BLACKNIGHT

YIELD AGGREGATOR + AI

MAKE DEFI ACCESSIBLE & IMPACTFUL

BLACKNIGHT

Pitch Deck & Tech Stack

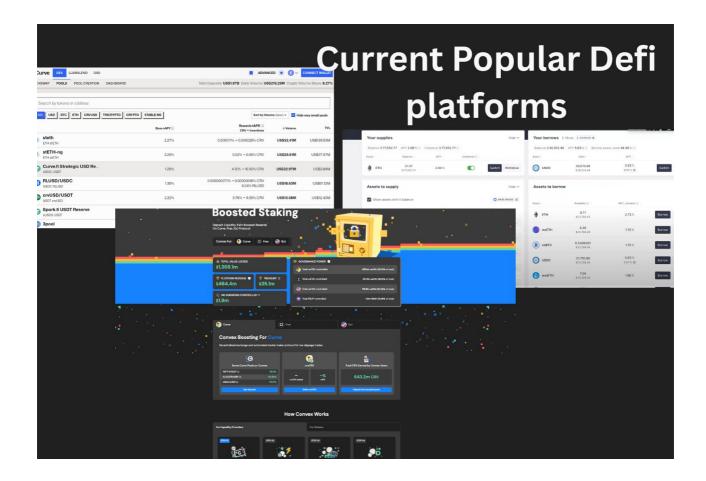### BY: WENJING SHI

A

Problem

DeFi (Decentralized Finance) allows anyone to earn yield, borrow, or lend crypto assets without banks — but navigating protocols like **staking** or **lending** platforms is often too complex for everyday users.

A **Yield Aggregator** is a tool that automatically finds and allocates your funds to the **best-performing DeFi strategies** — so users don't need to manage the complexity themselves.

1️⃣ **Problem 1: DeFi is too complex and intimidating for most people**
Despite the rapid growth of DeFi, the user experience remains overly technical. Whether it's lending protocols, staking platforms, or even yield aggregators, most are built for experienced users — with confusing interfaces and unfamiliar terms. This barrier is especially high for first-time users, including women investors, who often lack access to simple,

trustworthy, and inclusive platforms. As a result, normal people and beginner investors are excluded from participating in the ecosystem

2 DeFi remains profit-driven, while green, ESG and social impact focus are overlooked
As stablecoins gain wider adoption and the DeFi market continues to grow rapidly, most investment platforms remain focused purely on financial return.However, core principles of decentralized finance — such as DAO governance, fairness, and community-driven values — are often treated as secondary.This creates a growing gap for investors who want to align their capital with social impact, governance quality, or ethical finance principles.

3 Too Many Tokens, Too Little Guidance
The crypto market now offers thousands of tokens and DeFi strategies — each with different risk levels, returns, governance models, and technical parameters.

For beginner investors, especially those unfamiliar with blockchain, this is overwhelming. Most don't know how to evaluate or compare these tokens, which metrics matter, or where to start. Without proper guidance, many users either choose blindly or avoid investing altogether — missing opportunities and losing trust in the process.

`4` **Lack of AI-powered personalization for investment strategy**

Current DeFi platforms offer limited or no intelligent support to help users choose strategies aligned with their goals. There is a clear market gap for AI-driven tools that provide personalized, bias-aware portfolio suggestions based on a user's values, experience level, and risk profile — similar to how robo-advisors revolutionized traditional investing.

SOLUTION
We've built a simple, AI-driven DeFi investment platform that integrates social impact ratings and empowers everyday users.

✅ **Yield Aggregator** that automatically identifies and optimizes high-performing strategies

✅ **DAO & Social Impact Rating Engine** to assess governance quality and ethical value of tokens

✅ **AI-powered strategy recommendation**, based on user preferences (e.g. return-focused, impact-driven, or balanced)

✅ **Beginner-friendly UX**, designed to lower entry barriers — with a more inclusive experience for female investors

PRODUCT(MVP)

Demo link(Video):

(Please use below link for demo video play)

https://www.loom.com/share/53541896daff4ce2b0672b82f766c8d7?sid=815a1361-b68d-48c1-941f-55874acfea15

Summary Text (for demo slide)

Our MVP is a working, AI-powered yield aggregator designed for beginners — especially women and impact-driven investors.

✅ Users connect their wallet and choose between DAI or USDC for investment.

✅ The platform compares strategies using **real-time APY data from Aave** and mock strategies.

✅ We leverage an **LLM-based recommendation engine** to suggest optimal investment strategies.

✅ Users can browse crypto assets and recommendations across two key views:
- **Eco Assets Page** — showcasing green tokens, using live data from CoinGecko
- **Female Page** — with 4 investment categories (e.g. DAO-first, Yield-first, RWA-focused)

✅ Assets and Strategies are recommend using our **custom DAO & Social Impact rating system**, helping users invest based on both purpose and returns.

✅ Users can view strategy details, invest, check balances, and redeem — all deployed on a **Hardhat-forked Ethereum mainnet**.

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MARKET Opportunity

📊 DeFi is growing — but beginner investors and Impact Investing are the missing piece

DeFi is one of the fastest-growing sectors in Web3, with over **$90B+ Total Value Locked (TVL)** globally as of mid-2025, growing from ~$50B in 2023 despite market volatility.

In parallel, **impact investing** and **ESG-conscious capital** are rapidly expanding. In Switzerland alone, ESG assets under management surpassed **$1.6 trillion CHF** in 2023, with over 70% of institutional investors prioritizing sustainability factors.

Yet, in crypto, there is **no easy way to align investment with values**. Beginner investors — especially women and mission-driven users — remain underserved.

📐 Market Size Estimation

Layer	Description	Size Estimate
TAM	Global DeFi investment market	**$90B+** TVL (DefiLlama, 2025)
SAM	Crypto investors with impact/ESG alignment interest	**$5–10B** (growing rapidly)
SOM	Target: 2,000–5,000 users in Year 1, avg. $1,000 liquidity per user	**$2M–5M liquidity** initial liquidity target

Sources:

- DeFiLlama, TVL Data (July 2025) //Swiss Sustainable Finance Market Report 2023
- MSCI ESG Trends 2024// World Economic Forum: The Growth of Impact Investing

Business Model:

💰 Revenue Model

- **0.5% – 1% Management Fee** on invested assets
  → Applied to assets actively managed through our AI-recommended strategies

- **No hidden fees**; fully transparent and blockchain-verifiable

- **Optional Performance Fee (future):** Potentially on profits exceeding a benchmark (e.g., baseline APY)

🔐 Premium Features (Planned for Phase 2)

- Personalized strategy builder (based on user goals and risk tolerance)

- Advanced AI reports with portfolio diagnostics and rebalancing suggestions

- Access to exclusive strategy pools (e.g., curated Impact Portfolios or DAO-only sets)

Token Model (Future Vision)

A native utility token may be introduced later for:

- ○ Governance participation (voting on strategies or rating algorithms)

- ○ Staking for access to premium services or reduced fees

- ○ Incentives for long-term platform loyalty and ecosystem growth
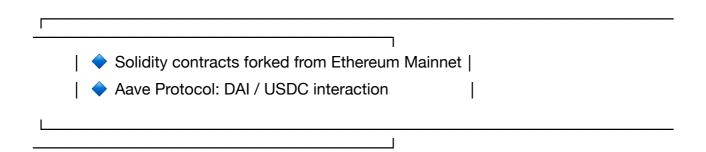
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Competitor Anylysis

Where We Fit in the DeFi Landscape

Platform	Target User	UX Complexity	AI / Personalization	Impact Rating	Beginner Friendly
Yearn Finance	Advanced yield users	High	No	No	✖
Beefy Finance	General yield users	Medium	No	No	✔ Middle
RoboFi	Crypto-savvy users	Medium–High	Limited (basic automation)	No	⚠ Partially
BlacKnight	Beginners, women, impact-driven	Low	✅ Yes	✅ Yes	✅ Yes

G

Technology implementation structure

👷 User Interface (Beginner-Friendly)

```
| ✅ React + HTML/CSS                       |
| ✅ MetaMask Wallet Integration (via Ethers.js)   |
| ✅ Token Info Cards (APY / TVL / ESG / Community) |
| ✅ Investment Flow via Aave Mainnet (Hardhat Fork) |
| 🔷 AI Assistant for Token Suggestions          |
```

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📡 Backend Server (Python Flask)

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| 🔷 RESTful API: /recommend (LLM)                |
| 🔷 Token Data Engine (Coingecko API, JSON filtering) |
| 🔷 Express-based routing (optional Aave APIs, modular) |
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🤖 AI Reasoning Layer (LangChain + Together AI)

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| 🔷 Mixtral-8x7B Instruct model (via Together API)     |
| 🔷 Prompt Engineering: Real-time APY/LTV → Natural Language |
| 🔷 Output: AI-based Strategy Recommendation (HTML formatted) |
```

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⛓️ Smart Contract Layer (Hardhat + Aave)

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│                                           │
│  │ ◆ Solidity contracts forked from Ethereum Mainnet │
│  │ ◆ Aave Protocol: DAI / USDC interaction          │
│                                           │
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Phase Real yield logic executed via local fork of Ethereum mainnet (Hardhat), enabling full simulation of Aave protocol investment flows using real smart contracts.

"AI + DeFi Guidance": Integrated AI assistant helps beginners navigate token choices based on chaindata, social impact, APY, and community scoring.

RoadMap

Quarter	Milestone
Q2 2025	MVP testing with Aave integration on forked Etherum mainnet, initial AI recommendation tuning - **(Finished)**
Q3-Q4 2025	Paper trading beta launch featuring multi-protocol, cross-chain support; begin public testing, community engagement, and beginner user onboarding. Customer data collected during paper trading will be used to train and improve our AI personalization models *(Conditional on funding)*.

Q1 2026	Public launch; Begin AI-based auto-portfolio builder for live users; Launch token reward simulation (paper trading mode); launch multi-language support
Q2 2026	Introduce Impact Token Index and staking mechanisms; expand marketing to European markets

MILESTONE ON TECH

Milestone	Description
Testnet Deployment & Community Beta	Deploy smart contracts and frontend to public testnet (e.g., Sepolia), invite early users for beta testing and feedback.
AI Portfolio Optimizer v1	Launch a mean-variance optimizer trained on real DeFi data, optimizing for sustainable green asset allocations.
Simulated Paper Trading + Analytics	Introduce paper trading with yield simulation logic; collect anonymized user behavior data to train future AI models.
Multi-Chain Expansion	Integrate additional chains (e.g., Polygon, Base, Optimism) to support broader asset availability and lower gas costs.
Trustless Yield Aggregation	Fully decentralize the aggregator's strategy execution via on-chain vault switching and permissionless strategy access.
Explainable Token Scoring Engine	Upgrade current token filtering logic to a lightweight AI-based scoring system using metadata and DeFi parameters, incorporating ESG tags and basic NLP keyword matching to enhance user personalization.

USE OF FUNDS

USE OF FUNDS (INITIAL ALLOCATION PLAN)

Category	Description	Estimated Share
Lean team Salaries	Core engineering team etc. for front-end, smart contracts, AI integration	35–40%
Smart Contract Audit	Security audit of key contracts and yield strategy logic	10–15%
Financial & Legal Advisory	Regulatory structuring, token compliance, ESG impact reporting	15–20%
Marketing & Community	Early-stage user acquisition, partnerships, social outreach	15–20%
Operations & Tools	Infrastructure, cloud services, testing environment, legal ops	5–10%

THANK YOU!