APPETITE FOR DIGITAL ASSETS
EXPLORING ENTERPRISE ADOPTION

by Capgemini Invent, February 2023

Table of Contents

1 Executive Summary

The future of financial products & investments is changing again. The main driver behind this is technology and user behavior.

The combination of centralized and decentralized financial systems is driving rapid innovation across a variety of sectors leaving institutions rapidly needing to upskill and engage with brand new asset classes.

Whilst the last decade has mostly focused on retail markets and startup/scaleup ecosystems that are quick to embrace the opportunities presented by digital assets, we have yet to see mass-market institutional adoption of these assets.

In this paper, we assess the what's now, what's new and what's next for digital assets as we move into 2023.

What's now?

- Alongside a decade of significant retail exposure, we're now approaching a point where institutional interest is shifting and significant opportunities are emerging for institutions willing to engage with digital assets.

- However, various risks continue to play a key role in enterprise decision-making including regulatory uncertainty, macroeconomic instability, rising inflation and ongoing cybersecurity concerns.

What's new?

- The last year demonstrated a need for heightened scrutiny and public auditability for key players within the cryptocurrency space following the collapse of large DeFi projects like Terra/Luna and centralized exchanges like FTX. Regulatory oversight will likely be a key enabler to rebuild confidence in the space and enable institutional players to enter the industry with confidence.

- Additionally, this report identifies a few key milestones to watch for that may signal significant growth and capitulation of digital assets into mass market adoption including key use cases.

What's next?

- Now is the optimal time for institutional players to begin or expand their ventures into the digital asset space.

- Whether you're just starting out or expanding next-gen digital products, we have a number of offers and resources available to support you on this journey.

2 Is the glass half full or half empty?

Perception of digital assets

The rise of digital assets such as cryptocurrencies, tokens and NFTs has sparked debate among institutional investors about their potential as a viable investment class. While some see digital assets as a high-risk, speculative investment with little inherent value, others see them as a promising new asset class with the potential for significant returns and long-term utility.

One of the key factors influencing the institutional perception of digital assets is a lack of correlation to other asset classes. Unlike traditional assets such as stocks and bonds, which tend to move in tandem with broader market trends, digital assets have shown a high degree of independence, with prices that can fluctuate wildly based on a variety of (often speculative) factors. This lack of correlation can make digital assets a useful tool for diversifying investment portfolios, but also creates additional risks for investors who may not be prepared for significant volatility.

Another factor influencing institutional perception of digital assets is a lack of regulatory clarity. While some governments have begun taking a more active role in providing supervisory oversight, many jurisdictions have been slow or non-responsive. This uncertainty is leaving institutions unsure of how to navigate various compliance challenges that arise from acquiring, holding or engaging with web3 platforms and assets. In the United States, the Securities and Exchange Commission (SEC) has been particularly vague about the classification digital assets as securities, deferring to a case-by-case assessment of an asset's function and purpose. This is quickly becoming a common regulatory approach in order to avoid stifling innovation at the risk of consumer protection. However, there is a growing tendency within the US to consider Bitcoin to be a commodity, whereas other assets may fall into SEC jurisdiction.

Overall, the institutional perception of digital assets remains significantly divided. Alongside recent market turmoil, such as the Terra/Luna collapse or the sudden administration of FTX, many question the role of digital assets within their portfolio. As the market continues to evolve, it will be important for institutions to carefully evaluate the potential risks and rewards of engaging with digital assets and consult with legal and financial advisors to ensure compliance with applicable laws and regulations. Emerging technologies that utilize blockchain and tokenization of real-world assets are seen as potential disruptors to enable next-gen banking services. This highlights the need for institutions to pay attention and prepare for the role of digital assets in the future as both an investment vehicle and a technical enabler for various use cases.

Institutional preferences

Recent research has found that the digital asset market is dominated by Bitcoin (BTC) and Ethereum (ETH). European and Asian institutions tend to prefer to optimize their exposure by holding assets directly, while North American institutions prefer investment products with existing holding companies or brokerage services. Holding rates for digital assets among institutions show that 53% hold BTC, 40% hold ETH, 21% hold other digital assets, and 11% hold none.

Estimates also suggest that retail market penetration of digital assets is quite high, with Coinbase estimating that it currently sits at around 50%.[1] In contrast, equities in Germany, the UK and Switzerland sit at around 20% retail market penetration suggesting that retail digital asset adoption as a speculative investment is almost at mass adoption, leaving significant space for institutional growth.

Interestingly, it's also worth noting that the vast majority of centralised exchanges are primarily servicing retail markets with estimates sizing 90% of exchange users being retail investors and only 10% being institutions. Consequently, the vast majority of exchange revenue comes from taker fees on trades.

[1] Market penetration refers to the percentage of customers being sold to out of a total addressable market.

Bitcoin (BTC) & Ethereum (ETH)

Bitcoin (BTC) and Ethereum (ETH) are the two largest and (arguably) most well-known digital assets. BTC is a decentralized digital currency, the first of its kind, which operates on a peer-to-peer network without the need for a central authority. It is sometimes referred to as "digital gold" due to its limited supply and its use as a store of value (albeit it still suffers from high volatility like other digital assets).

ETH, on the other hand, is a decentralized platform that runs smart contracts, which are applications that run as programmed without the possibility of downtime, censorship, fraud, or third-party interference. ETH is used to power the decentralized finance (DeFi) ecosystem, which allows users to access a range of financial services without the need for intermediaries, like banks or brokers.

BTC and ETH also have quite different risk and return profiles. BTC is often seen as a more stable and established digital asset, while ETH offers more potential for growth and innovation due to its use in the DeFi ecosystem. As such, an institutional investor may choose to allocate a portion of their digital asset portfolio to both BTC and ETH in order to diversify their exposure alongside a plethora of alternative digital assets including tokens and NFTs.

View from the bridge

The potential for high upside and outsized returns in this space is limited by regulatory uncertainty, a lack of correlation to other asset classes (albeit recent events have shown strong positive beta), and a lack of education. This often results in a reluctance to even start the journey with many institutions adopting a “wait and see” approach.

As institutional players, it is important to be aware of the current state of government regulation in the digital asset space. Whilst these assets are often seen as ‘decentralized’ and therefore outside of government control, many governments around the world have begun to take steps to regulate the industry.

In the United States, the SEC has begun instigating several enforcement actions against companies that have raised funds through initial coin offerings (ICOs) without following proper registration and disclosure requirements.

In other countries, such as China and South Korea, governments have taken a more restrictive approach, banning Initial Coin Offerings (ICOs)[2] and limiting the use of cryptocurrencies in general. This has led to a decrease in trading activity and a decline in the value of many cryptocurrencies.

Overall, it is important for institutional players to carefully consider the regulatory landscape when considering investments in the cryptocurrency space. While there may be potential for high returns, the lack of clear and consistent regulation can create uncertainty and risk. It is important to carefully evaluate each investment opportunity and consult with legal and financial advisors to ensure compliance with applicable laws and regulations.

What else

The lack of financial service infrastructure in the digital asset market can be attributed to its nascent stage and developing maturity. The core tools needed to provide services like brokerage, security, transparency, insurance, aggregator services and audit in this market are still in the process of being developed.

Another factor is that the cryptocurrency market is highly decentralized and fragmented, with a large number of different cryptocurrencies and blockchain networks in operation. This makes it difficult to establish a single,

[2] An Initial Coin Offering (ICO) is typically the initial ‘public’ capital raise run by a project where a digital asset/token is offered to both private and public/retail investors for a set price. Token holders acquire a project’s native token with an expectation of realizing future gains or the token providing functional utility within the project.

unified infrastructure for providing financial services as each cryptocurrency and blockchain may have its own unique set of features and challenges. The fragmentation of tooling also creates challenges for industry standards and capability building.

Overall, the lack of financial services infrastructure in the cryptocurrency market is a result of the market's relative youth, its decentralized and fragmented nature, and the ongoing evolution of the regulatory landscape.

Cybersecurity

The issue of cybersecurity continues to be a major concern for professional investors in the market. The decentralized and largely unregulated nature of digital assets makes it a prime target for hackers and other cybercriminals who are looking to steal funds or sensitive information.

One of the key risks is the potential for "hacking" of centralized or custodial exchanges, where cybercriminals gain access to the exchanges' systems and steal funds held there. This type of attack can be especially devastating, as it can result in significant losses for investors as digital assets are effectively held in large, custodial wallets on behalf of customers.

Another concern is the potential for "phishing" attacks, where social engineers trick individuals into providing sensitive information, such as their private keys or login credentials, by pretending to be a legitimate entity. These attacks have also resulted in the theft of funds and sensitive information.

To protect against these risks, professional investors in the cryptocurrency market need to take a number of steps to ensure the security of their funds and information. For self-custody, this includes using strong and unique passwords, enabling two-factor authentication, and only using reputable and secure exchanges and other crypto-related services. Alternatives to be considered are smart contract wallets, multi-signature wallets, social recovery wallets and of course and third party custodial providers.

3 Shifts in the digital asset landscape

Changes in retail markets

The last 12 months have been a rollercoaster when it comes to this emerging asset class. Whilst the promise of digital assets & DeFi has spurred mass retail & enterprise interest, we've seen a rapid pullback of investor confidence in recent months.

The collapse of large, centralised cryptocurrency exchanges like FTX and its affiliated entities like Alameda Research has spurred additional distrust amongst retail & institutional investors. The aftermath of these events has reignited debates around:

- The **concentration of assets held on custodial exchanges**; and
- The **lack of regulatory oversight & auditability of exchanges**.

These issues, coupled with a bleak macroeconomic outlook, have created a turbulent environment for the market perception of digital assets. The ongoing cryptocurrency bear market has also impacted large exchange players like Coinbase recently being forced to limit spending, reduce employee count and effectively consolidate the business in preparation for the next bull run.[3]

However, with rising interest rates comes rising interest in alternative stores of value. Whilst periods of high inflation generally create larger cash savings (as retail & institutional players look to create safety nets), this also creates opportunities for significant wealth generation.

This is where we're like to see a renewed interest in traditional financial service providers entering the space with new digital asset products and services.

The institutional outlook and response

Mature industry players are now recognizing the need for alternate use cases beyond speculative investments to drive the next bull run and capital in-flows. The big question that will dictate the future of digital assets will be the role these use cases play for both institutional & retail users.

Whilst many institutional players slowed down project spending drastically in the last 12 months, mature players have continued to build and ramp up investments irrespective of macroeconomic concerns. This trend highlights a fixation on the continued growth and role this technology will play in the future of financial services. Sample projects include Bitcoin Suisse and Sygnum Bank exploring DeFi services in a regulated way alongside existing custodial asset services and the continued growth of JP Morgan's permissioned payment network that enables JP Morgan institutional client to access a real-time global payment network through tokenised deposit accounts.

Some of the big milestones to watch for in the coming years will be:

- **Use cases that add value in daily life** - this may include transaction-based efficiencies, cross-border payments, real-time cost saving & optimisation or augmented digital experiences.

- **Increased scrutiny of asset-backed institutions** – the collapse of DeFi projects like Terra/Luna and exchanges like FTX may roll back on to traditional banks seeking to enter the market and carve their own share of the web3 space. The likely result is that additional scrutiny will be placed on these players including public audit or proof-of-reserve obligations.

- **Non-fungible token (NFT) utility & functions –** the explosive growth of NFT transaction volume was a strong indicator of speculation but may not be a reflection of underlying utility. NFTs have potential to

[3] Commentators opt to use the language of 'bull' and 'bear' markets to refer to sustained periods of rapid price rises, capital in-flows and high speculative interest (bull market) versus significant price declines and capital outflows to more stable stores of value (bear market).

seriously disrupt real-world assets through on-chain tokenisation or digital twins. These can free up significant amounts of traditionally illiquid capital and expand the reach of capital markets to new geographies and consumer groups.

A common thread across all these trends is the ability to more meaningful allocate of resources across traditional financial products and services. This is a key driver for the next wave of financial services.

4 What's next?

Based on the expected future market demand we've identified a number of general opportunities for enterprise players seeking to enter the digital space.

Core institutional bank offerings:

- **Custody Services** – Whether built in-house or partnering with existing digital asset security providers, the combination of consumer interest coupled with a desire for secure & trusted providers has placed financial institutions in a fortunate position to service this emerging market.

- **Trading** – Banks will likely play a competing role in the future ecosystem to provide liquidity and brokers services either with existing centralized or decentralized exchanges. In the short-mid term, most enterprise will find value in partnering with existing liquidity providers to meet immediate customer demand.

- **Staking** – For many, the attraction of digital assets has arisen from lucrative returns and consistent asset growth through staking rewards. Staking fundamentally is a by-product of DeFi, but it's function is consistent with any interest-bearing deposit account held with banks. Staking products enable institutions to meaningfully allocate resources for investment purposes.

New Products & Services

Alongside some core offers, we've already begun to see a convergence of services between traditional banks and large cryptocurrency exchanges to provide digital asset products & services. Players that act and are willing to partner & integrate into an ecosystem will be best placed to meet next-gen customer demands.

- **Customer Acquisition** – Whilst banks *should* be best placed to onboard customers as they have established, regulated products and trust in local markets, exchanges are rapidly maturing their offerings to support digital banking offers alongside digital asset services. These entities are seen as highly disruptive and can offer competitive fees, support services and highly agile services.

- **Liquidity Provisioning** – Centralized exchanges, like Coinbase, are already providing liquidity services managing large order books to enable digital asset trading. Banks wishing to enter the space now will likely need to partner and integrate existing liquidity provisioning services to ensure robust order books are available to meet customer demand.

- **Security** – Established custodial service providers have been hyper-focused on providing institutional-grade security solutions for digital assets. Banks increasingly are looking to partner with service providers to compliment digital asset products rather than building in-house capability especially when it comes to security & custody solutions.

The rise in digital asset ownership indicates a consistent trend toward mass market adoption. Whilst centralized exchanges and banks will likely be competing for the same mass market share, those entities who act now and start building knowhow and capability will reap the most benefits of the digital asset age.

5 Acknowledgements

Expert Interview:

Many thanks to Peter Hofmann – former Head of Market Expansion Germany & Switzerland, Coinbase.

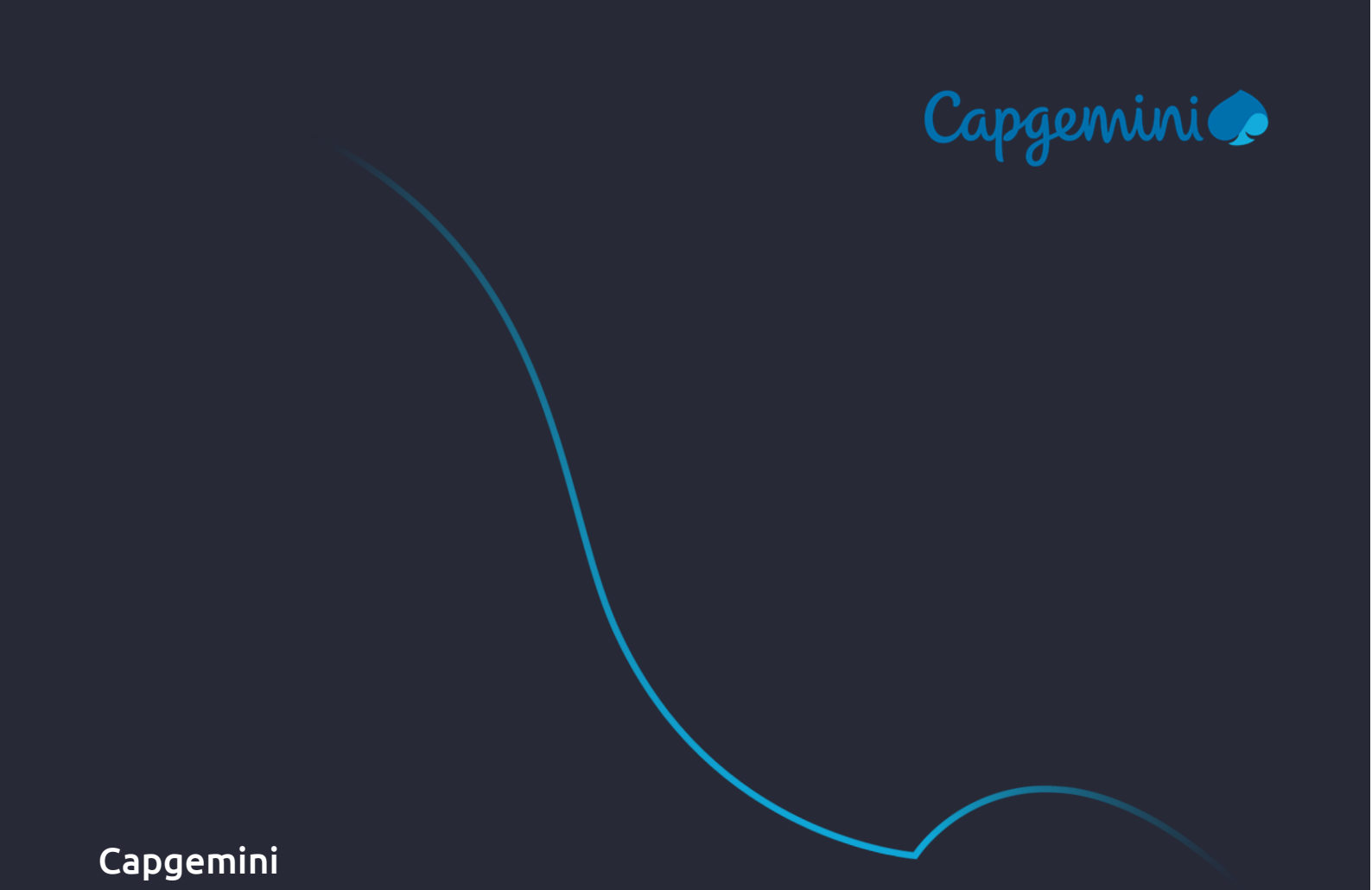
Core Team:

Andreas Pages

Duncan Cameron

Kai Libicher

James Wall



Capgemini

Capgemini is a global leader in partnering with companies to transform and manage their business by harnessing the power of technology. The Group is guided everyday by its purpose of unleashing human energy through technology for an inclusive and sustainable future. It is a responsible and diverse organization of over 300,000 team members in nearly 50 countries. With its strong 50-year heritage and deep industry expertise, Capgemini is trusted by its clients to address the entire breadth of their business needs, from strategy and design to operations, fueled by the fast evolving and innovative world of cloud, data, AI, connectivity, software, digital engineering and platforms. The Group reported in 2020 global revenues of €16 billion.