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The Blueprint for Institutional Digital Assets Trading

2026

Institutional demand for digital assets is steadily increasing, but participation in the over-the-counter (OTC) digital asset market can create unnecessary risk and operational overhead. The reliance on bilateral settlement models dominated by retail brokers — which often misleadingly label themselves as "exchanges" — has created issues around fragmented liquidity, inherent systemic and bilateral counterparty risk, and capital inefficiency.

Market participants frequently face high, often hidden costs when accessing digital asset markets. Retail aggregators (i.e., trading platforms, retail brokers, asset managers, neobanks) offering digital assets to their clients must operate across a complex, fragmented network in which each exchange functions as an isolated silo for execution, custody and credit. This structure leads to suboptimal client fill rates, elevated operational costs, and persistent counterparty risk, undermining both business stability and client trust.

Crucially, no two clients are identical.

Retail aggregators, neobanks, OTC desks, and brokers all operate with different regulatory constraints, liquidity profiles, client mixes, and operational preferences. Therefore, any "Prime" solution that simply replaces a web of bilateral relationships with a single, inflexible one will fail.

Digital Prime Brokers (DPBs) must offer a common core of netting, credit intermediation and risk control. Their value lies in achieving broad adoption through a standardized, modular platform that allows clients to configure the specific services they need without requiring fundamental code changes.

By contrast, foreign exchange (FX) markets operate on a mature, unbundled market structure. Electronic communication networks (ECNs) handle trade execution, prime brokers manage credit and margining, and settlement utilities such as CLS (Continuous Linked Settlement) provide centralized post-trade settlement, all while supporting client-specific configurations.

Digital asset trading, however, still predominantly operates on exchanges. Most digital asset exchanges are vertically integrated, combining execution, custody, and credit within a single platform. In some cases, these venues also rehypothecate — which refers to the reuse of a client's pledged collateral for financing, trading, or to meet the venue's own obligation — at no cost.

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This structure introduces complex fund flows, circular dependencies, and heightened liquidity stress, particularly during periods of market volatility.

This paper explains why digital asset markets require a prime brokerage–style model that features centralized credit intermediation, netted T+1 settlement, and the unbundling of execution, custody, and credit into clearly defined roles. Crucially, these benefits must be delivered through a configurable framework that accommodates diverse client requirements, rather than generalized implementation.

We demonstrate that the DPB model is fundamental to institutional scalability, delivering measurable alpha and robust operational control by serving as a mission-critical infrastructure layer.

The role of a DPB is to provide core shared infrastructure (netting, credit, risk and settlement) as a framework that can be tuned to each client's use case, rather than forcing all activity into a one-size-fits-all model.

This centralization achieves efficiency through three core pillars:

1. Superior execution through aggregated liquidity
2. Centralized credit and risk management through credit intermediation
3. Maximized capital efficiency through standardized net settlement (T+1) and cross-collateralization
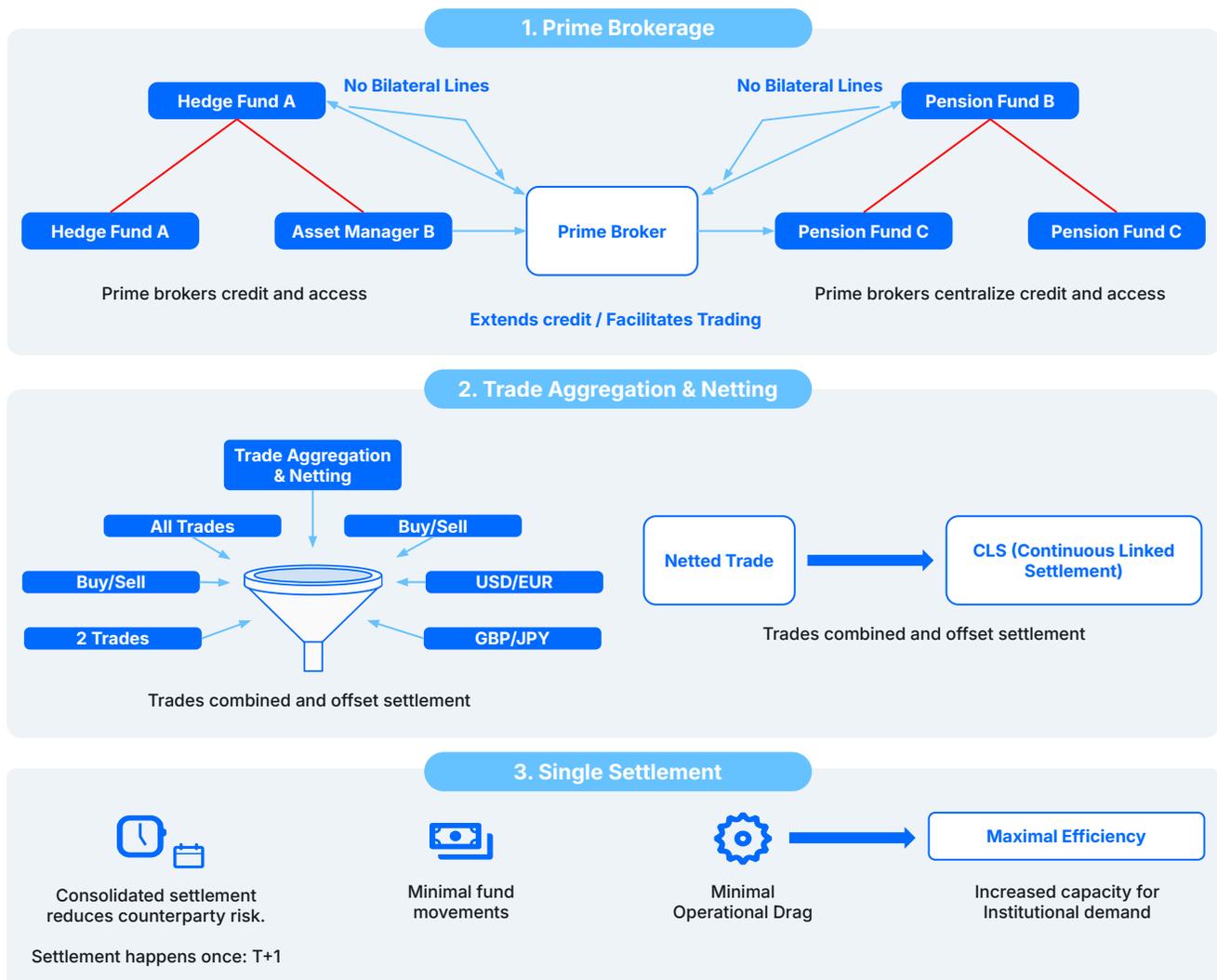
The core finding is that the DPB model eliminates the reliance on interest-free client collateral that has historically subsidized exchange operations, replacing it with a compliant, transparent, and scalable framework for institutional digital asset deployment.

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FX overview: How it works

This structure introduces complex fund flows, circular dependencies, and heightened liquidity stress, particularly during periods of market volatility.

- Prime brokers act as credit intermediaries between counterparties, eliminating the need for bilateral credit lines.
- Trades executed across multiple venues are aggregated and netted, with settlement routed through CLS where applicable.
- Net settlement occurs once per cycle — typically on a T+1 basis or aligned with CLS settlement cutoffs — maximizing capital efficiency and reducing settlement risk.
- Fund movements are minimized, significantly lowering operational complexity and the likelihood of settlement failure.

As a result, FX markets are able to support large-scale institutional participation with high reliability and capital efficiency. While this level of operational maturity is essential for scaling digital asset markets, current settlement processes fall short of these institutional standards.

1. Prime Brokerage

No Bilateral Lines

No Bilateral Lines

Hedge Fund A

Pension Fund B

Hedge Fund A

Asset Manager B

Prime Broker

Pension Fund C

Pension Fund C

Prime brokers credit and access

Prime brokers centralize credit and access

Extends credit / Facilitates Trading

2. Trade Aggregation & Netting

Trade Aggregation & Netting

All Trades

Buy/Sell

Buy/Sell

USD/EUR

2 Trades

GBP/JPY

Trades combined and offset settlement

Netted Trade → CLS (Continuous Linked Settlement)

Trades combined and offset settlement

3. Single Settlement

Consolidated settlement reduces counterparty risk.

Minimal fund movements

Minimal Operational Drag → Maximal Efficiency

Increased capacity for Institutional demand

Settlement happens once: T+1

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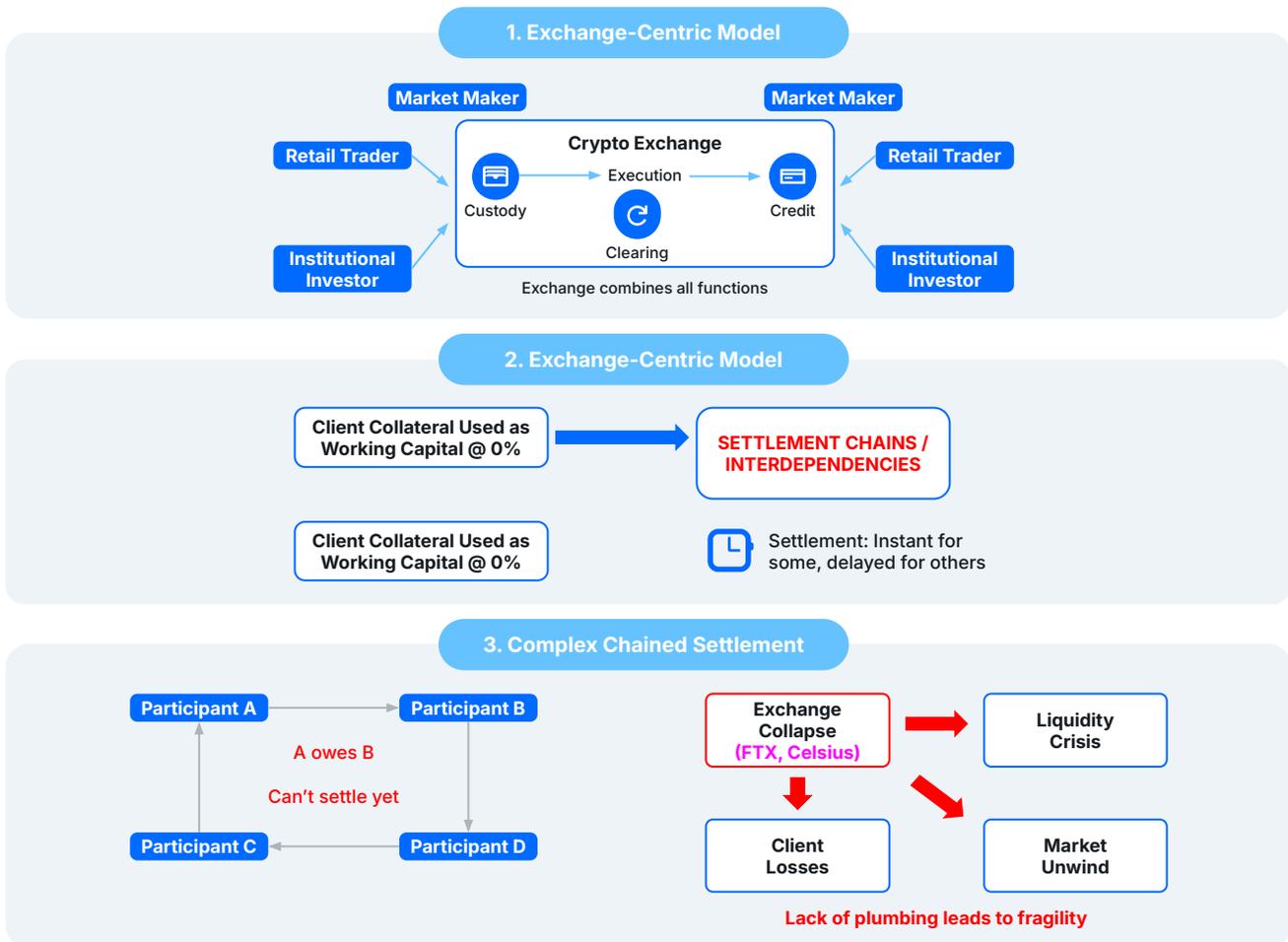# Digital Assets Overview: How it works

Digital asset trading developed on a retail exchange-centric infrastructure in which core market functions are vertically integrated. In this model:

- Exchanges combine execution, clearing, credit, and custody within a single platform.
- Client collateral is frequently used as interest-free working capital by the exchange.
- Settlement practices are inconsistent across venues, with some transactions settling near-instantaneously and others subject to delays.

This structure creates interdependent settlement chains across venues. Participants are often required to move assets between exchanges to meet settlement obligations, meaning delays or restrictions on one platform can prevent settlement on another.

In stressed market conditions, these dependencies can cascade rapidly, amplifying liquidity pressure and counterparty risk across the system. The failures of FTX and Celsius demonstrated how quickly exchange-centric settlement models can unwind when asset mobility is constrained and financial structures lack transparency.

This approach stands in direct contrast to mature financial markets, where standardized settlement cycles, centralized credit intermediation, and multilateral netting are designed to prevent cascading settlement failures across counterparties and jurisdictions.

1. Exchange-Centric Model

Market Maker   Market Maker

Retail Trader

Crypto Exchange

Custody → Execution → Credit

Clearing

Retail Trader

Institutional Investor   Institutional Investor

Exchange combines all functions

2. Exchange-Centric Model

Client Collateral Used as Working Capital @ 0% → **SETTLEMENT CHAINS / INTERDEPENDENCIES**

Client Collateral Used as Working Capital @ 0%

Settlement: Instant for some, delayed for others

3. Complex Chained Settlement

Participant A → Participant B

A owes B

Can't settle yet

Participant C ← Participant D

Exchange Collapse (FTX, Celsius) → Liquidity Crisis

↓

Client Losses   Market Unwind

Lack of plumbing leads to fragility

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The problem with fragmented liquidity

Institutional FX markets operate on a mature structure built around prime brokerage and multilateral netting through CLS, which minimizes settlement risk and reduces capital requirements.

By contrast, the OTC digital asset market has evolved on fragmented, exchange-centric rails and lacks these foundational efficiencies. As a result, institutional participants face a set of structural frictions that materially increase risk, cost, and operational complexity. These shortcomings manifest in three core inefficiencies.

Inefficiency 1: Credit risk multiplication

Trading across multiple liquidity providers (LPs) requires a party to establish, maintain, and monitor multiple bilateral credit relationships. Many internal risk departments also expect to set aside contingency against each LP. This results in higher operational costs, which are inevitably passed down to the end client.

Inefficiency 2: Trapped capital

Collateral is typically posted independently at each exchange or with each counterparty, resulting in fragmented margin pools and poor capital utilization. Without the ability to net exposures across venues, firms are forced to over-collateralize positions, leaving significant amounts of capital idle.

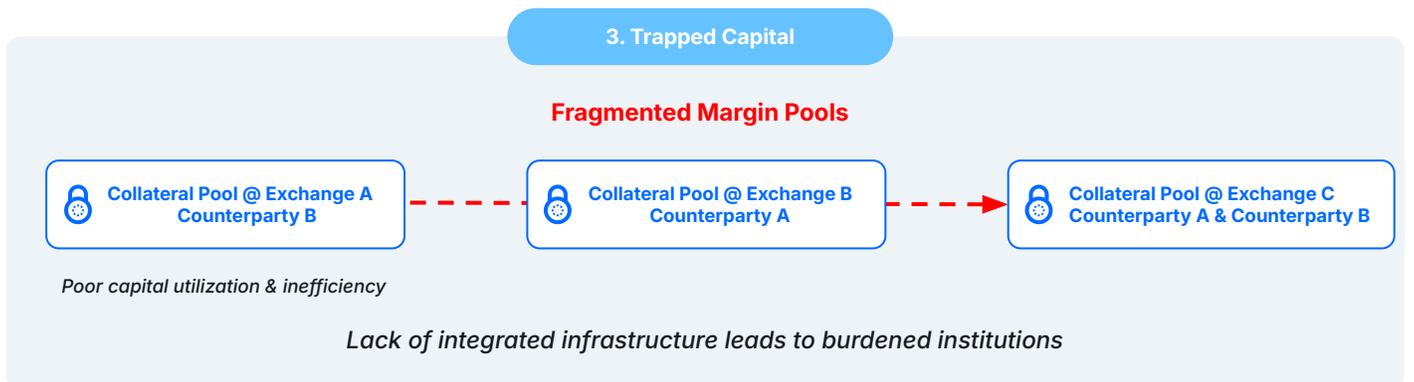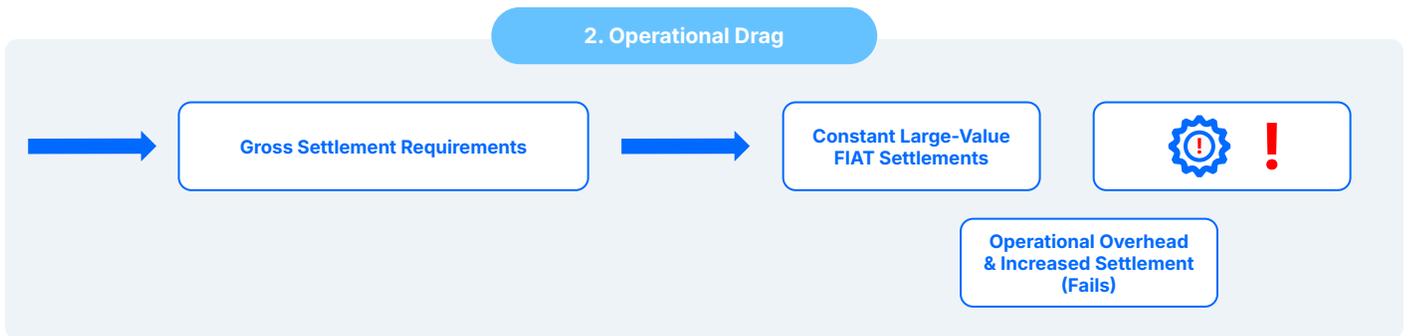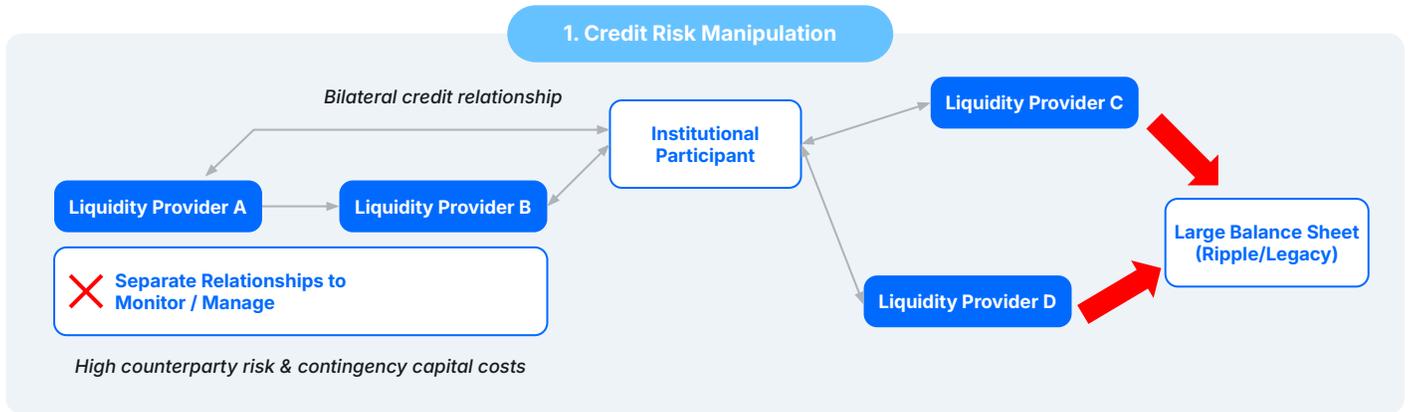### Inefficiency 3: Fragmented asset risk

Digital assets are held across multiple venues under differing custody arrangements, jurisdictions, and security models. This fragmentation introduces unnecessary operational and counterparty risk and stands in contrast to the practices of mature financial markets where assets are consolidated under standardized legal and risk frameworks.

The Digital Prime Broker

The DPB is designed to introduce capital efficiency and risk discipline to institutional digital asset markets through centralized credit intermediation and standardized post-trade processing. By unifying credit, risk, and settlement functions within a single operating framework, the DPB mirrors the efficiencies long established in FX prime brokerage while accommodating the unique requirements of digital assets.

These structural frictions affect client segments differently. Retail aggregators may be constrained by regulatory capital requirements and client money rules, while proprietary trading firms may be more sensitive to intraday funding volatility. A viable DPB model must be able to reflect these differences within its credit, margin, and settlement configuration, rather than imposing uniform terms across heterogeneous participants.

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The Problem of Fragmented Liquidity
OTC Digital Assets Market Inefficiencies

1. Credit Risk Manipulation

Bilateral credit relationship

Liquidity Provider A → **Liquidity Provider B** → **Institutional Participant**

Liquidity Provider C

Liquidity Provider D

→ **Large Balance Sheet (Ripple/Legacy)**

✗ **Separate Relationships to Monitor / Manage**

High counterparty risk & contingency capital costs

2. Operational Drag

→ **Gross Settlement Requirements** → **Constant Large-Value FIAT Settlements**

Operational Overhead & Increased Settlement (Fails)

3. Trapped Capital

Fragmented Margin Pools

🔒 **Collateral Pool @ Exchange A Counterparty B** ⇢ 🔒 **Collateral Pool @ Exchange B Counterparty A** ⇢ 🔒 **Collateral Pool @ Exchange C Counterparty A & Counterparty B**

Poor capital utilization & inefficiency

Lack of integrated infrastructure leads to burdened institutions

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Pillar I: Centralized Credit and Risk Intermediation

Centralized credit intermediation is the foundation of the DPB model and the primary mechanism for reducing operational and counterparty risk. By interposing itself between clients and executing dealers, the DPB fundamentally restructures how credit exposure, settlement obligations and risk are managed across venues.

This section outlines how a single counterparty relationship and a give-up settlement model replace fragmented bilateral arrangements with a controlled, institutionally scalable framework.

The single counterparty relationship

Under the DPB model, the client executes a single legal master agreement, such as an ISDA, with the Digital Prime Broker. When the client trades with approved executing dealers, including liquidity providers and market makers, those trades are given up to the DPB.

As a result, the DPB becomes the client's sole contractual counterparty, assuming responsibility for settlement and credit exposure across all approved venues.

Eliminating settlement chaos (Give-Up Model)

The give-up model removes the requirement for clients to settle directly with each executing dealer. Instead of managing multiple bilateral settlement flows, all obligations are consolidated through the DPB.

This structure eliminates a major source of operational complexity and settlement failure risk associated with frequent asset movements between counterparties.

Operational drag

In exchange-centric and bilateral models, gross settlement requires repeated, high-value movements of fiat and digital assets for each trade. These flows increase operational overhead and elevate the likelihood of settlement delays or failures, particularly during periods of market stress.

By contrast, the DPB absorbs the credit exposure of underlying executing dealers and consolidates settlements at the prime broker level. This transforms a complex matrix of bilateral relationships into a single, manageable N-to-1 exposure between the client and the DPB.

From an operational perspective, this simplification allows legal, compliance, and credit teams to focus on monitoring the financial health and credit limits of a single counterparty, rather than managing fragmented exposure across multiple venues.

In practice, the DPB's most effective risk-mitigation capability lies in its ability to reflect client-specific operating parameters within a unified credit framework. Differences in risk appetite, legal entity structure, product scope and regulatory constraints can be implemented centrally, without requiring bespoke bilateral negotiations across every counterparty and venue combination.

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Pillar II: Execution Alpha via Liquidity Aggregation

The DPB enhances execution quality, cost and efficiency by combating market fragmentation.

Rather than being constrained by pricing from a single exchange or OTC desk, the DPB connects clients to a broad, aggregated liquidity pool spanning centralized exchanges (CEXs) and non-bank market makers. This aggregation enables price discovery across venues and reduces dependence on any single liquidity source.

Different clients require different execution constraints. These may include venue whitelists or blacklists, retail-only routing policies, best-execution filters, or limitations driven by local regulatory requirements. A DPB that can encode these preferences into its routing and aggregation logic allows each client to get their version of enhanced execution from the same underlying liquidity network.

Take DPB Ripple Prime, for example:

- **Liquidity Aggregation:** Ripple Prime delivers a consolidated Best Bid and Offer (BBO) by aggregating executable quotes from connected liquidity providers through Route28 (R28)—the trading platform. Quotes compete on an order-by-order basis, without preferential treatment of any single LP, ensuring neutral routing and price competition. The resulting execution quality directly benefits the end client.

- **Minimized Spread:** By introducing real-time competition among multiple LPs, the DPB drives tighter bid-ask spreads and improved execution outcomes. Single-counterparty trading relationships are inherently inefficient, as credit and execution remain bundled. In such models, LPs embed their cost of capital into the top-of-book spread, meaning credit is effectively charged through pricing rather than explicit fees.

Even where no explicit charges are visible, bilateral settlement introduces hidden costs by preventing netting and margin offsets. In contrast, a competitive, aggregated LP network enables true price competition, reduces embedded financing costs, and materially improves execution quality.

Pillar III: Maximal Capital Efficiency through Netting

The DPB's ability to consolidate positions is central to unlocking trapped capital across certain fragmented digital asset ecosystems. By standardizing settlement, margining, and collateral management the DPB enables institutions to operate with materially lower capital intensity while maintaining robust risk controls.

Standardization:
Moving to FX-style net settlement (T+1)

The prevailing exchange-centric model relies on gross, near-instantaneous settlement or full pre-funding. This approach reduces liquidity, increases capital requirements, and forces unnecessary asset movements.

The DPB introduces standardized net settlement by replicating the efficiencies found in mature FX market infrastructure, such as CLS. Trades executed across venues are aggregated, and only the net obligation is settled at the end of the settlement cycle.

In practice, this typically takes the form of T+1 net settlement. All client purchases and sales across venues are netted, and only the residual balance is settled. For example, if a client buys 100 BTC and sells 80 BTC during the same cycle, only 20 BTC is settled net, reducing gross fund movements by approximately 89%.

Crucially, settlement cycles and margin rules do not need to be uniform across all clients. A large retail aggregator may prefer a conservative T+1 or T+2 framework with higher buffers, while an active market maker may operate on tighter cycles with intraday margining. The DPB supports this flexibility within a single, standardized infrastructure.

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Eliminating the free-capital loophole

By decoupling settlement from exchange custody, the DPB closes the "free-capital loophole" in which venues use client collateral as interest-free working capital. Settlement risk and funding costs are made explicit, transparent and appropriately priced, aligning incentives with institutional risk standards.

Cross-margining and collateral optimization

Under the DPB model, clients post collateral exclusively with the prime broker rather than fragmenting margin across multiple venues. This consolidation enables a unified view of risk and significantly improves capital efficiency.

- **Consolidated risk view:** Margin is calculated based on the client's net portfolio exposure across products and venues. A single margin engine can support different methodologies, add-ons and concentration limits, ensuring that clients with distinct portfolios and risk appetites are not forced into a uniform capital treatment.

- **Cross-collateralization:** Margin can be applied across multiple position types, including spot, futures, and swaps, eliminating idle capital pools. This applies across institutional venues such as CME, LMAX Digital, Crossover Markets, and platforms such as R28, as well as approved offshore exchanges.

- **Turning idle balances into productive capital:** Balances centrally managed within the DPB's secure environment can be deployed through its institutional network to improve capital efficiency. Where applicable, clients may receive a direct revenue share from this activity. Any such program should be explicitly opt-in, and DPBs must not engage in unauthorized rehypothecation of client assets.

Client configurability is a necessity

In FX, prime brokerage works because the core plumbing is standard, but the way each client uses it is not. The same must be true across digital assets trading.

A successful DPB must be able to:

- support different legal-entity and booking models (e.g., multi-jurisdiction
- retail platforms);
- reflect client-specific risk limits, margin add-ons and regulatory constraints;
- offer flexible product menus (e.g., spot only, spot + derivatives, ETFs);
- and adapt settlement conventions to each client's operational reality.

This flexibility is what allows retail aggregators, neobanks, and other institutional clients to adopt the model without breaking their own downstream processes.

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Similarities to FX

The role of prime brokers

Prime brokers enable access to deep liquidity without requiring multiple bilateral credit relationships. Acting as centralized credit intermediaries, they face liquidity providers directly and extend credit to clients within a controlled risk framework.

To achieve this, prime brokers such as UBS, JPMorgan Chase, Citigroup, and Ripple Prime act as credit hubs that:

- extend credit on behalf of clients;
- face liquidity providers directly;
- aggregate and net exposures;
- and manage settlement across counterparties.

Net Settlement via CLS

CLS is a global FX settlement utility that reduces settlement risk by coordinating payment-versus-payment (PvP) settlement across counterparties and currencies. It achieves this by:

- multilaterally netting transactions
- ensuring payment-versus-payment (PvP)
- settling only the net amount at the end of day

This model significantly reduces settlement risk, minimizes required fund movements, and enables large transactional volumes to be processed with high capital efficiency.

Illustrative example of inefficient digital asset settlement

Consider a market maker that buys 2 BTC for $200,000 USDC on Exchange A, settling at 10 a.m. UTC, and later sells 2 BTC for $200,000 USDC on Exchange B, settling at 6 p.m. UTC. In practice, this requires multiple intraday fund movements.

The 2 BTC received on Exchange A must be moved to Exchange B before 6 p.m. UTC.

2 → **Exchange A**

$200,000 USDC is received on Exchange B at settlement.

3 → **Exchange B**

$200,000 USDC must be transferred from Exchange C to Exchange A before 10 a.m. UTC.

1 → **Exchange C**

4 The USDC is then transferred back to Exchange C.

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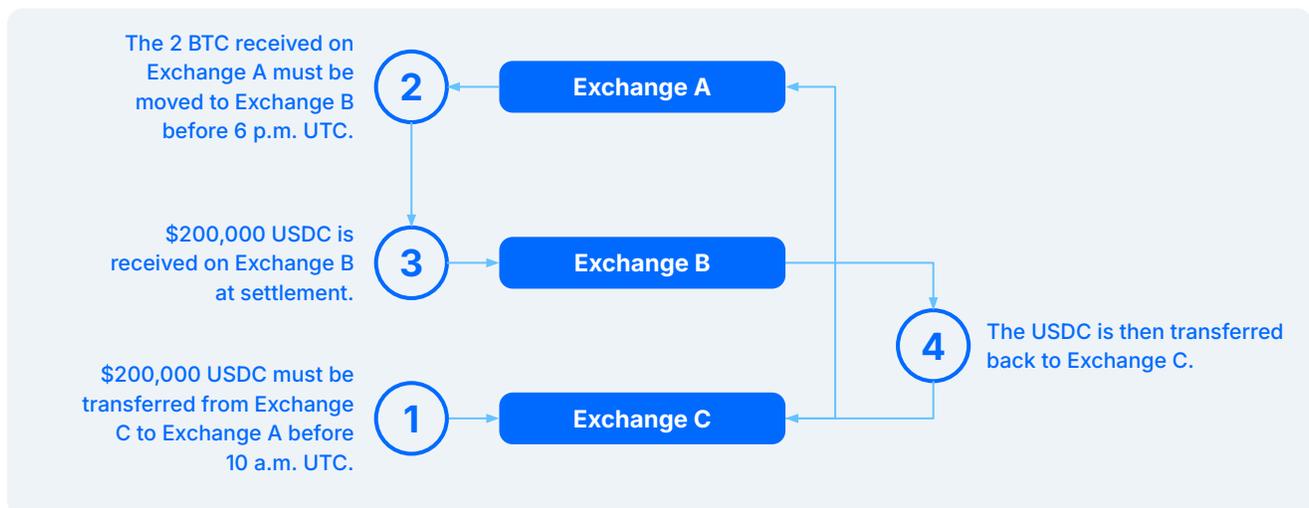
Although the market maker's net economic exposure is flat, mismatched settlement timing and venue-specific settlement requirements force unnecessary intraday asset movements. This increases operational complexity, elevates settlement risk, and ties up capital that could otherwise be deployed productively.

Digital asset markets today resemble the FX market of the late 1990s. The introduction of FX prime brokerage centralized credit intermediation and unlocked trapped capital by allowing participants to post a single margin pool. These efficiencies enabled market scale, materially reduced execution costs, and supported sustained growth, providing a clear blueprint for the evolution of institutional digital asset markets.

"A Digital Prime Brokerage model will enable institutional participants, including retail aggregators, to reduce operational risk, unlock trapped capital, and scale growth. As clients increasingly favor net-settled, prime-based structures, liquidity providers and venues will have to adapt. Adoption, however, will depend on prime brokers supporting specific client needs and constraints rather than enforcing a rigid, one-size-fits-all model."

Mike Irwin,
Chief Operating Officer, XTX Markets

Leveraging the XRP blockchain

The XRP blockchain can support early settlement within a Digital Prime Brokerage framework by enabling onchain credit lines that fund settlement ahead of the standard net settlement cycle, with funding costs applied explicitly and transparently.

Under this model, the prime broker — or a defined group of approved credit providers — exposes onchain credit lines to brokers and market makers. These credit lines allow participants to access liquidity before the standard net settlement cutoff, such as the T+1 end-of-day snapshot at 5 p.m. Eastern, when early settlement is operationally or commercially required.

When a participant elects to settle early, the process operates as follows:

- The participant invokes a smart contract to draw funds ahead of the standard settlement window.
- The prime broker's onchain credit line bridges the timing gap.
- The contract automatically accrues funding costs based on the amount drawn, the applicable rate, and the duration of use.

Funding costs are fully transparent and traceable onchain and are charged directly to the party requesting early settlement, whether that be an exchange, liquidity provider, or taker. This ensures early settlement is priced appropriately, reflects the true cost of capital, and eliminates the hidden subsidies that arise when exchanges rely on interest-free client balances.

Institutional solutions for a maturing market

Foreign exchange markets demonstrate that mature settlement infrastructure, centralized credit intermediation, and multilateral netting materially reduce systemic risk while improving capital efficiency. Digital asset markets, by contrast, continue to rely on fragmented, exchange-centric settlement models that introduce unnecessary dependencies, operational friction, and liquidity stress.

By reducing systemic counterparty risk, unbundling credit from execution and enabling standardized net settlement on a T+1 basis, the DPB model transitions digital asset markets from a volatile, retail-driven structure to a controlled, compliant, and institutionally scalable ecosystem.

From the client perspective, a DPB that acts as the central counterparty and supports net settlement materially improves capital efficiency as the market continues to institutionalize. The DPB model reduces operational complexity, counterparty exposure, and the need to manage multiple bilateral credit relationships, while improving transparency and control across venues.

A simplified operating model also lowers the true cost of execution and unlocks new revenue opportunities. In bilateral trading relationships, liquidity providers typically price default and funding risk implicitly into spreads and swap rates. Offshore exchanges and many bilateral liquidity providers in the digital asset market frequently apply default swap rates of approximately 11% — roughly 7% above the risk-free rate — effectively charging for counterparty risk through execution costs rather than explicit credit pricing.

At a 7% spread over the risk-free rate, the implied daily funding cost is approximately 1.92 basis points, or $192 dollars per million per day. This represents a meaningful and often unrecognized cost embedded in bilateral execution models, ultimately borne by aggregators and end clients.

By contrast, the DPB model makes the cost of credit explicit, eliminates hidden subsidies derived from interest-free client balances, and enables capital to be deployed more efficiently through net settlement and centralized risk management.

For retail aggregators and, ultimately, the broader institutional market, Digital Prime Brokerage provides the structural foundation to convert operational risk and trapped capital into compliant, accelerated capital velocity and sustainable revenue alpha.

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Market structure deep dive

Why the market pushes for instant settlement

The preference for instant settlement in digital asset markets is driven by structural constraints rather than economic efficiency.

Reasons include:

- Arbitrage inefficiencies: Cross-exchange price discrepancies persist and instant settlement is favored to avoid arbitrage losses, though it's economically inefficient.
- Lack of broker balance sheets: Brokers settle immediately to recycle client assets, creating same-day loops instead of efficient T+1 cycles.
- Counterparty risk: Clients are unwilling to leave assets on exchanges or with bilateral LPs longer than necessary. While third-party custody exists, the lack of standardization across venues fragments liquidity and limits access, often forcing prefunding with LPs. Rather than operate on a T+1 basis and extend exposure, they prefer to prefund, trade, and withdraw immediately — or execute DvP bilaterally.

Multiple exchanges and OTC desks force constant intraday fund movements and operational drag. But "instant" today is only possible because exchanges use free client collateral.

Retail Exchange Risk: Default Funds and Auto-liquidation

Retail-focused exchanges rely on default funds and forced auto-liquidation to manage counterparty risk. This model introduces significant systemic issues.

For example, when a participant can't meet obligations, the exchange liquidates their position in the market, potentially during thin or stressed conditions. Losses are transferred to the default fund, which is ultimately supported by user trading fees and collateral. In extreme cases, cascading auto-liquidations trigger market-wide slippage and destabilize global pricing.

Unlike traditional finance where settlement failures trigger controlled resolution processes, digital asset exchanges often mask them through liquidation engines.Blockchain technology has seen countless failed transactions, but most show up as:

- Clawbacks
- Insurance fund depletion events
- Forced liquidations
- Negative balances on user accounts

Several major venues have experienced these incidents across different market cycles. The autoliquidation model effectively absorbs settlement failures by socializing losses. This mechanism is neither sustainable nor a robust foundation for institutional adoption at scale.

Moving forward: net settlement and consolidated credit

A more resilient institutional market structure for digital assets would introduce a standardized settlement and credit framework that mirrors the risk controls of mature financial markets. At a minimum, this model would include:

- A prime broker or credit intermediary layer that centralizes credit exposure
- Net settlement on a T+1 basis (or longer) between brokers, liquidity providers, and custodians
- Clear separation of execution and custody functions
- A multilateral netting utility analogous to CLS

Critically, this model does not imply consolidation through a single provider. Resilience at scale requires diversification.

A multi-prime structure — consistent with established FX and rates markets — allows clients to benefit from centralized netting and capital efficiency while avoiding concentration risk. Within this framework, Ripple Prime provides a standardized operating layer for credit intermediation and net settlement, without requiring exclusive reliance on a single balance sheet.

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Additionally, Ripple maintains one of the most robust balance sheets in capital markets. This financial strength is backed by a business model far more mature than that of typical LPs in the digital asset space.

By integrating Ripple Prime into a broader multi-prime ecosystem, institutions can reduce the systemic and operational risks created by today's fragmented bilateral relationships. This hybrid approach balances capital optimization with diversified risk and reflects the direction in which institutional digital asset markets are converging.

Standardizing T+1 end-of-day snap (5 p.m. Eastern)

Similar to FX conventions, requiring all counterparties to settle based on a standardized T+1 end-of-day snapshot at 5 p.m. Eastern would remove the pressure for intraday fund movements and ensure every participant works off the same valuation and settlement window.

However, early settlement options may come at a cost.

If a participant requires settlement earlier than T+1, the DPB can fund this, similar to deliverable FX prime brokerages today, but with significant economic cost. The reason exchanges and brokers have been able to offer near-instant settlements historically is that they use client collateral for free, paying 0% interest on those balances. This practice effectively subsidizes their liquidity needs and masks the true cost of capital.

By contrast, when a DPB provides early settlement liquidity, they deploy their own balance sheet, which carries opportunity cost. Consequently, early settlement must be explicitly priced; hidden subsidies via unpaid client collateral disappear; the resulting cost is allocated to the exchange, LP, or taker requesting immediate settlement.

This cost should be passed through to the relevant party (e.g., exchange, LP, or taker) ensuring:

- Appropriate valuation of capital and settlement risk
- No hidden subsidies via client collateral
- Room for larger, more sophisticated counterparties to deploy size confidently
- T+0 is priced appropriately

Additional issue: Spot is not fungible across exchanges.

The current market structure treats spot and perpetual swaps as if they are interchangeable, but they aren't.

Spot settles differently across venues, each with its own cutoff and operational rules. If two products don't share a common settlement framework, they cannot be fungible—capital becomes trapped, pricing diverges, and liquidity siloed.

This lack of fungibility embeds counterparty risk; if an exchange restricts withdrawals or defaults, its perp funding rates can wildly distort because arbitrageurs cannot rebalance. Consequently, clients are left holding risk tied to a derivative whose value is based on a broken, exchange-specific internal reference, not a universal, robust market index.

ETF cash redemption: a clear signal

When Bitcoin ETFs launched with cash-only creation/redemption instead of in-kind, the message from regulators was straightforward: The market's settlement infrastructure isn't reliable enough yet. This was an explicit acknowledgement that digital assets lack the coordinated settlement standards institutions require.

DPB addresses these structural gaps and effectively bridges the divide between fragmented crypto markets and institutional expectations, offering the stability necessary for digital assets to transition from a niche alternative to a mainstream asset class.

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About Ripple

Founded in 2012, Ripple is the leading provider of blockchain-based enterprise solutions across traditional and digital finance. Its solutions span global payments, custody, liquidity, and treasury management, serving as a one-stop shop for moving, storing, exchanging, and managing value. Ripple's stablecoin, RLUSD, and the cryptocurrency XRP underpinning these solutions allow Ripple and its customers to shape the modern financial system.

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