Confidential

Global Digital Asset Services Market

Independent Industry Report

FROST & SULLIVAN
沙利文

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Overview of the Digital Asset Economy

- Today's financial system has supported global commerce at scale for more than a century, enabled by continuous innovation and growth. Yet, it is reliant on architecture developed in a pre-digital era. Transactions often pass through multiple intermediaries, creating high fees, settlement delays and counterparty risk. At the same time, high cost-to-serve and rigid onboarding processes leave billions of people underserved or excluded from participating in the global financial system.
- In parallel, a new digital financial system for the internet age is emerging. Like the early internet, which began from simple applications with compounding network effects that ultimately transformed entire industries, blockchain networks, which are built on distributed ledgers, are laying the foundation for a faster, more transparent and programmable financial system. More importantly, users can directly own assets on-chain, aligning their incentives with the growth of the network. This ownership dynamic deepens conviction, accelerates adoption and strengthens the resilience of the ecosystem.

Faster and lower costs

- Blockchain networks eliminate layers of reconciliation and reduce reliance on intermediaries, allowing 24/7/365 transactions to settle in seconds at internet speed. This lowers fees, reduces counterparty risk and improves accessibility.

Secure and transparent

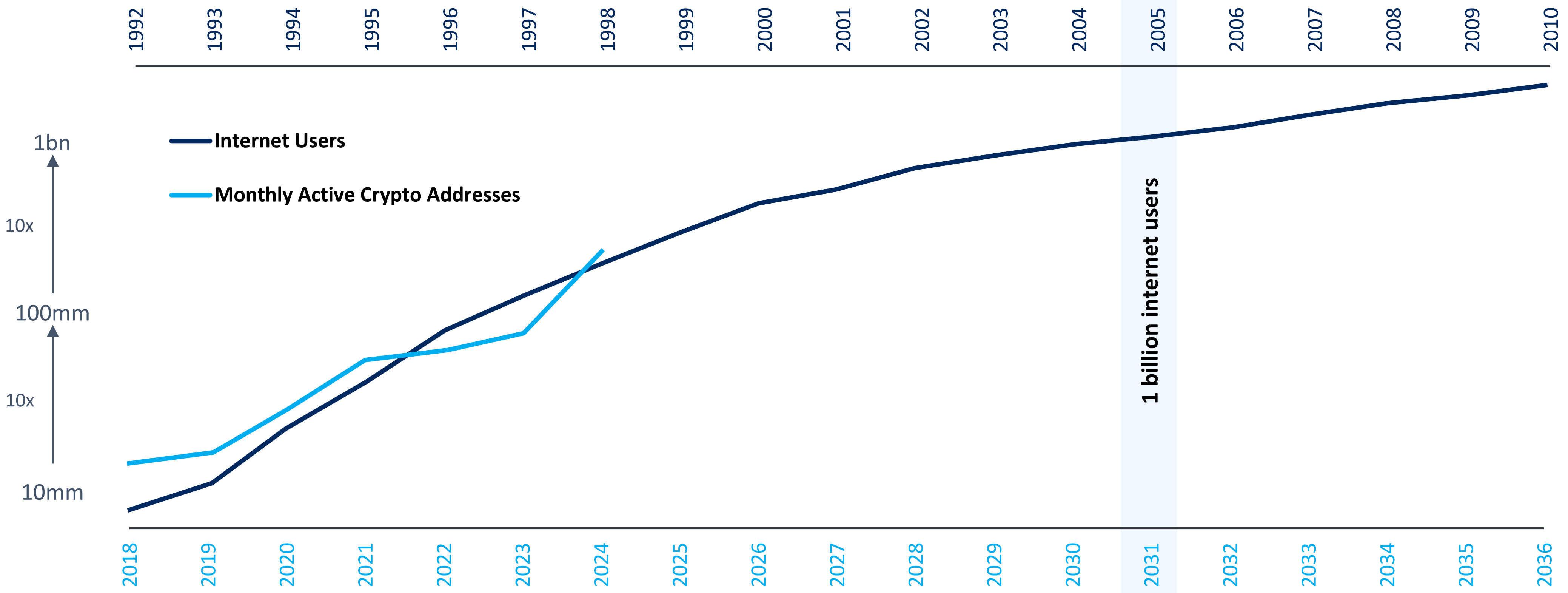
- Distributed ledgers are updated simultaneously across many participants, making transaction history tamper-resistant and auditable in real-time. This ensures data integrity since transactions can be verified anytime.

Programmable and more use cases

- From Bitcoin as a store of value to stablecoins for payments, to P2P financial applications for borrowing and lending, the inherent programmability of smart contracts unlocks a growing set of use cases such as digital marketplaces, decentralized identity, storage and governance.

Overview of the Digital Asset Economy
Growth of Digital Assets and Increasing Mainstream Adoption (1/2)

Internet Adoption vs. Digital Assets Adoption (Log Scale)



Key Findings

- Bitcoin, the first digital asset, was created in 2009 and quickly gained early traction as a decentralized store of value and medium of exchange. Initially a niche interest, digital assets have become a mainstream component of the global financial system and a multi-trillion dollar asset class. As of the Latest Practicable Date, the digital asset market has reached a market capitalization of USD4.0 trillion with over 18,000 digital asset tokens in circulation.
- With blockchain technology maturing, regulatory clarity advancing and user participation increasing, digital assets are widely seen as approaching an “Internet 1995” moment — a pivotal inflection point of mainstream adoption. In 1995, the internet was recognized as entering its commercialization phase. Similarly, monthly active digital asset addresses reached a record of 220 million in September 2024, tripling since the end of 2023, a growth pattern reminiscent of the rapid rise of early internet adoption.

Source: International Telecommunication Union, Frost & Sullivan

Overview of the Digital Asset Economy
Growth of Digital Assets and Increasing Mainstream Adoption (2/2)

Regulatory clarity

- Major jurisdictions have introduced clearer frameworks for digital assets in recent years, including the U.S. GENIUS Act (2025), the EU's Markets in Crypto-Assets Regulation (2023), and Hong Kong's Virtual Asset Trading Platform regime (2023). By creating a more supportive and well-defined ecosystem for digital assets, the growing regulatory clarity not only fosters a safer environment by reducing investment risk and building confidence through tangible safeguards for investor protection and market integrity, but also actively encourages broader participation by providing the foundation for an expanding range of use cases and product innovation. What's more important, a clear regulatory environment is a prerequisite for large-scale institutional participation, as firms with strict fiduciary duties require legal certainty to deploy capital. By unlocking these substantial pools of capital, enabling an expanding scope of use cases and products, and signaling long-term government endorsement, such policies lay the foundation for sustainable market growth beyond speculative interest.

Increasing institutional participation

- Global financial institutions such as BlackRock, Fidelity and J.P. Morgan offer digital asset services and invest in the sector. Spot Bitcoin and Ether ETFs have attracted over USD165 billion of inflows. Corporate treasury holdings (e.g. Strategy, Metaplanet) and tokenisation pilots for treasuries, bonds and funds are also gaining traction.

Growing adoption

- Mainstream adoption is accelerating, supported by proven use cases that are driving more users into the digital asset ecosystem. In parallel, developer activity remains strong with over 27,000 active developers across major blockchain networks.

- As the digital assets economy expands, so does the demand for the services that support them. Digital asset services form the backbone of the emerging digital financial system and comprise infrastructure and platforms that enable users to issue, trade, invest, manage and store their digital assets. These include exchanges, custody providers, staking node validators and asset managers. The digital asset services market is typically divided into three sub-segments: transaction facilitation services, on-chain services and asset management services.

Source: Frost & Sullivan

Overview of the Digital Asset Economy
Key Trends of Global Digital Asset Services Market

Trading Activity Migrating from Offshore to Onshore Venues

- In the early stages, when regulatory clarity was limited, majority of trading occurred on unlicensed offshore exchanges. These platforms often lacked incentives to apply proper standards for compliance, governance and risk management. This contributed to several high-profile failures including Mt. Gox, FTX and Voyager, which undermined confidence and set back the industry. In recent years, however, a growing amount of licensed onshore exchanges have emerged, regulated under statutory requirements for AML/KYC and client asset protection, as major jurisdictions such as United States, Europe, Hong Kong and Singapore introduced more robust and clearer digital asset frameworks.
- As a result, trading activity is progressively migrating from offshore to onshore exchanges, which are positioned to capture not only retail users, but also growing institutional flows seeking safe and compliant access to digital assets. Reflecting this shift, onshore trading volumes is expected to grow by 48.9% between 2024 to 2029, outpacing the 19.6% growth of offshore volumes over the same period. Moreover, onshore volumes are expected to increase their share of total volumes from 16.3% in 2024 to 36.8% in 2029, reflecting the structural migration of liquidity towards onshore venues.

Accelerating "Digital Twin" Tokenisation

- The first wave of digital assets consisted of digital-native tokens such as Bitcoin and Ethereum. These have established themselves as a multi-trillion dollar asset class and are expected to continue growing as adoption deepens. At the same time, the market is also broadening from "digital-native" assets (数字原生) to include tokenised "digital twin" assets (数字孪生), blockchain-based representations of off-chain assets such as stablecoins, equities, bonds, commodities, real estate and private funds.
- While still at an early stage, the potential opportunity for "digital twin" tokens is vastly larger. The market value of digital-native assets reached USD4.0 trillion as of the Latest Practicable Date, compared to the addressable market of USD126.7 trillion for equities alone, and USD271.8 trillion when including both equities and bonds. Stablecoins have already demonstrated product-market fit and recorded more than USD27 trillion in trading volume in 2024. Beyond replicating existing instruments, tokenisation also enables 24/7/365 trading, near-immediate settlement, fractional ownership and broader investor access, unlocking liquidity in historically illiquid assets.
- Initial tokenisation efforts are led by regulated and compliant players, including licensed onshore exchanges, custodians and fintech companies. These institutions serve as the bridge between traditional finance and digital asset, and play a central role in scaling tokenisation as adoption accelerates. Tokenisation initiatives typically require close collaboration with traditional asset managers and financial institutions, and they favor partners who are trustworthy and demonstrate high compliance and governance standards.

Financial Activities are Migrating On-Chain

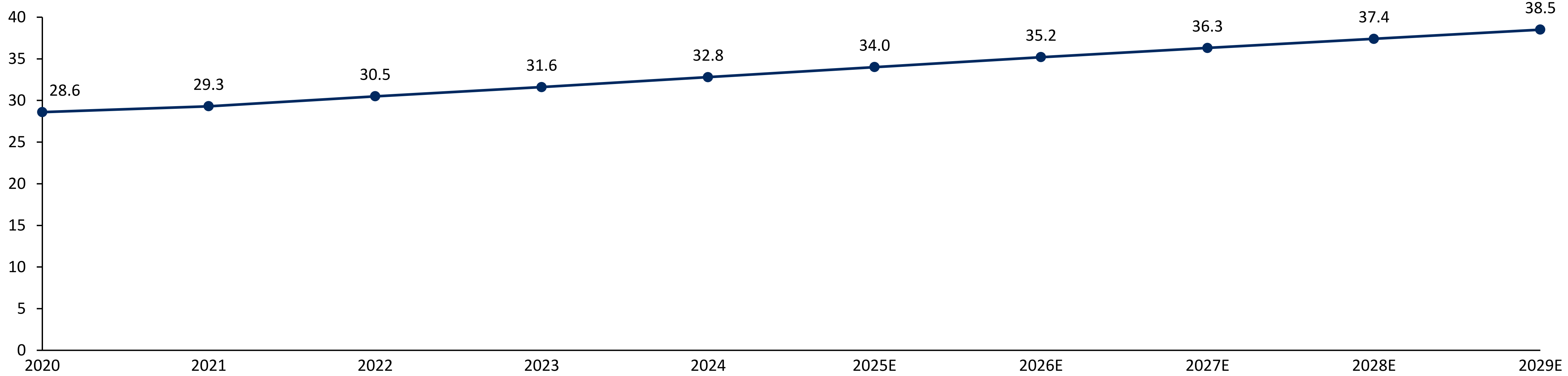
- Financial activities are witnessing a structural migration from off-chain ledgers maintained by centralized financial institutions to on-chain ledgers powered by blockchain technology. As blockchain technology advances, networks have become more scalable and efficient supporting higher transaction throughput and enabling a broader range of applications. Beyond simple transfers, on-chain services now span across other financial activities including lending, borrowing, trading, derivatives, perpetuals, structured products, insurance and stable-coin enabled payments.
- This migration is reshaping strategies across the financial ecosystem. Digital asset and fintech players are building own chains to capture distribution and monetization opportunities (e.g. Coinbase/Base, Circle/Arc, Crypto.com/Cronos). Corporations are issuing assets on-chain to simplify settlement, lower costs and broaden access to global investor base (e.g. BlackRock's tokenised fund BUIDL, Fidelity's money market fund FDIT, J.P. Morgan's stablecoin JPMD). At the same time, traditional firms are entering through Crypto-as-a-Service (CaaS) models and white-label solutions, leveraging regulated infrastructure providers to offer digital asset services to their clients. Investors are allocating capital to on-chain markets, which represent some of the most liquid, globally accessible pools with lower transaction costs.

Overview of the Digital Asset Economy
Cost Analysis

Monthly Median Wage for Employees Engaged in Financial Activities in Hong Kong

HKD Thousand, 2020-2029E

	2020-2024	2024-2029E
CAGR	**3.5%**	**3.3%**



Key Findings

- The industries that the Group operates in primarily involves staff cost and transaction expense. Staff cost which generally account for 35% to 55% of total operating expense. The monthly median wage for employees engaged in financial activities in Hong Kong has been rising steadily, with the median monthly wage climbing from a baseline of HK$28.6 thousand in 2020 to HK$32.8 thousand in 2024, reflecting a CAGR of 3.5%, and is expected to grow at a CAGR of 3.3% during 2024 to 2029, consistent with the broader inflationary environment.
- Transaction expense consists of both liquidity fee, which are paid to source and sustain adequate liquidity across trading pairs to minimize price slippage and provide a stable trading environment, and blockchain network fee which paid to network validators or miners to process and confirm on-chain transactions, such as the withdrawal, deposits and payments. Transaction expense can vary ranging from approximately 5% to 30% of revenue depending on scale of operation.

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Overview of Global Digital Asset Transaction Facilitation Services Market
Introduction of Digital Asset Transaction Facilitation Services (1/3)

Definition of Digital Asset Transaction Facilitation Services

- Transaction facilitation services refer to centralized exchanges that enable the buying, selling, and exchanging of digital assets between parties. These platforms act as intermediaries, providing core market infrastructure such as order matching and execution, market making and liquidity provision, as well as settlement and clearing operations. In a centralized exchange model, trades occur through the platform's order book rather than directly on-chain. There are two main types of providers competing in the digital asset transaction facilitation services market, namely onshore digital asset transaction facilitation providers and offshore digital asset transaction facilitation providers.

Introduction of Digital Asset Transaction Facilitation Services

- Onshore digital assets exchanges conduct business operations only under registered entities which are licensed and regulated by jurisdictions that have implemented comprehensive statutory frameworks for digital assets. These frameworks typically include conditions such as AML and KYC compliance, minimum capital requirements, custody standards, segregation of client assets, cybersecurity, and ongoing supervisory reporting. While onshore exchanges may serve global users, such activities are undertaken through, and subject to, the legal entity that holds the relevant license in its host jurisdiction. Transactions executed by global users are regulated under such licensed entities. The primary objective of this regulatory oversight is to ensure market integrity, provide clear legal recourse for users, and safeguard customer funds through enforceable legal and operational standards, creating a accountable and closely supervised environment where both the provider's obligations and the customer's rights are clearly defined by law.

- The critical distinction between an onshore and an offshore provider lies not in the mere possession of a license, but in whether the operation is conducted fully through the onshore regulated entity that holds that license. Certain digital asset transaction facilitation service provider may obtain an onshore license for market credibility while servicing users through separate, unregulated offshore entities. For offshore providers, the regulatory protections and legal recourse of the license do not apply, creating a gap between perceived and actual oversight. In contrast, onshore providers integrate licensing and operations within each jurisdiction, ensuring all activities are conducted exclusively through locally regulated entities, and guaranteeing every client is protected by a comprehensive and legally enforceable framework. The Group is a fully compliant onshore provider, committed to full compliance and licensure within every jurisdiction it operates.

Introduction of Digital Asset Transaction Facilitation Services (2/3)

Introduction of Digital Asset Transaction Facilitation Services

- Key jurisdictions such as Hong Kong, Singapore, the United Arab Emirates, Japan, Bermuda, and Ireland are clear examples of onshore environments. Hong Kong's SFC imposes a comprehensive dual-licensing VASP regime, established in 2023, with stringent requirements for capital, custody, mandatory insurance, and investor protection. Similarly, the Bermuda Monetary Authority ("BMA") offers a tiered licensing framework under its Digital Asset Business Act, established in 2018, mandating robust governance, AML compliance, risk management, and the mandatory segregation and bankruptcy remoteness of client assets. The Monetary Authority of Singapore ("MAS") licenses and supervises digital payment token service providers under the Payment Services Act 2019, which governs Singapore-based activities and imposes stringent requirements on AML, technology risk management, and the safeguarding of customer assets. In the United Arab Emirates, Dubai's Virtual Assets Regulatory Authority ("VARA"), established under its 2022 Virtual Assets Law, provides a framework mandating licensing across various activities, strict market conduct rules, and strong consumer protection measures. Japan regulates the sector through its Financial Services Agency ("FSA"), which, following key amendments to the Payment Services Act in 2017, requires providers to register and adhere to stringent operational requirements, including robust cybersecurity, cold storage of assets, and the strict segregation of customer funds. As a member of the European Union, Ireland is implementing the landmark Markets in Crypto-Assets Regulation ("MiCAR"), enacted in 2023. This EU-wide framework, overseen locally by bodies such as the Central Bank of Ireland ("CBI"), introduces harmonized rules for crypto-asset service providers, including authorization requirements, capital reserves, investor protection, and market abuse prevention, building upon Ireland's existing AML registration regime for VASPs.

- Offshore digital assets exchanges conduct business operations under entities which are not legally licensed nor regulated within jurisdictions that have implemented comprehensive statutory frameworks for digital assets. They may also be incorporated or registered in jurisdictions that do not have equivalent statutory frameworks, or they may be operating without a clear place of business, offering services globally without local authorization or local regulatory overview. Such exchanges generally prioritize operational flexibility, and may apply limited or unstandardized KYC/AML requirements compared with licensed onshore exchanges. However, certain risks may arise for users of offshore providers. For example, the absence of guaranteed segregation between client assets and corporate funds can lead to commingling and expose customers to potential losses in the event of insolvency. In addition, as offshore providers may have no physical presence or enforceable legal obligations within the user's jurisdiction, users often lack clear avenues for legal recourse or dispute resolution. Furthermore, without mandatory public disclosures or regulatory audits, the provider's financial condition, internal controls, and reserve levels remain opaque, resulting in heightened counterparty risk.

- In practice, certain exchange groups may operate through multiple affiliated entities and various business lines of operations. Certain activities may be conducted under licensed entities within recognized regulatory regimes, while other activities may be undertaken outside such licensed entities which are not subject appropriate regulations. Accordingly, the same brand, while may hold some licensed entities, may simultaneously operate offshore businesses at the group level.

- While users may choose between the two depending on their specific needs, onshore providers are expected to emerge as the key market participants due to stringent customer onboarding processes ensuring compliance and investor protection, provision of regulated and transparent products and services, direct fiat access through licensed banking channels, and asset security regimes supported by regulatory oversight. The table below sets out the comparison between onshore and offshore providers.

Overview of Global Digital Asset Transaction Facilitation Services Market
Introduction of Digital Asset Transaction Facilitation Services (3/3)

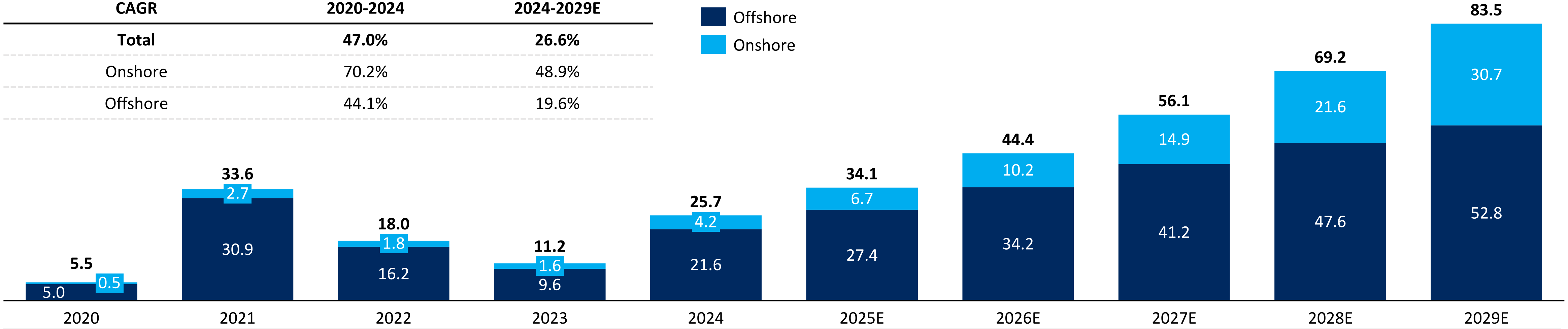
	Onshore providers	Offshore providers
Regulatory Status	➢ Conducts business operations only under registered entities which are licensed and regulated by jurisdictions that have implemented comprehensive statutory frameworks for digital assets.	➢ Conducts business operations under entities which are not legally licensed nor regulated within jurisdictions that have implemented comprehensive statutory frameworks for digital assets.
Customer Acquisition	➢ Provides services only to customers who have completed full KYC verification and comply with AML requirements.	➢ Onboards customers with limited or no KYC/AML procedures.
Types of Services Provided	➢ Offers regulated and compliant products and services approved by relevant authorities.	➢ Provides products that are not subject to regulations or prior regulatory approvals, which entail higher operational and legal risks.
Fiat Access	➢ Provides direct access to regulated banking systems, allowing users to deposit, withdraw, and convert fiat currencies securely.	➢ Lacks direct access to traditional banking systems, often relying on third-party payment processors or P2P transfers, which may carry additional risks and lack standardized oversight.
Asset Security	➢ Adheres to strict custody and cybersecurity standards mandated by regulators, including segregation of client assets and protection under licensed custodial arrangements, offering legal recourse in the event of loss or mismanagement.	➢ Lacks formal assurance or regulatory protection for user assets, with no guarantee if assets are hacked, stolen, or compromised, and users typically have limited or no legal recourse due to the absence of regulation.
Risk Appetite of Target Customers	➢ Exhibits a prudent risk appetite driven by the need for asset safety, robust regulatory protection, and guaranteed legal recourse provided by a fully compliant framework.	➢ Demonstrates a significantly higher and more aggressive risk appetite, prioritizes access to higher leverage, and financial anonymity while accepting the associated counterparty risks and lack of clear legal recourse.

Overview of Global Digital Asset Transaction Facilitation Services Market
Size of Global Digital Asset Transaction Facilitation Services Market

Size of Global Digital Asset Transaction Facilitation Service Market, in terms of Trading Volume

USD Trillion, 2020-2029E

CAGR	2020-2024	2024-2029E
Total	**47.0%**	**26.6%**
Onshore	70.2%	48.9%
Offshore	44.1%	19.6%



Key Findings

- The global digital asset transaction facilitation services market opportunity is rapidly growing, with outsized contribution from onshore. The size of global digital asset transaction facilitation services market, in terms of trading volume in single-sided basis, increased from USD5.5 trillion in 2020 to USD25.7 trillion in 2024, representing a CAGR of 47.0%. Following the bull market in 2021, global digital asset trading volumes declined notably in 2022 and 2023, primarily triggered by a series of high-profile collapses among offshore service providers, most notably FTX, which undermined investor confidence at that time and consequently led to a sharp decline in digital asset prices. For example, price of Bitcoin dropped from over USD60,000 in late 2021 to below USD20,000 by mid-2022, eroding investors' unrealized gains and weakening overall trading enthusiasm. In addition, heightened regulatory scrutiny in major markets such as the U.S. and Europe introduced compliance uncertainty for exchanges and custodians, discouraging market-making activities and limiting institutional participation. Looking forward, the size of global digital asset transaction facilitation market is expected to increase at a CAGR of 26.6% to reach USD83.5 trillion in 2029. The moderation in the forecast growth reflects not only the natural impact of a larger market base but also the market's transition toward a more stable, compliant, and institutionally driven growth phase. As the development of digital asset matures, the pace of expansion is expected to naturally normalize, shifting from speculative surges to sustainable growth supported by clearer regulation and diversified applications. Increasing regulatory oversight across major jurisdictions is fostering greater transparency and investor protection, which, while moderating short-term trading activity, lays the foundation for long-term institutional confidence. Moreover, as the digital asset market and its investor base mature, market participants are expected to place less emphasis on speculative coins that previously contributed to trading volumes. Together, these factors suggest a healthier and more resilient growth trajectory, in contrast to the rapid but volatile expansion seen in previous years. Onshore trading volumes have expanded rapidly, rising from USD0.5 trillion in 2020 to USD4.2 trillion in 2024, representing a CAGR of 70.2%, as licensed venues across the U.S., EU, and Asia gained traction with improved regulation, fiat access, and institutional participation. The momentum is expected to continue, with market size reaching USD30.7 trillion, representing a CAGR of 48.9% during 2024 to 2029.
- Trading of digital assets is playing a more significant role. Trading volume of digital assets compared to trading volume of cash equity rose from 5.3% of the combined total in 2020 to 24.1% in 2024, and is projected to reach 43.8% by 2029, driven by deeper liquidity, broader participation, and improved infrastructure.

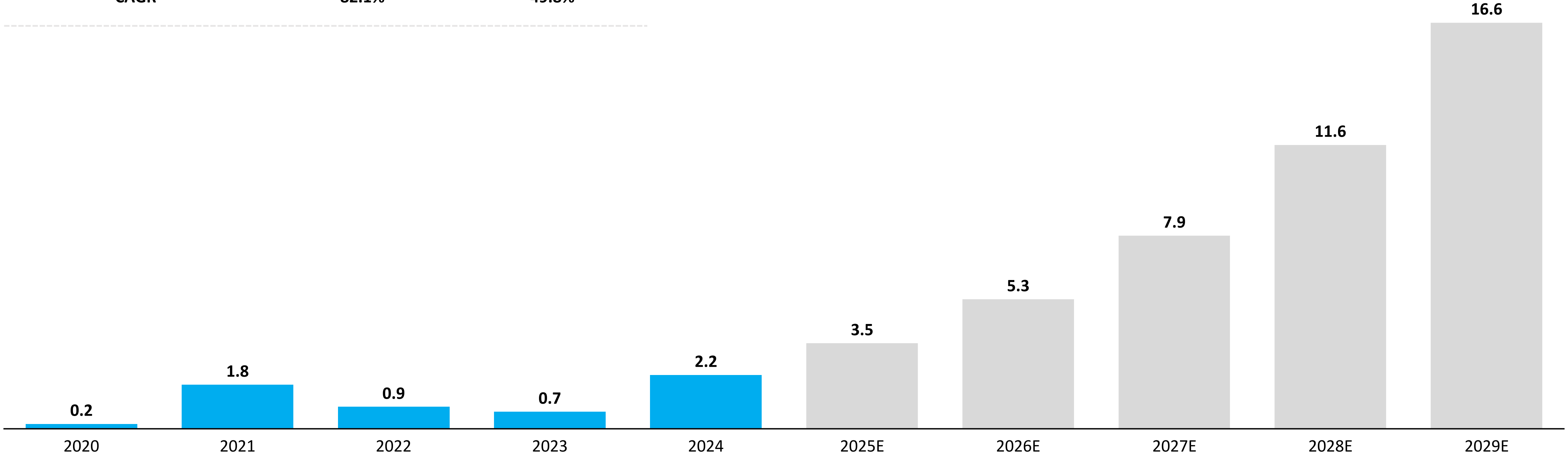
Source: Coindesk, Coingecko, Coinmarketcap, Frost & Sullivan

Overview of Global Digital Asset Transaction Facilitation Services Market
Market Opportunity in Asia

Size of Digital Asset Transaction Facilitation Service Market in Asia, in terms of Onshore Trading Volume

USD Trillion, 2020-2029E

	2020-2024	2024-2029E
CAGR	82.1%	49.8%



Key Findings

- Asia accounts for a substantial portion of global onshore market, accounting for USD2.2 trillion in 2024 (or 52.4% of global onshore market) and projected to expand at a CAGR of 49.8% to reach USD16.6 trillion by 2029. Increasing retail adoption and institutional participation with regulatory clarity are positioning key digital asset gateway regions such as Hong Kong, Singapore, Japan and South Korea as financial hubs for compliant transaction facilitation. Other notable highly active markets include Thailand, Vietnam and the Philippines.

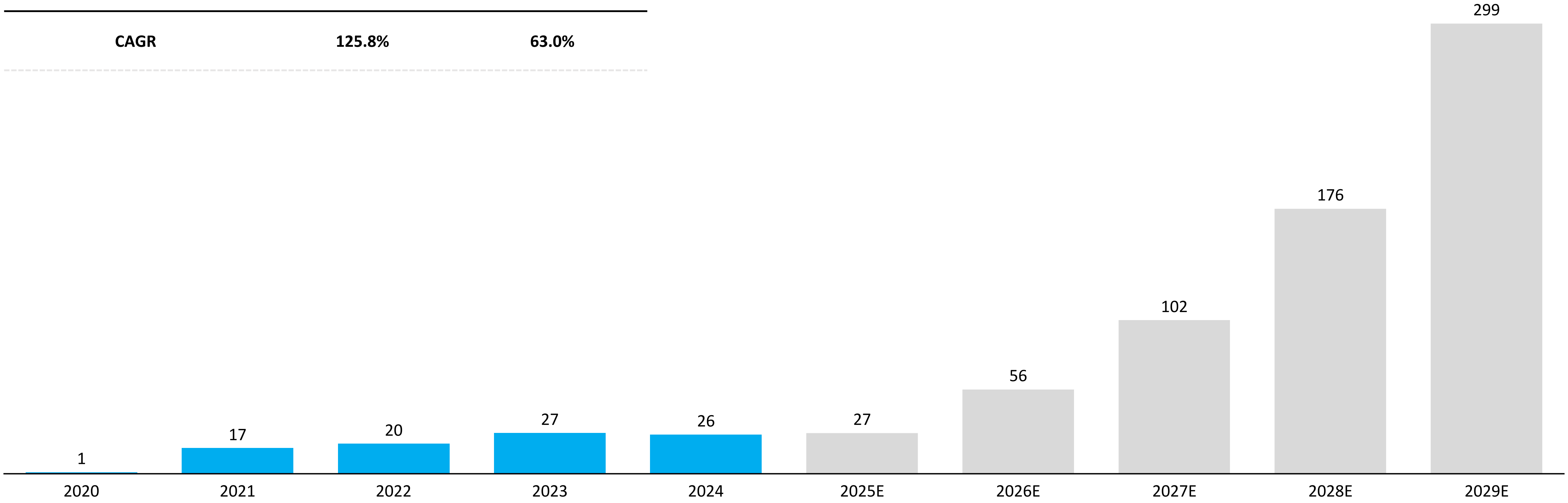
Source: Coindesk, Coingecko, Coinmarketcap, Frost & Sullivan

Overview of Global Digital Asset Transaction Facilitation Services Market
Market Opportunity in Hong Kong

Size of Digital Asset Transaction Facilitation Service Market in Hong Kong, in terms of Onshore Trading Volume

USD Trillion, 2020-2029E

	2020-2024	2024-2029E
CAGR	**125.8%**	**63.0%**



Key Findings

- Among these, Hong Kong is uniquely positioned to lead Asia's digital asset market as one of the world's leading financial centers. Its comprehensive VASP/VATP regime provides institutional-grade standards for custody, client protection, and compliance. With a mature brokerage culture, an active retail investor base, and its established role as a gateway for global capital, Hong Kong presents a significant opportunity to serve both local demand and attract international institutional flows. The size of transaction facilitation services market in Hong Kong has risen from roughly USD1 billion in 2020 to USD26 billion in 2024, representing a CAGR of 125.8%, and is expected to grow at a CAGR of 63.0% to USD299 billion in 2029. Similar to the global market, the decline in trading volume in Hong Kong was primarily triggered by a series of high-profile collapses among offshore service providers, which undermined investor confidence at that time and consequently led to a sharp decline in digital asset prices. The moderation in the forecast growth reflects the natural effect of a larger market and a transition toward more sustainable growth in Hong Kong supported by clearer regulation such as VASP/VATP regimes.

Source: Coindesk, Coingecko, Coinmarketcap, Frost & Sullivan

Overview of Global Digital Asset Transaction Facilitation Services Market
Key Trends in the Digital Assets Transaction Facilitation Services Market

Increasing institutional participation

- Institutional trading volume represent 65.0% of total global trading volume in 2024 and is expected to grow by a CAGR of 30.6% between 2024 and 2029, reaching a proportion of 76.0% of the total global trading volume by 2029, outpacing growth of retail trading volume. They also represent a more stable source of trading volume and revenue, and prefer licensed platforms. At the same time, traditional companies are increasingly looking to offer digital asset services to clients but lack native infrastructure. Rather than building from scratch, they partner with digital asset companies by integrating their white-label APIs to achieve faster time to market (e.g. Coinbase Prime's partnership with BlackRock).

Growing retail adoption

- Retail investors continue to be a meaningful driver of trading volume, driven by the accessibility of 24/7/365 trading, mobile-first applications and lower entry thresholds. The global transaction facilitation services market for retail has grown from USD3.1 trillion in 2020 to USD9.0 trillion in 2024, representing a CAGR of 30.5%, and is expected grow at a CAGR of 17.3% to USD20.0 trillion in 2029.

Rise of all-in-one platforms

- Scale is increasingly strategic as more players seek to become a full-service provider with deep liquidity. Larger liquidity pools enable tighter spreads and more efficient price discovery process. In contrast, smaller players such as single market players often struggle with fragmented order books, limited depth and fewer offerings, making it difficult to compete. As a result, there is increasing consolidation within the industry (e.g. Coinbase acquisition of Deribit, Kraken acquisition of NinjaTrader) and trend towards fewer but larger regional/global platforms.

Overview of Global Digital Asset Transaction Facilitation Services Market
Threats and Challenges of the Digital Asset Transaction Facilitation Services Market

Market downturn

- A market downturn in digital asset prices poses a threat to the digital asset transaction facilitation services market. When asset prices remain depressed for an extended period, investor sentiment weakens and speculative participation diminishes, leading to lower trading volumes and reduced transaction frequency. Lower market liquidity and user engagement directly translate into declining revenues and profitability. may accelerate user attrition, delay new user acquisition, and discourage institutional participation, further constraining the growth of the digital asset facilitation services market.

Cybersecurity and custody risk

- Exchanges are a primary target for large, sophisticated hacks and thefts due to the high value and irreversible nature of digital asset transactions. Breaches, thefts, or even perceived weaknesses in custody infrastructure can trigger rapid user withdrawals, liquidity stress, and potential insolvency events. Beyond the immediate financial loss, security incidents often result in lasting reputational damage, regulatory scrutiny, and erosion of user trust — factors that can be difficult to recover from in a market where credibility and asset protection are paramount.

Source: Frost & Sullivan

Overview of Global Digital Asset Transaction Facilitation Services Market
Competitive Landscape of Digital Asset Transaction Facilitation Services Market

Ranking of Global Transaction Facilitation Services Providers, 2024

Ranking	Company	Headquarter	Place of Operation	Onshore Trading Volume (USD Billion, 2024)	Market Share (%)
1	Company A	South Korea	South Korea	2,522	30.0%
2	Company B	The United States	The United States, Canada, Germany, Singapore, Australia, Argentina, Ireland, Spain, France, Italy, the Netherlands, and the United Kingdom, Bermuda	2,324	27.7%
3	Company C	South Korea	South Korea	804	9.6%
4	Company D	The United States	The United States, Canada, Cyprus, Ireland, the United Kingdom, Argentina, Australia, Bermuda	644	7.7%
5	Company E	Netherlands	The Netherlands	232	2.8%
6	**The Group**	**Hong Kong**	**Hong Kong, Bermuda, Singapore**	**82**	**1.0%**

1) *Company A is a private company founded in 2017 in South Korea, which primarily provides digital transaction facilitation services with a leading market share in the South Korean market.*
2) *Company B is a public company founded in 2012 in the United States, which primarily a secure online platform for buying, selling, transferring, and storing cryptocurrency.*
3) *Company C is a private company founded in 2014 in South Korea, which primarily provides digital transaction facilitation services, offering a wide selection of digital assets.*
4) *Company D is a private company founded in 2011 in the United States, which primarily provides global digital transaction facilitation services with a focus on security and advanced trading features like margin and futures trading.*
5) *Company E is a private company founded in 2018 in the Netherlands, which primarily provides digital transaction facilitation services for the European market.*

Key Findings

Based on trading volume by sellers and purchasers on a gross basis in 2024, the Company

- ranks sixth among global onshore digital asset transaction facilitation services providers
- is the largest regional onshore digital asset transaction facilitation services provider in Asia
- is the largest digital asset transaction facilitation services provider in Hong Kong

Overview of Global Digital Asset Transaction Facilitation Services Market
Entry Barriers of the Digital Asset Transaction Facilitation Services Market

Licenses and compliance	• Licensing regime creates a significant entry barrier, which requires significant capital, external assessments, and custodian partnerships, as evidenced by the few approvals granted to date. Increased regulatory scrutiny is raising the bar for market entry, pressuring exchanges to operate within formal licensing frameworks, accelerating a market-wide shift toward onshore platforms.
Brand reputation and trust	• Heightened caution pushes users and institutions toward established, licensed operators, creating a significant hurdle for new, unknown entrants. For example, in Hong Kong, SFC licensing confers immediate credibility versus offshore players. Transparent audits, proof of reserves, strong governance, clear asset segregation, and partnerships with traditional institutions to build confidence, raising entry barriers for new entrants.
Liquidity and operation management capability	• A major entry barrier in the digital asset transaction facilitation services market lies in the ability to effectively manage liquidity and ensure stable, efficient operations. Leading service providers maintain deep liquidity pools across multiple trading pairs and exchanges, allowing them to provide users with competitive spreads and seamless transaction execution. Achieving this level of liquidity management requires sophisticated operation management capabilities. In addition, strong operational management is critical for managing large transaction volumes, and complying with jurisdictional requirements such as KYC/AML and asset segregation. New entrants without mature liquidity networks or proven operational infrastructure may face significant challenges in the market.

Source: Frost & Sullivan

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Overview of Global Digital Asset On-chain Services Market
Introduction of Digital Asset On-chain Services

Definition of Digital Asset On-chain Services

- Digital asset on-chain services refer to service offerings provided on blockchain networks. These services mainly include staking and tokenisation. On-chain services are executed on public distributed ledgers via smart contracts, ensuring transparent and tamper-resistant transactions on the blockchain.

Classification of Digital Asset On-chain Services

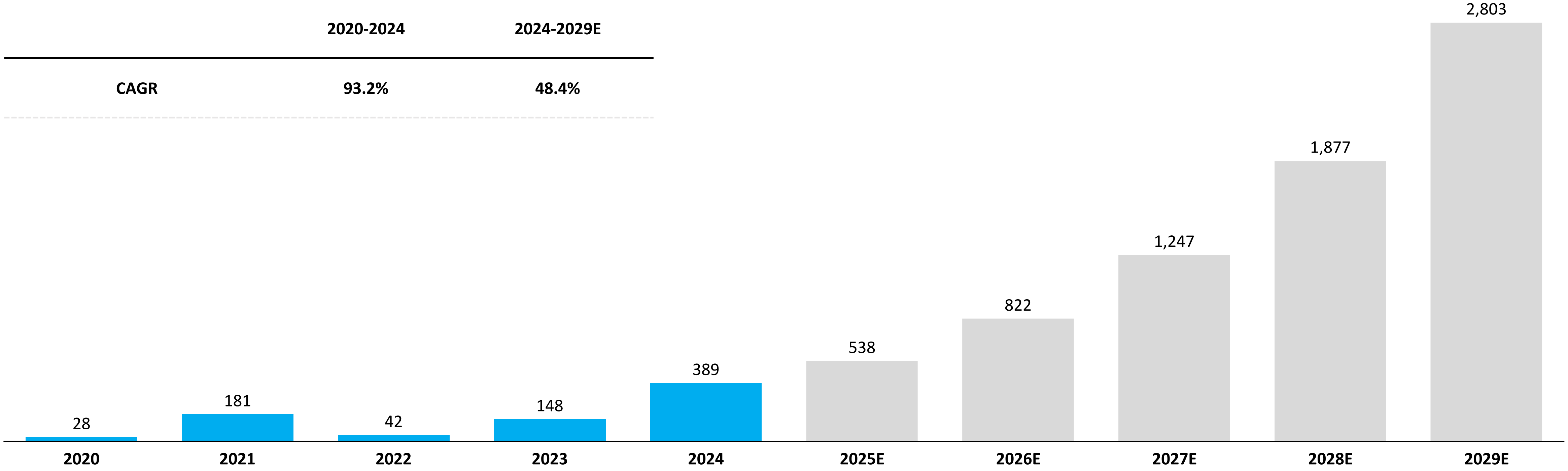
- **Staking.** Under proof-of-stake (PoS) networks, token holders can participate in securing the network by staking their tokens directly or delegating to a professional node validator who manages the technical operations. In exchange, stakers earn rewards that are distributed by the protocol. For those that delegate, the node validators shares staking rewards with the delegating users.

- **Tokenisation.** The process of creating digital tokens on the blockchain that represent ownership or rights to of real-world assets, such as equities, bonds, real estate, and commodities. These tokens can be traded, transferred and settled directly on-chain 24/7/365, enabling blockchain participants to obtain fractional ownership of these tokenised assets and enhancing on-chain liquidity.

Overview of Global Digital Asset On-chain Services Market
Size of Global Staking Services Market

Size of Global Staking Services Market, in terms of Assets Under Staking
USD Billion, 2020-2029E

	2020-2024	2024-2029E
CAGR	**93.2%**	**48.4%**



Key Findings

- The size of global staking services market increased from USD28 billion in 2020 to USD389 billion in 2024, representing a CAGR of 93.2%. Similar to the digital asset transaction facilitation market, the sharp contraction of the staking services market in 2022 and 2023 was primarily driven by the decline in PoS token prices. The steep drop in major PoS assets such as Ethereum and Solana reduced the total value of assets under staking. This price correction was driven by a combination of factors, including high-profile market collapses, heightened regulatory uncertainty, and broader macroeconomic pressures stemming from rising inflation and interest rates in key markets such as the United States. Consequently, the falling asset valuations led to a notable decrease in the overall value of staked assets during the period. Market size is expected to further increase at a CAGR of 48.4% to USD2,803 billion in 2029. As the market for staking services matures and the total value of assets under staking increases the growth rate naturally slows down. In the earlier stages of market development, staking services benefitted from rapid adoption and high growth, driven by speculative investments and new network launches. However, with a larger market base, the growth rate is expected to stabilize.

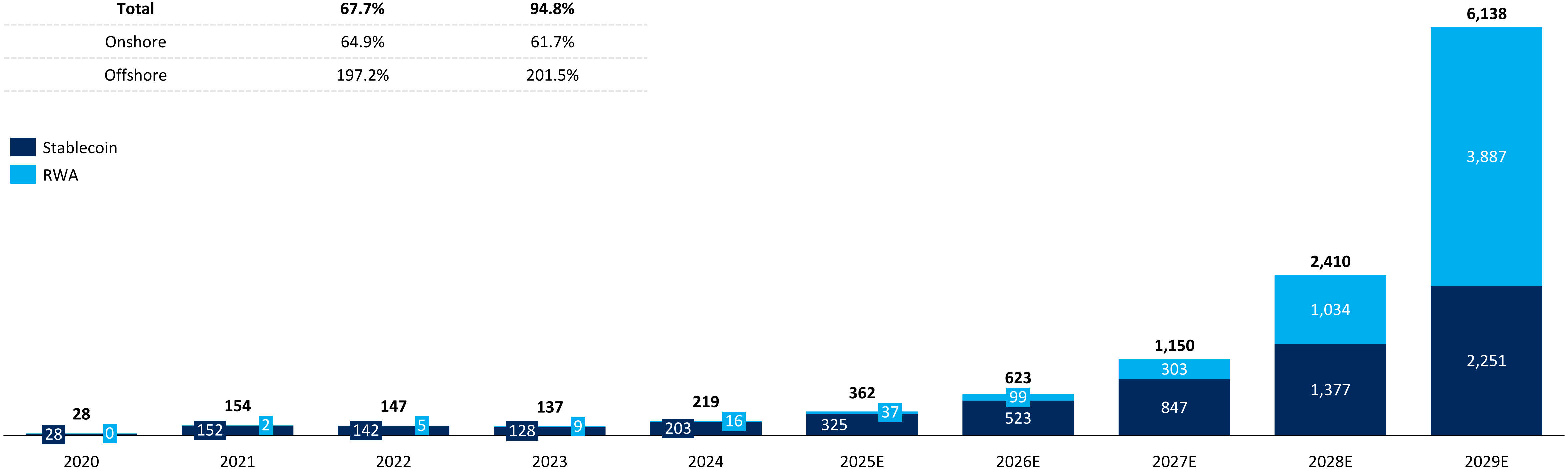
Source: Staked, Frost & Sullivan

Overview of Global Digital Asset On-chain Services Market
Size of Global Tokenisation Services Market

Size of Global Tokenisation Services Market, in terms of Tokenised Value

USD Billion, 2020-2029E

CAGR	2020-2024	2024-2029E
Total	**67.7%**	**94.8%**
Onshore	64.9%	61.7%
Offshore	197.2%	201.5%



Key Findings

- The size of global tokenisation services market increased from USD28 billion in 2020 to USD219 billion in 2024, representing a CAGR of 67.7%. Although the decline in the global tokenization services market size in 2022 and 2023 was relatively moderate compared to the digital asset transaction facilitation and staking services markets, he price decrease still undermined investor confidence, particularly in stablecoins and RWA tokenization projects, causing the slight decline. Market size is expected to further increase at a CAGR of 94.8% to USD6,138 billion in 2029. The moderation in the forecast growth from 2024 to 2029 reflects the market's transition from its early rapid expansion phase to a more mature and regulated stage of development. As the base of tokenized assets grows larger, incremental growth naturally slows. In addition, increasing regulatory oversight across major jurisdictions is expected to enhance market credibility and institutional adoption but also temper the speed of growth as stabcoins and RWA must meet higher transparency and compliance standards.

Overview of Global Digital Asset On-chain Services Market
Key Trends in the Digital Asset On-chain Services Market

Emergence of liquid staking and restaking protocols

- Staking has become a foundational on-chain service with the transition of major blockchains to PoS mechanism. Beyond direct participation, the emergence of liquid staking protocols such as Lido and Rocket Pool, as well as restaking platforms like EigenLayer and EtherFi, has expanded accessibility and improved capital efficiency. These solutions allow users to earn staking rewards while simultaneously deploying assets into DeFi and other application, transforming staking from a technical function into both a security layer and a core yield-generating product.

Companies developing their own proprietary chains

- Leading companies, technology firms and digital asset companies are increasingly launching their own blockchains to control distribution, enable monetization and expand user base. Examples include Coinbase/Base, Robinhood launching Layer 2 chain, and Circle launching ARC. This allows companies to capture a larger portion of the transaction stack, and integrate native products to lock in and reinforce their ecosystems.

Scalable infrastructure driving more on-chain activities

- On-chain activity is accelerating as scalable infrastructure supports more use cases beyond simple transfers. Stablecoin settlement volumes surpassed USD27 trillion in 2024, achieving true product-market fit. At the same time, tokenisation of real-world assets as well as better blockchain networks that support higher transaction velocity at lower costs are driving more use cases and applications.

Source: Frost & Sullivan

Overview of Global Digital Asset On-chain Services Market
Threats and Challenges of the Digital Asset On-chain Services Market

Demand for further regulatory response to support a wider involvement of participants	• While on-chain services have shown significant potential for innovation and growth, the lack of clear and supportive regulatory frameworks hampers the ability to scale and attract broader participation including many mainstream institutions. Many potential participants might be hesitant to engage in on-chain services due to concerns over regulatory uncertainty and legal compliance. To unlock the full potential of on-chain services, there is a critical need for regulators to establish supportive, clear, and adaptive frameworks that can facilitate the entry of more mainstream institutions and drive further market maturation.
Liquidity constraints	• While tokenisation aims to improve asset liquidity, secondary markets for tokenized assets are still fragmented and underdeveloped. Limited trading venues and inconsistent interoperability standards can restrict liquidity and price discovery, undermining one of tokenization's core value propositions.
Ensuring trustworthy tokenization of assets	• For tokenized assets to gain broader acceptance, the process of transferring off-chain assets to on-chain representations must be made trustworthy and secure. This involves developing advanced technologies such as IoT hardware devices, that ensure the accurate and secure linking of real-world assets to the blockchain. Additionally, contracts are essential in validating the authenticity and ownership of tokenized assets, providing an added layer of security and reliability. Ensuring trustworthy tokenization of assets will be key in building trust and facilitating the widespread adoption of tokenization services.

Overview of Global Digital Asset On-chain Services Market
Competitive Landscape of Digital Asset On-chain Services Market

Ranking of Global Digital Asset On-chain Services Providers, 2024					
Ranking	**Company**	**Headquarter**	**Places of Operation**	**AUM (USD Billion, 2024)**	**Market Share (%)**
1	Company F	Cayman Islands	Finland	36.8	9.5%
2	Company B	The United States	The United States, Germany, Singapore, Australia, Canada	18.6	4.8%
3	Company G	Cayman Islands	Cayman Islands, The United States	15.8	4.1%
4	Company H	France	France, The United States, The United Kingdom, Singapore	8.8	2.3%
5	Company I	Malta	Australia, Brazil, Hong Kong, Japan	7.3	1.9%
6	Company J	Cayman Islands	The United States, Brazil	6.6	1.7%
7	Company K	The United States	The United States, The United Kingdom	4.2	1.1%
8	**The Group**	**Hong Kong**	**Hong Kong**	**3.6**	**0.9%**

1) *Company F is a private company founded in 2020, which primarily provides liquid staking solutions for Ethereum.*
2) *Company B is a public company founded in 2012 in the USA, which primarily provides a secure online platform for buying, selling, transferring, and storing cryptocurrency.*
3) *Company G is a private company founded in 2022 in the Cayman Islands, which primarily provides Ethereum staking services.*
4) *Company H is a private company founded in 2018 in France, which primarily provides an enterprise-grade staking platform.*
5) *Company I is a private company founded in 2017 and headquartered in Malta, which primarily provides cryptocurrency trading and staking services.*
6) *Company J is a private company founded in 2018 in the Cayman Islands, which primarily provides non-custodial staking infrastructure and technology for intermediaries.*
7) *Company K is a private company founded in 2017 in the USA, which primarily provides non-custodial staking solutions for cryptocurrencies.*

Key Roles

- The Company ranks eighth among global digital asset on-chain services providers, and was also the largest digital asset on-chain services provider in Asia as of December 31, 2024

Source: Staking Rewards, Frost & Sullivan

Overview of Global Digital Asset On-chain Services Market
Entry Barriers of the Digital Asset On-chain Services Market

Comprehensive management ability

- A critical entry barrier in the digital asset on-chain services market lies in the ability to manage the entire networks, from asset issuance and custody to compliant trading. Successful providers must not only have the capacity to filter and select high-quality assets but also offer robust solutions for ensuring liquidity across the market. This includes establishing a network of partners, exchanges, and liquidity pools that can facilitate seamless asset transfers and trading. New entrants face significant challenges in building such a comprehensive network, as it requires substantial expertise, infrastructure, and regulatory compliance. Without the ability to provide liquidity and ensure the reliability and security of transactions throughout the lifecycle of digital assets, new entrants will struggle to gain traction and compete with established providers who have already built integrated, trusted solutions.

Technical infrastructure

- Both tokenisation and staking services require complex and resource-intensive technical infrastructure. For tokenisation, providers must design and maintain smart contract frameworks, establish secure oracle connections for off-chain data feeds, and ensure seamless integration with blockchain networks to represent and manage real-world assets on-chain. For staking, maintaining validator nodes with high performance and security is resource-intensive, as downtime or mismanagement can result in slashing penalties. Building and maintaining such infrastructure demands specialized technical expertise and ongoing investment, creating a significant barrier for new entrants.

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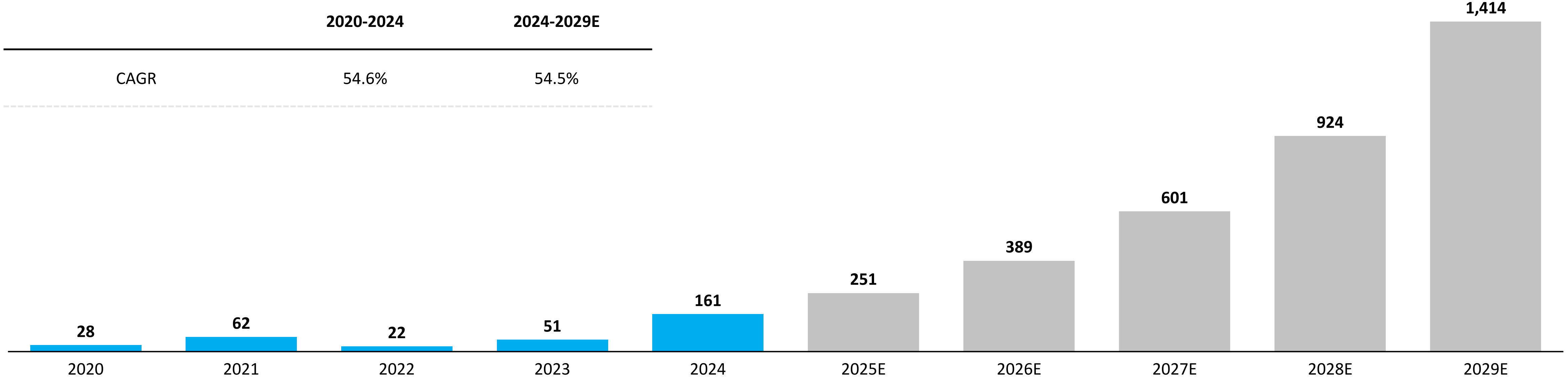
Overview of Global Digital Asset Management Services Market
Introduction of Digital Asset Management Services

Size of Global Digital Asset Management Services Market, in terms of AUM
USD Billion, 2020-2029E

	2020-2024	2024-2029E
CAGR	54.6%	54.5%



Key Findings

- Digital asset management services refer to professional investment management of portfolios mainly comprising cryptocurrencies, tokenised real-world assets, blockchain-based financial instruments. Offerings are diversified across private and public vehicles, active and passive strategies, and are targeted at both retail and institutional investors. Digital asset management service providers are fund managers that manage investments on behalf of their clients by leveraging their expertise in digital assets and aligning portfolio decisions with clients' investment objectives. This allows clients to participate in the rapidly evolving digital asset market through professionally managed and structured investment strategies.
- The global digital asset management services market increased from USD28 billion in 2020 to USD161 billion in 2024, representing a CAGR of 54.6%. The contraction in market size was primarily driven by the sharp decline in digital asset prices, caused by weakening investor sentiment and heightened macroeconomic uncertainty following the 2021 bull market. Major cryptocurrencies such as Bitcoin and Ethereum lost substantial value from their 2021 peaks, directly reducing portfolio valuations and overall AUM even. A series of high-profile market failures further undermined confidence in digital asset products, leading many investors to withdraw capital or shift to self-custody. Additionally, rising global inflation and interest rate hikes in major economies, including the United States, changes investment appetite, prompting investors to rebalance portfolios toward safer, yield-bearing traditional assets such as bonds. Market size is expected to further increase at a CAGR of 54.5% to USD1,414 billion in 2029. Similar to the other markets, the moderation in the forecast growth from 2024 to 2029 reflects the gradual maturation and stabilization of the global digital asset management market. As the market base expands, the pace of growth naturally slows due to the larger denominator effect. With clearer regulation, the global asset management services market is expected to enter a more sustainable and structurally sound growth phase.

Source: CoinShares, Frost & Sullivan

Overview of Global Digital Asset Management Services Market
Key Trends in the Digital Asset Management Services Market

Digital Assets to become a mainstream form of alternative investment

- Digital assets are increasingly acknowledged by both institutional and retail investors as a mainstream asset class. Adding crypto to the investment portfolio helps increase total expected return while lowering volatility. Digital assets are gradually seen as a way for institutions to enjoy the upside brought by the technological shift to Web3 and more blockchain-based applications.

Crypto ETFs unlocking broader investor access

- ETFs provide a simple entry point into the digital assets space via traditional channels, without the need to interact with crypto exchanges or wallets, thereby broadening access to a wider spectrum of investors. Besides lowering entry barriers, ETFs are generally subject to stricter regulations over custody, compliance and liquidity, which help target relatively prudent retail investors and conservative global pensions funds, improving capital access.

Prevalence of digital asset treasury strategies

- More companies are adopting digital asset treasury (DAT) strategies. Digital assets are purchased and held as treasury assets, helping corporates balance liquidity, generate yield and diversify risks. This also provides them with a lever to utilize digital assets within their business strategies, such as integrating cryptocurrencies as a means for payment settlement. For example, Metaplanets utilizes a Bitcoin treasury strategy, creating a dual nature for its business and driving return on equity from a combination of revenue from normal business operations and potential upside from Bitcoin value appreciation.

Overview of Global Digital Asset Management Services Market
Threats and Challenges of the Digital Asset Management Services Market

Market volatility

- Digital assets are highly volatile, with prices often driven by speculative sentiment rather than fundamentals. Sharp drawdowns — particularly in speculative coins — can rapidly erode assets under management and strain fund liquidity. Such volatility amplifies the risk of forced liquidations and may threaten fund solvency during market stress, underscoring the need for disciplined leverage limits and robust real-time risk management frameworks.

Cybersecurity and custody risks

- Security remains a fundamental threat to the integrity of digital asset management. Unlike traditional finance, the self-custodial nature of digital assets means that a single security failure — such as a private key compromise — can lead to irreversible loss. The limited availability of comprehensive insurance for digital asset loss further amplifies exposure, leaving managers to bear most operational risk themselves.

Source: Frost & Sullivan

Overview of Global Digital Asset Management Services Market
Competitive Landscape of Digital Asset Management Services Market

Ranking of Asian Digital Asset Management Services Providers, 2024			
Ranking	**Company**	**Headquarter**	**AUM (USD Billion, 2024)**
1	**The Group**	**Hong Kong**	**0.9**
2	Company L	Singapore	0.8
3	Company M	South Korea	0.6
4	Company N	Singapore	0.5
5	Company O	Hong Kong	0.5

1) *Company L is a public company founded in 2017 in Hong Kong, which primarily provides an all-in-one crypto finance platform that brings e-wallets, payment providers, exchanges, and other blockchain-enabled tools and technologies under one roof.*
2) *Company M is a private company founded in 2017 in South Korea, which is primarily a venture capital firm seeking to invest in the cryptocurrency and blockchain sectors.*
3) *Company N is a private company founded in 2018 in Singapore, which is a Web3 firm, specializing in M&A, restructuring, and capital raises.*
4) *Company O is a private company founded in 2016 in Hong Kong, which is a venture capital company focused solely on blockchain investments.*

Key Findings

- The Company is the largest digital asset management services providers in Asia, in terms of AUM for digital assets as of December 31, 2024.

Overview of Global Digital Asset Management Services Market
Entry Barriers of the Digital Asset Management Services Market

Regulatory and compliance barriers

- The digital asset management services providers operate under stringent and evolving regulatory regimes across jurisdictions. Obtaining licenses for asset management, custody, or advisory services requires extensive legal expertise, compliance infrastructure, and ongoing monitoring of AML, KYC, and counter-terrorist financing obligations, which hinder new market entrants to enter the market.

Specialized investment expertise and market understanding

- Unlike traditional asset classes, digital assets exhibit distinct market dynamics, valuation logic, and risk factors that require specialized knowledge to manage effectively. Understanding tokenomics, blockchain protocols, staking mechanisms, and DeFi yield structures is critical to portfolio construction and risk control. Services providers lacking specialized investment expertise and market understanding often struggle to generate sustainable returns or mitigate operational risks.

Evolving industry knowledge requirement

- A key entry barrier in the digital asset management services market is the necessity for participants to stay continuously updated with the rapid evolution of the industry. The market is constantly changing, driven by technological advancements, regulatory shifts, and evolving market dynamics, which demands participants to possess the ability to understand ongoing innovations and adapt to emerging trends. For new entrants, acquiring and maintaining frontier knowledge, along with the agility to implement innovations swiftly, presents a significant challenge. Established players, who have already developed the expertise and infrastructure to navigate this fast-paced environment, hold a competitive edge in maintaining market leadership.

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Appendices
Supplementary Information (1/2)

	Key Contents
1	• Hashkey is the largest regional onshore digital asset platform in Asia in terms of trading volume in 2024, and the largest in Hong Kong with over 75% market share, over three times that of our nearest competitor.
2	• Hashkey's development cycle aligns with the typical evolution of onshore digital asset trading platforms, which generally requires a multi-year investment period for scale efficiencies to materialize, before reaching profitability.
3	• Hashkey is the largest provider of on-chain services in Asia and are ranked eighth globally with HK$29 billion of assets under staking across more than 80 protocols.
4	• Hashkey is the largest digital asset manager in Asia with HK$7.8 billion in assets under management across both HashKey Venture Investments and HashKey Liquid Funds.
5	• As of September 30, 2025, Hashkey had HK$29.0 billion of assets under staking, and HashKey Chain's total RWA value has achieved HK$1.7 billion, positioning it as the largest staking services provider in Asia and the eighth largest globally.
6	• As of September 30, 2025, Hashkey had HK$7.8 billion in assets under management since inception, and is the largest Asian, and Hong Kong-based asset management service provider in terms of AUM as of December 31, 2024.
7	• The trading volume of perpetual and derivatives products is over 2 times larger than spot trading volume globally, and Hashkey expects such products to contribute significantly to trading volume growth going forward.

Appendices
Supplementary Information (2/2)

	Key Contents
8	• Hashkey's insurance policies align with general market practices for companies in the digital asset and fintech sectors, and comply with relevant regulations in Hong Kong and other jurisdictions where Hashkey operates, the unique and evolving nature of the digital asset industry means that certain risks may not be fully mitigated by Hashkey's current coverage.
9	• It is not ncommon for the terms of partnership agreements for investment funds to be in the range of seven to ten years.
10	• The pricing of the management fees and the other terms under the HashKey Fintech Fund Agreements are in line with those offered by market peers.
11	• The pricing mechanism of these related party transactions was consistent with the market practice.

Scope, Methodology and Key Assumptions

- ✓ This report offers a detailed analysis of targe market. Unless otherwise specified, the report defines 2024 as the base year, 2020 to 2023 as the historical period, and 2025 to 2029 as the forecast period.
- ✓ The methodology employed in this report combines data from proprietary database, insights gathered through interviews with industry experts, and our understanding on the defined markets. This integrated approach facilitates a thorough and accurate analysis of current developments, trends, market sizes, and competitive landscapes within the defined markets, ensuring the provision of precise and reliable information.
- ✓ This report is prepared under the key assumptions that the social, economic, and political environments in the PRC and globally will remain stable throughout the forecast period, ensuring sustainable and steady development of the defined markets. It also assumes no significant adverse changes in government policies affecting these markets.

About US

Founded in 1961, Frost & Sullivan has nearly 50 offices with more than 3,000 industry consultants, market research analysts, technology analysts and economists globally. Frost & Sullivan's services include technology research, independent market research, economic research, corporate best practices advising, training, client research, competitive intelligence and corporate strategy.

Frost & Sullivan prepared its report based on its in-house database, independent third-party reports and publicly available data from reputable industry organizations. Where necessary, Frost & Sullivan contacts companies operating in the industry to gather and synthesize information in relation to the market, prices and other relevant information. Frost & Sullivan believes that the basic assumptions used in preparing the Frost & Sullivan Report, including those used to make future projections, are factual, correct and not misleading. Frost & Sullivan has independently analyzed the information, but the accuracy of the conclusions of its review largely relies on the accuracy of the information collected. Frost & Sullivan's research may be affected by the accuracy of these assumptions and the choice of these primary and secondary sources.

Source: Frost & Sullivan

Thanks !

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