



Blockchain Identity - Too Good to be True?





CEESCA
September 2016

Consult Hyperion...













































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Department of Social Protection

Helping you build a better life







The Beginning: Bitcoin



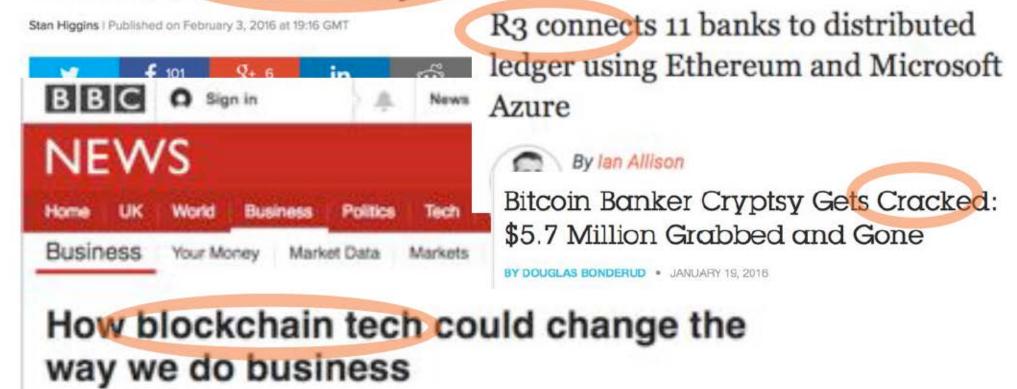


The marketing campaign for the blockchain

Wait, What?



UNICEF Eyes Blockchain As Possible Solution to Child Poverty Issues



And...



How the Technology Behind Bitsoin Could Provide a Tech Revolution for the Fire Service.

Home

Featured

How the Technology Bening bitcoin Could Provide a Tech Revolution for the

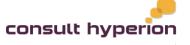
Wall Street | Technical | Exchanges | Mining | Block Size | Store | About | Co

Posted on Feb 4, 2016



Couple to Get Married on the Bitcoin Blockchain at Disney Bitcoin Conference





Investments in Bitcoin & Blockchain



Total (summer 2016): \$1.15 bln

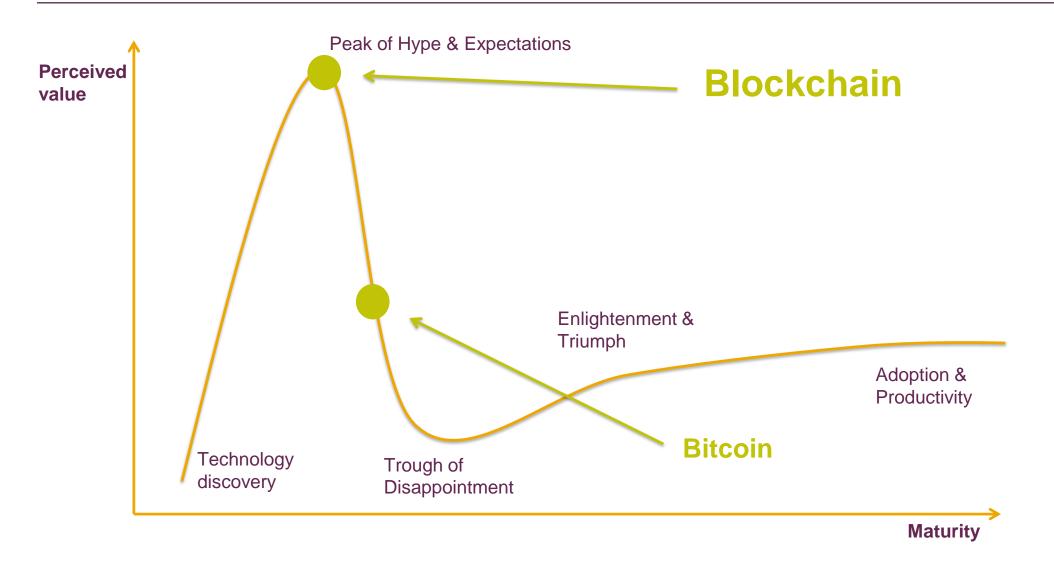
Number of start-ups: 800+ **MasterCard** Capital One Nasdag NYSE **VENTURES** BBVA Goldman **VENTURES** ANSAMERICA® WEDBUSH CME Group Santander InnoVentures reinventure MSIG F'PRIME July Jan July Jan 2014 2015 2015 2016

Sources: CoinDesk, VentureScanner, Chinsights, R3CEV



Adoption curve. July 2016

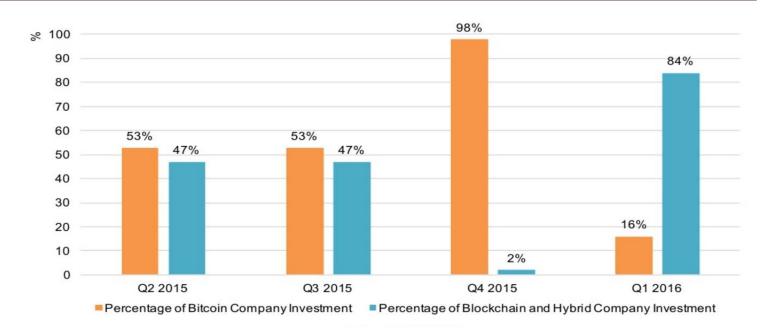




Blockchain space: traction



In Q1 2016 Blockchain start-ups overtook Bitcoin in total VC investment for the first time



	Market cap	Price	Growth since Jan 2016
Bitcoin	\$10 bln	\$600	40%
Ethereum	\$1 bln	\$12	1300%
Ripple	\$0.2 bln	\$0.005	10%

In 2016 Ethereum has been getting a lot of traction.

Sources: Coinmarketcap, Coindesk



Why now?



Computers \$\$\$\$
Comms \$\$\$\$

Computers \$\$\$
Comms \$\$\$

Computers \$\$
Comms \$\$

Computers \$
Comms \$

Moore's Law, Metcalfe's Law and Reed's Law

one copy of the transaction ledger

Centralise

one copy of the ledger spread over several computers

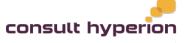
Decentralise

many copies of the ledger spread over many computers

Distribute

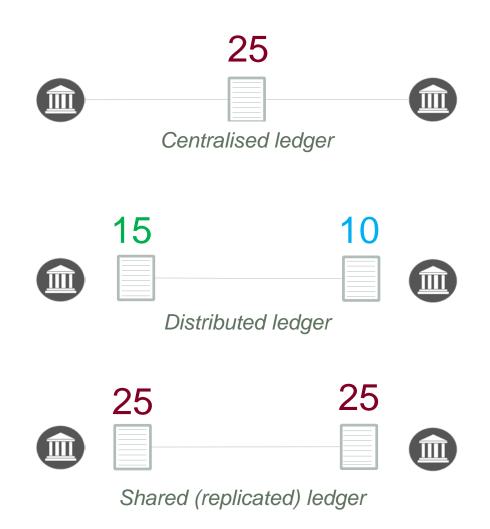
every computer has a copy of the transaction ledger

Replicate



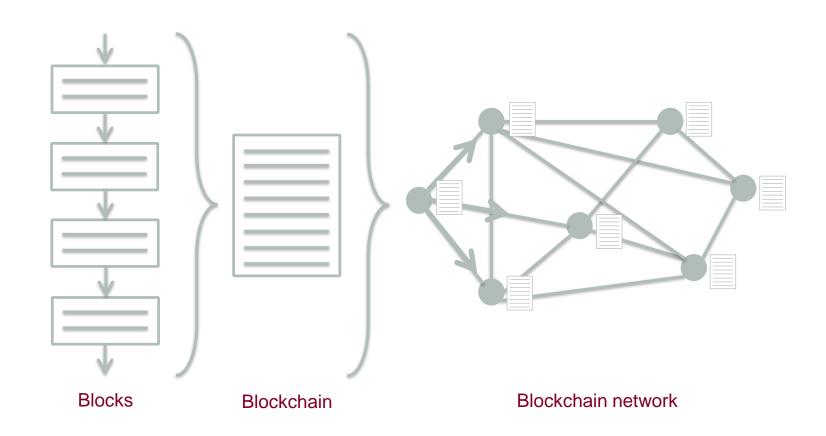
Not Bitcoin, Not Blockchain – Shared ledgers





"Blockchain" is an implementation choice of shared ledger technology





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What's new in architecture?



Contract

How can we animate the immutable record so that events trigger actions?

Shared Ledger Applications

Consensus

How do we agree the immutable record of transactions?

Content



What kinds of assets will be in the transactions?

Communications

Which entities create and propagate transactions?

Computer

Shared Ledger

Of course, FISH!

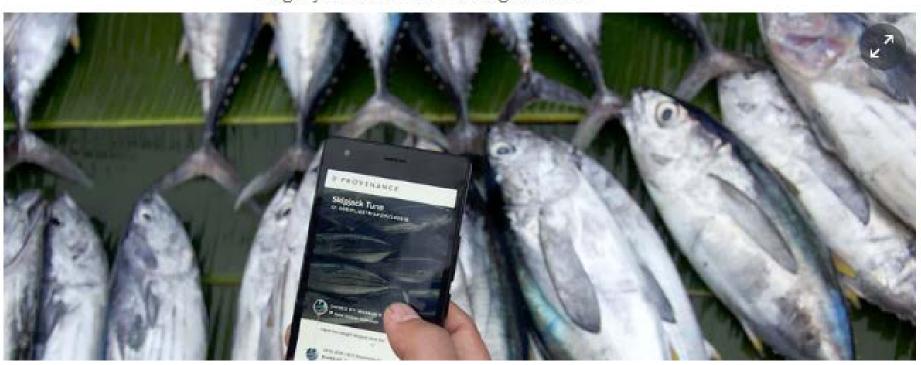


Guardian sustainable business

what if? economics

Blockchain technology trialled to tackle slavery in the fishing industry

Technology could be used to differentiate fish caught sustainably to those caught illegally, or linked to human rights abuses



Diamonds



Everledger To Use Blockchain Technology For Insurance Purposes

2015-08-03 08:59 AM | Alex William



http://www.chyp.com/podcasts/leanne-kemp-and-guarav-rana-everledger/

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Reputation



Airbnb Exec Hints at How Rental Giant Could Use Blockchain

Stan Higgins (@mpmcsweeney) | Published on March 8, 2016 at 18:20 BST

NEWS



One of Airbnb's co-founders has indicated that the popular renting service is interested in potential blockchain applications that could improve user trust.

The comments were issued by co-founder and CTO Nathan Blecharczyk in a recent interview in which he discussed the company's plans for 2016.

City AM writer Harriet Green said that the

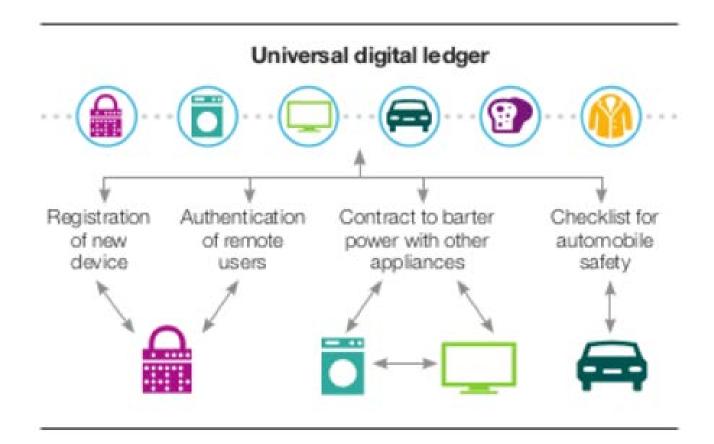


http://www.chyp.com/identity-for-blockchain-vs-blockchain-for-identity-whats-in-it-for-airbnb/

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Identity of things





Source: IBM

Personal ID attributes



Your Next Passport Could Be On The Blockchain

Posted Oct 31, 2014 by John Biggs (@johnbiggs)











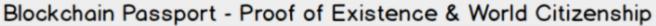












8181 3268 159E 51D1



https://keybase.io/Satoshi



Given Name

SATOSHI

Last Name

NAKAMOTO

Time Stamp

20141017-13:40UTC

Block #325,789

e251dcf4d45370606c3c45092432f7068e6951ef6fa44835

Expires

Block #378,349

<0x159E51D1<<RSA<<2048/4096<<AES256< <SHA512<<VERIFIED<<<<<<<<

WATCH **STORIES**

Wichita

potato

inventive

onlooker

torpedo

Brazilian

gravity

ahead

mural-

spindle

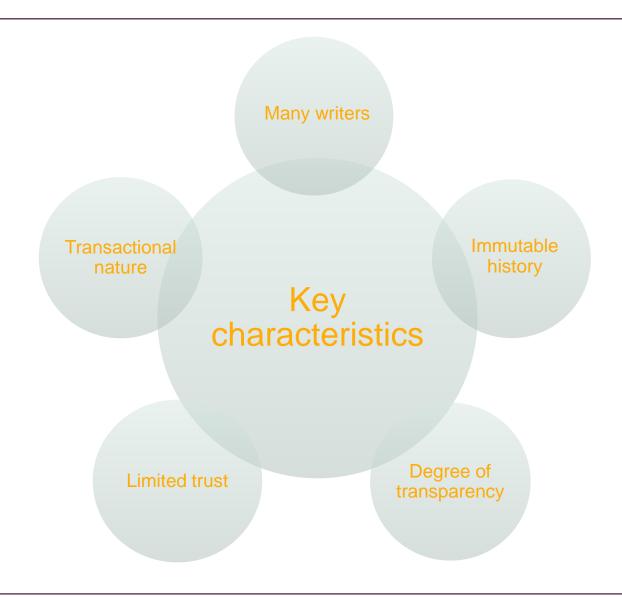
backfield

standard

Source: TechCrunch

How to understand if blockchain is at all relevant?





How to understand if we are solving the identity problem?

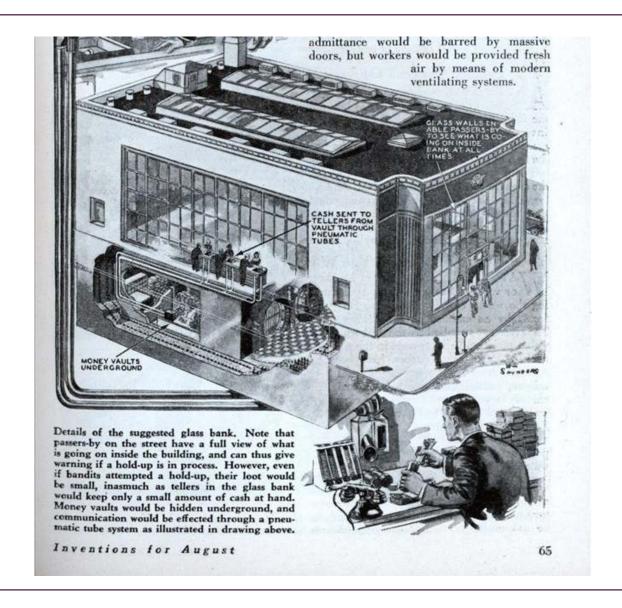


Think of three components:

Identification
Authentication
Authorisation

Radical Transparency





Ambient Accountability





Trust is a serious problem, we have to get to a new level of transparency – only through radical transparency will we get to radical new levels of trust (Marc Benioff, Davos 2015)

Contact



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