

Butterfly Effects + Paradoxes of Account Abstraction in DeFi

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Section 1

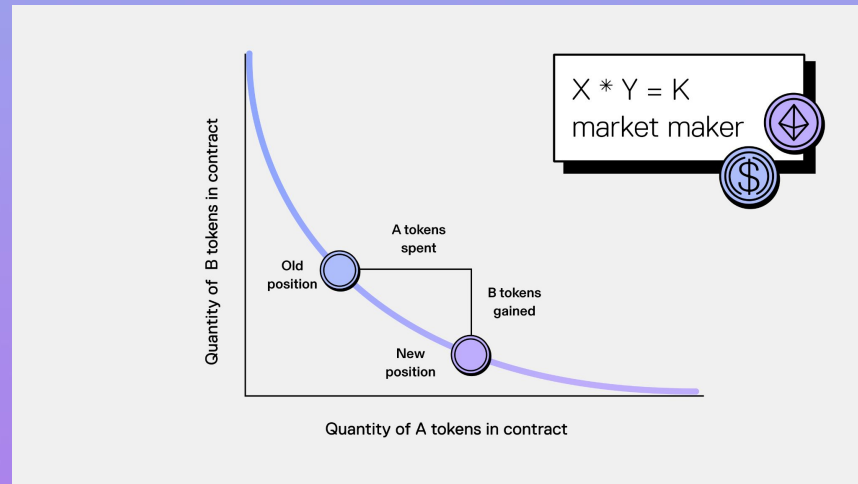
Butterfly Effects in DeFi



QWERTY Keyboard



Uniswap AMM 🦄



Source: <https://blog.uniswap.org/what-is-uniswap>

Uniswap AMM Model

Why it's transformative:

- Democratizing liquidity provisioning - anyone can become an LP
- AMMs eliminate the need for complex order books
- Composability ~ DeFi lego blocks

The incremental change:

Introduction of AMM model

The ripple effect:

Anyone can become a LP → rise of new DEXs → expanding the functionality of DEXs →
DeFi Summer of 2020

Current Issues with DeFi UX

- Complex key/wallet management

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- Gas fee and transaction complexity

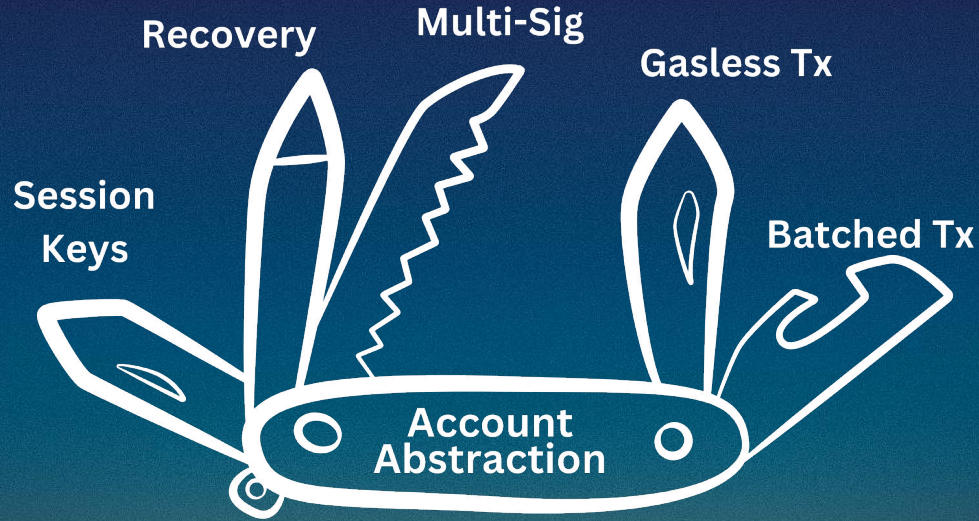
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Current Issues with DeFi UX

- Complex key/wallet management
- Gas fee and transaction complexity
- Poor onboarding experience for new users
- Liquidity fragmentation

Account Abstraction





Polymarket



426,081

Polymarket Safes created



1,606,951

Total number of Safe transactions on Polymarket

**\$5,778,465,97
3**

Polymarket betting volume



Section 2

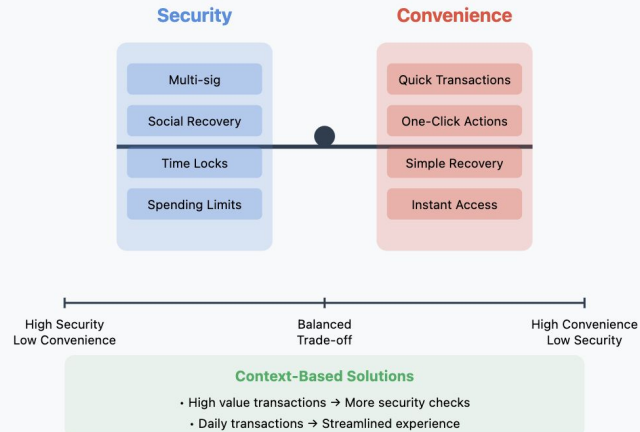
AA Paradoxes

Paradox #1

**Security
vs
Convenience**

Security vs Convenience

Security vs Convenience Paradox in Account Abstraction



Paradox #2

**Customization
vs
Standardization**

Intents, AI Agents in Web3



Use Case: AI Agents in Decentralized Trading

User Intent: Maximize profits by trading token X and Y within a \$100-\$120 price range.

AI Agent Workflow:

- Continuously monitors token X and Y's price and market volatility across multiple DEXs.
- Places buy orders at lower grid levels (e.g., \$100, \$105) and sell orders at higher levels (e.g., \$115, \$120).
- Executes trades in a gas-efficient manner, potentially batching transactions to save costs.

Outcome

The user achieves their desired profit targets without needing to manually track markets or execute trades.

Use Case: AI Agents in Prediction Markets

User Intent: Maximize returns by betting on the most likely outcomes of the U.S. presidential election, reallocating funds based on real-time changes in probabilities.

AI Agent Workflow:

- Continuously aggregates off-chain data
- Places bets on outcomes with the highest expected value
- Re-allocates funds to more favorable outcomes

Outcome

The user maximizes potential earnings while minimizing risk, without needing to stay updated on every market change or manually adjust positions.

Thank you!

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