
Digital Assets
Trading Venues
TORI
Experience. The difference.

Preface

The rise of digital companies over the last two decades has forced traditional organisations to rethink their operating models to achieve the required levels of agility, customer experience, and flexibility. As the market is showing increased interest in digital assets, Start-ups and early investors have created enormous value in the unregulated cryptocurrency market, while businesses in the enterprise space have adopted technologies developed and tested in the market and applied them to payments and settlement, record keeping, securitisation, and trading. Financial institutions have several business opportunities as adoption picks up speed and acceptance of digital assets becomes more widespread. There are also huge first-mover advantages in the crypto markets.



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1. Introduction of Digital Assets



The expanding ecosystem of digital assets is supported by advancements in distributed ledger technology (DLT) and creative cryptographic applications. These instruments have characteristics that enable the storage, transfer, tokenisation, embedding, and autonomous enforcement of rules or processes across parties with varying degrees of trust. The latter attribute is a crucial advancement that has made it possible to create digital units with financial or economic components that can cross organisational boundaries.

Digital assets include a broad range of digital instruments constructed using different technologies, security measures, and governance frameworks. They typically occur on open, permissioned networks that are neither restricted nor fully open. Open, permissionless networks gave rise to "crypto assets," whereas permissioned environments, which are typically used in enterprise settings serve as the foundation for a variety of offerings, such as state-endorsed digital currencies, and they are also deployed in more private settings.

Private settings in the context of digital assets and blockchain involve controlled, permissioned environments where access is restricted, and participants undergo identity verification. These networks use centralised consensus mechanisms, prioritise data confidentiality, and implement clear governance structures. They are commonly employed in business and enterprise applications, safeguarding sensitive information and ensuring compliance. Private settings also serve as the basis for state-endorsed digital currencies, like central bank digital currencies (CBDCs), providing trusted and controlled environments for their issuance and management. These settings are ideal for scenarios requiring high trust levels, data privacy, and regulatory adherence, such as supply chain management and financial services.

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2. Key Developments of Digital Assets

The financial services sector has been reluctant to respond to the growth of the crypto asset market from a niche offering to one that generates billions of dollars in annual revenue and has given birth to at least 20 unicorns since the enigmatic Satoshi introduced Bitcoin in 2009. Even though early adopters and successful start-ups have undoubtedly made significant wealth, established financial services companies have yet to figure out how to either meaningfully participate in the crypto asset market or use distributed ledger technology to introduce new digital asset propositions or streamline current operations. The majority of initiatives have had trouble moving past the proof-of-concept stage due to immature technology stacks, problems with risk governance, little commercial value, or unclear regulations.

Nevertheless, four significant events from the previous year, as seen below, are paving the way for a step-change in the sector.

Institutional Investors

Firstly, according to a number of analyst reports, institutional investors have begun to participate in the market and were primarily responsible for the crypto bull market that began in early 2021. Brevan's announcement to invest up to 1.5% of its assets into crypto assets and MassMutual's $100 million exposure to Bitcoin have both suggested a rising acceptance and commitment by a new group of affluent and regulated players in this industry. A strategy of allocating assets to an emerging asset class, meaningful trading opportunities that exist in the market, and, most crucially, client demand for exposure to an asset class that has generated astronomical risk-adjusted returns over the past ten years are what motivate these participants.

Maturing Market

Secondly, a market that is maturing is what led institutional money managers to participate. Market players can confidently trade their own balance sheet and client money thanks to institutionalised governance, compliance, taxes, and reporting capabilities provided by liquidity and price setting venues. Market liquidity has also reached a point where it can sustain big block trades that involve pricey purchases and sales that total hundreds of millions of dollars with little slippage. The lending activities of both centralised corporations and decentralised lending pools have resulted in a growing yield curve in the cryptocurrency market, which is valued in a variety of fiat and cryptocurrencies. While still lacking in consistency and predictability, regulations have changed. There is certainly a class of authorities in places like Singapore and Switzerland who support the usage of DLTs and welcome the crypto business. And while US authorities have increased their supervision of this industry, the message has remained unwaveringly in favour of innovation. The Office of the Comptroller of the Currency's (OCC) recent statements allowing banks to choose public blockchain infrastructure are evidence of this. Even China, which has outlawed all cryptocurrency-related activity, has promoted the use of blockchain, distributed ledger technology, and other tamper-resistant cryptographic innovations being developed by the crypto industry.

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Commercialisation

Thirdly, there is evidence that cryptocurrency proposals with a commercial value can be achieved. In the first quarter of 2021, Coinbase recorded net profits of US$770 million on US$1.8 billion in revenue. 17% of Robinhood's Q1 2021 revenue, or US$87 million, came from its entry into the cryptocurrency industry. After establishing crypto asset offers, Revolut (global neobank and financial technology company that offers banking services) and Square (offering business software, point-of-sale (POS) systems, payment hardware products etc.) have noted improved user engagement. Banks and payment businesses have also introduced payment systems based on stable coins or permissioned distributed ledger networks, expanding the use of digital asset concepts beyond the trading and investment sectors. The most famous of them is Visa's support for USDC payments on Ethereum, a platform that is neither governed by nor run by a financial institution.

Maturing Technology Infrastructure

The technology industry is constantly evolving, and there are often significant shifts. . For instance, layer-2 solutions, for instance, have advanced, and these solutions have made it possible to execute transactions of greater complexity and speed at a lower cost. These include approaches that increase Ethereum's transaction speed while decreasing transaction costs and bridges that connect various blockchains. Alternative public blockchain technologies and their native currencies are increasingly gaining significant traction outside of the "Big Two" of Bitcoin and Ethereum. This even applies to protocols that make use of consensus and governance models that, from a theoretical standpoint, contradict with the initial goals of decentralisation and democratisation of network trust and security. These alternative protocols, like Binance Smart Chain, have experienced widespread adoption and usage, as users and developers swarm to ecosystems with plenty of funding, low transaction costs, fast transactions, and developer-friendly libraries that facilitate quick deployment. Additionally, both in the public open-source domain and the commercial sphere, supporting infrastructure and programs that communicate with public cryptocurrency protocols are now accessible. These "off-chain" technologies make it simpler to protect, communicate, and deploy different products onto open bitcoin protocols. There are also commercial-grade self-custody options on the market that safeguard not only the exchange of wallet addresses but also keys. Together, these developments enable businesses to build proposals on vastly more accessible and established technological stacks and let institutions implement scalable retail wallets without incurring large protocol transaction fees.

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3. Crypto-Market View

Crypto Liquidity Venues, Providers, Global Order Book & Routing

Over the past ten years, huge competitive pressures and regulatory scrutiny on financial institutions have mostly had little impact on the development of cryptocurrency liquidity venues, providers, global order books, and routing. The incumbents, however, enjoy a major edge and are enjoying the rewards of their investments in constructing their crypto asset balance sheet, market intelligence, infrastructure, and network due to the pace of development and concentration of technical talent among crypto enterprises. When entering the market, most new entrants will need to find partnerships or other ways to cooperate with these incumbents.

Crypto Liquidity Venues

Liquidity markets, where prices for different crypto assets are determined, are at the base. Prices are found in spot and derivative markets, much like commodity markets.

Contrary to traditional commodities markets, there are several centralised and decentralised, regulated and unregulated marketplaces where a sizable amount of trading volume is available. Aside from transaction costs, crypto assets do not have any restrictions on physical arbitrage, making it possible to immediately use pricing data across several liquidity venues. Exchanges perform several responsibilities in the cryptocurrency market that are normally divided into regulated markets, which is another significant difference. Exchanges for cryptocurrencies must run market infrastructure, offer custody, develop retail brokerage capabilities, and occasionally run trading businesses and market maker companies that trade on several exchanges and venues. The infrastructure for information, risk management, trading, and execution across a variety of venues and counterparties is therefore required for institutions that want to engage in trading.

Crypto Liquidity Providers

The second layer consists of liquidity providers, with firms that offer OTC services and market-making services at liquidity venues currently making up the majority of these liquidity providers. It is generally unknown if the customer funds and books traded by the majority of these firms are properly segregated or co-mingled. Therefore, it is difficult for financial institutions to use conventional compliance and governance techniques to reduce risks that are both financial and non-financial. Open, non-discriminatory smart-contract-based liquidity pools that simply exist in code and without any sort of legal organisation from which regulators, creditors, and investors can demand regulation or recourse increase the complexity. Given the multitude of venues where leverage and derivative products are available in the crypto market, it is nearly hard to comprehend a counterparty's position.

Global Order Book & Routing

The infrastructure for trade execution, which integrates order books with different liquidity venues and suppliers, makes up the third layer. To offer a global order book with a variety of execution services, different participants have established counterparty networks and communication infrastructure for exchanges. The best offers tight spreads to a wide range of cryptocurrency assets. Access to trustworthy fiat on-ramps, however, presents a significant problem for companies in this market as banks have traditionally shied away from offering banking services to unregulated crypto firms. With access to banking licenses and partners as well as significant institutional trust, there is unquestionably room for players in this market.

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Asset Custody

The market will need custodians, licensed broker-dealers, and businesses with structuring and securitisation capabilities in order to access the market of institutional capital, wealth management capital pools, and possibly even corporate treasuries. Given the high risk of monetary losses due to security breaches or human error, custodians and custody solutions will be crucial. Institutional custody is a crucial element due to the irreversibility of transactions and the bearer-instrument-like characteristics of these assets.

Brokerage Licences

Broker-dealers will continue to play a part in fostering the acceptability of this new asset class, despite the frequently stated aim of public blockchains to displace middlemen. Regulated intermediaries that service and provide access to the cryptocurrency markets in a way that gives investors access to legal remedies in disputes will still be necessary. Brokers will play a significant role as gatekeepers that control capital movements, just like in traditional markets. Existing liquidity providers with solid connections to capital pools will probably enter this market as regulations advance and opt to be regulated. This layer will probably be extremely competitive and a major area of conflict between established incumbents and traditional financial institutions.

Securitisation & Structuring

For huge family offices, institutional investors, and large corporations, there will be a demand for sophisticated financing products, much like in traditional markets.

If businesses and payment organisations begin using cryptocurrencies as payment instruments, the latter will become more significant. Due to regulatory uncertainty and uncertainty surrounding how risk is priced and ultimately distributed, even putting cryptocurrency assets into straightforward fund management products, like a crypto ETF, is a market that is still largely untapped.

For instance, it is uncertain how a stable coin default or a technical issue with a tokenised derivative instrument will affect the market. However, to make crypto markets more generally available to huge swathes of institutional and wealth management money, existing financial institutions must maintain their institutional risk management and legal rigour.

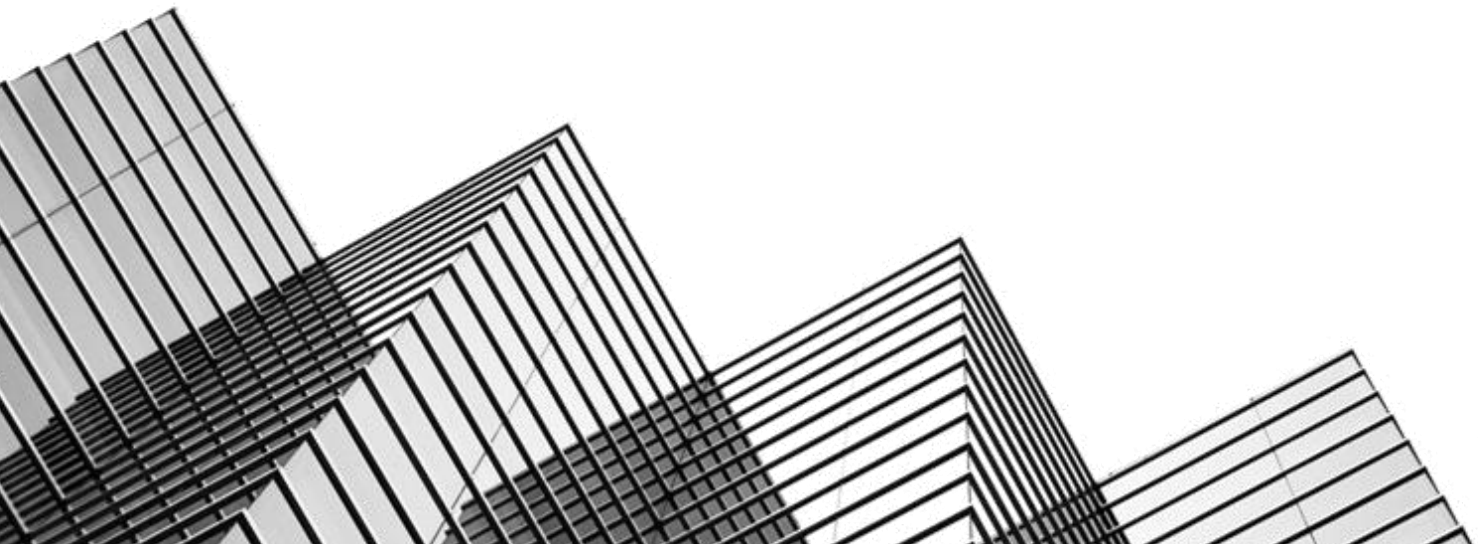
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4. Opportunities

There are many ways for financial institutions to participate in the digital assets trading venues, but there are six archetypes that will influence how they do so soon.

- **Custody & Wallets:** Offer institutional and/or retail clients licensed and regulated custody services for digital assets.
- **Trading Venues**: Create trading and settlement platforms for digital assets that are of institutional calibre.
- **Prime Brokerage:** Set up a premier brokerage desk service and give institutional traders access to the cryptocurrency markets
- **Payments & Settlement:** Provide banks, organisations, and businesses with faster, safer payment and settlement solutions.
- **Wealth & Fund Management:** Offer institutional and retail client's exposure to digital assets through wealth management and fund management products.
- **Innovative Financial Offerings:** Create and market novel financial products that incorporate engineering, financial contracts, and digital instruments.

Businesses will need to examine their risk management systems as banks and other financial institutions consider new models to launch digital asset propositions. Some of these risks may be well-known but need safeguards, while others will be novel and force modifications to risk taxonomy and management.



5. Risks

Anti-Money Laundering (AML) & Know Your Customer (KYC)

The possibility of money laundering and other types of misconduct, such as market manipulation, are some of the main issues with the adoption of digital assets, especially crypto assets that are constructed on public networks. While the risk does exist, there are currently methods that allow businesses to control and reduce the risk of fraud and money laundering without using private coins. Once the pseudonymous mappings are created, it is a relatively simple exercise to adopt a white-listing method to manage transactions. Most wallets in public blockchains have been linked to entities.

Protocol & Risk

The protocol concerns related to storing and transferring value on a public blockchain are more difficult to list. Participants in these networks have little control over how they evolve over time because most of them are controlled and run as open-source projects. As demonstrated by Ethereum's upgrade and switch from proof-of-work to proof-of-stake, which significantly alters the economics of users and node operators, some protocol updates can be important. Financial institutions that decide to use these new networks will need to participate in discussions among core developers and gain the requisite skills to properly assess how updates or features may affect their product offerings.

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Regulatory Risk

As the regulatory landscape changes, financial institutions must be aware of it and participate in its development. The vast range of regulatory postures around the world has made this more difficult. For instance, China has adopted a strident stance against cryptocurrencies, but Singapore has enacted regulations enabling crypto firms to develop and provide regulated offers. Policy changes can affect the way technological architecture is used and, more crucially, how profitable new companies are. Agility is a requirement for businesses that are thinking about entering the market when developing their business models and acquiring new technology. This could entail adopting diverse operating and collaboration models across various markets or loosely linking vended solutions to lower the cost of change.

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6. Future of Digital Assets



The future of digital assets trading venues carries significant implications for the financial industry. As digital assets continue to gain prominence, they are poised to reshape the landscape in several key ways.

1. Diverse Trading Venues: Digital assets will likely be traded across a spectrum of venues. While major financial institutions may establish closed networks for certain assets, open and permissionless networks, like decentralised exchanges (DEXs), will continue to thrive. Regulators may also introduce compliant networks to ensure transparency & investor protection.
2. Market Integration: The intersection of traditional and crypto markets will be a defining feature. Traditional financial services companies are expected to play a pivotal role by integrating digital assets into their offerings. This integration could involve the creation of hybrid financial products that combine both traditional and digital assets.
3. Innovative Financial Products: Traditional financial institutions will innovate by offering new financial products and services. These may include crypto-based ETFs, tokenised securities, and digital asset custody solutions. These offerings will cater to both institutional & retail investors.
4. Regulatory Frameworks: Regulatory bodies are actively working on establishing clear frameworks for digital assets. These regulations will define how trading venues operate, ensuring compliance with anti-money laundering (AML) and know your customer (KYC) requirements. Regulatory clarity will enhance investor confidence and foster mainstream adoption.
5. Global Connectivity: Digital asset trading venues will become more interconnected on a global scale. Cross-border trading will increase as liquidity pools expand, offering traders access to a wider range of assets. This global connectivity will reduce barriers to entry for investors worldwide.
6. Institutional Adoption: Institutional adoption will continue to grow as regulatory clarity and infrastructure improvements take place. Large financial institutions will provide liquidity and participate in asset custodianship, driving greater acceptance and investment in the space.

In summary, the future of digital assets trading venues will be marked by diversity, integration, innovation, & regulatory maturity.

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7. Conclusion



In the realm of digital assets, a nuanced landscape emerges, replete with both unprecedented opportunities and profound challenges. The imperative before the financial service industry is to exploit this juncture, synergising the technological attributes of digital assets with the autonomous enforcement of business logic across a diverse array of participants and competitors. Simultaneously, the financial services industry must leverage the bedrock of trust, influence, and formidable financial prowess that is the hallmark of major financial institutions.

This pivotal juncture in the evolution of financial markets presents an exceptional window of opportunity for those prepared to act with readiness and strategic precision. By embracing this transformative tide and cultivating strategic alliances with fintech and cryptocurrency enterprises, we can collectively surmount the long-standing hurdles of scalability, cost-efficiency, and transactional velocity.

Moreover, the move towards the seamless integration of digital assets within our financial infrastructure transcends mere profit-oriented motives. Those equipped with foresight, adaptability, and resilience will not only partake in the value thus generated but will also play an instrumental role in sculpting a future of finance characterised by equity, efficiency, and unwavering agility.

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How TORI Can Help

At TORI Global, we bring global blockchain knowledge across strategy, technology, risk advisory, regulatory, and assurance services. We are a catalyst for changing business models with digital as the core. Our Digital practice supports digital asset players across the ecosystem through in-depth regulatory support and rapid adoption. We provide fully integrated services for business model evolution. Our services are anchored to technology innovation and implementation, serving various industries globally.

We repeatedly see organisations' concerns lie around issues such as:

- How do I identifying pools of value to navigating the uncertainty present in the market and invent or reinvent new business models?
- How do I ensure scalable platforms that can be built to leverage digital assets?
- How do I get in-depth coverage of the emerging industry, players, and developments of digital assets particularly to prepare and welcome the development of Web3?
- How do I navigate through the rules and standards set forth to classify digital assets
- How do I assess the business, cyber, financial and other emerging risks related to digital assets?

TORI Offerings

Consulting Services

TORI can help you produce a Digital Asset Management (DAM) Strategy. Developing a comprehensive digital asset management strategy is essential for ensuring the success of your digital content initiatives. TORI can help you create a roadmap for implementing and maintaining an effective DAM system.

Digital Capabilities

TORI can help with Workflow Assessment and Optimisation.

It is important to have an efficient workflow for managing digital assets. The TORI team can assess your current workflows and make recommendations for improvements. TORI can also help you develop custom solutions that fit your specific needs.

TORI also offers platform capabilities and implementation services. Our team of experienced consultants can help you with every step of the DAM implementation process, from requirements gathering to system configuration to user training. TORI will work with you to ensure that your DAM system is properly set up and tailored to your specific needs.

Specialised Team

Digital Assets trading has various benefits: better control, faster transactions, lower fees, higher returns, minimised risk, maximum liquidity.

We are keen to make these advantages available to both private individuals and companies of all sizes. TORI has an international network of SMEs who are available to consult you at every step of your digital assets trading journey.

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