, but did use its own form of centralized digital currency called "Liberty Reserve Dollars". One of its services was accepting funds from Customer A, holding those funds, and then distributing them to Customer B at Customer A's direction using Liberty Reserve Dollars.

Like Mutum Sigillum's business, this was also a classic example of money transmission. It serviced customers across the globe, including the United States, without collecting any of the information or making any of the reports required under the BSA.

In May, 2013, the [US federal government seized the Liberty Reserve website](#) and shut down its business, citing, among other things, its operation as an unlicensed money transmitter. The seizure notice is still on its [website](#).

Liberty Reserve: Takes Digital Currency A Step Too Far

Silk Road: Immensely Popular Bitcoin Site for Purchasing Contraband

The screenshot displays the Silk Road anonymous market interface. At the top, the site logo features a green camel and the text "Silk Road anonymous market". Navigation links include "messages 0", "orders 0", and "account B0.00". A search bar is present with a "Go" button. On the right, a user is logged in as "Hi, [username] logout" with a shopping cart icon. A "Shop by Category" sidebar lists various items such as Drugs (3,471), Apparel (90), and Art (8). The main content area shows a list of items for sale, each with a thumbnail image, a title, seller information, shipping origin, and price in Bitcoin (B). The items listed are:

Item Name	Price (Bitcoin)
Premium Quality Cocaine (1 gram)	B10.45
QP OF ANY STRAIN LISTED	B82.91
10x 200ug Doublesided Blotter	B11.97
Cocaine good quality 1.0g	B3.96
1oz - "Swazi Red" (Rooibaard) African Sativa	B11.77

Regulatory Issues: FinCEN Guidance:

Three Roles:

- **User:** a person that obtains virtual currency to purchase goods or services. User is not an MSB under the FinCEN regulations (in same way user of currency is not an MSB)
- **Exchanger:** person engaged as a business in the exchange of virtual currency for real currency, funds, or other virtual currency
- **Administrator:** person engaged as a business in issuing (putting into circulation) a virtual currency, and who has the authority to redeem (to withdraw from circulation) such virtual currency

FINCEN Ruling Invokes Money Transmitter Rules

Individuals who merely exchange bitcoin for goods and services (and vice versa) are merely “users” of a virtual currency, not money transmitters.

Businesses that accept bitcoin from one person and send it to another are money transmitters, and are not exempt from money transmission regulation simply because they do not deal in fiat currency.

Individual bitcoin miners who convert their “created” coins to fiat are money transmitters, even though they never act “as a business,” nor accept value from one person to transfer it to a third person.

Any business that exchanges fiat currency for virtual currency – or even one virtual currency for another – is a money transmitter.

MTBs must enforce Anti-Money Laundering (AML) and Know Your Client (KYC) measures, identifying the people that they’re doing business with.





Evolution of Regulatory Landscape

- **From Law Enforcement Focus:**
 - **2012 FBI Report:** concerns over criminal activity (illicit drugs, weapons, child pornography)
 - **Seizure of Mt.Gox assets:** Summer 2013: >\$5M in U.S. Accounts seized by DHS for operating an unlicensed MSB
 - **Silk Road Bust:** Fall 2013: DOJ now in possession of ~25K Bitcoins
- **To Regulatory Clarity:**
 - **Are Bitcoins “Money”?**
 - TX: Bitcoin Savings and Trust case: Bitcoins are “money or monetary value”, but probably not currency
 - FEC: Bitcoins are not money (“in-kind contributions”)
 - **State Licensing:** Very few Bitcoin companies have successfully obtained MTLs; applicability of state laws unclear
 - **Congress:** Senate hearings held Nov 2013
 - **WA:** Jan. 2014: Bitcoin is “money” for state MTL purposes
 - **NY DFS Hearings:** Jan. 2014: “Bitlicenses” likely

Self-Regulation Emerges

The Bitcoin Channel
Your One Stop Shop for ALL Bitcoin News!

Posts Comments

 >    

The Bitcoin Channel
Crypto-Currencies Will Destroy The Bankers' Monopoly On Money

Donate Via Paypal
Donate

Donate BTC
1HnZuqhRQydeidVwqZaXYB1Vs2R2cdB5

Donate LTC
LdSTzyS9hD8XXX7waBN5nyTYx6r4aEQV1g

Donate NMC
Myc3GXp26pwiA1oT9eZyoT2uo1nLu6nd

Donate PPC
PL44yztocGuG8zdYUEvFWBgWBFWQzNoTi

Donate TRC
115Nb4VP95zPhZHG67VMpB7MjYjVUvd9

Donate DVC
15yr3Eb3Zczm4ZETmUGCvncTH82nbh

Donate NVC
4T399NvaGLG1eNLLe2EuLCEBGLYbVF8UJ

Donate IXC
xaNDew8EvsracyX288nYeIPUSERVnaUXwC

Donate CNC
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Donate FRC
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Donate BQC
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Donate DGC
DD67KLEcd437e89Yx9MrcAC18TugNYcoq

Donate YAC
XxKZbACmsGCCmaV7aaqz6RgD7vms83dSVam

DATA: Digital Asset Transfer Authority

Send & Share Large Files with Only a Web Browser

Take A Free Trial

Highly Secure & Easy to Use

FileGenius

Large File Transfer

ShareFile.com/Large-File-Transfer

Free Trial: Large File Transfer. Voted Best for Business- Try Now!

DATA
DIGITAL ASSET TRANSFER AUTHORITY

bitcoin-square.com / By Stephen Reed / August 1, 2013

On July 30th, 2013, pioneers of the digital cryptocurrency-based payments industry, including such names as Chris Larsen, CEO of OpenCoin; Tony Gallippi, CEO of BitPay; and Nejc Kodrič CEO of BitStamp; jointly established the Digital Asset Transfer Authority, or DATA.

DATA aims to become a formal self-regulatory organization (SRO) for the "emerging payments and virtual currency" industry. The official announcement on info.dataauthority.org states that DATA will "develop best practice anti-money laundering, ... business and technical standards for the prudent and responsible conduct of payment transactions," continuing that the organization will work with authorities and industry stakeholders to "identify and address emergent public policy concerns and risks affecting [the virtual currency] industry"

READ MORE

August 4th, 2013 | Tags: assets, chris larsen, DATA, Nejc Kodrič, SRO, TONY GALLIPPI, virtual currency | Category: Uncategorized

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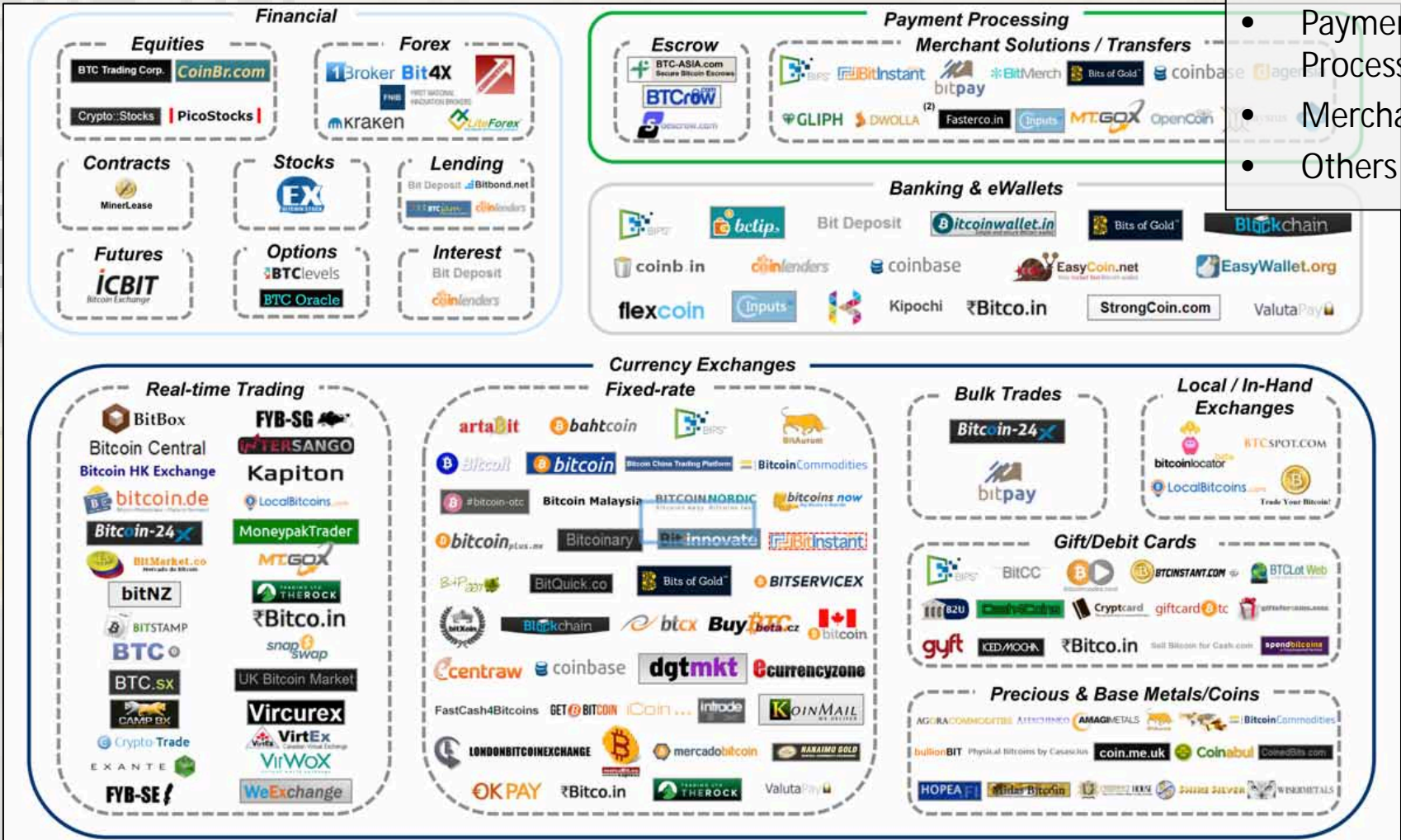
Random Quote
"At any rate, the spook spoke the truth: cryptology represents the future of privacy, and more. By implication cryptology also represents the future of money, and the future of banking and finance. (By "money" I mean the medium of exchange, the institutional mechanisms for making transactions, whether by cash, check, debit card or other electronic transfer.) Given the choice between intersecting with a monetary system that leaves a detailed electronic trail of all one's financial activities, and a parallel system that ensures anonymity and privacy, people will opt for the latter. Moreover, they will demand the latter, because the current monetary system is being turned into the principal instrument of surveillance and control by tyrannical elements in Western governments." - J. Orin Grabbe

Evolution of Regulatory Landscape

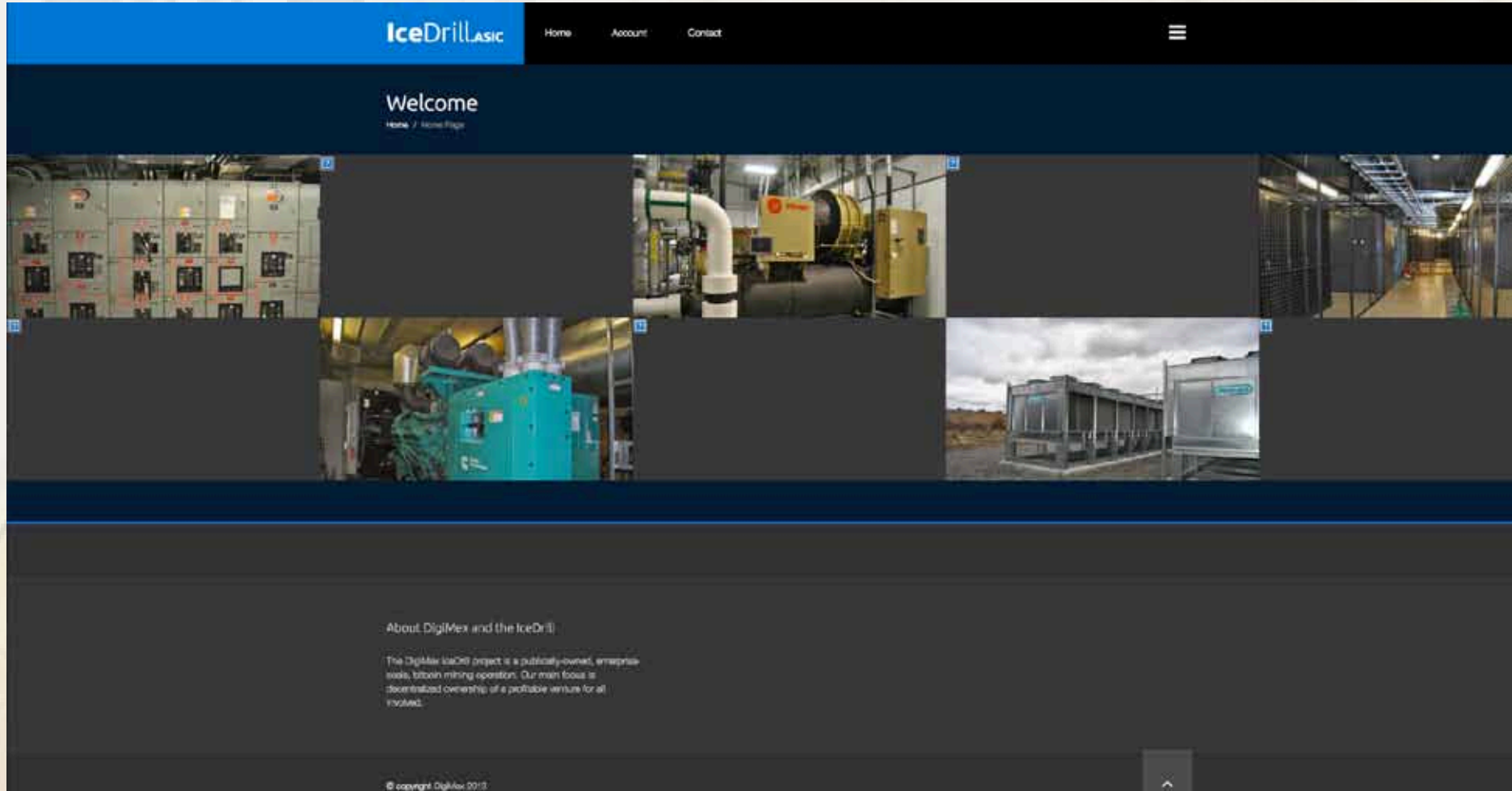
- Taxation:
 - IRS likely to increase guidance in 2014 (treating it as property, not currency)
- Consumer Protection:
 - Applicability of state and federal laws
 - EFTA and Regulation E
 - Remittance Rule
- State and federal Securities Laws
- Commodity Trading (CFTC)
- Banking Law
- and Bans within specific countries (e.g., China)

4. Virtual Currency Ecosystem

- Miners
- Exchangers
- Wallet Providers
- Payment Processors
- Merchants
- Others

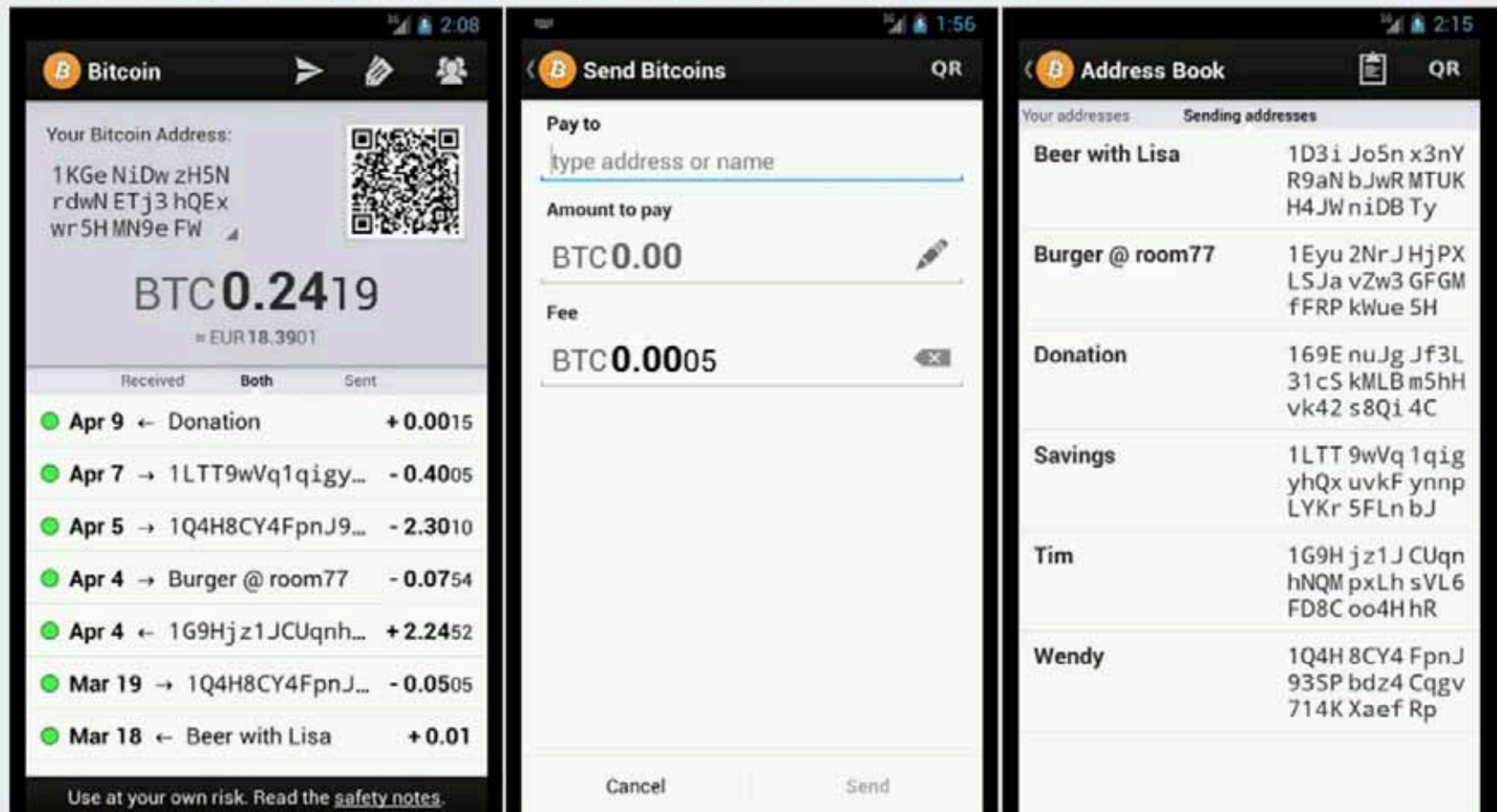


A (Really Big) Bitcoin Mining Operation



Bitcoin Wallets: Addresses are Publicly Open

Below is a screenshot of what someone's mobile wallet could look like.



Source: play.google.com

Since data about every Bitcoin transaction is freely available online, experts encourage people to create and use new Bitcoin addresses for each transaction. This also prevents hackers from seeing how many Bitcoins are stored in each wallet.

Merchant Value Proposition

How Much Can I Save?

BASE RATE

What is your *Base Processing Rate*?

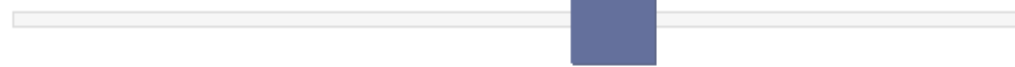
2.50%



CARD-NOT-PRESENT

What percentage of your sales are via mail, phone, or Internet?

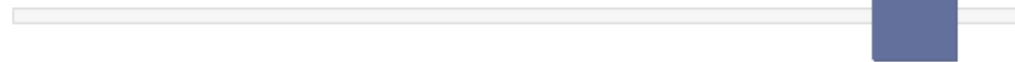
60%



REWARDS CARDS

What percentage of your customers pay with *cash back, miles, or rewards cards*?

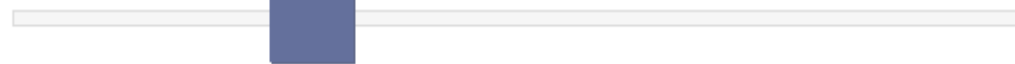
90%



MONTHLY VOLUME

What volume of payments do you process on average each month?

\$80,000



CREDIT CARD PROCESSING

\$3,200

BITPAY **BUSINESS** PROCESSING

\$300

How Merchants Tool-up for Bitcoin

Bitcoin payment solutions for popular eCommerce platforms



Ridiculously easy for developers

```
$ curl https://bitpay.com/api/invoice \  
-u YourApiKey \  
-d price=100 \  
-d currency=USD
```

Four lines of code is all you need to collect a payment with our **Bitcoin Payment Gateway API**

Payments by computer, tablet, and smartphone

[How it Works](#)

Try a Charity Donation Demo

Accept small or large donations over the internet. There are no long credit card forms to fill out, which makes it great for receiving donations from mobile phones.

Merchants Signing Up

gyft

 bitcoinstore

TigerDirect.com

 shopify

okcupid

 eGifter
Gift more. Get more.

foodler

Overstock.com®



 zynga

 reddit

CHICAGO
SUN-TIMES

 WORDPRESS

Overstock.com: Shot Across Payment Brands Bow



- Over \$1M in sales in first month
- 1% Reward Toward Future Purchase if you use Bitcoin to pay
- Approaching 1% of volume

Overstock to Launch New Rewards Scheme for Bitcoin Buyers

Pete Rizzo (@pete_rizzo_) | Published on February 12, 2014 at 17:02 GMT | Companies, Merchants, News

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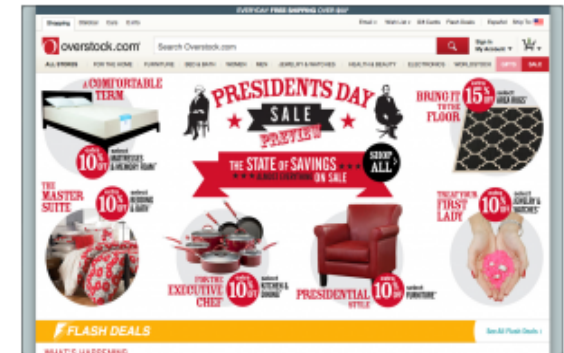
+1 15

1 point

Share 4

Online outlet store Overstock.com is to launch a special rewards program that will give bitcoin buyers 1% back in the form of Club O dollars, the company's in-house rewards points.





Speaking to CoinDesk, Overstock CEO Patrick Byrne said the scheme is expected to debut in approximately four weeks, although he did not commit to a definitive timeline.



Checkout Page: Full of Options

Payment Information

Credit / Debit card


   


visa, mastercard, american express, discover


Card Number *


Expiration Date *


01 Jan 2014

 **PayPal**
The safer, easier way to pay.

 **bitcoin**
ACCEPTED HERE [Learn More](#)

 **BillMeLater** [Terms and Conditions](#)


 **RewardsPay**
DISCOVER | CHOICEprivileges® [What's this? ?](#)


 **V.me by Visa** [Learn More](#)

I want to use a promo code

I want to use a gift card

Select Delivery & Gift Options

 This order is being sent as a gift.

 Yes, I want **FREE shipping and 5% back in Club O Dollars** on this order. [Learn More >](#)

By clicking the box, you accept our [terms and conditions](#)

Review your order and change shipping options. To edit your cart, [click here](#).
By submitting your order, you are agreeing to our [terms and conditions](#).

Items	Options	Price	Shipping Options Learn More
-------	---------	-------	---------------------------------------------

Order Summary

Subtotal: \$399.99

Promo Savings: -\$40.00

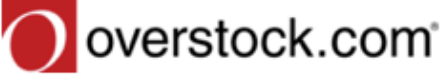
Shipping: FREE

Total: \$359.99

[Submit Order Now](#)

You are on our Verisign trusted server.


Checkout Process: QR Codes + Address from Wallet



Item	Price
Comfort Dreams Select-A-Firmness 11-inch Queen-size Memory Foam Mattress on Overstock.com invoice ID 132856065.	\$359.99 USD

Total: \$359.99 USD

[Send using a bitcoin address](#)



Send exactly 0.57526402 BTC (plus miner fee) to:
`13AD2zxVJCfzosyHMP1BBE7YukbD4DAPsf`

After sending to the above address click 'Confirm Payment' below.

[Copy Address](#) [✓ Confirm Payment](#)

[Send using a Coinbase.com account](#)

[Don't have any bitcoin?](#)

[Cancel and return to Overstock.com](#)

Powered by Coinbase.com · Report Issue

One More Example of QR Codes Becoming the Passport of Mobile/Digital Commerce

Gyft, Others Making Giving/Using Easy

The screenshot shows the Gyft website homepage. At the top left is the Gyft logo. To its right are navigation links: "Shop For Gift Cards", "Why Use Gyft", "Earn Points", "More", and "Get \$5 in Points". On the top right are "SIGN UP" and "LOGIN" buttons. The main content area features a promotional banner with the text "Use Bitcoin On Gyft. Earn 3% Points Back." and a red button labeled "Shop With Bitcoin Now". To the right of the text is a smartphone displaying the Gyft app interface with a "WALLET" tab. Next to the phone is a collection of gift cards from Burger King, Nike, GameStop, GAP, and Sears, along with several Bitcoin coins. Below the main banner is a quote: "How to add almost any gift card to Passbook". At the bottom of the page, there is a row of logos for partner brands: ellen, c|net, Mashable, Forbes, and engadget.

eGifter Supports Dogecoin and Litecoin, Too



The screenshot shows the eGifter website interface. At the top, there are navigation links for 'Create Gift', 'Gift Cards', and 'My Wallet'. The main banner features a large Bitcoin logo on the left and the text 'eGifter now accepts bitcoin' on the right, with a 'Get Started Now' button. Below this, a section titled 'Turn Bitcoin into gift cards from 200+ brands, including these and more:' lists logos for American Girl, Athleta, Banana Republic, Barnes & Noble, Bath & Body Works, Callaway Golf, and Clarks. A central section titled 'eGifter accepts Bitcoin payments for eGift Cards!' contains a list of five benefits: 1. Buy any of our 200+ eGift Cards with your bitcoin; 2. Fast and simple checkout process - no additional fees; 3. Earn TRIPLE points when you pay with your bitcoin; 4. Buy at eGifter.com or with the eGifter mobile app (Android); 5. We also accept Dogecoin and Litecoin! Below this list is a link to 'Browse Gift Cards' and a note: 'Got questions? We've got answers in our Bitcoin FAQ.' The footer includes social media icons for Facebook, Twitter, Tumblr, Instagram, and Pinterest, along with a 'Like' button and a 'Follow' button. It also contains a list of links: 'Gift Cards | About Us | Careers | Retailers | Press Blog | Terms | Privacy Policy | FAQ | Contact Us' and a copyright notice '© 2014 eGifter'. On the right side of the footer, there are buttons for 'Download on the App Store' and 'GET IT ON Google play'.

eGifter
Gift more. Get more.

Create Gift Gift Cards My Wallet

eGifter now accepts **bitcoin**

Get Started Now

coinbase

Turn Bitcoin into gift cards from 200+ brands, including these and more:

AMERICAN GIRL BATH & BODY WORKS CALLAWAY GOLF CLARK'S
ATHLETA BANANA REPUBLIC BARNES & NOBLE

eGifter accepts Bitcoin payments for eGift Cards!

- 1 Buy any of our 200+ eGift Cards with your bitcoin
- 2 Fast and simple checkout process - no additional fees
- 3 Earn TRIPLE points when you pay with your bitcoin
- 4 Buy at eGifter.com or with the eGifter mobile app (Android)
- 5 We also accept Dogecoin and Litecoin!

Got questions? We've got answers in our Bitcoin FAQ.

Browse Gift Cards

Facebook Twitter Tumblr Instagram Pinterest
Like (24) Follow

Gift Cards | About Us | Careers | Retailers | Press Blog | Terms | Privacy Policy | FAQ | Contact Us
© 2014 eGifter

Download on the App Store GET IT ON Google play

5. Bitcoin the Technology

- Created by a mysterious programmer known as Satoshi Nakamoto
- Only 21 million bitcoins can ever be created by miners
- Divisible down to one hundred millionth of a bitcoin (called a "Satoshi")
- The mathematical formula is open to inspection
- The software is open source
- Mining requires special computer power (and even special chips)
- It's catching on now because it's traded, and miners willing to work for others



Transactions Tracked in a 'Block'

- All transactions in a set period are collected into a list, called a block
- Miners confirm those transactions, and write them into a general ledger
- The GL is a long list of blocks, known as a 'chain'; additions are communicated in updates to all participants
- Miners examine each new block of transactions, applying a mathematical formula
- The formula converts the information into a hash, which is stored at the end of the chain

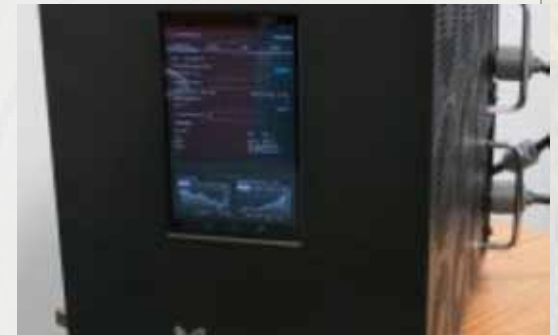


Unique Hash Linking Preserves Validity

- it is very easy to produce a hash from a large amount of data, but each hash is unique. If you change just one character in a bitcoin block, its hash will change completely.
- Miners don't just use the transactions in a block to generate a hash. Some other pieces of data are used too. One of these pieces of data is the hash of the last block stored in the block chain.
- Because each block's hash is produced using the hash of the block before it, it becomes a digital version of a wax seal. It confirms that this block – and every block after it – is legitimate, because if you tampered with it, everyone would know.
- If you tried to fake a transaction by changing a block that had already been stored in the block chain, this would change that block's hash. If someone checked the block's authenticity by running the hashing function on it, they'd find that the hash was different from the one already stored along with that block in the block chain. The block would be fake!
- Because each block's hash is used to help produce the hash of the next block in the chain, tampering with a block would also change the next block's hash. So tampering with a block would make the subsequent block's hash wrong, too. That would continue all the way down the chain, throwing everything out of whack.

'Proof-of-Work' Prevents Unrestrained Mining

- That seals off a block—something that miners compete with each other to do
- Each successful hash earns the miner a reward of 25 bitcoin, and is communicated to the participants
- To avoid a deluge of mining, the protocol requires 'a proof of work': the hash has to look a certain way, it must have the correct number of zeroes at the start
- The form and content of a hash is unpredictable



How a Bitcoin transaction works

Bob, an online merchant, decides to begin accepting bitcoins as payment. Alice, a buyer, has bitcoins and wants to purchase merchandise from Bob.

WALLETS AND ADDRESSES



Bob and Alice both have Bitcoin "wallets" on their computers.



Wallets are files that provide access to multiple Bitcoin addresses.



An address is a string of letters and numbers, such as 1HULMwZEPkJEPeCh43BeKILjYbLCWrfDpN.

CREATING A NEW ADDRESS

Bob creates a new Bitcoin address for Alice to send her payment to.



Each address has its own balance of bitcoins.

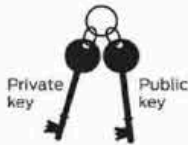
SUBMITTING A PAYMENT



Alice tells her Bitcoin client that she'd like to transfer the purchase amount to Bob's address.

Public Key Cryptography 101

When Bob creates a new address, what he's really doing is generating a "cryptographic key pair," composed of a private key and a public key. If you sign a message with a private key (which only you know), it can be verified by using the matching public key (which is known to anyone). Bob's new Bitcoin address represents a unique public key, and the corresponding private key is stored in his wallet. The public key allows anyone to verify that a message signed with the private key is valid.



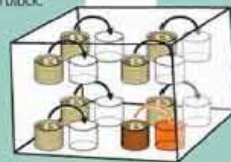
Gary, Garth, and Glenn are Bitcoin miners.



VERIFYING THE TRANSACTION

Their computers bundle the transactions of the past 10 minutes into a new "transaction block."

The miners' computers are set up to calculate cryptographic hash functions.



Private key



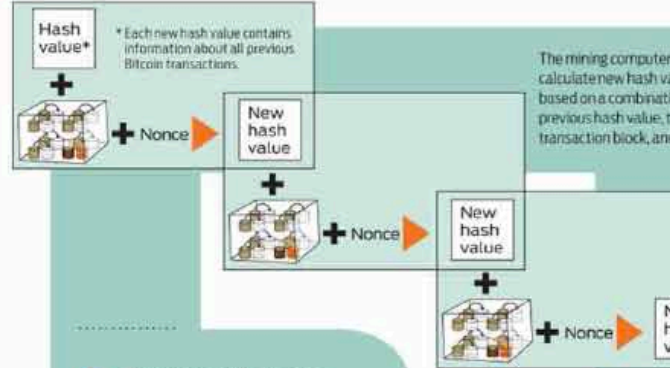
Public key

Alice's wallet holds the private key for each of her addresses. The Bitcoin client signs her transaction request with the private key of the address she's transferring bitcoins from.

Anyone on the network can now use the public key to verify that the transaction request is actually coming from the legitimate account owner.

TRANSACTION VERIFIED

As time goes on, Alice's transfer to Bob gets buried beneath other more recent transactions. For anyone to modify the details, he would have to redo the work that Gary did—because any changes require a completely different winning nonce—and then redo the work of all the subsequent miners. Such a feat is nearly impossible.



Cryptographic Hashes

Cryptographic hash functions transform a collection of data into an alphanumeric string with a fixed length, called a hash value. Even tiny changes in the original data drastically change the resulting hash value. And it's essentially impossible to predict which initial data set will create a specific hash value.

The root of all evil	6d0a1899086a... (56 more characters)
The root of all evil	486c6be46dde...
The root of all evil	b8db7ee98392...

Nonces

To create different hash values from the same data, Bitcoin uses "nonces." A nonce is just a random number that's added to data prior to hashing. Changing the nonce results in a wildly different hash value.

The root of all evil ???

Creating hashes is computationally trivial, but the Bitcoin system requires that the new hash value have a particular form—specifically, it must start with a certain number of zeros.

The miners have no way to predict which nonce will produce a valid hash value.



Each block includes a "coinbase" transaction that pays out 50 bitcoins to the winning miner—in this case, Gary. A new address is created in Gary's wallet with a balance of newly minted bitcoins.

Bob & Alice



Buyer and Seller Possess (or Download) Bitcoin Wallets to House "Addresses"

How a Bitcoin transaction works

Bob, an online merchant, decides to begin accepting bitcoins as payment. Alice, a buyer, has bitcoins and wants to purchase merchandise from Bob.

WALLETS
AND
ADDRESSES



Bob and Alice both have Bitcoin "wallets" on their computers.



Wallets are files that provide access to multiple Bitcoin addresses.



An address is a string of letters and numbers, such as
1HULMwZEP
kjEPeCh
43BeKJLyb
LCWrfDpN.



Bob creates a new Bitcoin address for Alice to send her payment to.

CREATING
A NEW
ADDRESS



Each address has its own balance of bitcoins.

New Purchases Require a Transfer to Seller's Address Via a Generation of a New PKI Key Pair for Verification

Public Key Cryptography (PKI):

Elements of a Bitcoin

Transaction:

- Sender's Account Address:

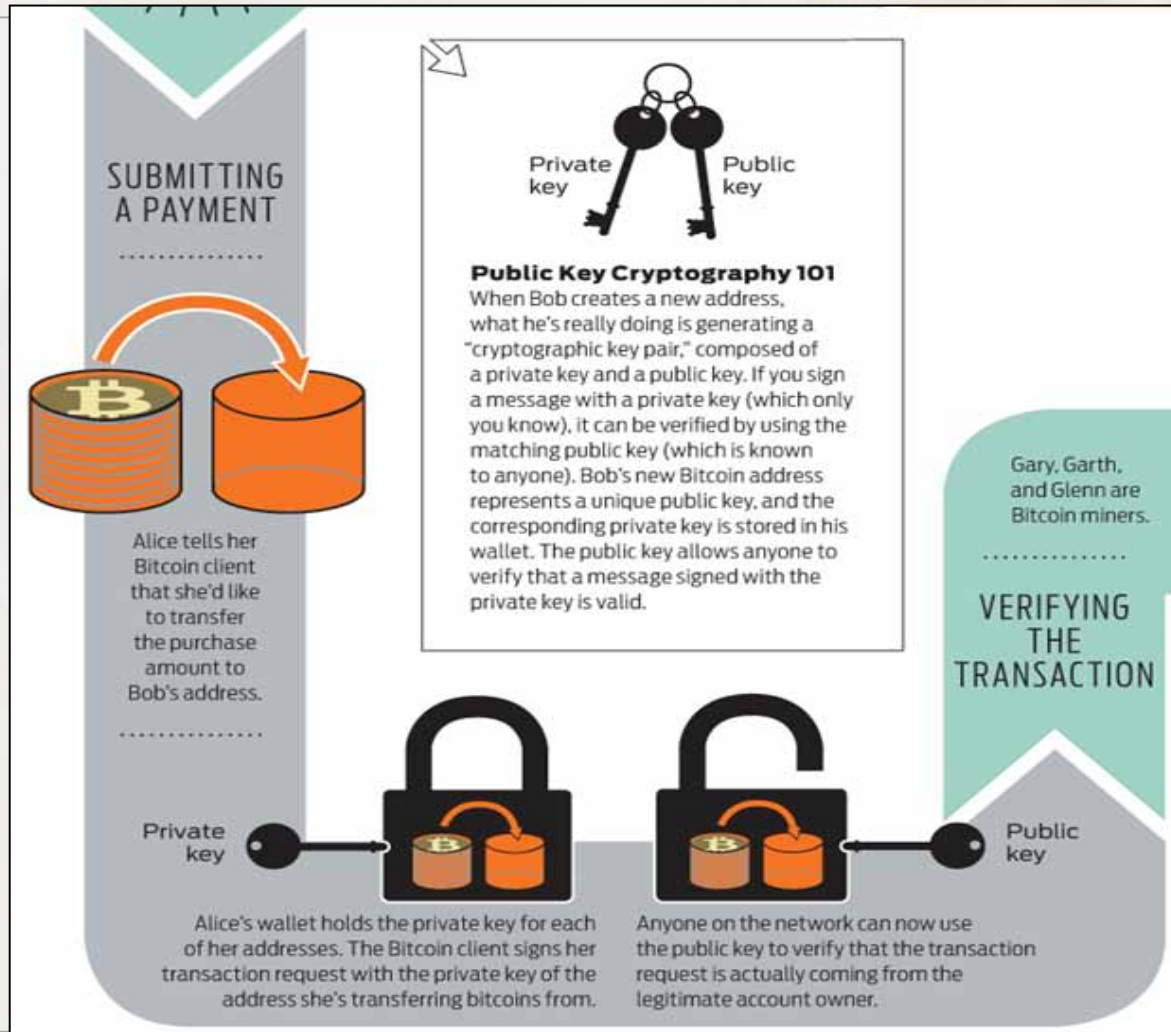
Account ID = Public Key

- Sender's Message:

"Transfer 1 BTC from Account A to Account B" (includes Account B's Public Key Address)

- Sender's Signature:

Transaction Message must be signed with Sender's Private Key = "Password"



Transaction Verification Involves Bundling the Last 10 Minutes of Transactions into a New "Block"

Transaction Verification: Mining

Consensus: verify key pairs

+

Competition: incentive

+

Proof of Work: complex math

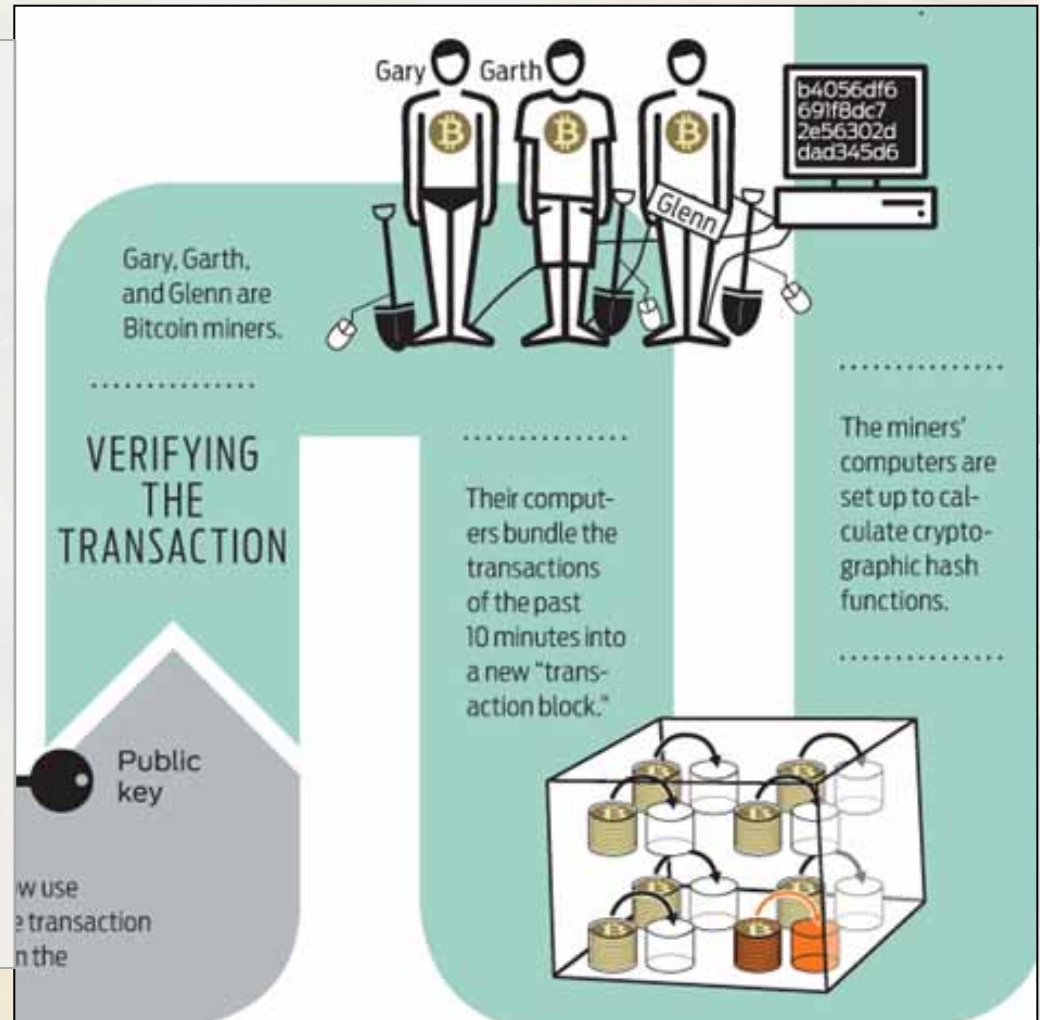
+

Reward: more Bitcoins*

=

Successful Transaction

*And fees...more on that later



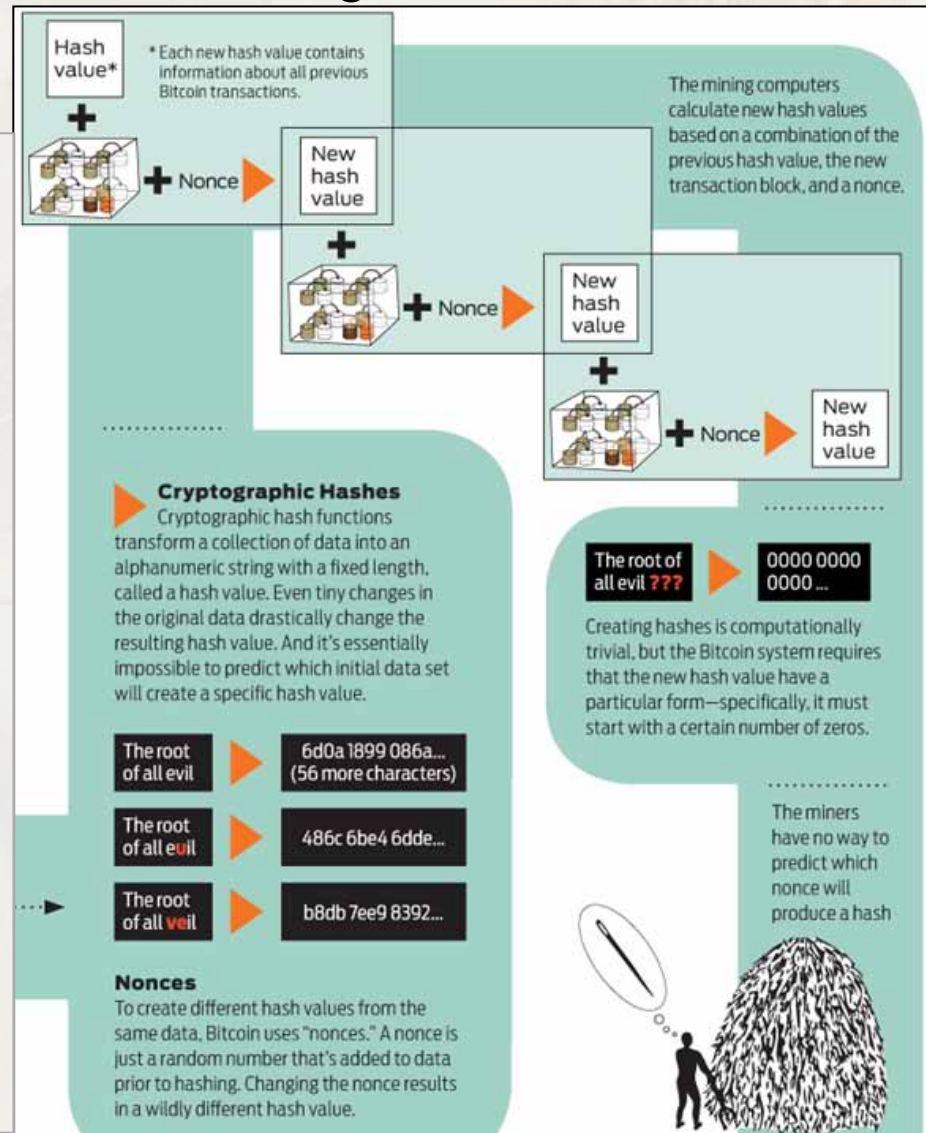
Miners Compete to Solve Blocks, then Add them to the "Block Chain" After Proving Their Work

But How Does It Really Work?

- **Miners** compete to solve **Blocks**
- **Blocks** = bundles of individual transactions (10 min. intervals)
- When Block is solved by a **Miner**, it is added to the **Block Chain**

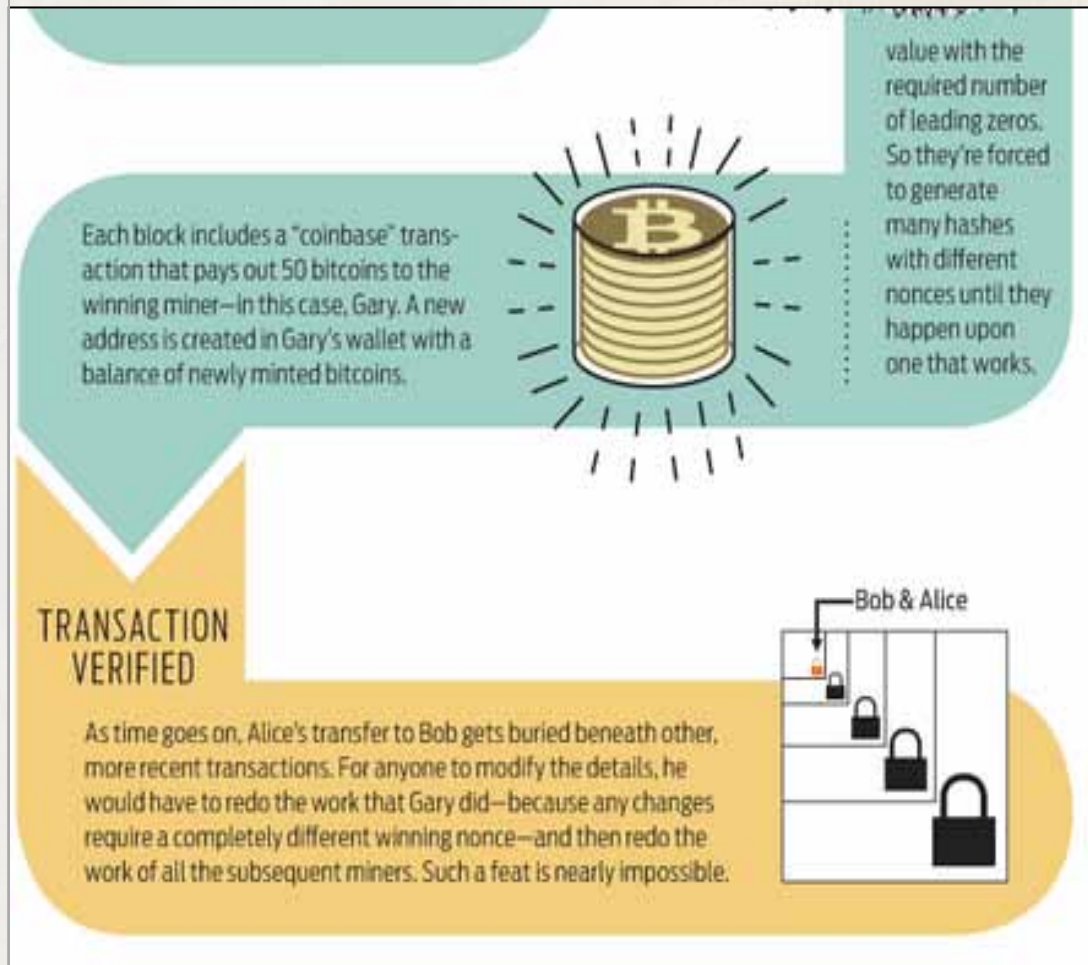
Block Chain:

- Public record of all Bitcoin transactions that have ever occurred
- Public Ledger of Accounts
- Extraordinarily difficult to hack
- Uses state of the art, industry standard cryptography
- (ECDSA + SHA 256)



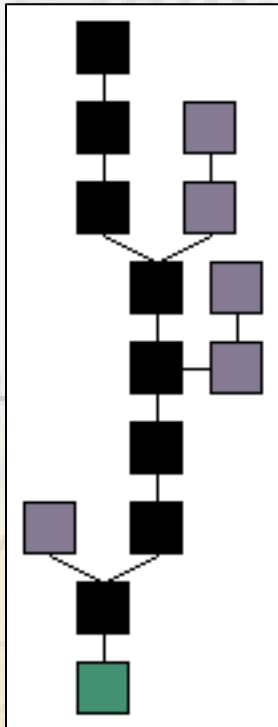
Each Solved Block Rewards the Miner with New Bitcoins; Transaction Details get 'Buried', but are Safe

- **Reward:** Winning Miner rewarded with newly mined Bitcoins
- **Built-In System Security:** security increases with each cycle, or block
- **Velocity Controls:** Work required to earn Reward increases as network power grows
- **Other Key Points:**
 - Only 21 Million Bitcoins will ever exist (~12.37M today)
 - Bitcoins divisible to one one hundred millionth of a Bitcoin (a "*satoshi*") or \$0.00000625
 - Last Bitcoin will be created in approximately 2140



Source: <http://spectrum.ieee.org/>

The Blockchain is the Breakthrough



B **BLOCKCHAIN**
Home | Charts | Stats | Markets | API | Wallet

Home Welcome to Blockchain More...

Height	Age	Transactions	Total Sent	Relayed By	Size (kB)
296629	2 minutes	385	864.05 BTC	Discus Fish	157.48
296628	< 1 minute	32	1,534.19 BTC	213.133.103.74	9.57
296627	20 minutes	24	844.61 BTC	75.150.123.25	11.14
296626	14 minutes	183	1,568.81 BTC	64.90.183.200	117.77
296625	19 minutes	202	1,700.38 BTC	BTC Guild	90.92
296624	25 minutes	212	1,271.19 BTC	178.18.90.41	76.03

Latest Transactions

c881eb33d3224f862570a9d2f...	< 1 minute	0.01297334 BTC
fbbc14e066... (SatoshiBONES 50pct)	< 1 minute	0.0647 BTC
18800fc89e9cb45aba1a86c26...	< 1 minute	306.00847182 BTC
2b1b04f0e0f9a727e769d0d83...	< 1 minute	1.0967 BTC
5255b3331ee6ebc4e062b532a...	< 1 minute	0.21895764 BTC
77c890d4165156312c0fe665...	< 1 minute	0.0746 BTC
e017945e7215de6e2a97415f0...	2 minutes	0.476 BTC
534b49c3a8ea3c366f975e487...	2 minutes	0.066 BTC
709b41d15... (LuckyBit yellow)	2 minutes	0.063 BTC
85dd5f7b51... (SatoshiBONES 50pct)	2 minutes	0.112 BTC

Search

You may enter a block height, address, block hash, transaction hash, hash160, or ip/v4 address.

NEWS

Finding Equilibrium : Searching for the true value of a Bitcoin
Byk < 1 minute ago

Bitcoin's image problem is not a problem
Reed 1 minute ago

how can an exchange operate without a bank account?
Bitcoin (James) 12 minutes ago

Welcome to Bitcoin Boulevard
CryptoCoinNews 15 minutes ago

***** GIGAMiner.net - BTC mining contracts from 5\$ per GH/s ! *****
Mining 19 minutes ago

Bitcoin Accepted Map of Ireland
Reed 20 minutes ago

BTC China installs the country's first Bitcoin ATM in Shanghai
Bitcoin Examiner 23 minutes ago

Bitcoin Offers Monetising Solutions for Online Publishers

Other Bitcoin Links

- **Most Popular Addresses** - Addresses which have received the most payments
- **Orphaned Blocks** - Valid blocks not part of the main bitcoin chain
- **Unconfirmed Transactions** - Transactions waiting to be included in a block
- **Largest Transactions** - Largest 100 transactions from the last 50,000 transactions
- **Double Spends** - Double spends detected in the last 500,000 transactions
- **Strings Transactions** - Transactions which we were unable to decode the output address
- **Mining Pool Stats** - Pie chart showing the market share of the top bitcoin mining pools
- **Bitcoin Nodes Globe** - WebGL globe showing bitcoin nodes (Requires Chrome, Safari)
- **Bitcoin Nodes List** - A Log of all bitcoin nodes blockchain.info has connected to
- **Hub Nodes** - A list of the most well connected bitcoin super nodes
- **Rejected Inventory** - Blocks and transactions which have been rejected by our nodes
- **Address Tags** - Tag your public bitcoin addresses.

gyft | bitcoin

Now Accepting Bitcoins

Bitcoin Pros and Cons

PROS	CONS
Ubiquity: send Bitcoin to anyone, anywhere...	Small Community: ...who has access to the Internet and a Bitcoin address; complicated compared to cash/credit
Cash-like: easy to transfer, secure, and authenticate	Cash-like: vulnerable to loss, theft
Transactions Final, Irreversible	Transactions Final, Irreversible
Extremely Fast <u>Settlement</u>: much faster than ACH, SWIFT, Wire Transfer, and credit settlement time frames	Slower <u>Verification</u>: card-based authorization in milli-seconds; full Bitcoin transaction verification at least 10 minutes, more for larger transactions
Shiny and New – early adopter glow; high disruption potential; extremely sophisticated technology	Slow Adoption: not well understood; lack of trust in currency not backed by govt.; regulatory concerns

Bitcoin Pros and Cons (Cont.)

PROS	CONS
Inflation Resistant: limited supply of Bitcoins intended to protect against inflation	Bitcoins Scarce by Design: price fluctuation = settlement risk, hoarding; Bitcoins divisible to .000000001 BTC
Low Transaction Costs: enables true micropayments	Transaction Fee Problem: sufficient reward for miners once last Bitcoin has been minted?
Extremely Secure: built on state of the art encryption standards: (same schemes used by banks, ISPs, etc.)	But Not Invulnerable: susceptible to user/vendor error; loss and theft; no built in consumer protections
Regulatory Approval: Bitcoin officially sanctioned in Germany, Canada; many U.S. states already granting licenses to exchanges	Regulatory Uncertainty: FinCEN and KYC; consumer protection concerns; State MTL compliance; Reg. E, FTC
Decentralized, distributed network: Internet-like resilience	Scalable? Visa = ~4,000 tps Bitcoin = ~7 tps (today)

6. Opportunities for Corporate Treasurers

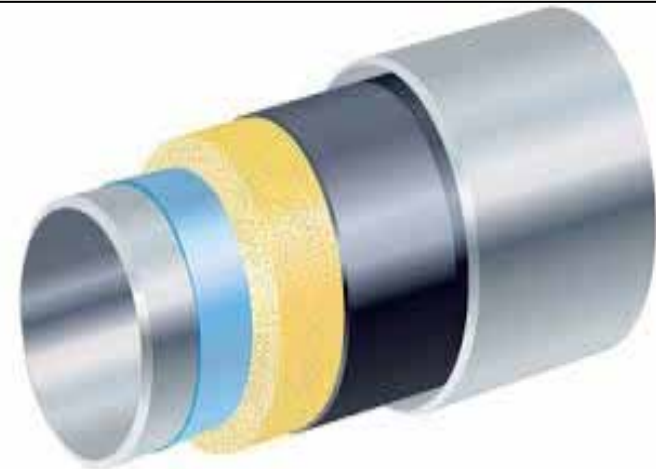
- Partner with Virtual Currency Companies:
 - Exchanges, Payment Processors need bank accounts
 - Compliance Due Diligence: work with firms that understand compliance
- Explore Issuance of New Financial Products:
 - Debit Cards with Bitcoin Purse
 - Virtual currency-backed GPR Cards
- Bitcoin Wallet = Checking Account?
- Leverage Existing Merchant Relationships:
- B2B Funds Settlement: direct challenge to ACH/wires
- New pipes for ISO 20022

Applications for FIs/Treasury Departments

- International transfers
- Intra-company transfers
- Tax 'protection' events and activities
- Avoidance of repatriation complications
- Procurement in 'sensitive' countries
- Foreign exchange arbitration/protection
- Hedging (including against central banks)

Implications for Payment Networks

- Merchants and corporate customers will soon be asking for support—what do you do?
- If the 'pipe' of the future for transferring value is based on mathematical cryptography rendered in software, who provides the layers of necessary supporting infrastructure?
- If regulated financial institution accounts will comprise the vast bulk of digital funding transactions, which network is best suited to 'insulate' the pipe while providing ubiquitous access?



Future Role in Faster Payments?

- Fed: Apply to faster, near-real-time payments initiative?
- Leverage open source code to modernize ACH system
 - “ACHCoin”?
- Upgrade EMV to digital payment?

Payment System Improvement - Public Consultation Paper

The Federal Reserve Banks

September 10, 2013

The U.S. payment system is undergoing a remarkable period of change, driven by rapid adoption of technology and evolving end-user expectations. Going forward, opportunity exists to improve speed and efficiency of payments and to maintain payment system safety in the face of escalating threats. The Federal Reserve Banks believe that collaboration and engagement with the industry is the foundation of any enduring strategic improvements to the U.S. payment system and look forward to public input to this consultative paper.

Banks Don't Like Bitcoin; But Investors do)



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AFP Home > Bitcoin Breakdown: JPMorgan's Dimon Predicts Bitcoin's End

Bitcoin Breakdown: JPMorgan's Dimon Predicts Bitcoin's End

By Andrew Deichler Published: 2014-01-24

SHARE       

Though Bank of America Merrill Lynch and Wells Fargo have expressed positive attitudes about Bitcoin, don't expect JPMorgan Chase to follow suit. Jamie Dimon, chief executive of the largest bank in the United States, denounced the virtual currency this week, and even predicted its demise.

"It's a terrible store of value," Dimon told CNBC. "It could be replicated over and over. It doesn't have the standing of a government."

Dimon cited criminal activity involving Bitcoin as a key reason why his bank is likely to eschew the cryptocurrency. "A lot of it is being used for illicit purposes," Dimon said. "And the people who will get upset with it are governments. Governments put a huge amount of pressure on banks: know who your client is, did you do real reviews of that? Obviously it's almost impossible to do with something like that."

superderivatives

introducing dgx

data done differently

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Tweets

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AFP Online @AFPonline 15 Feb

Yellen: No change on forward guidance, labor markets hurting bit.ly/NPxeR9

AFP Online

Steve Mott's Contact Coordinates



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Steve Mott
BetterBuyDesign

dba CSI Management Services, Inc.
1386 Long Ridge Road
Stamford, CT 06903
and 1214 Querida Drive
Colorado Springs, CO 80909
(o) 203.968.1967
(c) 203-536.0588
email: stevemottusa@yahoo.com
website: www.betterbuydesign.com

Appendix A: Beyond Bitcoin--Open Payment Networks

...which requires a decentralized network.

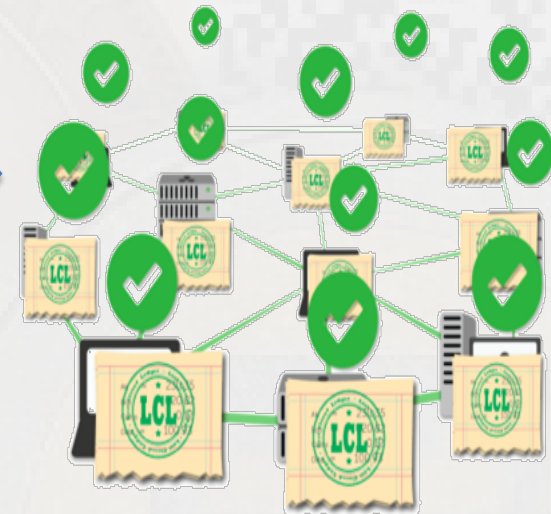
VisaNet, ACH, SWIFT
1973



BitCoin
2009



Ripple
2013



Appendix B: A Tour of Digital Currencies

- Litecoin
- Namecoin
- Philadelphia Equal Dollars
- Ithaca (NY) Hours
- Linden Dollars
- Ven
- Feathercoin

- WebMoney
- Ripple
- PPcoin
- Dogecoin
- (many more)

Litecoin: Bitcoin, but 4x More of Them

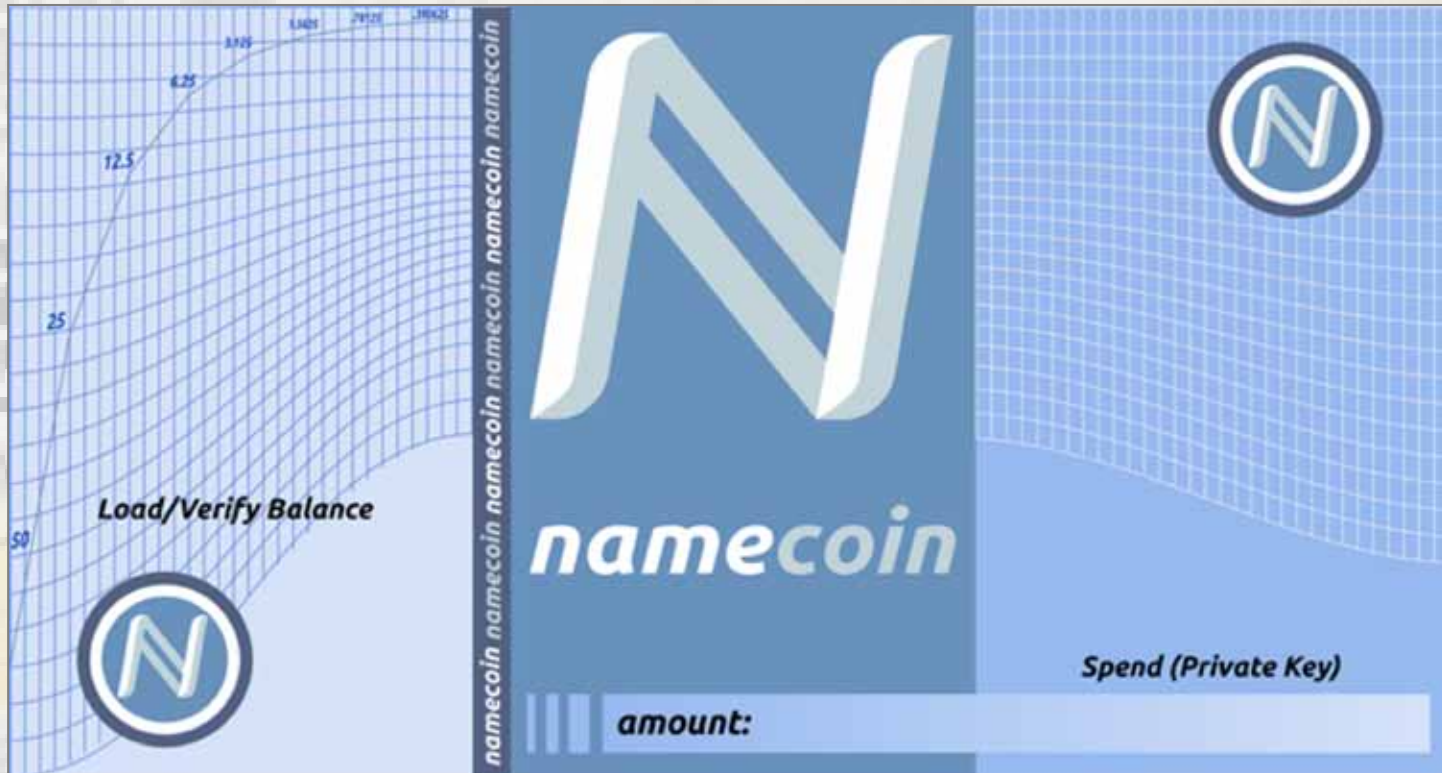
Litecoin



It's like Bitcoin's cousin. Litecoin is another form of virtual currency based on the Bitcoin model, but with a higher limit: there can only be 21 million Bitcoins, but Litecoins can reach the mark of 84 million Litecoins.

Aims to be easier to mine than Bitcoin, opens more often, and requires far less computer power. It is mined by a process that involves individuals using their computing power to roll digital dice. A certain rare combination of those dice will "unlock" a "block" of coins and those coins become the property of the miners.

Namecoin: Alternative, Decentralized DNS



A Namecoin like system was first described in 2010 and although it was created to be a cryptocurrency, today it's mainly used as a decentralized DNS. Namecoin "is a cryptocurrency which also acts as an alternative, decentralized DNS, which would avoid domain name censorship by making a new top level domain outside of ICANN control, and in turn, make internet censorship much more difficult, as well as reduce downages", it's possible to read [here](#).

Philadelphia: Equal Dollars

EQUAL DOLLARS COMMUNITY CURRENCY
EXCHANGE OF GOODS AND SERVICES FROM PARTICIPATING MEMBERS AND EMPLOYED IN THE EQUAL DOLLARS COMMUNITY CURRENCY NETWORK

Ten Equal Dollars

Ten Equal Dollars

For More Information about Equal Dollars Community Currency visit www.equaldollars.org or call (215) 951-0300.

Like the Berkshires region, Philadelphia also keeps promoting its local currency, called **Equal Dollars**. When you sign up to participate, you receive 50 Equal Dollars. Then, to earn more, you can offer your own possessions in an online marketplace, volunteer or refer friends.

Ithaca Hours: Hyperlocal Currency



"Ithaca Hours help to keep money local, building the Ithaca economy. It also builds community pride and connections. Over 900 participants publicly accept Ithaca Hours for goods and services", it's possible to read on the [official currency's website](#). Ithaca Hours is another form of hyperlocal currency, only usable in Ithaca, New York.

Second Life: Linden Dollars

Linden Dollars

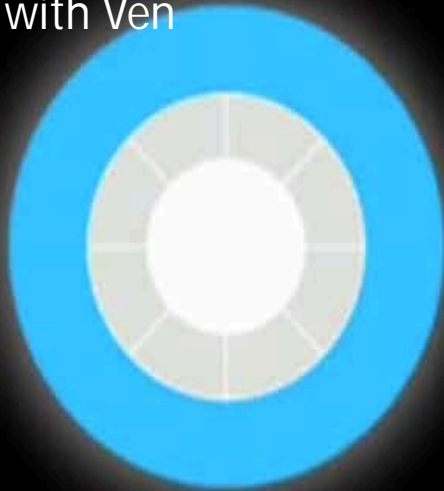


Linden Dollars can only be used in the online community [Second Life](#). This alternative currency can be bought with traditional currency or earned in other ways like selling goods or offering services to other community users.

Ven: Bid to be Global Currency

Ven is a global digital currency for everyone

Debuted as a Facebook app in 2007; acquired by Thomson Reuters in 2011; trading available on half-million terminals; price set based on basket of currencies, commodities and carbon futures; Nike first to sell carbon offsets with Ven



HUB CULTURE

Feathercoin: 4X Bigger Than Litecoin



Investment vehicle
with block reward of
200 coins, and a total
limit of 336 million
coins



FeatherCoin

Visit us at:

www.feathercoin.com

WebMoney: Russian, Very Private

WebMoney Transfer

Payment :

Russian

Product or service: uCoz order U101340556-101005151: PRODPACK_BASIC 1m

Amount: 3.09 WMZ

Merchant: UcoZ Web Services

Invoice # 101005151

Select the Method of Payment:



WebMoney Keeper

I already have WebMoney Keeper and I will pay them

Select the type of keeper: Keeper Classic



- 1 Please, make sure that [WebMoney Keeper Classic](#) is running
- 2 Press button "Next"
- 3 In the pop-up window enter this code:



[click, if picture is not visible](#)



Other methods

Cash and cashless payment methods

Next

Founded in 1998 as an in-system currency; Goods offered for sale, or "valuables of various legal nature" as they put it on their About page, are stored with "guarantors," entities who agree to store valuable properties from bonds and transfer them when the WebMoney units are transferred. A benefit of WebMoney, and an aspect that makes it more of a payment system than an independent currency, is how it is tied to fiat currencies. One WMZ, for instance, is always going to be worth \$1.00.

Ripple (Open Coin): Going Open Source



Send bitcoins to bitcoin addresses! On July 2nd Ripple.com **announced the Bitcoin Bridge**. This means that anybody with a ripple wallet can now send bitcoins to any bitcoin wallet. Like with other types of transfers on Ripple you can originate the transaction in any currency, it will be exchanged into bitcoin at the best rate, and it will be delivered to the bitcoin address you indicated.

A screenshot of the Ripple web interface for sending money. The interface is annotated with four red boxes and arrows indicating the steps: 1. Enter a Bitcoin address. (points to the recipient address field), 2. Enter an amount. (points to the amount field), 3. Pick a currency. (points to the currency dropdown and the currency buttons), and 4. Send. (points to the Send BTC button). The interface shows a recipient address, an amount of 0.001 BTC, and options to send in EUR, BTC, USD, or XRP.

Recipient
1P8g1R2n4jyYa2jRnE931gvAqwxZdA8PxR

Recipient will receive
0.001 BTC

You can send

0.073596 EUR Send EUR	0.001000 BTC Send BTC	0.086954 USD Send USD
6.3293 XRP Send XRP		

— Ripple – send – receive – Bitcoin Wallets >>>

Conclusion:

The Ripple Network will likely change the way money is handled in the world. By opening a Ripple Wallet everybody gets access to the global currency market including digital currencies like bitcoin.

It works like email, but with money instead of messages. You can send and receive any currency like yens, pounds, rubles, bitcoins or dollars. To and from

PPcoin: Aims to Avoid a Monopoly

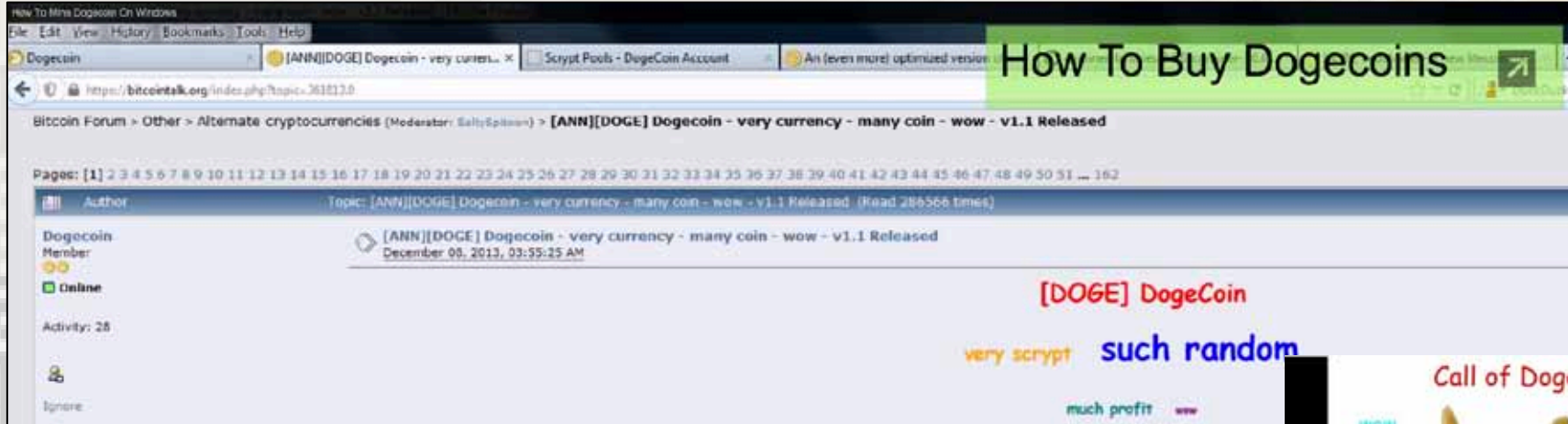


PPcoin, also known as PeerCoin and Peer-to-Peer Coin can be traded not only for fiat currencies but also for other digital currencies.

Like Bitcoin, Litecoin, and Feathercoin, PPcoin increases itself via mining. However, it [uses a proof-of-stake system](#) to prevent monopolies on the currency. Proof-of-stake ensures that if a miner, for instance, has 0.5 percent of the existing currency, he or she will only be allowed to mine 0.5 percent of the outstanding currency, making it much more difficult to secure a monopoly on the currency.

As over time the mining difficulty increases on a currency like Bitcoin, fewer people will mine. Eventually, one person or group could come to possess 51 percent of the currency. Since, as [Ars Technica](#) notes, the system that vets the currency recognizes the blockchain that is recognized by the most mining nodes; once you secure 51 percent (and have the most mining nodes) you could theoretically produce counterfeit currency, something no one can do at present.

Dogecoin: Script-based VC based on Internet Meme



How To Buy Dogecoins

[DOGE] DogeCoin
very script such random
much profit wow
many coin



how specification

Algorithm: Script
Max Coins: 100,000,000,000 DOGE
Block Time: 60 Seconds
Difficulty Retarget Time: 4 hours
Premine: None

