

Massive Compliance Cost Savings via Permissioned Blockchains

WEEKLY RECAP

- Total market cap. reached \$129bn (a 3.7% decrease), and 7 day trading volume slumped 21.1% for top 100 crypto

WEEK AHEAD

- 3 Jan:** ADA to release roadmap update

THOUGHTS OF THE WEEK

While we consider the value generated by public chains limited, we also view 2018 as the year of permissioned blockchain. Permissioned blockchains present particularly attractive use cases in reducing compliance costs for banking transactions (txs).

Data reporting and validation costs are a core burden of banking compliance, and omissions in reporting can lead to significant penalties. For example, each tx under the MiFID II reporting standard requires the provision of 65 individual fields of data. Case in point, Merrill Lynch was fined GBP 34.5mn by the Financial Conduct Authority (FCA) for the incorrect reporting of 68.5mn derivative txs in 2017.

Financial institutions (FIs) have been pursuing blockchain as tools for reducing compliance costs during the issuance of financial instruments. The most notable example is the first blockchain bond "BONDI" issued by the World Bank and the Commonwealth Bank of Australia (CBA). The use of blockchain automates the auction and book building process of BONDI, which enables massive savings in validating investor information. Blockchain also facilitates real time updates of investor bond holdings, thus enhancing data transparency and reducing data reporting costs. The streamlined bond issuance process facilitates faster settlement, from T+2 days to T+2 min.

FIs accelerated their exploration of blockchain in 2018, especially in data privacy and storage. Bank of America is one pioneer, filing blockchain patents covering external data validation and the storing of client crypto holdings in enterprise accounts. Patent applications is a noteworthy battlefield between FIs and tech giants (see Chart of the Week), and indicate significant interest in the technology.

Apart from in-house R&D, leading FIs collaborate with permissioned blockchain providers to further simplify the compliance process. 39 firms including BNP Paribas had completed global trials of KYC on R3's Corda as of June 2018. The Corda KYC platform eliminates the need for each institution to attest and update KYC records, thereby reducing data validation costs. Permissioned blockchains further preserve data privacy for banks as only authorised participants can request access to stored customer information.

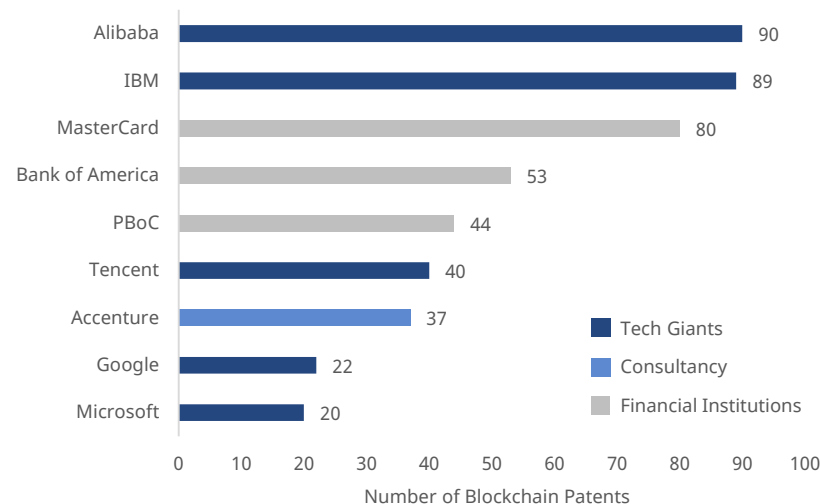
Blockchain technology can bring about significant cost savings when applied properly, most evidently so as permissioned chains. Expect wider adoption of blockchains in financial markets, yet this is likely driven by FIs and permissioned blockchain providers.

TOP CRYPTO PERFORMANCE SUMMARY

Name	Price	7D%	Vol.	7D%	Mkt Cap.	% Total Mkt
BTC	\$3,837.16	-5.05%	31.51bn	-24.05%	66.97bn	51.78%
XRP	\$0.37	-1.05%	4.01bn	-15.98%	14.91bn	11.53%
ETH	\$136.69	6.86%	17.31bn	-0.08%	14.23bn	11.00%
BCH	\$162.78	-16.03%	2.48bn	-53.37%	2.85bn	2.21%
EOS	\$2.62	-4.83%	5.06bn	-28.49%	2.37bn	1.83%
XLM	\$0.12	-6.38%	0.60bn	-21.37%	2.25bn	1.74%
USDT	\$1.03	0.64%	26.11bn	-21.40%	1.91bn	1.47%
BSV	\$88.97	-16.44%	0.59bn	-64.34%	1.56bn	1.24%
ADA	\$0.04	-3.69%	0.17bn	-48.89%	1.08bn	0.84%
XMR	\$48.16	-9.83%	0.09bn	-5.90%	0.80bn	0.62%

CHART OF THE WEEK

Blockchain Patents Ranking in 2018



TOP CRYPTO NEWS AT A GLANCE

Bank of America reveals blockchain patent to improve cash handling: This patent relates to deploying, configuring and utilizing cash handling services to provide dynamic and adaptable operating functions.

At least 340 UK crypto or blockchain companies ceased operations in 2018: The first time that the number of dissolved crypto firms outpaced the number of new registrations. 60% of them ceased activity between June-Nov.

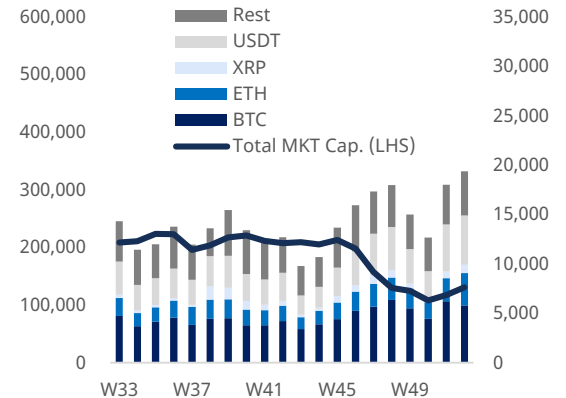
Bitcoin lightning network capacity surpasses \$2mn: The number of channels has grown significantly since Nov, totaling 14,352 unique channels.

Blockchain-based telemedicine and telepsychology in East Africa: The United Nations Office on Drugs and Crime (UNODC) has partnered with doc.com to roll-out such initiatives in 2Q 2019.

NETWORK FUNDAMENTALS

	BTC	ETH
Hashrate	40,723,455 TH/s (+4.0%)	178,655 GH/s (+9.1%)
# Wallet Users	31,806,700 (+0.5%)	51,526,977 (+1.5%)
Top 3 Miners	BTC.com (17%) AntPool (11%) F2Pool (10%)	Ethermine (27%) SparkPool (22%) NanoPool (13%)

MARKET CAP & TRADING VOL. (US\$ MN)



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WEEKLY SUMMARY | 24 – 30 DECEMBER

DISCLAIMER

Abbreviations: ABC: Adjustable Blocksize Cap; ADA: Cardano; BCH: Bitcoin ABC; BCH SV: Bitcoin Satoshi Vision; bn: billion; BONDI: Blockchain operated new debt instrument; BTC: Bitcoin; CBA: The Commonwealth Bank of Australia; crypto: cryptocurrencies; ETH: Ethereum; FCA: the Financial Conduct Authority; FIS: Financial institutions; GBP: British Pound; IBM: International Business Machines Corporation; ICO: Initial Coin Offerings; KYC: Know your customer; Market Cap: Market Capitalization; MiFID II: The markets in financial instruments directive II; mn: million; Nov: November; PBoC: People's Bank of China; R&D: Research and development; Trading Vol.: Trading Volume; Tx: Transaction; UK: The United Kingdom; UNODC: The United Nations Office on Drugs and Crime; US\$: United States Dollars; USDT: USD Tether; XLM: Stellar Lumens; XMR: Monero; XRP: Ripple

Chart of The Week: Sources: Blockexplorer.com, IPRdaily.cn, Standard Kepler Research

Market Cap & Trading Vol.: Sources: Coinmarketcap, Standard Kepler Research
The horizontal axis represents the week number in 2018. For instance, W33 indicates the thirty third week in 2018. The primary vertical axis represents total market capitalization; and the secondary vertical axis represents total trading volume.

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

Thought of The Week: Sources: Accenture, Bank of America, Bloomberg, CCN, Coindesk, Coinmarketcap, Cointelegraph, IPRdaily.cn, R3, Standard Kepler Research, The Commonwealth Bank of Australia, The World Bank

Top Crypto News At a Glance: Sources: Blockcast.it, CCN, Coindesk, Cointelegraph, Standard Kepler Research

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

Week Ahead: Sources: Cryptocalendar.pro, 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.

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Unless otherwise stated, all data is as of December 30, 2018 or as of most recently available.

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