



agrifi
Defying Agronomy

www.Agrifi.tech

PROBLEMS

01.

Transparency is the major problem in the agriculture industry.

02.

Consumers and farmers are not aware of the market price, demand, and availability of goods in the area.

03.

There are a lot of middlemen involved in the process of buying and selling goods.

04.

The involvement of middlemen makes the process more costly and complex.

05.

The income of farmers is highly volatile and depends mainly on the weather conditions, market demand and the variable market rates.

06.

The market rates are highly volatile and totally in control of the store holders. There is a big chain of middlemen between the consumers and the producers.

07.

The farmers get a meager price for their goods and all the profits are made by the middlemen.

08.

In the case of developing economies, farmers have limited access to financial resources.

09.

There are some common problems in food supply chains such as food traceability, food safety and quality, food trust and supply chain inefficiency, which add additional risks to the entire society, economy and the health of humans.

10.

Many farming organizations aren't prepared to utilize cutting edge technology to deal with their inventories.

INTRODUCTION

Blockchain technology is a disruptive technology that changes business and supply chain models. The blockchain revolution is coming. Today, blockchain technology is not only a platform for crypto currencies, but also has many applications and advantages. Blockchain technology is a distributed ledger that shares all network transactions between members. All network transactions in the form of timestamped blocks must be approved by most members and nodes of the network before performing any activity.



ROLE OF BLOCKCHAIN TECHNOLOGY

Blockchain technology has many applications, including solutions to problems in agriculture, including traceability of food products, finance, insurance, and supply chain transactions.

Innovation combined with advanced technologies like blockchain and artificial intelligence (AI) offer revolutionary solutions to agriculture.

Blockchain technology provides users with efficient data protection, transparent and secure data exchange.

A unified transparent environment for data exchange makes it possible to supply the supply chain wisely to establish contracts between suppliers, carriers, customers. Blockchain technology could manage the agricultural trade while providing guarantees in the certification procedures.

AGTECH HELPS SMALL AND LARGE FARMS TO



Understand Inputs:

Farmers have unprecedented access to market data



Boost Efficiency:

Sensor-driven analytics and automation reduce costs and enhance productivity



Manage Operations:

Software can help farmers manage the complexity of running large and small agriculture operations

MACRO FACTORS ARE DRIVING AGTECH ADOPTION

01. Population Growth

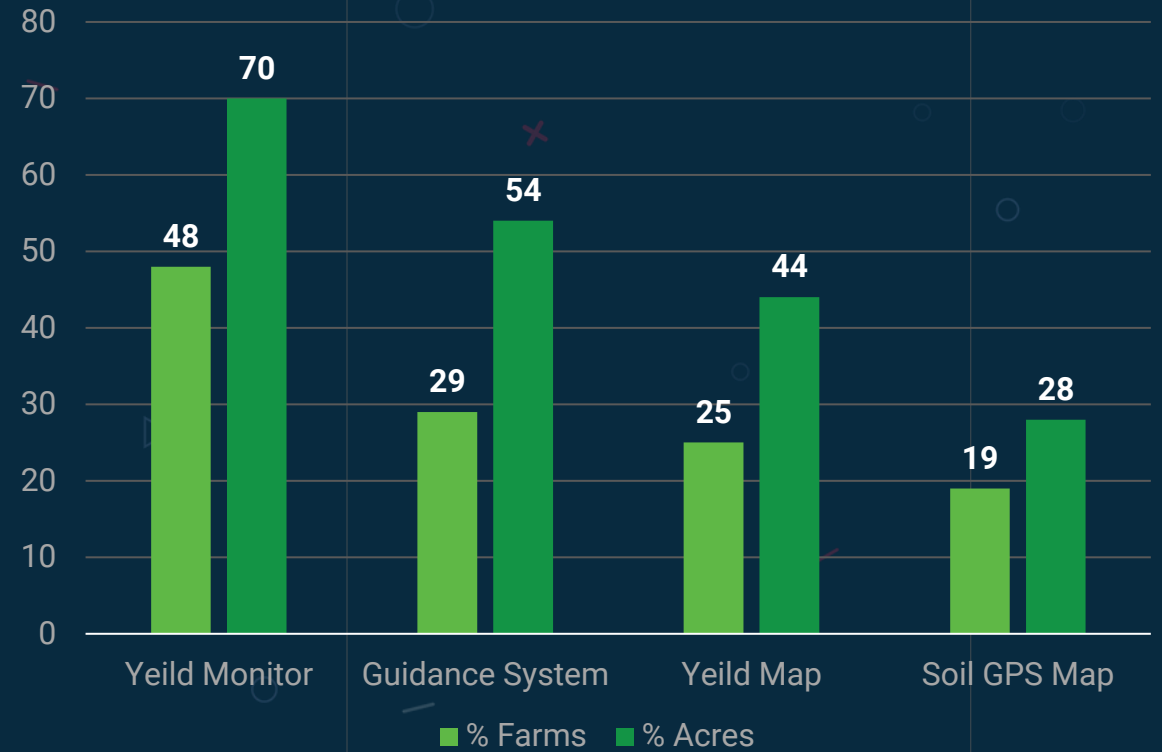
02. Changing Diets

03. Environmental Cost

04. Declining Sensor Costs

AGTECH HAS TRACTION AMONG U.S. FARMERS

According to the USDA, agtech is used at varying rates by US farmers, with yield monitoring and guidance systems leading the way.

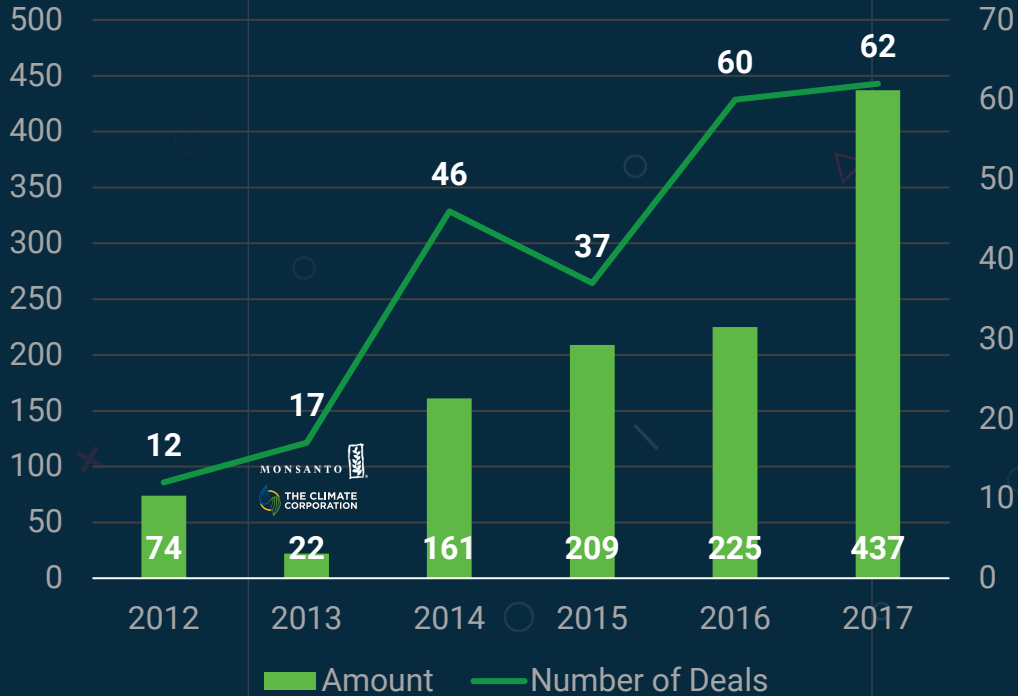


FINANCING TRENDS

Funding to farm-focused startups has been on the rise since Monsanto's acquisition of Climate Corporation, a farm data and analytics platform

2017 was a record year for farm-focused startups

\$ Millions, 2012-2017



CLIMATE CORPORATION VALIDATED THE AGTECH THESIS

Monsanto acquired Climate Corporation for 25-30x its series A valuation – a win for early investors that included NEA, First Round Capital, and Allen & Co.

Financing History

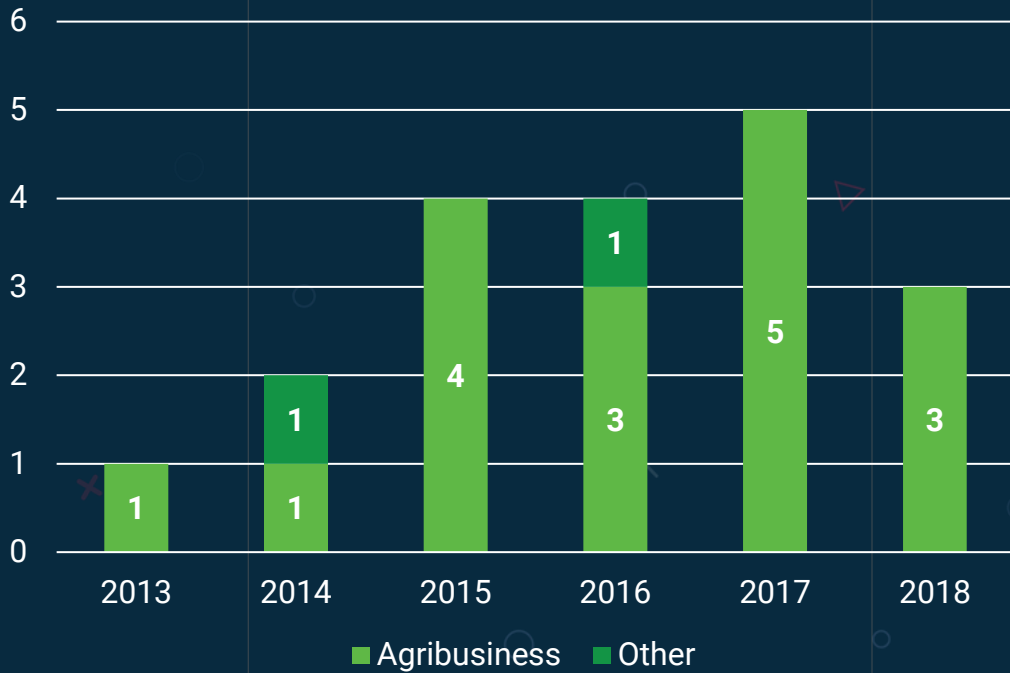
Date	Round	Amount (\$M)	Valuation (\$M)
11/1/2013	Acquired	\$930-\$1,100	\$930-\$1,100
6/15/2012	Series C	50	\$349
2/18/2011	Series B	42	\$186
10/17/2007	Series A	12.5	\$37
1/5/2007	Seed VC	4.3	Not Disclosed

FINANCING TRENDS

Large agribusiness companies have almost entirely driven exits in the farm-focused agtech space

Large agribusiness companies have driven M&A

Exits by Acquirer Type, 2013-YTD 2018






SUPPLIERS ACTIVELY ACQUIRE FARM-FOCUSED STARTUPS

Company	Target	Date	Company Type
 MONSANTO	HydroBio VitalFields Solum Climate Corp.	05/2017 11/2016 02/2014 11/2013	Analytics Farm Mgmt. Analytics Analytics
 syngenta	Farmshots Ag Connections	02/2018 10/2015	Aerial Imaging Farm Mgmt.
 JOHN DEERE	Blue River Technology Monosem	09/2017 11/2015	Robotics Machinery
 DU PONT	Granlur	08/2017	Farm Mgmt.
 AgJunction	Novariant	03/2015	Automation

AGRIBUSINESS GIANTS ARE TAKING NOTICE

Large agribusiness companies have almost entirely driven exits in the farm-focused agtech space

 <p>Acquisition: 2017 Valuation: \$300M</p> <p>Granular is an agriculture software and analytics company dedicated to helping farmers use data to drive decision making.</p>	 <p>Acquisition: 2015 Valuation: Undisclosed</p> <p>Ag Connections provides farm management software, including cloud-based agronomic data storage and analysis</p>	 <p>Acquisition: 2013 Valuation: \$930-1,100M</p> <p>Climate Corporation is a software platform that combines agronomic and weather data to improve decision making on farms. The company is now offered as the Climate Fieldview product</p>
---	--	---

CLIMATE FIELDVIEW IS MONSANTO'S DATA OFFERING

 <p>Sensors</p> <p>Agronomic data for the platform is gathered from Climate Fieldview sensors</p>	 <p>Analytics</p> <p>Climate Fieldview's platform runs analytics on farm operations, from crop performance to field health</p>	 <p>Input Optimization</p> <p>The platform can be used to implement variable rate seeding and chemical prescriptions</p>
---	--	--

DUPONT'S GRANULAR COMBINES FARM MANAGEMENT AND FARM-TO-FARM CONNECTIONS

Granular offers a full farm management platform, with network-like farm data sharing options.

GRANULAR FARM MANAGEMENT SOFTWARE



SENSORS ARE NOW COMMON THROUGHOUT FARMING



Ground-Based

Farms use sensors to monitor soil and plant health



Aerial Imaging

Aerial imaging captures data on crop yields, plant health, and irrigation needs



Machine-Based

Machine attached sensors capture data on equipment performance and crop conditions

GROUND-BASED SENSORS PROVIDE COMPREHENSIVE, PRECISE CROP DATA

Plant/Soil Metrics

- > Crop health monitoring
- > Irrigation management
- > Soil health management
- > Pest management



Animal Monitoring

- > Animal health
- > Fertility
- > Herd location



Weather Forecasting

- > Weather forecasting
- > Moisture sensing



ADVANCED AERIAL IMAGING IS NOW POSSIBLE

Ground-Based

Drones can fly at low speeds and altitude to capture crop data. Startups have focused on developing sensors for drone platforms, rather than the drones themselves. ✕

SLANTRANGE
IMPROVING AGRICULTURE FROM ABOVE

GREENSIGHT

AgriBotix

Aerial Imaging

Advances in LIDAR and remote sensing have improved fixedwing aerial imaging. Traditional aircraft can cover greater distances at higher speeds.

ceresimaging

Machine-Based

Satellites can cover huge areas in one image. Hyperspectral imaging has improved the granularity of satellite imaging.

FluroSat

Descartes Labs

Swim ONFARM WATER ACCOUNTING

EQUIPMENT-BASED SENSORS COLLECT AGRONOMIC, MACHINE PERFORMANCE DATA



Agronomic Data

Farmobile's sensor attaches to farm equipment to capture agronomic data



Machine Efficiency

Karnott, a Lille France based startup, makes a sensor that calculates equipment mechanization loads.

ANALYTICS TOOLS DERIVE INSIGHTS FROM SENSOR DATA

Connected sensors throw off huge volumes of data that are useless unless structured, stored, and analyzed in a way that drives decision making

STARTUPS ARE LEVERAGING AI TO IMPROVE A RANGE OF FARM DECISION MAKING



Crop Simulations

Analytics software can be used to model crop growth and environmental simulations. CiBO offers a range of products that simulate complex crop dynamics.



Weather Analytics

Weather

Weather data can be a powerful tool in farming. Weather Analytics offers analytics software that helps farmers make crop forecasts based on weather conditions.



Farm Ops

Machine learning can help automate and enforce crop growing operations. Prospera uses analytics to optimize irrigation, fertilization, and planting.

ROBOTICS IS AUTOMATING AGRICULTURE

From Built In Guidance On Deere Tractors...



Deere tractors offer AutoTrac™ Vision, a machine vision system that keeps tractors on track, preventing crop damage



...To Robotic Material Handling



Harvest Automation's flagship product is a robotic plant handling machine for nurseries

BENEFITS

TRANSPARENT SUPPLY CHAIN

Blockchain helps solve the problem now consumers can buy food from anywhere by knowing the exact time of harvesting and where it comes from. The chains of food value are intended to increase its competitive advantage by collaborating on a project bringing together producers, processors, marketing specialists, food service companies, retailers and support groups, such as shippers, research groups and suppliers.



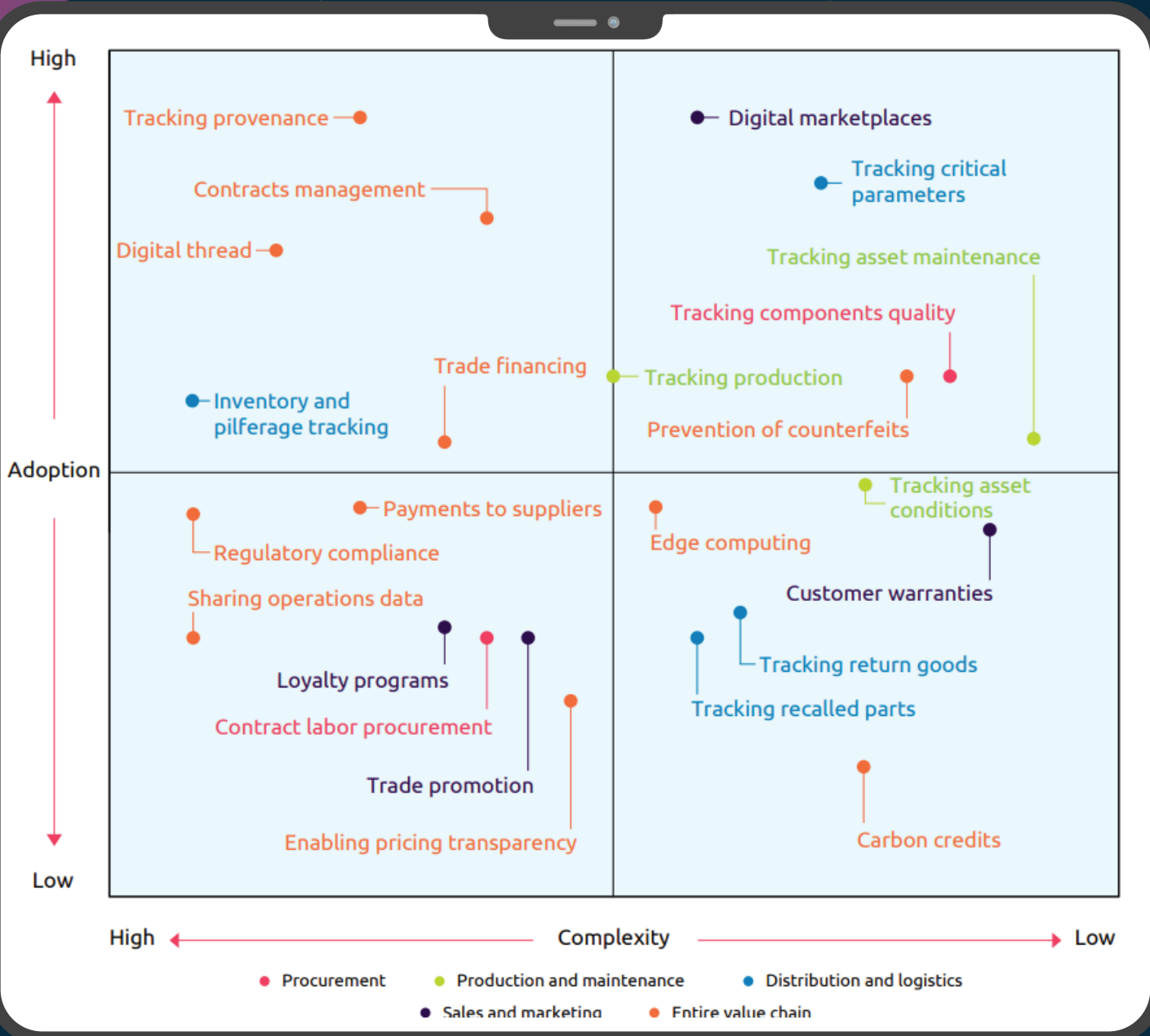
With the use of blockchain technology, it will help both consumers and farmers to connect directly without any involvement of middlemen.



All the data is uploaded on the blockchain and is visible to everyone. Consumers can directly see the availability of goods in the area.

THIS WILL HELP IN PREVENTION OF FOOD FRAUD, FALSE LABELING, AND CHAIN OF MIDDLEMEN.





FAIR PRICING OF GOODS

Blockchain will remove the middlemen chain and will provide fair prices to farmers according to their quality.

Farmers could theoretically receive payment for their goods as soon as they are delivered, without a significant portion of their income being taken away from them in the process.

Farmers can use integrated platforms with no intermediaries and more transparency to create an international trade union and increase their profit margin.





EXPAND FINANCIAL OPTIONS FOR FARMERS

Farmers can show what they have harvested and use it for verification, funding for crop insurance.

Blockchain will help farmers by providing them with quicker access towards verification and to be financially viable in developing economies.

We will provide decentralized crop insurance based on blockchain. They offer farmers to select crop types and field locations first, and then farmers receive automatic payments based on weather information.

IMMEDIATE PAYMENT ON DELIVERY



Farmers are ensured of transparency, trust with the use of blockchain technology.



Blockchain intervention can also help expedite financial settlements and farmers no longer have to wait for payments endlessly, which often leaves them distressed.



Smart contracts are written in code form and when all the criteria are met, payments are released automatically.

Blockchain's ability to promote trust, efficiency and accuracy in B2B payments and trade finance through the use of tools like smart contracts and digital tokens means farmers, buyers and Financial Institutions can mitigate risk.

TRACEABILITY OF FOOD



Blockchain will remove the control of some people over transportation and bring transparency to all this process.



The blockchain tracking tag system is different from the barcode and RFID system.



Blockchain technology will solve this problem by letting consumers know exactly where their food originated, who planted it, and how fresh it is.



USE CASES



OVERSEEING FARM INVENTORY

Blockchain in inventory management can help farmers by monitoring the storage climate and informing you when produce will expire. In this way, you can take legitimate measures.

Farming systems need to be designed to work smarter by reduced energy use, fossil fuel elimination, optimal fertilizer usage and controlled greenhouse gas emissions that will result in it being more productive with minimized wasted effort or expense.

With IOT devices planted in farms which monitor soil temperature, soil humidity, air moisture etc - any deviation from the optimum can be tracked in real time and measures taken to prevent damage.

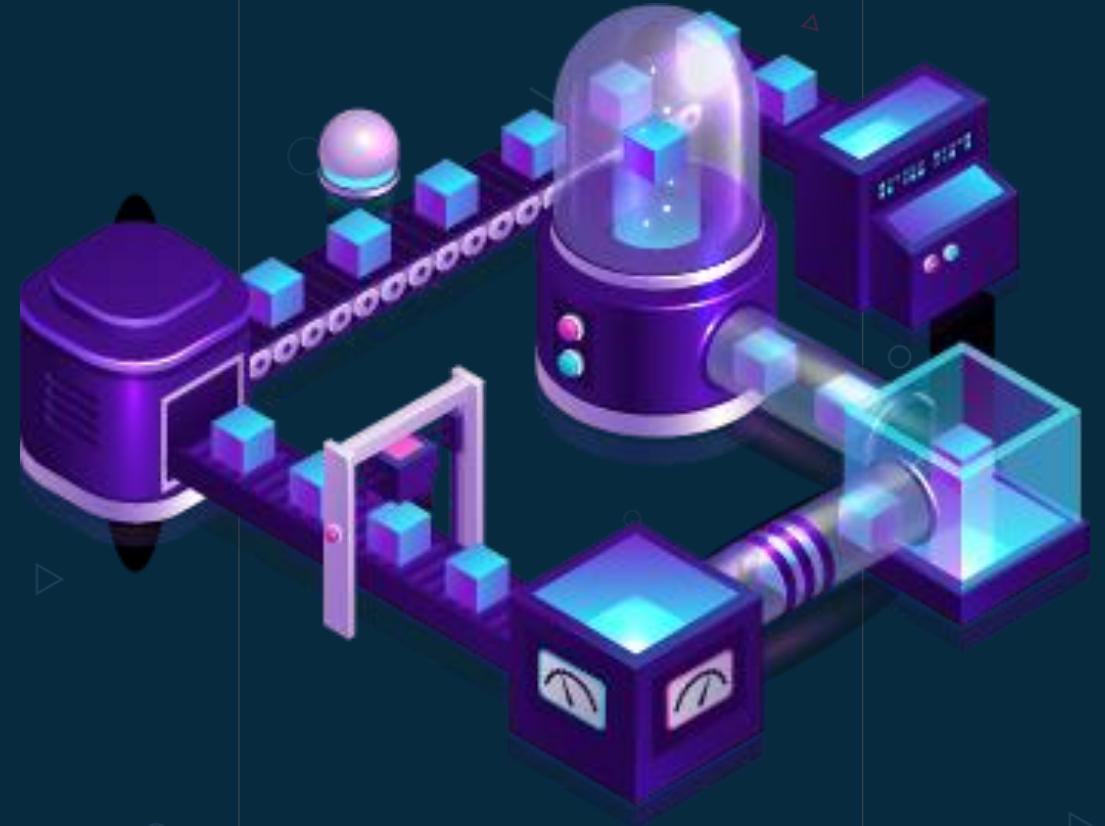
Blockchain promises a single source of truth about the condition of the farm, inventory as well as contracts from planting to harvesting to storing. Blockchain is one such technology which can bring in immense benefits to the sector and make agriculture sustainable.

ENHANCING AGRICULTURAL SUPPLY CHAIN

Blockchain technology allows goods and individuals to be tracked from their origin throughout the supply chain based on real time. The blockchain technology also gives all supply chain operators the ability to know what was done at what time and by whom. The distribution of the blockchain network promotes transparency and tracking of goods and services in a supply chain. These capabilities require accurate data collection and secure storage for reliable data tracking.

Blockchain technology allows critical information about the farming, production, transport of agri-commodities to be immutably recorded. Attaching this data to the digital asset enables it to move securely between participants along the supply chain. With the power to trace commodities and create data rich digital assets, the growing problems of food fraud and security across global agri-supply chains can be addressed with greater success.

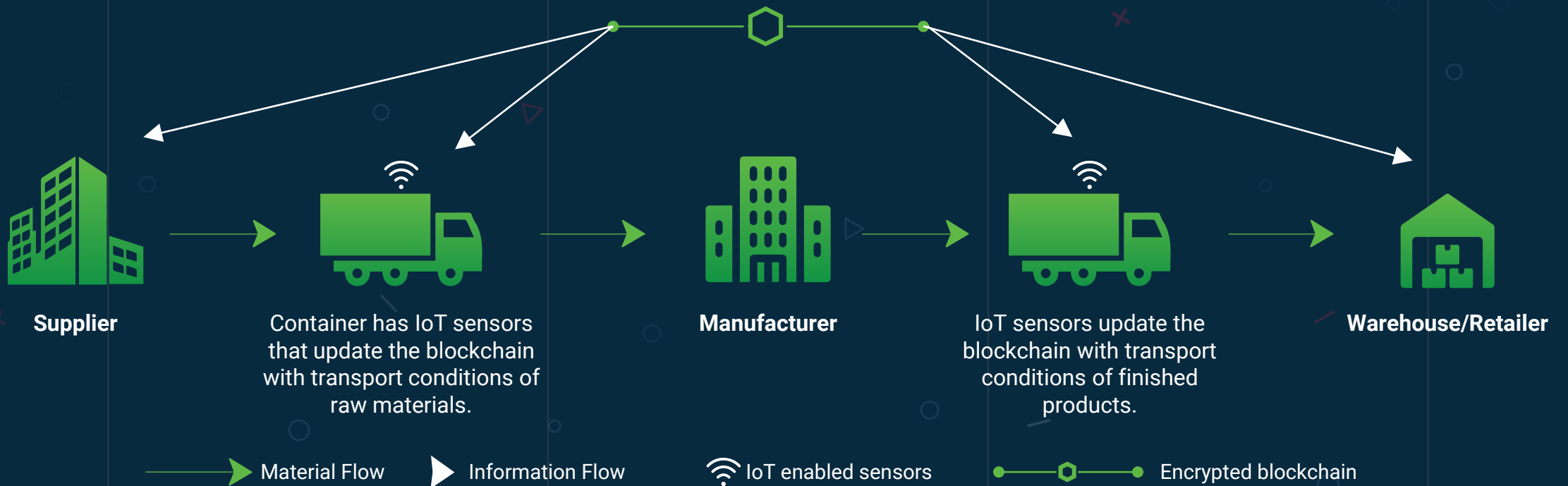
Using blockchain-based platforms, supply chain participants can report emerging issues in real time. Due to its characteristics of transparency, security and decentralization, blockchain technology makes it possible to track the information about food quality in the entire supply chain.



Supply chain management is just one of the use cases where blockchain is being recognized as a new and powerful solution. As total visibility and verifiable authenticity become increasingly valuable commodities in the modern world, blockchain will continue to grow in its role as a ledger of indisputable truth. The Blockchain offers up a host of unique capabilities that make it a perfect fit for supply chain management. It offers the capability to record every transaction with absolute certainty, and it provides accurate, real-time tracking for every item in your entire supply inventory.

Most importantly, it creates a level of trust and transparency that simply could not exist previously in supply chain management.

The data on the blockchain is shared across participants and any lapses in transport conditions can trigger a contractual penalty



MODERNIZING FARM MANAGEMENT SOFTWARE

The farm management software will become mainstream soon in reality. The use of blockchain technology in the agri-food supply chain allows stakeholders and consumers access to reliable information.

Most of the Farm Management Systems focus on specific tasks and use their own specifications to implement the functionality provided. Agriculture is rapidly becoming a very data intensive industry where farmers need to collect and evaluate a huge amount of information from a diverse number of devices (e.g., sensors, farming machinery, meteorological sensors, etc.) in order to become more efficient in production and communicating appropriate information.

Blockchain can help farmers in controlling weather crisis - IoT sensors generating data or Farmers storing data, Distribution of grown crops to the food processing companies, Supply of Processed Food to Wholesalers and Retailers, Consumers can back trace the supply chain. Smart farming allows sensors to generate crucial information related to the crops sown in the fields. The data captured either by using IoT sensors or manually by farmers is saved in the distributed storage platform, i.e IPFS with addresses stored in the blockchain.

Blockchain promises a single source of truth about the condition of the farm, inventory as well as contracts from planting to harvesting to storing. Blockchain is one such technology which can bring in immense benefits to the sector and make agriculture sustainable.

THE MARKET: FARM MANAGEMENT SOFTWARE

The global farm management software (FMS) market is expected to expand to \$4.22 billion by 2025. An anticipated 50% growth in demand for agricultural products by 2050, coupled with water shortages and stagnation in methods to expand crop yields means that leaps and innovation in farm management software represents a key area of yield enhancement.

\$4.22 billion by 2025.

(FMS) market is expected to expand to \$4.22 billion by 2025.

50%

50% growth in demand for agricultural products by 2050

AGTECH IOT OPTIMISATION

IoT applications support farmers during crop planting, irrigation, crop processing, harvesting and post-harvest, crop storage and transportation, and many other benefits in agricultural IoT systems.

IoT can provide farmers with information on crop yields, soil temperature, pest infestation, and soil quality that is essential for high crop production and provides precise data that can be used to improve farming techniques.

Crop tracking can be performed effectively to track crop growth and record growth information.

\$43.4 Billion by 2025.

Precision agriculture practices, which can help farmers make better informed decisions, have evolved significantly over recent years, with the global market now estimated to reach \$43.4 billion by 2025.



FAIR PRICING

Blockchain technology can provide lower cost and faster payment options to agri-commerce participants.

Farming is often a feast or famine lifestyle, and the wealth of information that could be provided to farmers via a blockchain platform would help decrease the chances of famine, while helping them maximize the boom times.

Blockchain reduces the number of intermediaries, so farmers can enter into contracts directly with retailers on more favorable terms. Blockchain makes the market more transparent, which can be used to exert social pressure on parties that make excessive profits. The practice of eco-organizations has proven that this strategy is effective.

Farmers can use blockchain-based platforms to create a kind of international trade union to protect their rights.

Blockchain can provide transparency of agricultural finance transactions, credit history, and financial agreements for small farmers who want to invest in agriculture.



Smart contracts will eliminate unnecessary delays and ensure farmers get paid for their product on time. Using the blockchain-based marketplace, farmers can offer their produce to the fair purchasers and can even reach more purchasers than they could previously.

OVERSIGHT AND PAYMENT OF AGRICULTURAL SUBSIDIES

The transparent and immutable behavior of the Blockchain will enable insurance companies and other authorized parties to access the data provided by farmers easily. They can directly query the blockchain to fetch the required information with the help of smart contracts. After the insurance claim request is approved, farmers will automatically get the requested amount in their respective wallets. Also, during the whole process farmers can trace the activity of approval of subsidy. Thus, through Blockchain farmers can get compensation seamlessly and quickly.

A Blockchain enabled database that embraces smart contracts and automation on several accounts would facilitate the transfer of subsidy payments in a cost-efficient manner and instantly. Blockchain can also be employed in the process of disbursing subsidies to farmers to ensure that they benefit from subsidy programs.

COMMUNITY SPONSORED AGRICULTURE

Community-supported agriculture (CSA model) or crop sharing is a system that connects the producer and consumers within the food system more closely by allowing the consumer to subscribe to the harvest of a certain farm or group of farms. It is an alternative socioeconomic model of agriculture and food distribution that allows the producer and consumer to share the risks of farming.

FarmShare in the US is an example of this new CSA model. The ultimate goal is to create new forms of property ownership, community cooperation, and local self-sufficient economies. CSA farmers are also more likely to be younger, which means that they may be more inclined to embrace blockchain technology, could it prove to be an asset to their operations.



MOBILE REMITTANCE FOR SMALL FARMERS

Blockchain enables low-cost, quick, and secure payments that eliminate the burden on farmers. The payments can be done within a few minutes with limited transaction fees without the involvement of any middle agents like remittances or banks. The mobile payment system has opened a world of opportunities for many smallholder farmers excluded from mainstream financial services like banking and insurance.

The financial services enable smallholders to:

01. Invest in agriculture
02. Relieve liquidity constraints

Blockchain brings fairness in the process of agricultural finance via transparency and shared control accessibility.



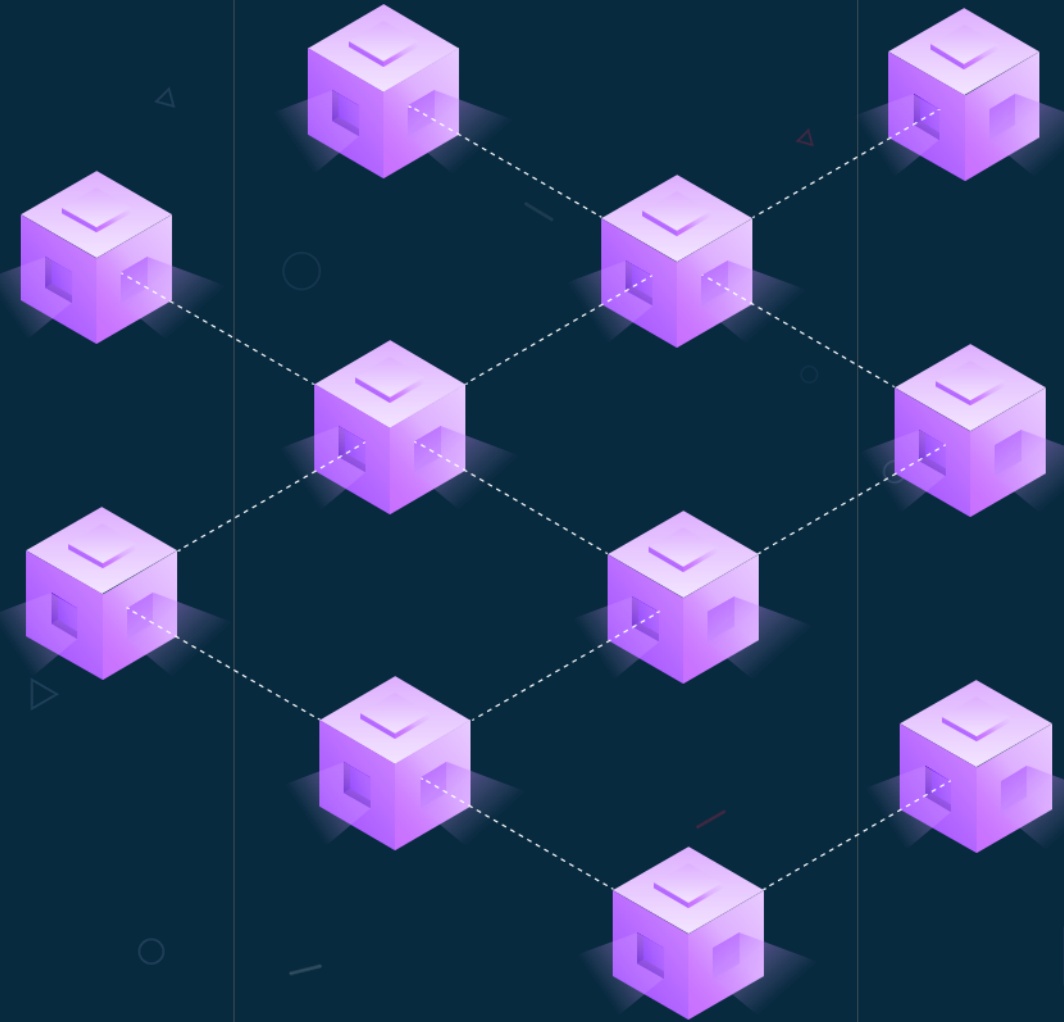
Blockchain technology is used in removing counterparty risk for sellers through real time payment, automating and democratizing access to supply chain financing for buyers, and guaranteeing that all consumers have access to the provenance of their commodities to make informed purchase decisions.

INCENTIVIZING SUSTAINABLE PRACTICES

Blockchain is a disruptive technology that can facilitate traceability in agriculture supply chains through decentralized immutable public records.

Agricultural cooperatives powered by the blockchain reward sustainable practices, encouraging farmers to establish provenance of their methods in order to attain a financial reward.

Smallholder farmers cultivate crops on 12% of the world's farmlands and constitute a majority of producers in developing economies. To encourage them to produce high-quality yield, it is crucial to improve their access to financial assistance, which can aid them in investing further in farm productivity by procuring high-quality inputs, upgrading their post-harvest processes, staying informed about sustainable farming practices, and adopting better risk management practices; all of which will support their transition from subsistence farming to one that is economically and commercially viable.





GREATER ACCOUNTABILITY FOR MULTINATIONALS

Blockchain's greatest characteristic stems from the fact that its transaction ledger for public addresses is open to viewing. In financial systems and businesses, this adds an unprecedented layer of accountability, holding each sector of the business responsible to act with integrity towards the company's growth, its community and customers.

The blockchain technology offers a reliable approach of tracing transactions between anonymous participants. Fraud and malfunctions can thus be detected quickly.

Blockchain technology provides value to an industry that needs more trust as it enables the storing of and access to information, which is immutable and timeless.

TECHNOLOGY



REQUIRED TECHNOLOGIES FOR Agrifi PROJECT

The development of IoT technology has made it possible for many objects to connect to the Internet to communicate with each other without human intervention. IoT reduces human data entry and uses a variety of sensors to collect data from the environment, allowing automated storage and processing of all data.

Incorporating geo-spatial data, especially from earth observation (EO) data can identify not only the origins of cash crops such as oil palm but also identify their spread to identify the impact on deforestation.

The integration of blockchain with Internet of Things (IoT) for real-time monitoring of physical data and tracing based on the hazard analysis and critical control points system (HACCP) has recently been proposed.

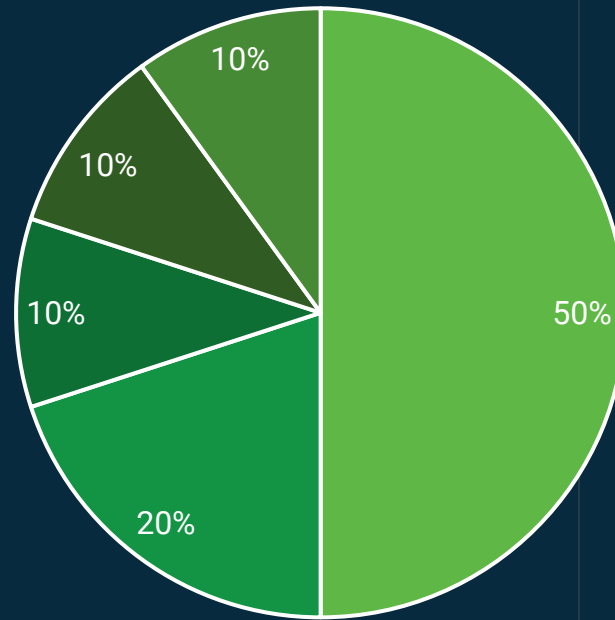
LOCK-UP PERIOD



Partners and Advisors - 10% of tokens will have a 1 year vesting and 3 months cliff



Team and Founders - 3 years vesting with 6 months cliff



■ For Sale ■ Team & Founders ■ Advisors ■ Partners ■ Reserve Fund

THE ASK



The intent of Agrifi is to raise the minimum needed funds to launch the network and platform (5.6M).

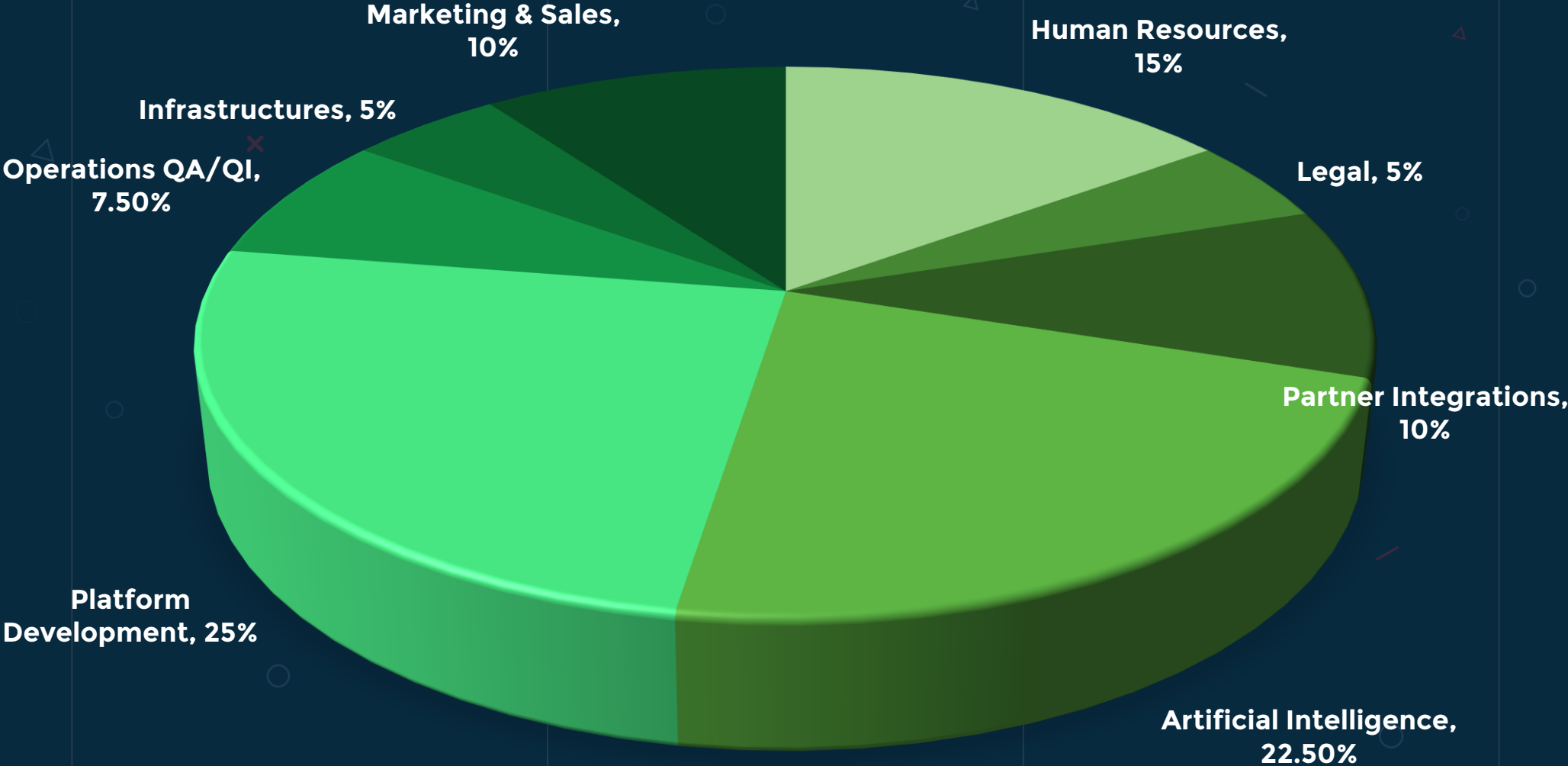


This fundraise provides the absolute minimum required to get to our 1 year milestones and continue to develop out the platform.



The remainder of the funds between the soft cap and the hard cap allows the company to scale larger faster as well as more efficiently.

FUNDS UTILIZATION



ROADMAP

Q4 2023

Project &
Exchange Launch

Q2 2024

Agrifi
Network Launch

Q3 2024

Data Integration (3rd
Party)

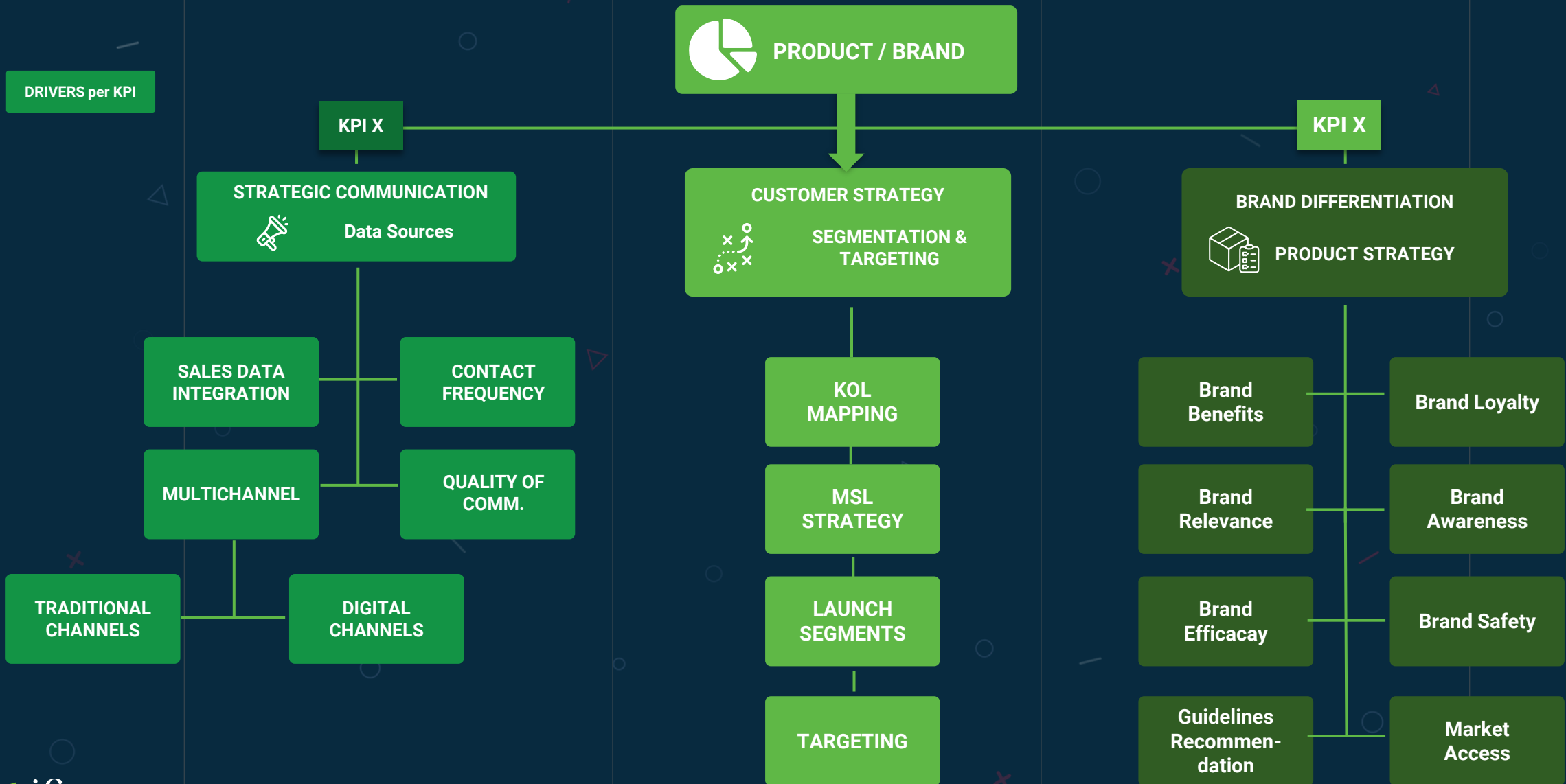
Q4 2025

Dapps HER/CDMS/SC)

Q4 2026

AL/ML Engine

SALES STRATEGY



GROWTH STRATEGY

- ✓ Utility Token
- ✓ Crypto Token
- ✓ Decentralized data storage
- ✓ AI Algorithms
- ✓ Host verification
- ✓ Data encryption
- ✓ IOT Device Connectivity
- ✓ Host Selection
- ✓ Proof-of-Work Protocols



MARKETING STRATEGY



Website / Appstore Optimization

- Focused Key Page Elements
- Localized website / app store pages
- Optimized Discoverability and conversions



Paid Advertising

- Smart Banners
- Traffic Acquisition
- Tailored Adds



Marketing

- Influencer
- Social Media
- Print Media
- Electronic Media



Referrals

- Reward Videos
- Invites
- Referral Codes
- Bragging Encouragement
- Demos and Free Trials

VALIDATION



**Interoperability of Blockchain
is the Key to Mass Adoption**



<https://www.finextra.com/blogposting/18972/blockchain-and-interoperability-key-to-mass-adoption>



<https://finance.yahoo.com/news/blockchain-interoperability-key-successful-projects-140034557.html>





VISION, FINANCIALS, EXIT



Become the leader in aggregating all Agriculture data globally



Raise 100K-200K to test market response



Potential Billion Dollar Unicorn Company within 5 years



Exit with sale to Google, Amazon, J&J, other major digital health provider or Big Pharma company