



# The Katana Flywheel:

Rethinking Incentives and Liquidity for Sustainability

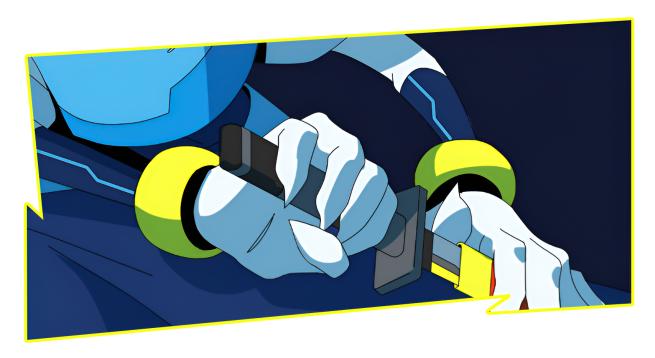


# The Katana Flywheel:

# Rethinking Incentives and Liquidity for Sustainability

	TI. E
3	The Flywh
	The Role o
4	A Self-Sus
	Competiti
	General-P
9	Application
	Risks and
	Market De
	Smart Con
18	Sustainabi
	Conclusio

The Flywheel: How Revenue Flows Through Katana	
The Role of KAT and vKAT	
A Self-Sustaining Liquidity Engine	
Competitive Landscape and Positioning	
General-Purpose Layer 2s	
Application-Specific Chains	
Risks and Considerations	
Market Dependence	
Smart Contract and Technical Risk	
Sustainability Watchpoints	







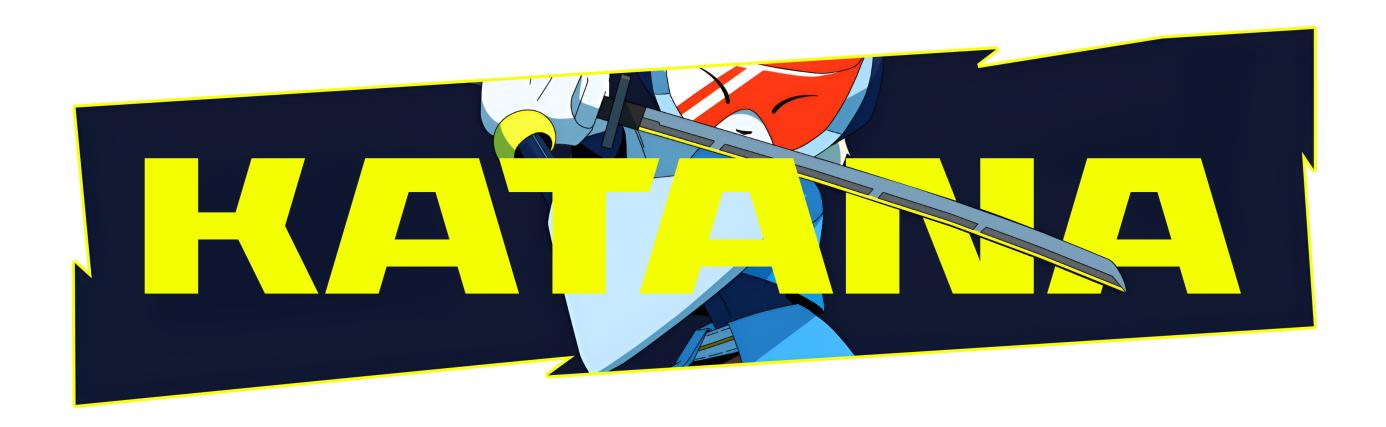


# **Introduction**

Katana is purpose-built for DeFi. Rather than acting as a general-purpose Layer 2, it functions as a financial network where every transaction, pool, and application reinforces collective liquidity and long-term yield generation for its users.

Most Layer 2s aim for breadth, supporting a wide range of applications. Katana instead prioritises depth, embedding yield creation, liquidity routing, and value distribution directly into its base layer. The result is an ecosystem where users, protocols, and the network advance together through shared incentives and productive capital.

This report examines how that model works in practice. It explores how Katana transforms liquidity into a network-wide resource, how onchain activity generates sustainable revenue, and how value flows back to participants. By analysing key components such as VaultBridge, AUSD, and Chain-Owned Liquidity, it demonstrates how Katana redefines DeFi sustainability through structural alignment between users and infrastructure.



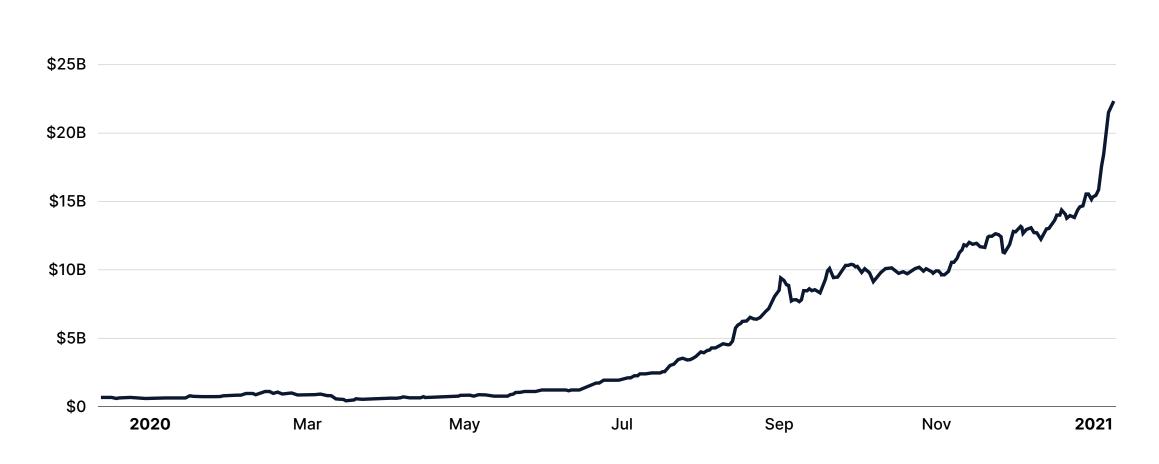


# The Shift from Speculation to Productive Capital

In its early years, DeFi set out to prove that financial primitives could exist without intermediaries. MakerDAO enabled collateralised lending onchain. Uniswap introduced automated market making, allowing trades to clear without order books. Compound laid the groundwork for algorithmic borrowing and lending markets. These breakthroughs proved that decentralised finance could function independently, but they also raised a new question: how could protocols attract enough liquidity to operate at scale?

The answer came through token incentives. Total Value Locked (TVL) became the dominant measure of success, and teams began distributing newly issued tokens to reward users and attract capital. This model reached its peak during DeFi Summer, when protocols such as Yearn, Synthetix, and SushiSwap expanded rapidly through aggressive liquidity mining campaigns.

By offering high emissions, they were able to draw liquidity at record speed. As users discovered these new financial primitives and their generous yields, DeFi's TVL soared from \$600 million at the start of 2020 to \$15 billion by year-end.



**DEFI TVL 2020 - 2021** 

Source: <u>DeFiLlama</u>

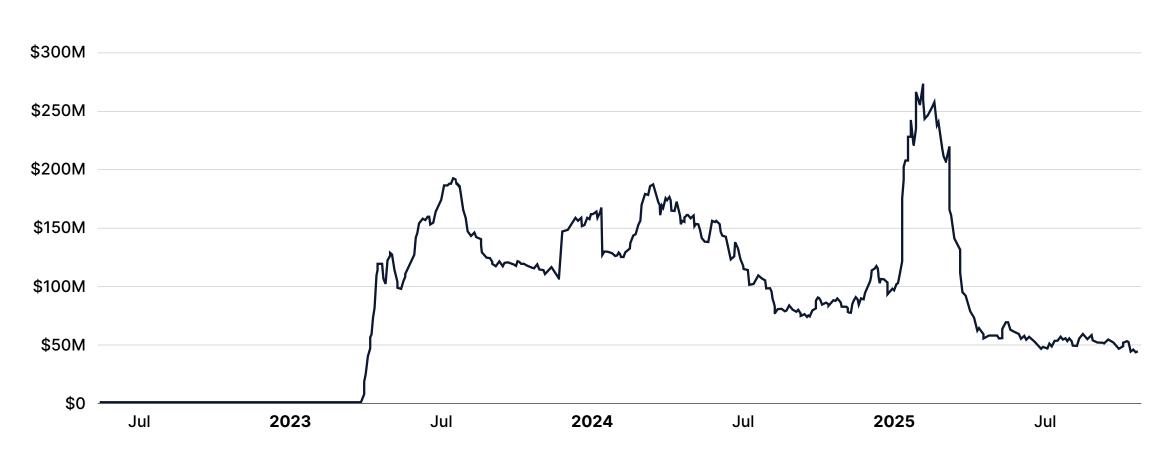


Over time, the weaknesses of this model became clear. Most liquidity providers were loyal to yield rather than to protocols. When emissions ended, they moved to platforms offering higher rewards. Gauntlet's 2023 analysis of Uniswap's liquidity mining on Optimism illustrated this well.

Liquidity increased across all pools during the incentive period, but only two out of five (wstETH/WETH 0.05% and OP/USDC 0.3%) maintained higher levels once rewards stopped. The rest soon reverted to their original state. Gauntlet found that incentives could have a lasting effect only when the short-term boost in liquidity translated into greater trading volume and fee generation, which was uncommon.

While Uniswap's programme is just one example, the same pattern has appeared across the ecosystem. Many recent campaigns show that attracting liquidity through emissions is one thing, but keeping it is another. One of the more recent examples, the zkSync Ignite programme, which allocated 300 million ZK in rewards, demonstrates this even more clearly. During its incentive period, TVL climbed to around \$260 million, but after rewards ended, it fell to about \$45 million.

## **ZKSYNC ERA TVL**



Source: DeFiLlama

This sharp decline shows that token incentives alone no longer guarantee sticky liquidity, and that genuine retention now depends on deeper factors such as trading demand, protocol utility, and sustainable fee generation.

# From Token Emissions to Real Yield

Around the same time, it became clear that DeFi could no longer rely on emissions alone to grow its TVL. As the limits of liquidity mining became visible, a new focus began to take hold around real yield. During 2023 and 2024, users started asking tougher questions about sustainability.

Phrases like "Where does the yield come from?" and "If you don't understand the yield, you are the yield" became common across DeFi discussions, reflecting a broader realisation that not all returns were built to last.

Attention shifted toward protocols that earned revenue from real activity rather than token inflation. Trading platforms helped push this shift into the spotlight, with GMX and later Hyperliquid popularising fee-sharing models that tied rewards directly to usage and volume. Users began comparing protocols not by how much they emitted, but by how much they earned.

At the same time, lending saw renewed momentum. Protocols such as Aave, Compound, and Morpho became the backbone of this new environment, offering yield linked to borrower demand rather than incentives which explains the rapid growth of lending vs other sectors which showed less sustainability in its revenue.

By late 2024, the conversation in DeFi had changed: growth was no longer about who could print the most tokens, but about who could generate real, repeatable cash flow.

# Katana: Building the Infrastructure for Productive Capital

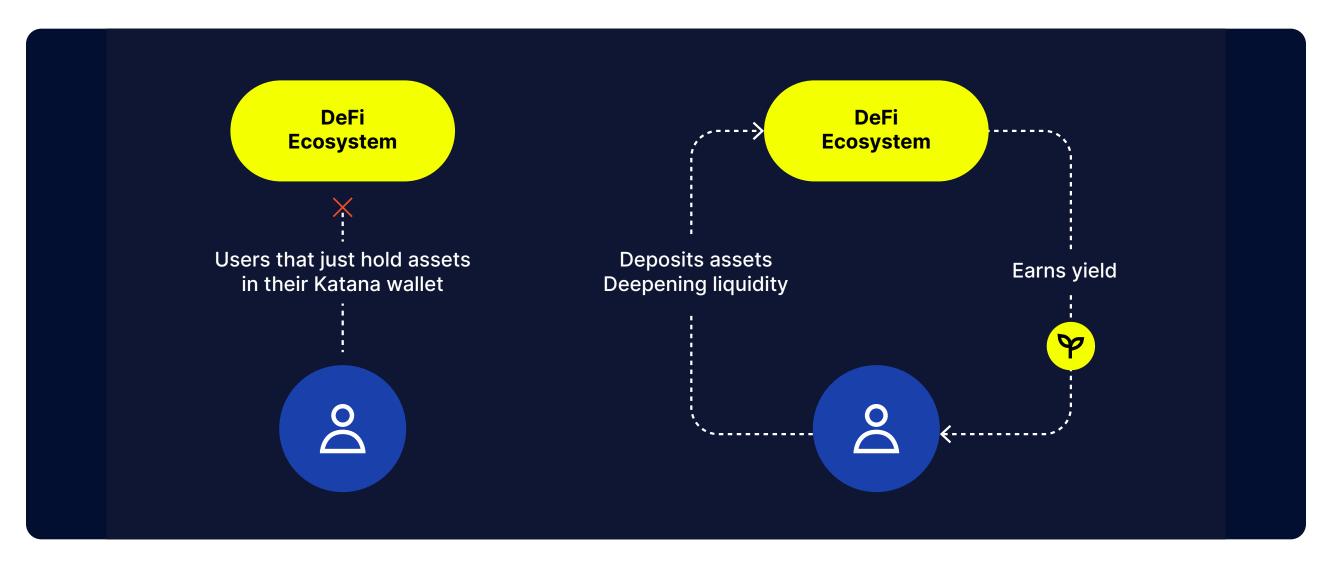
As DeFi matured and the real yield narrative took hold, attention shifted toward sustainable revenue and long-term value creation. Yet one problem persisted. Even as protocols learned to generate real yield, large portions of onchain capital remained idle. Liquidity existed, but much of it sat in wallets or contracts instead of supporting lending, trading, or market depth.

This gap between secured and productive capital became the starting point for Katana, a network built by teams from Polygon Labs, GSR, and other experienced DeFi builders. Having lived through the rise and decline of liquidity mining, the team concluded that lasting sustainability could not be achieved at the application layer. It required infrastructure that embeds yield generation directly into the base layer while drawing from multiple sources of revenue.

On top of that, Katana's philosophy is built around the idea that value should be measured not only by Total Value Secured (TVS) but also by how much of that value is actively working within DeFi.

A network might secure one billion dollars in assets, but if only a fraction of that is deployed productively, the rest adds little to growth. For this reason, every asset on a chain should be made productive, and the yield from those assets should flow not to users who simply hold them in wallets, but to those who use them actively within DeFi.

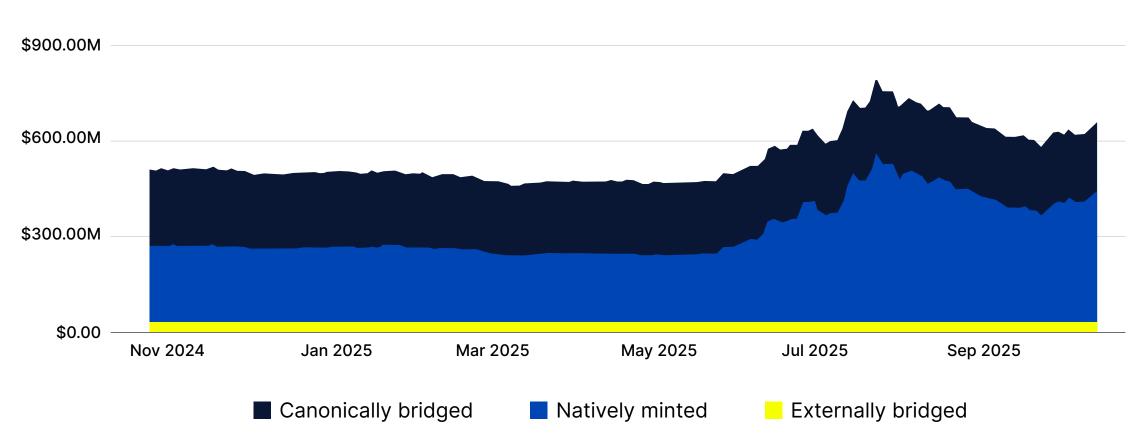
## **ACTIVE USERS EARN ALL THE YIELD**



Source: Katana

To see this problem in practice, consider the zkSync Era. The network currently secures \$657M in assets, yet only about \$50M of that is deployed in DeFi protocols. This shows how much potential liquidity remains unused when value is not designed to move productively through the system.

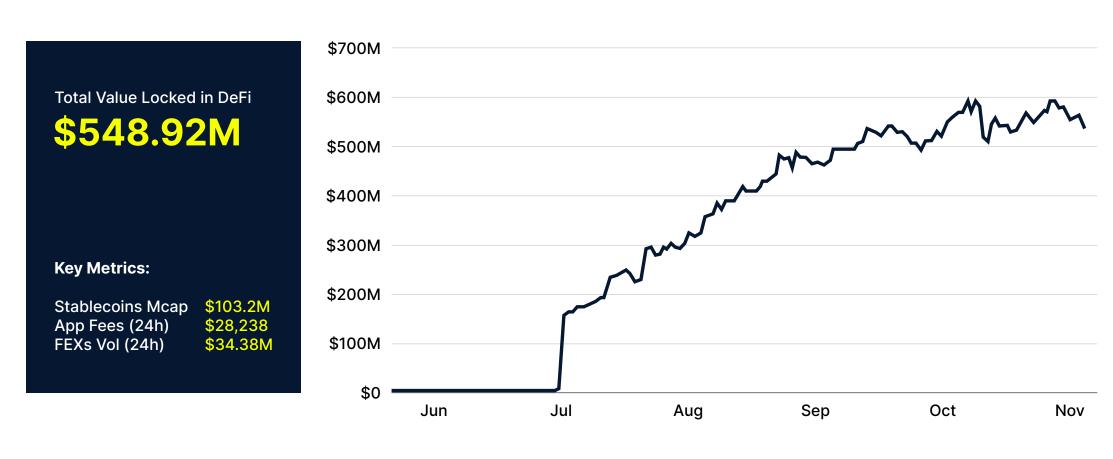




Source: <u>L2beat</u>

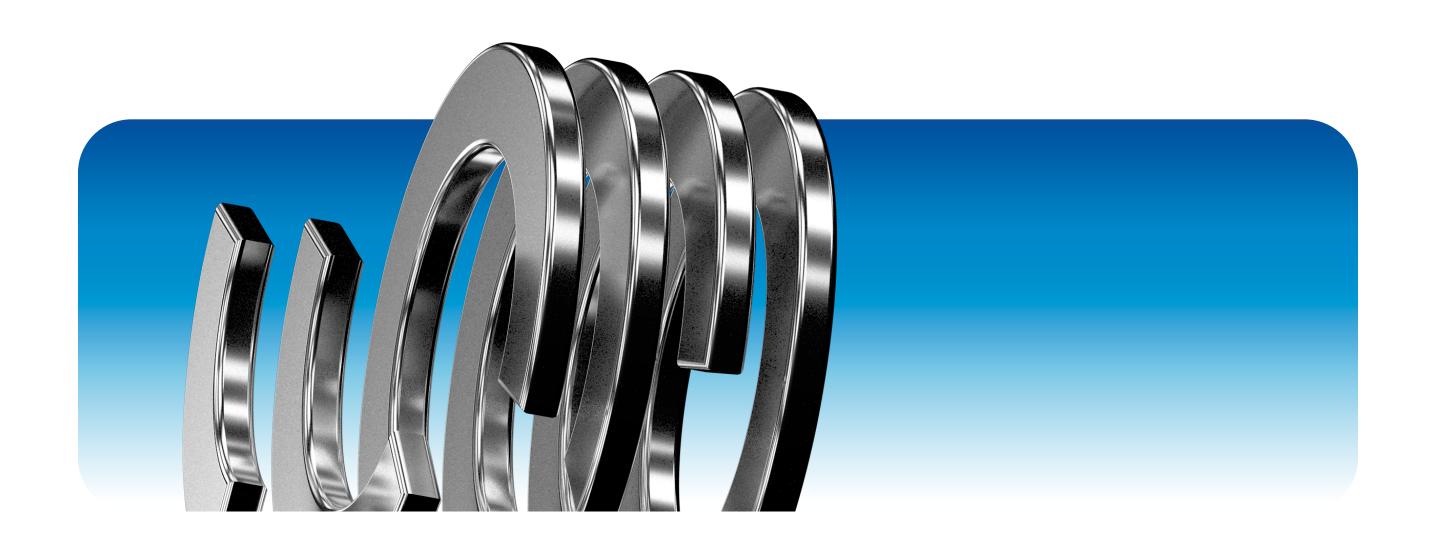
Meanwhile, Katana currently has \$548.92 million in productive TVL, actively deployed across DeFi protocols. This places it among the top 15 networks by DeFi TVL and highlights a sharp contrast with other Layer 2s, where only a fraction of total value is actively utilized within DeFi.

## **KATANA TVL**



Source: DeFiLlama

For Katana, solving this challenge required more than tweaking incentives or improving yield distribution. It meant rethinking how a blockchain is built. The team set out to design an architecture where productive capital is not an outcome of applications but a fundamental property of the network itself. The next section explores how Katana's architecture achieves this.





# Chain Architecture: Where Yield and Infrastructure Converge

# The Foundation: Rollup Architecture and Proving

When Katana set out to build a DeFi-first chain, its goal was to make yield a structural feature of the network itself, not something dependent on isolated applications. To achieve this, the team needed a foundation that was both proven in production and adaptable enough to support major architectural innovation.

Katana is connected to Polygon's AggLayer and built using the AggLayer Chain Development Kit (CDK-OP Geth), which uses OP Geth with zero-knowledge proofs. While it uses OP Geth, Katana is not part of the Optimism Superchain and, instead of being optimistic, it uses ZK proofs for security and finality.

Working in close partnership with Conduit, Katana used this CDK-OP framework to accelerate development and deployment. Conduit provided the engineering backbone for the chain, handling rollup implementation, infrastructure management, and sequencing services, while co-developing the custom modifications required for Katana's design.

This collaboration allowed Katana to focus on what mattered most: integrating liquidity, yield, and user incentives directly into the base layer of the network.

But the project's vision extended far beyond a standard rollup. To enable capital to move seamlessly and productively across the ecosystem, the team needed to solve two key challenges: slow finality and fragmented liquidity. The first was addressed through Katana's proving architecture, which builds on the OP Stack with integrated ZK proving, and the second through deep interoperability with Polygon's Agglayer network.

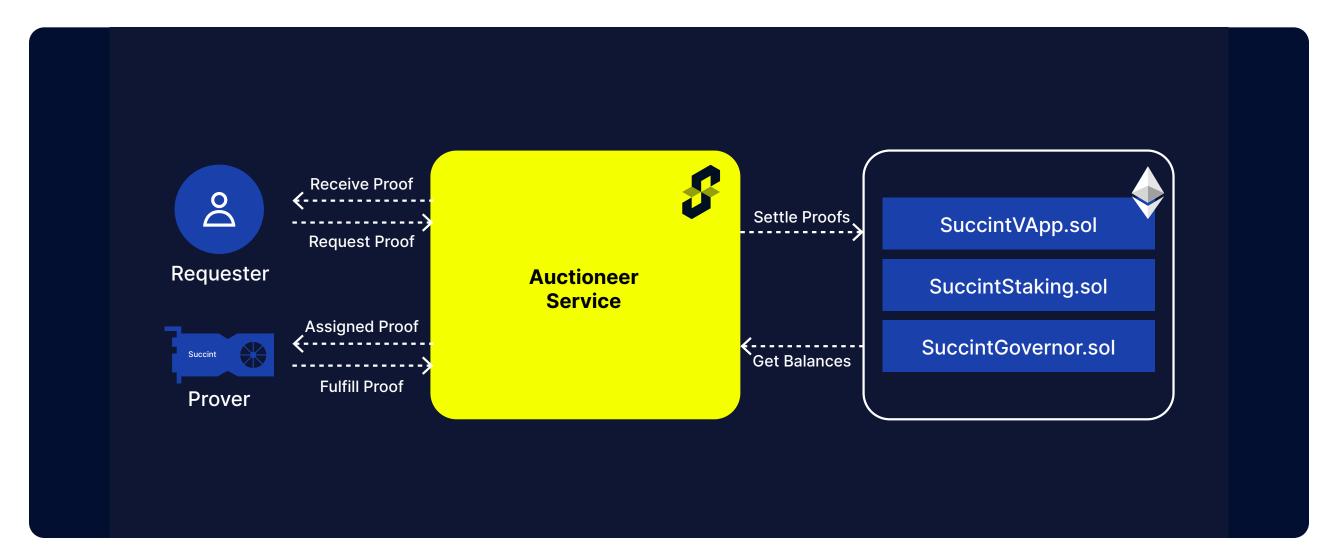
# The Proving Layer: Fast Finality with Succinct

One of the main bottlenecks for DeFi users on existing rollups is capital lockup. Withdrawals often take several days to finalise, leaving liquidity idle and discouraging active participation. Katana approached this challenge by rethinking how rollup proofs could work for a financial chain that relies on continuous liquidity movement.

The solution came from Succinct, a zero-knowledge proving network that enables chains built on the OP Stack to operate as fully verified ZK rollups. By integrating Succinct's validity proofs, Katana reduced withdrawal times from a week to just a few hours. This upgrade not only improved the user experience but also unlocked a higher level of capital efficiency, allowing liquidity to move freely between Katana, Ethereum, and other connected chains.

Succinct's Prover Network was another key part of this evolution. It decentralises the proof generation process, spreading it across a network of independent provers and driving costs down to fractions of a cent per transaction. The result is a cost-effective and scalable environment where high-frequency DeFi activities like trading, lending, and yield vaults can function without interruption or excessive fees.

## THE SUCCINCT NETWORK ARCHITECTURE



Source: Medium

This shift from optimistic to validity-based security turned Katana into a new kind of rollup: one capable of near-instant finality while maintaining the transparency, safety, and efficiency that DeFi demands.





## The Interoperability Layer: Connecting to the Agglayer

While fast finality solved the issue of capital lockups, another challenge remained: fragmented liquidity. Liquidity across Layer 2 ecosystems is often siloed, forcing users and protocols to bridge manually between chains. Katana addressed this by becoming one of the first rollups to integrate directly with Polygon's Agglayer, a unifying interoperability layer that connects multiple chains through shared liquidity and canonical bridging.

Agglayer serves as the connective layer of Polygon's ecosystem, allowing assets and messages to move freely between connected chains. This creates a fluid environment where liquidity is no longer trapped within a single domain. For Katana, this means users can onboard seamlessly from any Agglayer-connected chain, while developers can access a larger pool of capital and users without building separate integrations.

# With AggLayer L2 L2 L2 L2 L3 AggLayer Ethereum

## **POLYGON AGGLAYER**

Source: 4pillars

The integration was made possible through close collaboration between Polygon Labs and Conduit, who codeveloped the Agglayer CDK (CDK-opgeth), a framework that combines the OP Stack with ZK proving to deliver fast finality, enhanced security, and native interoperability within the Agglayer network. Katana was the first deployment to use this new framework, serving as a live proof of concept for future Agglayer-connected rollups.

Through Agglayer, Katana evolves from a standalone Layer 2 into a connected financial hub, part of a broader network of interoperable ecosystems where liquidity and capital can move freely.

# The sequencer

Every transaction on Katana generates value through the sequencer. Unlike most chains where sequencer fees are collected and stored passively, Katana's system recycles them directly into its liquidity economy. Once operational costs such as data posting to Ethereum are covered, the remaining revenue flows back into the network.



**TOP L2 SEQUENCER FEES** 

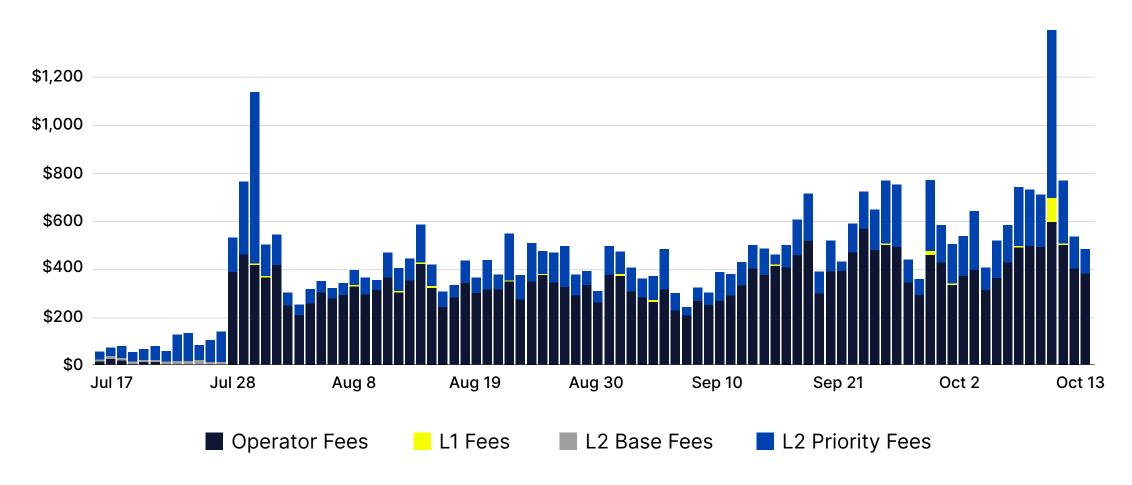
Source: growthepie

Part of these sequencer fees is allocated to Chain-Owned Liquidity (CoL), Katana's treasury of protocol-controlled liquidity that supports lending, trading, and stable yield generation. The rest is distributed to active users who contribute to the ecosystem by providing liquidity or participating in core DeFi activities.

This approach creates a feedback loop where activity drives revenue, revenue deepens liquidity, and deeper liquidity attracts more users and volume. Over time, this system compounds on itself, turning Katana's sequencer into a sustainable and recurring source of yield rather than a simple fee collector.

Currently, sequencer fees (aka network REV) on Katana accounts for only a small portion of its total revenue, representing around 2% every month. However, this could change in the future as onchain activity increases.

## KATANA: NETWORK REV



Source: Blockworks

# Built-In Yield Infrastructure: VaultBridge and AUSD

While most rollups rely on applications to generate chain revenue, Katana builds yield directly into its architecture. Two key mechanisms power this: VaultBridge and AUSD.

# VaultBridge

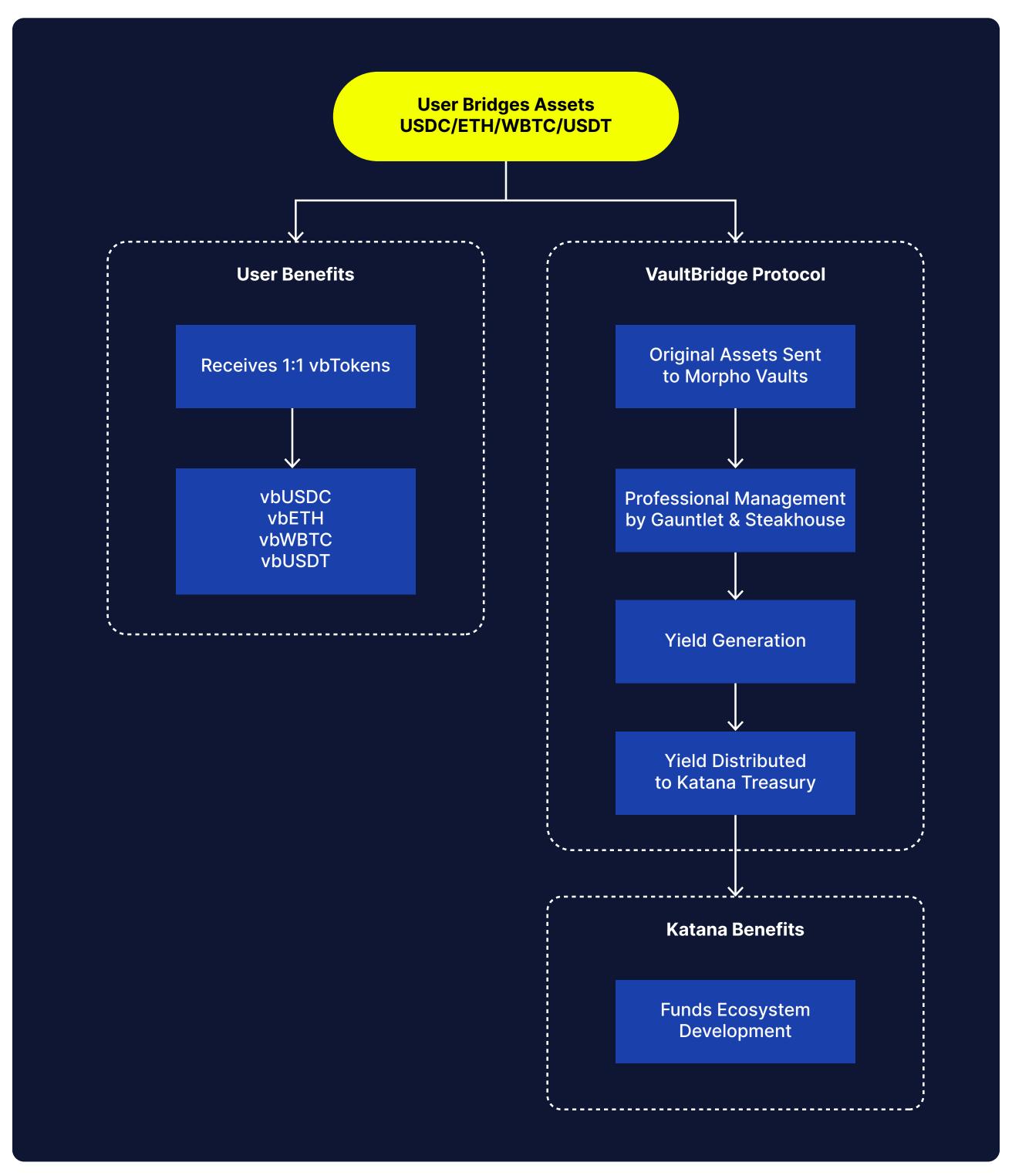
If Katana's proving and interoperability layers laid the groundwork for efficient capital movement, VaultBridge was the system that made that capital productive from the moment it entered the network.

In most ecosystems, bridged assets remain idle on Layer 1. Users deposit tokens into a smart contract, and those assets simply sit there until they are withdrawn. This inefficiency locks up billions of dollars in unproductive collateral. VaultBridge was created to change that by giving every bridged asset a role in yield generation.

When users bridge supported tokens such as USDC, WETH, USDT, or WBTC into Katana, their assets are automatically deployed into low-risk yield strategies on Ethereum via Morpho Vaults, which are managed by independent risk curators like Gauntlet and Steakhouse Financial. These vaults generate real yield that is streamed back to Katana and distributed to users who actively participate in DeFi.

This design also makes Katana one of the most Ethereum-aligned Layer 2s, as assets bridged to Katana continue to support and strengthen the Ethereum DeFi ecosystem through Morpho deposits.

## A YIELD-BACKED ECONOMY



Source: X



Each bridged asset is represented on Katana by a vbToken, such as vbUSDC or vbWBTC. These tokens function like their underlying assets but with an important distinction: only users who use them productively earn the yield. Depositing vbTokens into lending markets, liquidity pools, or other DeFi protocols on Katana qualifies them for rewards in real-yield liquidity mining campaigns, while holding them passively in a wallet does not.

This design ensures that yield flows exclusively to participants who contribute to liquidity and market depth, aligning individual incentives with network efficiency. It also ties Layer 1 and Layer 2 more closely together, creating a continuous flow of value between Ethereum and Katana.

VaultBridge is more than a bridge. It is a yield-routing mechanism that turns idle capital into productive assets by default and currently serves as the largest revenue driver for Katana, contributing between 80% and 90% of the network's monthly revenue.

# \$600K \$500K \$400K \$300K \$200K \$100K \$100K \$0 Jun 2025 Jul 2025 Aug 2025 Sep 2025 Oct 2025

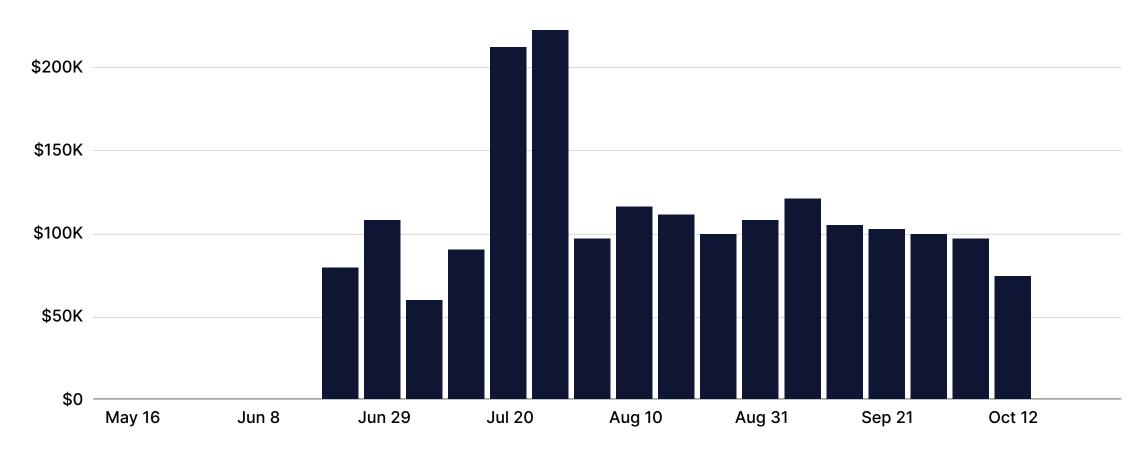
KATANA: TOTAL NETWORK REVENUE

Source: Blockworks

This revenue is already at a strong level, ranging between \$400K and \$500K per month, and is expected to grow further as more assets are bridged to Katana.



## KATANA: VAULT BRIDGE REVENUE



Source: Blockworks

## AUSD: Katana's native stablecoin

While VaultBridge channels onchain yield from Ethereum, AUSD extends Katana's economic model into real-world assets. Developed by Agora, AUSD is Katana's native stablecoin, backed by U.S. Treasury bills and designed to route off-chain yield directly into Katana's DeFi ecosystem.

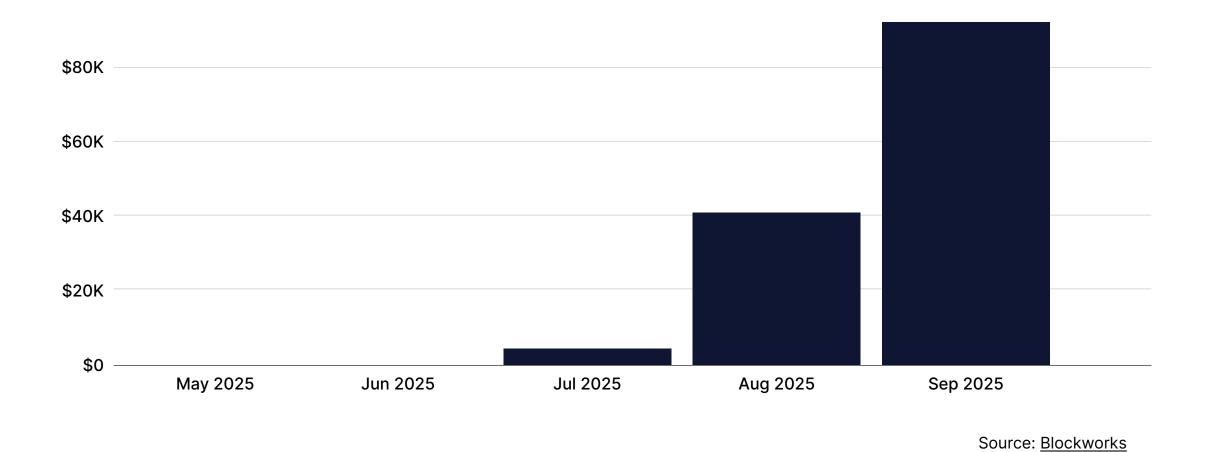
Traditional stablecoins like USDC and USDT are also backed by Treasuries, but their yield goes to the issuing company rather than to the users who provide liquidity or take on counterparty risk. AUSD inverts this model. The yield generated by its underlying collateral flows back to the Katana Foundation, which distributes it across DeFi pools, lending markets, and liquidity providers

USD is minted natively on Katana, meaning it does not rely on external bridges or wrapped assets. Users can mint AUSD directly through Agora or acquire it on Sushi, gaining access to a stablecoin whose yield supports onchain liquidity with boosted returns. This makes AUSD appealing to both retail users and institutions seeking a transparent stablecoin whose DeFi pools are enhanced by offchain yield.

Its integration into Katana's flywheel is strategic. Yield from Treasuries provides a steady, uncorrelated revenue stream that helps stabilize the ecosystem during market downturns. When DeFi yields decline, AUSD continues to generate income from traditional fixed-income markets, supporting consistent returns and reinforcing liquidity.

At present, with onchain yields still elevated and Treasury yields near 4%, AUSD contributes between 7% and 16% of monthly revenue, amounting to \$40,000 in August and \$90,000 in September.

## **KATANA: TOTAL AUSD REVENUE**



Katana's primary yield sources are VaultBridge yield, AUSD Treasury yield, yield generated from Chain-owned Liquidity (CoL), and sequencer fees. While CoL itself is not a separate yield source, the liquidity it deploys in DeFi earns returns that flow back to the chain.

A portion of VaultBridge yield, AUSD yield, and sequencer fees is directed into CoL, which compounds over time by reinvesting earnings into more liquidity and DeFi incentives. This feedback loop deepens liquidity and strengthens the long-term sustainability of Katana's economic model.

Together, VaultBridge, AUSD, yield generated from CoL, and sequencer fees form a diversified and resilient foundation for Katana's economy. One mechanism channels crypto-native yield from Ethereum, another anchors it in real-world income, and CoL ensures that this capital continues to grow productively within the DeFi ecosystem.





# **Applications and Ecosystem**

Katana is built on the idea that DeFi has become a structural component of blockchain architecture rather than a separate layer of applications. Its design reflects this integration. Just as a chain selects dedicated providers for core functions such as proving or sequencing, Katana embeds essential DeFi protocols directly into its foundation. Sushi powers its decentralized exchange, Morpho provides the lending market infrastructure, and Kensei serves as the core app token launchpad.

This approach ensures that Katana's architecture is only as strong as the ecosystem operating on top of it. From inception, the network was designed to avoid the liquidity fragmentation common across DeFi ecosystems. Instead of dozens of competing protocols each pursuing their own incentives, Katana enshrines a focused set of core applications at the protocol level, concentrating liquidity, yield, and user activity within a single coherent system.

These applications form the operational backbone of the network, each handling a specific financial function while feeding value back into the same liquidity and reward loop. Every trade, loan, and deposit reinforces the collective revenue base, allowing activity to compound across the ecosystem rather than disperse among isolated protocols.







# Sushi: The Spot Liquidity Layer

Sushi serves as Katana's primary exchange venue for spot trading and market making. By concentrating liquidity on a single DEX, Katana eliminates the intra-chain fragmentation typically caused by competing AMMs, creating deeper liquidity and more efficient pricing across all trading pairs.

Multiple inflows support yield within Sushi. VaultBridge channels yield from Ethereum-based Morpho strategies into Sushi pools for LPs, while sequencer fees collected on Katana are partially deployed by Chain-owned Liquidity (CoL) to reinforce liquidity during volatile conditions. All deployed CoL within Sushi is actively managed through concentrated liquidity managers (CLMs) such as CharmFi, Steer Protocol, The Deep, and Gamma Strategies, which optimise Sushi V3 bands to achieve greater efficiency than typical retail LPs. Trading fees are reinvested in the same system, compounding returns and bolstering Katana's shared liquidity base.

This has resulted in a strong level of liquidity in the pools on SushiSwap, with a current TVL of \$146M. In August, 48% of application fees were generated through Sushi, while in September this share stood at 26%.

# 100% 80% 60% 40% 20% Jun 2025 Jul 2025 Aug 2025 Sep 2025

KATANA: APPLICATION FEES

Sushi's integration into Katana's broader yield economy ensures that liquidity providers receive returns derived from actual trading activity and external yield sources, establishing a stable foundation for capital formation.

Source: Blockworks



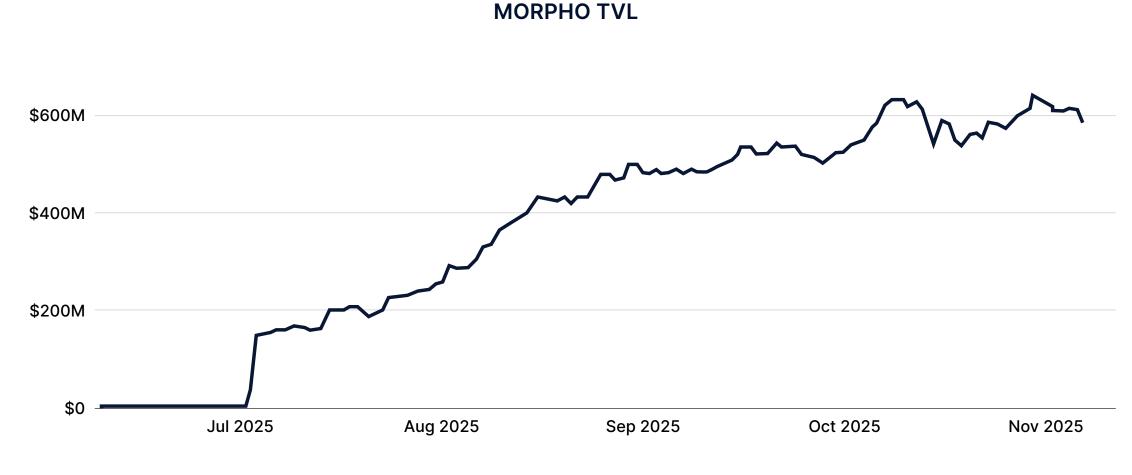


# Morpho: The Credit Layer

Morpho underpins Katana's lending and borrowing markets, serving as the network's primary credit layer. Depositors and borrowers earn returns from four main yield sources: borrower interest, VaultBridge yield from Ethereum-based vaults, AUSD yield from Treasury reserves, and token emissions from KAT and MORPHO. A portion of Katana's Chain-owned Liquidity (CoL) is also deployed into Morpho on the deposit side, where it earns yield alongside external participants. This ensures that liquidity owned by the chain remains productive and supports broader onchain activity.

The connection between Morpho and Sushi demonstrates Katana's focus on capital efficiency. Liquidity supplied to Morpho can be borrowed and redeployed into Sushi trading pools, deepening markets and generating additional fees. The proceeds from these activities strengthen the lending base, creating a circular flow of capital that keeps liquidity active and reinforces both layers of the network.

As of October 2025, Morpho accounts for a large share of Katana's TVL, with \$617 million held on the platform, \$200 million in outstanding loans, and significant levels of both deposit and borrowing activity.



Source: Morpho





# Kensei: Token Launch Infrastructure

Kensei integrates features that promote fair launches and sustainable liquidity. Each token is deployed through an on-chain bonding curve with liquidity locking and anti-sniping protection, ensuring transparent price discovery and immediate market depth. A reputation system tracks user behavior through XP and badges, rewarding fair participation and penalizing manipulative activity.

All launches are connected directly to Katana's liquidity architecture. Tokens transition automatically from the bonding curve to live pools on Sushi, while future integrations will enable pairing with vbUSDC or collateralization through Morpho. This design ties new token activity to Katana's broader yield cycle, generating sequencer fees and trading volume that feed back into Chain-Owned Liquidity (CoL).

Since Kensei is not live yet, there is no data on how much revenue it could contribute to the ecosystem. However, as new tokens are launched through the platform, both sequencer revenue and LP fees are expected to rise as more projects go live on Katana via Kensei.

## **Core Asset Providers**

Katana's asset layer introduces productive collateral sources designed to maintain liquidity diversity while preserving systemic integration. Each asset type contributes specific yield or composability characteristics that reinforce the network's liquidity architecture.

- VaultBridge Assets (vbUSDC, vbETH, vbUSDT, vbWBTC): Representations of bridged assets deployed in Morpho vaults on Ethereum.
- Agora (AUSD): A natively issued stablecoin backed by U.S. Treasuries that routes off-chain yield to Katana's DeFi pools.
- BitVault (bvUSD): A Bitcoin-backed stablecoin expanding BTC's role as collateral.
- Lombard (LBTC, BTCK): LBTC is a yield-bearing BTC wrapper; BTCK is a non-yield-bearing wrapper minted natively on Katana.
- EtherFi (weETH): Restaked ETH collateral offering staking yield while remaining liquid within Katana.
- Jito (jitoSOL): The liquid-staked SOL token has been bridged to other ecosystems via LayerZero using its Omnichain Fungible Token (OFT) standard.
- Universal (uTokens such as uSOL, uADA, uXRP): A cross-chain asset layer enabling composable liquidity across multiple ecosystems.

These assets are fully interoperable across Katana's core applications. AUSD, for instance, can serve as collateral in Morpho and as a trading pair on Sushi. The integration of multiple asset issuers ensures that yield diversity and capital efficiency remain structural features rather than temporary incentives.



# The Flywheel: How Revenue Flows Through Katana

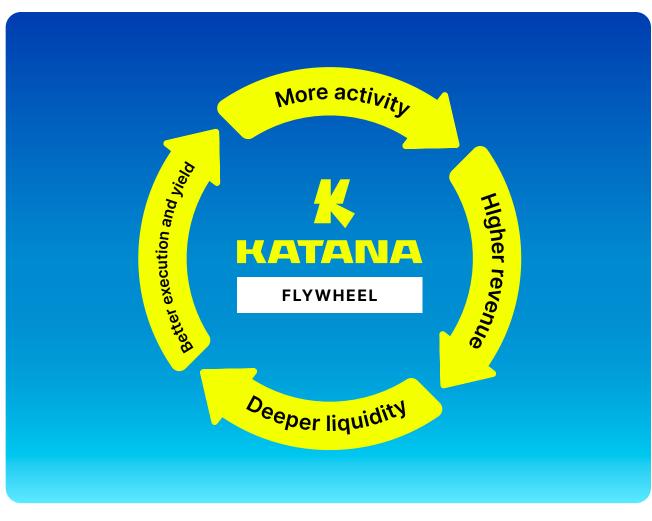
Having explored Katana's infrastructure and core applications, it is now possible to understand how these elements work together as a single, self-reinforcing system. The network's design ensures that every layer sequencer, bridge, applications, and assets feeds into a unified flywheel that drives liquidity, yield, and value accrual to users and the protocol alike.

Katana's economy is supported by four primary revenue sources:

# Sequencer fees: Every onchain transaction contributes to network revenue. These fees are aggregated and partially redirected into Chain-Owned Liquidity (CoL), reinforcing permanent liquidity depth across Katana's trading and lending markets.

2. VaultBridge revenue: Bridged assets such as USDC, ETH, USDT, and WBTC are deployed into yield-generating vaults on Ethereum. The resulting income is streamed back to Katana and distributed to active DeFi participants through liquidity mining campaigns, increasing the in-kind yield users receive relative to other chains.

KATANA'S FLYWHEEL



Source: DL Research

- **3.**CoL yield: The network's own liquidity reserves are deployed across DeFi strategies, earning protocol-level returns that fund further liquidity growth. CoL is deployed efficiently through Automated Liquidity Managers (ALMs) such as Charm Finance, Steer Protocol, The Deep, and Gamma Strategies, aligning Katana's liquidity operations with leading ecosystem partners.
- **4.**AUSD treasury yield: Katana's natively issued stablecoin, AUSD, is backed by U.S. Treasuries. The yield generated from these off-chain assets is shared with DeFi users through increased yield in AUSD DeFi pools, diversifying revenue sources and providing a stable baseline of returns.

These four flows form the foundation of Katana's flywheel. Activity on the network generates revenue, which is recycled into new incentives, deeper liquidity, and improved user experience.

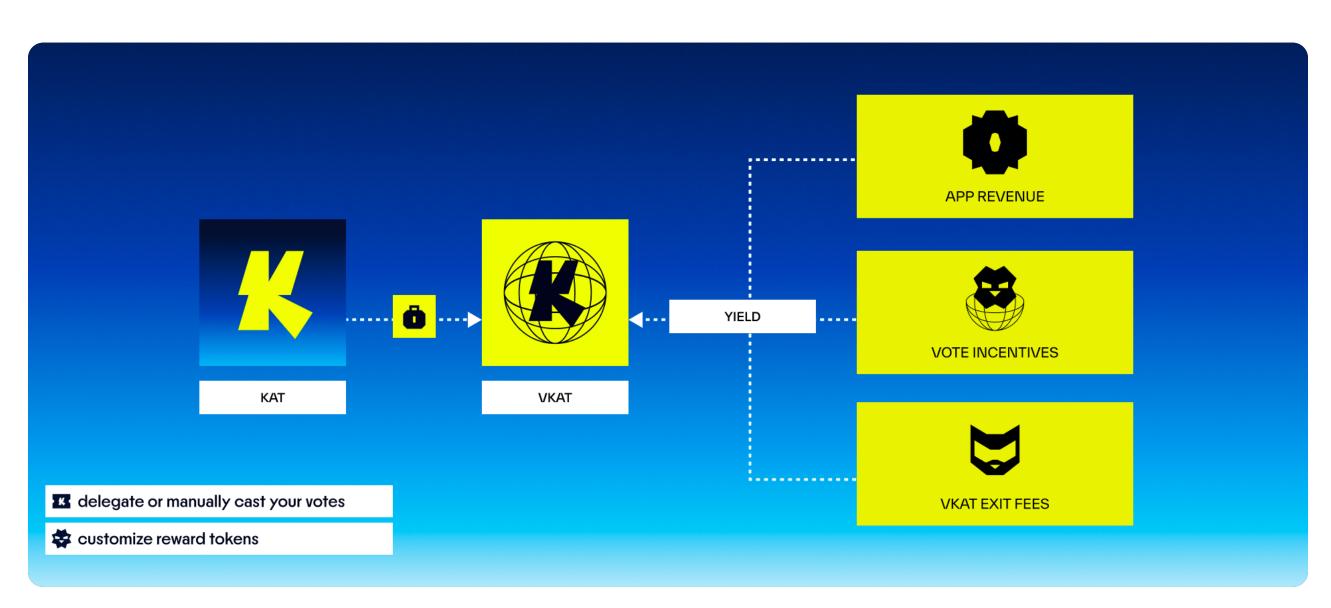
Unlike traditional incentive loops, this model is self-sustaining. Yield is not created just through inflationary emissions, but through the productive deployment of capital and real revenue generation across multiple sources.



# The Role of KAT and vKAT

At the centre of this economic loop is KAT, Katana's native liquidity coordination token. KAT represents the governance and reward layer through which KAT liquidity incentives are distributed and aligned. The system is designed in partnership with Aragon, extending the ve(3,3) framework pioneered by Curve and Aerodrome into a chain-wide coordination mechanism. This has never been attempted at the chain level before, marking a first in network-wide liquidity coordination.

Holders of KAT can lock their tokens to receive vKAT (voting KAT), which grants them the ability to direct future KAT emissions toward specific pools and applications, starting with Sushi and later expanding to Morpho, Kensei, Spectra, and other ecosystem protocols. By voting for particular markets, vKAT voters earn a share of the fees generated by those pools, along with potential vote incentives (also known as "bribes") from protocols and asset issuers seeking to attract KAT emissions.



THE GLOBAL VOTE INCENTIVES MARKET: vKAT

Source: Katana

This system converts KAT liquidity incentives into a participatory governance process. Rather than relying on arbitrary token distributions, emissions are allocated by users who have locked value and taken a long-term position in the network. Exit fees and cooldowns reinforce this long-term alignment by redistributing early withdrawal fees to remaining vKAT holders.



## DYNAMIC VKAT EXIT FEE

exit initiated	dynamic exit fee	
day 1		25%
day 10		20%
day 20		15%
day 30		10%
day 45		2.5%
*dynamic exit fee decre	ases 0.5% each day during the cooldown	period

Source: Katana

Over time, Katana's goal is to transition toward revenue-backed KAT emissions. As chain revenue grows, KAT emissions directed by vKAT voters will increasingly be funded through KAT buybacks rather than new token issuance. This ensures that incentives remain sustainable, supported by real revenue rather than KAT dilution.

# A Self-Sustaining Liquidity Engine

When you put all of this together, the full vision of Katana comes into view.

Each component of the system feeds into the next, creating a circular and revenue-backed economy. Activity on Katana generates sequencer fees and application revenue, which flow back into the ecosystem, further spinning the flywheel of growth and liquidity.

As CoL expands and vKAT voting directs incentives, the network's liquidity grows deeper and more efficient. Users earn yield from real activity such as trading, lending, and vault income, while vKAT voters receive a share of the protocol fees. Buybacks and rewards complete the loop, attracting more capital and driving further participation.

This model allows Katana to grow without depending on inflationary token issuance. Every part of the ecosystem reinforces another, forming a compounding flywheel of liquidity, incentives, and productivity.

Katana's design brings the idea of sustainable DeFi full circle. It creates an economy where revenue, liquidity, and yield are all tied to genuine network activity, and where users, developers, and the chain itself benefit together from growth that lasts.

# **Competitive Landscape and Positioning**

The Layer 2 ecosystem has expanded rapidly, with tons of different L2s now competing for liquidity and users. These networks often fall into two categories: general-purpose rollups, which aim to host any kind of application, and app chains, which specialise in a single product or use case.

Katana occupies a middle ground between the two. It is sector-specific, designed entirely around the needs of DeFi. This specialisation gives it the advantages of an app chain's focus without the limitations of a single-product ecosystem.

The following sections explore how Katana differs from both general-purpose and app-specific models, and why its DeFi-centric design offers a more sustainable framework for liquidity, yield, and long-term network value.

# General-Purpose Layer 2s

## The Fragmentation Problem

In general-purpose ecosystems, value capture tends to be dispersed across hundreds of independent applications. The rollup itself collects sequencer fees, while individual protocols must design separate incentive systems to attract liquidity. This separation fragments economic activity.

Fees paid by users of one protocol rarely strengthen the network as a whole, and much of the value generated exits the ecosystem through short-term emissions or external yield programs.

While this model benefits application diversity, it limits the compounding effects between users, protocols, and the base chain. Liquidity providers, for example, have little reason to remain loyal to one ecosystem, since their rewards are isolated at the protocol level. Meanwhile, sequencer fees often flow upward to central treasuries rather than circulating back into DeFi activity.

# Katana's Sector-Specific Alternative

Katana was designed to address this disconnect by narrowing its focus. Instead of optimising for general throughput, it optimises for DeFi capital efficiency. Every layer of Katana, from transaction execution to yield distribution, is structured around liquidity depth, sustainable yield, and user participation. This makes the network inherently more aligned with the economic goals of both DeFi applications and their users.

You can see this contrast most clearly when comparing Katana with the three largest Layer 2 networks, Arbitrum, Optimism, and Base. The difference lies not only in architecture but also in how each system treats applications, liquidity, and users within its economy.

## **KATANA vs L2s**

COMPARATIVE OVERVIEW					
CATEGORY	ARBITRUM / OPTIMISM / BASE	KATANA			
Primary Focus	General-purpose scalability	DeFi-specific architecture			
Withdrawals	~7 days (challenge window)	~3 hours			
Core Applications	Deployed by independent teams	Enshrined at the protocol level (Sushi, Morpho, Kensei)			
Revenue Model	Sequencer fees accrue to treasury	Multi-source yield: VaultBridge, CoL, AUSD, Sequencer fees			
Liquidity Structure	Fragmented across isolated apps	Unified and chain-owned, recycled into user yield			
Economic Alignment	Weak link between users and network	Strong feedback loop aligning users, apps, and chain			
Incentive Model	Emissions-driven liquidity	Revenue-backed, self-sustaining liquidity flywheel			

Source: DL Research

Katana's approach does not seek to replace general-purpose Layer 2s but to complement them through specialisation. By narrowing its scope to DeFi, Katana creates tighter alignment between activity and value distribution. This allows liquidity to compound rather than fragment and establishes a model where users, applications, and infrastructure benefit from the same economic cycle.

# **Application-Specific Chains**

In contrast to general-purpose rollups, a new wave of application-specific Layer 2s has emerged, designed around single use cases such as derivatives trading. Examples include Lighter, Derive Chain, and Paradex, each optimised for performance and latency in their own markets.

These chains offer strong advantages in speed, execution, and capital efficiency for their target applications. Lighter focuses on high-performance order book infrastructure for derivatives markets, while Derive Chain extends the OP Stack to create a low-latency trading environment. Paradex, meanwhile, uses StarkWare's technology to settle derivatives efficiently with strong risk controls.

However, this single-product focus comes with structural limitations. App-specific chains typically rely on one source of revenue, attract a narrow user base, and depend heavily on sustained demand in their chosen vertical. Their liquidity, incentives, and governance are closely tied to one application, which makes them efficient in bull markets but fragile in periods of declining activity.

#### KATANA vs APPCHAINS

CATEGORY	LIGHTER	PARADEX	DERIVE	KATANA
Use-Case Focus	Derivatives / perpetual markets	Exchange / derivatives infrastructure	Options, Perpetuals, Structured Products	Full-spectrum DeFi (trading, lending, stable, yield)
Revenue Model (Primary)	Trading / derivatives fees	Exchange / settlement fees	Derivatives trading fees, options premium, structured finance	Multi-source yield (sequencer fees, VaultBridge, CoL, AUSD)
Liquidity Scope	Concentrated in derivatives markets	Concentrated on exchange / settlement pairs	Focused on derivatives and structured products liquidity	Shared across multiple core DeFi primitives
Volatility / Risk Exposure	High (derivative markets, leverage)	High (exchange cycles)	High (derivatives & structured product cycles)	Lower (diversified yield sources across ecosystems)

Source: DL Research

Katana's approach blends the strengths of both models. Like app chains, it embeds DeFi functionality directly into its infrastructure, but instead of relying on one product, it supports a full suite of financial primitives. Trading (Sushi), lending (Morpho), and token issuance (Kensei) are all enshrined at the protocol level, sharing the same liquidity and yield base. This vertical integration allows Katana to maintain the focus of a specialised chain while preserving the economic diversity of a broader ecosystem.

However, to compete with app-specific chains such as Lighter, Derive Chain, and Paradex, it will be important for Katana to eventually expand into derivatives and perpetuals. These sectors continue to dominate specialised rollups, and adding them would further strengthen Katana's position as a complete DeFi network.

Katana stands apart from both general-purpose and application-specific rollups. It defines a third category: the sector-specific chain. By embedding an entire DeFi stack within its base layer, Katana turns liquidity into a shared network resource and yield into a sustainable revenue stream for its users.

The key takeaway is that Katana has found a balanced path forward. It combines the robustness of a well-designed Layer 2 with a focused, sector-specific vision. Instead of trying to serve every use case or narrowing itself to a single product, it focuses on the full DeFi stack as its domain. This approach allows Katana to align users, protocols, and infrastructure under one coherent economic system, offering a model for how specialised blockchains can grow sustainably while remaining deeply integrated within the wider ecosystem.

# **Risks and Considerations**

While Katana's design addresses many of the sustainability issues seen in earlier DeFi models, several risks and dependencies remain. These risks are not unique to Katana but are important considerations for understanding its long-term resilience.

# **Market Dependence**

Katana's revenue model draws from both on-chain and off-chain sources, including Ethereum-based lending markets and U.S. Treasury assets. Although this diversification provides partial insulation from volatility, yields still move with broader market cycles. Periods of low borrowing demand on Ethereum, for example, can compress supply rates and reduce revenue from VaultBridge.

To mitigate this, Katana's revenue base is diversified across multiple layers. Yield from Chain-Owned Liquidity (CoL) and AUSD's treasury-backed reserves provides stability even when lending demand softens, while exposure to assets in other ecosystems, such as uSOL and jitoSOL, introduces additional diversification of yield opportunities for users, historically only found outside of the Ethereum ecosystem.

## **Smart Contract and Technical Risk**

As a highly composable network, Katana's interconnected applications introduce dependencies between components such as Sushi, Morpho, VaultBridge, and CoL. While this interconnection increases system efficiency, it also expands the potential surface area for technical risk.

However, Katana's reliance on established, audited protocols like Sushi and Morpho helps limit this exposure. By focusing on a small number of integrated core applications rather than many independent deployments, the overall attack surface is narrower than in more fragmented ecosystems. Continuous audits and onchain monitoring further help safeguard against potential vulnerabilities.

# **Sustainability Watchpoints**

Katana's long-term sustainability depends on maintaining a steady flow of user activity and liquidity. Most of the network's revenue originates from VaultBridge, meaning Ethereum lending demand is a key variable for yield generation. If market activity slows or yields compress for extended periods, compounding effects may weaken.

Nevertheless, Katana's structure is designed to smooth these fluctuations. CoL and AUSD provide revenue continuity through protocol-owned and offchain-backed assets, while the integration of revenue-backed liquidity mining campaigns ensures that user incentives remain linked to real economic output rather than just KAT emissions.



# Conclusion

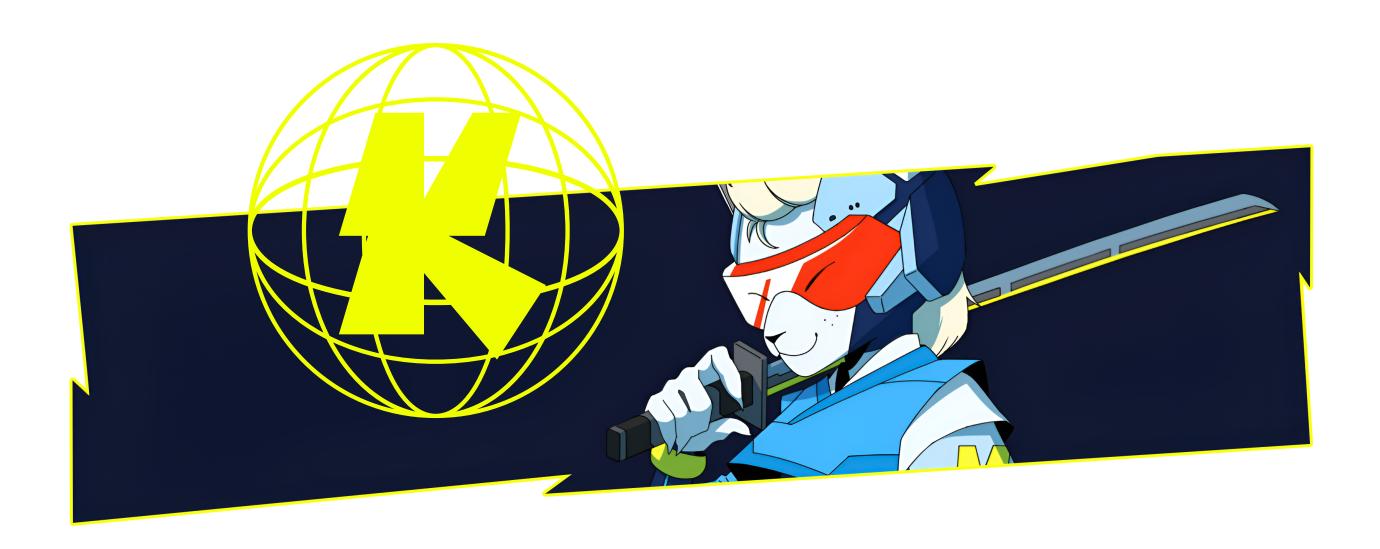
Over the past five years, DeFi has evolved from an experimental concept into a diverse ecosystem of financial primitives. Yet much of this growth was driven by short-term incentives rather than sustainable value creation. The shift from emission-based expansion to revenue-based yield has marked a critical turning point, and Katana represents the next logical step in that evolution.

By integrating DeFi directly into the base layer, Katana transforms how a blockchain interacts with liquidity, yield, and users. Its architecture ensures that every component, from the sequencer and VaultBridge to AUSD and Chain-Owned Liquidity to vKAT voting, feeds into a single economic loop where value circulates between users, applications, and the protocol itself.

This design marks the evolution from TVL-chasing protocols to cashflow-driven ecosystems. Capital bridged into the network becomes productive by default, generating yield from real activity across trading, lending, and offchain income rather than token emissions. The result is a structure where liquidity compounds naturally and growth stems from participation instead of inflation.

By aligning the interests of users, developers, and the network, Katana creates a self-sustaining economic system. Activity produces revenue, revenue deepens liquidity, and deeper liquidity attracts more activity. Each cycle strengthens the next, forming a durable flywheel of productivity and value creation.

This is what makes Katana stand out among recently launched chains: it has found a strong middle ground between being general-purpose and app-specific. It will be interesting to see what additional core applications Katana introduces and how it continues to expand yield opportunities for its users.







# The Katana Flywheel:

Rethinking Incentives and Liquidity for Sustainability