

CANNABIS SUPPLY CHAIN

Decentralized autonomous organization

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Evolving Legal Status

- Countries including New Zealand, Australia, Germany and 33 states in the US have already legalized the medicinal use of cannabis.
- In the year 2020, New Zealand will hold a referendum on the question whether to legalize the personal use of cannabis.
- The outcome of this referendum has the potential to open the door to an explosion of economic growth in the cannabis industry.

Current Problems

- Illegality has caused a massive black market to develop for the production and distribution of the plant.
- This black market is plagued with distrust between the involved parties and no transparency.
- No age restrictions - most black-market dealers will sell to anyone, including children
- Poor customer satisfaction - users are commonly ripped off
- No quality control - users do not know how their purchased product was grown and the quality of product is inconsistent
- Banking the unbanked – even in legal locations, banks do not like dealing with cannabis money due to risks of money laundering

The organization's purpose

Blockchain technology has the potential to move the cannabis industry out of the shady black-market to an open and transparent platform where various different stakeholders in the industry can communicate and trade in a safe way.

Organization purpose statement:

This DAO will provide an open platform where growers, manufactures, lab testers, retailers and users of cannabis related goods and services can interact and grow the industry in the most safe and sustainable way possible.

Sustainability

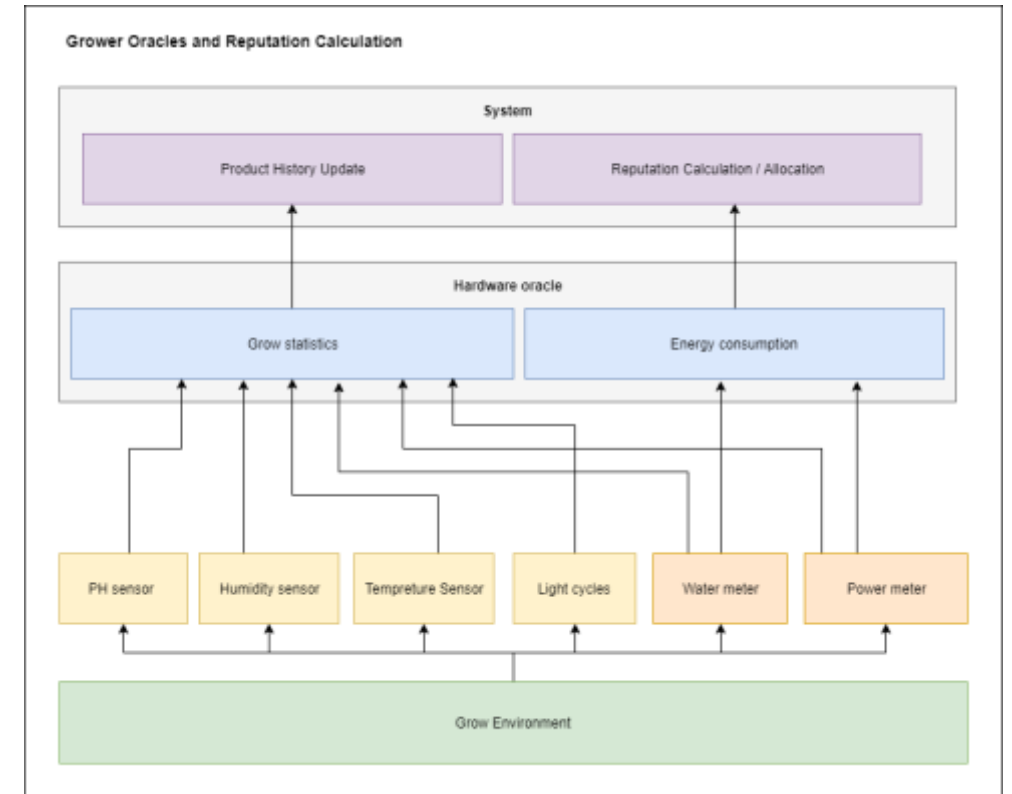
- Agriculture is one of the biggest contributors to the climate crisis.
- Because cannabis has been illegal for so long, there is no clear rules for how to make its production more sustainable.
- A 2016 report from new Frontier found that cannabis was the most energy intensive agricultural crop to produce in the US.
- Research has shown that 83% of millennials will consider a products environmental or social impact before making a purchase, while 70% will pay more for products that are made sustainably

Tokens and Reputation

- The system will be a permissioned blockchain – you must validate your identity
- CANNA coin will be used for purchasing goods and services between the different stakeholder groups on the platform.
- A reputation-based voting system will be used to drive the growth of the platform.
- The reputation system is going to be closely linked to the idea of sustainable business methods.
- Reputation will be awarded to stakeholders depending on how sustainable their methods are when completing their role in the supply chain.

Oracles

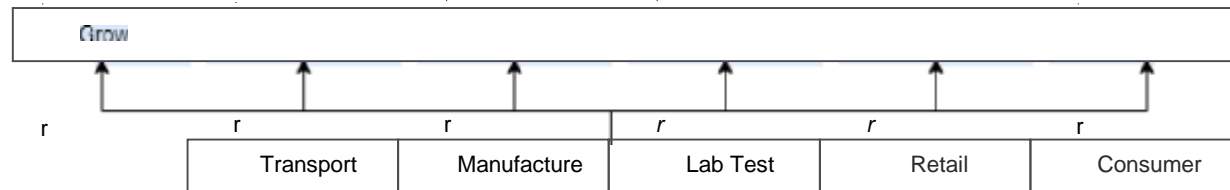
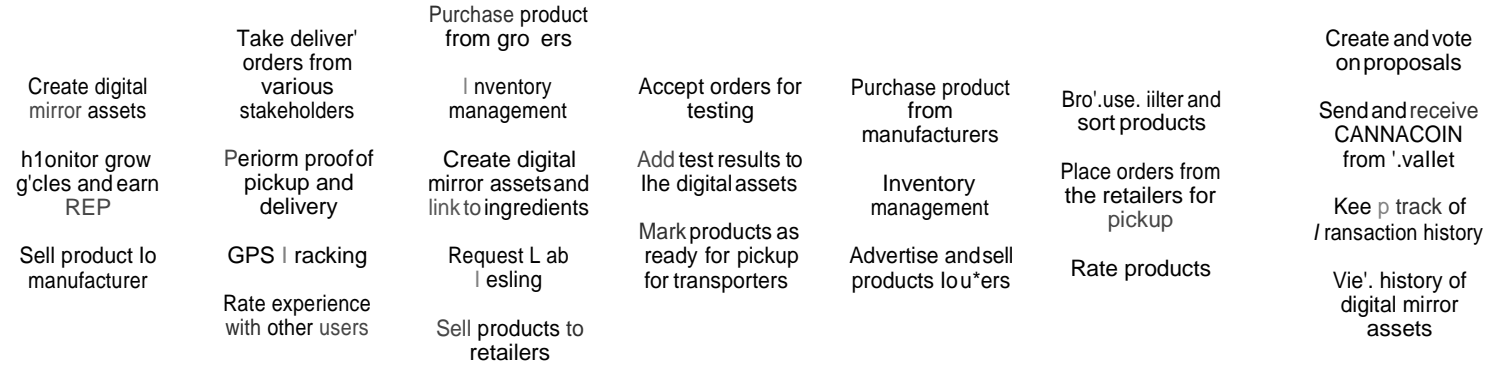
- **Hardware oracles for grow monitoring** - Plan to develop a hardware oracle that can read various sensors in the grow environment and connects to the users wallet address. A grower can earn reputation at the end of a harvest that is based on energy consumption.
- **Mobile application** - The main place for stakeholders to interact with the system will be in the form of a mobile application.
- Slightly different versions of the mobile app for each type of stakeholder.



Initial Coin offering

- A total of 20 million tokens will be issued in the ICO over the course of 1 month.
- The coins will be sold at staggering prices throughout the month to encourage the early purchasing of tokens. Designed in a way that reduces the number of large buyers and favors small investors that plan on participating in the community.
- The accepted payments can be in Ethereum or Bitcoin.
- A further 10 million tokens will be placed in reserve for particular partnership and contractors that helped start the organization (e.g. hardware oracle designers).
- After the ICO, a further 100 million tokens will be put up for sale.
- Website for purchasing of required hardware to participate.

Stakeholder interaction with system



mobile Application

CANNACOIN

Blockchain

Prototype Application

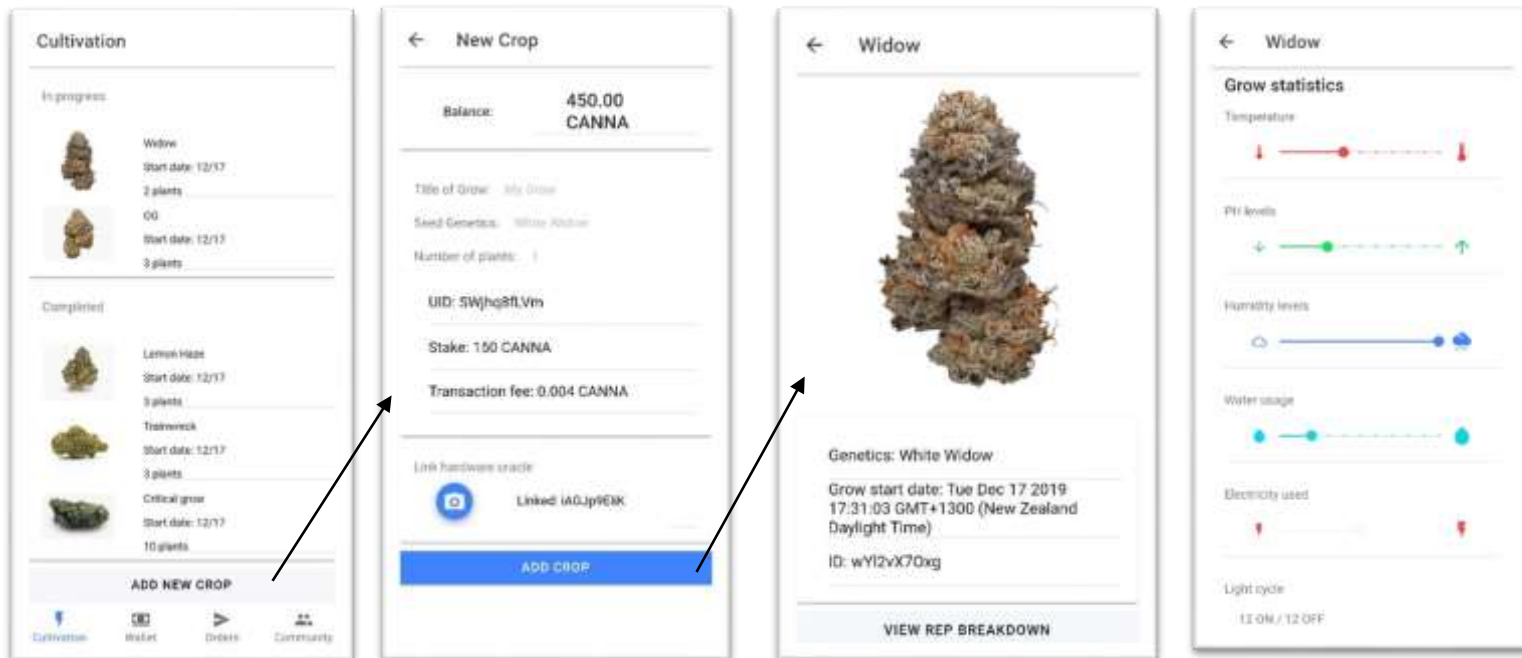
I have implemented 3 different flavors of the application:

- Grow App
- Manufacture App
- Consumer App

I built the prototypes in the Ionic framework, which allows the applications to be run in the browser. The applications can also be deployed natively to both Android and IOS devices.

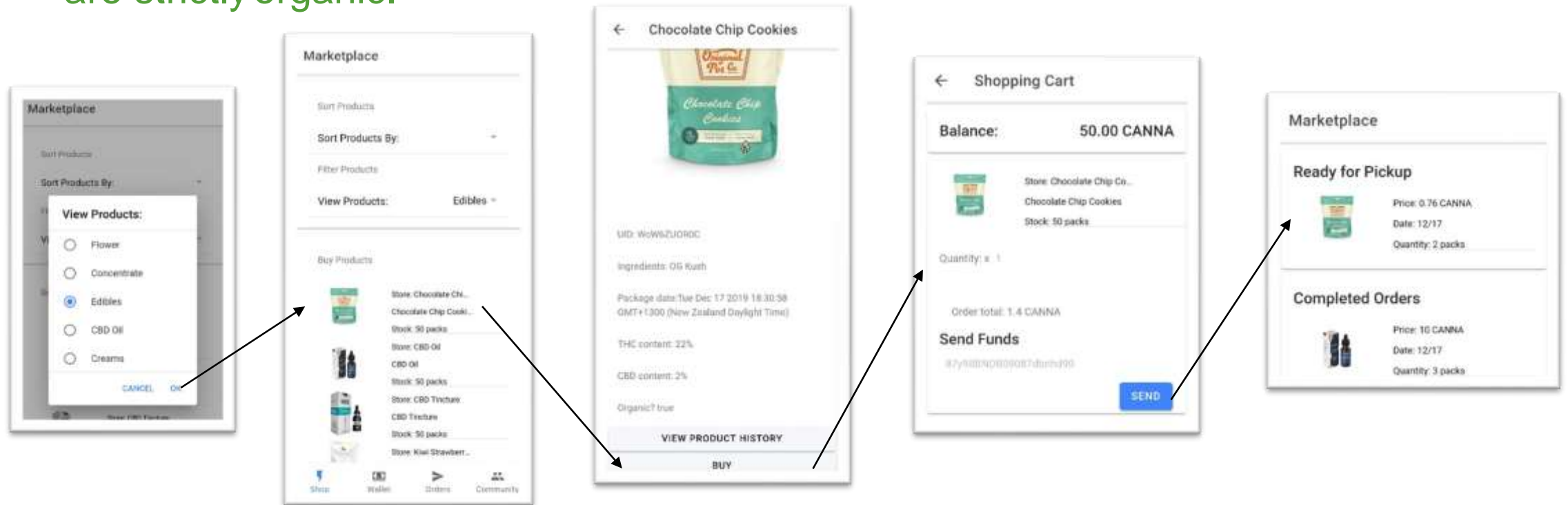
Example use case 1: Growing

A cannabis grower wishes to grow a new crop and monitor its growing statistics using the CANNA system. At harvest time, the grower will receive some reputation that reflects how sustainable the grow method was.



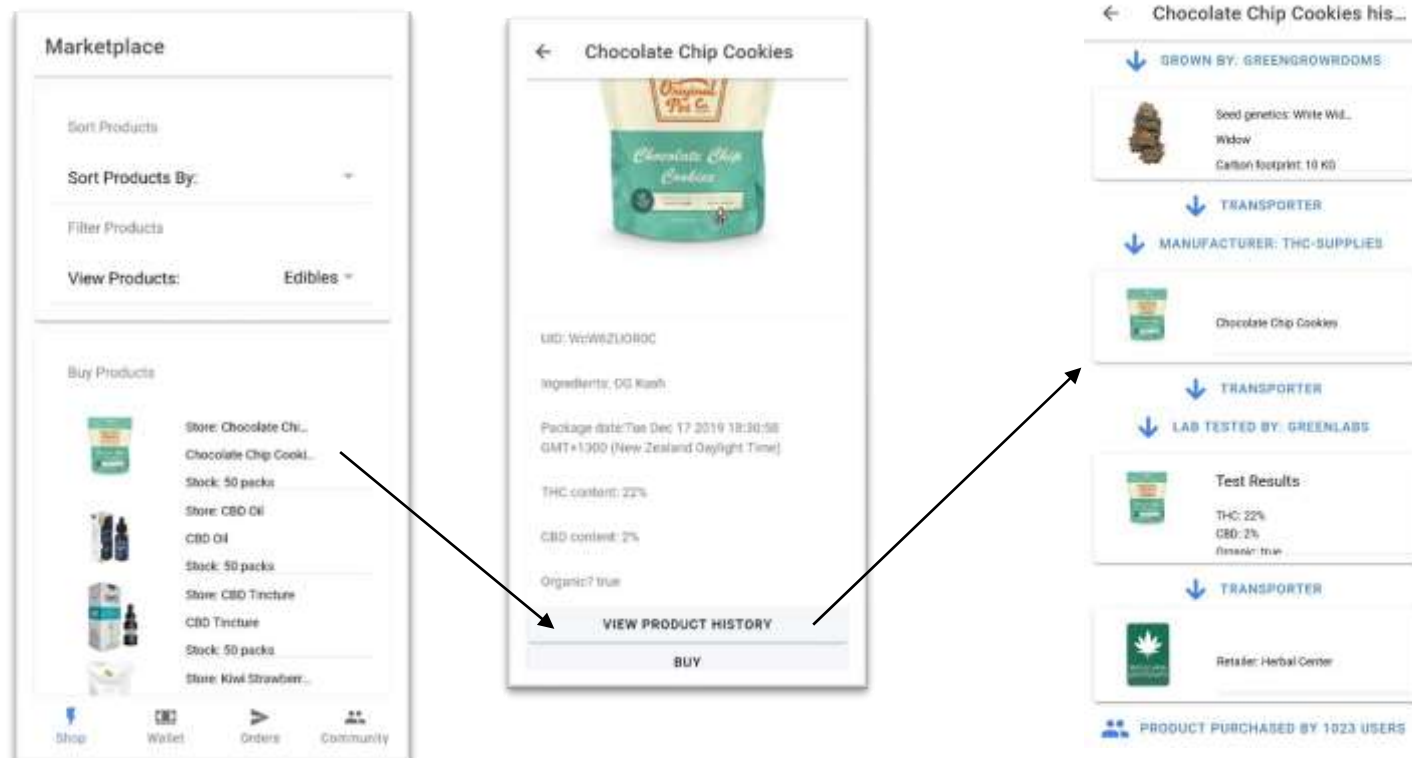
Example use case 2: Consumer

A consumer (user) would like to browse and purchase cannabis cookie products that are strictly organic.



Example use case 3: Product history

A user would like to see a complete breakdown of the history for a specific product.



Wallet and Proposals

