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Online Sale Agriculture Product by Farmers Direct to Consumer Using Block Chain

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ABSTRACT: Blockchain technology plays an important role in the agriculture sector and various industries application. The application fills the requirement, demand and satisfaction of our customer in the agriculture sector. It allows users to transfer value or assets between each other without the need for a trusted intermediary. Reduce the cost of networking by being accessible peer to peer.

As multiple small scale farmers, companies, food processors, distributors and retailers, untrusted parties are involved in this sector. It is very important in this sector to study both application of blockchain and techniques used in this sector. During the Covid -19 there are lots of problems coming in the time period. We identified challenges in the agriculture sector and tried out for the best solution to these problems. We use the effective blockchain technology and play an important role in this sector.

I. INTRODUCTION

In recent agriculture sectors demanding for new technologies and applications for reformation of the agriculture area. In present time old techniques used by farmers and in response they get nothing back. How much their efforts in their field as input do not get a response from the government. In the middle some brokers buy their product at minimum cost and sell the same product at high cost. It's a huge gap between the market and people. Prices of daily use items rise daily and it does not maintain the food and market chain supply. Our old system like a monopolistics and centralise agriculture management system.

In this way Blockchain play an important role in this sector to overcome the number of serious problem in the system.

- 1) Hackers can easily hack and theft the agricultural system data from the management system.
- 2) We maintain the high cost and finish the role of broker in the market.
- 3) Maintain the supply chain and balance between the market and people's demand.
- 4) We include in the system online transactions and take the fair in tha system.

For maintaining all the things we need a system like to maintain a connection among these problems. Among these only one technology is using blockchain technology in the agriculture sector. From this we can achieve the digital solution and everything online and anyone can see our product quality ,services and handling the situation of our solution. From blockchain technology we achieve our goal and business demand.

We identified our customer by using the digital technology uploading the photo signature and some government identification card.

Blockchain creates a permanent ,immutable history of events that is replicated and stored on each participating node. Immutable means: hard to change the history,since there is no central authority or control of the network.

II. TECHNOLOGY

First and foremost, blockchain is a public electronic ledger built around a P2P system that can be openly shared among disparate users to create an unchangeable record of transactions, each time-stamped and linked to the previous one. ... Each digital record or transaction in the electronic ledger is called a block.

Blockchain have most of features and data techniques to store the information not accessible by unauthorized users. Storing the data and retrieval only from authorized person or users in the system. Payments: By establishing a decentralized ledger for payments (e.g. Bitcoin), blockchain technology could facilitate faster payments at lower fees than banks. Clearance and Settlement Systems: Distributed ledgers can reduce operational costs and bring us closer to real-time transactions between financial institutions.

Consensus algorithm used by system, the most utilised consensus algorithm used by blockchain. Every computer (node) tries to solve the puzzle.

Energy and cost require a large amount of computing power and winning node have authority to earn the right to write the next block and receive an incentive for work. The double spend problem: Preventing someone making a purchase with digital cash from reusing the same token to purchase again.

Tokenization: Is there a business problem that can be solved with blockchain. For example, tokens may include evidence ownership and evidence or transact settlement. How are tokens used and transferred in the marketplace.

Regulation: securities law, currency exchange law, commodity, etc.

II. WORK RELATED FROM AGRICULTURE

Relief from broker: We provided the solution to save intermediaries from the marketplace. Using blockchain technology identified the intermediate people in the agriculture sector using traceability and gps technology.

Providing the security, escape from fraud, solution of problem, agriculture loan, buying and selling their product at maximum support price.

Including the product in our sector vegetable, grain, machinery, animal, food supply, job, hiring the labour according to job.

Transport: plan for transportation for products from farmers or retailers and make connections between the system and farmers. Solution for lack of transparency and distribution of food.

III. CHALLENGES

We surveyed the village and people which type of problem they have faced in their daily routine and found the problem for the cost of their price, language, monopoly in the market, paying lagaan for their product and unpredicted change of environment problem, wild animal, water problem etc.

IV. CONCLUSION

Blockchain technology provide the solutions Greater need for supply chain transparency and data integration. Many potential distributed ledger agricultural solution emerging. Commercially reasonable: Public is increasingly embarrassing the need for transparency in food products and agriculture techniques. Retailers want high quality farming products as well as sustainable products, authenticity and informed process process. Improves transparency in the supply chain. Traceability of consumers. Expand financial option for farmers. Provide immediate payment option on delivery. Provide farmers direct access to suppliers and transparent information.

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