





“If you read onward you become a part of this tale.”

Terence McKenna

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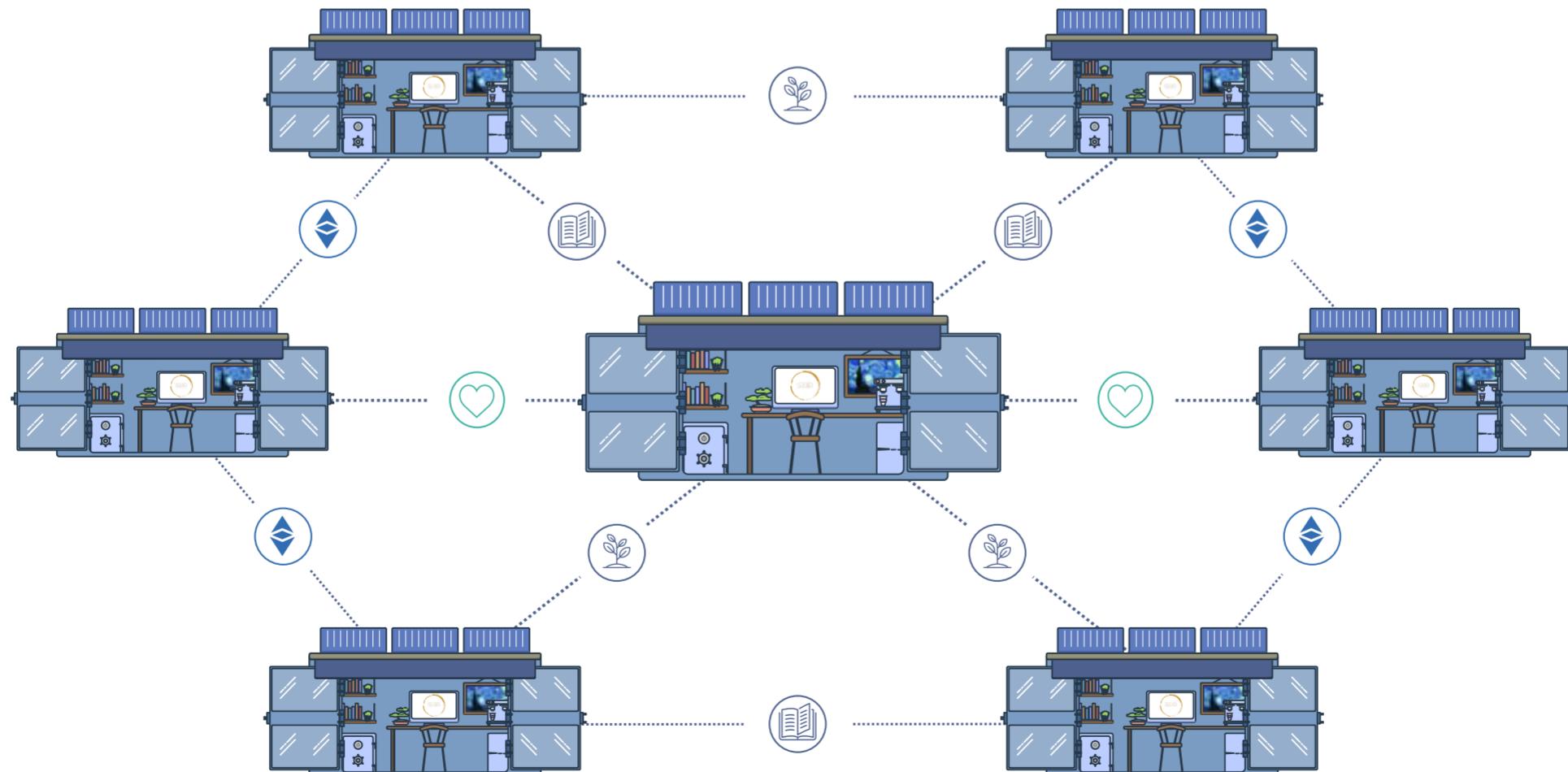
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S33D

1.1 What?

S33D is a distributed seed & story library that seeks to recalibrate the value of seed saving and storytelling within both our local and global economies.

A living trade canvas of ancient DNA encoded with cryptographic precision - S33D is a marriage between the ancient and modern worlds, germinating a suit of tools to assist in reconnecting us with our origins through education, trade, and localised community curation.



"Diversity goes hand in with decentralisation, and the creation of decentralised, biodiverse food systems is the key to the design of a world without hunger. For this, a shift from globalisation to localisation is vital. Globalisation has reduced food to a commodity while expanding the control of agribusiness. Localisation reclaims food as nourishment, expands community control of food systems, and promotes food democracy and food sovereignty." Vandana Shiva

1.2 Why?

It is estimated that within the last 80 years alone, monoculture food systems have lead us to lose up to 93% of our cultivated seed varieties*. Furthermore, a shift from localisation to globalisation has allowed us to become increasingly disconnected from the origins of what we consume.

Sensing the immeasurable value that this planet's biodiversity represents, we see value in collectively reclaiming seed sovereignty for the benefit of our commonwealth. The legacy trade paradigm, and subsequently the way the world's value systems have been calibrated, no longer serve the full potential of the planet and its diverse range of inhabitants. Within the new trade paradigm, programmable capital offers a creative path to live a timeless vision of humanity to preserve and amplify the Earth's voice, her abundant natural stores, and the harmony of all life she supports.

"It is now highly visible to take care of everybody on Earth at a higher standard of living than any other have known. It no longer has to be you or me. Selfishness is unnecessary. War is obsolete. It is a matter of converting high technology from weaponry to livingry."
Buckminster Fuller

* Taken from a National Geographic Infographic circa July 2011

1.3 How?

S33D is sprouting a virtual layer of mobile applications and a physical layer of globally distributed, locally curated Pods, weaving together an organic computer membrane powered by yOur story. Focusing innovation around open source libraries, consensus mechanisms, and trade webs, we begin to unlock the full potential of organic assets - opening a playground of edible education for all.



Value
Recalibration



Distributed Trade
Maps



Community
Governance



Open Source
Education

We see value in a product's history and would like to collectively tap and play with this golden canvas of communication. Offering wider and more transparent access to a diversity of food, medicines and plant based products, we begin to create aware and decentralised trade webs that offer promise to rapidly amplify crop security, food access, and consumer influenced choice.

Physical Network

2.1 Aloha Genesis Pod

On March 3rd 2019, S33D reached a milestone in its journey thus far by sowing the foundations of the Genesis S33D Pod in the soil of the Sierra Nevada Mountains. Our Alpha build began with an eleven-day workshop at Aloha Ke Akua, a conscious garden community located in the mountains above Minca, Colombia. The Aloha workshop focused our energies around sustainable building, dream and story sharing, with an imagination-stimulating introduction to seed saving, permaculture and the future of food forests.



Naturally home to a wealth of biodiversity including rare birdlife, plant species, and an extensive range of ancient knowledge, the Sierra Nevada is the perfect platform to begin showcasing the values we wish to amplify, preserve, and protect. Regenerating clean water, wilderness, and sustainable food systems on both local and global scales are essential. We all felt the Genesis Pod was born exactly where it was meant to be as we looked onto the snow-capped twin peaks of the world's highest coastal mountain ranges.

Physical Network

By building platforms to allow individuals to establish clearer connections with the origins of their food and medicines, we can begin to collectively revalue the bio-diversity of the planet as the abundant resource it truly is. As we were building the Pod in Colombia, the sense that our earth requires a diverse makeup of ecosystems for survival was constantly apparent.



We envisage bringing together a toolbox to assist us in collectively aligning our consumption and creation. Leveraging trust networks to accelerate the purchasing and restoration of degraded land to a balanced state, increasing crop security, and preserving languages and stories at risk of being lost.

Aloha Library

One of the main focuses during our Aloha Pod Build was the curation of the Pod's seed and story library. Many of these items were donated by those who took part in the build.

We used S33D's MVP application to log their existence and origin stories, exported as a CSV file and hashed onto the Bitcoin blockchain using Proof of Existence (see Virtual Network f.3.1).

"I have always imagined that Paradise will be a kind of library." Jorge Luis Borges

2.2 Pod Templates

A S33D Pod is a sustainably built community structure; a focus point or “hub” for localising learning, saving, production, and trade. Each Pod will provide the infrastructure necessary to collect, cast, curate, and verify the stories we share around the vast supply chains of our consumables. A portal to a global, open-source educational network focused on the restoration of biodiversity, its circulating knowledge, and wisdom keeping traditions.



“Imagination is everything. It is the preview of life’s coming attractions.” Albert Einstein

S33D's platform will provide the tools necessary for communities to govern their Pods. These features include:

Physical Network



Living Libraries

Gardeners can collectively curate for their Pod's libraries, focusing mainly around: **Seeds, Books, & Tools** (Nodes, Skills, etc). Each Pod will also have an accompanying Wishlist so communities can vote on which seeds and educational resources they wish to preserve within a shared space. Once tested inside the Pod, this collective curation can breathe life into the surrounding garden as the living library sprouts.



By encouraging communities to locally preserve seeds of the world and their accompanying stories (data), we can globally increase an awareness around the relative value of diverse biospheres. Acting as super nodes in a distributed library network, Pods hash records of inventories and curation votes onto various blockchains, using decentralised file storage systems to save digital repositories for increased network security.



Community Trusts

Each Pod will have its own accompanying DAO, a multi-signature trust that is managed by the gardeners of each community. Each DAO will have an accompanying investment index that is voted on by the Pod's gardeners using census rounds. Vote where to invest, store, or spend community funds.

Index

Rank	Symbol	Name	Change	Value
1		Bitcoin BTC	+ 13.98 %	4.96
2		Hemp HMP	+ 4.67 %	16.98
3		Papaya PYA	+ 2.2 %	4.9
5		Ethereum ETH	+ 0.33 %	44.4
4		Cacao CAO	- 0.03 %	6.6



Proposals & Requests

New 3D Printer
\$399.99 (2.16 ETH)

Votes Needed: 46 / 66 68 %

Security Camera Feature
\$29.99 (0.16 ETH)

Votes Needed: 30 / 33 90 %

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The Aloha Trust (see Capital Allocation 4.3) will be the first community DAO template that we begin experimenting with (see Aragon 7.4).



Events

Pod's can host markets, story, and trading circles to encourage the fostering of local connections and regenerative culture. Gardeners can upload their smART contracts into a community marketplace, selling them at locally organised events. Pods therefore act as hubs for communities to record and validate local produce and their origin trails (supply chain data), acting as gateway nodes to S33D's wider network.



For trades that take place at Pod markets, a portion of the Plant Hearts minted will go directly into the Pod's DAO. This acts as a financial incentive for communities to host and validate local trade, as well as a mechanism to grow a larger commonwealth fund. Communities will also be able to host a range of events at their Pods, including (but not limited to): Educational talks, sharing circles, workshops, meet-ups, musical events and much more.



Communication

Each Pod will have a virtual story board (yOur Story) to act as a communications channel. This will be a social space for gardeners to post pod updates, educational resources, discuss and comment on various community topics and initiatives. As well as fundraising and creating polls for sowing consensus on the evolutionary direction of Pods and their wider communities.

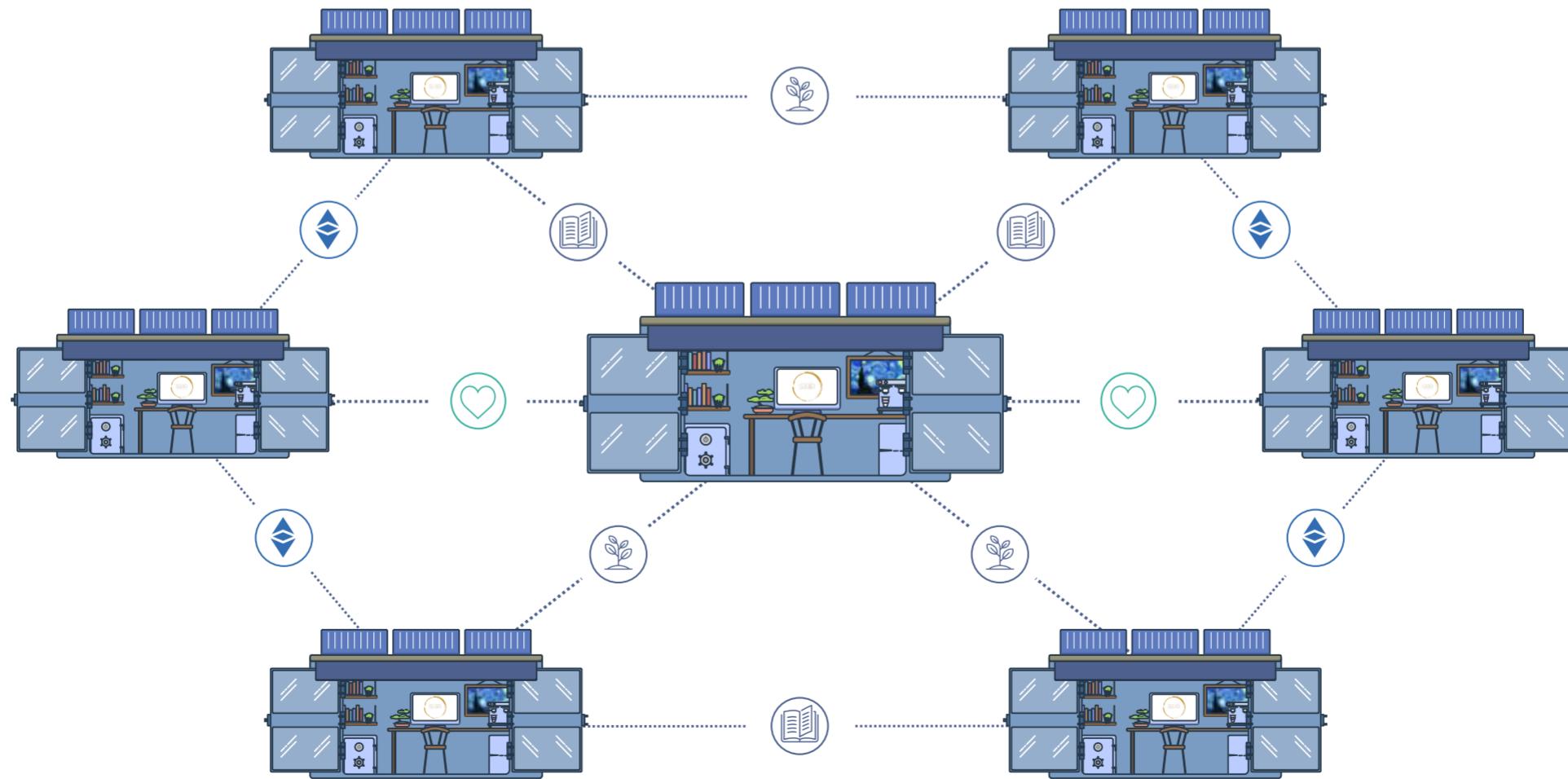


Physical Network

2.3 The S33D Library Network

S33D is sprouting Pods in the heart of communities around the world. Together these form the S33D Library Network (SLN). As mentioned, Pods are creative spaces germinating out of a diversity of materials, with a shared goal to grow greener and cleaner as they evolve. Embodying the principles of local community while recognising the value of global communications.

The aim of SLN is to build physical locations for trade communities to self-organise, save, and connect, with each pod facilitating the weaving of a distributed trade web and its accompanying live data stream. Pods also act as curation points for both physical and virtual information (an open access point to various pre-existing libraries of educational resources & research), as well as secure storage spaces for a globally distributed seed bank.



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As these pods continue to sprout they will begin to knit together with mesh networks, a cleaner, more flexible & less invasive alternative to stagnant cellular towers. Ideally, we'd love to see Pods located in spaces such as public gardens, allotments, schools, hospitals and sustainable communities.

We are confident this physical network can spur on the open-source education movement whilst raising awareness for plant diversity and node decentralisation, essentially growing the exoskeleton for an augmented geo-localised trade tool. Furthermore, as P2P production and trade blossom, the SLN helps usher in a new era of open access to regenerative products and their provenance trails.

"If you want to go fast, go alone. If you want to go far, go with others." **African Proverb**

Build a Pod

Would you like to help usher in a new age of seed sovereignty by creating a Pod for you and your local community? If so, please send an email to pods@s33d.life with your contact information and a brief description of your community or project.

Virtual Network

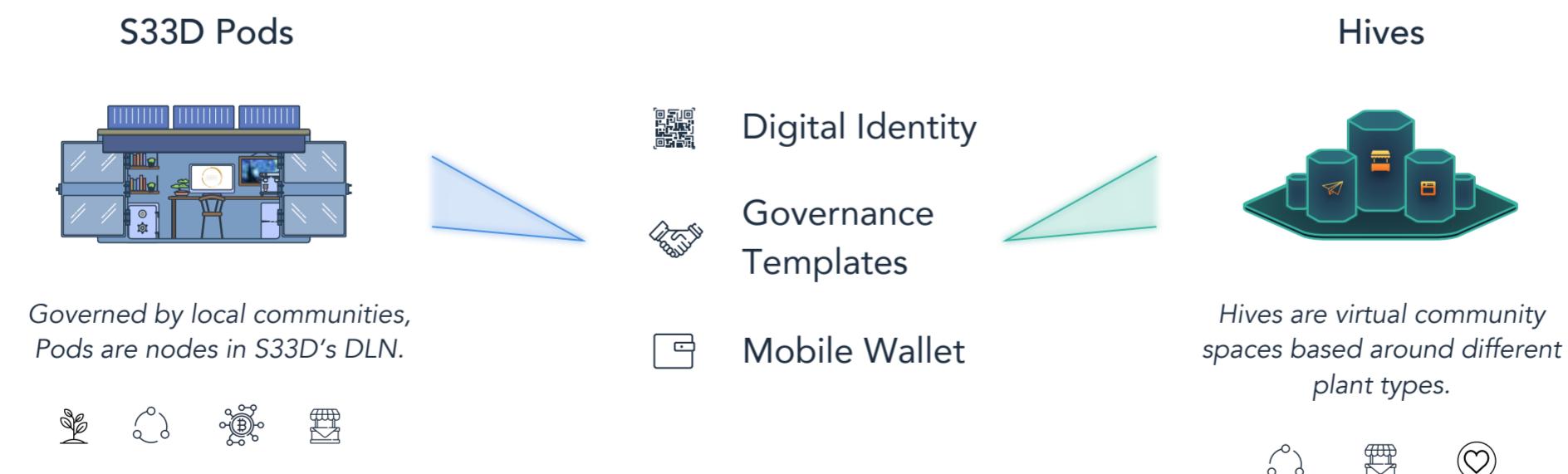
S33D is germinating an ecosystem of dApps, explorers and portals to synchronise with existing pods while encouraging further propagation, and assisting our reconnection to the origins of our consumption.

3.1 S33D MVP



S33D's MVP Application allows community members to sign up and create their digital identity, store tokens/assets in their wallet, and take part in the social governance of S33D's genesis pod(s) being built at Aloha and elsewhere.

We are patiently integrating new features, such as: Fundraising Tools, Polls, Index DAOs, Events, and Maps augmented with Harvest calendars. Once this model reaches a certain standard of operation, it will be packaged for other gardeners to use - allowing communities to create their own Pods and join the SLN.

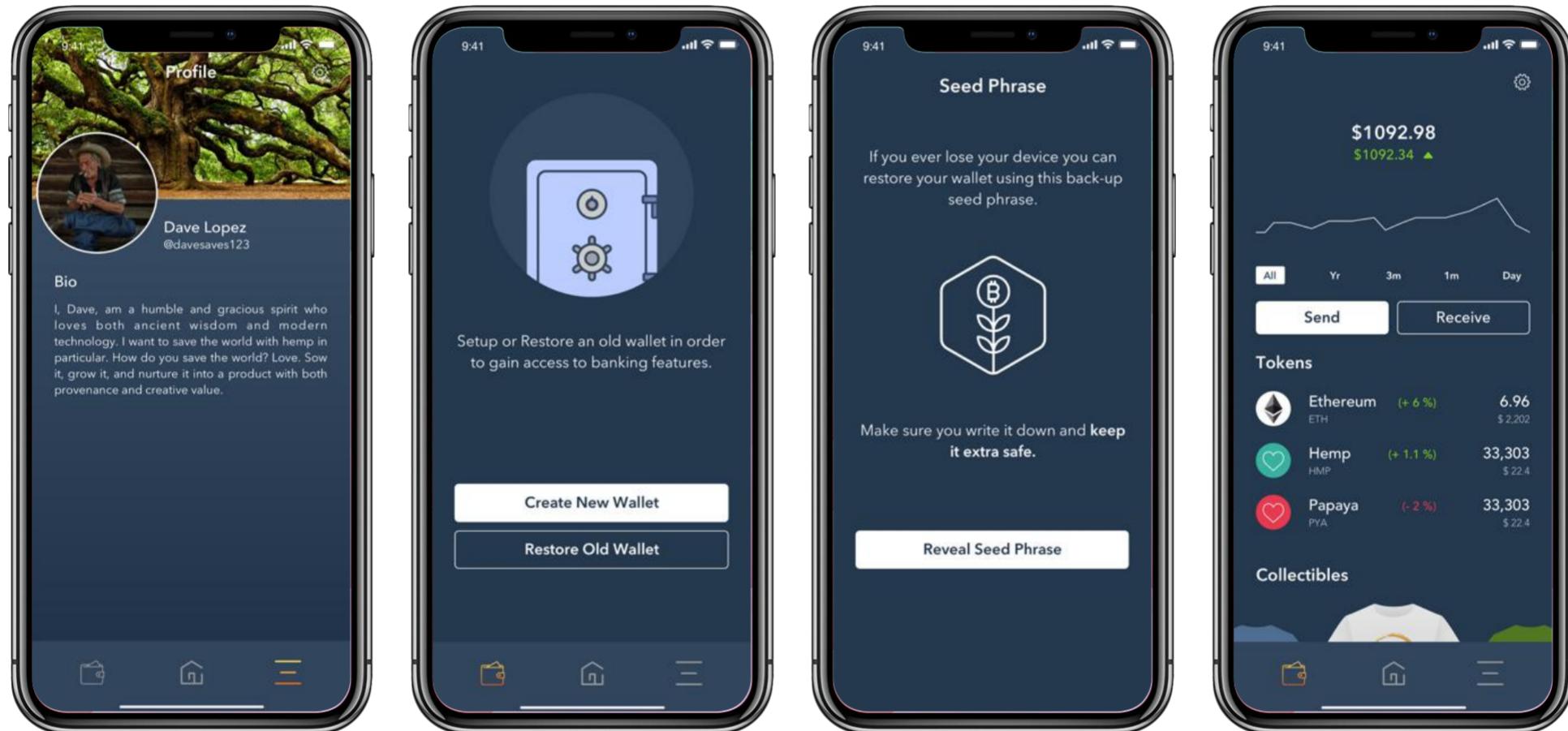


f.1



Identity & Backpack

Gardeners can sign up within the app and create their S33D identity. They also have access to their own backpack (wallet), and can securely store Ether, ERC-20 & ERC-721 tokens, as well as their own personal seed & story collection. This includes their NowTee collectibles, which can be used to amplify reputation with a Pod.



f.2



Messaging

For basic communication between gardeners, we have built an in-app chat function. Gardeners can contact each other when negotiating and/or arbitrating contracts, organising events, or for any other purpose. Chats can either be direct messages between gardeners, or group chats between multiple people.

S33D: A GOLDEN DREAM, V2



f.3 Pod Governance

The main function of S33D's MVP is the ability for gardeners to govern their local Pod(s). Pods are governed as geo-local DAOs by their communities, and gardeners can be members of multiple pods.

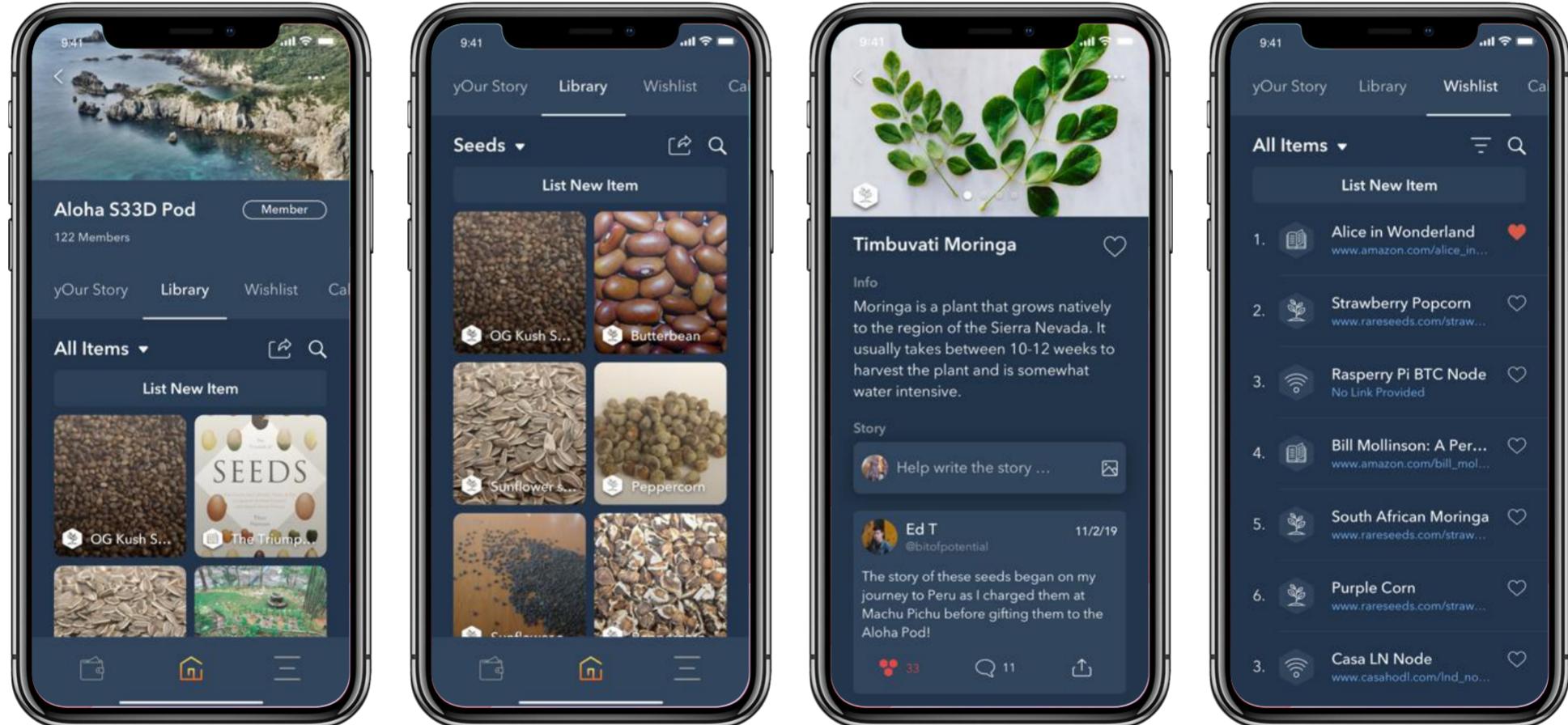


The primary focus of each pod is to curate a living library of seeds and data that contribute to an ever growing distributed library network. Pods will also serve as event hubs and learning portals for their local communities.

Virtual Network

f.3.1 Library & Wishlist

Gardeners can curate a living library for their Pod, focusing mainly around the inventory of: **Seeds, Books, & Tools** (Nodes, Skills, etc). Gardeners can upvote items within the Pod's library as a tool of physical curation. Each Pod will also have an accompanying Wishlist for communities to vote on which seeds and educational resources they wish to preserve within a shared space.



Gardeners are also able to export their Pod's library, hashing it onto the bitcoin blockchain using Proof of Existence (PoEX.io). This enables added security when keeping track of a community's library, as well as the changes to its curation (e.g voting, edits and additions).

<https://proofofexistence.com/detail/a2534957b25842b09d62d98c682a3e6a8c4e56edf50a1efc5fd560bc7a4bb443>

f.3.2 yOur Story

Each Pod will have a virtual story board (yOur Story) to act as a communications channel. This will be a social space for gardeners to post pod updates, educational resources, discuss and comment on various community initiatives, fundraise, and create polls for matters of consensus.

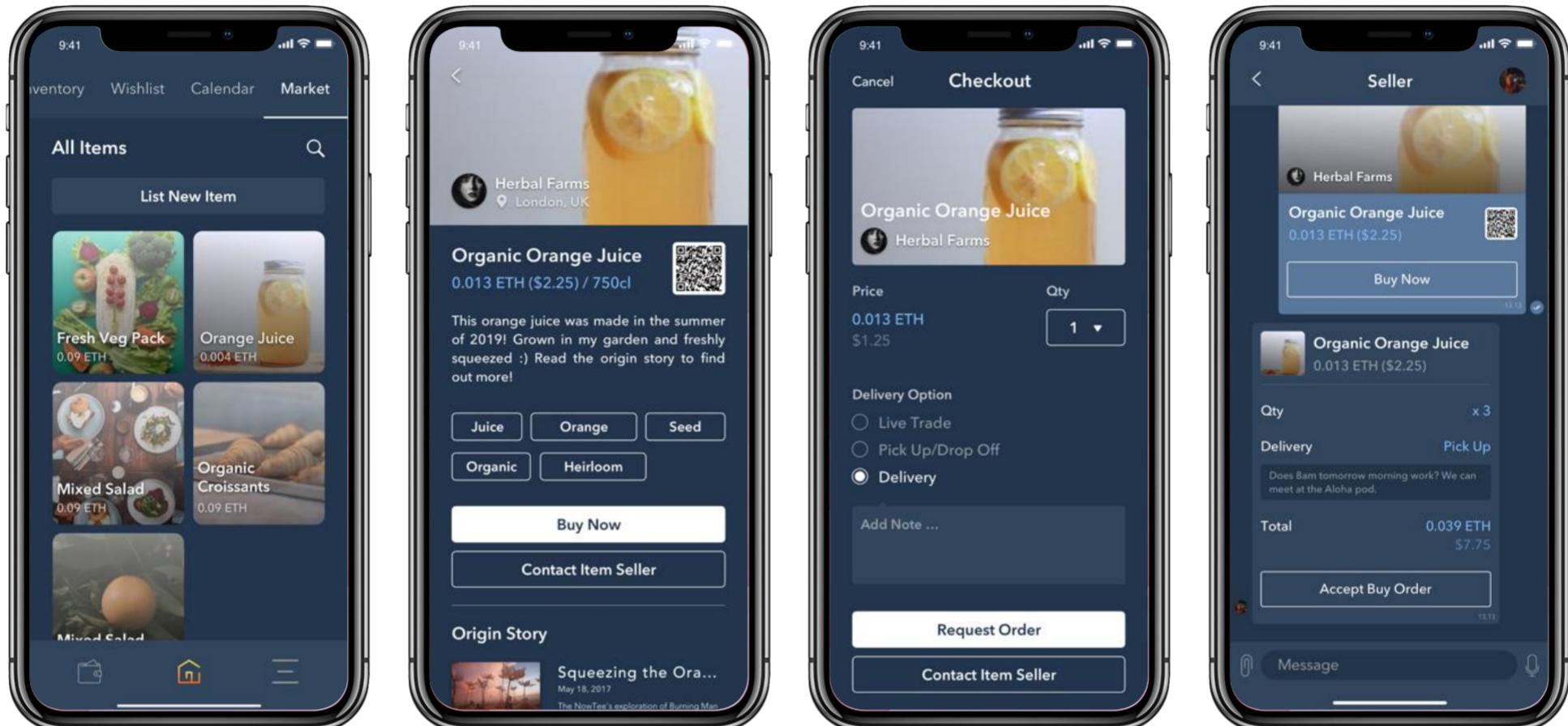


f.3.3 Events & Commerce

Pod's can host markets and trading circles to encourage localised trade and story telling within their community. Gardeners of a Pod can upload their smART contracts into a community marketplace, selling them at local events.

Virtual Network

Pods act as hubs for communities to record, map and validate locally traded products, as well as gateway nodes to S33D's wider marketplace.

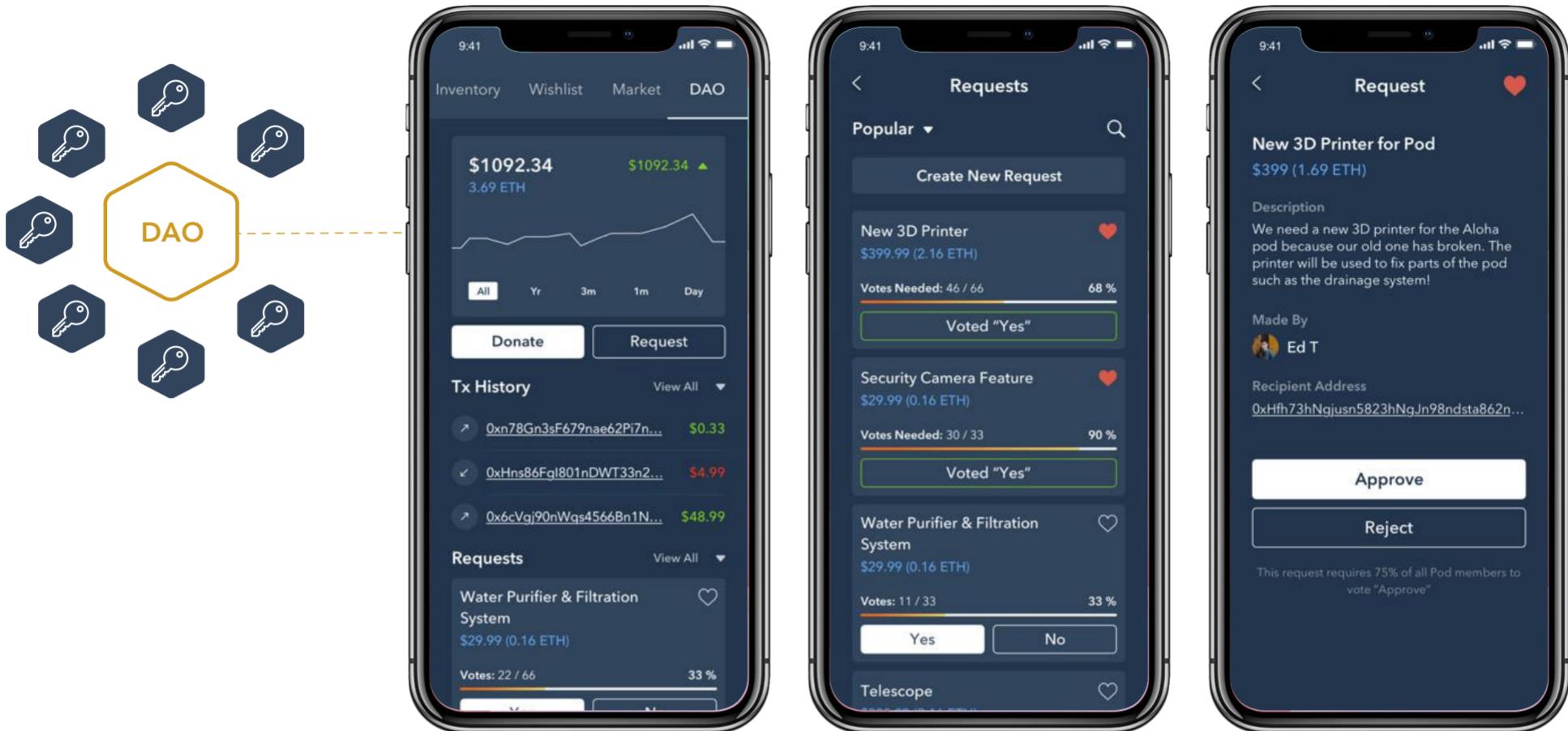


f . 3 . 4 Community Banking

Each Pod has its own accompanying DAO, a multi-signature fund that is governed by the gardeners of each community. Each DAO will take the form of an investment index that is voted on by the Pod's gardeners. Vote where to store or distribute community funds.

For trades that take place within a pod's marketplace, a portion of transaction fees will go directly into the pod's DAO. This acts as a financial incentive for communities to host and validate local trade, as well as a mechanism to grow commonwealth.

S33D: A GOLDEN DREAM, V2



"Creation is not finished - the world occurs anew every moment." Hans-Peter Durr

f.4 Hives

Once we have sufficiently tested our first governance templates using Pods, we will begin experimenting with Plant & Crypto Hives. These are social education spaces focused around different plant types or crypto-assets. Gardeners will be able to build, join, and access Hives of their choosing.

We will start by developing the Hemp Hive, creating a working template that can later be forked for other plant species that are of interest to the community. Using mobile, web and desktop portals, gardeners can govern Hives using blockchain toolkits and tokens.

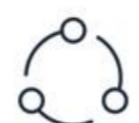
Virtual Network



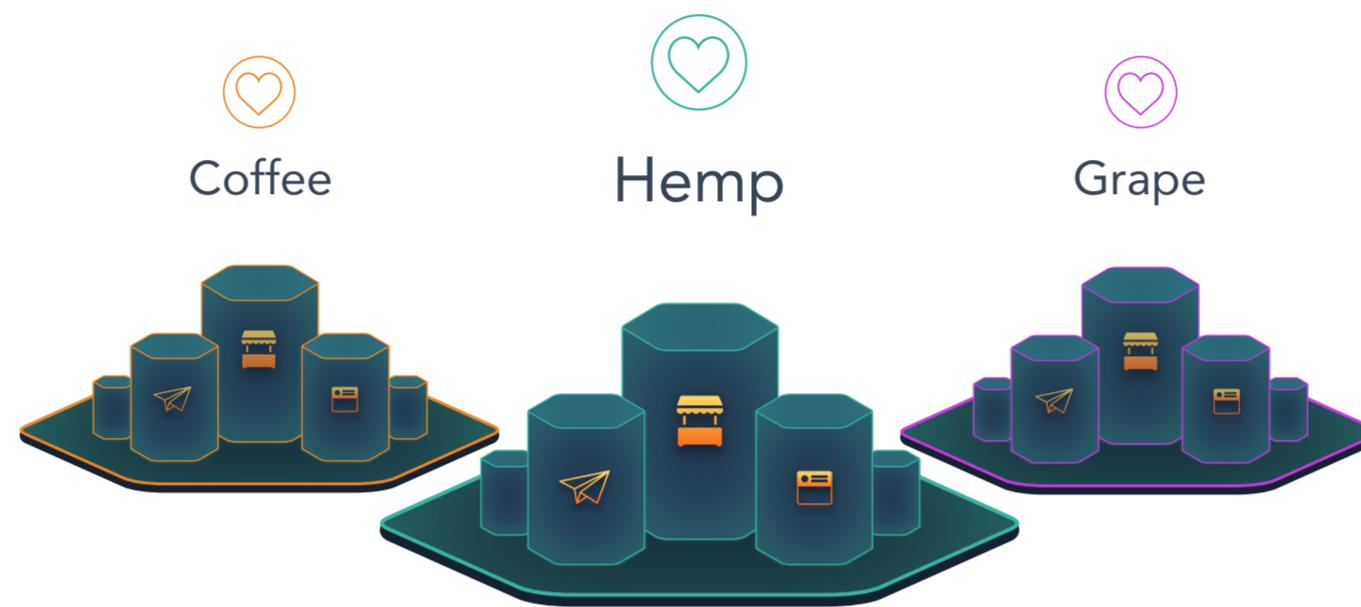
"Don't waste your time chasing butterflies. Mend your garden, and the butterflies will come." Unknown

f.4.1 Hemp Hive

The Hemp Hive will be the first Hive launched, introducing the same features built for Pod templates in a different context. Features we are including are: Markets, Events, yOur Story (social education), as well as DAO governance using the native Hemp Heart - a utility token for governing the Hemp Hive (See 4.6), and to incentivise origin trails back to a product's source.

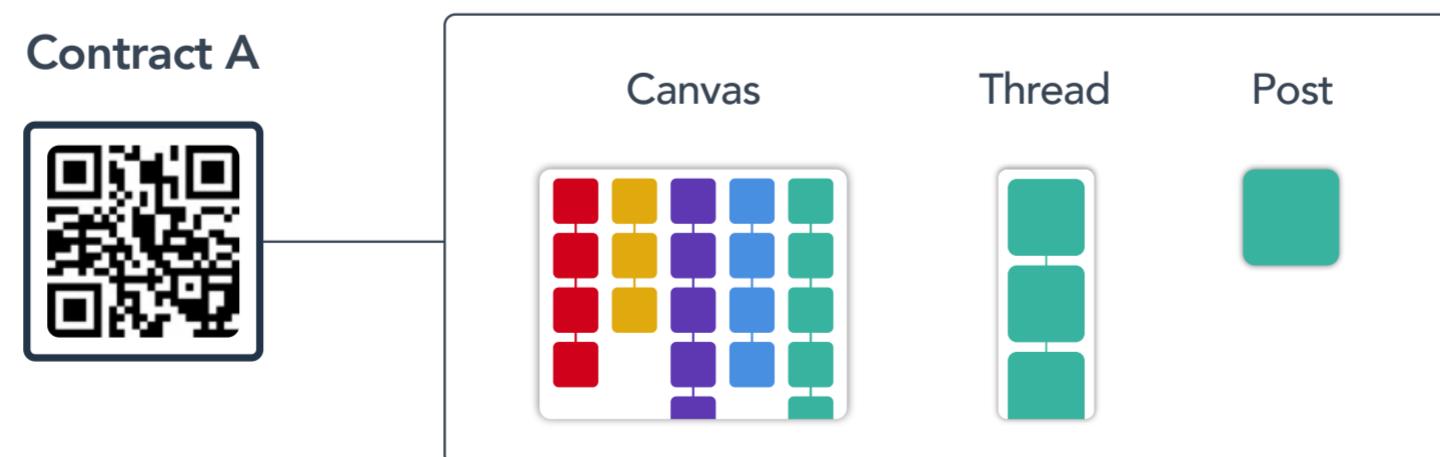


Once we have completed a working template for the Hemp Hive, we will begin opening up Hive creation to other plant and crypto assets.



f. 5 My Garden

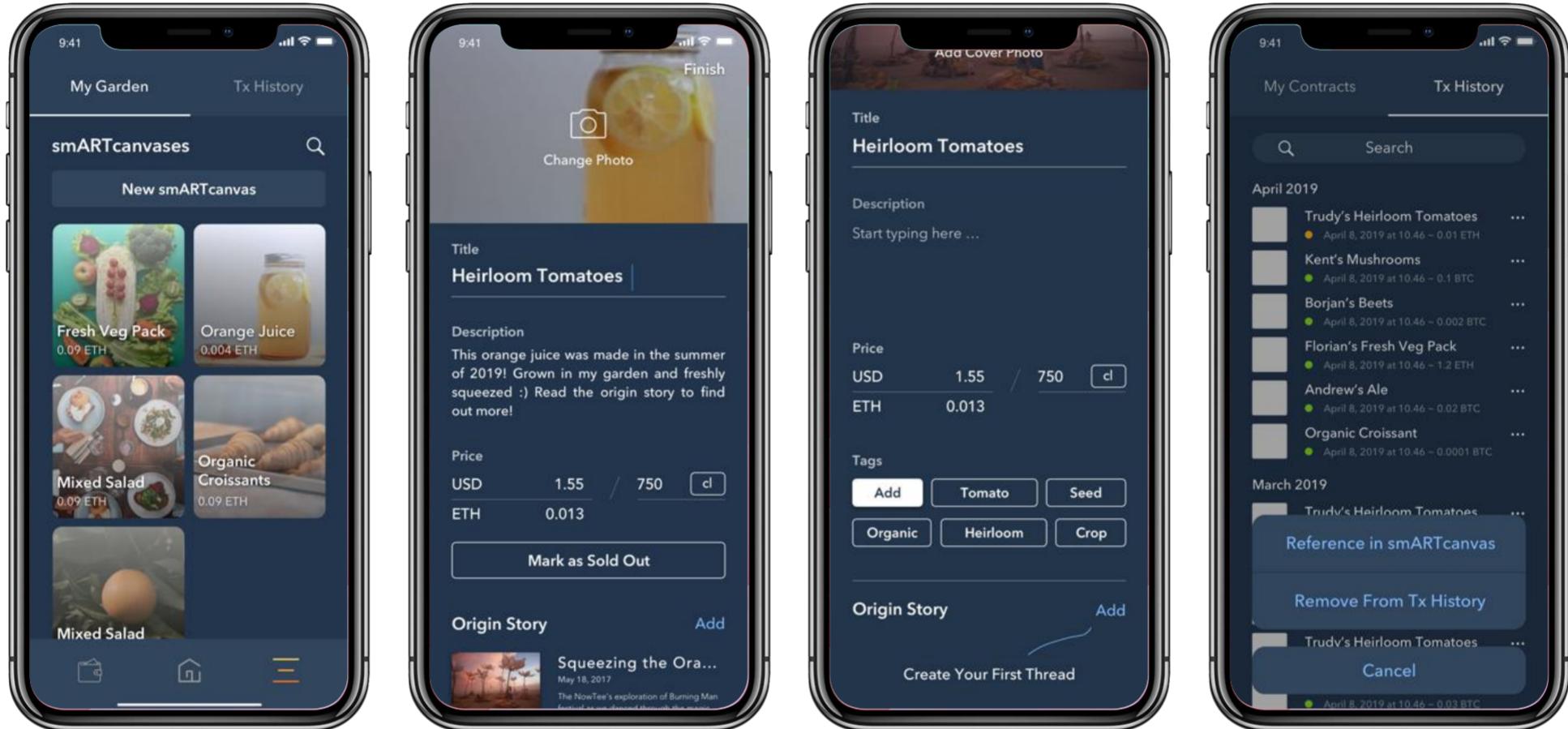
My Garden is the section of the app whereby users can create contracts for items they wish to sell within a Pod or Hive marketplace, curating the origin story of their product along the way using a smART canvas template.



The purpose of smART canvas templates is to facilitate a sweeter reconnection between

Virtual Network

growers, producers, and consumers. By allowing supply-chain data to be accessed at the moment of trade, consumers are able to gage a better idea of what world they are feeding as they feed themselves.



"Biomimicry is innovation inspired by nature. In a society accustomed to dominating or 'improving' nature, this respectful imitation is a radically new approach, a rEvolution really. Unlike the Industrial Revolution, the Biomimicry Revolution introduces an era based not on what we can extract from nature, but on what we can learn from her." Janine Benyus

3.2 NFTrees



The other side of the seed's spiral is the fractal nature of the Tree. In order to accelerate our collective realisation of the immense value that diverse biospheres hold for us, we are developing protocols to begin valuing ancient trees within the mainstream economy. The focal point of these protocols is the creation of a game that incentivises the mapping of our world's trees using blockchain collectibles (NFTs).



"The creation of a thousand forests is in one acorn." Ralph Waldo Emerson

How Will it Work?

NFTrees are digital trading cards created around specific trees, using location and species trackers to hash and store tree data onto distributed ledgers. In order to create new NFTrees, or confirm and collect ones that have already been mapped, users have to prove they are within a given radius of that a tree's location (e.g Takara). They do this by generating the three words associated with a tree's location (www.what3words.com). These 3 words can also be used as a search function to find NFTrees within the game's map (NFTree "block" explorer).

Virtual Network

Along with a tree's locational data, we believe it would be equally beneficial to map its species and dimension. Plant Hives will be able to incentivise further data flows in the form of stories and scientific study.



A Game of Generations

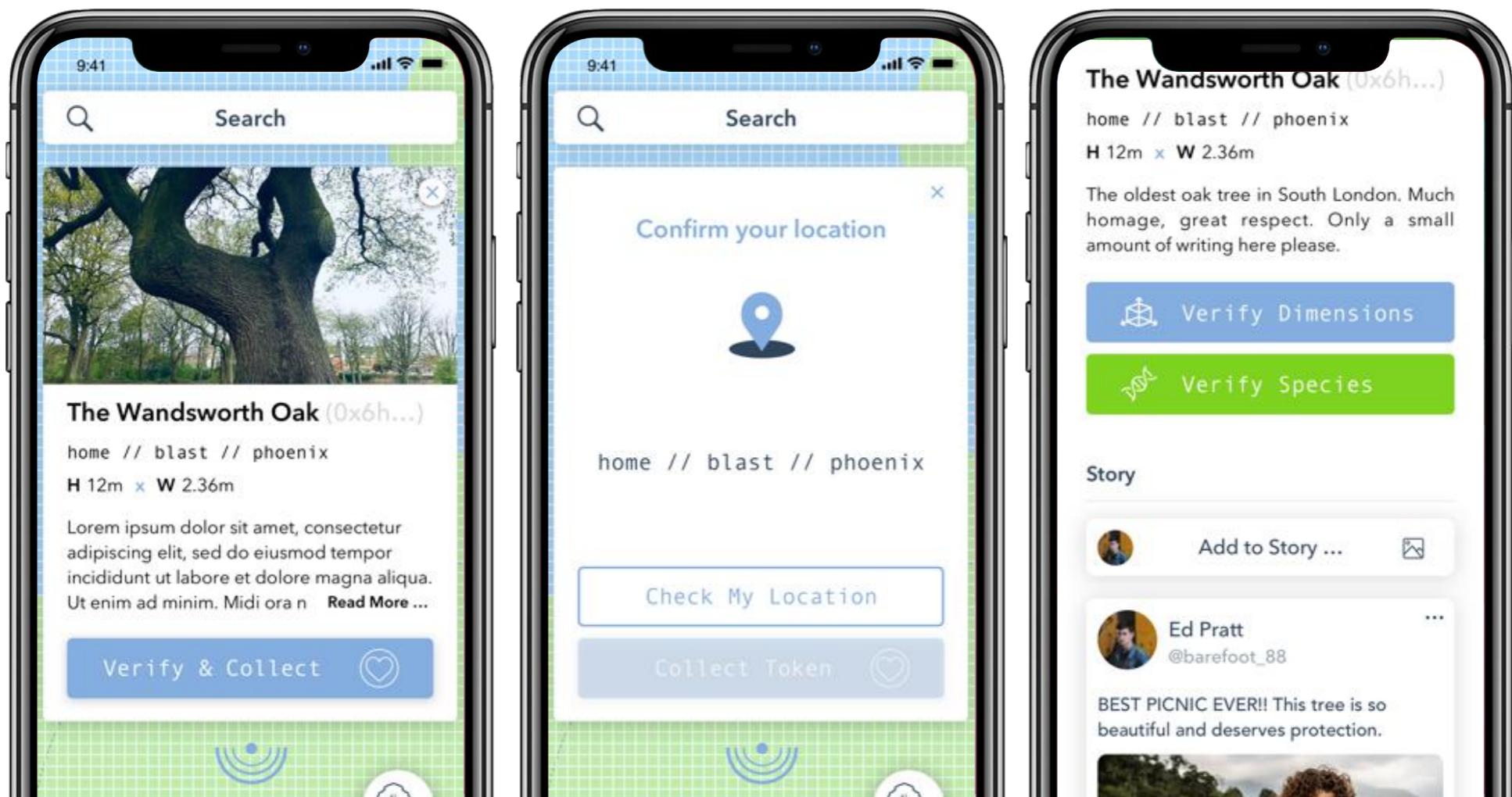
Each confirmation of an existing NFTree releases a new trading card (sorted in Generations), the earlier you confirm or map a tree, the lower the generation of your trading card is (i.e relating to it's rarity). These generations will be scaled according to the golden ratio beginning with 3 (3,3,6,9,15...).



For example, each new NFTree mapped therefore needs a minimum of 3 confirmations to produce a trading card. These first 3 confirmations will produce a Generation 1 NFTree associated with the mapped tree, the next 3 confirmations will release 3 Gen 2 NFTrees, the next 6 confirmations produce 6 Gen 3 NFTrees and so on.

Natural Nodes

In order to evolve the concept of NFTrees, we are proposing virtual noticeboards to be located around each tree. This will be similar to social feed, however, users can only post or comment on a tree's virtual noticeboard if they can prove they are at that location. Instead of carving your initials into the tree's trunk to mark your visit, take a selfie and hash it onto a tree's feed. Trees then become the natural nodes in a new social network for NFTree gamers.



3.3 PlantLabs



PlantLabs will act as an all-in-one desktop portal to access Pods, Plant Hives and NFTree maps. Gardeners will be able to visualise the mapping trade flows, trees, census indexes, as well as gaining access to an open-source plant knowledge library. This will be a hugely powerful tool that people can creatively harness, imagine an augmented plantpedia.

Trade flows can be accessed and mapped via an evolving block explorer specific to the trade transactions of individual plant, visualising genetic mapping & trade data based around each species.

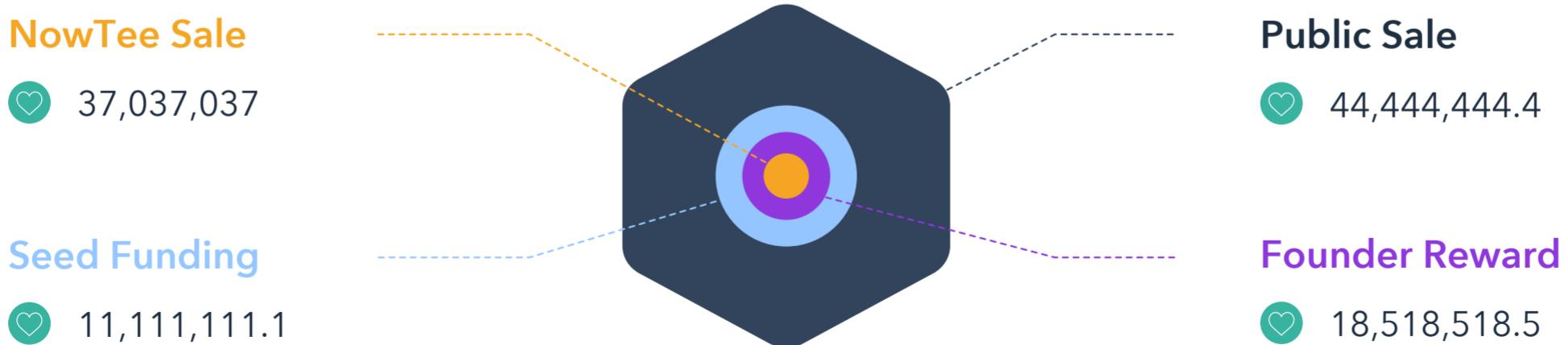
IGO

4.1 Initial Garden Offering

HMP Total Supply	Initial Garden Offering	Hemp Hackathon	Remaining HMP
555,555,555	111,111,111	111,111,111	333,333,333

To write the next chapter of the S33D story, we are coalescing resources around a three faceted IGO (Initial Garden Offering) to distribute pre-minted Hemp Hearts (HMP) to our early supporters. HMP is an evolving utility token circulating the S33D network, facilitating the launch and governance of the first plant DAO, the Hemp Hive.

1/5th of the total supply of HMP will be offered over the course of our IGO (see Overview). A further 5th will be minted during the Hemp Hackathon over a 21-month period, germinating the Proof of Open Heart Protocol (PoOH). The final 3/5th's will be distributed via Proof of Play (PoP). PoP is hybrid minting protocol of PoOH and Proof of Trade (PoT).



Initial Garden Offering

This follows a long tail distribution curve minting HMP and the moment verified organic trade. This minting process will be replicated with other Plant Hearts (e.g. Cotton, Cacao, etc).

4.2 What are Hemp Hearts (HMP)?

Hemp Hearts (HMP) will be the first, and only pre-minted Plant Heart to circulate the S33D Network, akin to a freely tradable air-mile circulating the hemp economy. HMP will be used as a utility token to: govern & vote in the Hemp Hive, stake and secure the Hemp String (chain), pay for contracts and fees. HMP will also play a vital role in allowing sponsors to take part in S33D's Hemp Hackathon (see Post IGO for more info).



Stake in Hemp Hackathon



Vote & Govern Hemp Hive (DAO)



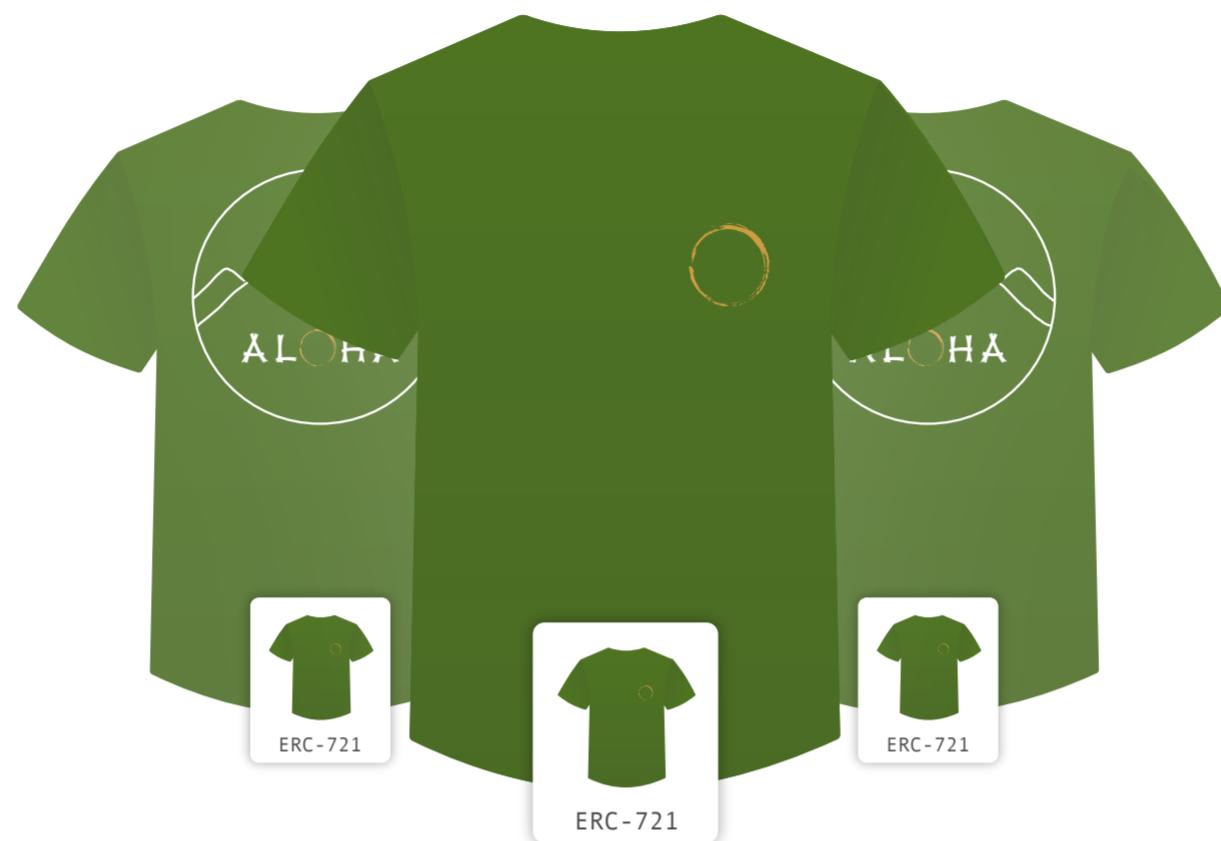
Use to Pay Contracts & Tx Fees

4.3 The Aloha NowTee's

Target	HMP Minted	Price Per Heart
\$110,700	37,037,037	\$0.00298

S33D's IGO opens with the pre-sale of 999* limited edition Hemp T-shirts. NowTees are sold in sets of three, each paired with a unique digital collectable (NFT). In order to

S33D: A GOLDEN DREAM, V2



demonstrate the concept of our future Proof of Trade (PoT) protocol, **NowTee buyers will be gifted 111,222.333 HMP for each set bought.** 33 Sets of Aloha NowTee's have been reserved for founding partners and those who took part in the Aloha pod build in March 2019. All NowTee's are available in sets of three (S,M,L) for a minimum donation of \$369 (incl. VAT). Money raised will set-up the Aloha DAO and the Papaya Foundation (www.s33d.life/aloha-alpha/).

Why Aloha?

Naturally home to a wealth of biodiversity including rare birdlife, plant species, and an extensive range of ancient knowledge, the Sierra Nevada is the perfect platform to begin showcasing the values we wish to amplify, preserve, and protect. For more information on why we chose to begin the story at Aloha Ke Akua, please read this article we wrote for Face the Current magazine (<https://facethecurrent.com/s33d-restoringearths-sustainable-food-systems-through-global-seed-pods/>).

Initial Garden Offering

Capital Allocation



Aloha Ke Akua, Colombia

Aloha Ke Akua Share - \$50,000

Aloha DAO - \$12,775

"Aloha is a conscious permaculture community based in the Sierra Nevada Mountains of coastal Colombia, one of the most biodiverse regions in the world."

**This represents the genesis funding of the S33D commonwealth (a network of DAO's orbiting Pods & Hives)*



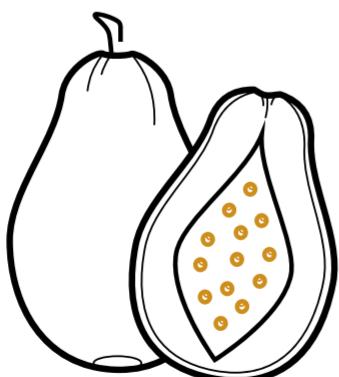
T-Shirt Manufacturing Cost

THTC Organic Hemp - \$12,500

Printing - \$1000

Delivery - \$1000

VAT (20%) - \$22,200



Papaya Seed Ltd. Expenses

Papaya Seed Ltd & Foundation

Set Up Costs - \$8200

**Email, File Storage,
& Other Software Tools** - \$2525

4.4 Papaya Seed

Target	HMP Minted	Equity Offered	Price Per Heart
\$1,100,000	11,111,111.1	40%	\$0.099

Following the NowTee offering, Papaya Seed Ltd will be raising capital through a seed investment round, **offering investors both a share of HMP and equity of the company.** Papaya Seed will flower into a private investment fund (The Papaya Fund) to nurture projects and dApps within the S33D ecosystem, as well as a foundation (The Papaya Foundation) to distribute grants and form councils around keystones of the ecosystem.

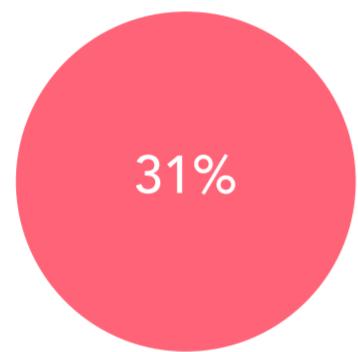
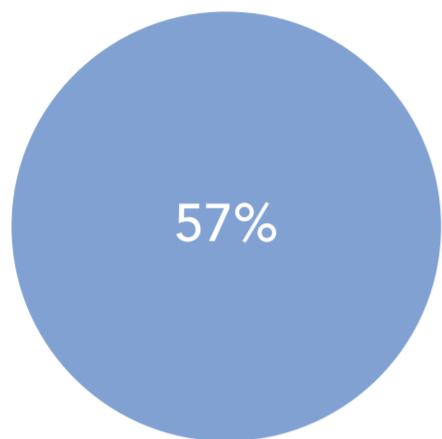
Gold (8%)*	Silver (4%)	Bronze (2%)
Amount Invested \$220,000	Amount Invested \$110,000	Amount Invested \$55,000
HMP Reward  2,222,222.22	HMP Reward  1,111,111.11	HMP Reward  555,555.555

Capital raised during this private investment round will primarily be used to fund the IGO Public Sale, the Hemp Hackathon, as well as salaries for Papaya Seed Ltd's core team.

* Gold investors will also be given a seat on the board of Papaya Seed Ltd.

Initial Garden Offering

Capital Allocation



Ecosystem & Blockchain Development

Hemp Hackathon* - \$300,000
IGO Set Up* - \$180,000
Mobile App - \$85,000
Website - \$60,000

Salaries

Core Team (x5) - \$325,000
Intern Compensation (x3) - \$11,000

Company Expenses

Legal + Accountancy Fees - \$85,000
Software Extras - \$6,000
Travel - \$20,000

Office

Pod @ Gossimer City - \$10,000 / yr
Tech Fit Out - \$10,000
Furnishing Fit Out - \$8,000

4.5 Papaya Foundation

Target	HMP Minted	Founders Share	Price Per Heart
\$33,300,000	62,962,962.9	18,518,518.5	\$0.74925

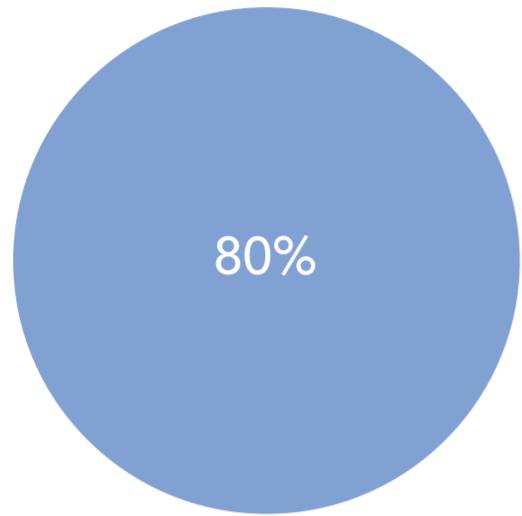
Once we have closed our private funding round for Papaya Seed Ltd, we will open up the HMP public sale, widening distribution whilst raising a larger portion of capital to expand development progress and continue working on S33D's more complex protocols, such as Proof of Play (PoP).



The vehicle steering this evolution will be the **Papaya Foundation**, a not-for-profit organisation built for the sole purpose of furthering non-custodial development. The goal of the foundation is to help pioneer governance and distribution templates that assist with resource amplification and the preservation of diversity across a distributed network of thriving gardens.

Initial Garden Offering

Capital Allocation



Ecosystem & Blockchain Development

- Mobile App** - \$1,000,000
- Software Grants** - \$10,000,000
- Hardware Grants** - \$10,000,000
- Protocol Development** - \$5,000,000
- NFTrees** - \$600,000
- Seed Councils** - \$60,000

Papaya Seed Ltd Costs

- Salaries (x8)** - \$695,000 / yr
- Law Council** - \$100,000 / yr

Papaya Libraries

- La Semilla, Colombia** - \$500,000
- SA / Zimbabwe** - \$500,000
- UK** - \$1,000,000

Foundation Expenses

- Legal + Accountancy Fees** - \$100,000 / yr
- Office (London)** - \$40,000 / yr
- Software Extras** - \$10,000 / yr

4.6 Post IGO : The Hemp Hackathon

HMP Minted	Time Period	No. Of Rounds	Honeypot
111,111,111	21 Months	7	12,111,111

Once the IGO public sale has successfully launched, we will begin distributing the next portion of HMP during the Hemp Hackathon using Proof of Open Heart (PoOH). Growing around the launch of the Hemp Hive (DAO), the purpose of the hackathon is to stimulate projects within the S33D ecosystem whilst securing the hemp string as HMP holders stake their tokens. The hemp string is the first weaving of the S33D Web, facilitating a reconnection to the origin of all we consume and the creative nature of this consumption.

Why Hemp?

The Hemp Hack is bringing together projects and investors involved in the rapidly evolving hemp industry. S33D has chosen to combine a hemp focus with blockchain tools to create solutions that will assist the industry to fulfil its economic and social potential, predicted to be worth **"\$31 Billion by the end of 2022"- Forbes**. This renaissance has largely been propelled by the increased awareness of the advantages of growing and consuming this plant.

- Medicinal Benefits 
- Bio-Plastics 
- Sustainable Bio-Fuel 
- Good Rotation Crop 



-  Carbon Sequestration
-  Less Water
-  Organic / Zero Pesticides
-  Soil Detoxification

Initial Garden Offering

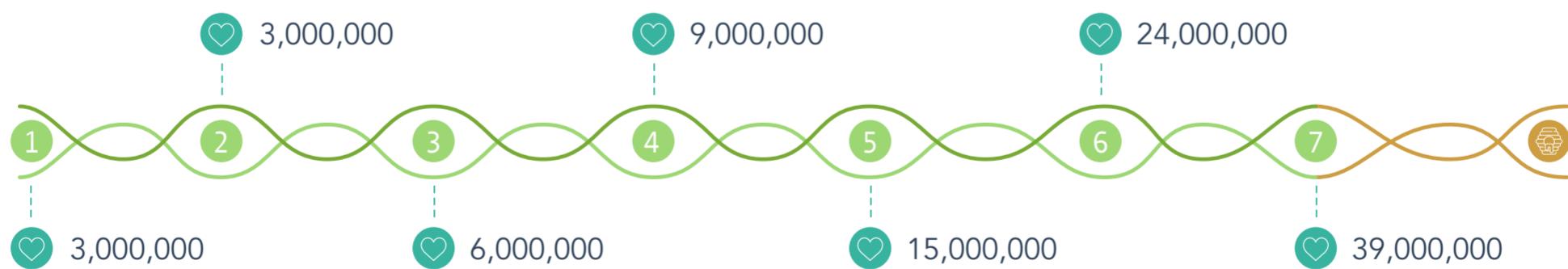
Medical research suggests that cannabinoids such as CBD promise to become a keystone of the new health paradigm. Environmental benefits are also present throughout the supply chain, from soil remediation to alternatives to all crude oil based products.

What is Proof of Open Heart (PoOH)?

PoOH is S33D's first staking protocol and will be used during the Hemp Hack to secure the hemp string whilst stimulating development and consensus within the Hemp Hive (DAO). In return for staking of HMP, gardeners may vote for a proposal or project within the hackathon. The collective consensus of open hearts then determines how the newly-minted HMP will be distributed between projects in each round, as well as voters.

How will the Hemp Hackathon Work?

Every 3 months a reward pool of HMP will become available to all that take part by staking a minimum of 3 HMP and voting in the round. The reward is then split 3 ways between: stakers, proposed projects, and voters. Votes are cast between proposed projects participating in the Hemp Hackathon.



Following the 7th Round, the remaining tokens will be given to the project that has accumulated the most votes over the course of the hackathon. The purpose of the Hemp

Hackathon is to widely distribute new-minted HMP whilst attracting new developers and projects into the S33D ecosystem.

How will the reward pool be split?



1). Stakers

The first third of the newly minted HMP will go to those who stake their tokens and secure each census round. The HMP reward is given in proportion to a user's stakings.



2). Proposed Projects

The second third of HMP will go to the proposed projects in proportion to their popular vote.



3). Voters' Lotto

The final third of HMP will be distributed to the accounts of one voting collective each round. The winning collective will be the group of voters of one project, and their chances of winning the lottery are proportional to how many votes their elected project received over the course of a voting round.

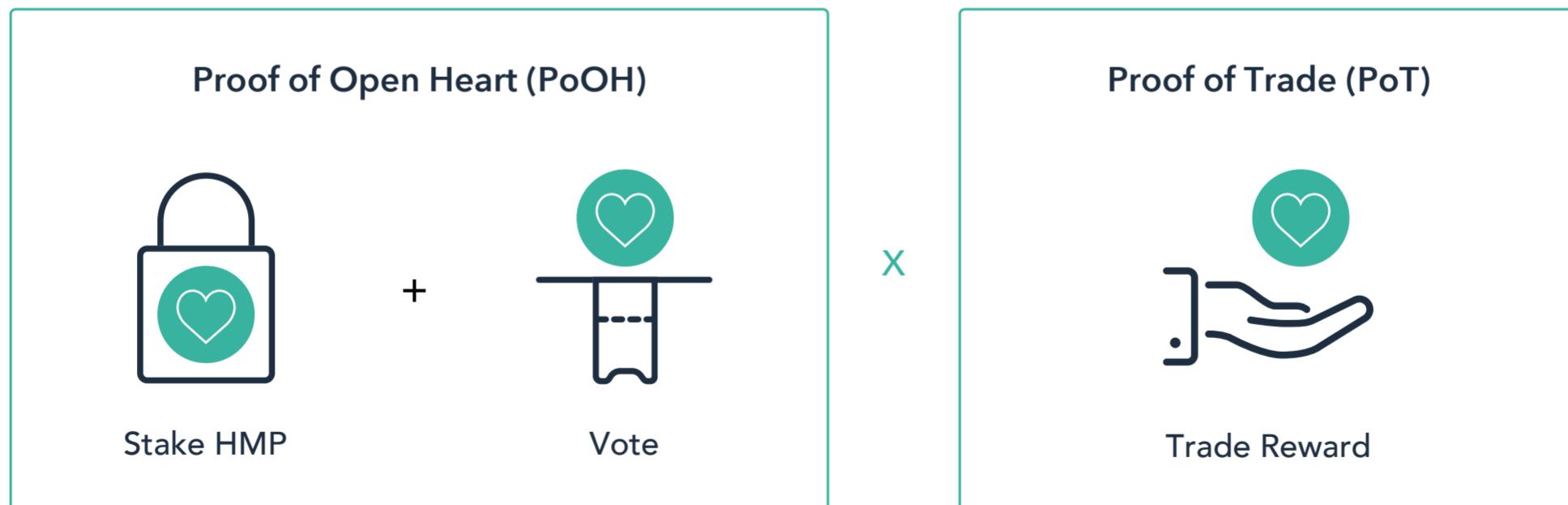
Initial Garden Offering

4.7 Proof of Play (PoOH x PoT)

HMP Minted	Time Period	Proof of Open Heart	Proof of Trade
 333,333,333		 111,111,111	 222,222,222

By the time we have completed the Hemp Hackathon using Proof of Open Heart (PoOH), we hope to have developed S33D's Proof of Trade (PoT) protocol so we can begin integrating our hybrid minting process - Proof of Play (PoP). Please see our HMP Overview for more information on how the token distribution will occur.

Proof of Trade (PoT) seeks to distribute Plant Hearts at the moment of trade to gardeners, Pods, and Hives. Akin to a freely tradable air-mile, Plant Hearts distributed during Proof of Trade (PoT) will help incentivise organic trade, rewarding gardeners for sharing their stories transparently.

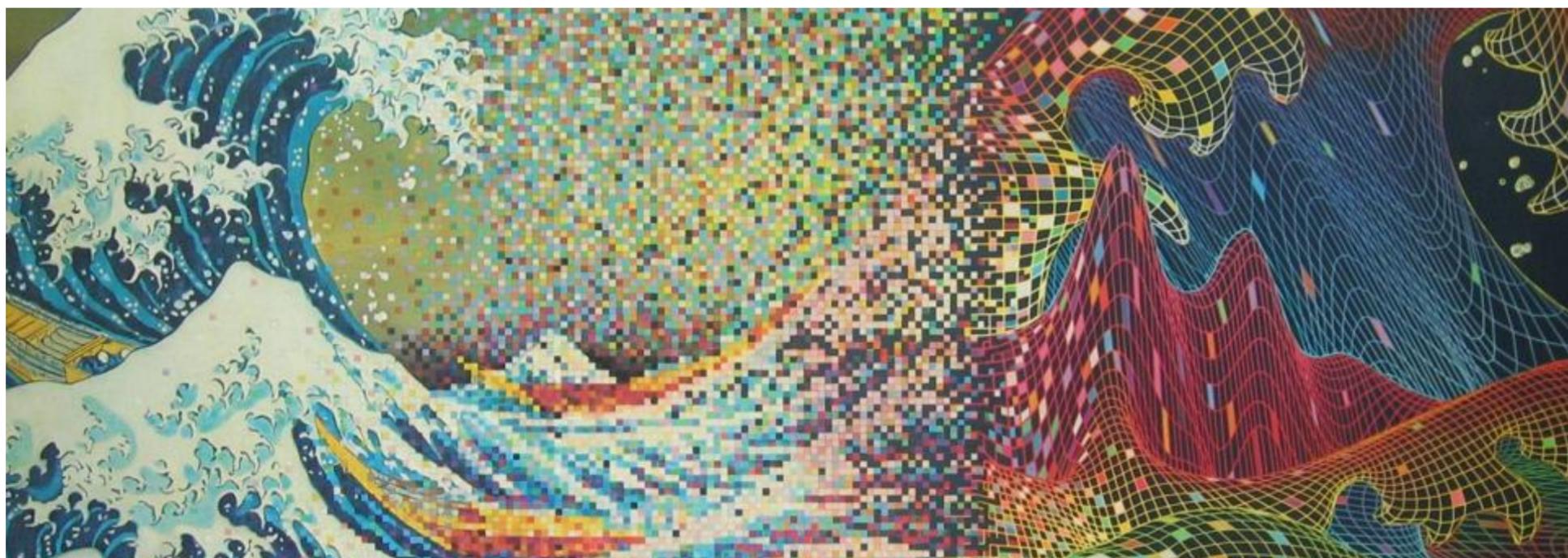


Harvest

5.1 Sowing a Symphony

It could have started in a million ways, ultimately connection is where sharing any interpretation of truth must begin. The connection with a feeling that we are now more connected to our environments than we've ever dared to dream, this feels like a fitting meme on which to begin.

Connecting this fractal feeling are significant populations on the earth, spread across a vast range of communities, who share a vision, not for a future, but for an evolving moment right NOW. This is why we have chosen the ensō circle to be S33D's logo, "a circle that is hand-drawn in one or two uninhibited brushstrokes to express a moment when the mind is free to let the body create". A moment in which we collectively and consciously chose to exist in harmonious vibration with our planet, plants, animals, our fellow humans, and of course fundamentally, ourselves.



Maia Valenzuela - 'Hokusai pIxel wave'

<https://creativecommons.org/licenses/by/2.0/legalcode>

5.2 A Living Charter

After many years dreaming, on the 5th November 2018 we hashed our first version of the Golden Dream onto the Bitcoin Blockchain and distributed it to friends and family, leaving behind a printed copy in the Aloha Pod.

"A dream you dream alone is only a dream. A dream you dream together is reality."

John Lennon

From a Dream to Reality

We envisage the Golden Dream metamorphosing into the Golden Charter for V3, allowing members of the community to propose & vote on solutions and changes to this living document. If a threshold of the community agree on a revision, it becomes the new charter. However, all previous versions will still be browsable, as are proposed changes in order of popularity and recent submissions.

S33D Golden Dream, v1.1.1

Authors: Ed Thurlow, Ed Pratt

PoEX TX id: 46dfa8c544e967fecaf2a353c05f75387bf3ace330f801912f0df6e149f38433

S33D Golden Dream, v2.0.3

Authors*: Ed Thurlow (S33D Key #3), Ed Pratt (S33D Key #2), Max Thurlow (S33D Key #1)

PoEX TX id: 899100b960853b179cb72ce2f7e61c64fc667a7c08ad14042b2923d294c8602d

* Please see Appendix for verified signatures of the authors' S33D Key custodianship

5.3 Sow, Sew or So Long?

We are well aware that attention is the currency of today's world. So, if you have come this far, we would like to express enormous gratitude. We would be honoured if you would collaborate in evolving an environment that enables us to grow the highest versions of ourselves, in all our 7 billion skins.

S33D is designed to grow. Ultimately the experience is joining the experiment:

- Protect & Revalue our earth's biodiversity
- Access an evolving encyclopaedic lattice of wisdom orbiting the plant kingdom
- Curate the information we have and are receiving from the natural world through communities of cryptographic networks focused around different plants and sustainable technologies
- Save. Help yourself, help your community. Local produce, food security, emergency aid, access to open-source libraries & education

Our dream is for us all to take part in playing with this multidimensional loom, knitting an eternal tapestry of consensus grown truth with the golden threads of heartfelt connection, curated by humanity and destined for the stars.

"Amateurs built the Ark; Professionals built the Titanic." Elizabeth May

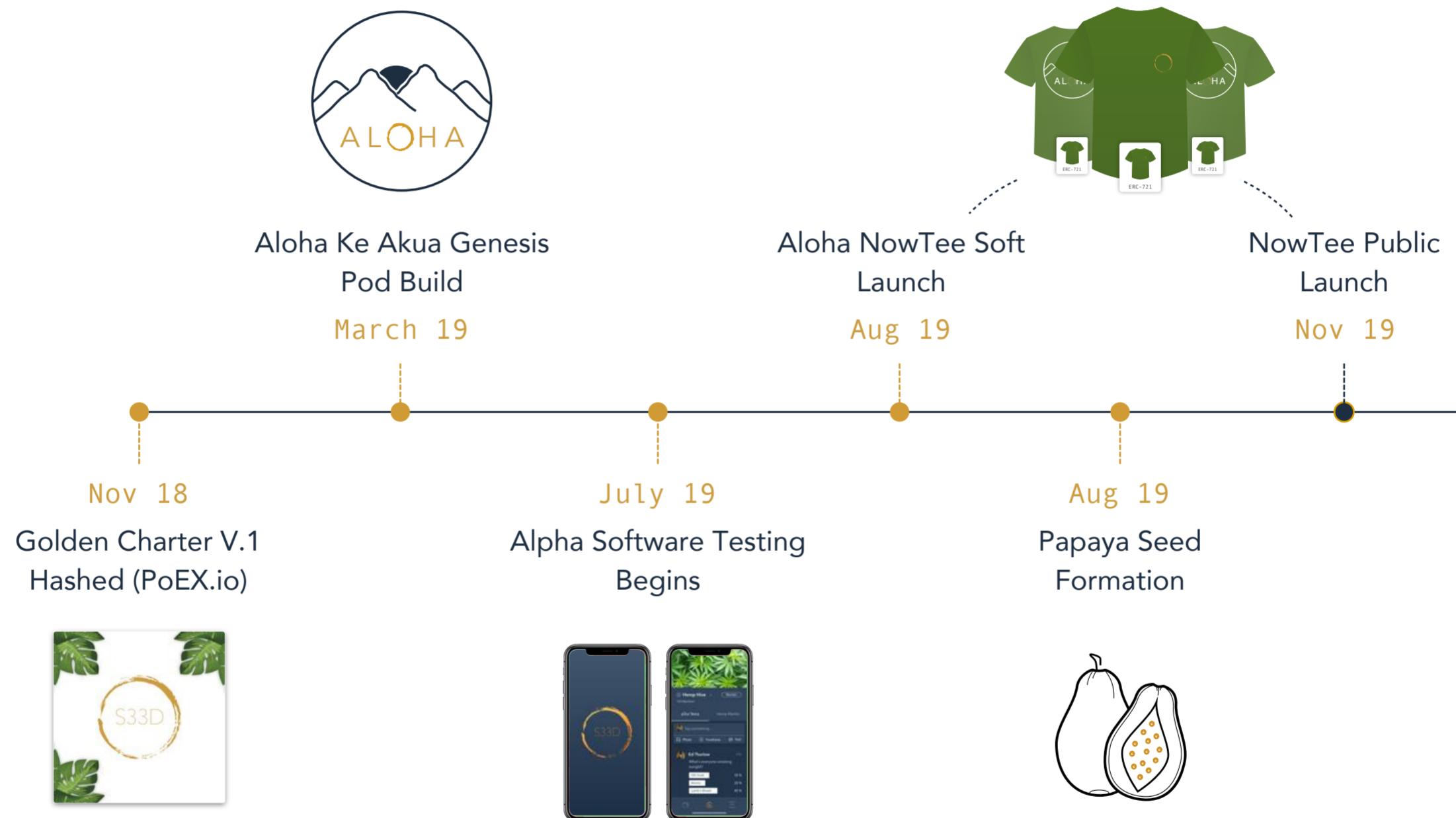
5 . 4 What Are We Solving?

We feel we are beginning to assist in solving some of the key problems human society faces at the moment, including but not limited to:

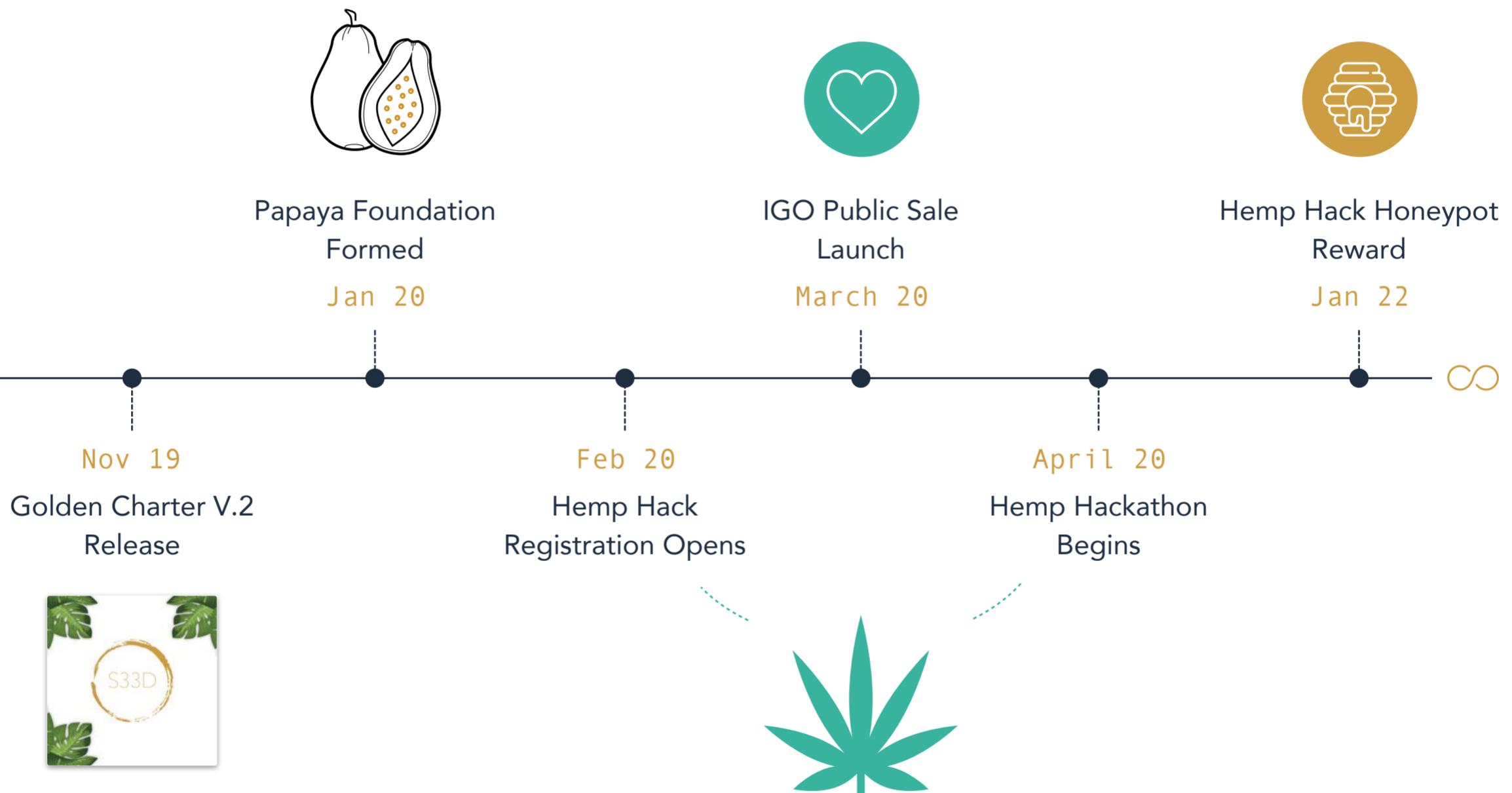
- Disconnection from the effects of our cosumption
- Local and Global food security
- Incentives for sustainable innovation, working with nature's forces
- Harmonising and strengthening exititng projects

"The purpose of truly trancendant art is to show you something you are not yet, but can become." Ken Wilbur

Roadmap



Roadmap



Orbiting Organisations

7.1 Papaya Seed Ltd

Papaya Seed is a private limited company that will flower into both a private investment fund (The Papaya Fund) to nurture projects and dApps within the S33D ecosystem, as well as a foundation (The Papaya Foundation) to distribute grants and form councils around keystones of the ecosystem. We have chosen to use Aragon (see 7.4) to create a DAO that acts as a digital twin of Papaya Seed Ltd.

7.2 Papaya Foundation

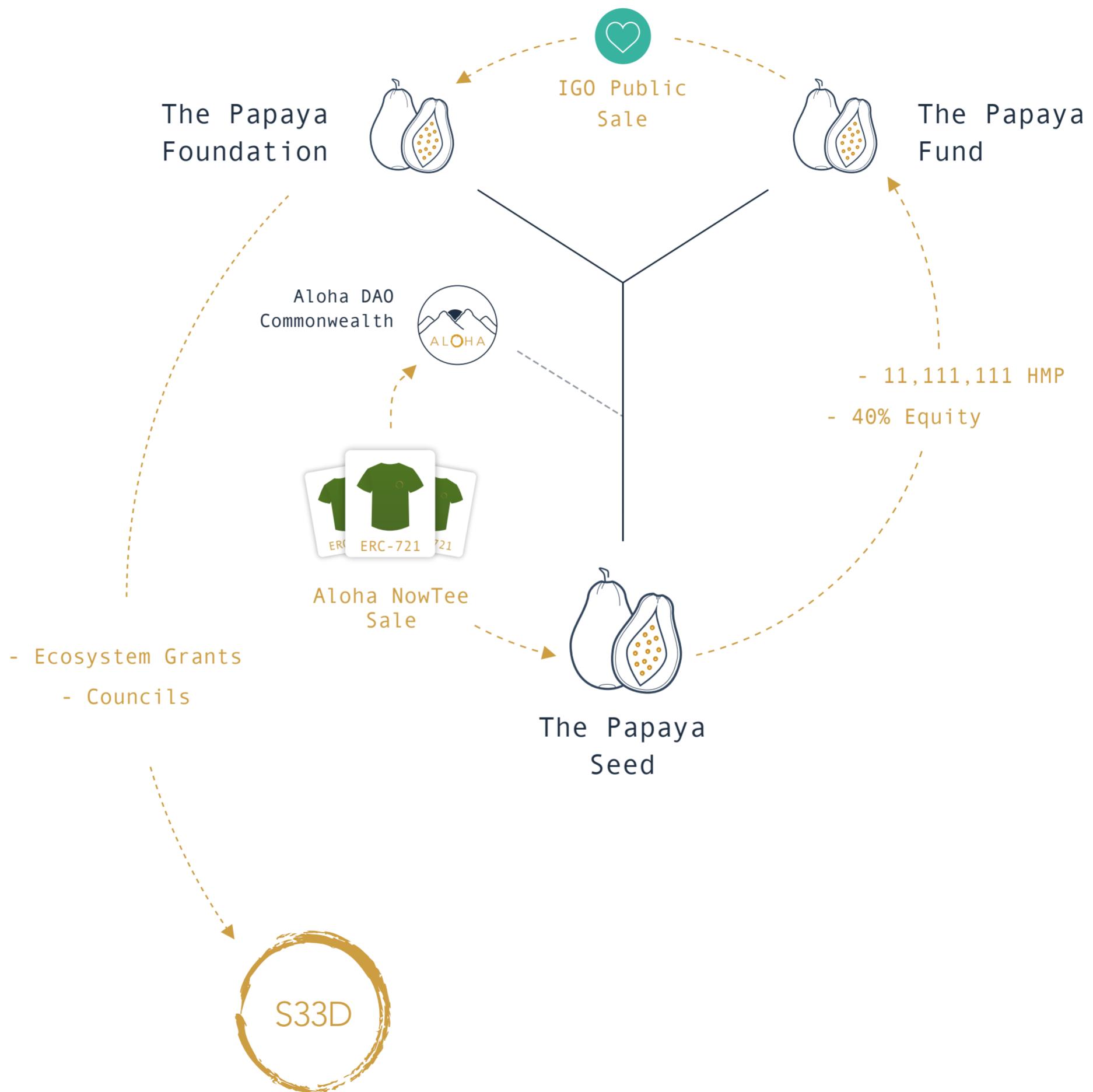
The Papaya Foundation is a **not-for-profit organisation** built for the sole purpose of furthering non-custodial development of S33D protocols. The goal of the foundation is to help pioneer governance and distribution templates that assist with resource amplification and the preservation of diversity across a distributed network of thriving gardens.

Furthermore, the Papaya Foundation will be in charge of distributing software and DLN development grants, as well as helping form councils around keystones of the ecosystem.

"The machine does not isolate man from the great problems of nature but plunges him more deeply into them." Antoine de Saint-Exupery

Orbiting Organisations

7.3 Flow Map



7.4 Inspiring Projects

We have been inspired by the activities of numerous projects of all sorts. We hope to collaborate in spinning an evolving story with many of these, below we've started to weave a few of these into this second draft of the Golden Dream.

London Freedom Seed Bank

<https://londonfreedomseedbank.wordpress.com>

"The London Freedom Seed Bank is a network of food growers and gardeners dedicated to saving, storing and distributing open-pollinated seed.

The vision of the London Freedom Seed Bank:

- 1). *RAISING AWARENESS: Of the skills and importance of seed saving; of the issues and actions threatening our seed heritage*
- 2). *RE-SKILLING: Providing training for urban food growers, gardeners and schools about growing, saving and storing organic seed; creating a community of Freedom Seed Savers, skilled in seed saving techniques.*
- 3). *PRESERVING: Creating a living seed bank for protecting and storing our Freedom Seeds: rare and unusual varieties, grown and saved in London.*
- 4). *SHARING & DISTRIBUTING: Sharing and distributing Freedom Seeds for free to all who want to grow food."*

We have learnt a tremendous amount connecting with the London Freedom Seed Bank, showing us that although Londoners may feel to be worlds away from some of the indigenous communities of the Sierra Nevada, there is a common thread in our connection to the Earth as a united conscious being, and the awe inspiring potential that

Orbiting Organisations

lies dormant in a seed.

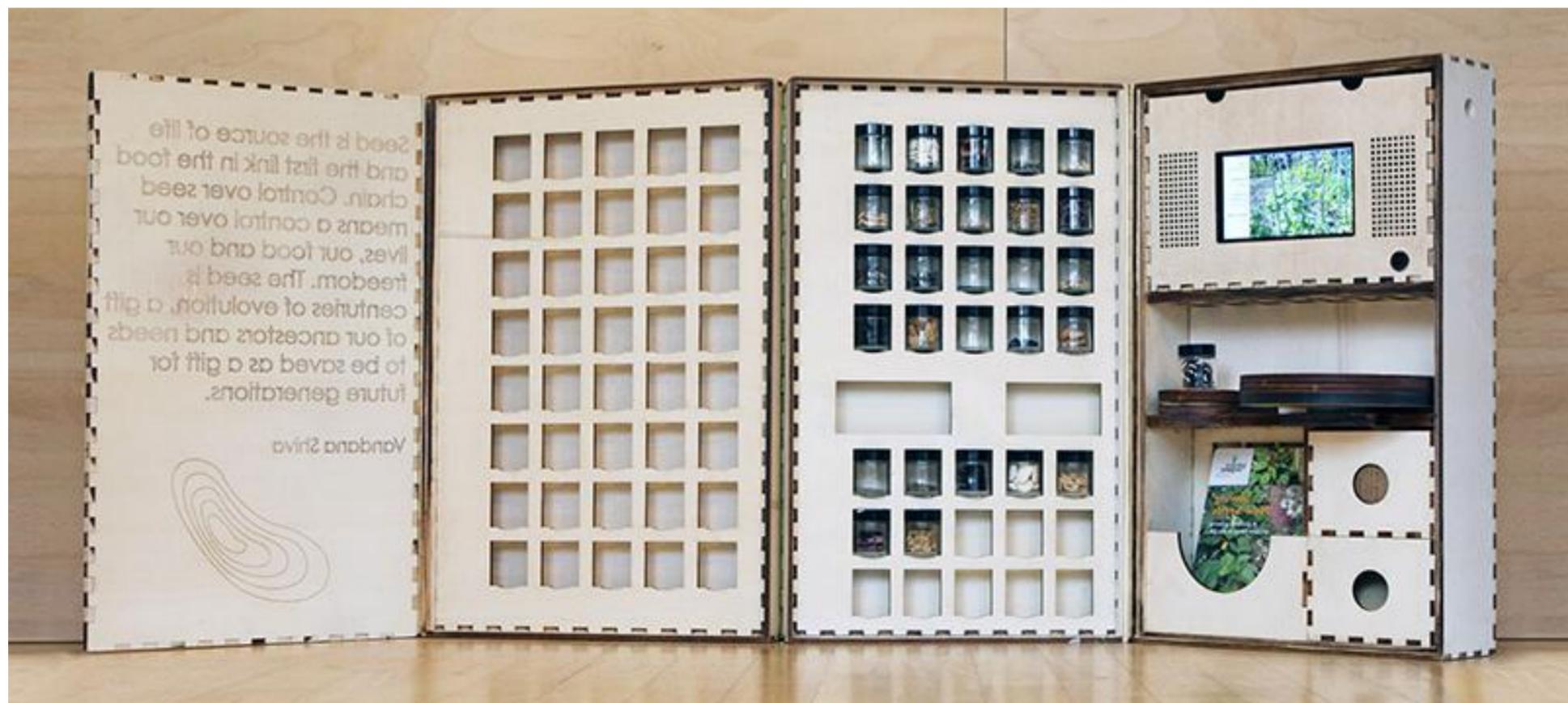
"Seed is the source of life and the first link in the food chain. Control over seed means a control over our lives, our food and our freedom. We should turn our roof tops into gardens, which are seed sanctuaries, because the seed is centuries of evolution, a gift of our ancestors and needs to be saved as a gift for future generations." Vandana Shiva

Connected Seeds Library

<http://www.connectedseeds.org>

"The Connected Seeds Library is a community seed library that lives at Spitalfields City Farm. It was established by researchers at Queen Mary University of London in collaboration with staff and volunteers at the farm, as part of a research project exploring how digital technology can support more sustainable food growing in the city.

The library is a resource for local communities who wish to grow their own food from locally-



adapted, open-pollinated seed. You can become a member – or Seed Guardian – of the library and take some seed home to grow. You are encouraged to return some seeds to the library at the end of the season, to make sure that stocks are not depleted.”

We have been very inspired by the way the Connected Seeds Library has become augmented with digital technology to make it interactive. Visitors to the library can hear the voices of guardians talking about their experiences of growing, and see pictures from their gardens. This is a similar experience we wish to create using applications and portals to access the SLN and its accompanying data stream.



Myceliate

<https://www.myceliate.org>

“At Myceliate, we believe that by working with fungi to regenerate damaged ecosystems we can reverse much of the damage that has been wrought over centuries of inadequate land stewardship. We must not forget that we too are members in this community of life, and by learning once again how to participate in our landscapes positively through conscientious foraging, mushroom cultivation, and ecosystem restoration practices, we can shift the mindset of society from consumption and extraction, to restoration and symbiosis. By learning about fungi, we learn what it means to be human again.”

Connecting with David Satori at Myceliate has cemented the belief that the basic pod template should also include a spore library.

Orbiting Organisations



Bitcoin

<https://bitcoin.org/>

"Bitcoin uses peer-to-peer technology to operate with no central authority or banks; managing transactions and the issuing of bitcoins is carried out collectively by the network. Bitcoin is open-source; its design is public, nobody owns or controls Bitcoin and everyone can take part."

The coinbase parameter in the Genesis block 3rd Jan 2009 launched a meme that is still ringing, "The Times 03/Jan/2009 Chancellor on brink of second bailout for banks".



Ethereum

<https://ethereum.org/>

"Ethereum is a global, open-source platform for decentralized applications. On Ethereum, you can write code that controls digital value, runs exactly as programmed, and is accessible anywhere."

S33D's NowTee sale (smart contract) was built using Ethereum, issuing ERC-721 tokens as collectibles to all buyers. Furthermore, we are also planning on issuing Hemp Hearts (HMP) as an ERC-20 token throughout different stages of S33D's IGO.



Metamask

<https://metamask.io/>

"MetaMask is a bridge that allows you to visit the distributed web of tomorrow in your browser today. It allows you to run Ethereum dApps right in your browser without running a full Ethereum node."

In order to take part in the Aloha NowTee sale, buyers will first have to download and install Metamask in order to interact with the smart contract we developed on top of Ethereum. You will also be able to use your Metamask wallet to sign and collect your t-shirts once they are ready to be shipped.



Proof of Existence (PoEX)

<https://www.poex.io/>

"The original BTC blockchain notary service. Instant, anonymous, distributed, and secure proof of existence for any digital document."

We have used PoEX to notarise updates to S33D's Golden Charter (including this one). Furthermore, we have also integrated a PoEX shortcut within our mobile application, allowing gardeners to hash their Pod's inventory onto the Bitcoin blockchain.



Provenance

<https://www.provenance.org/>

"Provenance helps brands and retailers build customer trust through transparency. Using blockchain technology Provenance empowers shoppers to choose your product."

Since hearing Provenance showcased at an early Ethereum meet up, their progress has been a joy to follow.



Democracy.Earth

<https://democracy.earth/>

"Democracy Earth enables token-based community participation. Open source, peer to peer and human centered."

We have been very inspired by the way Democracy.Earth have introduced quadratic voting using ERC-20 & ERC-721 tokens. We hope to integrate their voting technology into S33D's Hemp Hack, allowing HMP holders to vote for their favourite projects.

Orbiting Organisations



Gitcoin

<https://gitcoin.co/>

"Leverage our global, on-demand workforce. Find expert freelance developers to design, test, code, and build your project teams today. Save time via direct Github integration. Crowdfund for your open source startup or project to increase your budget and bring in more developers."

We hope to use Gitcoin or a similar platform to distribute proceeds from the public sale of S33D's IGO to help build the next chapter of our shared story.



GitHub

<https://github.com/>

"GitHub brings together the world's largest community of developers to discover, share, and build better software. From open source projects to private team repositories, we're your all-in-one platform for collaborative development."

We will be using github for our open-source code repositories, as well as inventory update repositories.



Aragon

<https://aragon.one/>

"Aragon is a project to empower freedom by creating tools for decentralized organizations to thrive."

Aragon is tool we have been experimenting with to create and govern community DAOs, allowing members to vote using tokens and collectibles. We have created a Papaya Seed DAO to receive the Aloha NowTee funds, as well as deciding on how these funds are distributed using decentralised governance and voting.



214 Alpha

<https://www.214alpha.com/>

"We provide high-touch professional services, ensuring our client communities receive high-quality solutions to meet their needs, which includes, but is not limited to: financial; operational; educational; supply chain and logistics; and others."

214 Alpha have been the talented engineering team behind S33D's MVP, allowing gardeners to sign up, create a wallet, and begin creating & joining Pods in the SLN.



Hypha DAO

<https://dao.hypha.earth>

"Hypha is the global, open organization that's launching SEEDS and other decentralized applications. Our mission is to create digital tools for our Regenerative Society."

We have been extremely humbled and impressed by the community brought together around the Hypha DAO. Our first development proposal is to configure a way of distributing seeds to community members who hash and store copies of SDL Pod inventory files.



SEEDS

<https://joinseeds.com>

"SEEDS is a digital currency that serves, rewards and finances the people and organisations committed to creating a healthier and more equitable planet."

As well as having a great name, SEEDS also has very similar intentions to our project. In the new paradigm of collaborative organisations and networks, why build 2 sides of the same coin? We are looking forward to working with both Hypha and SEEDS on potentially integrating their ID login services and DAO templates.

Orbiting Organisations



Telos

<https://github.com/>

"Telos is a smart-contract blockchain built to support the economies of the future."

Telos is a fork of EOS, with a realigned focus on voting and distributed storage. Telos is the platform that the Hypha DAO runs on. We resonate with both the philosophy and the community evolving around the Acrorn.



What3Words

<https://what3words.com>

"What3Words is a really simple way to talk about location. We have assigned each 3m square in the world a unique 3 word address that will never change. Our vision is to become a global standard for communicating location."

Inspired by What3Words, we hope to integrate their location technology into S33D's NFTree map, assigning each tree a specific 3 words associated with its location and collectible.



Takara

Discontinued

Ahead of its time, Takara demonstrated some amazing capabilities of blockchain technology to help incentivise education within geographical locations. Having experimented with Takara when it was live, we are very grateful for the inspiration it provided for our NFTrees protocol.



THTC

<https://shop.thtc.co.uk/>

"THTC produces eco-friendly and politically conscious street wear, made from hemp, carbon-neutral organic cotton, and recycled salvage plastic fibres".

THTC has been a pioneer of the UK hemp scene since 1999, this is why we have chosen them as the manufacturers of the Aloha NowTee's, made from a blend of organic hemp and cotton.



Global White Lion Protection Trust

<https://whitelions.org/>

"The Global White Lion Protection Trust (WLT) is a South African based non-profit conservation and community development organisation, responsible for protecting the White Lions of the greater Timbavati bush region and developing the related cultural values that hold them sacred".

The White Lion Trust has earned the respect of conservation leaders, indigenous authorities and renowned personalities the world over. Their pioneering reintroduction of the white lions and harmonisation of the ecosystem within the Timbavati region has been an inspiration.



Resonance Academy

<https://resonancescience.org/>

"The Resonance Academy is an academic community and online learning environment that enables you to explore the science behind the Connected Worldview and the unified field theory".

We have been very impressed with their development of online learning tools used alongside integrated field learning. Their research around improving the coherence of water, and the resulting effects on seed fertility, and germination rates are extremely exciting.



Experimental Thought Co.

<https://www.facebook.com/ExperimentalThoughtCo/>

"The Experimental Thought Co. is an emerging thought community that seeks to develop coherence in a time between worlds. We connect networks that exercise thought in the name of conscious evolution, positive personal and social change, and collective wisdom."

Based in London, the Experimental Thought Co. has been hugely inspiring in hosting educational talks on matters such as conscious social evolution and change. We enjoyed participating in their Human//Nature series this summer.

Glossary

S33D Library Network (SLN) - A distributed network of S33D Pods around the world, forming a decentralised seed and story library

S33D Pod - A S33D Pod is a sustainably built community structure; a focus point or “hub” for localising learning, saving, production, and trade

Hive - A DAO focused specifically on one plant or cryptocurrency (Social education and trade spaces)

Plant Heart - A freely tradable utility token (akin to an air-mile) circulating a particular Plant Hive

Hemp Heart (HMP) - A utility token used to govern the Hemp Hive and its accompanying hackathon

Proof of Open Heart (PoOH) - A token minting protocol using staking and quadratic voting to distribute newly minted tokens between gardeners & projects within the S33D ecosystem

Proof of Trade (PoT) - Creating freely tradable Plant Hearts at the moment of trade (akin to an air-mile/reward point)

Glossary

Proof of Play (PoP) - Hybrid minting protocol using Proof of Open Heart (PoOH) & Proof of Trade (PoT)

IGO - Initial Garden Offering to distribute original minting of Hemp Hearts (HMP)

NFT - Non-fungible token or collectible

NFTree - A non-fungible token/trading card representing a particular tree on the NFTrees Map

smART Canvas - Threads of provenance data that are embedded within a smart contract trade agreement

DAO - Decentralised Autonomous Organisation

Index DAO - An economic consensus experiment, using weighted voting to determine the makeup of a Pod's multisignature trust

P2P - Peer-to-Peer

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SEEDS, A Conscious Global Currency - Rieki Cordon, 2019

Who Really Feeds the World? - Vandana Shiva, 2016

Critical Path - Buckminster Fuller, 1981

Ficciones - Jorge Luis Borges, 1981

Biomimicry: Innovation Inspired by Nature - Janine M. Benyus, 2009

Food Ark - Charles Siebert, 2011

In 80 Years, We Lost 93% Of Variety In Our Food Seeds - Mark Wilson, 2012

Appendix

S33D Key #1 (BTC)

Address - 3EZKX9aSVqfBwErdrANa7WHRGdG7MXfjN9

Message - "S33D #1 (BTC) - under Guardianship of Max Thurlow"

Signature - I6oIrQU9AaTDKJxOi8+HQEHnnhJkrlkvIVTAq0+n1IVLPcYZj+FlUcypPrqwgYI55QNJFjoGjMNzbj91+0uJEE=



S33D Key #2 (BTC)

Address - 36gYjNnEF4D9QyhjnSvWkX1smEm6PbBcXg

Message - "S33D #2 (BTC) - under the Guardianship of Edward Pratt"



Signature - JH1hU8CGs/KXBi8YJkz8ICtvKtO6m4cvDZAQC4n8ebJEDSkWf2xWVAA5PeR1wzwdybDm7zFD0Z6yPCYUBwYd5vY=

S33D Key #3 (BTC)

Address - 3PcPLzTP7qHFWfweK6AVUcxFYF9H8xYsyT

Message - "S33D #3 (BTC) - under the Guardianship of Edward Thurlow"



Signature - I4mSEDn3Zd4XhN++a0fg+MREfi7IdByy93RdcY/yrAOTCsOSLemAkMk88+c5P/KAIEnVWWSkNbSPxLYAVY7FF64=

