

The future is decentralised. The future is here.
Democratise the availability of alternative investment to retail investors



Synapse Network LitePaper

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Synapse Network, the fairest launchpad in history...

Abstract: synapse.network is developing a cross-chain Launchpad, an investment and start-up acceleration ecosystem based on blockchain technology, to give everybody an equal chance to contribute to great upcoming projects, and to do so early-on. We are creating a bridge to a new world of fundraising across all smart-contract-based blockchains. Accessible for everybody, with a democratised tier system redesigned from scratch and allowing for investment at any stage of project development.

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This Document is not a final technical specification: This document does not constitute nor imply a final technical specification of Synapse Network. Information presented on this litepaper, technical or otherwise, is meant to outline the general idea of Synapse Network, its design, and its use-cases and is subject to change with or without notice. For the latest up-to-date technical specification, check out the updates and documentation on the official website <https://synapse.network/>

THE PROBLEM -

Investors with no start-ups, start-ups with no investors

The vast majority of major companies go through several different stages of funding - from self-funding, to seed capital, venture, various series and finally to their initial public offering (IPO).

As companies grow from start-ups to global players, providing value to society whilst generating profits for entrepreneurs, they reward their investors. Those who reap the greatest rewards are those who invested early on. It's a small group of privileged investors who can participate in early stage investment and early adopters who reap all the benefits.

The internet - a democratising force

The internet has democratised vast areas of social life - from creating millions of jobs, transforming entire industries, providing voices to the voiceless via social media, transforming the media by ushering in a new age of citizen journalists, to reducing numerous barriers that previously existed.

The fundraising sphere - an elitist, legacy industry

One area that has not faced a reckoning yet is the funding sphere - and this remains a challenge both to budding entrepreneurs and those who have capital but nowhere to place it. On a wider scale, this is a problem for society as a whole - this barrier of access to capital results in lower social mobility, and hinders innovation as a whole, with unfathomable potential never being realised by projects that do not take off due to lack of funding.

Entrepreneurs face several challenges - in their early stage they are primarily limited by funding. This is a serious limitation to most potential entrepreneurs, who simply cannot afford to risk running a start-up. Often, entrepreneurs lack the contacts needed to raise money, and they don't even know where to start looking for seed capital. Lacking the contacts, uncertain where to raise money, many potential entrepreneurs keep their brilliant ideas at the "idea" phase.

Investing today, a David vs. Goliath situation

The fundraising space today is comparable to a David vs. Goliath situation - venture capital, with its vast resources, network, experience and capabilities, naturally excludes the average small ticket investor from the early-stage investment phase.

Most private investors do not have the resources, experience or even access or the possibility to invest early in projects, with that space remaining the bastion of specific types of investors or incubators.

Furthermore, potential investors often lack the ability to perform due diligence on a company or its founders, and thus they find themselves uncertain whether a company is worth the

investment and whether the team can deliver on their promises.

Fundraising, bear market

In bull runs, with vast amounts of capital, there is an illusion of perpetual growth - in bull periods, access to capital becomes easier, fuelled by growing profits and investor confidence.

During a bear market, as confidence dwindles, “the average Joe’s” savings have been wiped out, only smart money remains. In these periods, greater amounts of diligence are performed, which in turn leads to better projects getting funded.

Whether in a bull run or a bear market, Synapse Network aims to level the playing field and turn the average Joe into a smart money investor.

“Synapse Network, turning low-cap investor into a smart money investor.”

SUMMARY of the PROBLEMS:

1. Start-ups and small entrepreneurs lack funds, access to funding and contacts
2. Potential “entrepreneurs” stay at the “idea” phase of their project due to lack of funds.
3. Private investors do not have the possibility to invest in early rounds.
4. Investors face insufficient information, and are unable to perform due diligence on start-ups and founders.

Civilising the fundraising process

...but it does not have to be this way. It’s time to disrupt traditional investing and use the potential offered to us by technology to open access to this previously closely guarded closed space, and to create opportunities for everyday people. Both on the start upside, and the investor side.

This is where Synapse Network comes in - in short, we are **civilising the fundraising space** and creating the **fairest launchpad in the world** and providing an entire **investment technology ecosystem**.

Synapse Network, business in the service of society

At its core, a company that succeeds needs to provide a product, and satisfy consumer needs whilst generating a profit.

At Synapse Network we want to go beyond being a mere business - we are not only building a sound company, which solves obvious market inefficiencies, but we are also harnessing the power of the internet and technology to continue the online **decentralisation** and **democratisation** process, and providing the infrastructure to transform society for the better by providing everyone with opportunity previously reserved to the elites.

THE SYNAPSE NETWORK SOLUTION - Building on existing tech, and pioneering to solve a market inefficiency

Setting the scene...

The Internet - A Gateway to Freedom

Since its inception, the internet has been a gate to freedom. The internet has undoubtedly increased freedom of information, enhanced freedom of expression and provided billions of people the means to communicate, exchange, learn, and trade.

Civilising the Fundraising Process

Just as the internet provided the architecture to democratize numerous spheres of life, it is now time to use the internet to **democratize investing** and **civilise the fundraising process**.

Social media networks and the internet provided everyone a virtual “pnyx”, virtually embodying the ancient Greek value of *isēgoría*, or equal speech.

The internet has been an important catalyst for freedom, but true freedom is often **restricted by lack of money**. True freedom requires the ability to accrue and increase capital.

Disrupting legacy finance

The capital space has traditionally been dominated by banks and financial institutions with absolute power in their hands - this hegemony is being challenged by the nascent yet rapidly growing decentralised finance (DeFi) space, which has grown from around \$600 million at the start of January 2020 to over \$45 billion in March 2021.

The decentralised cryptocurrency space and blockchain space are reverting the internet back to what it initially was before global corporations centralised it.

This return to a decentralised architecture is opening up a world of new opportunities.

Disrupting legacy finance - pioneering

As the digital and internet space was being created, “pioneers” colonised it and built it up. As the space grew increasingly prosperous and populous, many of the “early settlers” have grown comfortable with the status quo.

This is especially true of many investors - those that braved the digital space were once adventurous, but now they are tamed. Those that initially colonised the digital space do not feel the need to push further into that metaphorical “West”.

However, beyond the current landscape and architecture, there are still new frontiers left. This is the “Wild West” of investing today - the space inhabited by blockchain, crypto, VR and yet unknown technology developments.

DeFi - frontier tech

Decentralised finance (DeFi), has grown from around 600M USD in total value locked (TVL) at the start of 2020 to over circa 90 bn USD a year and a half later, which shows the gigantic potential of these “frontier” technologies.

What is DeFi? In its perfect form, DeFi presents four characteristics:

1. Non-custodial financial services allow participants full control over their funds at any time
2. Permissionless nature of DeFi allows interaction with financial services without a third party being able to block or deny access
3. Openly auditable
4. Financial services can be arbitrarily composed

Crypto and Freedom

Cryptocurrencies, especially the established ones such as Bitcoin, are a neutral, open and borderless technology. The only thing they require is internet access - and their rules are the same, no matter your nationality, status, wealth, gender, beliefs or race.

They are powerful human rights tools which defend users against authoritarianism but also other abuses from traditional power structures such as kleptocracy.

Unlike with fiat money, no matter how much you own, you cannot debase them, confiscate, tweak the issuance, track transactions or generally rewrite the rules of the system.

As the internet and the digital space grew, civil liberty advocates concerned with freedoms after the great electronic transformation, yearned for a decentralised digital cash, an entity separate from governments or corporations, which could shield human rights in the digital age. Satoshi Nakamoto's Bitcoin, and later numerous other cryptocurrencies and tokens, provided the answer to those fears.

The ultimate risk is risk aversion

Crypto's appeal is undeniable - Bitcoin is the best-performing financial asset in the world over the past 12 years.

We are still in the very early days of this technology and the eventual impact of this industry on the gold market, art and collectible market, the stock market, the real estate market or the bond

market is hard to imagine.

Now that we have set the scene, let's get back to Synapse Network...

We don't live in a society. Let's build one.

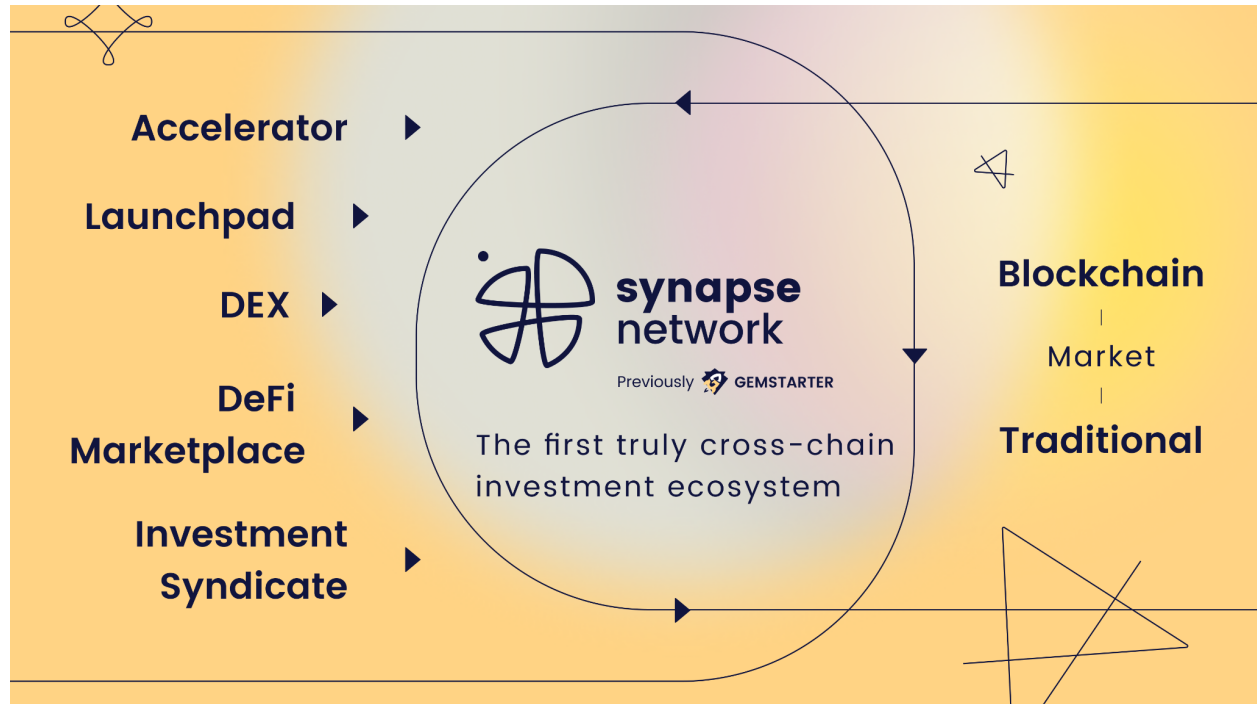
Synapse Network is building on these existing technological foundations and stepping stones - in short, we are creating a unique space that will allow users to have exclusive pre-access to products offered by projects incubated under Synapse Network.

At Synapse Network, we want to provide people the ability to invest at any stage, any amount they are comfortable with, whilst allowing investors to monitor the development of the project.

We want everybody to have an equal chance to contribute to upcoming projects. Essentially, we are building the fairest launchpad in history.

SYNAPSE NETWORK - A 360-DEGREE SOLUTION

Synapse Network, a DeFi ecosystem which has everything you need in the crypto world in one secure, simple and convenient place.



The Synapse Network Ecosystem visualised: The Major Elements of the Ecosystem

1. Synapse Network— A chain-agnostic crowdfunding platform
2. DeFi Marketplace — DeFi platform with multiple earning options
3. Cross-Chain DEX
4. Investment Syndicate - A network of trusted partners
5. Incubator and Accelerator

Synapse Network overview

Synapse Network is a 360-degree solution - in its final form, it is a complex and robust product, providing a decentralized world and investment technology ecosystem.

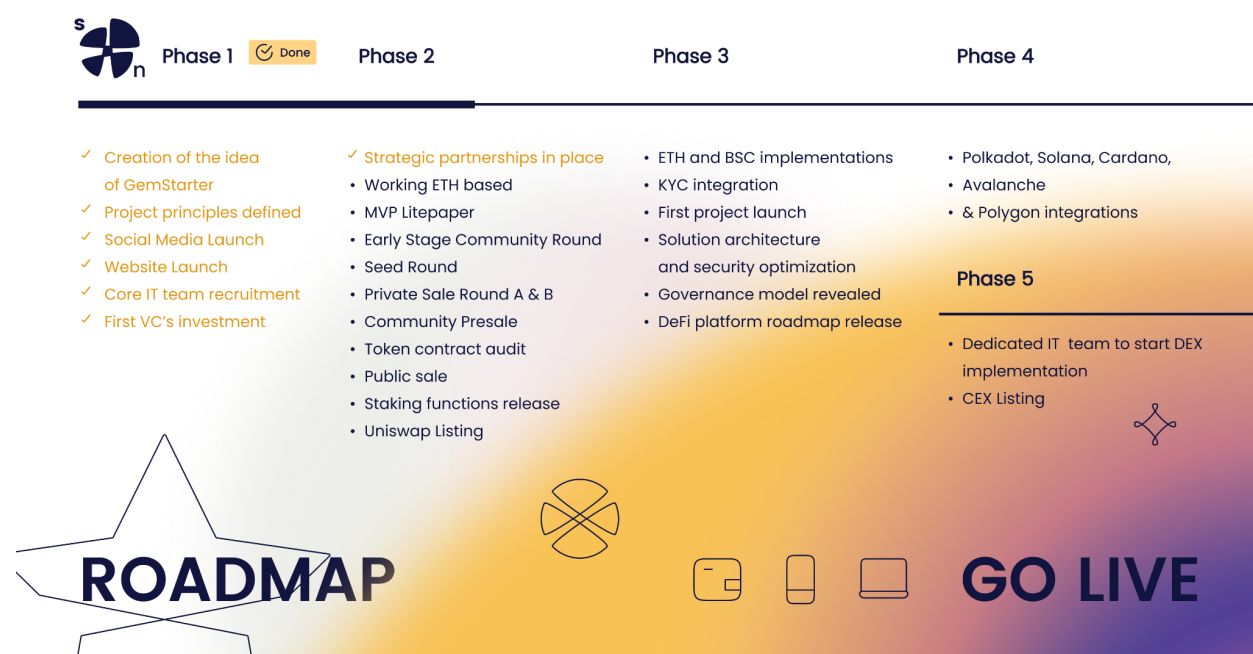
Synapse Network will provide a fully rounded and exhaustive solution which will give everyone an equal chance to invest (provided you have some capital) and build a company (provided you have a vision).

Our journey is taking us from launching a cross-chain Launchpad to providing an ecosystem

containing a DeFi platform and a multichain DEX, which will all be accessible from one mobile app. As part of this ecosystem, start-ups and entrepreneurs will have access to the Synapse Network incubator / accelerator as well as a network of trusted tech partners, business angels, venture capital and Synapse Network funds.

The Synapse Network roadmap...

As a company, we have a clear project development roadmap, extracted into FIVE PHASES - we have completed PHASE 1 and are currently working on PHASE 2.



The Core - a crowdfunding platform

We have a long term vision, but reduced to its simplest core, Synapse Network is a Launchpad, which will **provide investment opportunities in early-stage start-ups to everyone**.

Synapse Network will provide a cross-chain launchpad, a virtual trading floor accessible to everyone, regardless of how little or how much they own. This enables everyone to become an investor, and the possibility to accrue and increase their existing capital, on an equal footing.

To make investment fair and equal to everyone, regardless of the size of their investment, we have redesigned a **tier system completely from scratch**, to bring to low-cap investors the possibility to invest itself.

The Synapse Network tier system

The **tier system** we have developed is **simple, transparent and fair**. At its core, our system aims to provide

- a) guaranteed allocation calculated on the basis of tickets.,
- b) bonus allocation calculated on the basis of tickets.
- c) dividing the rest of the guaranteed allocation based on the deposited USD.

Bonus allocation will come into effect for every part of the pool that has not been filled up. It can happen if not every investor eligible for investment participated in the process. If, for example, 20% of investors skipped the project, then more or less 20% of the pool will not be filled. This part will be available for the investors who participated, but only for those who decided to over allocate (invested more than the tier allows). The platform will allow to over allocate and the funds not used for investment will be claimable on the platform. The bonus allocation will be calculated based on the number of tickets assigned.

After the bonus allocation phase, the platform will check if there is any part of the investment pool not filled. In such a rare case, the rest of it will be divided linearly to people who over allocated and still have funds after the bonus allocation phase.

Every part of the investment will be fully automated, the investor only needs to invest and decide whether he would like to over allocate. In such cases, bonus allocation will be calculated and subtracted from his overallocation. The only manual process for the investor will be claiming the remaining funds and claiming the bought tokens.

The tier system works as follows:

1. Taking part in events will require staking a minimum of \$500 in GMS tokens using DeFi services within the Synapse Network platform.

- \$500 in SNP tokens	1 tickets
- \$1,000 in SNP tokens	2 tickets
- \$2,000 in SNP tokens	3 tickets
- \$3,500 in SNP tokens	4 tickets
- \$5,000 in SNP tokens	5 tickets
- \$7,000 in SNP tokens	6 tickets
- \$10,000 in SNP tokens	8 tickets
- \$15,000 in SNP tokens	10 tickets
- \$20,000 in SNP tokens	12 tickets
- \$35,000 in SNP tokens	17 tickets
- \$50,000 in SNP tokens	20 tickets
- \$75,000 in SNP tokens	25 tickets
- \$100,000 in SNP tokens	30 tickets
- \$175,000 in SNP tokens	40 tickets
- \$250,000 in SNP tokens	50 tickets

The tier system was designed in such a way that we promote small investors and allow them to easily upgrade to another tier. We performed hundreds of simulations and based on this we found out the following mathematical formula:

$$\text{Tickets} = \text{power}(\log(\text{allocationSize}, 1 + \text{whaleHandicap} * (\text{tierLevel} + 1)))$$

$$\begin{aligned} & \text{NumberOfTicketsAssignedToInvestor}(\text{tier}) \\ &= \log_2 \left(\frac{\text{minTierTokenValue}_{\text{tier}}}{\text{baseMinTokenValue}} + 1 \right)^{(1 + \text{whaleHandicap} * (1 + \sum_{i=1}^{\text{tier}} i))} [\text{allocation tickets}] \end{aligned}$$

$$\text{whaleHandicap} = 0,044$$

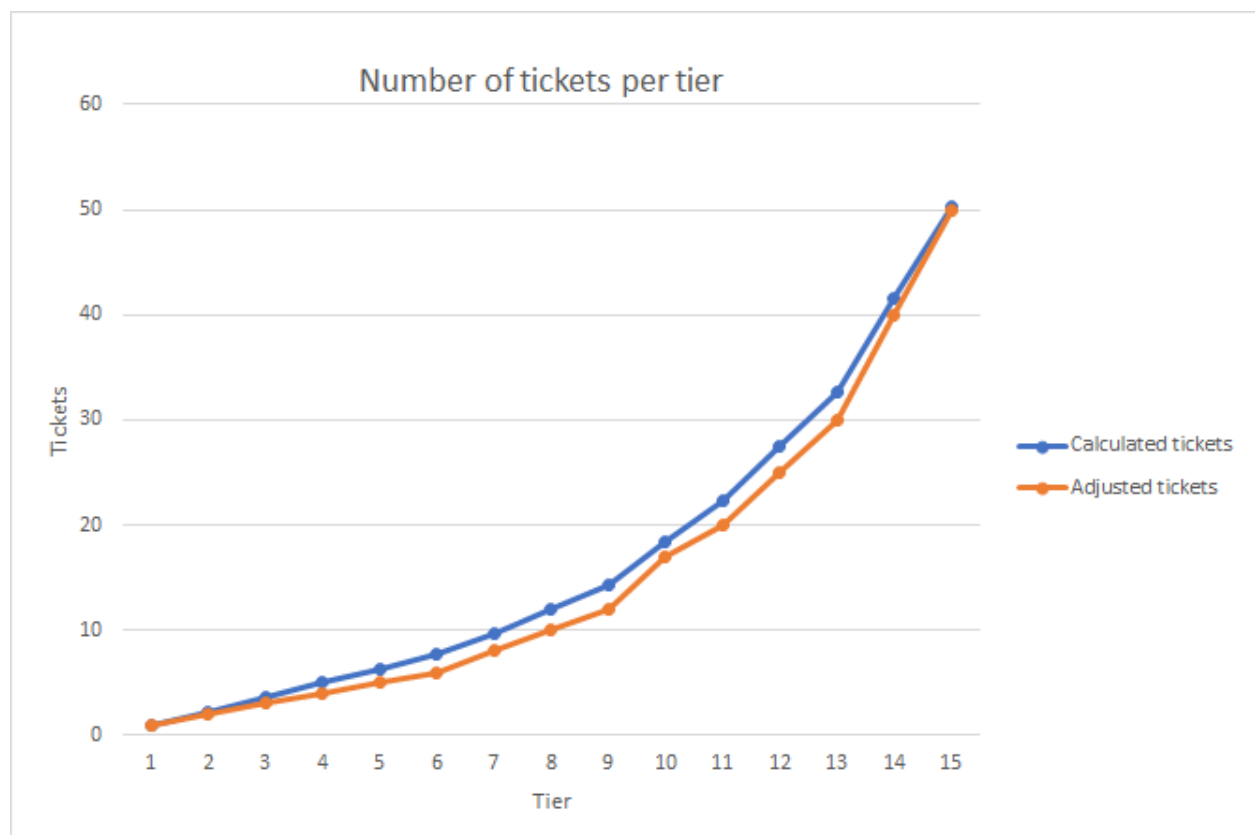
$$\text{baseMinTicketValue} = \text{minTierTicketValue}_{\text{tier1}} = 500\$$$

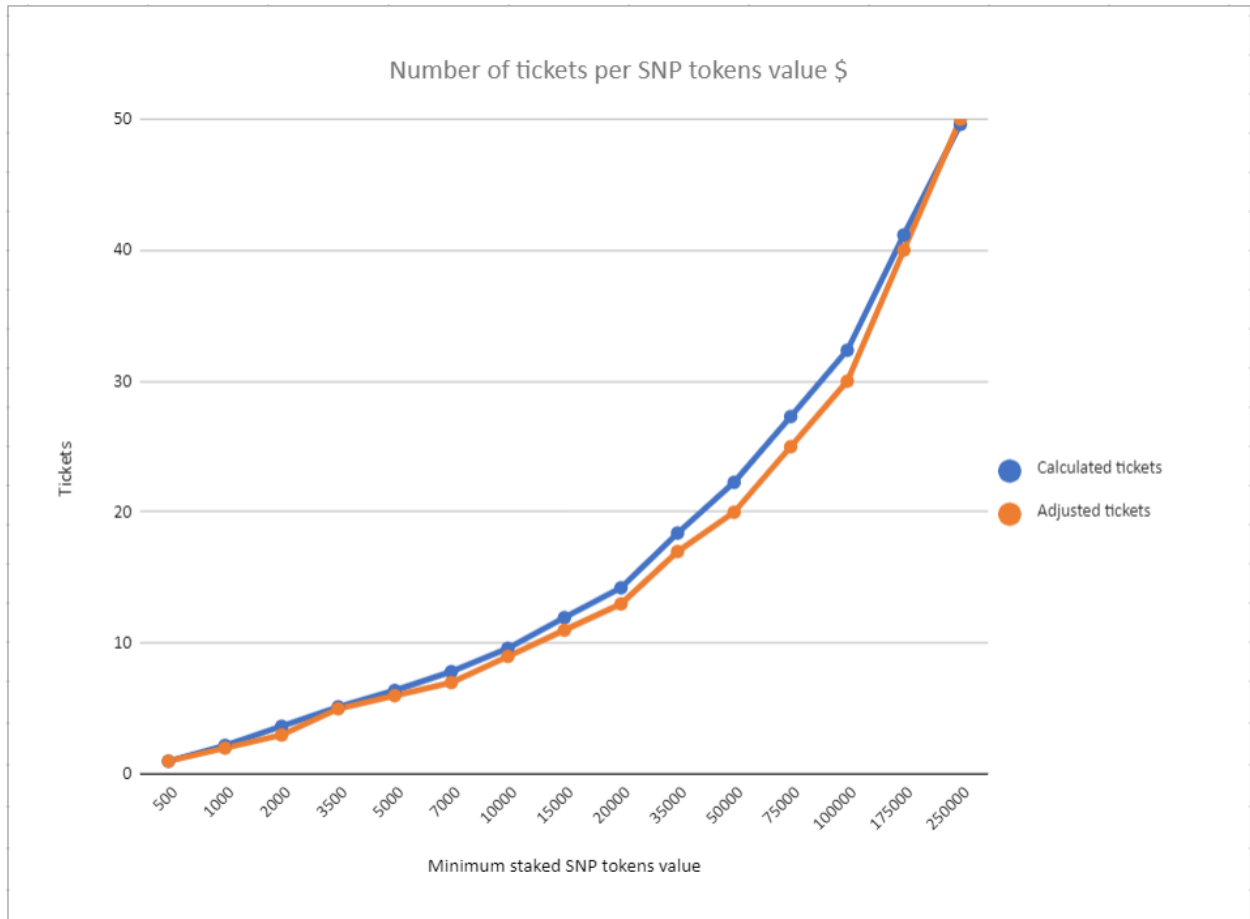
$$\text{minTierTicketValue}_{\text{tier}} = \text{minimum value of SNP tokens in \$ for specific tier}$$

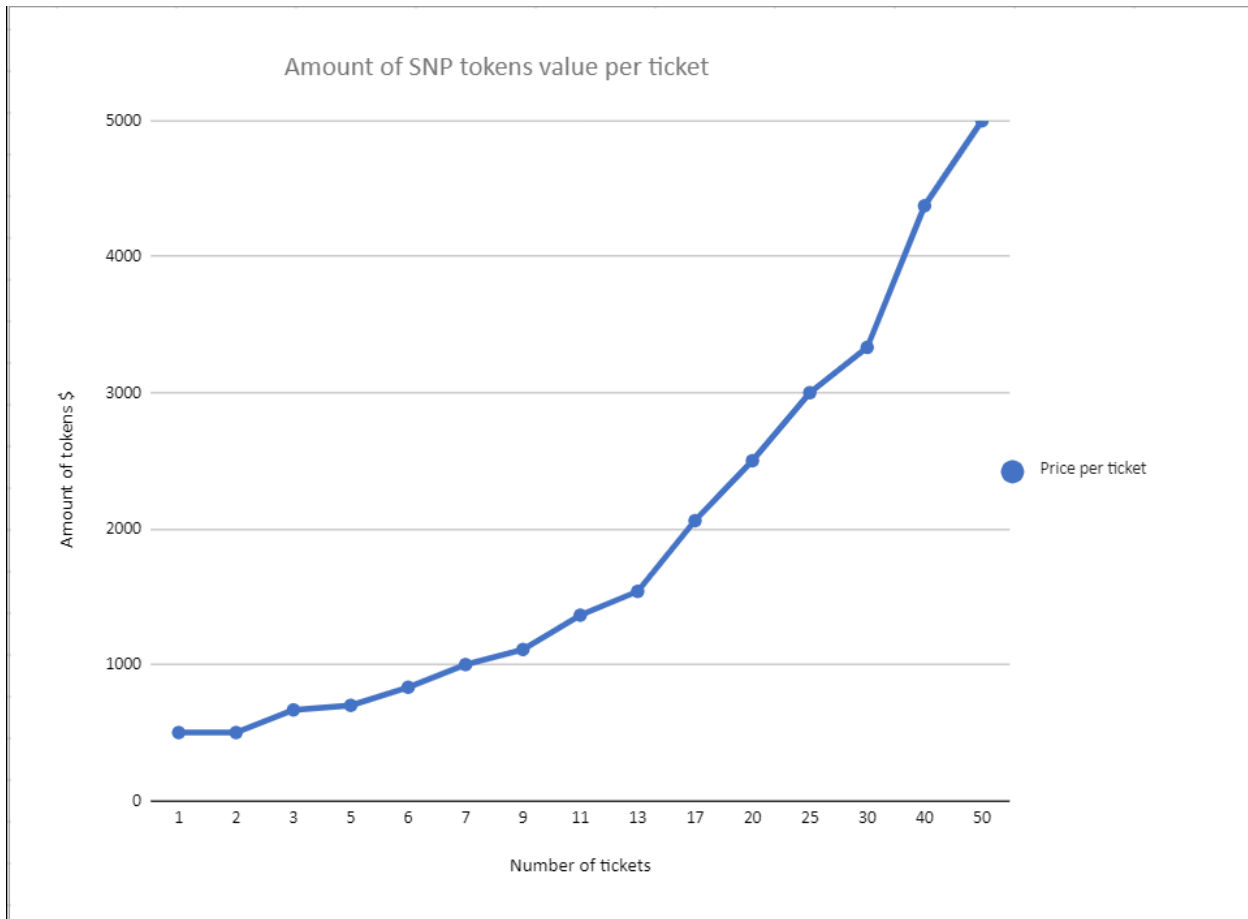
$$\text{allocationTicketValue} = \text{equal part of investment pool for an investor assigned per ticket}$$

$$\text{investorAllocationSize} = \text{allocationTicketValue} * \text{NumberOfTicketsAssignedToInvestor}$$

After that we slightly adjusted the tickets number to round numbers (calculated tickets vs adjusted tickets number). As you can see on the chart the ticket cost increases on every tier. The largest whales need to pay over 10 times as much for the same allocation as a small investor.







2. Maximum allocation, depending on the value of the SNP you stake, will increase following a simple tier system.
3. Getting a ticket requires passing KYC and connecting an account to the Synapse Network platform
4. Investors will be able to stake SNP tokens and achieve desired tiers, even 5 min before any sale starts. But to prevent a buy and dump strategy, we will enforce a small commitment from the users. After staking there will be a 7-day time frame where to unstake SNP tokens, users will pay a penalty fee.
5. To give everybody even chances to participate in our events:
 - One account per person, verified by the following methods: onchain, via KYC, by user behaviour, by device fingerprint, via IP. We will be very strict to these rules, and failing to comply may result in a permanent ban.
 - Tiers, once achieved - will last forever, regardless of the value of the SNP tokens - unless the SNP tokens are unstaked from our platform. It means that you are safe from the price drop.
 - You will be able to achieve a higher tier without extra tokens if the price of SNP token increases. To achieve it, you will need to process restake on our platform.
 - Adding tokens to the Stake will not reset the stake itself (this ensures you will not lose the tier even if the value of your tokens is lower than the tier level you have). This mechanism prevents the investor from losing in case of decreasing the value of SNP tokens. In such a case, adding more tokens to the stake will bring benefits to the investor

in terms of more income (with the same APY more tokens give the more income).

6. A robust and comprehensive anti-cheating prevention system that will disqualify bots and fraudsters attempting multi-account manipulation.
7. After 30 days of uninterrupted staking, you will become a Premium Staker and earn extra SNP Tokens - A 0.5% transaction fee will be distributed to all who gain Premium Staker
8. Protocols to avoid Gas War and FCFS problems, with convenient time limits set on deposits. The crypto world is stressful enough, so we would like to give you a flexible time window - you will have at least 24 hours to deposit. We will also notify you on platform and via email about every investing opportunity - it would be a shame to miss an interesting project.

Ultimately, Synapse Network will be a DeFi ecosystem which has everything you need in the crypto world in one secure, simple and convenient place.

This ecosystem will consist of the following building blocks:

Defi Marketplace - DeFi platform with multiple earning options

The DeFi Synapse Platform will be a simple and secure platform which will allow users to stake SNP tokens to participate in Synapse Network events as well as earn decent rewards with equitable APR.

Taking this further, this will also be the space where users have exclusive **pre-access to products** offered by projects incubated under Synapse Network. This platform will be the space where start-ups will gain their **first market exposure** and will help them **build a dedicated community**.

Synapse Network - Multichain DEX

Our solution will continue the work started by the decentralisation revolution, in order to provide value on both sides of the investment - to the entrepreneurs and the investors.

Our DEX will be simple, user-friendly and safe, allowing users to exchange most of the top-rated cryptocurrencies, and finally bypass the borders caused by single blockchains.

Additionally, this will be where projects **incubated** on Synapse Network will be listed.

Synapse Pad and Synapse Wallet- mobile applications

At Synapse Network we want to keep things as convenient and simple as possible - providing easy access to the crypto world is at the core of our model. Cross-chain solutions are frustrating, especially when using multiple wallets to operate across cryptocurrencies.

That is why we will develop an **all-in-one non-custodial multi-wallet** which will allow users to connect to existing platforms, whilst the Synapse Pad will keep everything organised.

The Synapse Network backbone - the “Investment Syndicate”

One of the most important components of the Synapse Network ecosystem is what we refer to as the “Investment Syndicate” - a network of trusted and reliable VC funds, business angels, tech partners, private investors and other blockchain projects.

This syndicate is an essential part of the Synapse Network ecosystem, providing a backbone to many of the projects in the Synapse Network ecosystem.

Based on this “Investment Syndicate”, we will also be able to provide our Incubator and Accelerator, with this network providing aside from capital, their human resources, ranging from business consulting, product development, technological know-how, due diligence services,

This precious know how, technical skill and experience will be a crucial, in not indispensable “service” offered to both the investors using our platform and the start-ups we help finance. This Investment Syndicate will grow these early stage start-ups, helping turn them into global businesses, those providing value to our investors who will reap the benefits of that growth.

More to be introduced soon