



THE BLOCKCHAIN & ISLAMIC FINANCE A PERFECT MATCH?





ALBERTO CANCLINI

SOLE DIRECTOR

HFL S.R.L.

(HALAL FINANCE & LIFESTYLE)



Blockchain revolution

“Blockchains enable us to send money directly and safely from me to you, without going through a bank, a credit card company, or PayPal.”

Tapscott, Don; Tapscott, Alex. Blockchain Revolution: How the Technology Behind Bitcoin Is Changing Money, Business and the World (p.6).





Blockchain definition

the blockchain is a **distributed public ledger**, or list, of all transactions across a **peer-to-peer** network. This is the technology underlying Bitcoin and other cryptocurrencies, and it has the **potential to disrupt** a wide variety of business processes-

December 2, 2015 Americas

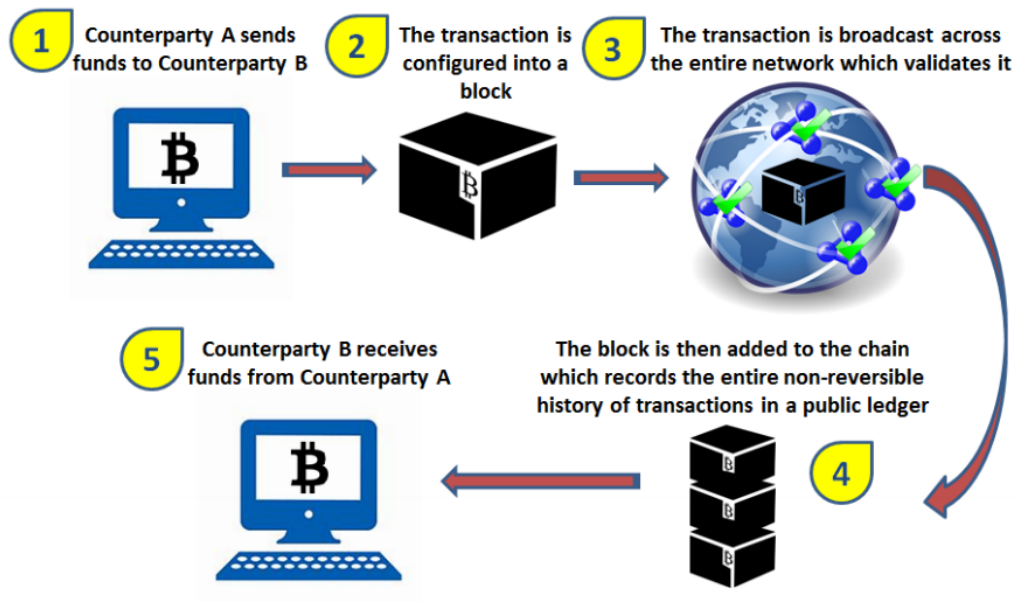
What if I Told You ... the Blockchain Could Disrupt ... Everything

Source: Goldman Sachs Global Investment Research.



Blockchain in a nutshell

Exhibit 1: The Blockchain is a distributed, public ledger, most commonly known as the core underlying technology for Bitcoin



Source: Goldman Sachs Global Investment Research.



Bitcoin blockchain nodes

GLOBAL BITCOIN NODES DISTRIBUTION

Reachable nodes as of Thu Mar 02 2017
10:44:29 GMT+0100 (CET).

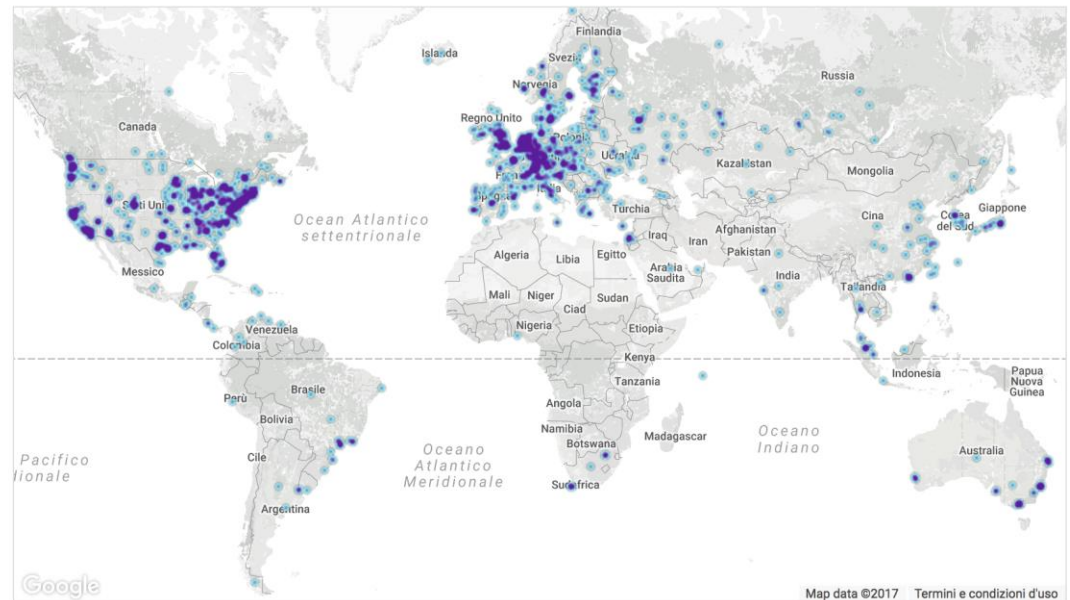
6023 NODES

24-hour charts »























Top 10 countries with their respective number of reachable nodes are as follow.

RANK	COUNTRY	NODES
1	United States	1588 (26.37%)
2	Germany	1099 (18.25%)
3	France	441 (7.32%)
4	Netherlands	369 (6.13%)
5	Canada	259 (4.30%)
6	n/a	235 (3.90%)
7	United Kingdom	222 (3.69%)
8	China	222 (3.69%)
9	Russian Federation	165 (2.74%)
10	Switzerland	107 (1.78%)

More (87) »



Cryptocurrencies Market Cap

#	Name	Market Cap	Price	Circulating Supply	Volume (24h)	% Change (24h)	Price Graph (7d)
1	 Bitcoin	\$20,571,025,537	\$1270.23	16,194,725 BTC	\$409,082,000	3.35%	
2	 Ethereum	\$1,708,406,057	\$19.11	89,403,216 ETH	\$100,177,000	1.81%	
3	 Dash	\$300,023,885	\$42.05	7,135,763 DASH	\$62,586,500	-24.05%	
4	 Ripple	\$225,741,984	\$0.006035	37,406,829,143 XRP *	\$3,690,320	5.44%	
5	 Monero	\$205,280,449	\$14.61	14,046,931 XMR	\$10,270,400	17.96%	
6	 Litecoin	\$196,918,504	\$3.94	50,028,582 LTC	\$11,359,500	3.80%	
7	 Ethereum Classic	\$123,477,353	\$1.38	89,364,960 ETC	\$3,624,410	1.64%	
8	 NEM	\$84,309,570	\$0.009368	8,999,999,999 XEM *	\$961,778	13.92%	
9	 MaidSafeCoin	\$75,473,523	\$0.166773	452,552,412 MAID *	\$681,382	4.71%	
10	 Augur	\$62,553,040	\$5.69	11,000,000 REP *	\$975,239	0.56%	
11	 Zcash	\$29,904,304	\$38.17	783,481 ZEC	\$2,211,080	-4.77%	



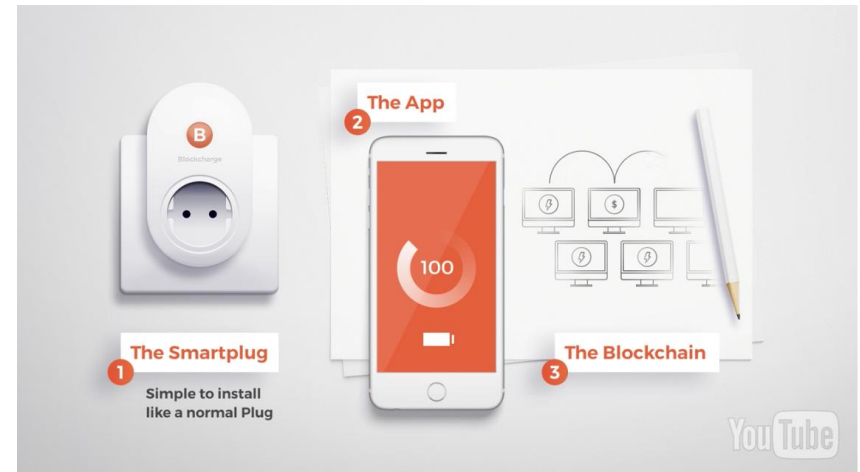
Bigger than bitcoin: Here comes blockchain

“We are seeing tremendous potential for the application of blockchain in industrial use cases. Being able to create a tamperproof history of how products are manufactured, moved and maintained in complex value networks with many stakeholders is a critical capability. This must be supported by a **shared blockchain infrastructure** and an integrated **Internet of Things** protocol.”

Dirk Slama, Chief alliance officer at Bosch Software Innovations



Slock.it (Smart contract / Ethereum blockchain)





Chronicled (Smart contract / Ethereum blockchain)

CHRONICLED

GET STARTED

PLATFORM

SOLUTIONS

COMPANY

BLOG

SIGN UP

LOG IN

A blurred photograph of a crowd of people at a conference or event, with some individuals raising their hands. The background is out of focus, showing bokeh light effects.

Linking the Physical World to the Blockchain



Promise ...

- Predicting vs advocating the future of Blockchain;
- The economy works best when it works for everyone;
- This new platform is an engine of inclusion;
- It drastically lowers the cost of transmitting such funds as remittances;
- It significantly lowers the barrier to having a bank account, obtaining credit, and investing;
- It supports entrepreneurship and participation in global trade



... and Peril (Challenges to overcome)

- The technology is not ready for prime time;
- The energy consumed is unsustainable;
- Governments could stifle or twist it;
- Powerful incumbents of the old paradigm will usurp it;
- The incentives are inadequate for distributed mass collaboration;
- The blockchain is a job killer;
- Criminals will use it.



Will Ethereum and other blockchain networks ever be trusted enough to replace our current financial system?

“The main advantage of blockchain technology is supposed to be that it’s more secure, but new technologies are generally hard for people to trust, and this paradox can’t really be avoided . We have to just live through it.”

Vitalik Buterin, founder of Ethereum



Bitcoin (XBL) versus fiat currencies

- Bitcoin (cryptocurrency) was the first use case for the blockchain;
- XBL is free of *riba* while fiat is lent into existence in exchange for *riba*;
- The quantity of XBT is capped, whereas the quantity of fiat is unlimited and can hyper inflate;



Cryptocurrencies in Islamic Banking and finance

- Could be more appropriate medium of exchange than riba-backed central bank fiat currencies;
- Lower transaction fees than mainstream money transfer;
- Could be useful for unbanked (2 billion adults) to access market of goods and services and payment system;
- Could facilitate small-scale cross-border trade;
- Social benefits and positive externalities.

