

Bridging the Adoption Gap: Aligning Digital Asset Offerings with Buy-Side Requirements

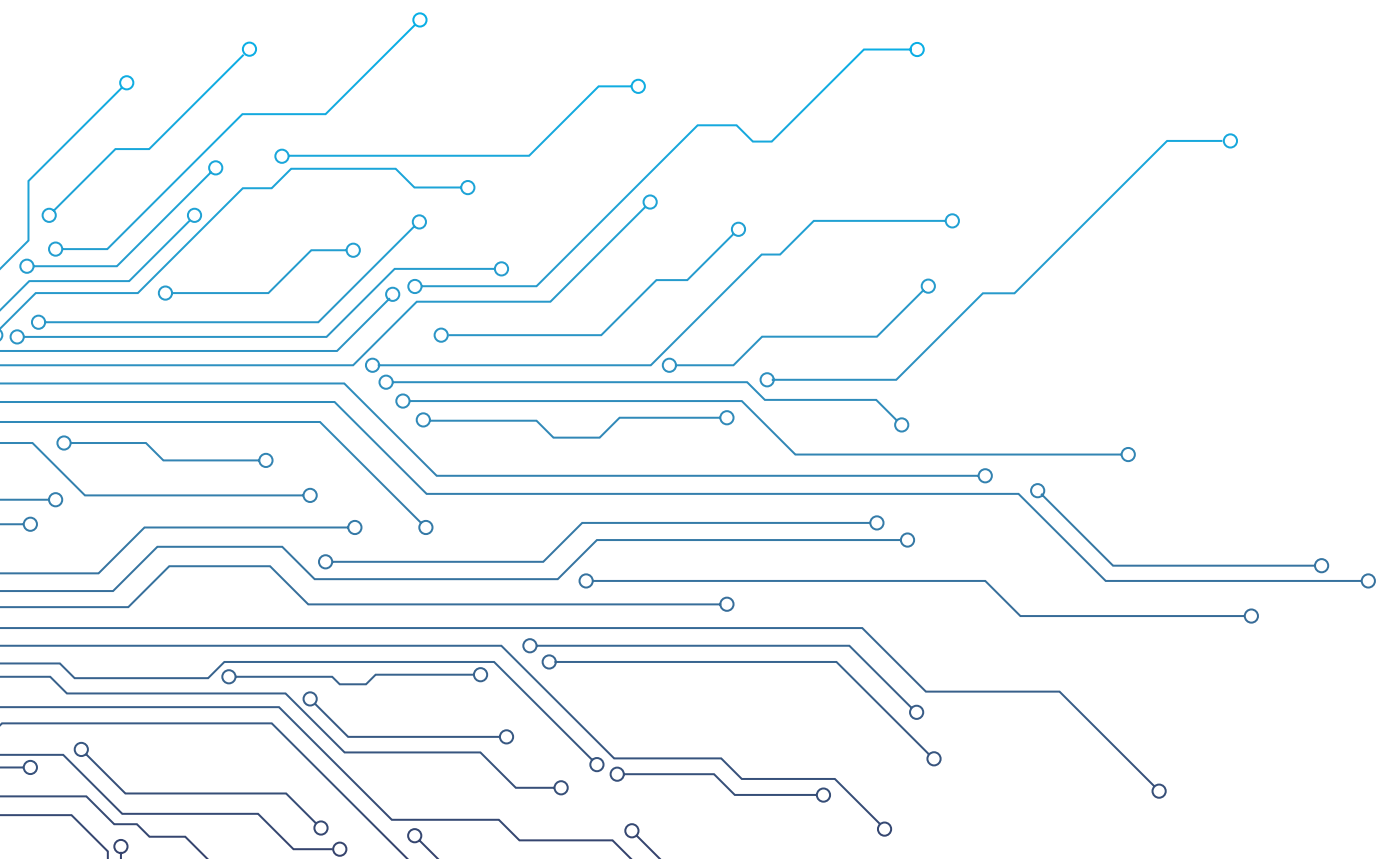
Insights from Singapore and the UK



Disclaimer

This paper and its contents are made available on an “as-is” basis without warranties of any kind. The content in this paper does not constitute regulatory, financial, legal or any other professional advice and should not be acted on as such. None of its authors and contributors shall be liable for any damage or loss of any kind howsoever caused as a result from the use of the information contained or referenced in this paper.

This paper does not seek to address policy objectives or recommend any specific solution or product. Whilst the content strives to provide more clarity on the subject matter, the authors of this paper make no representation or guarantees on the performance or adequacy of the solutions or models. The examples used in the paper are only for illustration purposes.



Contents

Disclaimer	2
Forewords	4
Kenneth Gay – Chief FinTech Officer, Monetary Authority of Singapore	4
Simon Walls – Executive Director of Markets, Financial Conduct Authority	4
Carmen Wee – CEO, Investment Management Association of Singapore	5
Chris Cummings – CEO, The Investment Association	5
Executive Summary	6
Background	7
1. The growing asset tokenisation market	9
Institutional and retail investors drive demand	9
Shifting expectation of investors creates new opportunities	11
Changing roles of financial market participants and service providers	13
Current headwinds for the scaling of tokenised assets	15
2. Differing priorities of issuers, sell-side and buy-side affecting adoption and demand of tokenised assets	16
Issuer-centric product development	17
Sell-side service impacts	18
Institutional investment imperatives	19
The adoption gap	20
3. Key buy-side / investor considerations	21
Liquidity and secondary market access	22
Changing custodial and trust arrangements	23
Operational changes to investors' exercise of rights	24
Potential investor harms and changing consumer protections	25
Potential legal and regulatory considerations	26
The path forward	27
4. An operational readiness checklist for issuers and investors	28
Next Steps	32
Conclusion	33

Forewords



Kenneth Gay

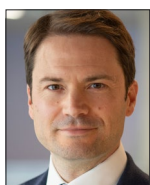
Chief FinTech Officer, Monetary Authority of Singapore

The investment landscape stands at a pivotal juncture. Tokenised assets are emerging as a transformative force in capital markets, offering the promise of greater efficiency, transparency, and accessibility. Yet, a meaningful adoption gap remains between these innovative digital instruments and buy-side investors.

This gap arises because many tokenisation initiatives often prioritise technological innovation and efficiency gains, whilst institutional investors must satisfy stringent operational, regulatory, and fiduciary requirements before adoption becomes feasible.

The collaboration between Singapore (MAS and IMAS) and the UK (FCA and IA) exemplifies the need to align tokenised asset design with buy-side needs. The aim is to foster robust, scalable tokenised asset markets that serve all investor classes effectively, while upholding investor protection and governance standards.

Achieving this vision will require collaboration among financial institutions, technology providers, and regulators. MAS remains committed to realising this vision through Project Guardian and collaboration with fellow regulators. Together, we can build a future where tokenisation enhances – not disrupts – the foundation of finance.



Simon Walls

Executive Director of Markets, Financial Conduct Authority

As the UK's market and conduct regulator one of our responsibilities is to ensure that our financial services sector is fit for the future. That's why we've set out an ambitious strategy to support growth, help consumers, fight crime and become a smarter regulator.

Tokenisation has a potentially transformative role to play in the future of financial services. New investor expectations are already driving changes as firms and financial services evolve to keep pace with the habits and needs of "tomorrow's investors".

For the digital ecosystem to reach scale, investors must have trust and confidence in digital products – just as we expect in existing propositions today. Investors should be at the heart of this transformation, sharing in the benefits of tokenisation and getting the information and services they need. This isn't technology for technology's sake – it needs to enhance provision in some way: make things cheaper, or quicker, or increase choice, or enable something that just can't be done today. Done right we believe that tokenisation can do this.

This collaboration between global regulators and industry brings the community together to discuss what we each need to consider to ensure that any digital transformation is underpinned by trust, confidence and resilience.

The UK and Singapore are already hubs for innovation and experimentation, and we know that international coordination is important to give firms the confidence to build at scale and to do business across borders. That is why we are pleased to have been involved in this paper, which is a reflection of years of close collaboration between the UK and Singapore.

**Carmen Wee**

CEO, Investment Management Association of Singapore

Tokenisation of financial assets represents a transformative development in modern finance, offering the potential to reshape market operations. By leveraging DLT, financial institutions can create a more efficient, transparent, and inclusive ecosystem—where transactions are secure, processes are streamlined, and access to financial products is expanded. Realising the full potential of digital assets requires careful consideration of investor needs, alongside robust regulatory, fiduciary, and operational frameworks that support responsible adoption while balancing innovation with prudential safeguards.

The collaboration between two leading financial centres—Singapore and the United Kingdom—through Project Guardian marks a significant step toward broader market access, interoperability, and enhanced resilience. Bringing together regulators, industry participants, and standard-setting bodies, the initiative aims to establish consistent frameworks, and foster innovation that strengthens investor confidence and market efficiency.

IMAS is committed to representing the buy-side, ensuring that the perspectives of asset managers and investors remain central to the evolution of tokenised finance. Together with the MAS and counterparts in the UK—IA and FCA—IMAS seeks to enable responsible, scalable adoption and deliver tangible benefits across the investment ecosystem.

**Chris Cummings**

CEO, The Investment Association

The rapid evolution of digital assets and DLT is transforming not only how we invest, but how we conceive of ownership, access, and value transfer across global financial markets. The UK and Singapore are at the forefront of these changes, working closely together through Project Guardian and informed by domestic initiatives like our own IF3 Lab in the UK, which demonstrate the immense potential of tokenised funds, assets and new custodial frameworks.

The buy-side has a crucial role to play in this journey. We are uniquely positioned to drive adoption, yet significant commercial and operational challenges remain. By voicing our needs and concerns, we ensure that tokenisation delivers tangible benefits—greater efficiency, transparency, improved liquidity, and new opportunities for diversification. It is imperative that regulatory and service provider developments keep pace with these shifts, providing robust protections while enabling growth.

This document not only maps the current landscape but also highlights the necessary collaborative spirit—across the globe—to unlock the full value of digital issuance. I encourage all stakeholders to engage with these findings as we shape the future of investment together.

Executive Summary

Digital assets and distributed ledger technology (DLT) are transforming global financial markets, **redefining how investment, ownership, and value transfer can be managed**. Singapore and the United Kingdom (UK) are at the forefront of this transformation, collaborating through initiatives such as Project Guardian to unlock the potential of tokenised funds, assets, and new financial market infrastructure frameworks.

Buy-side institutions play a key role in driving adoption and scale in digital markets, but they continue to face challenges which make up the “adoption gap”; where firms are limited in their ability to fully-realise the benefits of tokenisation – new distribution, greater efficiency, transparency, liquidity, and diversification. Ongoing collaboration among regulators, industry bodies, and asset managers in both jurisdictions exemplifies a **forward-thinking approach to address these challenges**, through active participation, shared learning and open dialogue.

This paper introduces a **practical checklist to guide stakeholders** as firms start to design and launch digital products and services. The checklist offers clear, actionable guidance on operational, commercial, and regulatory considerations, empowering market participants to navigate this transformation with confidence and consistency. Stakeholders, both domestic and international, are encouraged to engage with these findings and leverage the checklist as a tool for informed action. A collective commitment to common standards and best practices is essential to help unlock the full potential of tokenised assets and shaping the future of investment.

To fully realise the benefits of digital asset transformation, it is vital to build on the foundations established by the UK and Singapore. Global insights will help to refine, strengthen, and harmonise frameworks for issuance and cross-border trading of tokenised assets and products. In doing so, we can foster a resilient, inclusive, and efficient global ecosystem that upholds investor protection and market integrity.

Overview of recommended next steps:

Stakeholder	Next Steps / Actions
Individual Firms	• Implement robust governance frameworks tailored to the distinct characteristics of tokenised assets; • Establish clear procedures for exercising investor rights—such as transparent voting mechanisms and straightforward avenues for redress; • Invest in staff training and resilient technological infrastructure and provide regular, transparent communication with clients to build trust.
Industry Bodies	• Standardise best practices and interoperable technology solutions; • Improve investor education and digital literacy to empower consumers to make well-informed decisions; • Manage emerging risks by sharing intelligence; • Innovate responsibly.
International regulators, standard setters & other bodies	• Use convening powers to bring the full-value chain together to discuss key obstacles and opportunities. • Explain key expectations of regulatory frameworks and work with industry to consider them in DLT contexts. • Monitor market developments and regulatory approaches through global standard setting bodies to be alert to key areas of regulatory divergence.

Background

The rise of digital assets demands a new and outward-looking approach to financial markets and policy making. Digital infrastructure, such as DLT and shared ledgers, operates across jurisdictions and unconstrained by time zone or market hours, making collaboration among global financial centres essential.

The UK and Singapore, sharing a longstanding partnership, are strengthening their ties as technological transformation accelerates their joint ambition to modernise financial markets and unlock efficiencies through innovation. Both jurisdictions have sought to be leaders in exploring and adopting digital assets, with collaborative projects and industry frameworks that are shaping the future of digital finance.

Project Guardian¹, convened by the Monetary Authority of Singapore (MAS), is a flagship initiative in partnership with global financial institutions, industry associations, regulators and central banks. It aims to test and develop scalable digital asset frameworks and models, focused on interoperability and commercialisation of tokenised financial products. Project Guardian has facilitated several live pilots involving the issuance, trading, and settlement of tokenised bonds and funds, coupled with the use of tokenised bank liabilities. These learnings provided valuable insights into how shared ledgers can enhance efficiency and transparency within financial markets, and guided commercial implementations of digital asset solutions with robust risk management and controls in place.

In support of Project Guardian, the Investment Management Association of Singapore (IMAS) has convened fintech innovators, regulators, asset owners, and asset managers to foster collaboration, exchange ideas, and harness emerging technologies to drive innovation across the investment ecosystem. Through these engagements, IMAS has provided a platform for industry participants to address challenges, explore opportunities, and identify practical solutions that can accelerate digital transformation in asset management.

Building on insights gathered from its **Masterclasses** and plenaries, IMAS is now extending its thought leadership through its latest training initiative, “The Brave New World of Tokenisation and Blockchain for Asset Management”. This comprehensive program is designed to deepen industry understanding of blockchain and tokenisation, highlighting real-world applications, regulatory considerations, and operational implications for buy-side institutions and investors. By equipping asset managers and investors with a shared vocabulary, actionable frameworks, and practical guidance, IMAS aims to empower the industry to adopt digital asset technologies responsibly and at scale.

In the UK, the **Investment Fund 3.0 (IF3) Lab**² acts as an innovation hub, bringing together asset managers, FinTechs, and regulators to experiment with modernising investment funds to be fit for the Web3.0 world. The IF3 Lab is designed to support the development and commercialisation of tokenised products, encouraging industry-wide collaboration and knowledge sharing, and close interaction with policy makers including the Financial Conduct Authority (FCA), HM Treasury and

¹ Monetary Authority of Singapore: [Project Guardian](#) Accessed November 2025

² The Investment Association: [Investment Fund 3.0](#) Accessed November 2025

the Bank of England. Its activities include enabling the buy-side's voice on matters relating to the digital securities sandbox and workshops focused on overcoming regulatory, operational and legal hurdles in digital issuance.

The FCA has recently built upon the **UK Blueprint Model** by publishing guidance³ for firms on a practical framework for the tokenisation of funds, setting out the technical and regulatory steps required to launch, manage, and service funds on DLT in compliance with UK rules. The FCA has also established a roadmap to support firms exploring the benefits of fully on-chain funds, where firms can use on-chain cash instruments for settlement, invest in tokenised assets, and make greater use of public networks.

Complementing these efforts, the **Guardian Funds Framework (GFF)**⁴ in Singapore established standards for the creation and distribution of tokenised funds, emphasising transparency, operational resilience, and investor safeguards. The GFF is designed to facilitate cross-border issuance and trading, allowing funds to be managed and serviced using DLT while maintaining regulatory compliance and market integrity.

Collectively, these initiatives in the UK and Singapore exemplify a dynamic and collaborative approach to asset tokenisation, showcasing how innovation and regulatory clarity can advance digital finance. Their efforts are not intended to stand alone: they provide a platform for **engagement with other jurisdictions to share insights and co-develop standards**. By fostering sustained cross-border dialogue and collaboration, these frameworks lay the foundation for a more efficient, transparent, and inclusive global financial system – where digital assets can be issued, traded, and settled efficiently and at scale. As these efforts evolve, they create new possibilities for investors, institutions, and economies worldwide.

To support this paper, a targeted industry survey was conducted among leading asset managers, custodians, and institutional investors from both jurisdictions. We also heard from consumer groups. The survey captured insights on operational readiness, investor sentiment, adoption barriers, and ecosystem constraints. Respondents included organisations with live tokenised financial products as well as those actively exploring opportunities in this space. These perspectives form an insightful evidence base for the analysis and recommendations in this paper.

³ Financial Conduct Authority: [Progressing Fund Tokenisation](#) October 2025

⁴ Guardian Asset & Wealth Management Industry Group: [Guardian Funds Framework](#) November 2024

1. The growing asset tokenisation market

Asset tokenisation is transforming how investors access and manage existing financial instruments, with new mobility and distribution mechanisms. Institutional and retail investor expectations will fundamentally shape how tokenised products are designed. This transformation creates new opportunities for investors and service providers in digital asset management.

Institutional investors bring capital and credibility, motivated by enhanced collateral management and access to broader asset classes. Retail investors are attracted to a more instant, intuitive and singular relationship with their money managed through digital wallets, building on their existing comfort with technology and familiarity with cryptoassets. This dual demand creates competitive pressure on traditional service providers to innovate.

Institutional and retail investors drive demand

Asset tokenisation offers investors – both institutional and retail – new ways of accessing, managing, and experiencing investments. While the economic exposure of tokenised assets remains identical to their conventional equivalents, tokenised assets may unlock efficiency gains and novel opportunities.

Investors are a key driver behind the adoption of asset tokenisation. Their demand for value, performance and transparency of financial products continues to incentivise financial institutions to innovate and digitalise. For many institutions, DLT-based solutions offer a pathway toward achieving these goals. Ultimately, capital allocation decisions will determine whether tokenised products evolve from limited pilots and projects into mainstream investment vehicles.

Large **institutional investors** – including banks, asset managers, pension funds – play a pivotal role in accelerating asset tokenisation. **Their participation brings demand, capital and credibility to the market.** In addition, institutional investors subject to risk management and prudential requirements are motivated to explore asset tokenisation as a means of enhancing collateral management, improving risk exposure coverage and broadening eligible asset classes. Many leading financial institutions are actively exploring or piloting tokenised offerings, signalling growing confidence in the technology and long-term value creation.

Institutions have been increasing their allocations to tokenised assets in recent years as more become available. This growing allocation points to a growing belief in the potential future value of tokenised markets. Demand directly influences adoption. Traditional service providers are looking to innovate, driven by a competitive intent to ensure future relevance.

On the **retail side**, investors may be represented across a spectrum of those already within the remit of conventional issuers, and those who will soon have wealth to deploy but to date are



served only by neobanks or native digital market issuers. There has been growing interest in digital assets and demand **for more inclusive investment opportunities**.

The rise of cryptocurrencies and fractional investing has shown that retail participants are looking for innovative ways to invest, trade, and own assets. Tokenisation extends similar benefits to traditional financial assets – it enables fractional ownership, meaning high-value assets (such as infrastructure) can be split into small token units, drastically lowering investment entry barriers. Broadened access could allow everyday investors to buy a tiny stake in assets that would otherwise be out of reach, expanding the overall investor base. Proponents have recognised that fractionalisation does not in itself create a liquid market in such units, or ensure an accurate valuation of small stakes, and firms are exploring whether the roles or activities of firms may need to change to deliver this.

While institutional players lead in volume, retail investors drive adoption by showing interest in features made feasible by tokenisation. In recent years, millions of retail users globally have become comfortable with digital tokens, wallets, and online trading – this builds a ready audience for tokenised stocks, bonds, or funds as these become available at scale. In fact, retail trading platforms are beginning to list tokenised assets (such as gold tokens, tokenised treasury bonds and assets). The presence of retail participants provides issuers and regulators with evidence that a market for tokenised assets exists beyond just large institutions, and that this can only develop where retail investors have confidence that products are of high quality and will work as intended.

Tokenised Money Market Fund (tMMF) growth, 2024 to 2025

The tMMF sector has seen significant growth in the past year, driven by institutional adoption and blockchain technology's promise of efficiency, transparency, and liquidity. Below is a comparison of the growth in the tMMF sector, based on available data up to August 2025.

2024: The tokenised real-world asset (RWA) market, including tMMFs, reached approximately \$15.27 billion in total assets across protocols. Tokenised U.S. Treasuries, a significant component of tMMFs, grew to \$6.9 billion by May 2025, up from just \$100 million at the end of 2022. Specifically, **tMMFs hit a market capitalisation of around \$2 billion by late 2024.**

2025: The broader tokenized RWA market grew to \$17.88 billion by March 2025, a 78.8% increase from \$10 billion in 2024. By June 2025, the **tMMF sector in the US reached \$7 billion**, with BlackRock's USD Institutional Digital Liquidity Fund (BUIDL) capturing nearly 30% of the \$1.3 billion tokenised Treasury market within six weeks of its March 2024 launch, growing to \$2.91 billion in assets under management (AUM) by May 2025.

Shifting expectation of investors creates new opportunities

Many investors are seeking faster transactions, near-instant settlement, and deeper liquidity. Asset tokenisation can address these priorities.

Tokenised funds enable asset managers to embed **rule-based logic** directly into tokens, such as investor eligibility, transfer restrictions, or lock-up mechanics. This allows for enhanced compliance “by design” while creating the possibility of bespoke, client-specific solutions. Over time, tokenisation may support highly personalised portfolios constructed and managed at scale, a vision aligned with the concept of composable finance described in the Guardian Funds Framework⁵ and the FCA’s recent paper⁶.

One of the most cited benefits by survey respondents is **faster settlement**. Traditional fund subscriptions and redemptions typically operate on a T+2 or T+3 basis, though are reducing. Tokenised fund units, when paired with tokenised cash, can be settled nearly instantly, reducing counterparty and settlement risk. Survey respondents noted that money market funds (MMFs) are particularly well-suited for tokenisation as the money market instruments held are one of the few asset classes that can support same-day (T0) or T+1 settlement. While other asset classes, such as listed equities, will take longer to achieve this, the trajectory points toward faster and more transparent settlement cycles.

Tokenised assets can also **streamline collateral management**. Through smart contracts, tokenised assets can be pledged or rehypothecated, enabling real-time margining and reducing the friction traditionally associated with collateral transfer. Fund management firms emphasised the growing use of tokenised collateral in derivatives trading, while also pointing to the potential of tokenised funds to provide yield-bearing opportunities for Web3 investors. Stablecoin reserves could also be managed by trusted asset managers. Where the underlying assets of a fund or stablecoin reserve are themselves tokenised, transparency on these underlying holdings can be offered to underlying investors allowing verification. This may be advantageous where the fund or stablecoin is used as collateral or investors require look-through reporting.

Fund managers noted that “crypto-native” investors currently represent the most active client segment on tokenised exchanges. This group expects real-time, on-chain execution and settlement. They may be a source of new capital for issuers, but there is a need for incumbents to **adapt to very different needs and expectations**, such as providing access to or functionality to integrate full-service digital wallets for payments and investing, rather than via disparate platforms.

We heard from consumer groups how retail investors want to have a single, instant, intuitive relationship with their money – the same expectations they have of other service providers, such as online shopping. Tokenisation may therefore become a differentiator in meeting these evolving demands, without fundamentally altering the risk profile or suitability of the underlying investment product.

⁵ [Guardian Funds Framework](#) November 2024

⁶ Financial Conduct Authority: Ibid

Retail participation requires a strong consumer protection regime. The market will only scale if individuals trust and understand the platforms and products. A strong regulatory regime – which supports firms to achieve good outcomes for consumers and ensures redress where this trust is breached – is necessary to drive adoption of DLT-based investment solutions.

Additionally, **investor expectations around redemption rights, safekeeping, disclosures, and service experience** will influence how these products are built and governed. Understanding and addressing these expectations is therefore not ancillary, but essential for moving tokenisation from pilot to mainstream adoption. Investor expectations are re-shaping how firms provide access to financial markets in an efficient, personalised and inclusive way.

Shaping the Future: Schroders' Journey Through Digital Assets

Our journey to composable finance

"At Schroders, we adopt a learning-by-doing approach. Our first hands-on engagement with digital assets was purchasing a digital bond. This allowed our teams to get to grips with smart contracts, wallets and custody, while ensuring alignment with existing risk and control frameworks. This experience reinforced our belief that data, DLT and artificial intelligence (AI) will be transformative for the asset and wealth management industry.

"Taking this forward, we are continuing to drive innovation across our product lifecycles, with use-cases on insurance-linked securities (ILS) and tokenised funds. Industry-wide working groups such as Project Guardian have been a turning point in bringing the industry and regulators together to establish digital asset standards for commercial scale, while allowing us to keep our fingers on the pulse at the frontier of industry innovation.

"Now tokenised products are forging ahead and becoming increasingly mainstream, fuelled by the advent of stablecoins as on-chain money that facilitates settlement. This has enabled us to move towards our vision of composable finance, with the need to digitise verticals of the financial ecosystem, starting with digital assets and digital money."

Peter Hilborne, Chief Operating Officer, Schroders

Changing roles of financial market participants and service providers

Tokenisation is driving a reconsideration of roles and responsibilities across the financial services value chain. As funds and assets migrate onto distributed ledgers, traditional intermediaries, custodians, administrators, and distributors are required to adapt their systems, capabilities, and service models to remain relevant in a digital-first environment.

Most fund houses **rely on external service providers to reconcile and record transactions**. While tokenised fund units and digital cash instruments may be used for subscriptions and redemptions, existing service provider systems largely remain unable to fully recognise and reconcile on-chain transactions with traditional off-chain records. This creates operational friction, as middle- and back-office processes are still designed for conventional asset classes. System upgrades and industry-wide alignment are required before tokenised fund flows can be seamlessly integrated into mainstream fund administration.

Custody has emerged as one of the most critical areas requiring adaptation. Custodians are **transitioning from conventional safekeeping to also managing digital wallets** and smart contract governance. To unlock the full benefits of tokenisation, Singapore and UK based fund managers emphasised the need for end-to-end infrastructure, including digital custody frameworks, tokenisation platforms for issuance and whitelist management, smart contract monitoring, on-chain compliance tools, and settlement rails connecting on- and off-chain systems. Digital custody is essential not only for securing tokenised holdings and private keys but also for investor authentication, smart contract auditing, and bridging on/off-chain data for analytics and reporting.

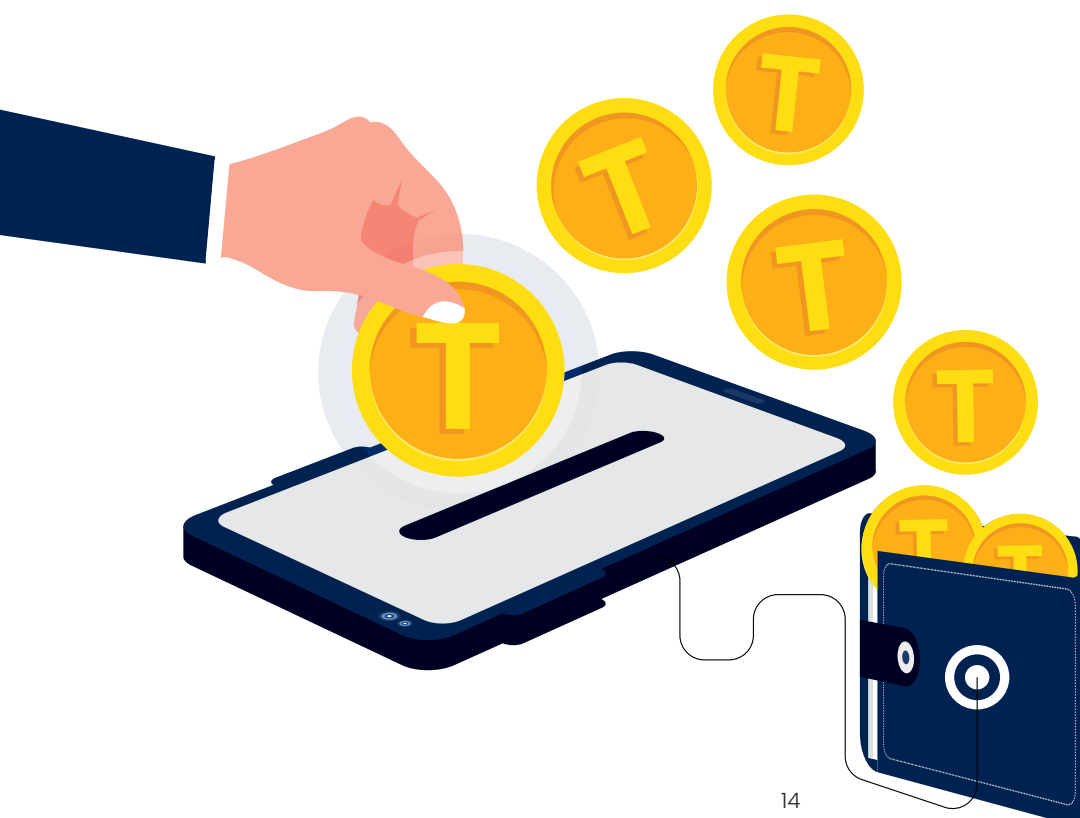
Tokenisation introduces **new forms of risk requiring specialised oversight**. Service providers are expected to support smart contract risk assessment through code audits, multi-chain portfolio dashboards, and transaction cost optimisation. Due diligence has also evolved: blockchain forensics tools can trace transaction histories, oracles must be assessed for data reliability, and custody arrangements may require proof-of-reserve mechanisms and multi-signature wallet audits. These functions represent a significant expansion and evolution of the responsibilities of risk and compliance providers.

The current distribution model is also undergoing change, though progress remains uneven across the ecosystem. Traditional distributors such as banks and financial advisers are in the early stages of building tokenisation capabilities. Digital distributors and specialised exchanges are emerging as **new venues to access funds**, particularly catering to crypto-native investors. However, onboarding to these platforms is resource-intensive, as each operates within its own ecosystem and requires dedicated integration and compliance processes.

That said, evolving needs present a significant opportunity for market participants to adapt and thrive. By equipping distributors, relationship managers, and financial advisers with the right tools and training, firms can bridge the knowledge gap and empower these professionals to articulate tokenised fund structures, associated risks, and potential benefits with confidence to their clients. As investor understanding deepens, tokenised funds may be positioned to distinguish themselves with better access, efficiency, and transparency that surpass traditional structures. With greater integration into mainstream distribution channels, tokenised funds could evolve from niche offerings to trusted investment products that enhance investor choice.

Tokenisation may also enable product providers to **broaden distribution into digital-first and Web3.0 client groups** not typically reached through conventional channels. Examples include foundations and Decentralised Autonomous Organisations (DAO) with significant treasuries, stablecoin issuers seeking tokenised collateral options, and digital asset banks or platforms embedding tokenised liquidity into their offerings. This perspective from an asset manager highlights the potential pathways for tokenisation to open up new client segments and expand the role of service providers within the investment value chain.

As some existing roles change, others are created: **new categories of firms** are offering on-chain identity for KYC, compliance analytics for transaction monitoring, and oracle-based pricing services. Tokenisation may accelerate convergence of custodians, administrators, and technology providers to deliver end-to-end solutions for fund houses and investors. Those able to adapt by building digital custody, compliance, and distribution capabilities are positioned to play an expanded and central role in the future of asset management.



Current headwinds for the scaling of tokenised assets

Despite clear interest from both institutional and retail investors, several factors continue to hinder broader adoption of tokenised financial assets. These challenges are typical in innovative change cycles – commercial factors (business and market challenges), operational factors (technology and process challenges) and regulatory/legal factors.

Each category directly impacts investor participation in tokenised markets and long-term commitment to tokenisation initiatives. Addressing these factors in tandem may help alleviate investor concerns and support the scaling of tokenised assets.

Commercially, financial institutions are hesitant to fully embrace tokenisation due to high upfront costs, uncertain short-term returns, and complex system overhauls required for widespread adoption. Liquidity is still limited, as fragmented platforms and distribution channels restrict investor access and issuers' confidence. Many incumbents are wary of disrupting traditional revenue streams, especially when early tokenised products may carry higher costs. Retail investors are further constrained by the need for digital wallets and may conflate tokenisation with cryptocurrencies, causing scepticism. As advisers and distributors grow more familiar with tokenised products, they could bridge knowledge gaps and accelerate mainstream adoption, but until then, most market participants remain cautious and prefer to wait for clear demand and proven benefits before committing.

Operationally, integrating on-chain and off-chain systems remains a significant obstacle, as legacy IT infrastructures need adapting for digital tokens and new custody models that increase resource demands and risk assessment. The market's fragmentation—across platforms, protocols and standards—further complicates interoperability, raising costs and limiting liquidity. Many institutions face internal knowledge gaps, with only innovation teams possessing digital asset expertise, leading to uncertainty and errors among legal, compliance and operations staff. Investors, particularly those unfamiliar with crypto, must adapt to new concepts like digital wallets and key management, often lacking the technical understanding or trust needed for tokenised assets, which hampers adoption. Inconsistent servicing standards and unclear processes for exercising rights such as redemption or voting add further confusion. Security concerns, including risks of cyber-attacks, wallet breaches and uncertain legal protections, persist for both institutional and retail investors, deterring broader participation and stalling the advance of tokenisation.

The **regulatory and legal environment** is evolving as new frameworks are introduced and existing rules refined to foster innovation while maintaining investor protection and market stability. Regulatory sandboxes and new standards are being rolled out but inconsistent regulation across jurisdictions can create uncertainty, especially regarding custody, fund registers, and cross-border recognition. This variability, along with unanswered questions around due diligence, disclosures, and the legal status of tokenised assets, makes institutions cautious about global adoption. Investors, particularly institutions, seek clarity and reliable safeguards akin to those for traditional securities, as the absence of clear legal frameworks and standardised protections hampers confidence. As international coordination improves and legal definitions become clearer, trust in tokenised assets should grow, unlocking broader participation and capital flows.

2. Differing priorities of issuers, sell-side and buy-side affecting adoption and demand of tokenised assets

The tokenised asset market currently suffers from a fundamental disconnect between what issuers build, how sell-side intermediaries operate, and what investors – mainly institutional – need. This misalignment has created an “adoption gap” where promising technology fails to achieve meaningful adoption, limiting the transformative potential of tokenisation.

The following table offers a reminder of the differing priorities and roles of market actors:

Perspective	Main considerations		
	Issuers	Sell-side	Buy-side / Investors
Primary objective	Capital raising and operational efficiency	Revenue generation through intermediation	Risk-adjusted returns and fiduciary compliance
Technology focus	Innovation and blockchain capabilities	Integration with existing trading infrastructure	Compatibility with portfolio management systems
Regulatory approach	Regulatory arbitrage and speed to market	Compliance with intermediary regulations	Comprehensive regulatory protection and clarity
Liquidity priorities	Initial liquidity creation and market launch	Trading volume and bid-ask spread optimisation	Consistent market depth and exit capability
Risk management	Smart contract and operational risk mitigation	Counterparty and settlement risk management	Comprehensive risk assessment and portfolio integration
Revenue model	Token sales and ongoing fees	Trading commissions and market making spreads	Investment returns and fee minimisation
Time horizon	Short to medium term (fundraising cycle)	Transaction based (immediate return)	Long term (investment holding periods)
Market structure	Broad market access and distribution	Efficient price discovery and execution	Transparent and fair market conditions
Success metrics	Capital raised, token adoption, ongoing fees	Trading volume, spread capture, client growth	Investment returns, risk metrics, benchmark performance

Issuer-centric product development

Issuers of tokenised products may approach their go-to-market strategy with a fundamentally different mindset than traditional capital markets participants. Driven by venture capital funding cycles and competitive pressures from other blockchain projects, they often prioritise technological differentiation and rapid market entry. This can create what might be termed an "innovation trap" – where technological sophistication becomes an end in itself rather than a means to solve genuine institutional investment challenges.

The typical issuer development process begins with blockchain protocol selection and smart contract architecture, often before conducting comprehensive institutional investor consultation. Product roadmaps emphasise features like programmable compliance, automated distributions, and cross-chain interoperability – capabilities that demonstrate technical prowess but may not address the primary concerns of institutional allocators. This technology-first approach reflects the background of many tokenisation teams, which often combine blockchain developers with traditional finance professionals who may lack deep institutional investment experience.

In feedback, we heard that issuers can often view institutional investment operations as inefficient legacy systems rather than carefully evolved frameworks designed to manage fiduciary risk. Institutional investors require practical infrastructure, such as integration with existing portfolio management systems, familiar custody arrangements, standardised reporting formats, and clear regulatory treatment. Issuers may assume that demonstrating cost savings or operational efficiencies will drive adoption, without recognising that institutional investors take individual investment decisions, including the degree to which a product is regulated, its liquidity, the operational infrastructure the costs of the product. This can lead to products that offer theoretical benefits – such as 24/7 trading or real-time settlement – unable to be achieved in all market conditions or not desired by investors.

The consequences extend beyond product design to market positioning and investor relations. Issuers often market tokenised assets using blockchain-native terminology and concepts that institutional investors find unfamiliar or concerning. Marketing materials emphasise technological innovation rather than addressing specific institutional investment challenges, creating communication barriers that compound operational incompatibilities. Furthermore, many issuers lack the regulatory expertise to navigate institutional compliance requirements, leading to products that may technically function but cannot be adopted by fiduciary investors without significant operational restructuring.

Sell-side service impacts

Sell-side institutions face challenges in the tokenised asset ecosystem, finding themselves positioned between rapidly evolving issuer innovation and the cautious operational requirements of their institutional clients. Traditional investment banks, broker-dealers, and asset servicers have established business models around securities markets with predictable regulatory frameworks, standardised operational procedures, and proven technology infrastructure. Tokenised assets disrupt all three foundations simultaneously.

The operational challenge for sell-side firms extends beyond simple technology integration. Their existing trading systems, built around traditional settlement cycles and established clearing mechanisms, may require investment and development to accommodate blockchain-based assets that may settle instantly and require different custody, valuation, and risk management approaches.

Traditional sell-side business models depend on predictable fee structures: underwriting fees for new issuances, trading commissions and spreads for secondary market activity, custody and administration fees for ongoing services, and financing charges for prime brokerage. Tokenised assets potentially compress many of these revenue streams through automation whilst creating new operational costs for blockchain infrastructure, smart contract auditing, and specialised compliance procedures.

These firms seek to maintain regulatory compliance across multiple jurisdictions whilst serving institutional clients with varying risk tolerances. This may create a conservative bias where firms avoid tokenised assets entirely rather than risk regulatory violations or strained client relationships.

Traditional due diligence processes focus on financial analysis, legal structure review, and market assessment – areas where sell-side firms have deep expertise. Tokenised assets require additional evaluation of smart contract security, blockchain infrastructure dependencies, governance token mechanics, and protocol upgrade risks. The use of external consultants or technology vendors for this type of analysis may help in the near term but is costly and may become required skills for in-house teams.

The client relationship management challenge compounds these operational difficulties. Institutional clients expect their sell-side counterparts to provide comprehensive research, risk assessment, and ongoing support for any recommended investments. For tokenised assets, this may require sell-side firms to develop entirely new research capabilities, train relationship managers on blockchain concepts, and create new operational procedures for client onboarding and ongoing service delivery.

Institutional investment imperatives

Institutional investors operate within a complex web of fiduciary duties, regulatory requirements, and operational constraints that have evolved over decades to protect beneficiaries and ensure prudent investment management. These frameworks create what economists might term "institutional stickiness" – a resistance to change that reflects not conservatism but rather the accumulated wisdom of risk management and the legal obligations of fiduciary duty.

The fiduciary framework governing institutional investment creates several layers of constraint that tokenised asset issuers often fail to appreciate. Investment committees must demonstrate that any new investment category serves beneficiary interests and fits within established risk parameters. This requires not just potential return analysis but comprehensive risk assessment, including operational risk, regulatory risk, and liquidity risk. For tokenised assets, these risk assessments often reveal gaps that traditional securities do not present – smart contract vulnerabilities, blockchain infrastructure dependencies, governance token concentration risks, and regulatory uncertainty.

Operational integration presents equally significant challenges. Institutional investors have invested heavily in portfolio management systems, risk management frameworks, and reporting infrastructure designed around traditional securities. These systems handle everything from trade execution and settlement to performance attribution and regulatory reporting. Tokenised assets that cannot integrate with these systems create operational silos that increase costs, introduce error risks, and complicate fiduciary oversight.

The custody challenge exemplifies the operational complexity institutional investors face with tokenised assets. Traditional institutional custody involves established legal frameworks, insurance coverage, and operational procedures that have been tested through multiple market cycles. Tokenised assets may require entirely different custody arrangements – potentially including self-custody or crypto-native custodians – that institutional investors cannot easily evaluate or integrate with their existing operational frameworks.

Liquidity requirements create another layer of constraint. Many institutional investors face regulatory or contractual obligations to maintain specific liquidity levels or provide redemption rights to their own beneficiaries. This requires not just theoretical liquidity but demonstrated, reliable access to secondary markets with sufficient depth to handle institutional-size transactions. The fragmented and often shallow liquidity of tokenised asset markets, including markets for fractionalised assets, conflicts with these requirements, forcing institutional investors to either accept liquidity constraints that may violate their fiduciary duties or avoid tokenised assets entirely.

Valuation and reporting requirements add further complexity. Institutional investors must provide regular valuations to beneficiaries and regulators using established methodologies and independent verification. Tokenised assets, particularly where novel in structure, may fall outside the product offering of existing pricing infrastructure, independent valuation services, and audit frameworks that institutional investors require for fiduciary compliance. This creates not just operational challenges but potential legal exposure if valuations prove inaccurate or if reporting fails to meet regulatory standards.

The governance challenge in tokenised assets presents particular difficulties for institutional investors subject to proxy voting requirements and fiduciary duties. Many tokenised assets include governance tokens or protocol governance mechanisms that differ significantly from traditional corporate governance. Institutional investors may struggle to evaluate these governance frameworks, participate effectively in governance decisions, or demonstrate to beneficiaries and regulators that their governance participation serves beneficiary interests.

The adoption gap

The absence of institutional participation limits secondary market liquidity, which discourages further institutional interest whilst reducing the revenue potential for sell-side intermediaries. This creates a market structure dominated by retail investors and crypto-native institutions, which further reinforces the perception among traditional market participants that tokenised assets are speculative rather than institutional-grade investments.

The liquidity challenge extends beyond simple trading volume to market structure fundamentals. Institutional investors require not just liquidity but predictable liquidity – the confidence that they can execute large transactions without significant market impact and within acceptable timeframes. The current tokenised asset market structure, characterised by fragmented trading venues and limited market making, cannot provide this assurance. Furthermore, the absence of established prime brokerage services means that institutional investors cannot easily finance positions or hedge exposures, further limiting their ability to participate effectively.

The infrastructure gap compounds these market structure problems. Traditional securities markets benefit from decades of infrastructure investment in clearing and settlement systems, market data distribution, regulatory reporting, and risk management tools. Tokenised asset markets lack much of this infrastructure, forcing market participants to develop proprietary solutions or accept operational limitations. This infrastructure deficit creates barriers to entry for traditional market participants whilst increasing operational costs for early adopters.

3. Key buy-side / investor considerations

Institutional investors approach tokenised assets with caution, demanding clear advantages over traditional investments and strict regulatory compliance due to the upfront complexities of blockchain technology. The adoption of tokenised assets is hindered by the need for robust integration with established institutional oversight and risk management frameworks. To facilitate progress, institutions should actively participate in the development and regulation of tokenised assets, ensuring these innovations align with long-standing fiduciary standards and oversight requirements.

Institutional investors assess tokenised assets through established analytical frameworks, but apply heightened scrutiny given blockchain and DLT's operational complexity and regulatory uncertainty. Unlike retail investors motivated by technological novelty or crypto-native institutions accustomed to blockchain/DLT infrastructure, institutional buy-side investors require tokenised assets to demonstrate clear, measurable advantages over traditional alternatives whilst remaining fully compliant with existing fiduciary and regulatory obligations. Their evaluation process inherently prioritises beneficiary protection over innovation where innovation is unproven.

The institutional ecosystem operates through multiple layers of oversight – investment committees, boards of trustees, regulatory supervisors, and external auditors – each demanding substantiating documentation, transparent risk assessments, and ongoing monitoring capabilities. Traditional securities markets satisfy these requirements through well-established infrastructure and service frameworks. For tokenised assets to gain traction, they must not only offer compelling investment characteristics but also integrate with institutional architecture, creating adoption barriers significantly higher than many blockchain advocates anticipated.

Bridging this gap does not require choosing between traditional finance and blockchain innovation. Instead, success depends on creating products that effectively merge the strengths of both through collaborative development and shared infrastructure investment. Institutional investors should engage proactively with tokenised asset development rather than waiting for fully mature markets to emerge. This includes participating in product development consultations, piloting small allocations to promising tokenised assets, and working with regulators to develop appropriate oversight frameworks. Early engagement enables institutions to shape tokenised asset development in directions that serve institutional needs whilst potentially providing first-mover advantages.

The following five considerations represent the critical evaluation criteria that determine whether tokenised assets can successfully navigate institutional due diligence processes and achieve meaningful allocation within institutional portfolios.

Liquidity and secondary market access

Liquidity and secondary market access are foundational requirements for institutional buy-side investors, rooted by their **operational obligations and fiduciary responsibilities** rather than mere investment preferences. Institutional investors face contractual obligations including pension benefit payments, insurance claims, mutual fund redemptions, and regulatory capital requirements that demand predictable access to cash. These institutions manage assets against specific liability profiles and cash flow schedules, making the ability to convert investments to cash quickly and at fair prices an operational necessity rather than a convenience. Without robust secondary markets, institutional investors cannot fulfil their core function of matching asset liquidity with liability timing, potentially exposing them to significant operational and reputational risks.

The **scale and sophistication of institutional trading requirements** amplify these challenges in tokenised asset secondary markets. Institutional investors typically transact in large amounts, requiring market depth and continuous liquidity provision that can accommodate large transactions without significant price impact. They are used to working with multiple market makers who are providing competitive spreads, transparent price discovery mechanisms, and trading infrastructure that integrates seamlessly with their existing portfolio management and risk systems. Current tokenised asset markets often lack this institutional-grade infrastructure and may have more in common with low liquidity or less well-established markets where liquidity is concentrated in smaller retail-sized transactions and market making provided by less sophisticated automated systems or sporadic manual intervention that cannot meet institutional execution standards.

Modern portfolio management relies heavily on **the ability to adjust and rebalance positions quickly** in response to changing market conditions, risk parameters, or investment opportunities. Institutional investors use sophisticated risk management systems that may trigger automatic rebalancing requirements when positions exceed predetermined limits, correlations shift unexpectedly, or market stress creates concentration risks. Without liquid secondary markets, these risk management protocols become less effective, potentially exposing institutions to unacceptable risk levels or breaches of investment diversification limits. Additionally, many institutional investment mandates include explicit liquidity requirements or allocation limits for illiquid investments, meaning tokenised assets without robust secondary markets may be automatically excluded from consideration or limited to minimal allocation sizes that don't justify the operational complexity of adoption.

The fiduciary duty framework governing institutional investors requires them to demonstrate that **investment decisions serve beneficiary interests and maintain appropriate risk management standards**. Investing in assets without adequate liquidity provisions can violate these fiduciary duties, particularly if illiquidity prevents the institution from responding to beneficiary needs or market stress. Investment committees and boards of trustees typically require comprehensive analysis of liquidity risks and secondary market characteristics before approving new asset classes, including stress testing scenarios that assess how liquidity would perform during market downturns or technical failures. For tokenised assets, this means secondary market infrastructure must not only exist but demonstrate resilience and reliability comparable to traditional securities markets, with established market makers, regulatory oversight, and proven performance across various market conditions.

Changing custodial and trust arrangements

Custody and trust arrangements form the foundation of investor confidence in financial markets, and tokenisation introduces both new opportunities and distinct challenges in this domain. While traditional custodians have long played a critical role in safeguarding fund units and maintaining investor records, the shift toward digital assets necessitates a **fundamental rethinking of how custody, safekeeping, and settlement are structured and executed** in practice.

Survey responses and broader industry feedback reveal divergent levels of readiness. On one hand, emerging specialised providers, particularly those emerging from the digital asset and crypto sectors, have developed custody and settlement infrastructure designed for on-chain transactions. These firms offer innovations such as **multi-signature wallets, proof-of-reserve attestations, and on-chain analytics** that enhance transparency, security and compliance monitoring. Their models demonstrate the growing maturity of tokenised asset custody solutions.

On the other hand, integration with traditional fund infrastructure remains limited. Many established custodians and fund administrators are not yet equipped to process, reconcile, or settle tokenised transactions alongside traditional assets. This operational gap increases complexity and risk for institutional investors, who require custody providers to handle both tokenised and traditional assets seamlessly within a single framework. For example, a Singapore-headquartered fund management firm shared that its custodian was integrated with only a single digital exchange, preventing broader distribution and **creating reliance on fragmented infrastructure**. Investors, in turn, are often required to open multiple wallets across different platforms to access tokenised products, which undermines convenience and scalability.

In addition, investors have raised questions around the **legal characterisation of custody** in a tokenised environment. These include whether tokenised assets are recognised as property, how investor protections apply in cases of insolvency, and whether custodians' fiduciary duties extend to the safeguarding of private keys. The absence of harmonised regulatory guidance adds to uncertainty. A Singapore-based fund management firm suggested that regulators and industry bodies could go further by providing model clauses or standardised trust deed templates to clarify custodial responsibilities in a tokenised environment.

Ultimately, strengthening custodial and trust arrangements will be essential to investor confidence. Industry innovation, paired with regulatory guidance and cross-jurisdictional cooperation, can help ensure that tokenised custody models deliver both security and convenience while preserving the high standards of investor protection found in traditional markets.

Operational changes to investors' exercise of rights

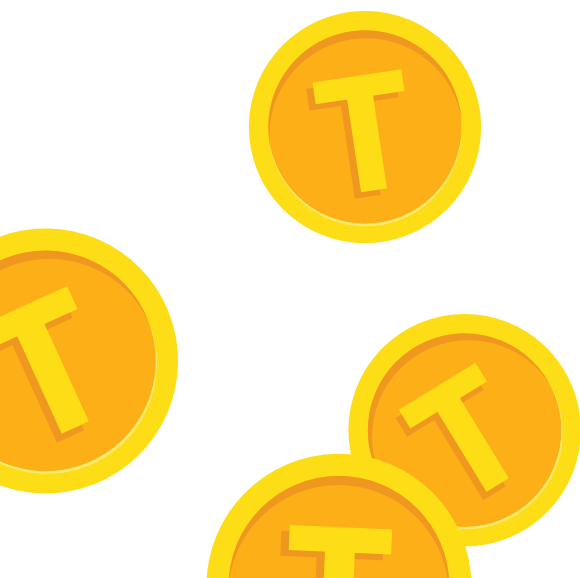
Tokenisation has the potential to reshape how investors interact with their investments and exercise the rights traditionally associated with fund ownership. This creates opportunities for automation, transparency, and greater efficiency, but also raises questions about how established protections and practices will translate into digital form.

A central change is that the rights themselves can be represented and executed on-chain. **Voting rights, dividend distributions, and redemption entitlements can be encoded within a smart contract**, allowing investors to exercise them seamlessly through their digital wallets. This reduces some reliance on intermediaries and could reduce administrative bottlenecks. Redemption timelines, for example, could be accelerated to near real-time, with greater transparency and status tracking from instruction to completion. Several survey respondents highlighted investor's interest in understanding redemption mechanics, seeking clarity on redemption timelines and whether round-the-clock redemptions will truly be possible in practice.

Custody models are also evolving. Investors may continue to rely on regulated custodians, or in some cases, opt for self-custody, with responsibilities for key management, insurance, and incident response clearly defined. These models influence **how investors initiate transfers, pledge collateral, or evidence ownership**—and tokenisation can strengthen audit trails and provide near-instant confirmations across these processes.

To fully realise these benefits, regulatory and market frameworks will need to evolve in parallel. Questions remain over how corporate actions will be communicated in a digital environment, how redemption or transfer restrictions can be enforced consistently across jurisdictions, and how disputes over token ownership are resolved. Addressing these uncertainties will be critical to building investor confidence.

In sum, tokenisation offers the promise of making investors' rights more accessible, transparent, and efficient to exercise. With appropriate safeguards and clarity in operational standards, these changes could **enhance the investor experience and support broader adoption** without compromising trust or protection.



Potential investor harms and changing consumer protections

While tokenisation promises efficiency, accessibility, and product innovation, it also introduces unique risks and considerations for investor protection. Current proof-of-concepts and early pilots often adopt fragmented models depending on the platform or distributor, which could leave investors with uneven safeguards.

Tokenisation introduces new types of risks for investors, such as **vulnerabilities in smart contract code**, reliance on digital wallets, and increased exposure to cyberattacks. Retail investors in particular may struggle to understand these risks, especially when engaging with complex technical systems that lack the human intermediation present in traditional fund platforms. Fund management firms highlighted that customer protection issues may arise given that most investors are not familiar with the technology and how this affects their protections and the exercise of their rights as investors. Principle-based regulation is key. Firms should be able to innovate whilst maintaining appropriate protections. Firms should not simply disclose such complex risks, they should manage it for their consumers, including vulnerable consumers.

This could involve some novel safeguards which product teams ought to build in where investors cannot reasonably perform the functions themselves, such as transaction reversibility, dispute resolution, and recovery in the event of **token loss**. Such features may help investors and managers benefit from the use of DLT across the value chain, whilst maintaining existing and strong regulatory protections.

As tokenised products involve private key management and digital wallets, investors are asking who bears responsibility if tokens are lost, compromised, or rendered inaccessible due to technical failures. Some questions include whether tokenised assets are legally recognised as property, and if investors' rights to their tokens can be upheld under insolvency or bankruptcy scenarios. Clear legal remedies for defective or compromised smart contracts are needed to address these concerns, alongside clarity on cross-border compliance, tax, and reporting obligations.

To mitigate these risks, both regulators and industry participants will need to strengthen baseline standards of care. Fund managers suggested the creation of regulatory guidelines that set out minimum expectations for trustees, managers, and service providers in areas such as: (i) selecting trading platforms or blockchain infrastructure; (ii) record-keeping and reconciliation of tokenised assets across on- and off-chain systems; and (iii) procedures for events such as token loss due to cyberattacks or errors in smart contracts. These should be seen as an evolution of existing expectations on agent bank selection and use of securities depositories, reconciliations and treatment of shortfalls in client assets. Embedding such standards would help establish consistent safeguards, boost investor confidence, and reduce uncertainty.

Finally, **investor education** was highlighted by several firms as a cornerstone of consumer protection. Retail investors, in particular, must be made aware not only of the potential benefits of tokenised assets but also of the specific risks, including technology vulnerabilities, liquidity

limitations, and regulatory uncertainties. Without adequate education, there is a risk of mis-selling or inappropriate investment decisions, which would undermine confidence in the wider ecosystem.

Tokenisation presents regulators and industry with a delicate balancing act: ensuring robust investor protection that is harmonised across markets, while not stifling innovation. Addressing legal certainty, establishing clear liability and custody frameworks, and strengthening investor education will be key to ensuring tokenisation evolves in a safe and sustainable way for all investor classes.

Potential legal and regulatory considerations

Legal and regulatory certainty remains one of the most significant determinants of investor confidence in tokenised assets. Survey participants consistently identified **legal clarity as a prerequisite** for adoption.

One of the foremost issues raised relates to ownership and evidencing of tokenised fund units. Distributors and end investors are seeking clarification on whether tokens provide the same legal protections and evidentiary weight as traditional securities. There are also complexities in understanding regulatory implications where there are different standards across different regions. This fragmentation complicates cross-border distribution and raises questions over enforceability of investor rights.

There are also broader legal uncertainties around bankruptcy remoteness, regulatory compliance, and tax treatment. Investors want to understand whether tokenised funds enjoy the same protections as traditional vehicles in insolvency scenarios, as well as how cross-border reporting obligations would apply. Liquidity arrangements and secondary market regulation also remain open questions, particularly when smart contracts are embedded into fund operations.

From an operational standpoint, investors continue to query the integrity and auditability of smart contracts. While programmability is one of tokenisation's defining features, it also introduces new risks that require legal frameworks to address the liability of firms in the event of coding errors, system failures, or malicious exploits.

Feedback from Singapore-based managers suggests a practical path forward through industry standardisation. Drawing parallels to the successful launch of the Variable Capital Company (VCC), respondents recommended the development of **"tokenisation-ready" templates** for unit trust deeds and fund constitutions. These would incorporate clauses covering on-chain governance, investor access rights, dispute resolution, and reconciliation between on-chain and off-chain records. In addition, regulators could strengthen investor confidence by issuing guidance on the standard of care expected of trustees, managers, and service providers in areas such as custody arrangements, platform selection, and handling of cyber incidents.

Beyond legal classification, an institutional investor also flagged the importance of digital identity frameworks as a regulatory enabler. Codified **standards for digital identity and chain-reliant KYC/AML** could provide a major unlock for scaling tokenised products, easing cross-border distribution and improving compliance efficiency.

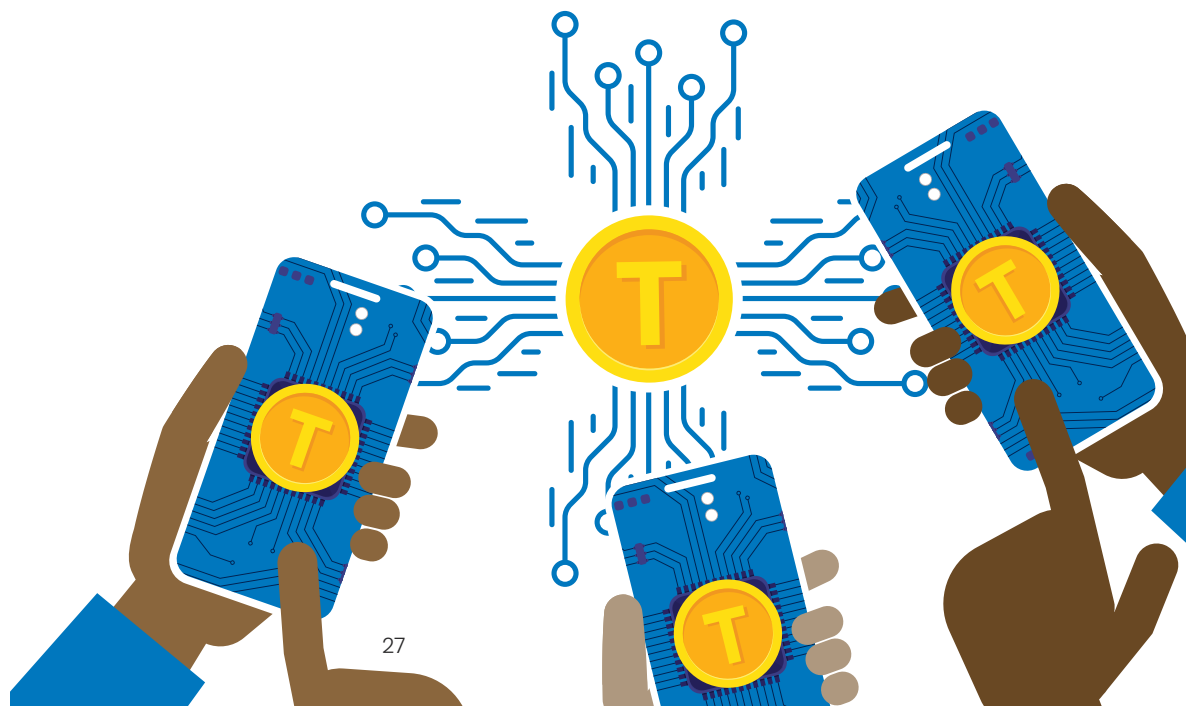
Collectively, there is a need for regulatory harmonisation, standardised legal templates, and clear allocation of liability. Without these foundations, investors remain hesitant to commit capital at scale. Regulators and industry associations have an opportunity to collaborate in addressing these gaps – from clarifying fiduciary duties in a tokenised environment to promoting best practices in custody, wallet management, and investor education. Only then can the legal and regulatory infrastructure support the broader adoption of tokenised funds and assets.

The path forward

Successful tokenised asset adoption requires a fundamental shift from technology-driven to ecosystem-driven product development. This means engaging all three constituencies – issuers, institutional investors and sell-side intermediaries – during the design phase, building products that integrate with existing institutional infrastructure whilst providing sell-side firms with viable business models and clear regulatory frameworks.

For issuers, this requires abandoning the "build it and they will come" mentality in favour of collaborative product development that begins with institutional investor consultation. Successful tokenised assets will likely emerge from partnerships between blockchain innovators and established financial institutions, combining technological innovation with deep institutional market knowledge. This approach requires longer development timelines and higher initial costs but offers the potential for sustainable institutional adoption.

Sell-side firms must view tokenised assets as an evolution of their traditional intermediary role rather than a threat to it. This requires significant investment in technical capabilities, regulatory frameworks, and operational infrastructure. However, firms that successfully navigate this transition may gain competitive advantages in serving institutional clients seeking exposure to tokenised assets whilst maintaining their traditional service relationships.



4. An operational readiness checklist for issuers and investors

This checklist highlights considerations across seven areas to promote maximum levels of investor participation, operational efficiency in issuance, minimise risk, and help maintain trust and legal adherence in the rapidly evolving landscape of digital assets.

Step	Benefits provided
Product considerations	
Service providers and scope of work (including their tech or ecosystem providers).	Ensures all parties' roles and responsibilities are clear, helping to deliver a smooth service and minimise operational risks.
Target client segment.	Defining the target market allows for tailored product features and marketing, ensuring better uptake and suitability.
Any licensing and/or regulatory requirements for asset manager and/or service providers in the respective jurisdictions.	Meeting these requirements is vital for legal compliance and to avoid regulatory sanctions or penalties.
Ensure Investor protection, AML/KYC and wallet screening, data privacy for tokenised product.	This helps safeguard investors, prevent financial crime, and ensure compliance with relevant regulations.
Structure of token (native instrument, digital twin, e-money token)	The token's structure determines its legal status, use cases, and how it interacts with existing financial systems.
Legal rights of the token and token holder.	Clear rights provide legal certainty for investors and reduce the risk of disputes.
Any additional disclosures required in the prospectus, factsheets, etc.	Providing full disclosures builds investor trust and meets regulatory expectations for transparency.
Any additional requirements for new processes, or changes to existing processes to accommodate to the new solution.	This ensures operational readiness and minimises disruption when introducing new solutions.
Audit frameworks for tokenised products.	Robust audit frameworks enhance accountability and support regulatory compliance.

Step	Benefits provided
Technical design of tokenisation solution	
Choice of blockchain protocol(s).	Selecting the appropriate protocol ensures security, scalability, and compatibility with other systems.
Selected blockchains and implementation of chain-to-chain interoperability (mint and burn, lock and mint, etc.).	Interoperability enables seamless movement of assets across different blockchain networks, increasing flexibility.
Integration within existing infrastructure	This facilitates adoption and reduces costs by leveraging existing systems and processes.
Token management – Smart contracts and token interaction (e.g. escrow in 3rd party smart contract, token issuance smart contract) in the issuance, transfer, burning (if any), redemption.	Effective token management ensures operational efficiency, security, and transparency in transactions.
Records and audits of token and smart contract activities.	Keeping detailed records supports traceability, dispute resolution, and regulatory audits.
Interaction between tokenised product and tokenised cash (if any).	This enables smoother settlements and can enhance liquidity in digital markets.
Business continuity plans to ensure continuity of critical services after a disruptive incident.	Planning for disruptions minimises downtime and safeguards client assets and trust.
Is this solution future-proof? I.e. will this solution still work in a future state with digital native solutions.	Futureproofing helps avoid costly overhauls and ensures long-term viability of the solution.
Custody solution	
Wallet and key management requirements for tokens and keys.	Proper management reduces the risk of loss or theft of digital assets.
Robust identity management and access control	This helps control access and enhances security by verifying participants' identities.
Multi-signature governance to ensure assets can be transferred only after necessary signers approve.	Multi-signature arrangements reduce the risk of unauthorised transactions and internal fraud.
Investors – self custody or via custodian: a. Self-custody entails ensuring sufficient knowledge and expertise to hold the assets. b. Custodian model requires assessments of the custodian and capabilities necessary to safekeep the assets—including the requirements of digital wallet providers.	This decision affects risk, responsibility, and the level of control investors have over their assets. Investors must be well-informed to avoid mistakes that could result in loss of funds. Due diligence on custodians helps ensure assets are securely held and accessible when needed.

Step	Benefits provided
24/7 availability and functions	
Dealing cut-off times at token level and underlying asset level.	Clear cut-off times prevent settlement mismatches and ensure orderly processing of transactions.
Impact on liquidity and settlement.	Assessing liquidity and settlement impacts helps maintain efficient markets and protects investor interests.
Settlement mismatch (out of hours trading).	Identifying mismatches avoids failed trades and ensures accurate, timely settlement.
Fees and pricing	
Pricing of product to investors, and whether it is fiat, or tokenised cash.	Clarifying pricing and currency type ensures transparency and helps investors make informed decisions.
Costs arising from integration solutions, process changes, new processes, blockchain gas fees, audits, custody, wallet management, etc.	Understanding all costs supports accurate pricing and budgeting for both providers and clients.
Fair and equal treatment of investors.	This upholds investor confidence and ensures compliance with regulatory standards.
Scalability	
Portability of solution for different clients, and in different jurisdictions.	Portability allows the solution to be adapted for various clients, broadening its market potential.
What are the additional requirements for the product to enter certain markets.	Identifying these requirements ensures smooth market entry and helps avoid regulatory obstacles.



Step	Benefits provided
Testing and Assurance	
Need for independent 3rd party audits for smart contracts.	Independent audits help uncover vulnerabilities and enhance confidence in the technology.
Changes to liabilities/insurance requirements.	Adjusting insurance ensures that risks associated with new solutions are adequately covered.
Completion of user acceptance testing (UAT).	UAT ensures the solution meets business needs and is ready for deployment.
Validation of end-to-end workflows and test scenarios (including load testing).	This verifies that the system performs as expected under various conditions and workloads.
Interoperability and failover tested.	Testing these aspects ensures resilience and seamless integration with other systems.
Go-live checklist and signoffs completed.	Completing these steps helps prevent missed tasks and ensures readiness for launch.
User training and support	
Training on use of systems, SOPs, and incident response.	Proper training equips users to operate the system effectively and respond to incidents swiftly.
Documentation for internal and client use produced.	Comprehensive documentation supports ongoing operations and helps users resolve issues independently.

Next Steps

Investors remain at the heart of capital markets, possessing the power to determine the success or failure of digital issuances. Investor protection, market integrity, and ongoing innovation must remain the paramount priorities for issuers. At the organisational level, individual firms should **implement robust governance frameworks** tailored to the distinct characteristics of tokenised assets. This entails establishing clear procedures for exercising investor rights—such as **transparent voting mechanisms** and straightforward avenues for redress—as well as embedding privacy considerations into product design from the outset. Firms are also encouraged to invest in comprehensive staff training and **resilient technological infrastructure** to stay abreast of regulatory changes and evolving investor expectations. Regular, transparent communication with clients is essential in building trust and fostering understanding around tokenised offerings.

At an industry-wide level, collaborative engagement through trade bodies is key to developing **standardised best practices and interoperable technology solutions**, thereby reducing fragmentation and minimising operational risk. Industry bodies should actively partner with regulators to co-develop guidance on distribution models, custody arrangements, and data privacy as they pertain to tokenised investments. The formation of working groups dedicated to **investor education and digital literacy** will empower consumers to make well-informed decisions in this rapidly shifting landscape. Moreover, the industry should proactively identify and **manage emerging risks by sharing intelligence** and supporting the creation of regulatory sandboxes for testing innovative approaches within controlled settings.

At domestic level, regulators are able to use their convening powers to **bring the full-value chain together** to discuss key obstacles and opportunities, explain key expectations of regulatory frameworks and **work with industry** to consider them in DLT contexts. Internationally, regulators should **monitor market developments** and regulatory approaches through global standard setting bodies to be **alert to key areas of regulatory divergence**.

Collectively, these measures will help ensure that tokenisation delivers meaningful benefits to investors whilst mitigating new risks. By maintaining a commitment to **responsible innovation** and fostering **cross-sector and international collaboration**, we can together cultivate a more resilient, inclusive, and investor-focused capital markets environment, thereby enhancing outcomes for all participants.

Conclusion

The continued advancement of tokenisation within capital markets offers substantial promise for enhancing investor experiences and broadening market participation. This paper has underscored the necessity for robust governance at the organisational level, tailored to the unique features of tokenised assets, including transparent mechanisms for investor rights, privacy considerations embedded from the outset, and the importance of comprehensive staff training and resilient systems to keep pace with regulatory developments.

At the industry level, collaboration through trade bodies and partnerships with regulators remains essential to develop standardised best practices, interoperable technologies, and clear guidance around distribution, custody, and data privacy. Initiatives such as working groups on investor education and regulatory sandboxes will be critical for fostering digital literacy and safely piloting new approaches. Domestically, regulators have a pivotal role in convening stakeholders to address key challenges and align regulatory expectations, while internationally, monitoring market developments and maintaining engagement with global standard setters will help manage regulatory divergence.

Looking ahead, we **encourage all market participants—industry, regulators, and consumer representatives in all jurisdictions—to actively contribute** to shaping a resilient and inclusive tokenised investment landscape. Your perspectives, experiences, and innovative approaches will be invaluable as we collectively adapt to the evolving needs and expectations of investors worldwide. By collectively prioritising responsible innovation, transparent communication, and cross-sector collaboration, we can ensure that the benefits of tokenisation are realised while emerging risks are effectively managed. Through these shared efforts, capital markets can become more **robust, investor-focused, and better equipped to meet the evolving needs of all participants**.

