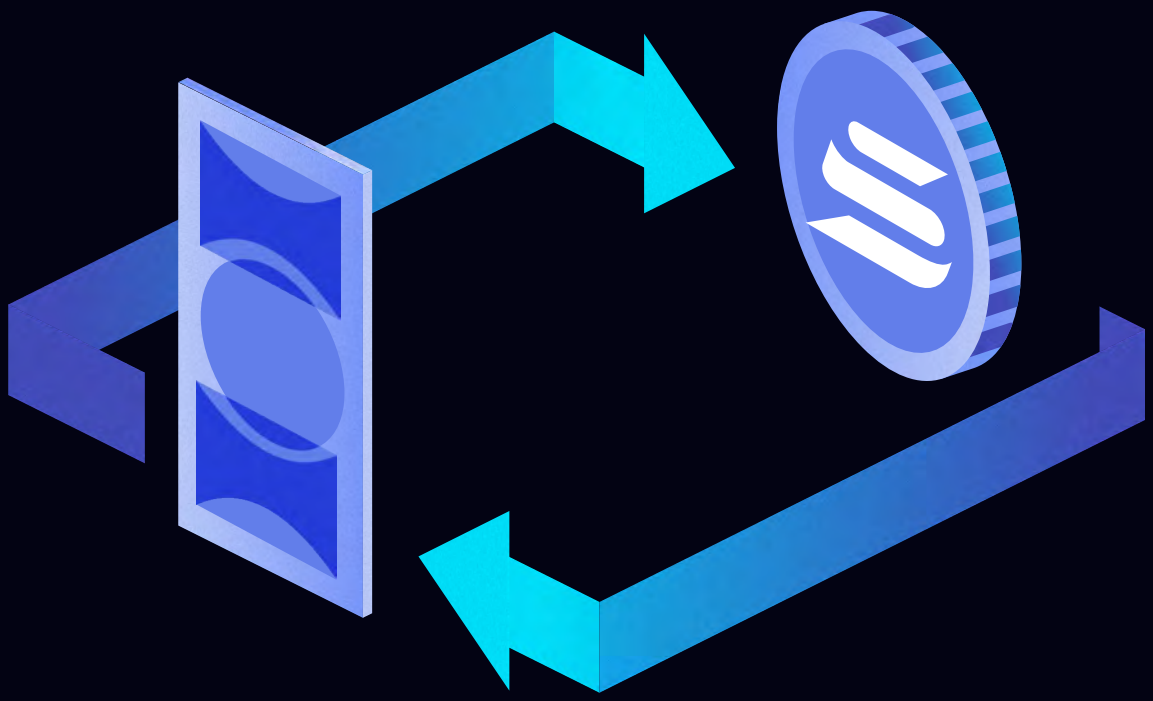
Synthetify



Whitepaper

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v1.0

Table of Contents

1 Introduction 3

2 Synthetify 4

2.1 Synthetic assets 4

2.2 Staking 4

2.3 Trading 4

2.4 Liquidation 5

2.5 An example 5

3 Advantages 6

4 Roadmap 7

5 Synthetify Token 8

6 Team 9

Abstract

Synthetify is an upcoming synthetic assets platform, fully built on the Solana blockchain [1].

The platform aims to provide a bridge between cryptocurrencies, stocks, fiat currencies, and other financial instruments directly from one decentralized exchange.

Synthetify solves critical problems seen on other Synthetic assets platforms like: high fees, long confirmation times and losses caused by arbitrage during sharp market moves.

The Solana blockchain offers better performance that is orders of magnitude better than any other layer-1 blockchain available on the market right now.

Thanks to low fees and the fast confirmation time it's the perfect bedrock for applications like Synthetify.

Synthetify will introduce it's own token that will act as collateral for synthetic assets, reduce fees on Synthetify and hold voting power during governance decisions.

1 Introduction

Decentralized finance, also known as DeFi, is a monetary system that was built on public blockchains and, most importantly, enables financial activity to take place without any involvement of centralized institutions (e.g. government, banks).

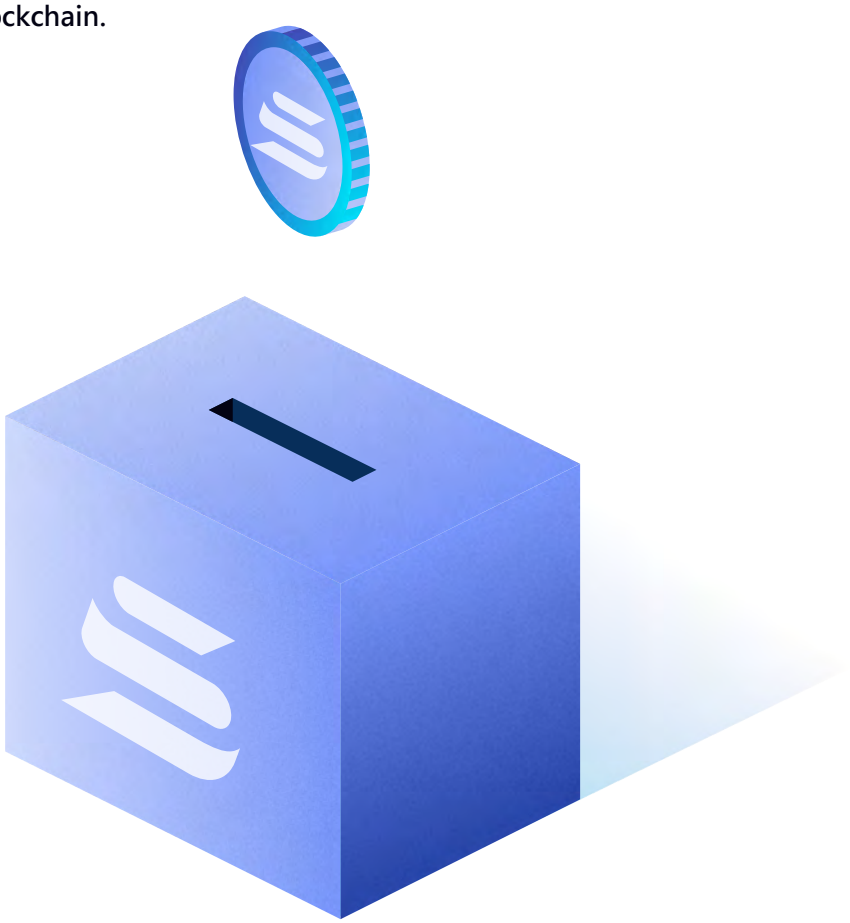
Currently, the overwhelming majority of DeFi are applications built on Ethereum, or other EVM compatible blockchains. This causes Ethereum to be slow and unreasonably expensive to use. The idea behind DeFi is to give the same access to all participants no matter how much capital they control.

Unfortunately this is not possible on ETH where transactions fees are often higher than the value of the operation.

Synthetic assets platforms are highly sensitive to underlying network performance since traders on those platforms expect high transaction bandwidth and close to instant execution time.

Solana is a high performance blockchain that is a perfect fit for DeFi applications, including the most demanding, like decentralized exchanges.

Applications like Serum [2] or Raydium [3] have already proven Solana's usability and started a shift of users to the Solana blockchain.



2 Synthetify

The Synthetify protocol enables creation, exchange and burn of synthetic assets based on prices provided by a decentralized system of oracles.
On Synthetify, exchange trading is executed against the public debt pool that allows for almost infinite liquidity and zero slippage even during big trades. Participants of the debt pool earn pro-rata exchange fees for acting as counter-parties during trades. Debt pool participants need to constantly hold sufficient collateral in Synthetify tokens (SNY) to ensure platform stability.

2.1 Synthetic Assets

Synthetic assets created on Synthetify exchange will strictly track the price of underlying assets provided by decentralized oracles. All synthetic assets are SPL-token based and will act just like all other Solana based tokens. This will enable further usage on other platforms like AMMs with almost frictionless integration. Debt pool participants need to burn synthetic assets to improve their collateralization ratio or to free up collateral.

2.2 Staking

Users who lock their SNY tokens and mint synthetic assets incurring exchange debt are called Stakers. Stakers benefit from trading on Synthetify Exchange thanks to accruing pro-rata exchange fees from each transaction. All Stakers need to maintain a sufficient collateral ratio or part of their collateral can be liquidated to ensure network safety. Collateral is dependent on the price of SNY token and debt is calculated based on their share of debt of the entire platform.

2.3 Trading

Traders use Synthetify to swap between different synthetic assets. Traders do not need SNY tokens to perform trades but holding SNY reduces fees charged on asset swaps. Only swaps between synthetic assets are permitted on Synthetify based on current prices provided by the oracle. Some assets have a limited supply that can be minted..

2.4 Liquidation

To ensure platform stability, undercollateralized Stakers can be liquidated, and part of their collateral will be transferred to Liquidators in exchange for paying back part of the Staker debt. Liquidation includes penalties of 80% that is transferred to Liquidators and 20% to an Exchange owned account to improve platform stability.

2.5 An example

This example explains the core mechanism of Synthetify and the risks of participating in the debt pool.

		Alice	Olivia	Total debt
Step 1	**xUSD**		5 000	10 000
	xSOL	5 000		
Step 2	**xUSD**		5 000	15 000
	xSOL	10 000		
Step 3	**Final**	10 000	5 000	15 000
	Owned debt	7 500	7 500	
Net Profit		+ 2 500	- 2 500	

Step 1: Both Alice and Olivia have the same amount of debt (50%). Entire debt is equal to $10k. Olivia holds$5k synthetic USD and Alice holds $5k synthetic SOL.

Step 2: The price of xSOL doubles making Alice's balance worth $10k this causes debt to rise to $15k. Olivia still holds xUSD and the value of this token is stable.

Step 3: Both Alice and Olivia are still responsible for the entire debt of the protocol each for 50% of it. Debt increased by $5k so the debt of Alice and Olivia will rise by $2.5k. When we match positions against owned debt for Alice and Olivia, we get that Alice ended up with $2.5k profit and Olivia lost $2.5k since her debt increased by this amount.

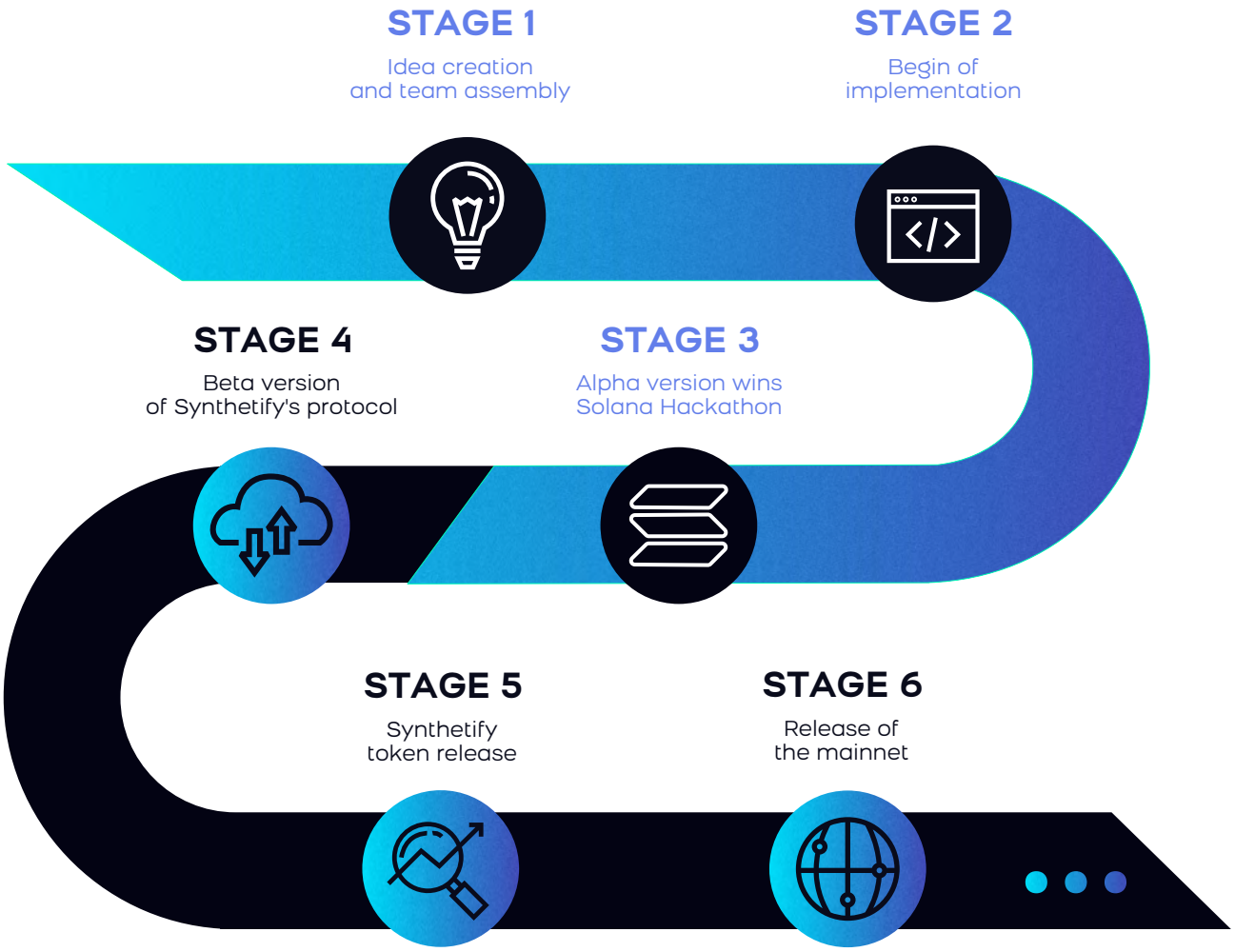
3 Advantages

A well known and established synthetic assets platform is Ethereum based protocol, Synthetix. Unfortunately, Synthetix suffers from underlying network performance issues, especially during sharp market moves, when there is necessity for liquidations and frequent oracle updates.

Synthetify aims to solve these issues to enable a trading experience comparable with centralized exchanges, while keeping all the benefits of decentralized exchanges.

- Enormously increased transaction bandwidth thanks to the Solana blockchain that can currently handle over 50k transactions per second.
- Almost instant transaction confirmations. Average confirmation times on Solana are 0.6s.
- Close to zero transaction fees. The average transaction fee costs about $0.0001.
- Eliminate oracle arbitrage thanks to frequently updating oracles that push updates to the blockchain every couple of seconds. [4-5]
- Listing less liquid tokens and debt pool control by introducing max supply for each synthetic token. [6]
- Higher capital efficiency.
- Improved stability even during sharp market moves.

4 Roadmap


STAGE 1
Idea creation
and team assembly
STAGE 2
Begin of
implementation
STAGE 3
Alpha version wins
Solana Hackathon
STAGE 4
Beta version
of Synthetify's protocol
STAGE 5
Synthetify
token release
STAGE 6
Release of
the mainnet

5 Synthetify Token

5.1 Utility

Synthetify (SNY) is anticipated to hold the following utility:

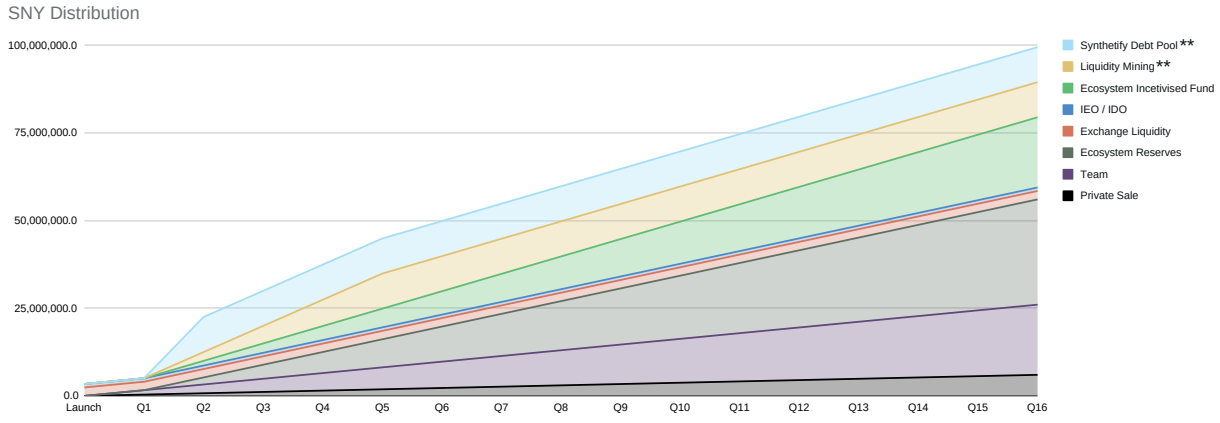
- Collateral for creation of synthetic assets on Synthetify.
- Discount for performing swaps on Synthetify.
- In the future SNY will represent vote in governance decisions.

5.2 Distribution

Synthetify plans to supply 100,000,000 SNY tokens*. The initial distribution of SNY is presented on following table:

Category	Percentage
Private Sale	6%
Team	20%
Ecosystem Reserves	30%
Exchange Liquidity	2.4%
IEO/IDO	1%
Ecosystem Incentivised Fund	20%
Liquidity Mining	10.6% **
Synthetify Debt Pool	10% **

Note: In the future, Synthetify will introduce perpetual inflation.



**Liquidity mining and Synthetify Debt Pool tokens unlocking dates are estimates and are dependent on the date of Synthetify platform launch.

6 Team

Synthetify is built by a group of experienced blockchain developers to deliver safe and reliable blockchains systems. The founder and lead developer is Norbert Bodziony. [7]

Our primary focus is always on product, and user experience. The Synthetify team participated in both Solana hackathons. Gaining 3rd place [8] in the first one and 2nd place [9] in the second Hackathon.

References

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[8] Solana's Inaugural Hackathon - https://solana.com/news/announcing-the-winners-of-solana-s-inaugural-hackathon
[9] Solana X Serum DeFi Hackathon - https://solana.com/news/winners-of-the-solana-x-serum-defi-hackathon