

THE GOVERNMENT, BLOCKCHAIN, BITCOINS, & CRYPTOCURRENCIES

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In September of 2015, the World Economic Forum published the results of a survey of over 800 executives and experts from the information and communication sector. According to the study¹, most senior leaders believe that over the next ten years, federal governments will be collecting taxes using the Blockchain, and 10% of global Gross Domestic Product (GDP) will be stored on Blockchain technology. Once this occurs, there will most likely be a massive upheaval in established government and financial systems, with the Blockchain, Bitcoins, and cryptocurrencies fundamentally transforming how the Federal Government interacts with its constituents.

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In fact, the shift has already begun.

¹ *Deep Shift: Technology Tipping Points and Societal Impact*. World Economic Forum. 9 September 2015. <https://www.weforum.org/reports/deep-shift-technology-tipping-points-and-societal-impact>

BITCOINS

Bitcoins hit the market in 2008, worth less than pennies. Now, barely seven years later, the value of the Bitcoin network is worth over \$7 Billion USD, with no sign of slowing its growth in the foreseeable future. Bitcoin ATMs are being installed globally, from local gas stations to the United States Capitol Building, and the number of participating venues continues to rise.

CRYPTOCURRENCIES & THE BLOCKCHAIN

While most Americans have heard of Bitcoins, it is by no means the only cryptocurrency available. In fact, there are currently over 800 cryptocurrencies in use globally today.

Cryptocurrencies are simply peer-to-peer transfers of value using computers or smartphones, essentially texting or emailing someone cash without the middleman, and the Blockchain is the underlying technology for the cryptocurrency transaction. The transactions are instant and cost effective: I have several customers in Asia who pay me using cryptocurrencies, and when they do, I receive the funds immediately and with no transaction fee, much more efficient than working through the slow, expensive and primitive banking system.

Bitcoins are a fairly straightforward cryptocurrency, but there are many others that are more complex. One of these non-Bitcoin cryptocurrencies is Ether, which allows its transactions to be preprogrammed. Programmable money has an infinite number of avenues, from the parents who program allowances to be deposited based on the students' grades in school, to Medicare / Medicaid payments that can be used only on authorized expenses for a set amount of time, after which they return to the government.

Every major bank and financial institution is studying this innovative technology, trying to understand it and get in on it before it puts them out of business, the way Uber has impacted the taxicab industry. If customers can transfer cash, stocks, or bonds without going through a previously trusted source- a bank or stock exchange- is there any future for financial institutions or companies like Western Union?

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It's still too soon to tell.

REACTING TO THE CHANGE

What we *can* tell is that the Federal Government will need a whole new regulatory framework to deal with these changing realities, including creating and updating national and international standards and policies.² Up until now, countries have had wildly different policies towards Bitcoins and other cryptocurrencies. Some countries, like Great Britain, have embraced the new technology. In 2014 George Osborne, Great Britain's Chancellor of the Exchequer, launched a review to assess how the UK could become a leading global center for Bitcoin and other virtual currencies.³ In 2015 the UK Government's Ministry for Economy and Finance approved policies solidly endorsing and welcoming of block chain technology and digital currencies.⁴

² Torey, Kyle. "The United States is Falling Behind in Bitcoin Regulation." BitCoin Magazine. 04-25-2016 <https://bitcoinmagazine.com/articles/the-united-states-is-falling-behind-in-bitcoin-regulation-1461604211>

³ <http://www.telegraph.co.uk/finance/currency/11014508/George-Osborne-embraces-Bitcoin-as-London-aims-to-be-centre-of-global-financial-technology-revolution.html>

⁴ In 2015, the UK Treasury issued a call for information on Digital Currencies:

<https://www.gov.uk/government/consultations/digital-currencies-call-for-information/digital-currencies-call-for-information>

Later that year, the HM Treasury announced the UK was "committed to more open banking" to "further help the UK's world leading FinTech sector."

Some countries, like Russia, have made them illegal. In fact at one point, Russia issued a statement stating that anyone caught acquiring, possessing, or trading Bitcoins would be sentenced to a forced labor camp.⁵ However, since July of 2016, Russia has relaxed its position and begun allowing a limited trade of Bitcoins.⁶ Still others, like China, are finally beginning to accept that these cryptocurrencies are part of a new financial reality and are here to stay. Though China had originally banned all Bitcoin use, today China allows them to be used openly. In fact, now approximately 80% of all new Bitcoins are being mined in China.⁷

The United States has held different positions on the use of cryptocurrencies. While many government agencies, including the IRS, FTS, and DHS have policies on the topic, those policies all differ, so cryptocurrency users may easily be in compliance with one government agency and out of compliance with another⁸. In July of 2016, the US Senate Committee on Banking, Housing, and Urban Affairs addressed a letter⁹ to senior government officials including the chairs of the Federal Reserve, the Federal Deposit Insurance Corporation, the Consumer Financial Protection Bureau, the Office of the Comptroller of the Currency, and the National Credit Union Administration asking for clarification on what these agencies have done “to study and understand the various types of FinTech companies involved in marketplace lending,

<https://www.gov.uk/government/speeches/uk-to-lead-on-big-data-research-says-harriett-baldwin>

⁵ <http://www.financemagnates.com/cryptocurrency/news/proposed-punishment-for-using-bitcoin-in-russia-raised-to-4-years-of-labor/>

⁶ https://en.wikipedia.org/wiki/Legality_of_bitcoin_by_country#Russia

⁷ https://en.wikipedia.org/wiki/Legality_of_bitcoin_by_country#China

⁸ Some agencies, including the Office of the Comptroller of the Currency, are attempting to bridge the legislative gap. In March of 2016, they published a white paper on Supporting Responsible Innovation in the Federal Banking System.

<http://www.occ.gov/publications/publications-by-type/other-publications-reports/pub-responsible-innovation-banking-system-occ-perspective.pdf>

⁹ The letter can be downloaded in its entirety here: <https://www.merkley.senate.gov/news/press-releases/brown-merkley-press-federal-agencies-on-oversight-of-financial-technology>

alternative payments, consumer lending, Blockchain and distributed ledger, virtual currencies...”
The letter was signed by 22 senators.

This is by no means the only request to the Federal Government for some clarity.

Representative Adam Kinzinger (R-IL) sponsored a resolution to the US House of Representatives, calling for the development of a “national policy for technology” that would include digital currencies and Blockchain technology.¹⁰ This is a timely request, as many congressmen¹¹ have been receiving Bitcoin campaign contributions, and the Presidential election is well underway.

THE DARK SIDE OF THE (BIT)COIN

Government involvement in the Blockchain is not, and should not, be solely focused on financial institutions. Law enforcement and national security organizations are also taking a second look at the technology, because along with the legitimate and beneficial services the Blockchain provides, criminals and terrorists are making use of its capabilities. Many users love that cryptocurrencies on the Blockchain are completely confidential and tightly secured, and for that

¹⁰ House Resolution 835, “Expressing the sense of the House of Representatives that the United States should adopt a national policy for technology to promote consumer’s access to financial tools and online commerce to promote economic growth and consumer empowerment.” <https://www.congress.gov/bill/114th-congress/house-resolution/835?resultIndex=11>

¹¹ Dan Elder (US House Representative candidate from Missouri) is funding his campaign using only Bitcoins: <http://electdanelder.com/donate/>
Rand Paul accepted Bitcoins for his presidential campaign: <http://www.coindesk.com/rand-paul-presidential-campaign-bitcoin-donations/>

reason, ISIS has been using the technology to move large transactions anonymously and securely.¹²

With illegal activities now occurring on the Blockchain, law enforcement and national security officials are working on ways to monitor and track illegal and dangerous transactions. This is a predominantly uphill battle, as one of the key goals of cryptocurrencies is to eliminate the need for third-party involvement.

ANALYZING & IMPACTING ECONOMIC ACTIVITY

While individual transactions are virtually impossible to monitor, general economic activity can be monitored in real time.¹³ We no longer live in an era where data must be collected, aggregated, and re-aggregated to come up with economic reports and analysis. Blockchain economic activity can be monitored in real time by real people, allowing both individuals and government agencies to respond quickly to changes in economic activity.

This moment-by-moment analytical capability creates unprecedented opportunities for local and federal governments. One of the exciting opportunities is a simplified tax code, with taxing mechanisms built into the Blockchain itself. This, however, comes with a unique challenge: how does one regulate a completely unregulated financial system? Since there is no financial institution with control over the cash flow, no user is in any way compelled to report their transactions to any government entity. Bitcoins and other cryptocurrencies allow individuals and organizations to make free local or international transactions instantly and anonymously. This makes it almost impossible to enforce tax collection.

¹² Charles, Brooke Satti. "ISIS. Are They Using Bitcoins to Fund Criminal Activities?" Security Intelligence, 10-29-2014. <https://securityintelligence.com/isis-are-they-using-bitcoins-to-fund-criminal-activities/>

¹³ There are a wide range of monitoring websites, but Blockchain.info has some analysis tools: <https://blockchain.info/>

NON-FINANCIAL USE OF THE BLOCKCHAIN

The Blockchain can be used for so much more than just financial transactions. It can manage anything of value. The Blockchain is now being used to document birth certificates and other vital records¹⁴, such as legal documents, property records, wills, voting records, marriage certificates and all kinds of personal identification¹⁵. Blockchain records are immutable. No one can forge, destroy, or tamper with them¹⁶. Developers are already exploring application ideas to enable people in the most remote parts of the world to establish identities and begin participating in the global economy.

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LOOKING FORWARD

Will government be impacted by this new technology? **Absolutely.**

This is the time to become knowledgeable about Bitcoins, cryptocurrencies, and the Blockchain so you can take advantage of the many opportunities that this transformational shift will provide.

¹⁴ Santiago Siri uploaded a video with his daughter's name, birth date and location, and uploaded it using Proof of Existence: <https://www.proofofexistence.com/>
The story is available here: <http://www.coindesk.com/meet-the-dad-who-registered-his-daughters-birth-on-the-blockchain/>

¹⁵ OneName is an identity registration service: <https://onename.com/>

¹⁶ For a more detailed explanation of the security behind the Blockchain, Khan Academy has taken the time to explain it: <https://www.khanacademy.org/economics-finance-domain/core-finance/money-and-banking/bitcoin/v/bitcoin-security-of-transaction-block-chains>

ABOUT THE AUTHOR

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