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## **Supply Chain Traceability using Blockchain**

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Abstract: This project is an innovative and revolutionary blockchain-based traceability system that utilizes QR code technology to improve the transparency, efficiency, and safety of the supply chain. The primary aim of this project is to develop a system that can accurately and effectively track goods in real-time and provide reliable information on their origin, movement, and authenticity. The proposed system uses advanced blockchain technology to record transactions and track the movement of goods from the point of production to the end consumer. In today's global marketplace, the importance of supply chain transparency and accountability cannot be overemphasized. Any weak link in the supply chain can result in significant negative consequences, such as recalls, product shortages, and legal liability. The proposed system aims to address these challenges by improving supply chain transparency, efficiency, and safety. The system is designed to lower supply chain management costs by streamlining operations, reducing the likelihood of a recall, and improving customer trust. The project's outcomes demonstrate the advantages of the system and successful implementation. The proposed system has significant potential to transform the supply chain industry and set new standards for transparency, efficiency, and safety.

Keywords: Block chain, Transparency, Supply Chain, Compliance, Cost Reduction, Efficiency, QR code.

