

# Ark

The DeFi Tower Built on A Single Reservation Primitive.



Get the gist in 2 minutes

# The TL;DR

One reservation primitive unifying spot, options & lending — gasless, AI-driven execution.



## Mission

Unify DeFi’s fragmented markets into one AI-powered, gasless reservation layer.

Unify



## Innovation

Single “trade-now, settle-later” primitive that guarantees execution with bond penalties.

Simplify



## Impact

TradFi-grade reliability + capital efficiency — without fragmented liquidity.

Prove



The Pain

# The Problem

## Fragmentation

### DeFi's Capital Is Trapped in Silos

Liquidity is locked in rigid smart contracts, each serving a narrow function. This fragmentation drains efficiency, limits reuse of funds, and forces traders across multiple protocols just to complete a single strategy.

## Exposure

### Public Formulas Invite Exploitation

AMMs and lending markets expose their pricing logic on-chain, allowing front-running, MEV attacks, and predictable rate manipulation — creating losses and distrust.

## Complexity

### Siloed UX Blocks Adoption

Users must juggle different interfaces and wallets for trading, options, and lending. The result: a fragmented, expert-only experience that keeps mainstream users out.

## Instability

### Uniform Risk Pricing Breaks Fairness

Safe and risky borrowers face the same rates, while volatile oracles trigger forced liquidations — producing unpredictable costs and systemic instability.



Ark's remedies

# The Solution

Unification

One Reservation  
Primitive for All of  
DeFi

A single “trade now, settle later” primitive connects spot, options, and lending into one seamless, gasless platform.

Incentivization

Bond-Backed  
Reliability

Market makers post a one-time bond and face penalties for failed execution, ensuring users always get filled or compensated.

Authomation

AI-Powered Private  
Pricing

Off-chain AI models compete to quote optimal prices — eliminating front-running and enabling smarter, market-driven rates.

Efficiency

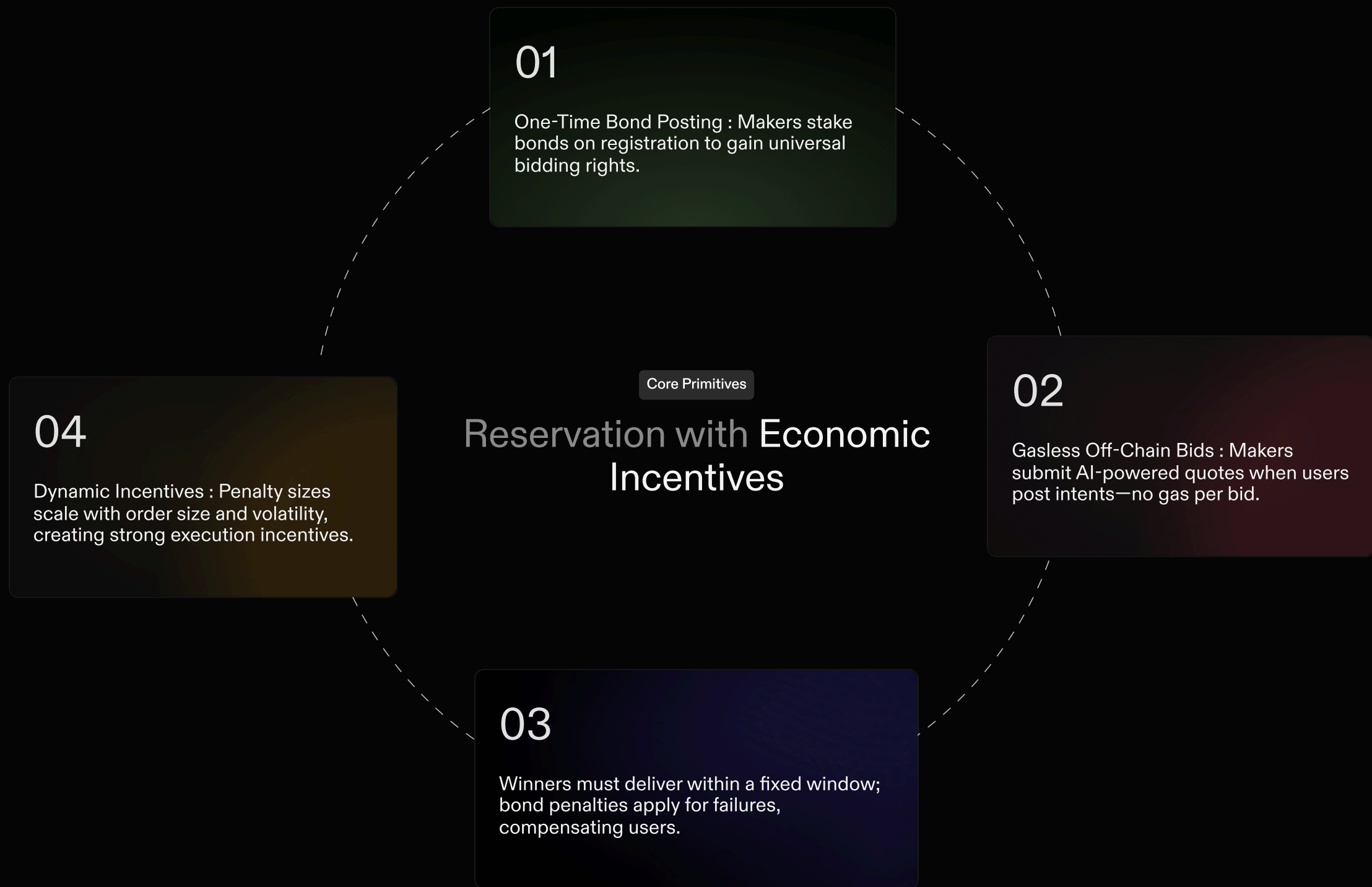
No Locked Liquidity,  
No Wasted Gas

Makers source liquidity dynamically, users post intents off-chain, and settlement happens only when confirmed — maximizing capital efficiency.

Experience

TradFi-Grade  
Simplicity, DeFi  
Freedom

Unified UX and guaranteed outcomes deliver the smooth, predictable experience users expect from traditional finance.



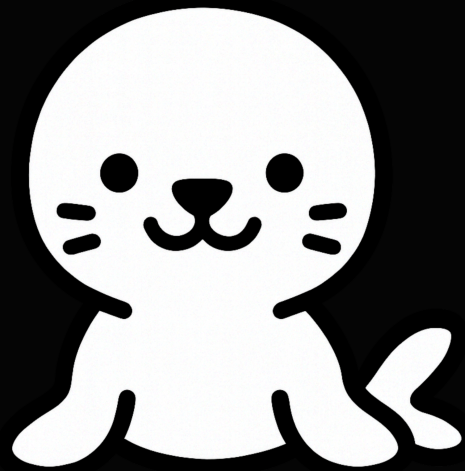


Unification

# Products Overview

Trinity

# Products



## Seal

- Core Use: Spot & limit trading
- Key Value: Gasless orders, penalty-backed fills



## Hedgehog

- Core Use: Options on any asset
- Key Value: AI pricing + physical delivery



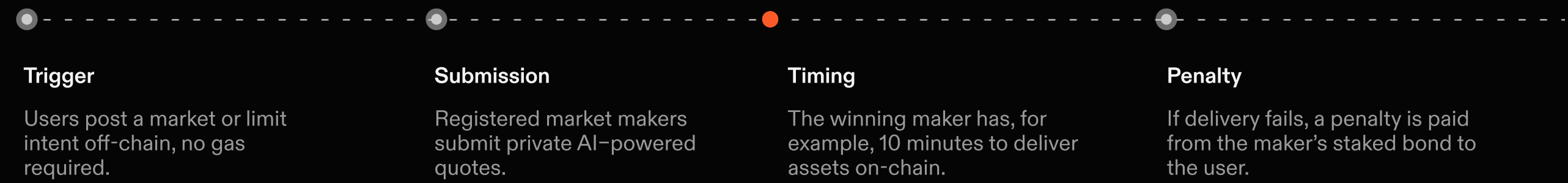
## Squirrel

- Core Use: Fixed-rate lending
- Key Value: No liquidations, risk-based rates

Spot & Limit Trading

# Seal

## How It Works?





Spot &amp; Limit Trading

# Seal

Sarah wants to sell 1 ETH immediately

- 1 She posts a market intent
- 2 Makers quote \$3,520, \$3,525, and \$3,530.
- 3 The \$3,530 maker wins and settles on-chain within 10 minutes
- 4 If the maker fails, Sarah receives a penalty (e.g., \$100) automatically.

Spot & Limit Trading

# Seal

## Why users love it?



### No failed transactions

Either the trade executes or the user is compensated.



### Better pricing

AI-driven competition yields tighter spreads than typical AMMs.



### Zero gas for quoting

Posting orders and bidding is gasless.

Spot & Limit Trading

# Seal

## Competitive comparison

### Economic incentive-backed fills

Seal: Economic incentive-backed fills

Others: None; failed fills possible

### Pricing model

Seal: Private AI-powered quotes

Others: Public formula ( $x \cdot y = k$ )

### Gas costs for orders

Seal: Gas only for settlement, not for posting

Others: Gas for posting & execution

### Liquidity sourcing

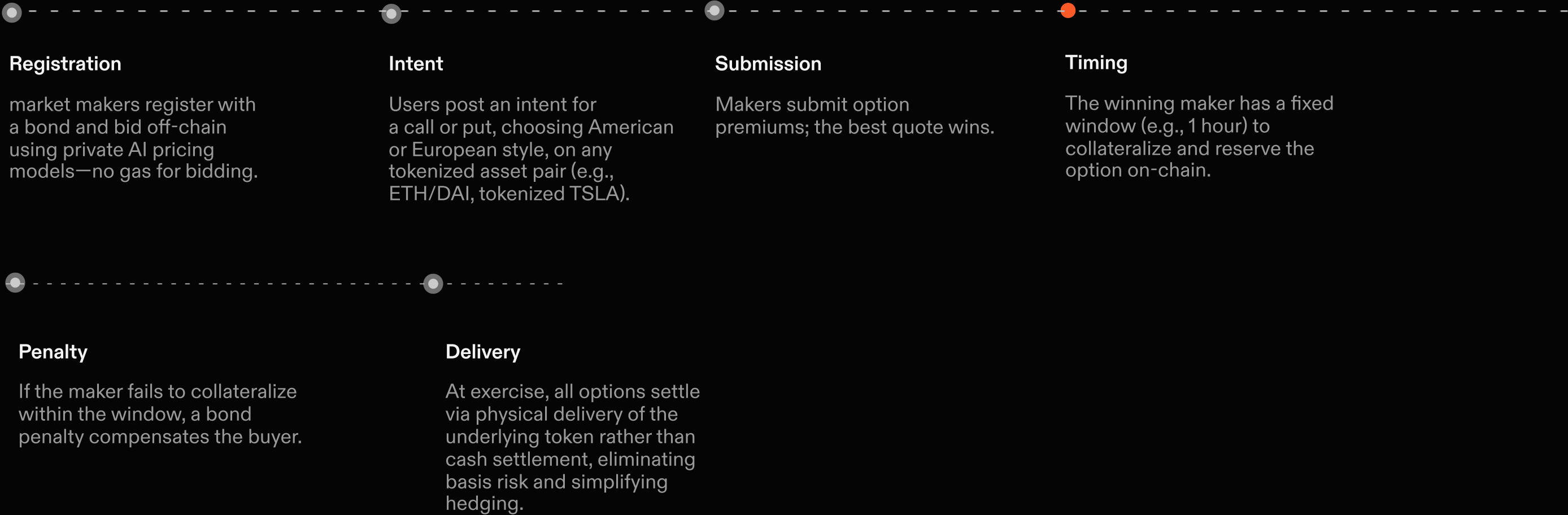
Seal: Across multiple venues via maker sourcing

Others: Single pool per pair

Options on Any Pair

# Hedgehog

## How It Works?





Options on Any Pair

# Hedgehog

Mike wants a 60-day American call on 1 ETH at \$4,000.

1 He posts the intent gaslessly and selects “American” style.

2 Makers quote premiums of \$120, \$125, and \$130.

3 He selects \$120.

4 The winning maker stakes 1 ETH collateral within one hour or pays a penalty.

Mike can exercise any time before expiry; upon exercise, he receives 1 ETH, and the maker receives \$4,000 USDC from Mike.

Options on Any Pair

# Hedgehog

## Why users love it?



### Any asset pair & style

Trade American or European calls/puts on crypto, tokenized stocks, commodities, or FX in one interface.



### Physical delivery

Receives the actual underlying asset, avoiding cash-settlement slippage or oracle mismatches.



### Capped downside

Maximum loss is the premium paid.



### Competitive pricing

Private AI bids yield tighter spreads than oracle-based or pool-based models.



### Incentive-aligned

Bond penalties make non-delivery costly without overpromising guaranteed fills.

Options on Any Pair

# Hedgehog

## Competitive comparison

Supported assets

Hedgehog: Any tokenized asset pair

Others: BTC, ETH, a few majors

Option styles supported

Hedgehog: American & European

Others: European only

Bid mechanism

Hedgehog: Off-chain reservation bids, gasless for makers

Others: On-chain pools

Settlement mechanism

Hedgehog: Physical delivery of underlying token

Others: Mostly cash settlement via oracles

Pricing source

Hedgehog: Private AI-powered, market-competitive

Others: Oracle-based vol surface

Settlement incentive

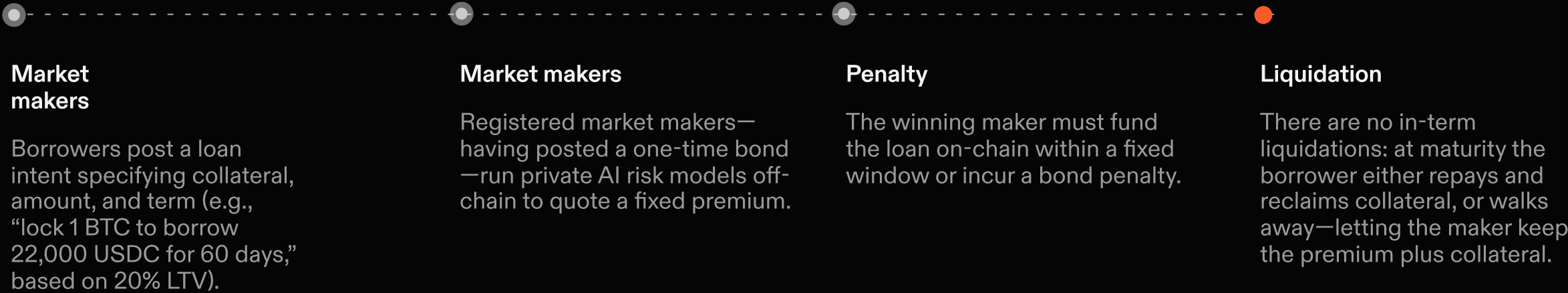
Hedgehog: No penalty for non-delivery

Others: No penalty for non-delivery

Fixed-Rate Lending

# Squirrel

## How It Works?





Fixed-Rate Lending

# Squirrel

Alex, a long-term BTC hodler, needs USDC liquidity without risking his position

- 1 Current BTC price: \$110,000
- 2 He posts intent: lock 1 BTC (\$110,000) to borrow \$22,000 USDC (20% LTV) for 60 days.
- 3 Makers quote premiums of \$148.27 (4.1% APR), \$180.82 (5.0% APR), and \$198.90 (5.5% APR).
- 4 Alex selects \$148.27 premium (4.1% APR). Maker funds \$22,000 USDC.
- 5 At maturity, Alex repays \$22,148.27 USDC to reclaim his 1 BTC. If he defaults, the maker keeps the 1 BTC.

Fixed-Rate Lending

# Squirrel

## Why users love it?



### Risk-Based Pricing

Lower LTV loans (20% vs. 80%) earn significantly lower premiums via AI models—unlike existing money markets that charge the same rate for all LTVs.



### No Oracle or Liquidation Risk

Safe collateral positions never face forced liquidations or oracle-glitch wipeouts.



### Non-Recourse Bullet Loans

BTC hodlers unlock capital with zero margin-call risk; failure to repay simply transfers collateral.



### Certainty & Transparency

Fixed term, fixed premium, gasless quoting —borrowers know exact cost at initiation.

Fixed-Rate Lending

# Squirrel

## Competitive comparison

LTV pricing

Squirrel: Lower premiums for safer LTVs via AI differentiation

Others: Same rate for low and high LTVs

User experience

Squirrel: Gasless quoting, penalty-backed funding incentives

Others: On-chain quoting & execution, gas

Liquidation model

Squirrel: No in-term liquidations; non-recourse at term end

Others: Forced liquidations in-term

Oracle dependence

Squirrel: Off-chain AI pricing; minimal oracle use

Others: Full reliance on on-chain oracles

Ideal for BTC hodlers

Squirrel: Safe, bullet loans collateralized by BTC

Others: Exposed to liquidation

Rate determination

Squirrel: Private AI risk models per maker

Others: Public utilization curve, one model

The Moment for Unified Rails

# Market Opportunity & Timing

## Growth

DeFi Maturing Fast — ~\$237B TVL (Q3 2025)  
with institutions entering, yet liquidity and execution remain fragmented.

## Demand

Derivatives Dominate — 70-80% of crypto volume comes from derivatives, but <10% happens on-chain due to inefficiency.

## Breakthrough

AI Changes the Game — New AI pricing tools enable anyone to run institutional-grade models, leveling the playing field.



We're positioned at the intersection of these growing markets.

Perfect time to bridge TradFi execution standards to DeFi.



A Sustainable Revenue Stack

# Business Model

01 Counterintuitive insight Reservation fees per execution.

02 Handcrafted solution Premium Premium sharing on options & loans.

03 Bond penalty revenue share.

04 AI tool subscriptions for makers.

Expansion

# Go-to-Market

Seeding liquidity, simplifying access, scaling adoption.

Start with makers, grow with users, scale with trust.

GTM

Provide maker dashboard tools for quoting, bonding, and risk management to streamline participation.

Target institutional and high-frequency market makers with bond incentives for early registration.

Partner with liquidity providers and protocol integrators to broaden global sourcing capabilities.

Emphasize transparent pricing, guaranteed fills, and zero liquidation risk to attract crypto natives and TradFi migrants.

Leverage influencer partnerships, educational campaigns, and community incentives to build network effects.

Trajectory

# Roadmap

Where it all began

User Aquisition

Scaling a single reservation engine across all DeFi markets.

2025

2026

2026



Q1 2026

Q2 2026

Q3 2026

Seal Public Launch

Squirrel Public launch

Hedgehog Public launch

- Each product will be live with an MVP and private testing

30 Years of Experience in the Finance

# Team

Refracted Labs has built and scaled DeFi apps and validators securing \$20B+ TVL, operates Pryzm and a validator business with 550K+ delegators, and brings deep experience across institutional finance (Goldman Sachs, JPMorgan), protocol engineering (Anchor Protocol), and AI.



Olly, CEO : Ex-Goldman Sachs & JPMorgan.



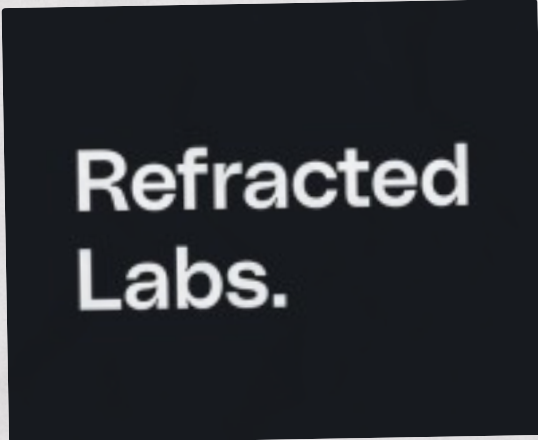
Olly's LinkedIn profile  
[www.linkedin.com](https://www.linkedin.com) ↗



Mo, CTO : Led engineering for \$20B AUM..



Mo's LinkedIn profile  
[www.linkedin.com](https://www.linkedin.com) ↗



Core Team, Elite engineers, designers, ...



LinkedIn Login, Sign in |  
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Catalyst

# Funding Ask

Raise: \$3M SAFE @ \$30M pre-money.

## Use of Proceeds:

**45%**

Engineering &amp; audits

**20%**

Partnerships &amp; BD

**10%**

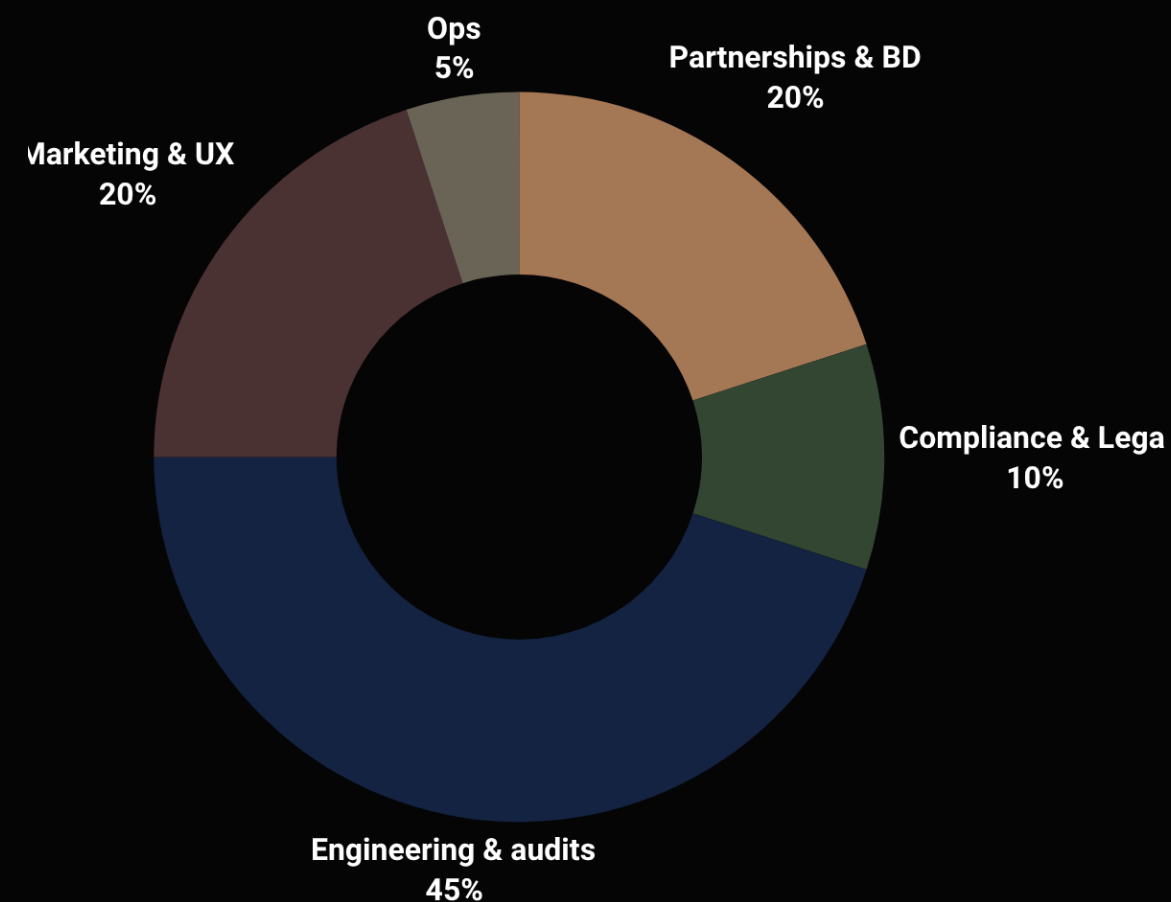
Compliance &amp; Legal

**20%**

Marketing &amp; Growth

**5%**

Ops



Join Us

# Call to Action

Join us in building DeFi's universal financial rails.

## Book a meeting

Calendly

30 minutes  
meeting with Olly

## Get in touch

Telegram

Talk with Mo

Telegram

Talk with Olly

## Email

contact@refractedlabs.com

# THANK YOU.