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Common Blockchain Misconceptions – Part 1 of 3

WEEKLY RECAP

- Total market cap. decreased to $176bn (a 3.2% decrease), and 7 day trading volume decreased 25.6% for top 100 crypto

THOUGHTS OF THE WEEK

My colleague and Standard Kepler CEO David Tang recently authored a few articles on the subject of blockchain and cryptocurrency misconceptions. I found that the content could be quite useful to people new to this sector. Knowing that many of our readers work outside of blockchain and crypto I decided to cover these 8 misconceptions identified by David, starting with the first 4 today. You will likely be familiar with at least a few of them.

1. “Blockchain ensures data authenticity”: Yes, data stored on a blockchain is typically immutable (there is no such thing as perfect immutability on blockchain). However, the blockchain cannot guarantee the validity of stored data. “Cr*p in, cr*p out", as it is often eloquently put. The misconception may stem from people mixing up two types of data: transactional data and general data.

All stored transactional data (e.g., a token being sent and received) is verified before being recorded on blockchain. After storing this piece of information on blockchain it can neither be modified nor erased. Hence we can be assured that the transactional data being accessed or read has not been tampered with. And, most importantly, the information has been verified to be authentic. But not every piece of data stored on blockchain is transactional data. Moreover, blockchain technology itself cannot make general data self-evident (e.g., the piece of information that “the coffee is from Ethiopia” cannot be made self-evident just by using blockchain technology.)

2. "Blockchain erases all middlemen": Blockchain technology can replace middlemen who facilitate transactions; in fact, it is more accurate to say that a group of miners replace the centralized middleman who traditionally verifies transactions. This is the foundation for creating a monetary system that is beyond regulations, and with potentially lower transaction costs. Thus, it is not inaccurate to state that blockchain can replace middlemen in the verification process of transactions. However, it is inaccurate to state that blockchain can replace every type of middleman. It should also be noted that some intermediaries who add value to the overall system should not be replaced.

TOP CRYPTO PERFORMANCE SUMMARY

Name	Price	7D%	Vol.	7D%	Mkt Cap.	% Total Mkt
BTC	$5,167.72	-1.05%	80.64bn	-24.98%	91.19bn	51.82%
ETH	$167.84	-5.03%	38.91bn	-22.06%	17.73bn	10.08%
XRP	$0.33	-8.89%	6.67bn	-36.72%	13.74bn	7.81%
BCH	$288.65	-9.72%	8.28bn	-42.37%	5.12bn	2.91%
LTC	$82.94	-10.46%	16.44bn	-30.60%	5.09bn	2.89%
EOS	$5.55	0.92%	17.02bn	-13.26%	5.03bn	2.86%
BNB	$19.49	2.86%	1.07bn	-3.98%	2.75bn	1.56%
USDT	$1.01	0.01%	80.91bn	-26.93%	2.43bn	1.38%
XLM	$0.12	-11.18%	1.76bn	-19.50%	2.25bn	1.28%
ADA	$0.08	-6.00%	0.68bn	-26.03%	2.19bn	1.25%

3. "The acceptance of blockchain by industry giants proves that crypto is the future“: JP Morgan coin and Facebook coin are not even close to the Bitcoin and Ethereum types of cryptocurrency. Rather, these coins are existing settlement systems employing some blockchain features (see our recent summary report on central bank digital currencies to learn more). From a user’s point of view, there is no difference in using these systems from using Swift or WeChat Pay. Cryptocurrency is still new to the general public, and therefore plenty of vague definitions make the rounds. Most of these can be summarized into the following two, reasonable, definitions of cryptocurrency: 1. It is issued using Distributed Ledger Technology, or 2. It is not controlled by any single company or government (e.g., no one can stop/wipe a transaction as long as it is signed correctly).

While few people would argue against definition 1, definition 2 is definitely not a universally accepted definition. However, definition 2 is the essence of cryptocurrency. Blockchain serves to ensure the validity of a transaction without involving any regulatory body or authority. To achieve this benefit, we pay extra decentralization costs (time cost, electricity, etc.) Using cryptocurrencies does not lower the transaction cost if we apply traditional regulations to them. If we regulate cryptocurrency in the traditional manner (as regulators are currently trying to do), there are only two possible outcomes: Either there won’t be a future for decentralized blockchain infrastructure (only permissioned blockchains, and I think this outcome is very likely), or blockchain becomes a less efficient, and already obsolete, piece of technology.

4. "All things are better if they are decentralized": This has for a long time been a common misunderstanding with regards to blockchain. We have to understand that decentralization is a cost we pay to allow blockchains to operate without trusted parties; decentralization is not the goal in itself. It makes no sense to make things decentralized unless you want to create something that cannot be controlled by an individual, an organization, or an alliance. Decentralization is an expensive, and it is very fragile. In return, you can theoretically build a system that cannot be manipulated or governed by anyone. But why pay this cost and make a system slower, more expensive and less stable if we are not trying to make it uncontrollable?

NETWORK FUNDAMENTALS

	BTC	ETH
Hashrate 7D Av.	45,991,630 TH/s (1.0%)	147,981 GH/s (+3.8%)
Hashrate 30D Av.	45,983,082 (+1.9%)	143,708 GH/s (0.3%)
Wallet Users 7D Av.	35,221,842 (+1.2%)	61,060,168 (+1.0%)
Wallet Users 30D Av.	34,686,839 (+0.8%)	60,141,965 (+0.9%)
Top 4 Mining Pools	BTC.com (16%) AntPool (14%) F2Pool (11%) ViaBTC (9%)	Ethermine (25%) SparkPool (24%) F2Pool (13%) Nanopool (11%)

Next week I will introduce the final 4 misconceptions that are commonly associated with blockchain and cryptocurrencies. Finally, while reading a book (Debt: The First 5000 Years) I came across the following account written 300 years ago on the first famous market bubble: The South Sea Bubble of 1710. I couldn't help but laugh a little:

"The most absurd [business scheme] of all, and which shewed, more completely than any other, the other madness of the people, was one started by an unknown adventurer, entitled 'A company for the carrying of an undertaking of great advantage, but nobody is to know what it is.’ The man of genius who essayed this bold and successful inroad upon public credulity merely stated in his prospectus that the required capital was half a million, in five thousand shares of 100l. each, deposit 2l. per share. Each subscriber, paying his deposit, would be entitled to 100l. per annum per share. How this immense profit was to be obtained, he would not condescend to inform them at that time, but promised that in a month the full particulars would be duly announced, and call made for the remaining 98l. of the subscription. Next morning, at nine o'clock, this great man opened an office in Cornhill. Crowds beset his door, and when he shup up at three o'clock, he found that no less than one thousand shares had been subscribed for, and the deposits paid. He was philosopher enough to be contented with his venture, and set off that same evening for the Continent. He was never heard of again."

DISCLAIMER

Abbreviations: ADA: Cardano; BCH: Bitcoin ABC; BSV: Bitcoin Satoshi Vision; bn: billion; BTC: Bitcoin; Central Bank Digital Currency: CBDC; crypto: cryptocurrencies; ETH: Ethereum; ICO: Initial Coin Offerings; Market Cap: Market Capitalization; mn: million; RPS: Retail Payment System; Trading Vol.: Trading Volume; tx: transaction(s); US$: United States Dollars; USDT: USD Tether; WPS: Wholesale Payment System; XLM: Stellar Lumens; XMR: Monero; XRP: Ripple

Chart of The Week: Sources:

Network Fundamentals: Sources: Blockchain.com, Blocktrail, Etherchain.org, Etherscan.io, Standard Kepler Research

Thought of The Week: Sources: Standard Kepler Research

Top Crypto Performance Summary: Sources: Coinmarketcap, Standard Kepler Research

Weekly Recap: Sources: Coinmarketcap, Standard Kepler Research

Past performance does not guarantee future results.

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The price of Bitcoin and other cryptocurrencies are highly volatile in nature. It is suggested that clients should perform their own due diligence and consult a fully qualified independent professional financial adviser before making any investments in cryptocurrencies.

Unless otherwise stated, all data is as of April 14, 2019 or as of most recently available.

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