



USING BLOCKCHAIN
TO SECURE BUSINESS



Agri-Chain

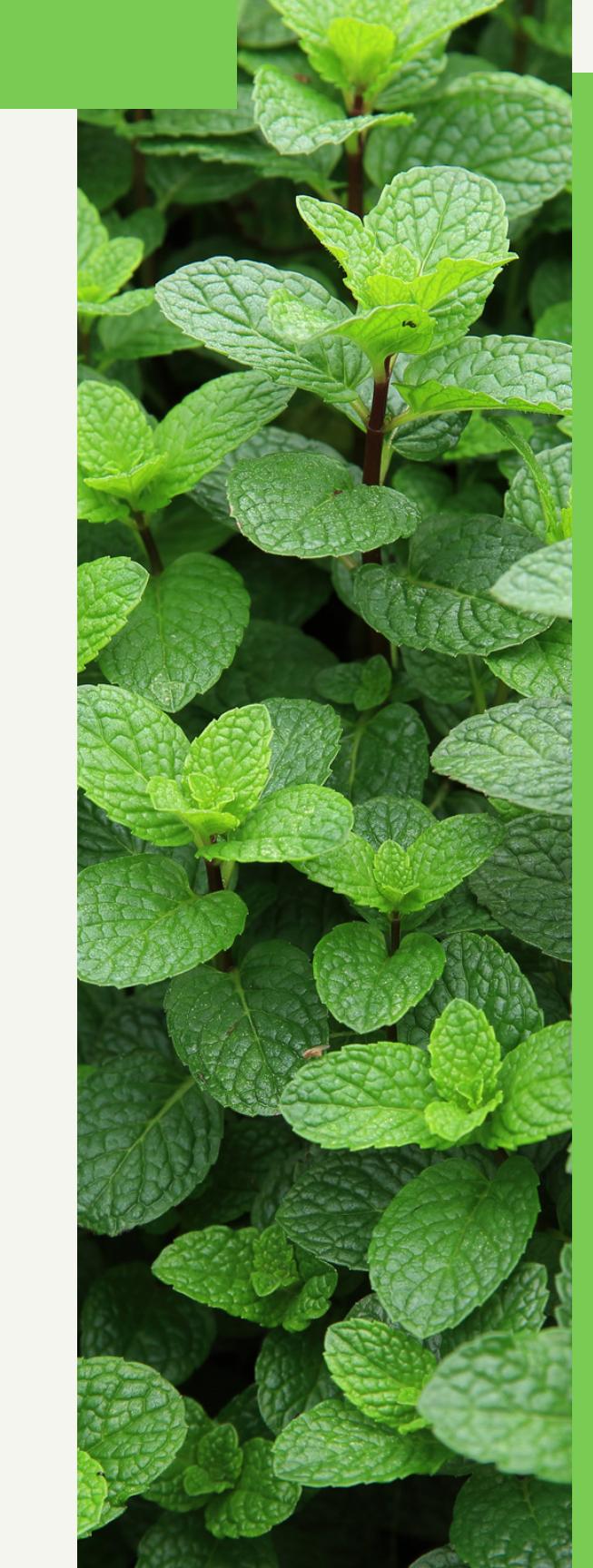
Agriculture

Presentation Outline



AREAS COVERED

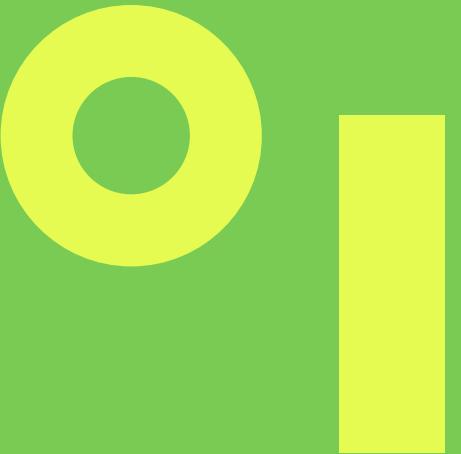
- Problem Statement
- Short-comings of present system
- Our Solution
- Primary benefits
- High-level implementation of idea





USING BLOCKCHAIN TO DRIVE SUPPLY CHAIN TRANSPARENCY

Problem statement



In the present scenario the supply chain usually goes like:

- The farmer grows the crop in his farm and is ready to sell them after harvesting.
- There are various levels of retailers who act as intermediaries through which the crop passes before it reaches the *mandis* or as we call *the bazars*.
- Because of so many intermediary levels of exchanges sometimes crops are sold at unreasonable prices most of which doesn't go to the farmers and are consumed by intermediaries entities.

Short-comings of current system

LACK OF TRANSPARENCY

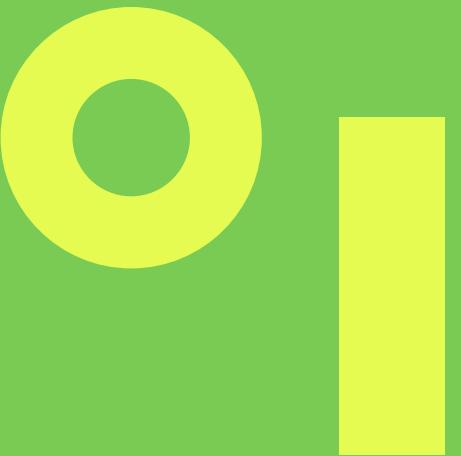
We cannot track the crops which are sold by the farmers up until their final location which is the mandi.

PRICE INFLATION

Because of many intermediaries the price at which it is sold to consumer is often inflated and the farmer also doesn't have any say in this.

GRAY MARKETING

Since crops are not tracked, one can black-market crops easily and earn profits from expensive crops.



Our solution

We propose to digitalise the entire supply chain right from the farmers up until the mandis by creating a portal for farmers as well as for intermediaries through which the retailers or other intermediaries can purchase the crops. We plan to store transactions in form of a ledger by using blockchain technology.

The reason for using block chain technology is:

- Immutability
- Improved security and privacy
- Increased accountability
- Visibility and traceability
- Tokenization

Using blockchain in the supply chain has the potential to improve supply chain transparency and traceability as well as reduce administrative costs.

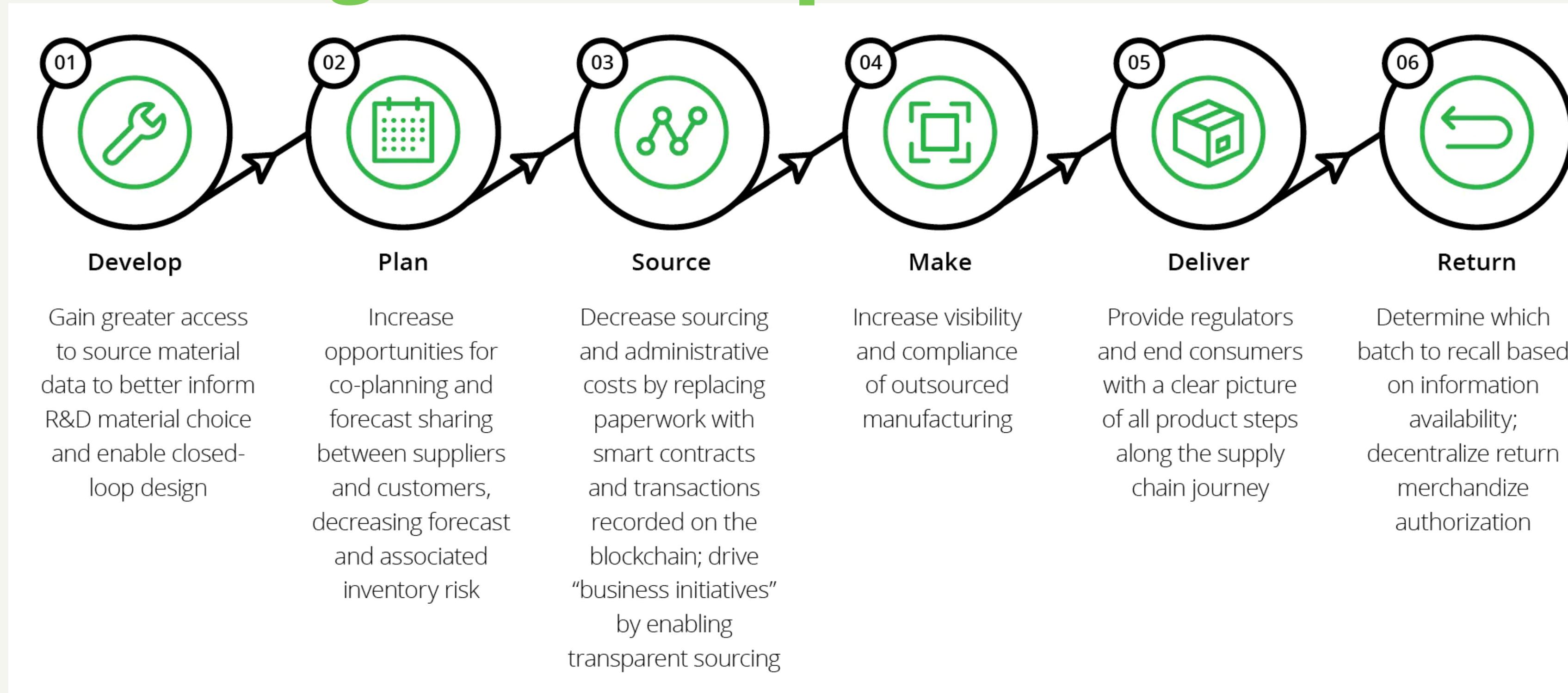
A blockchain supply chain can help participants record price, date, location, quality, certification, and other relevant information to more effectively manage the supply chain.

The availability of this information within blockchain can increase traceability of material supply chain, lower losses from counterfeit and gray market, improve visibility and compliance over the crop supply chain.

Primary potential benefits

- Increase traceability of crop supply chain to ensure corporate standards are met.
- Lower losses from counterfeit/gray market trading.
- Improved visibility and accountability.
- Reduce paperwork and administrative costs.
- This will also benefit the farmer as the intermediaries will be held accountable and the details cannot be tampered with.

High Level Implementation



This diagram represents the implementation of the idea for manufacturing sector.
This similar approach could also be used to implement our solution



What Will Be Needed

Successful use of blockchain in supply chain management requires a trusted group of permissioned participants, a new consensus protocol, and protections to prevent the introduction of contaminated or counterfeit products.

The state governments can form their individual departments which will overlook the process to ensure it's proper functioning.

Thank you



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