



# The Institutional Gateway to On-Chain Finance

HashKey CaaS White Paper



# Chapter 1

## Abstract

In today's fast-paced financial world, staying ahead of technological change is a constant challenge for institutions. Amid this evolution, one trend is becoming undeniable: blockchain and on-chain tokenization are set to redefine the future of finance. This is not a distant prospect, but a rapidly growing reality. The market for real-world assets (RWA) is projected to reach USD 16 trillion by 2030, while the stablecoin market has already surpassed USD 290 billion and is gaining significant regulatory clarity. Together, these forces are unlocking immense growth, with some projections pointing to a USD 3.7 trillion market by 2030.

Institutional capital is quickly entering this space, given the recent market expansion and regulatory clarity. However, technological complexity, fragmented regulatory frameworks, and high entry costs are barriers that prevent traditional financial institutions from securely and efficiently benefiting from this emerging sector.

**HashKey Crypto-as-a-Service (CaaS)** eliminates the complexities of Web3, making it the best solution for institutions. We provide an end-to-end solution and infrastructure for a plug-and-play experience for our clients, and the solution is perfectly fit for bridging traditional finance with the on-chain economy.

As a one-stop platform, HashKey CaaS integrates a full suite of institutional-grade products and services. Our platform includes compliance-friendly on-chain services, asset tokenization, institutional staking, licensed liquidity solutions, security and risk management, and custody, all supported by a robust security framework and our proprietary blockchain network. Our goal is to empower banks, asset managers, and fintech companies by helping them rapidly launch digital asset products securely and efficiently. This platform enables all our clients to focus on value creation and business innovation, eliminating the need to build complex and costly underlying blockchain infrastructure.

## Chapter 2

### The Paradigm Shift in Financial Infrastructure: From Traditional Finance to On-chain Finance

Our financial system is currently facing an irreversible tipping point. Blockchain is transforming financial infrastructure, introducing a new model defined by digitization, automation, efficiency, reduced transaction costs, 24/7 markets, and decentralization.

For the first time since the invention of double-entry bookkeeping, financial infrastructure is undergoing a crucial transformation. This transformation is the evolution from traditional double-entry systems, where different ledgers need to be reconciled, to a globally synchronized, unified ledger that we call blockchain. Blockchain technology offers four structural benefits: instant settlement, reducing transaction time from days to seconds; drastic cost cuts through disintermediation, including smart contract automation; significant transparency improvements by shifting from traditional auditing to real-time on-chain supervision (which also reduces costs); and significant performance enhancements enabled by scaling technologies, such as Layer 2 solutions.

These advantages make asset tokenization not merely an option, but a strategic necessity for staying competitive, unlocking a convergence of market opportunities that are now within reach.

## 2.1 Market Opportunity: The Convergence of Three Trends

In our space, technological innovation is driving increased institutional capital inflows and new regulatory clarity, creating exciting new market opportunities.

**Tokenization is driving the next trillion-dollar market.**

In 2024 alone, the tokenization market grew by 237% with private credit and treasury tokenization leading the way. This growth is driven by:

- 1. Institutional adoption.** The entry of leading financial institutions and large corporations shows that tokenization is a critical investment strategy. These include BlackRock, JPMorgan, Goldman Sachs, BNY Mellon, Fidelity, HSBC, Citibank, Standard Chartered, PayPal, MassMutual, Square, Visa, Mastercard, and several other prominent financial institutions.
- 2. The stablecoin economy** is going through an exponential expansion propelled by growing global demand and clear U.S. regulations. The stablecoin market capitalization, led by USDC and USDT, has surpassed USD 290 billion and continues to grow. Experts project it could reach a staggering USD 2.8 trillion by 2028. Global financial centers, led by regions like Hong Kong, are exploring the compliant issuance of stablecoins as part of their regulatory evolution.

**Strategic positioning of global systemically important financial institutions.**

For institutional investors, the question is no longer “when” but “how much.” Multiple recent industry studies, including those by CoinShares, Fidelity Digital Assets, ARK Invest, and Bitwise, consistently highlight growing institutional interest in digital assets and steadily increasing capital inflows.

- In 2024 alone, crypto assets under management (AUM) surpassed USD 120 billion. This is in part due to new market trends such as the rapid emergence of regulated products such as Digital Asset Treasuries (DATs) and spot crypto ETFs, which provide institutional investors with safe and transparent investment solutions.
- According to data from Boston Consulting Group (BCG) and Fidelity, more than 70% of global asset managers plan to add tokenized products into their core portfolios within the next five years.
- The number of publicly listed companies building Bitcoin and Ethereum reserves is also surging. Institutions now hold 3.68 million Bitcoin, and holdings of public companies have surged from 150,000 BTC in 2021 to 1.08 million BTC in 2025—a compound annual growth rate of 64%—accounting for 30% of the total circulating supply. At the same time, institutional holdings of Ether have reached 11.27 million ETH. DAT products alone increased their Ether holdings to 4.7 million ETH in September 2025, a more than 42-fold increase in just six months.

An increasing number of corporations, financial institutions, and wealth management houses are systematically researching and allocating to digital assets. A new asset class is emerging, with cryptocurrencies steadily transitioning from being treated as alternative investments to becoming a core component of strategic portfolio allocation.

**Favorable regulatory tailwinds**

For many years, the regulatory uncertainty suppressed institutional participation. However, now, regulations worldwide are becoming clearer and more supportive.

Many jurisdictions around the world have introduced clear regulatory frameworks, including Hong Kong’s VASP regime, the EU’s MiCA regulation, and the U.S. FIT21 Act, with many other regions following suit. This new regulatory clarity allows for the market’s large-scale growth, institutional participation, and capital deployment. It also reduces regulatory risk for financial institutions seeking to enter the digital asset market, and it gives institutions the confidence to increase capital allocation on-chain.

HashKey is one of the premier infrastructure providers positioned to help institutions that need to capture this immense market opportunity.

## 2.2 Institutional Challenges: Four Barriers to Web3 Adoption



Despite promising opportunities, institutions encounter four key challenges when implementing digital asset strategies:

- 1. Technical barriers and complexity.** Integrating Web3 technologies securely with traditional systems remains complex. Building and maintaining secure multi-chain infrastructure requires specialized expertise rarely found in-house.
- 2. Security costs and custody risks.** Asset security is paramount for fiduciary institutions. Managing private keys and defending against cyberattacks requires fortress-grade infrastructure, combined with insured, compliant custody solutions.
- 3. Regulatory compliance burden.** Regulation is evolving favorably, but it remains fragmented. AML (Anti-Money Laundering) and KYC (Know Your Customer) requirements demand significant resources to mitigate compliance risks.
- 4. High costs in capital and time.** Meeting all technical, security, and compliance requirements can require significant expenses and time constraints, which are especially disadvantageous in fast-moving markets.

## Chapter 3

# The Trusted Choice: Why HashKey CaaS Is the Institutional Keystone

In the digital assets sector, selecting the right infrastructure partner has a direct impact on institutional reputation and asset safety. As Hong Kong's established and trusted digital asset firm, HashKey Group has engineered its CaaS platform using unparalleled expertise in regulation, technology, and the market. HashKey, which originated in Asia, has grown to serve tens of thousands of clients worldwide. Our advantages go beyond top-tier infrastructure and rest on several key pillars critical to institutional adoption:

### 1. Global Licensing Footprint

HashKey has obtained regulatory licenses in multiple jurisdictions around the world through its various subsidiaries [[Appendix: Global Compliance Framework](#)]. We have cemented a vast compliance network by securing licenses and approvals in key financial centers, including Hong Kong (SFC), (In Hong Kong, HashKey Exchange holds Type 1 & Type 7 licenses; HashKey Capital holds Type 4 & Type 9 licenses; and HashKey Custody holds a TCSP license. These allow us to operate a virtual asset exchange, provide virtual asset fund management and advisory services, and deliver compliant asset custody solutions.) Singapore (MAS) (In Singapore, HashKey Capital holds a CMS license and HashKey OTC holds an MPI license, which allows us to conduct regulated fund management, over-the-counter (OTC) trading, and payment services in full compliance with local regulations. ), and Japan (In Japan, HashKey Japan operates a licensed crypto asset exchange, offering exchange services for digital assets.) In Bermuda, we have obtained a Class F Digital Asset Business License. In Dubai, we have HashKey MENA, a Virtual Asset Service Provider (VASP) approved by VARA. This creates a compliance moat, where HashKey is uniquely capable of providing our clients with a one-stop regulatory passport. Through a single integration with the HashKey platform, our clients can seamlessly scale their digital asset capabilities globally in a regulated manner.

### 2. Extensive Industry Experience

HashKey Group has been a leader in the industry for nearly ten years, with extensive experience in global digital assets. We started focusing on this area early on, investing in Ethereum back in 2015.

Using our strong knowledge of the Asian market and a vast network of partners, we have worked to connect investors and opportunities between Asia and the West. We have also built a solid reputation for helping the industry innovate.

By partnering with leading financial institutions such as Bosera Asset Management (International) Co., Limited to pioneering the first tokenized shares for an ETF in Hong Kong, and collaborating with MicroBit Capital Management Company Limited to launch the MicroBit Ether Spot ETF, our proven track record shows HashKey excels in navigating complex markets, building reliable infrastructure, and driving compliant innovation in digital assets.



### 3. Institutional-Grade Compliance Capabilities

Institutional-grade compliance is fundamental to HashKey's business, built upon our proactive communication and participation in initiatives led by regulators such as the Hong Kong Monetary Authority (HKMA) and the Securities and Futures Commission (SFC).

As a participant in the HKMA-led Project Ensemble Architecture Community, HashKey contributes its expertise to validating tokenised assets and testing tokenised asset transactions. The Group has also pioneered the launch of the world's first tokenised funds and Hong Kong's first batch of spot cryptocurrency ETFs[1].

Our experience shows we can combine compliance with product innovation to deliver secure and market-leading solutions for our partners, even in complex regulatory environments.

### 4. Comprehensive Ecosystem Enablement

The HashKey Group's extensive ecosystem resources are deeply integrated into our CaaS platform. It includes not only cutting-edge market insights and project pipelines brought by HashKey Capital, one of Asia's leading digital asset funds, but also large-scale infrastructure support provided by HashKey Cloud.

Another core business line of the HashKey Group is HashKey Exchange, our licensed virtual asset exchange that leads the market in Hong Kong[2]. The exchange provides highly liquid trading in a compliant manner, acting as a distribution channel for virtual assets and tokenized assets directly to an institutional and qualified investor base.

Our proprietary Layer 2 network, HashKey Chain, provides on-chain innovation for partners, serving as a platform for tokenized assets and promoting a thriving ecosystem. It enables partners to develop DeFi applications, create unique business scenarios, and explore new business models and strategies powered by digital assets.

This model of ecosystem empowerment delivers strategic value that goes far beyond technology alone, creating a robust and sustainable competitive edge for our clients.

## Chapter 4

# The Solution — The HashKey CaaS Platform

Our primary goal is to provide clients with a single platform that enables them to navigate and capture the enormous opportunities in Web3 in a smooth and compliant manner. In short, through our end-to-end CaaS platform, HashKey bridges traditional finance with the digital financial world.

## 4.1 Platform Overview

The HashKey CaaS platform is the most comprehensive solution for any institution looking to enter the Web3 space or develop digital asset products. We offer everything that is needed, from regulatory compliance, the technical tools, integrations, and liquidity to succeed in this market.

We provide full Web3 enablement for institutions and financial organizations, including asset management firms, brokerages, family offices, and fintech innovators. The platform is based on four core, modular pillars that can be used separately or together as a complete end-to-end solution.

- **On-chain-as-a-Service:** Infrastructure and technology for building and running Web3 applications, including HashKey Chain, our Ethereum Layer 2 designed for financial institutions, alongside multi-chain node operation and staking services. Our chain services also support on-chain auditing, which actively monitors smart contract security, fund flows, and node performance. This gives investors and regulators more comprehensive and reliable transparency.



- **Tokenization-as-a-Service:** We provide end-to-end solutions for bringing assets such as funds, bonds, and private credit onto the blockchain. Our professional team offers clients full lifecycle support, legal structuring, and technical implementation for asset issuance and distribution.
- **Trading-as-a-Service:** Delivers an integrated trading and liquidity solution by deeply fusing our regulated, centralized trading architecture with our dynamic on-chain DeFi ecosystem. Through our licensed brokerage, over-the-counter (OTC), and exchange services, we provide compliant market access, powerfully complemented by the deep, native liquidity sourced from the HashKey Chain. This unique dual-pillar model bridges the gap between centralized and decentralized ecosystems, creating an access point to a globally shared liquidity pool spanning both centralized and decentralized ecosystems.
- **Security-as-a-Service:** In a rapidly evolving technological environment, we provide efficient and secure solutions to address continuously changing risks and challenges, ensuring the safety and stability of systems and data.

## 4.2 Unique Value Proposition (UVP)

HashKey CaaS delivers four strategic advantages that help clients bring their digital assets to life:

1. Accelerated digital asset transformation and innovation
2. End-to-end integration
3. Enabling the fastest time-to-market
4. Built-in compliance and security

Our UVP lies in equipping clients with tools to accelerate their digital business ambitions. This is made possible through our turnkey on-chain solutions, including integrated liquidity, custody, tokenization, and compliance, all with minimal regulatory friction and best-in-class security practices, allowing our partners to navigate the space with very low risk.

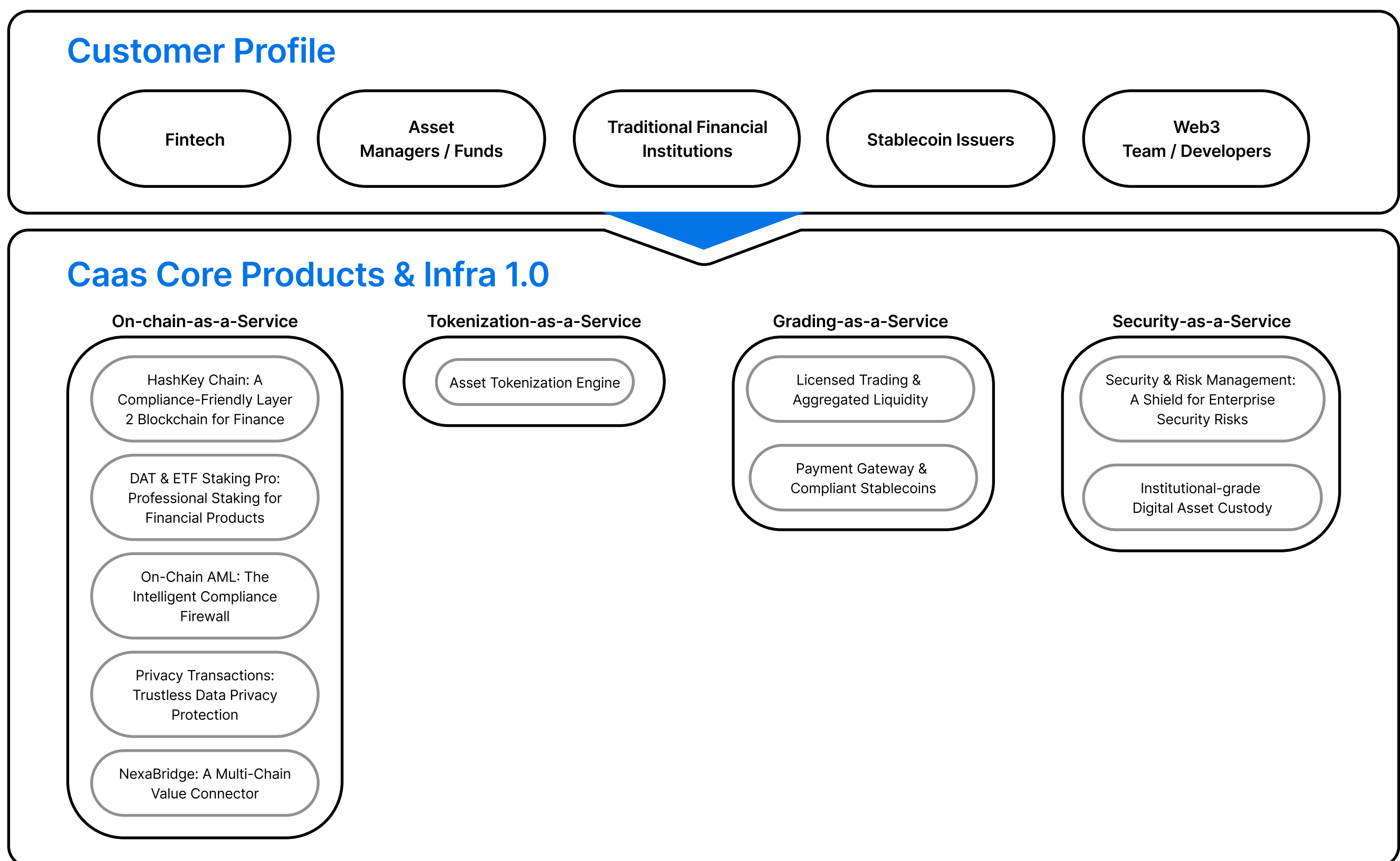
## Chapter 5 Product Architecture

HashKey has designed the CaaS platform's product architecture to be **reliable and modular**, delivering a plug-and-play experience for our clients. The architecture is built on multiple layers, which insulates clients from underlying complexity while providing full on-chain accessibility. At the application layer, our module not only supports API and SDK integration for automation, but also provides user-friendly interfaces and access to consulting and advisory services from HashKey's experienced team.

**By delivering a holistic end-to-end and easy-to-use solution, the value of our CaaS platform far surpasses the sum of its individual components.** Our CaaS platform provides our clients with a decisive advantage, enabling them to achieve a rapid time-to-market and maintain sustained competitiveness.

The following is the product architecture diagram of HashKey CaaS.





## 5.1 On-chain-as-a-Service

Infrastructure and technology for building and running Web3 applications.

### HashKey Chain: A Compliance-Friendly Layer 2 Blockchain for Finance

The HashKey Chain is an Ethereum Layer 2 network, built for financial institutions to meet regulatory requirements. By embedding on-chain KYC and a rules-driven compliance engine, the platform transforms public blockchains into a “permissioned” environment, enabling secure and compliant trading accessible only to verified participants.

As a Layer 2 solution, HashKey Chain inherits Ethereum’s security while also delivering a very high throughput and ultra-low transaction costs. This creates a path for large-scale, high-frequency financial applications. Additionally, it also supports private transactions, allowing for the enforcement of the privacy requirements of traditional financial institutions.

To further drive innovation and adoption, HashKey Chain Foundation has established a **Grant Program** and provides marketing and community-building support to help new projects accelerate their growth on HashKey Chain. Over USD 200 million in tokenized assets have been deployed on-chain, including Boserá money market ETF and tokenized private equity of SpaceX.

### DAT/ETF Staking Pro: Professional Staking for Financial Products

This module provides professional staking services that institutions can integrate into ETFs. It enables asset management companies holding spot POS tokens for ETFs and DATs to capture native network yields from their underlying assets. All assets are managed by licensed custodians, ensuring complete segregation of funds and robust security. Google Cloud is one of the key technology vendors[3] supporting the DAT/ETF Staking Pro product.

The entire process is automated, with a dedicated management dashboard that allows enterprises or fund managers to monitor data and node status in real time. The service also includes ETH staking slashing insurance, which covers the highly unlikely risk of slashing and ensures that funds remain fully protected at all times. Successful use cases of this service include the **Bosera HashKey Ether ETF (3009.HK/9009.HK)** and the **MicroBit Ether Spot ETF (3425.HK / 9425.HK)**.

## On-chain AML: The Intelligent Compliance Firewall

HashKey CaaS features an on-chain AML module that enforces risk controls and regulatory compliance directly at the blockchain level, providing compliance and risk services for regulated stablecoins and tokenized asset trading markets. The module is built around the ERC-3643 standard (a universal framework for RWA tokenization) and supports permissioned rule customization.

It provides real-time monitoring by connecting issuers with security providers to track on-chain activity, and creates a closed-loop AML ecosystem by integrating all participants. The system also establishes collaboration channels between issuers, regulators, and law enforcement, supporting full-path investigations and generating complete on-chain traceability reports, all while ensuring data privacy for all parties.

## Privacy Transactions: Trustless Data Privacy Protection

This module is crucial for transaction confidentiality, especially for institutions. It addresses on-chain confidentiality requirements by using a Fast Fully Homomorphic Encryption over the Torus (TFHE)-based protocol, which allows transactions and business logic to be executed without exposing data on the public ledger.

Our privacy protocol enables trustless, cost-efficient data privacy protection and general-purpose computation on-chain, supporting a range of applications. These include private payments where transaction amounts remain confidential, private lending and collateralization without disclosing raw data, private voting systems, and even privacy-preserving competitive analysis that provides aggregated industry insights without revealing individual business secrets.

## NexaBridge: A Multi-Chain Value Connector

In the digital asset space, there's still a lot of liquidity fragmentation across different blockchains, creating liquidity silos. To address this, HashKey offers NexaBridge, a cross-chain solution that enables seamless asset bridging across networks, including consortium chains (such as Venachain) and public blockchains.

NexaBridge helps to connect permissioned blockchains with public-chain crypto ecosystem in a secure manner. Its cross-chain capabilities enhance asset liquidity and utility, strengthen network effects, and optimize the distribution of digital assets. Unlike most blockchain bridges, we have created a seamless bridging experience with an intuitive user interface and a multi-wallet architecture safeguarded by multi-signature control.



## 5.2 Tokenization-as-a-Service

End-to-end solutions for bringing assets such as funds, bonds, and private credit, and securities onto the blockchain.

### Asset Tokenization Engine

This module is a comprehensive digital asset issuance platform designed for financial institutions, aiming to simplify complex issuance processes into a seamless and efficient operating experience. The module encompasses the full issuance process of a tokenized asset, which happens in several steps, including product design and legal structure, smart contract development, and asset issuance. Post-issuance, issuers can also manage the asset, which includes dividend payments and other corporate actions, all in a single standardized solution.

Novia and NexaToken have already supported multiple leading financial institutions in launching innovative tokenized projects. This includes the first tokenized shares for an ETF in Hong Kong by Bosera Asset Management (International) Co., Limited, as well as GF Securities' GF Token, among other landmark products.

- **Novia:** Novia is HashKey's all-in-one tokenization platform, enabling licensed institutions to securely and compliantly tokenize institutional grade assets. HashKey Novia consists of three core parts: The product engine (product design and legal structuring), technology engine (powered by NexaToken), and open distribution platform
- **NexaToken:** A technology platform for tokenization, designed to bring traditional assets such as funds, bonds, loans, private credit, and securities onto the blockchain. NexaToken allows for the issuance and management of tokens on-chain, as well as enhancing liquidity, token distribution, and operational efficiency. It includes a built-in oracle that delivers real-time data from traditional financial markets quickly and securely to the blockchain. Consequently, this oracle provides reliable, low-latency external data for smart contracts and decentralized applications. NexaToken also has a dashboard for visualization, monitoring, and control of token issuance, circulation, and transactions for any tokenized asset. This feature ensures greater confidence for investors and strengthens supervisory visibility for regulators.

## 5.3 Trading-as-a-Service

Delivers unified access to institutional liquidity and payment solutions across centralized and decentralized ecosystems.

### Licensed Trading & Aggregated Liquidity

HashKey provides institutional clients with a liquidity engine. This liquidity engine gives access deep liquidity pools from our licensed HashKey Exchange or from on-chain DeFi protocols on the HashKey Chain. Provide clients with transparent pricing and a seamless trading experience. This liquidity module serves not only as a trading execution gateway but also as a critical infrastructure for the discovery of prices and the secondary market circulation of tokenized assets. HashKey Exchange also enabled one of Hong Kong's largest digital bank to become the first retail bank in Asia to offer virtual asset trading services.

### Payment Gateway & Compliant Stablecoins

Through our strategic partnership with Google AP2, we empower businesses and merchants to seamlessly accept stablecoins and other major cryptocurrencies, complete with automated, real-time fiat settlement. This provides critical payment infrastructure for commercial applications and value transfer in the digital economy. Building on this foundation, we have introduced the HashKey Payment Protocol (HP2). HP2 is a specialized payment protocol engineered for intelligent agent payments and automated settlement, merging the advantages of the AP2 and x402 protocols while supporting a diverse range of payment assets. Furthermore, HP2 ensures transactional compliance and transparency through built-in KYC/AML and auditing capabilities, delivering a traceable, secure, and automated solution for payments in the digital economy.

Concurrently, we provide end-to-end stablecoin solutions for issuers and managers, establishing a seamless, bidirectional connection between digital assets and fiat currencies. This comprehensive solution includes the technical support for compliant stablecoin issuance and deep liquidity provisioning.

## 5.4 Security-as-a-Service

In a rapidly evolving technological environment, we provide efficient and secure solutions to address continuously changing risks and challenges.

### Security & Risk Management: A Shield for Enterprise Security Risks

With expertise in security audits, infrastructure protection, operations, and risk controls, we provide our clients with end-to-end solutions that identify, assess, and mitigate potential risks, ensuring stable and secure operations within the Web3 ecosystem.

Security services include:

- **Product & Application Security:** Security audits for Web2 and Web3 systems, from code audits, smart contract audits, and wallet security audits. These services are crucial for enterprises to identify vulnerabilities and attack surfaces in their in-house digital products and strengthen their overall system protection while reducing risks.
- **Infrastructure Security & Operational Assurance:** We build security capabilities for hardening any type of digital infrastructure. This includes conducting red/blue team exercises and penetration testing to enhance enterprise resilience against security threats and improve secure operational standards.
- **Risk Management & Control:** Offering business-focused risk data analytics, Web3 compliance consulting, customized risk control strategies, and the development of comprehensive risk management platforms. These solutions support continuous monitoring and proactive risk mitigation to ensure long-term operational stability.

### Institutional-grade Digital Asset Custody

As a licensed Trust or Company Service Provider (TCSP) in Hong Kong, our custody services are the security backbone for institutions. We have built security infrastructure, with multi-signature authorization mechanisms.



## Chapter 6

# Future Blueprint: Three Steps to Build the Global Engine of Digital Finance

From the start, our vision is to build the definitive institutional gateway to Web3. To realize this ambition, we have crafted a strategic three-phase roadmap designed to establish HashKey CaaS as the global engine of digital finance.

The HashKey ecosystem token, HSK, plays a key role in the platform's development, providing vital economic incentives and governance support at each stage of the strategy, while continually driving value flow and collaboration within and outside the ecosystem. HSK not only plays a key role in platform service payments, exclusive token pre-subscriptions, on-chain governance, access to value-added services, and cross-ecosystem collaboration, but it also runs through every stage of our long-term vision of building an institutional-grade digital finance engine, ensuring both the momentum and mechanisms necessary for strategic growth.

- **Phase One: Laying the Foundation and Market Penetration.**

In our foundational phase, we will solidify our leadership in the Hong Kong market by introducing the HashKey CaaS v1.0 "AEG" service package. This integrated suite provides institutions with a turnkey solution, encompassing core infrastructure creation (Architect), on-chain value enhancement (Enhancer), and robust security and compliance (Guardian). Our strategy is to partner with leading financial institutions to deploy flagship tokenization projects, proving the model and building market confidence. Concurrently, we will leverage HSK incentives to foster a vibrant early-adopter community, accelerating ecosystem growth and gathering critical feedback for rapid product iteration.

- **Phase Two: Regional Expansion and Ecosystem Prosperity.**

Riding on the HashKey Group's licensing advantages in the biggest APAC markets, such as Singapore and Japan, we plan to systematically replicate the successful model across other major Asian financial hubs. The goal is to achieve regional-scale expansion. At the same time, we will establish a regulated and efficient secondary market for tokenized assets, further enhancing liquidity. Through diversified incentive programs, we will continuously expand the application ecosystem of HashKey Chain, attracting more developers and institutions, and forming a virtuous cycle of growth.

- **Phase Three: Global Leadership and Standard Setting.**

Our goal is to become the world's leading institutional Web3 infrastructure provider, expanding our business network to Europe, the Middle East, and beyond, while positioning HashKey Chain as one of the global settlement centers for tokenized assets. Meanwhile, we are committed to actively participating in and driving global industry standard-setting, contributing HashKey's practical experience in compliance, technology, and governance, and leading the industry toward maturity and standardization.

## Chapter 7

# Trusted Ecosystem: Endorsed and Powered by Industry Leaders

Our market-proven, institutional-grade solutions are trusted by leading financial institutions, asset managers, and technology pioneers. Our technology is powered by global leaders like Google Cloud, guaranteeing exceptional resilience and scalability.

Clients:

博时基金  
BOSERA FUNDS

廣發証券(香港)  
GF SECURITIES (HONG KONG)

Silver  
Times

MicroBit

HASHGLOBAL

Avenir  
GROUP

INCE  
CAPITAL

FENBUSHI  
CAPITAL

QUANTUM  
SOLUTIONS

Partners:

WANXIANG  
BLOCKCHAIN  
万向区块链

RD Technologies

啓明創投  
QIMING VENTURE PARTNERS

DataYes!  
通联数据

SLOWMIST

primus

OristaPay  
by RD Technologies

蓝象智联

Paimon

Key Technical vendor:



# Appendix :

## Global Compliance Framework

The foundation supporting all our services is HashKey Group’s comprehensive suite of licenses, covering key financial centers including Hong Kong, Singapore, Japan, the UAE, providing clients with a “compliance passport” for their global operations.

| Region          | Entity                  | License Type                           | Business Scope                                                                                                                    |
|-----------------|-------------------------|----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| Hong Kong (SFC) | HashKey Exchange        | Type 1 & Type 7                        | Operation of a virtual asset exchange                                                                                             |
|                 | HashKey Capital         | Type 1 & Type 4 & Type 9               | Virtual asset fund management and advisory                                                                                        |
|                 | HashKey XPert Limited   | TCSP License                           | Compliant asset custody services                                                                                                  |
| Singapore (MAS) | HashKey Capital         | CMS License                            | Regulated fund management services                                                                                                |
|                 | HashKey OTC             | MPI License                            | OTC trading and payment services                                                                                                  |
| Japan           | HashKey Japan           | Crypto Asset Exchange                  | Operation of a crypto asset exchange                                                                                              |
| Bermuda         | HashKey Bermuda Limited | Class F Digital Asset Business License | Operate a digital asset trading platform                                                                                          |
| Dubai           | HashKey MENA            | VASP approved by VARA                  | Authorized to provide broker-dealer services, including intermediation and distribution, and to operate a virtual asset exchange. |

In addition to compliance and licensing, HashKey also holds other certifications that allow us to operate in a compliant and secure manner:

- **Segregated & Custody:** Assets are protected by multiple layers of security; stored in cold wallets in compliance with regulatory requirements, and funds segregated from HashKey’s operational accounts. Custody operations are independently audited by a top-tier accounting firm and have obtained SOC 1 Type II and SOC 2 Type II attestation reports. Our platform is also certified under ISO 27001 (Information Security Management) and ISO 27701 (Privacy Information Management) standards.
- **Hardware Security:** HashKey uses market-leading cryptographic security, specifically Thales FIPS 140-2 Level 3 validated Hardware Security Modules (HSMs) for key management, ensuring top-level security and meeting global regulatory requirements.

1. <https://group.hashkey.com/en/newsroom/bosera-hashkey-bitcoin-and-ether-spot-etfs>

2. According to media reports dated January 15, 2025, HashKey Exchange’s capital scale has exceeded HK\$10 billion, with cumulative transaction volume surpassing HK\$600 billion, and its OTC trading business recording a year-on-year growth of up to 160%, making it the largest licensed virtual asset exchange in Hong Kong.

3. [Google Cloud & HashKey Staking Partnership White Paper: https://docs.google.com/document/d/1vyjagsnr4rzqdtug/edit](https://docs.google.com/document/d/1vyjagsnr4rzqdtug/edit)



# Glossary

## Staking

Staking refers to the act where owners of digital assets (cryptocurrencies or tokens) lock up a certain amount of their tokens, delegating them to a specific blockchain network or node (i.e., a validator), in order to participate in that blockchain network's validation and governance process.

## AML (Anti-Money Laundering)

Refers to regulations, laws, and procedures intended to prevent criminals from disguising illegally obtained funds as legitimate income.

## KYC (Know Your Customer)

The process of verifying the identity of clients, typically to comply with regulatory requirements and assess potential risks of illegal intentions.

## L2 (Layer 2)

A secondary framework or protocol built on top of an existing blockchain (Layer 1) to improve scalability, throughput, and cost-efficiency.

## Custodian

A regulated entity responsible for safeguarding clients' digital or financial assets, ensuring segregation and security.

## Permissioned Blockchain

A blockchain network that restricts participation to verified or authorized entities, often used in compliance-driven financial environments.

## Privacy-Preserving Transactions

Transactions designed to conceal sensitive information (such as transaction amounts or participants) while still being verifiable on-chain.

## TFHE (Fully Homomorphic Encryption over the Torus)

TFHE is a fully homomorphic encryption (FHE) scheme proposed by Chillotti et al., based on the security assumptions of the Ring Learning With Errors (Ring-LWE) problem. Its core innovation lies in the use of a "torus" representation, making it particularly well-suited for Boolean circuits and binary computations.

## Project Ensemble

an HKMA-led program that explores tokenised deposits, green bonds, and other regulated digital assets as bridges between Web3 and traditional finance, and also turns regulatory insights into drivers of innovation.