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# Bridging the liquidity gap:

How Digital Asset infrastructure is rising to meet institutional demands

By Vivek Shankar

DIGITAL ASSETS



LIQUIDITY



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In April 2025, Ripple dropped \$1.25 billion to buy Hidden Road, instantly becoming the first crypto company to own a global prime broker. This is the kind of deal that signals a huge shift in institutional digital asset infrastructure. It isn't just evolving, but is instead being rebuilt from the ground up.

One reason for this is the fragmentation problem. "Liquidity is scattered across dozens of exchanges without a single dominant platform across all trading pairs or instruments," says Sameer Shalaby, Co-Founder & CEO of VersiFi.

Meanwhile Frank van Zegveld, Head of EMEA Sales at Talos, puts the scale in perspective: Talos alone connects to over 70 sources of liquidity. "Unlike traditional markets, where trading is concentrated on a few dominant venues, the digital asset ecosystem is highly fragmented," he explains.

This fragmentation exists as the crypto and digital assets market transitions from an adolescent to a young adult state (according to Coalition Greenwich's March 2025 report), and as 65% of EU-based crypto businesses have achieved MiCA compliance. Institutions can seemingly no longer wait for market infrastructure to mature. So what lies in store for them?

## THE TECHNICAL LABYRINTH

2025 is bringing digital asset infrastructure breakthroughs. Bitnomial launched the fourth US clearinghouse for crypto derivatives in January, offering something unprecedented: accepting digital asset collateral to margin futures and options trading. For the first time, institutions can use their Bitcoin and Ethereum holdings as margin, eliminating the need to convert to cash and dramatically improving capital efficiency.

The infrastructure arms race is accelerating. Traditional financial technology companies are entering the space with enterprise-grade solutions designed to abstract away the complexity. New protocols are emerging that promise standardized connectivity, while regulatory clarity is pushing exchanges toward more consistent operational practices.

Despite this rush, the market is not without its technical complexities, which runs deeper than just having many venues. "Unlike traditional markets, where data communications are standardized by the FIX protocol, no such standardization exists in digital asset markets," van Zegveld explains.

This means institutions must build custom API connections for each exchange, which "quickly becomes a drain on engineering resources to establish and maintain."

The engineering burden is staggering. While traditional finance relies on decades-old protocols that allow seamless connectivity across markets, digital asset trading requires bespoke integration work for every venue.

Each project involves painstaking work verifying API endpoints, interpreting data payloads, building authentication

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Sameer Shalaby

The challenge is managing the operational complexity that comes with this integration. Institutions must navigate varying fee structures, different risk management protocols, and inconsistent settlement mechanisms across platforms.

Shalaby highlights another layer of the problem: “Accessing real-time market data across multiple venues can introduce latency and limit visibility into true market depth.” When milliseconds matter, the technical overhead of aggregating data from disparate sources can mean the difference between profitable trades and missed opportunities.

Each venue requires separate risk management, as “institutions need to onboard and manage counterparty exposure on each exchange separately, increasing risk and operational headaches.”

The operational burden extends beyond technology. Legal teams must negotiate dozens of separate

agreements. Compliance departments must monitor different jurisdictions and regulatory requirements. Treasury teams must manage collateral across multiple venues, often requiring pre-funding that ties up capital inefficiently.

“Our focus at Talos has been on simplifying the complexity of a highly fragmented ecosystem,” van Zegveld says. “We are building the connective tissue that brings together disparate venues, workflows, and liquidity sources into a one-stop solution that surpasses traditional platforms, by leveraging the unique characteristics of the digital asset class.”

As solution providers navigate technical challenges, they’re also setting the stage for a bigger transformation: the rise of prime brokerage services that can solve these connectivity and operational challenges through a single relationship.

### PRIME BROKERAGE AS THE BRIDGE SOLUTION

“Currently, none of the major TradFi banks or prime brokers support crypto,” van Zegveld observes. “There are emerging prime brokerage solutions, with providers offering incomplete services.”

This vacuum has attracted new players who see prime brokerage as the solution to institutional crypto’s fragmentation problem. “Prime brokers have emerged as the ultimate solution in institutional digital asset trading, acting as both aggregators and risk managers to help mitigate the liquidity challenges posed by a fragmented market,” Shalaby explains.

Market developments bear out Shalaby’s observations. Kraken launched Kraken Prime in June 2025, offering institutional clients access to

paths, and handling unique operational flows (such as pre-funding accounts or non-DvP settlement models). What should be a straightforward, plug-and-play connection transforms into a months-long development cycle for each exchange.

Tony Acuña-Rohter, Chief Executive Officer at EDX Markets, puts it bluntly: “It is not operationally, technologically, or financially feasible to connect to the dozens of venues or market makers directly.”



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Frank van Zegveld

liquidity representing over 90% of the digital asset market across more than 20 global venues.

The platform supports asset-backed lending and seamless integration with both on- and off-platform liquidity through smart order routing.

Meanwhile, Hidden Road has scaled to impressive institutional reach, clearing \$3 trillion annually across markets with more than 300 top institutional customers. In May, the

firm formally entered the US market with OTC digital asset swaps, enabling institutional clients to execute cash-settled swaps across a wide range of digital assets.

The value proposition is compelling. Prime brokers “give clients access to a wide network of exchanges and liquidity providers through a single account, which eliminates the need to maintain separate operational and legal relationships with each counterparty,” Shalaby notes.

They also “extend one credit line to the client while managing collateral and margin across exchanges to enable cross-venue margining and capital efficiency.”

But the real breakthrough comes in execution capabilities. Shalaby notes that Prime brokers offer algorithmic trading capabilities with smart order routing that can source liquidity across venues to optimize execution. “This is critical for institutions seeking tighter spreads across execution venues,” he says.



Compliance remains the critical enabler

The infrastructure van Zegveld described as incomplete is rapidly changing. “Many prime brokers partner with custodial services, ensuring secure and segregated asset storage while supporting real-time trading,” Shalaby says. “They offer efficient onboarding, reporting, reconciliation, and risk management to enable institutions to scale their trading activities without scaling complexity. Whilst Kebbie Sebastian, CEO & Founder, Merge says that, “With hundreds of billions of dollars in institutional capital expected to enter digital assets this year, these digital-native prime brokers aren’t just service providers - they’re the infrastructure layer that will power a multi-trillion dollar market. The winners won’t be single prime brokers but orchestrators who can dynamically route across this specialized ecosystem.”

This institutionalization of prime brokerage services sets the stage for the next critical development: regulatory frameworks that can provide the oversight and legitimacy these growing institutional relationships demand.

### THE REGULATED VENUE ADVANTAGE

As with all things institutional finance, regulatory standing has become the new competitive moat. “Regulated venues are critical to attracting and retaining long-term participation from institutional investors,” Acuña-Rohter explains.

“Institutions operate under a robust set of requirements and oversight, which are embedded in their risk management, vendor management and security programs.”

The regulatory landscape is shifting in institutions’ favour. Van Zegveld points to comprehensive frameworks like MiCA in the EU and VARA in

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**Tony Acuña-Rohter**

Dubai as catalysts for change. "These regimes are setting clearer standards around custody, trading, reporting, and governance and in doing so, are paving the way for broader institutional participation," he notes.

The market is responding predictably. "This regulatory momentum is having the effect of consolidating volume toward venues that meet regulatory expectations and institutional-grade standards," van Zegveld observes.

"It's incentivising exchanges and intermediaries to adopt best practices in areas like best execution, market

surveillance, transaction reporting and counterparty controls."

EDX Markets exemplifies this regulatory-first approach, Acuña-Rohter says. Despite operating in an environment where "spot digital asset trading and clearing are not presently governed by federal regulations," Acuña-Rohter says his venue "was designed from the ground up with these priorities in mind."

The platform performs KYC and customer due diligence for all participants and has partnered with industry-leading compliance providers for trade surveillance and transaction monitoring.

Acuña-Rohter's bet is that regulatory preparation pays off. "As regulatory clarity continues to emerge, particularly with recent movement in the US, venues like EDX that are aligned with institutional requirements will play a central role in attracting institutional participation," he predicts.

"EDX will be ready for regulation because we were purpose-built with

traditional financial market structure and regulation in mind."

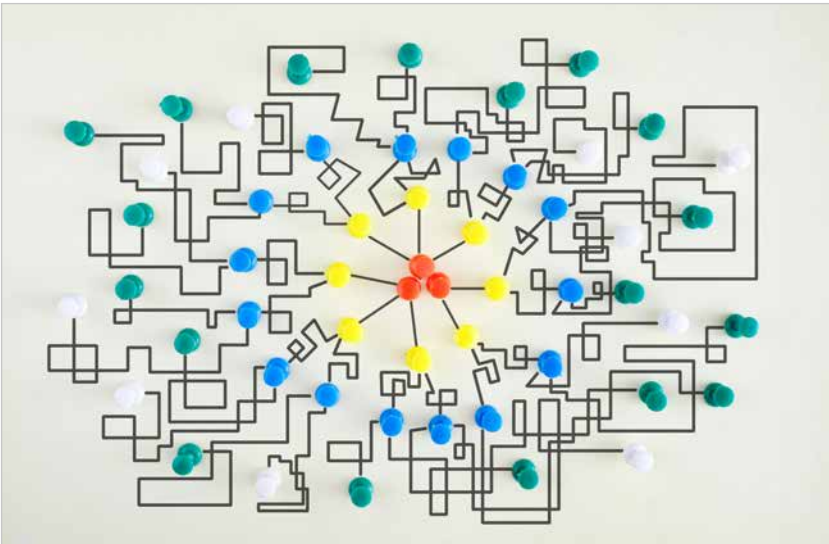
The regulatory foundation extends beyond compliance and into operational integrity. EDX has implemented trading and monitoring safeguards, including trade practice surveillance, transaction monitoring, fat finger limits, price banding, and messaging throttles. "The combination of these controls protects the market against runaway algorithms, market manipulation, and operational issues associated with execution," Acuña-Rohter explains. This regulatory legitimacy creates a virtuous cycle, Van Zegveld notes. "It is having the effect of consolidating volume toward venues that meet regulatory expectations and institutional-grade standards," he says. "It's incentivising exchanges and intermediaries to adopt best practices in areas like best execution, market surveillance, transaction reporting, and counterparty controls."

He also notes that it helps institutional investors meet internal mandates for compliance, auditability, and fiduciary responsibility.

### **HYBRID DEX-CEX STRATEGIES**

While regulated venues provide the compliance framework institutions need, they're also opening the door to hybrid trading approaches that combine traditional centralized exchanges with decentralized alternatives.

Decentralized exchanges offer institutional advantages that centralized venues can't match. "Their peer-to-peer trading mechanisms eliminate the need for intermediaries, and participants retain custody of their assets, which reduces the counterparty risk associated with centralized exchange failures or hacks," van Zegveld explains.



The infrastructure complexity that has plagued institutional crypto adoption is finally being resolved

**“These digital-native prime brokers aren’t just service providers - they’re the infrastructure layer that will power a multi-trillion dollar market.”**



**Kebbie Sebastian**

“And because transactions are on-chain, they are auditable in a way that centralized exchange transactions are not, and they settle almost immediately which translates into capital efficiencies.” But institutions can’t simply plug into DEXs with their existing infrastructure. “Institutions can’t leverage these benefits at scale without the right execution infrastructure,” van Zegveld warns. They need “an institutional-grade custody solution, such as an MPC wallet, that enables access controls without compromising the self-custody required to interact with a DEX.”

The real opportunity lies in hybrid approaches. Van Zegveld anticipates that “many institutions will adopt a hybrid model, whereby they trade in both CEXs and DEXs simultaneously.” This requires “a platform that aggregates liquidity from both into a synthetic order book to facilitate price discovery, the use of advanced algorithms or order types, and smart order routing.”

2025 is delivering on this hybrid vision. The tokenization boom has created new markets worth exploring. Real-world asset tokenization has exploded

380% in three years to reach \$24 billion, with Standard Chartered projecting growth to \$30 trillion by 2034. These tokenized assets often trade on DEXs, giving institutions new reasons to develop hybrid execution capabilities.

Specialized DEX development is accelerating. Speaking to Cointelegraph, Michael Egorov, founder of Curve Finance, predicted growth in “special-purpose decentralized exchanges” that solve specific institutional problems.

“Exchanges between stablecoins of different denominations like the Euro, US dollar, and others are not yet properly solved,” Egorov noted, highlighting FX as a key use case.

Compliance remains the critical enabler. Van Zegveld emphasizes that “compliance technologies that support on-chain KYT, whitelisting, and real-time risk scoring are increasingly required before institutions can get comfortable interacting with DEXs.”

The strategic advantage is clear. “The ability to blend CEX and DEX execution while managing risk and compliance is a competitive advantage in a multi-venue market, allowing institutions to tap into a broader spectrum of liquidity opportunities,” van Zegveld concludes.

This hybrid infrastructure sets the stage for a broader transformation: the evolution of traditional finance toward blockchain-native operations.

## **THE INFRASTRUCTURE ENDGAME**

The infrastructure complexity that has plagued institutional crypto adoption is

finally being resolved. “Institutionally-focused solutions continue to mature and become available in the market,” Acuña-Rohter observes. “Much has changed over the past decade, where institutions no longer have to build everything in-house from the ground up.”

What once required custom development for basic functions like custody, connectivity, and settlement workflows is becoming plug-and-play. The institutional adoption timeline reflects this infrastructure maturation.

EY research shows institutions planning to scale digital asset investments over the next two to three years, with 50% expressing interest in investing in tokenized assets. The hesitation reflects the need to ensure robust operational foundations.

Van Zegveld sees this moment as the beginning of a much larger transformation. “Our vision extends beyond crypto: we believe that over time, all assets will move onto digital rails, and the future of capital markets will be powered by this new infrastructure.”

The infrastructure wars of the past few years are creating the foundation for this transition. Fragmentation forced innovation in prime brokerage, regulatory frameworks, and hybrid execution platforms.

What began as a problem—dozens of disconnected venues with incompatible systems—is becoming a competitive advantage as unified solutions emerge that can navigate complexity while delivering institutional-grade reliability.

The question is no longer whether digital asset infrastructure can meet institutional demands, but how quickly institutions can adapt to the opportunities this infrastructure creates.