1. Supply Chaim management using Blockchain

ABSTRACT

Supply Chain Management is the backbone of global trade, encampassing the flow of goods and services from raw materials to final products delivered to customers. With the exsting complex distribution network and inaccuracies in surveilance, we are not completely able to prevent counterfeit products from entering the market. With the current tracking system, it is not possible to determine where products originate from or 100 % quarantee that they are safe. Share the informations only with the manufactures, shipper or warehouse. The fact that tracking information is only included as label on the drum or container also make it relatively easy to add counterfeit products to the supply chain. Its also takes a lot of time.

The integration of blockchain technology into supply chain management (SCM) presents transformative opportunities to enhance transparency, security, and efficiency across the entire supply chain. By leveraging the decentralized, immutable, and transparent nature of blockchain, supply chains can achieve real-time traceability of products, reduce the risk of fraud, and eliminate the need for intermediaries. The end user also view the products details. All the informations such as financial transactions, product shipping informations added to the blockchain.

2. Voting System

ABSTRACT

Voting is a fundamental democratic activity. Many experts believe that paper balloting is the only appropriate method to ensure everyone's right to vote. But this method is prone to errors and abuse. Many nations utilize digital voting methods to solve the difficulties of paper balloting. A single flaw in digital voting may lead to massive vote-rigging. Election voting methods must be legal, accurate, safe, and convenient. However, issues with digital voting methods may restrict acceptance. Due to its end-to-end verification capabilities, blockchain technology was developed to address these problems. To guarantee We have used blockchain technology anonymity, privacy, verifiability, mobility, integrity, security, and fairness in voting.

3. Fake Production Identification using QR code

ABSTRACT

The manufacturing and marketing of counterfeit or duplicate products pose serious financial, health, and safety risks to end users. They also negatively impact the economic growth of legitimate manufacturers and businesses through revenue loss, product defamation, downtime, replacement expenses, and the cost of fighting counterfeits. Counterfeiting damages trust among business partners, steals sales, and forces brands to invest heavily in anti-counterfeiting measures.

To address these issues, a blockchain-based system is proposed to identify original products and detect duplicates, ensuring authenticity. This method prevents consumers from relying solely on merchants to verify product legitimacy. By placing unique QR codes on product packaging, consumers can scan the codes using a phone app to check product details, origin, and authenticity.

Blockchain technology secures this information, making it tamper-proof and trustworthy. Smart contracts automate product verification, ensuring that only genuine products are tracked and verified throughout the supply chain. This approach builds trust between companies, sellers, and buyers by providing real-time updates and alerts about fake products.