DEMYSTIFYING DIGITAL ASSETS TRADING: FROM YOUNG MONEY TO MEETING INSTITUTIONAL EXPECTATIONS

IN CRYPTO CUSTODY PARTNERSHIP WITH

Trustology

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WWW.GC.EXCHANGE

INTRODUCTION

Since Jan 2009, the launch of the bitcoin blockchain, we have come a long way in possibly one of the most disruptive technological innovations in the last 50 years. May 22, 2010 is another auspicious day in the bitcoin faithful calendar. “Pizza Day”, when bitcoin was first used to buy some pizza 10,000 bitcoins (worth at the time approx. $25) for two delivered Papa John's pizzas, with a price now of $100 million.

"I'll pay 10,000 bitcoins for a couple of pizzas.. like maybe 2 large ones so I have some left over for the next day" - Laszlo Hanyecz

Transactioning over a forum, this is not a marketplace anywhere close to the current market infrastructure with low latency execution and limit order books currently available at GCEX.

In 2014, Mt Gox, once the largest bitcoin exchange, was hacked and lost 850,000 BTC at the time worth $450 Million, with a current value closer to $8.5 Billion. The loss caused the collapse of the exchange and was the hack that changed everything.

Both these two examples lead to very real world scenarios of what is counterparty risk in the digital asset space.

This has been a core problem (and strength) with a decentralised currency as once cryptocurrency is sent and private key signed, there is no authority to reverse the transaction. Counterparty risk is a big problem, from buying pizzas to large transaction volumes across counterparties. Except it may result in more than the loss of a pizza.

According to Cointelegraph, in 2019 alone, around $300 million in total was stolen from 12 crypto exchanges and is a primary concern to those from traditional finance transitioning into the digital asset market. Custody of assets has therefore become a core focus, with solutions ranging from offline cold storage and self-custody hardware and paper wallets to MPC and hardware security (HSM) multi-sig wallets.

However, these solutions typically mean a trade off between security and convenience. Hence, striking a balance between secure storage, fast access and resolving counterparty risk for institutions has been the end-game for many custody providers worldwide.

“If your bitcoin exchange gets hacked, you lose all of your money. If your bitcoin wallet gets hacked, you lose all of your money. If you forget your login credentials, you lose all of your money. If there’s a bug in the code of your smart contract, you lose all of your money. If someone successfully hacks the blockchain security, you lose all of your money.”

- Bruce Schneier

https://www.wired.com/story/theres-no-good-reason-to-trust-blockchain-technology/

TRENDS AND CHALLENGES IN DIGITAL ASSETS TRADING

The overall crypto market, as of May 2020, is worth about USD260 billion. Exchange daily trading volumes are estimated to be in the region of USD100 billion, but many suspect much of that to be wash trading. OTC trading volumes are reported to be at least twice that of exchange volumes.

At the end 2017 bitcoin futures arrived, placing the CME at the forefront of a new kind of institutional offering - exposure to Digital Assets. In May 2020, bitcoin futures open interest reached new highs on May 7 of 48.9K bitcoin ($4.9 billion). At the same time, Deribit has achieved USD1 billion in open interest in the options markets.

Many unregulated and non-transparent entities have entered the market since 2017. In stark contrast to the CME, we see exchanges which do not fulfil the basic notion of "institutional" and what is expected in a transaction between parties. Cryptocurrency markets are highly fragmented so achieving best execution is often difficult without connecting to multiple venues.

GCEX aims to streamline the trading for both FX and digital assets fusing regtech and fintech combined. GCEX clients can achieve the best execution and tight spreads without the problems of unregulated venues, similar trading experience to FX.

ENTER THE CUSTODIAN

Trustology

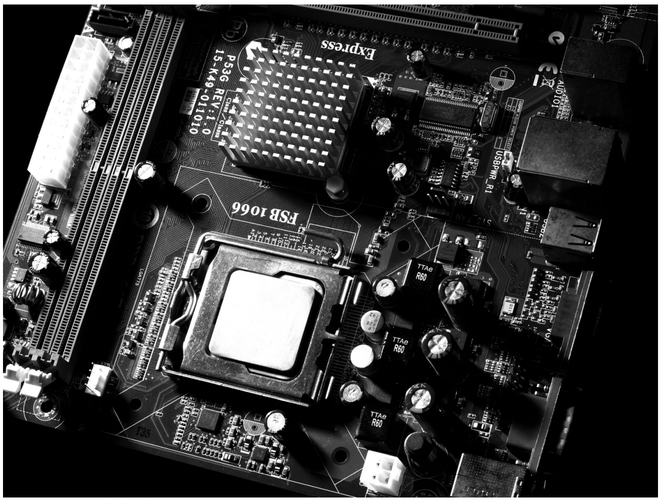
As noted earlier, the security and ownership shortcomings of existing crypto custody solutions have led to many headline-grabbing stories. The hacking and mismanagement of cryptocurrency resulted in bitcoin and other altcoins suddenly 'vanishing' from investor accounts and wallets, some wholly lost others stolen or coerced from investors. Securing the keys is still very problematic for most.

The experience is not very user friendly, easily accessible or secure and originally designed with the individual in mind so not scalable to meet business demand or equipped with the necessary business and compliance controls needed. Offline solutions such as cold storage are slow and expensive to manage and maintain not to mention unscalable. Hardware and software wallets are cumbersome and less secure as they both require self-custody of the keys which now subjects users to both losing those keys and being vulnerable to hacking. Similarly, whilst newer multi-party computation solutions enable both the owner and service provider to sign a transaction in such a way that neither can ever sign a transaction on their own there is still the need for users to manage their backups, i.e. they must self-custody, which again is not practical or secure.

Among existing market-leading solutions which still represent only a handful globally, there is an unaddressed need for a low-latency, user friendly, yet highly secure custodial provider. Also, there is a pressing need for an independent custodian that meets regulatory requirements and can keep up with new high-frequency margin trading demands. The current alternative is to hold assets on-exchange. However, depositors may unwittingly expose themselves to counterparty risks and hacking.

But in reality, when hedge funds need to trade, they still need to move the funds to the exchange. This is the particular predicament of institutional traders, and the reason that so many institutional investors store their funds primarily on cryptocurrency exchanges–in spite of the associated risks, because they need to stay as liquid as possible.

Another critical issue is the lack of user-friendly crypto custody services within the burgeoning decentralised finance (DeFi) sector. At present estimates, DeFi is set to become a $5 billion industry in 2020 with USD1 billion in value already locked. It promises lower fees, lower risks and deeper liquidity than traditional financial services by offering trading, lending, hedging etc. Yet investors are left stranded, unable to take advantage of this potentially lucrative venture due to an absence of appropriate control, safety and due diligence checks and the nascent overall structure of the market applications which are not often user friendly or easy to integrate with.



A custody model framework that's more than just fit for purpose

Now that crypto is more established, funding trading in crypto versus fiat is more popular, so is margin trading, and the need to meet crypto margin calls quickly.

What we have is a rapidly evolving and maturing market with higher demand for regulatory clarity and more reliable security and custody options to secure and manage a variety of cryptoassets across chains and platforms, to allow for more individual and institutional participation.

So suddenly, scale and speed matter as much as security.This is where independent, insured crypto custodians such as Trustology can add value.

With crypto funding of trading accounts, comes the headache of managing millions of keys, and wanting to transact instantly and securely. Manual operations are too expensive and cumbersome, and for that automation is needed - speed, scalability and resilience.

Additionally, with the advent of DeFi you also need to be able to support an almost infinite number of protocols, do so securely and in real-time with segregated keys and controls fit for institutions without compromising on speed or access which we do.

An ideal balanced solution would be one that is in 'real-time', works across chains and protocols, but leverages end-to-end encrypted hardware security and custom firmware to mitigate security risks such as hacking or theft.

"Unlike exchange wallets, custodians are not lenders, so clients are not exposed to counterparty credit risk."

Users can efficiently execute transactions through a variety of interfaces such as mobile devices, desktop or via API integrations, thereby reducing the transactional delays caused by manual processing as experienced with cold storage.

What's more, crypto custodians provide institutional investors with the enforced transactional controls such as multisig and whitelists to satisfy regulatory and investor scrutiny.

Unlike exchange wallets, custodians are not lenders, so clients are not exposed to counterparty credit risk.

The upside for institutions leveraging digital assets

Further regulation will see benefits to GCEX and regulated entities moving into the market. At the same time, market fragmentation should improve as more venues are connected - which some have dubbed as "walled gardens".

Trading venues will have more specialised infrastructure to start offering best execution, reducing transaction costs and price slippage. GCEX is committed to transparency and best practices wherever possible.

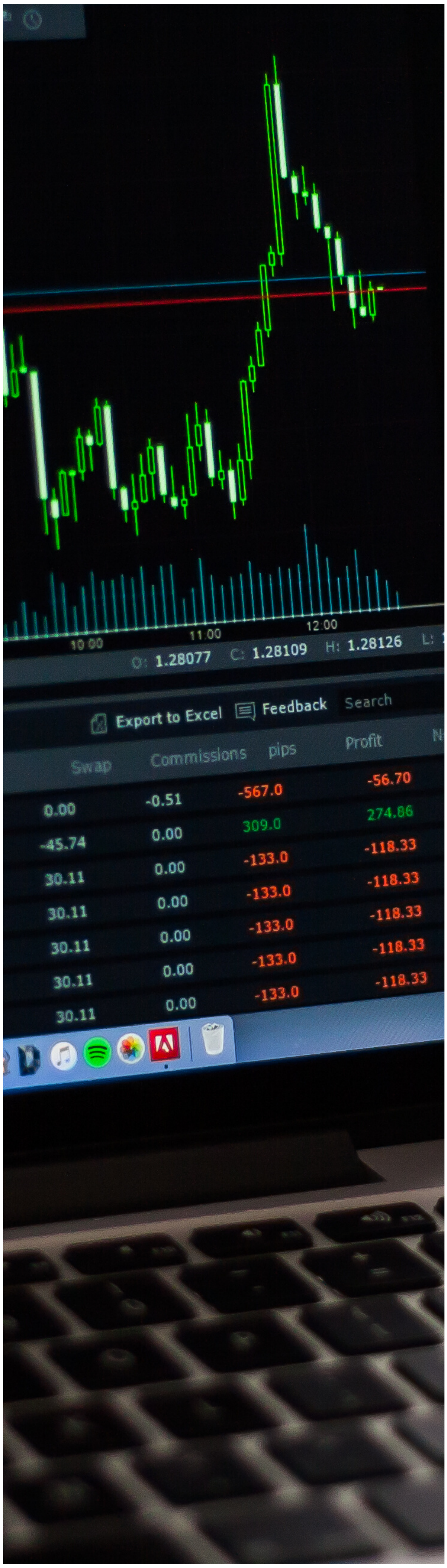
Increasing volumes in the derivatives markets will lead to more institutional investors implementing more hedging strategies; consequently, this will mean continued growth in the derivatives market and required institutional infrastructure.

From proof of concept to a tokenised future

There have been considerable developments in both the infrastructure of and the clients who trade cryptocurrencies and digital assets.

Perhaps the most crucial possible direction for digital assets and the expanding digital and security token market is toward a market set to exceed many trillions of dollars of real asset value; which, although not (entirely) decentralised provides a way for blockchains to reduce market fiction for the trading of standard shares substantially.

These tokens will have to be traded and held in custody at regulated venues. At the moment these token offerings are illiquid, but anticipated to grow, so a venue such as GCEX with a custody provider such as Trustology could offer a way to aggregate liquidity, execute trading at low latency and settle and store digital assets with much lower risk.




"Longevity in this business is about being able to reinvent yourself or invent the future"
SATYA NADELLA
CEO MICROSOFT
CORPORATION

MARKETS DON'T STAND STILL WE DON'T EITHER

The risk of dealing with cryptoassets can be overcome, and there is an increasing number of regulated entities moving into the space to deal with fears related to hacking, regulatory risk and lack of specialists in this area.

GCEX aims to provide a client experience which is almost identical to FX; the technology stack is the same for trading and execution against our aggregated LPs.

Securing and managing digital assets with Trustology allows a third party to hold the funds in a secure and insured manner whilst facilitating 'best execution' and more.

Fintech and DeFi are proving to be an incredibly disruptive force in financial markets, with the dream of anonymous pizza purchases in an online subculture progressing to a global movement as an alternative way to perform value exchange.

Afterall, **“Longevity in this business is about being able to reinvent yourself or invent the future” -- Satya Nadella**, CEO Microsoft Corporation.

We’re about the latter - inventing the future for active institutional adoption.

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GCEX is an FCA regulated professional and institutional technology-agnostic platform, allowing brokers, funds and other professional traders to access deep liquidity. We offer exposure and access to traditional and digital markets using Tier 1 and trusted providers for FX and traditional finance. www.gc.exchange

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Trustology’s vision is to create the most compelling cryptoassets company of the 21st century. Our first focus has been securing and managing cryptoassets with our TrustVault platform technology. www.trustology.io