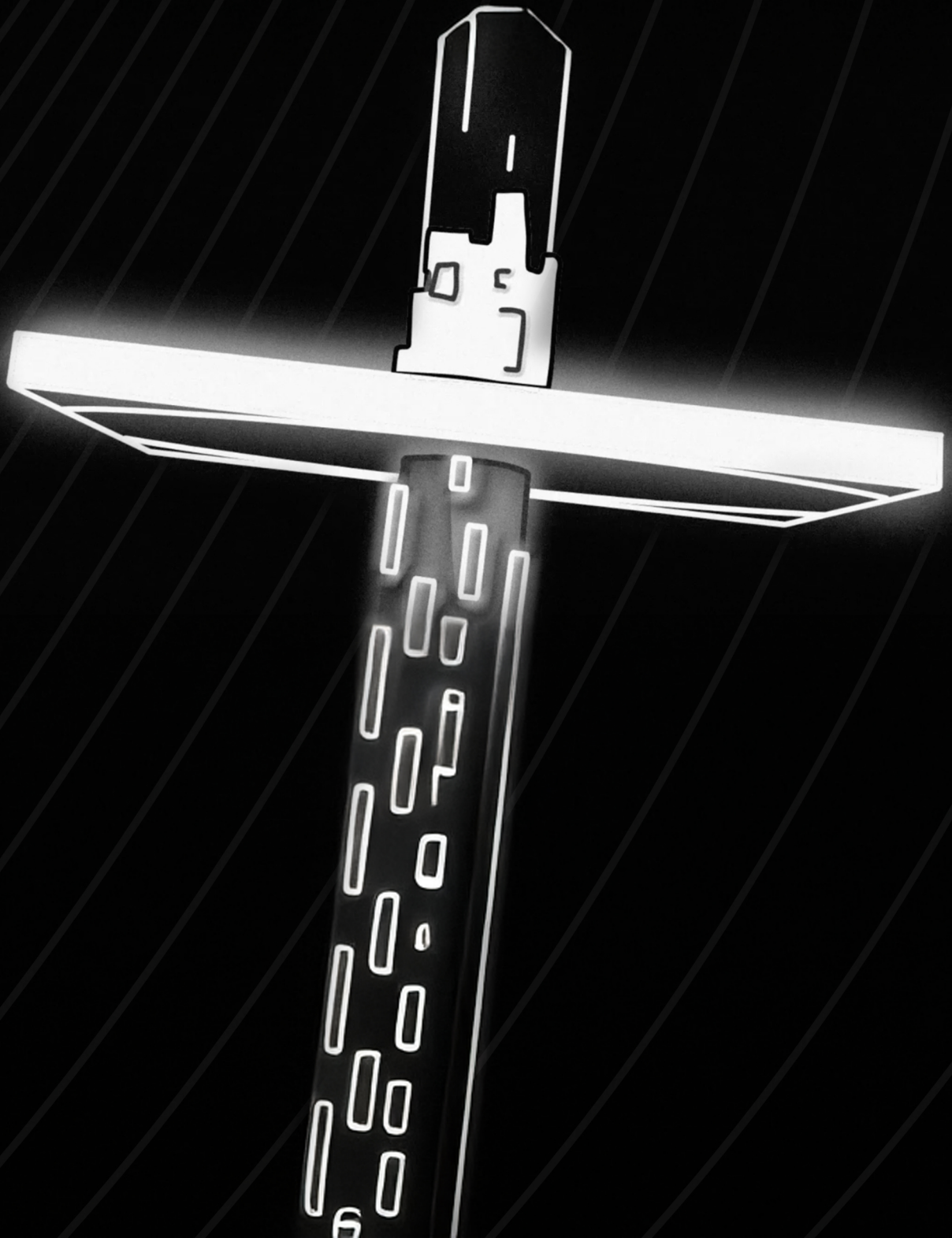




AI-Driven Investments





WHITEPAPER v1.0

12/12/24

# INDEX

- **Mission and Purpose**
- **Problems with Traditional Finance**
- **novAI is Different**
- **Portfolio Management Mechanics**
- **AI-Powered Portfolio Optimization**
- **An Assessment of Risks**
- **Links**

# Mission and Purpose

novAI is a community-powered hedge fund, owned and operated by its users.

We believe that finance is not as difficult as some "masters of the universe" make it out to be and are committed to building a future where investing activities are more profitable, rewarding, and equitable for our users.

Since inception, novAI has centered user experience (UX) as a core value. UX is about more than just aesthetically pleasing interfaces. It's about removing all barriers to make interactions with novAI as seamless as possible. This means simplifying financial access, demystifying financial concepts, and answering the question "how does this work?" efficiently and visually.

Unfortunately, the cryptosphere is littered with poor user experiences masquerading as 'products.' Too many developers dismiss UX as non-critical, but ignoring it is both selfish and self-destructive. Poor UX means poor adoption, poor Total Value Locked (TVL), and slow growth. At novAI, we aim for strong UX to attract users, unlock growth, and increase TVL.

Ultimately, we seek to empower individuals to self-organize and express financial views collectively.



# Problems with Traditional Finance

The legacy financial system, though powerful, is riddled with restrictions that protect profitable segments for large players. For example, in IPOs, only about 10% of allocations are typically reserved for retail investors, while large clients often get preferred treatment, leading to outsized returns. In private markets, 98% of the U.S. population is excluded due to "sophisticated investor" requirements, further exacerbating disparities.

Traditional investment funds are structured in a way that keeps large firms at the top. Investment firms hire managers, but biases affect hiring, limiting opportunities for the best and brightest. In contrast, the open-source nature of cryptocurrency allows for a broader talent pool, providing better opportunities for talented individuals.

At novAI, we eliminate these socio-political barriers by focusing on passion, dedication, and talent, ensuring that everyone can participate in the future of finance.

# novAI is Different

## The novAI Ecosystem:

### 1. Fund Deposit and Structure:

- Investors deposit funds into novAI, which is split 90% into USDC and 10% into novAI tokens.
- The 10% novAI is staked in a contract that earns a 10% dividend from investment returns.
- The 90% USDC is pooled with other investors' deposits in the novAI fund.

### 2. Investor Voting & Decision Making:

- Nova token holders vote on investment proposals to determine portfolio allocation, guided by risk management principles.
- 70% of returns are distributed to investors.
- 20% is distributed based on a SuperNova value, a combined score of Nova and Investor Credit Score.
- 10% of returns are distributed to staked novAI holders and LPs (Liquidity Providers).

### 3. Staking and Redemption:

- Longer staking periods lead to higher returns.
- At the end of each investment cycle, investors can redeem their initial USDC and novAI deposits.
- Early redemption incurs a variable fee, reinvested into the treasury to help buffer novAI price volatility.

# Portfolio Management Mechanics

## **Nova Token & Voting:**

Nova token holders possess the majority of the voting power in the fund. Staking Nova enables users to vote on investment proposals. The voting power is capped to prevent rapid accumulation and malicious activity.

## **Investor Credit Score:**

This score tracks an individual's contributions to the fund, factoring in high-quality research, profitable investment proposals, and strong voting performance. A high credit score grants more power in voting and earning potential.

## **SuperNova:**

SuperNova determines the return distribution based on a user's Investor Credit Score and the amount of staked Nova. This system rewards talented portfolio managers by providing them with a higher share of returns.

## **Delegated Voting:**

Users can delegate their votes to skilled portfolio managers. If a delegated proposal is successful, both the voter and manager's credit scores are boosted, incentivizing collaboration and recruitment of talented managers.

## **Asset Trading:**

Initially, trading will focus on highly liquid pairs on Raydium, with regular voting intervals. As gas fees are an issue on Solana, novAI will subsidize them via UMA's uGAS futures and other solutions. Over time, novAI will integrate more asset types and decentralized protocols.

# AI-Powered Portfolio Optimization

novAI integrates advanced **AI-driven portfolio optimization** to maximize returns and minimize risks. Artificial intelligence is used to:

- 1. Automated Asset Allocation:**

novAI employs machine learning algorithms to assess real-time market data and dynamically adjust asset allocation within the fund. This AI-powered approach enables rapid reactions to market trends and shifts in investor sentiment, ensuring that the portfolio adapts to market conditions efficiently.

- 2. Risk Prediction and Management:**

AI models predict the potential risk of assets based on historical data, market behavior, and volatility. By continuously analyzing market conditions and assessing the risk levels, the AI recommends adjustments to the portfolio to minimize exposure to market downturns and protect investor assets.

- 3. Smart Trading Algorithms:**

novAI uses algorithmic trading bots to execute trades based on pre-determined strategies. These bots analyze historical data, real-time market trends, and investor sentiment to execute high-frequency trades that maximize profits. The system can also automatically execute trades on decentralized exchanges like Raydium or Meteor to ensure optimal execution.

- 4. Investor Behavior Modeling:**

AI is also used to model investor behavior, including predicting which investment opportunities are most likely to be favored by the community. These insights are used to align the portfolio with market preferences, ensuring that the novAI hedge fund stays relevant and competitive.

- 5. Enhanced Decision-Making:**

AI assists in decision-making by analyzing a broader set of data than is possible manually, including financial statements, global economic trends, and even social media sentiment. This helps portfolio managers make data-driven decisions that are backed by comprehensive insights, ensuring more informed investment choices.

By integrating AI, novAI offers a level of automation and predictive power that traditional hedge funds and decentralized finance systems cannot match. This innovative approach optimizes the portfolio and provides investors with consistent, long-term growth opportunities.

## An Assessment of Risks

novAI focuses on achieving **risk-adjusted returns**, measuring success by the return relative to the volatility experienced during investment periods. Portfolio risk management tools, enhanced by AI, will help optimize investment decisions by balancing position sizes, diversifying portfolios, and maintaining hedges to avoid large losses.

We aim to achieve market outperformance while minimizing downside risk, recognizing that avoiding substantial losses is more crucial than missing out on big returns.

## Links

<https://novai.cloud>