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Tokenization can scale. But can its economics?

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From technical feasibility to economic viability

Capital markets have spent the last several years proving that tokenization can work. The next challenge is whether it can scale economically.

At its core, tokenization is about reducing friction in how assets are issued, owned, traded and settled. It enables participants to transact against a shared record and embeds rules and processes directly into programmable assets. When appropriately designed and implemented, it may reduce certain reconciliation steps, manual processes and settlement delays. Faster settlement could improve capital efficiency, greater automation could lower operating costs, and fractionalization and broader distribution could lower investment thresholds and open assets to new pools of capital.

The potential scale of this shift is significant. In a report released in June 2026, Citi estimated that the global tokenized asset market was approximately $17 billion and projected that it could reach $5.5 trillion by 2030 under its base-case scenario. Boston Consulting Group, using a different definition, estimated in April 2026 report that tokenized real-world assets excluding stablecoins and repos remain below $25 billion today, but could reach $14 trillion by 2030 in its middle-of-the-road analysis.

The significance of these forecasts is not their precision but what they reveal about the operating challenge ahead. Markets measured in billions can tolerate inefficiencies that markets measured in trillions cannot.

Yet every efficiency introduced by tokenization creates a corresponding requirement to operate, govern, secure and integrate a new digital ecosystem.

The challenge is turning that potential into sustainable economics. Operating tokenized markets at scale will require institutions to connect new platforms with established infrastructure, bridge different networks and maintain controls across both digital and traditional assets. Each of those requirements introduces cost. The danger is that efficiencies gained at the transaction level could be offset by the infrastructure, integration and operational complexity required to deliver them.

Institutions will need a clear view of their infrastructure economics: how requirements for compute, storage, network capacity and operational support change as transaction volumes and participation grow, and where investment, optimization and automation will be required to prevent infrastructure costs from eroding the benefits tokenization is intended to deliver. This becomes increasingly important as the market moves from relatively small-scale and experimental implementations toward broader production deployment, where scalability, interoperability and the need to operate across both existing and tokenized infrastructure can introduce additional cost and complexity.

Proving a use case in a controlled environment or launching for one asset class is a good starting point, but operating it across a global institution is another. Transaction volumes often fluctuate, new asset classes are in scope, and institutions are chasing their growth agendas through expansion into new markets. Furthermore, with scale the resilience requirements will increase alongside the security, governance and regulatory controls that must be designed in from the outset and remain adaptable to evolving requirements.

An increasingly important constraint on widespread tokenization is becoming less about technical feasibility and more about the industry's ability to ensure that the cost of scaling grows more slowly than the value created.

The hybrid reality changes the economics

Traditional financial-market infrastructure, including core banking and securities platforms, payment and settlement systems, custody platforms, market data environments, mainframe-based processing and established messaging rails such as SWIFT is unlikely to disappear as tokenized markets develop. Current analysis points instead toward a hybrid model in which traditional and tokenized models coexist.
The authors of a 2026 IMF working paper on financial market infrastructure in a tokenized economy described how functions including record keeping, settlement, collateral management and reporting can increasingly be digitized or executed on-chain. However, functions requiring legal certainty, accountable governance, risk management and human discretion are likely to remain institutional in nature, even as the technology used to support them continues to evolve.

This is why tokenization should not be viewed as a technology replacement exercise. It is a coexistence challenge.

Traditional and tokenized assets will coexist across market infrastructure, distributed ledgers, cloud platforms, data environments and operational processes, and this hybrid model will have economic consequences that need to be addressed. Supporting both traditional and tokenized assets requires interoperability and the ability for new digital platforms, existing market infrastructure and different networks to work together seamlessly.

If every new asset class requires another technology stack, integration layer, operating model and set of controls, cost and complexity will quickly accumulate. The result will be benefit leakage, where the additional cost of scaling begins to erode the efficiencies that tokenization was intended to create and, ultimately, weakens the business case for further digitization.

The Economics of Scale

Traditional measures of scalability would be technological in nature and use KPIs such as transaction throughput, latency, availability and capacity. There is no doubt these are still important and valid, but they tell only part of the story. For tokenized markets, institutions also need to understand how the economics change as volumes grow, new asset classes are introduced and more markets are connected.

Executives should be asking for answers to the following questions:

- What happens to compute, storage and network costs as transaction volumes increase?
- How much additional operational effort is required when another asset class or market is introduced?
- What is the cost of maintaining traditional and tokenized infrastructure simultaneously?
- How much complexity is introduced at the boundaries between networks and platforms?
- Can security and regulatory controls scale without adding equivalent manual effort?
- Can infrastructure capacity adapt to changing demand?
- What is the marginal cost of the next tokenized transaction, asset class or market?

That final question could become particularly important as a digitized platform capable of processing 10 times today's volume is technically scalable. If supporting that volume requires 10 times the infrastructure, operational effort and control overhead, the platform may not be viable.

The objective should be to change the cost curve

The real opportunity is to break the relationship between growth and cost. If institutions can scale tokenization without infrastructure and operating costs rising at the same rate, then the related economics fundamentally change. The extent to which that can be achieved will depend on a range of factors, including market structure, technology architecture, operating model, regulatory requirements and organizational maturity. There is no single solution that will enable organizations to achieve success in this. However, institutions evaluating tokenization at scale may consider four capabilities that can support the management of growth, operational complexity and governance requirements.

- **Modern infrastructure.** Cloud and hybrid architectures can help change the cost curve by allowing compute, storage and network capacity to scale more closely with demand, potentially reducing the need to provision permanently for peak volumes. The extent of these benefits will depend on implementation choices, workload characteristics, resilience and latency requirements, and the ability of workloads to make effective use of elastic capacity.
- **Autonomous operations.** AI-assisted operations can automate elements of incident detection, diagnosis and remediation, while continuously analyzing infrastructure performance and resource utilization. By reducing manual operational workload and enabling teams to manage greater complexity and activity, these capabilities could allow operational capacity to scale without a proportionate increase in staffing. The extent of this benefit will depend on automation coverage, data and observability quality, operational standardization and the level of human oversight required.



- **Continuous governance.** Automated governance and policy management approaches can support the consistent application of defined security, compliance and policy controls across increasingly complex technology environments. This could reduce reliance on manual intervention as digital markets expand across asset classes, platforms and jurisdictions. The extent of these benefits will depend on the completeness and accuracy of the underlying policies, effective integration across environments, and appropriate human oversight, with regulatory and jurisdiction-specific requirements continuing to apply.
- **Operational intelligence.** Monitoring, observability and analytics capabilities can provide greater visibility across applications, infrastructure, networks and distributed platforms. As environments become more interconnected, these capabilities will be able to support a more complete view of performance, resilience and cost across the transaction lifecycle, helping institutions identify emerging constraints and inform operational decisions. The effectiveness of this insight will depend on the quality, completeness and integration of operational data across the underlying environment.

Programs should also recognize that the objective is not simply to make individual components cheaper. A broader consideration is whether infrastructure, operations and controls can be shared and reused across the hybrid model. This will require technology and infrastructure planning to be closely aligned with the institution's growth strategy, with expected transaction volumes, asset classes and market expansion built into the economic model from the outset.

The economics should be designed before scale arrives

The need to design the economics of tokenization before large-scale adoption arrives is becoming increasingly urgent. In July, the UK Wholesale Digital Markets Champion published a report setting out a delivery roadmap for wholesale-market tokenization. At launch, the associated task force was made up of 54 firms, including many of the world's largest banks, asset managers and market-infrastructure providers, alongside digital-asset specialists. Their work spans issuance, tokenized collateral and funds, payment rails, interoperability, financial-crime controls and resilience.

Institutions should therefore model the economics of tokenization with the same discipline they apply to its target-state architecture. That means understanding how compute, storage, networking, software, resilience, operational effort, controls and integration costs behave as transaction volumes and asset classes increase.

It also means distinguishing between fixed and variable costs and understanding where costs can be reduced through shared infrastructure, standardization or automation. Institutions should also consider the economics of ownership by understanding which capabilities need to be built and operated internally, and which could be consumed through cloud, managed services or other as-a-service models. Moving from fixed investment towards more consumption-based models will provide greater flexibility while adoption and volumes remain uncertain, but this needs to be modelled against the economics of scale.

Completing this work as soon as possible will help create an investment model that can guide decisions as digital markets grow. Done later, there is a risk that the same exercise becomes a cost-remediation program.

What should executives do next?

The next 12 months do not necessarily need to be about making a single large technology bet. They should be about developing the evidence required to make consistently better ones.

Establish the economic baseline

Start by understanding the current environment. Establish a clear baseline of the infrastructure supporting tokenization today, and how its cost and complexity could change as adoption grows.

This should start with the current environment: the infrastructure landscape, hybrid cloud and DLT platforms, observability, security, resilience and operational maturity. Institutions should then connect that baseline to the underlying economics, understanding the cost and consumption of compute, storage, network and capacity, alongside the operational effort required to support them.

Importantly, this assessment should not look only at today's volumes. It also should test how the environment responds as transaction volumes increase, new asset classes are introduced and the balance between traditional and tokenized assets changes.

In an initial assessment phase, institutions may seek to establish an infrastructure baseline and develop an initial economic model to better understand cost drivers, capacity constraints and potential areas for modernization, automation or operational improvement.

This should provide an evidence-based answer to three questions:

- What does our tokenization infrastructure cost today?
- How will those costs change as we scale?
- Where do we need to intervene to change the cost curve?

Design for reuse across the hybrid market

With the infrastructure and economic baseline established, the next step is to identify where changes to technology and the operating model can begin to alter the cost curve.

The focus should be on areas where growth might otherwise drive a corresponding but disproportional increase in infrastructure cost, operational effort or control overhead.

This could include modernizing infrastructure to consume capacity more efficiently, applying AI and automation to infrastructure operations, embedding governance and regulatory controls into technology workflows, and improving end-to-end observability across traditional and tokenized environments. Rather than attempting wholesale transformation, organizations should prioritize higher value use cases to test these interventions. Agentic AI and automation, for example, could reduce the manual effort required to operate increasingly complex infrastructure. Codified policy approaches could enable defined governance and compliance controls to be applied more consistently and at scale across expanding environments. Greater operational intelligence and observability could provide broader visibility across hybrid environments, helping identify emerging performance, capacity and cost issues before they become constraints on growth.

As institutions evaluate potential operating-model changes, pilot programs and limited-scale implementations may help assess which approaches are most appropriate for their environments. These activities can inform the development of a target operating model and support decision-making regarding future investment priorities.

Govern the cost curve

With the target operating model defined and initial interventions validated, the focus should shift from proving what works to scaling the capabilities that can materially improve the economics of tokenization.

Organizations should prioritize investments against the economic model established in the earlier phases. This may include directing investment toward the areas that have demonstrated the greatest potential to reduce infrastructure cost, automate operational effort, strengthen resilience and embed controls without adding equivalent complexity.

The objective should not be transformation or digitization for its own sake. Every investment should have a clear link to the growth strategy and expected adoption of tokenized markets. The economic model should provide a continuing basis for investment decisions, testing whether the infrastructure and operating model remain efficient as adoption grows, and identifying when alternative architectures, sourcing models or as-a-service approaches could deliver better economics.

Over time, institutions may choose to expand selected capabilities into broader production environments where implementation objectives, governance requirements and business priorities support doing so. Organizations may use production deployments to evaluate how infrastructure, operating models and governance approaches perform as adoption, transaction volumes and operational requirements evolve. The longer-term objective may be to develop operating approaches that can accommodate changes in transaction volumes, market participation and asset types with a reduced need for significant redesign or process re-engineering.

The economics of scale may become an important differentiator

Tokenization promises to remove friction from financial markets, but that promise will only be realized if the infrastructure supporting it can scale economically. As institutions move from individual use cases towards portfolios of tokenized assets operating alongside traditional markets, understanding and actively managing that cost curve will become increasingly important. The winners may not be those that tokenize first or even those that tokenize the most, but those that build an operating model where the value created by tokenization grows faster than the cost and complexity of delivering it.





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