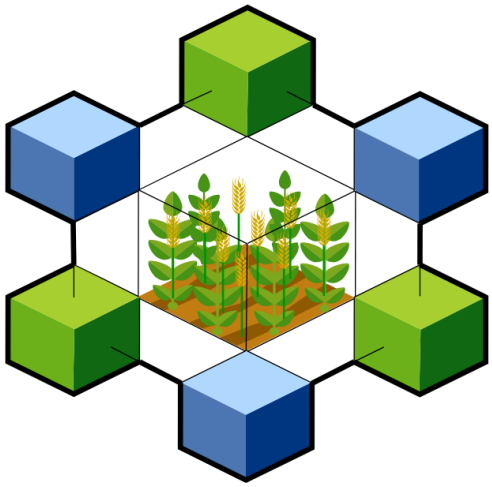

AgriTech

Revolutionizing Agriculture with Kissan Coin

Whitepaper Version: 1.0

7th June, 2023

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1. Introduction

1.1. Background

The AgriTech platform has been meticulously designed to serve as a comprehensive and effective solution for both farmers and consumers. It addresses the prevalent disarray within the farming economy, which is widely recognized. It is a well-known fact that a significant portion of the generated margins is absorbed by intermediaries in the form of commissions and supplementary fees [1]. This situation often results in farmers being compelled to sell their produce at lower prices, thereby experiencing a profit deficit of up to 180%. Despite the government's efforts to implement measures to regulate such occurrences, implementing these measures across a country as vast as ours proves to be challenging. The introduction of the Minimum Selling Price (MSP) initially appeared promising; however, due to the unorganized nature of the farming sector, even the government encountered difficulties in effectively assisting farmers, as it is not feasible for the government to purchase the entire yield of all farmers [1].

Another widely known measure implemented by the government involved the introduction of three farm bills in 2020, aiming to provide a certain framework for the farming economy with the long-term goal of centralizing the agricultural industry. However, this initiative sparked widespread protests across the nation due to concerns among farmers regarding the potential consequences it could have on the existing APMC mandi (Agricultural Produce Market Committee) and MSP (Minimum Support Price) system. The inclusion of corporate entities without any supplementary fee payment [2] further exacerbated fears among the farming community. Consequently, it is evident that this endeavor to centralize the farming sector did not achieve substantial success.

In addition to that, financing is a huge issue especially in India’s agricultural sector. This issue is further fueled by the above discussed issues that make the farmers unable to generate good profits from their produce. So far, many steps have been taken by the government to establish new credit sources for the farmers, for instance, the establishment of the National Bank for Agriculture and Rural Development [3]. Even then, due to the disorganized nature of the farming community, many farmers fail to utilize the benefits of such schemes. Although the farmers do, one problem with this system is that the farmer still needs to repay the credit with his hard earned money, which as we’ve already established is a scarce resource for the farmers as their yield results in little to no profit due to the problems discussed above.

1.2. Our Vision

At AgriTech, our objective is to pursue an alternative approach. Through the elimination of intermediaries and the provision of comprehensive resources and information to farmers, we strive to bring about a revolution in the agriculture industry. Our intention is not to centralize, but rather to further decentralize the industry by enabling crowdfunding for farmers, establishing a direct connection between them and their end customers. This approach effectively addresses the funding challenges faced by farmers. However, this alone does not constitute a complete solution. In order to fulfill our claim of being a one-stop platform, we recognize the importance of completing the entire crop lifecycle—from seed to crop and ultimately to the end customer. To

achieve this, we integrate a management section that equips farmers with essential information about suitable crops and enables them to track their ongoing cultivation activities. Furthermore, farmers can conveniently purchase supplements and seeds for their crops, as well as sell their produce through our dedicated e-commerce store. By ensuring that end customers receive the assurance that their food products originate directly from the farms, the crowdfunding aspect automatically gains strength. Thus, our comprehensive solution operates as a self-sufficient model, where each module independently complements the others.

1.3. Concept

Initially, the fundamental idea was straightforward: to generate value and mutual benefits for all stakeholders involved. Conceptually, the platform's overall viability as a sustainable long-term business seemed questionable. However, through the iterative process of prototyping and observing the seamless integration of individual modules functioning harmoniously as a unified whole, the entire model underwent a transformative shift. It not only became economically viable but also demonstrated day-zero profitability on Polygon Blockchain. This accomplishment can be attributed to the exceptional cohesion among the various sections comprising the platform. At its core, the underlying concept of the entire project can be perceived as a comprehensive solution that consolidates the financing, maintenance, and sale of farmers' products within a single platform.

1.4. Terminology

1.4.1. Platform Terminology

Wallet

e-Wallet of the user to store the *'Kissan Coins'* bought on the platform. A standard home-grown crypto wallet with all standard functionality.

Plan

The term "plan" denotes a pre-prepared proposal formulated by the farmer to estimate approximate revenue, profit and loss, and effectively manage the procurement of necessary raw materials and supplements over the course of the plan's duration. These plans are inherently tied to campaigns, ensuring that potential contributors have a comprehensive understanding of the project's objectives and financial outlook before making any investments.

Pipeline

The pipeline represents the collection of crops that have been cultivated as part of the ongoing execution of a plan. It maintains a comprehensive record of the harvest month and offers provisions for reporting instances of crop failure. Furthermore, the pipeline incorporates detailed recordings from any supplementary electronic products procured from the AgriNeeds store to facilitate the monitoring of crop health.

Produce

Produce refers to the ultimate outcome obtained at the culmination of the crop lifecycle. The term "produce" encompasses a contextual significance and may pertain to a specific crop or the entirety of the harvest as a whole.

Campaign

The term ‘campaign’ refers to the contract that facilitates crowdfunding via the blockchain. It is basically a smart contract involving meta transactions [5] resulting in no gas fee on users’ end. This smart contract tracks all the investments of different investors on a plan put forward by the farmer, who is the owner of the contract. It also contains all the KCO that is contributed by the users.

Contribute/Contribution

Contribution denotes the sum pledged by users or investors within a campaign. This amount can either represent an outright donation towards the cause or a genuine investment, contingent upon the narrative presented by the farmer in association with the campaign and the potential return on investment that users may expect to receive.

1.4.2. Transaction Terminology

Address

Address serves as a distinctive identifier for each wallet within the platform. Upon user registration, an e-Wallet is generated, and the user is assigned a wallet address. This address serves as a repository for Kissan Coins, which can be acquired, transferred, or accumulated through campaigns. In essence, this address functions as the user's account number, akin to a bank, and is a necessary element for all transactions conducted on the platform.

Balance

Balance pertains to the quantity of Kissan Coins held within a user's wallet at any given point in time. It represents the total amount of Kissan Coins available to the user for transactions and serves as a measure of the current holdings in their wallet.

KCO

KCO is an acronym for "Kissan Coins," which serves as the native currency of the platform. All transactions within the platform are conducted using KCO, except in cases where users acquire a specific quantity of KCOs using traditional paper or digital currency.

Gas

Gas represents the obligatory transaction fee that individuals are required to pay when conducting transactions on a blockchain network using the native currency of that particular blockchain. In our platform, we provide users with the ability to circumvent the

need for paying this gas fee by conducting transactions on their behalf. Consequently, users are spared the inconvenience of procuring separate currencies like Ethereum or Matic solely for the purpose of covering transaction fees. This feature streamlines the process and alleviates users from the complexities associated with managing multiple currencies.

Permit

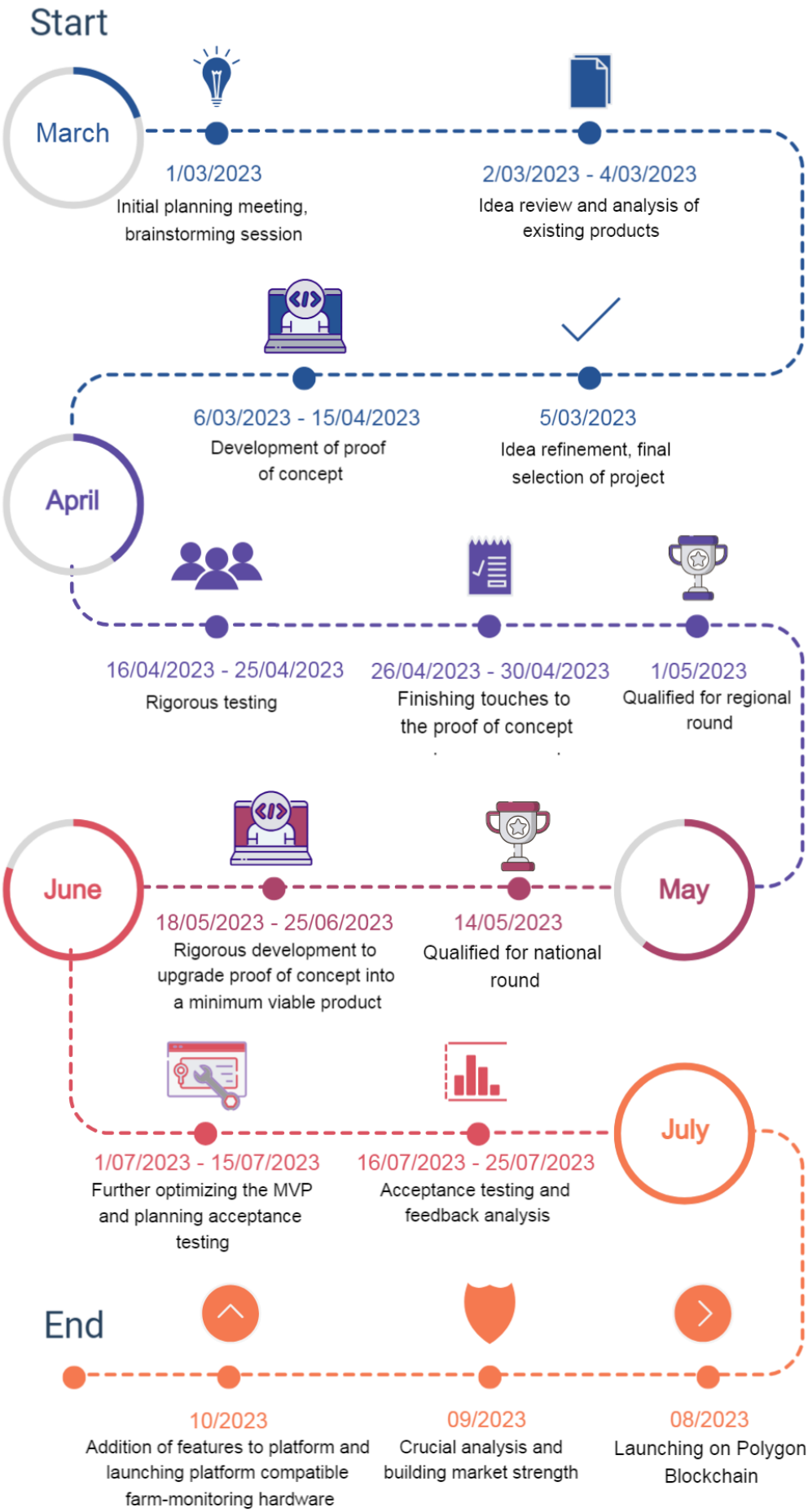
A permit, within the platform's context, refers to the authorization given by a user to the platform, empowering it to execute transactions on their behalf. This permission enables the process to be executed without requiring the user to bear the gas fees associated with blockchain transactions as the permit function is called with user signatures. Consequently, this mechanism reduces the technical complexity of blockchain for the user and facilitates hassle-free transactions.

ERC-20

ERC-20 [4] is a technical standard used for creating and implementing fungible tokens on the native blockchain. It defines a set of rules and functions that enable compatibility and interoperability among different tokens, facilitating seamless integration and interaction within the native ecosystem. KCO is an ERC-20 token and operated on the technical standards put forward by ERC-20.

1.5. Project Timeline

We are a very young project but have already built a ready to serve first version of the platform. Although not in a commercial stage yet, the project is soon set to be open to actual user interaction with day-zero profitability once a proper business model is set in place.


Start
March
1/03/2023
Initial planning meeting, brainstorming session
2/03/2023 - 4/03/2023
Idea review and analysis of existing products
6/03/2023 - 15/04/2023
Development of proof of concept
5/03/2023
Idea refinement, final selection of project
April
16/04/2023 - 25/04/2023
Rigorous testing
26/04/2023 - 30/04/2023
Finishing touches to the proof of concept
1/05/2023
Qualified for regional round
May
June
18/05/2023 - 25/06/2023
Rigorous development to upgrade proof of concept into a minimum viable product
14/05/2023
Qualified for national round
July
1/07/2023 - 15/07/2023
Further optimizing the MVP and planning acceptance testing
16/07/2023 - 25/07/2023
Acceptance testing and feedback analysis
End
10/2023
Addition of features to platform and launching platform compatible farm-monitoring hardware
09/2023
Crucial analysis and building market strength
08/2023
Launching on Polygon Blockchain

2. Architecture

A 3-layer architecture is adopted by the AgriTech platform to facilitate the different functionalities and features. These layers work with high cohesion and are namely: the application layer; the data processing layer and the core layer.

2.1. Core

This layer serves as the central and fundamental component of the project, representing its core functionality and backbone. The logic implemented within this layer is executed directly on the blockchain. Critical functionalities, including crowdfunding, KCO buying and transferring, contributing to campaigns, and numerous others, heavily rely on the proper functioning of this pivotal layer.

2.2. Data Processing

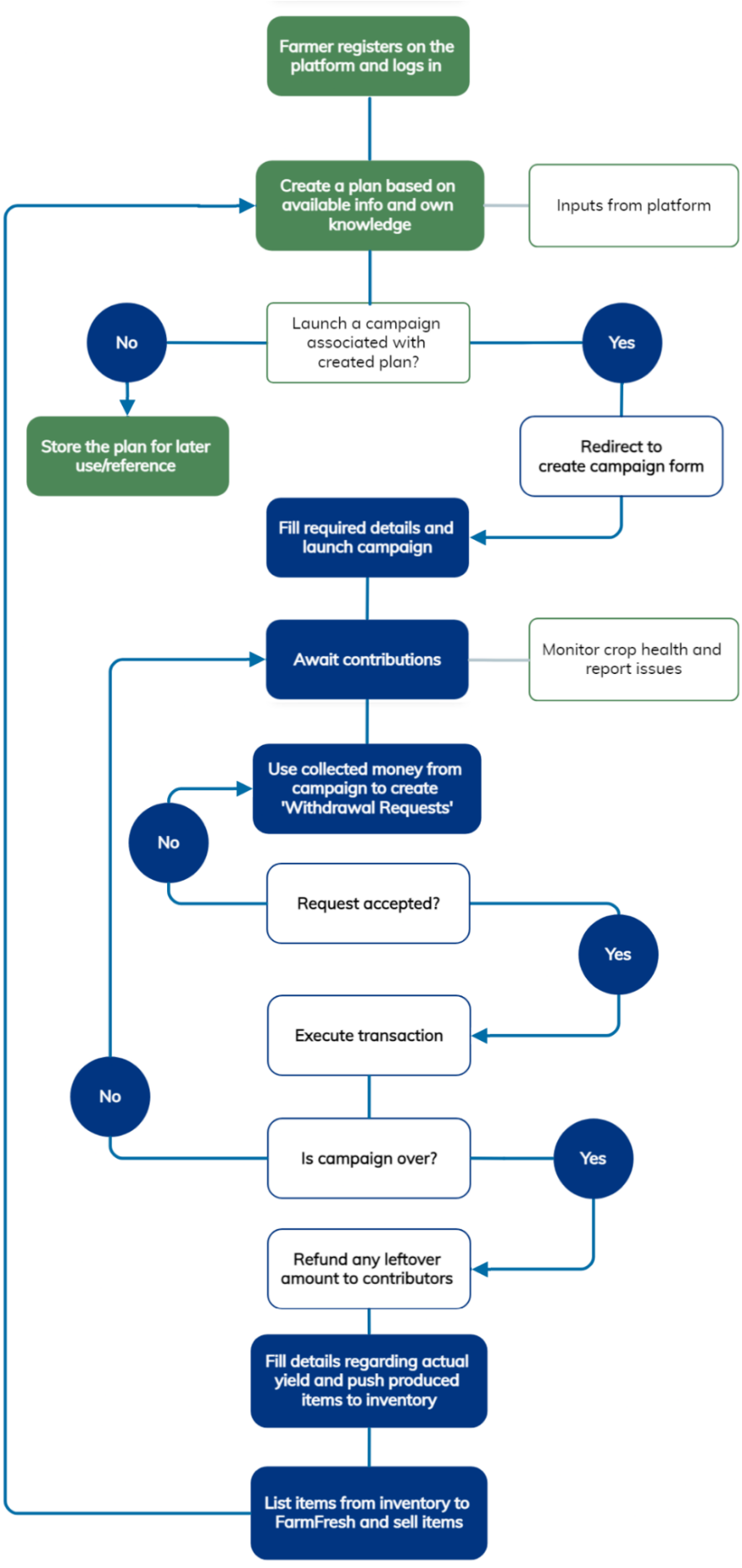
This layer is responsible for executing the essential business logic required for the platform's operation. Critical modules such as the Management Module and AgriStore depend on the proper functioning of this layer. It processes user inputs and translates them into actions to be executed on the blockchain, thereby ensuring complexity abstraction and seamless execution of user actions. This layer also comprises the off-chain processing such as signing of requests before forwarding them to the core.

2.3. Application

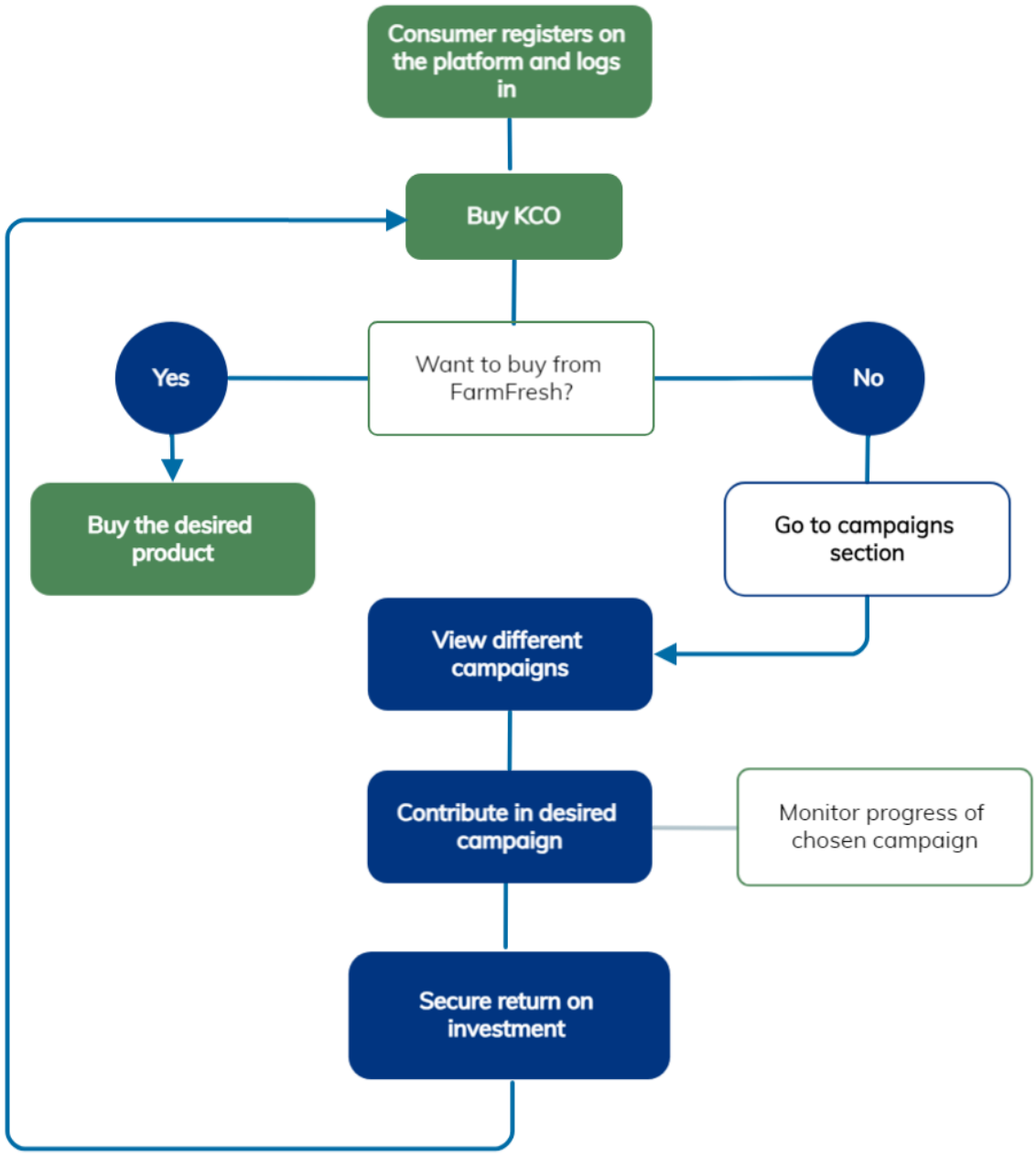
This top-level layer acts as the interface between the user and the application, providing a user-friendly presentation of recorded data and ensuring an optimal user interface (UI) and user experience (UX) across the platform. It facilitates user inputs and subsequently transfers them to the data processing layer, enabling the execution of user-requested actions.

3. User Flow

3.1. Farmer as User (B2B)


Farmer registers on the platform and logs in
Create a plan based on available info and own knowledge
Inputs from platform
Launch a campaign associated with created plan?
No
Yes
Store the plan for later use/reference
Redirect to create campaign form
Fill required details and launch campaign
Await contributions
Monitor crop health and report issues
Use collected money from campaign to create 'Withdrawal Requests'
No
Request accepted?
Yes
Execute transaction
No
Is campaign over?
Yes
Refund any leftover amount to contributors
Fill details regarding actual yield and push produced items to inventory
List items from inventory to FarmFresh and sell items

3.2. Consumer as User (B2C)



4. Blockchain

4.1. Smart Contracts

Smart contracts play a pivotal role in facilitating code execution on the blockchain. Within our platform, users engage with smart contracts in various scenarios. To ensure a favorable user experience (UX), a considerably elevated level of abstraction has been developed. The following instances encapsulate these interactions:

1. User buys KCO: In the context of the user's acquisition of KCO tokens, an integral process referred to as the "KCO transfer" transpires. This operation is entirely contingent upon the KCO contract's deployment on the blockchain during its initial launch.
2. User transfers KCO: The transfer of Kissan Coins (KCO) is an inherent feature encapsulated within the functionality of the KCO contract. It is imperative to note that this transfer mechanism encompasses various types of transactions. Firstly, a direct transfer transpires when users initiate the transfer of a specified quantity of KCO tokens directly from their wallet to another user's wallet. Secondly, a distinct form of transfer occurs when a user procures a product from the AgriStore platform, leading to the transfer of the corresponding payment amount to the seller's wallet.
3. User launches a campaign: Every campaign that is initiated within our system undergoes contract deployment on the blockchain. This contract serves as the foundation for all campaign-related functionalities, encompassing key operations such as contribution, voting, and request processing.

Another novel feature of our smart contracts is their seeming gasless nature. Since we offer a very high amount of abstraction for the users to have a seamless experience, the involvement of gas would cause unnecessary complexity in the process. To avoid this, we introduce meta transactions on our platform. Meta transactions, also known as "gasless transactions" or "user-agnostic transactions," are a concept in blockchain technology that allows users to interact with decentralized applications (dApps) or execute transactions on a blockchain without needing to hold and directly pay for the underlying cryptocurrency's transaction fees (gas fees). Instead, a third-party entity, often referred to as a "relayer" or "meta transaction service provider," covers the gas fees on behalf of the user.

Basically, meta transactions enable the users to seamlessly perform transactions without having to hold a certain amount of ETH in their wallets as our platform will also act as relayer.

4.2. KCO Contract

The KCO smart contract plays a pivotal role in deploying the KCO token on the blockchain, enabling seamless transactions involving KCO. Conforming to the ERC-20 standard, this smart contract incorporates permits to facilitate gasless transactions. It encompasses essential token functionalities, such as token transfers, account balance management, and transaction approvals. Additionally, the smart contract provides visibility into the total supply of the platform's native currency currently in circulation.

4.3. Campaign Contract

The campaign smart contract plays a pivotal role in enabling the crowdfunding element of the platform. It encompasses the necessary functionalities for accepting contributions and is deployed for each individual campaign launched by a user. Each contract represents a unique campaign, and the contributed amount is securely stored within the contract. The release of funds is contingent upon confirmation from the majority of the contributors, ensuring a consensus-based approach. Notably, all transactions within this contract are meta transactions,

eliminating the need for users to possess the blockchain's native currency for gas payment. This gasless mechanism enhances user convenience and accessibility.

5. Platform Features

The AgriTech platform leverages different aspects of technology to provide a seamless user experience. It offers a variety of different services in both B2B and B2C sectors. Following are the features that the platform offers as of now. Note that these features are the ones that are production ready.

5.1. Dashboard

The dashboard, akin to its counterparts, offers a comprehensive representation of various operations through the utilization of widgets. Featuring a highly responsive user interface, it seamlessly facilitates the viewing of pertinent information regarding ongoing campaigns on mobile devices. Meticulously designed, each widget has been crafted with precision to provide users with precise and relevant information tailored to their needs, ensuring an optimal user experience.

5.1.1. Widgets

Campaigns

The campaigns widget serves as a valuable tool, offering users a comprehensive overview of recently visited campaigns. This functionality grants users the capability to monitor and assess a campaign's details before making any investment. Additionally, for users who have already invested in a particular campaign, this widget provides a means to conveniently track the progress and developments of said campaign.

Inventory

The inventory widget plays a pivotal role by presenting users with a comprehensive overview of the total quantity of goods stored within the inventory. This widget stands as an independent inventory management system, offering the necessary functionality to efficiently manage inventory operations. Remarkably, it achieves this while maintaining a high level of abstraction, ensuring a user-friendly interface that effectively engages with the target audience.

Transaction History

The recent transaction history widget offers users a straightforward means to view the most recent transactions. This functionality is instrumental in providing instant access to new transactions, enabling users to verify their accuracy and thereby enhancing the overall trustworthiness of the system. Notably, each transaction is accompanied by its respective transaction hash, ensuring the uniqueness of every

transaction. These transaction hashes effectively serve as verifiable records, akin to invoices, attesting to the details and authenticity of each transaction.

Contribution History

In a manner analogous to the transaction history widget, this particular widget enables users to access and review their recent contributions. Furthermore, it serves as a concrete proof of payment, as each contribution is accompanied by an immutable transaction hash. This transaction hash can be utilized by any interested party, regardless of their location, to verify the transaction's details, thereby establishing a robust mechanism for global transaction validation.

Current Order

The process of ordering products from AgriStore is characterized by its simplicity, as is the subsequent tracking of the placed order. The 'Current Order' widget offers users a convenient means to monitor the progress of their ordered product, including real-time updates on its origin and current location. Additionally, this widget provides users with an estimated delivery time, enabling them to gauge when they can expect to receive their product.

Order History

This widget provides users with the ability to effectively monitor and manage their recent orders. Its primary purpose serves as a sales tactic aimed at promoting a seamless buying experience. Through this widget, users are afforded the convenience of easily reordering previously purchased products directly from the interface. Additionally, it enables users to track the date of their last purchase for a specific product, allowing for quick reference and informed decision-making.

Current Plan

The current plan widget serves as a valuable tool for users to monitor and assess the progress of their ongoing agricultural plan. This widget facilitates the tracking of the plan currently being executed, providing essential information such as the remaining duration until crops can be harvested. Furthermore, it offers users a comprehensive list of the crops that have been sown as part of the current plan, enabling them to stay informed about the composition of their agricultural endeavors.

5.2. Wallet

The wallet section of the platform has been meticulously crafted to cater to the requirements of the average user. Within this section, users gain access to a range of functionalities aimed at effectively managing their finances including a whole wallet to store KCO. In a novel approach, the platform ensures zero dependency over existing wallets (such as MetaMask) and provides a home-grown method of storing the native currency. The wallet section encompasses several distinct components, each serving a specific purpose. These components include:

5.2.1. Address

The "Address" component within the wallet section serves as the designated wallet address for users to store their Kissan Coins (KCO) acquired or received. It comprises a unique identifier in the form of a randomly generated sequence of 32 alphanumeric characters. This address holds significant importance as it is utilized whenever the user engages in the purchase or receipt of KCO tokens, ensuring secure and accurate transactions within the platform.

5.2.2. QR Code and Scanner

This particular feature offers users a convenient scan and pay functionality. Due to the length of wallet addresses and the absence of custom address creation on the platform, the QR scan and pay feature seamlessly facilitates the transfer of Kissan Coins (KCO) between users' wallets. This functionality opens up possibilities for merging the online and offline experiences, allowing farmers, who are users, to directly accept KCO as a form of payment at point-of-sale (POS) locations. Consequently, this enables farmers to sell their products in an offline environment, while consumers have the opportunity to make payments at these POS locations and purchase genuine products within that offline setting.

5.2.3. Balance

The wallet balance of users is readily accessible and consistently updated in real-time. This integral feature allows users to stay informed about the current balance within their wallet. Additionally, it is complemented by the ability to view transaction history and contribution history, effectively functioning as a mobile passbook for the users' wallet. Collectively, these features provide users with a comprehensive overview of their financial activities, ensuring transparency and facilitating informed decision-making.

5.2.4. Transfer

This feature empowers users with the capability to transfer Kissan Coins (KCO) from their own account to another user's account. To initiate the transfer, users are prompted to input the unique address of the recipient along with the desired amount to be sent. Furthermore, as a security measure, users are required to enter their password to authorize the transfer. For enhanced convenience, users have the option to scan the recipient's QR code, which can autofill the recipient's address and amount. However, it is important to acknowledge that in the current version of the platform, certain cosmetic features such as autofill may occasionally exhibit bugs and necessitate further testing and development for optimal functionality.

5.3. Management

The management section within the AgriTech platform, as its name implies, grants users the authority to effectively manage the entire harvest lifecycle. This module possesses the

capability to function autonomously as a comprehensive farm management system, empowering users to meticulously plan for their harvest, monitor crop growth, manage inventory, and forecast product sales on FarmFresh. It also offers widgets to analyze the MSP of different crops over the years in graphical representation. To facilitate these diverse operations, the management section consists of the following subsections:

5.3.1. Planning

Effective planning is crucial for the profitability of any business, including agriculture. Within the AgriTech platform, the planning module enables users to strategically plan for the upcoming harvest season while providing an overview of the associated costs. These costs are calculated based on the information provided by the user. Additionally, the module calculates the projected profit and loss, as well as the total expected revenue. Several key factors are taken into consideration when determining the cost and revenue of the plan, such as the present cost of raw materials per unit, the expected yield, and the final sale value of the produce per unit. This section works in close conjunction with the campaigns module to transparently provide contributors with comprehensive information regarding the crops and supplements to be utilized throughout the harvest season.

5.3.2. Produce Pipeline

The produce pipeline section provides users with a comprehensive view of all currently cultivated crops, along with their expected month of harvest. Moreover, it offers users the functionality to raise issues pertaining to ongoing plans, thereby allowing them to log any concerns or problems encountered with the crops. These issues are not only recorded within the platform but are also shared with users who have contributed to the respective farmers' plans through associated campaigns, provided such campaigns have been launched. This ensures that contributors are informed about any significant issues or challenges faced during the progression of the plan.

5.3.3. Inventory

Inventory management holds significant importance within the crop harvest lifecycle. This module plays a pivotal role in providing users with a comprehensive understanding of the total cost of the inventory they currently possess. By doing so, it facilitates effective management of produced goods and prevents unnecessary purchases of crop supplements. Furthermore, the module enables users to update their inventory by adjusting the quantity of items after utilization and offers the functionality to list the produced goods for sale on FarmFresh. While this module has the potential to function independently as a standalone inventory management system, its optimal utilization is achieved when integrated with other functionalities on the platform. The interdependence of various modules allows for seamless complementarity, ensuring a holistic and efficient user experience.

5.3.4. Sales

The sales section of the platform is meticulously crafted to facilitate the analysis of sales performance for the wide array of products listed on FarmFresh by farmers. It serves as a dedicated resource for users, particularly farmers, offering them a user-friendly interface to explore and evaluate historical sales data. This valuable feature provides insights into past trends and patterns, enabling users to gain a deeper understanding of market dynamics.

Furthermore, the sales section incorporates predictive analytics capabilities, empowering users to estimate future product prices and compare them to prevailing market trends. This valuable information assists users in making informed decisions regarding competitive pricing strategies, thereby enhancing their ability to maximize profitability.

However, it is important to note that the current version of the sales section has limited functionality, necessitating further updates and enhancements to fully realize its potential. The platform developers are actively working on introducing improvements to expand the capabilities of the sales section, ensuring a more comprehensive and robust user experience.

5.4. Campaigns

Campaigns serve as a pivotal component in enabling the crowdfunding process, acting as the conduit that connects farmers with consumers for financial support. These campaigns can be created and accessed within the designated campaigns section of the platform. Users who express an interest in funding a campaign can navigate to this section and explore the comprehensive details of any campaign that captures their attention. The user interface is thoughtfully designed to ensure an engaging experience, keeping users actively involved and informed throughout their interaction with the campaigns section. Following are the key elements within the campaigns section.

5.4.1. Contribution

Contributing to any campaign on our platform is a seamless and straightforward process, deliberately designed to prioritize user-friendliness. A notable feature that sets our platform apart is the gasless nature of the entire procedure, making it accessible even to users with limited knowledge or experience in blockchain and cryptocurrencies.

The contribution process closely resembles the purchase of KCO tokens, which are subsequently sent to the designated farmer. However, it is important to note that the transferred amount does not directly grant the farmer immediate access. Instead, the funds are securely stored within the smart contract associated with the campaign, effectively regulated by the contributors themselves.

To enable farmers, who serve as the campaign owners, to access the contributed funds, they must submit withdrawal requests detailing the purpose for which the funds are required. These requests are crucial in maintaining transparency and accountability within the system. Furthermore, the withdrawal process is conducted in the native currency of the platform, further enhancing the trustworthiness of the entire system.

Upon submitting a request, campaign owners have the option to either transfer the funds to their personal wallet or utilize them to purchase a product of their choice

from the AgriNeeds store. It is important to highlight that these requests undergo a verification process by the contributors, who have the authority to approve or reject the request. The final decision is determined through a voting mechanism, wherein the majority of contributors (51%) hold the power to determine whether the owner should receive the requested product or not.

By incorporating this participatory approach, our platform ensures that the funds contributed by users are utilized in a manner deemed acceptable and beneficial by the majority, fostering a sense of collective decision-making and accountability.

5.4.2. Return on Investment

The concept of "agriculture as an investment" holds significant importance within our platform's framework. As previously outlined, our unique model empowers users to contribute to specific campaigns and support farmers. In this collaborative process, farmers are provided with the opportunity to offer certain rewards as a return on investment to the contributors, thereby encouraging user participation and engagement.

The rewards offered by farmers can vary in nature, providing a range of options for contributors. Farmers have the flexibility to determine the type of return they wish to provide to the contributors. These rewards may include discounts on products available for sale on FarmFresh, curated by the respective farmer, or even instances where contributors receive a designated quantity of the produce free of charge.

In the long run, these rewards can potentially serve as an advantageous investment for the contributors. It is worth noting that these returns are categorized as non-capital gains, thereby exempting them from direct taxation. As a result, contributors would only be required to pay indirect taxes on the products they purchase from the store, ensuring a transparent and equitable financial arrangement.

By incorporating this mechanism, our platform not only facilitates financial support for farmers but also fosters a mutually beneficial relationship between farmers and contributors. This approach aligns with our vision of leveraging agriculture as an attractive investment opportunity, ensuring that both farmers and contributors can reap the benefits of this collaborative ecosystem.

5.4.3. Deadline

Every campaign on our platform is assigned a specific deadline, beyond which no further contributions can be accepted. Once the deadline has passed, if there are any remaining funds within the campaign that have not been utilized, a refund process will be initiated. The refund will be distributed to the contributors in proportion to their respective contributions.

It is important to note that this refund process is independent of the campaign's success or failure. Regardless of the campaign's outcome, the refund will be provided to the contributors based on the proportion of their contributions. This ensures that contributors receive a fair and proportional return of their funds, regardless of the campaign's ultimate results.

The refund amount will be directly transferred to the contributors' designated wallets, ensuring a seamless and efficient process for returning the unused funds. By implementing this refund policy, we prioritize transparency and fairness, demonstrating our commitment to maintaining a trustworthy and equitable platform for all contributors involved in our campaigns.

5.4.4. Refund

As previously mentioned, once the campaign deadline has elapsed, an automatic refund process will be initiated by the system for any unused funds. Contributors have the flexibility to utilize the refunded amount in multiple ways. They can choose to reinvest the funds by contributing to other campaigns on the platform or utilize it for purchasing items from the AgriStore. This process does not require any additional approval from the contributors as it is fully automated.

To ensure transparency and provide a clear record of the refund transaction, users can track the refund process through the transaction history within the wallet section of the platform. This feature enables users to easily monitor and verify the refund transaction, further enhancing the transparency and accountability of the platform.

By automating the refund process and offering various options for utilizing the refunded amount, we aim to provide a seamless and user-friendly experience, empowering contributors to efficiently manage their funds and actively participate in supporting campaigns aligned with their interests and goals.

5.5. AgriStore

AgriStore, an integral component of the AgriTech platform, serves as a self-developed e-commerce section catering to the buying and selling needs of various products using the platform's native currency, KCO. With the aim of addressing the diverse requirements of different user segments, AgriStore is further divided into two distinct subsections: FarmFresh and AgriNeeds.

By categorizing AgriStore into FarmFresh and AgriNeeds, we aim to streamline the user experience and deliver relevant product offerings to farmers and consumers alike. This approach not only enhances usability but also fosters a dynamic marketplace that promotes transparency, trust, and mutual benefits for all stakeholders involved in the AgriTech ecosystem.

5.5.1. FarmFresh

The FarmFresh store, within the AgriStore, is specifically tailored to cater to the needs of consumers seeking to purchase agricultural produce directly from farmers. This dedicated section provides a compelling option for end users, as the products available on FarmFresh are essentially sourced from the campaigns facilitated on the platform. Consequently, consumers benefit from the assurance of obtaining products that are directly linked to specific farming initiatives.

One of the notable advantages of purchasing from the FarmFresh store is the comprehensive level of information available about each product. Users have the

opportunity to delve into the intricate details of the crops, including the specific fertilizers and cultivation techniques employed during their growth. This transparency allows consumers to make informed decisions, gaining a deeper understanding of the agricultural practices associated with the produce they are purchasing.

By making products available for sale upon the conclusion of relevant campaigns, the FarmFresh store fosters a unique narrative for each crop. This association between the product and its corresponding campaign adds a layer of authenticity and storytelling to the consumer's purchasing experience. By enabling consumers to trace the origin of the products they purchase, the FarmFresh store emphasizes trust, accountability, and a deeper connection between farmers and consumers.

Through the FarmFresh store, the AgriTech platform strives to create a marketplace where consumers can confidently access high-quality, genuine agricultural products while supporting the sustainable development of the farming community.

5.5.2. AgriNeeds

The AgriNeeds store, an integral part of the AgriStore, serves as a dedicated platform catering to the specific needs of farmers by offering a wide range of essential goods and services required throughout the crop lifecycle. This section primarily focuses on providing farmers with access to a diverse array of raw materials crucial for successful farming practices, including seeds, tractors, fertilizers, and other related items.

One of the key strengths of the AgriTech platform lies in its interconnectedness, where all the features and functionalities seamlessly complement one another. In this context, the requests created by farmers within their campaigns can be directly associated with products available in the AgriNeeds store. This linkage establishes a significant advantage for contributors, as they are afforded the opportunity to cross-check and verify the products before granting approval for the farmer's purchase.

By establishing this interconnected relationship between the campaigns and the AgriNeeds store, the platform promotes transparency, accountability, and trust. Contributors are able to review and validate the products requested by the farmers, ensuring that the chosen items align with the campaign's objectives and adhere to the highest standards of quality and suitability.

6. Future Scope

As evident, the AgriTech platform has a lot to offer. Although the overall functionality developed as of yet, there still remains a lot of future prospects.

One such prospect is the introduction of appliances to monitor crop health in the AgriStore. Since our management section already provides different widgets to the user to keep track of their crops, it is very easy to integrate new farming equipment in the actual farm to a widget in the management section. This would in turn, provide interested users with extended functionality on an on demand basis.

Furthermore, the platform is committed to regular updates and improvements based on user feedback, ensuring its responsiveness to evolving needs. An ongoing objective is to enhance the real-world value of KCO, enabling users to utilize it for everyday transactions. For instance, users would have the convenience of directly paying dairy farmers in KCO when purchasing milk, fostering seamless integration of the cryptocurrency into routine transactions. This approach aims to establish KCO as a practical and widely accepted medium of exchange within various sectors of the economy.

7. Conclusion

The AgriTech platform serves as a comprehensive solution catering to all farming requirements, embodying the concept of farming as an investment opportunity. Operating in both the B2B and B2C domains, the platform adds value to the lives of farmers and consumers alike. Its primary focus revolves around facilitating the integration of cryptocurrency transactions into everyday life, thereby enhancing their practicality and widespread acceptance. Notably, the platform stands out through its gasless transaction mechanism, eliminating the need for users to bear blockchain transaction costs. Additionally, a distinctive feature of the platform is its provision for farmers to repay contributors not in traditional currency, but by sharing the produce generated through the contributed funds. By streamlining processes and reducing reliance on intermediaries, the AgriTech platform, with its initial launch, takes a significant stride towards revolutionizing the agricultural industry.

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