

Food Traceability for Small and Medium Enterprises Using Blockchain Technology

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Abstract : Blockchain is a distributor ledger technology trend that extended to different fields and proved a remarkable success. Blockchain technology is a vital proliferation technique that recuperates the food supply chain traceability process. While tracing is the core of the food supply chain; still, a complex system mitigates the exceptional risk of food contamination, foodborne, food waste, and food fraud. In addition, the upsurge of food supply chain data variance and variety in the traceability system requires complete transparency, a secure, steadfast, sustainable, and efficient approach to face the food supply chain challenges. On the other hand, blockchain technical aspects merged with a detailed implementation plan, the advantages and challenges in food traceability have not been much elucidated for small and medium enterprises (SMEs.) This paper demonstrated the advantages and challenges of applying blockchain in SMEs combined with the success stories of firms implementing blockchain to cover the gap. Moreover, blockchain architecture in SMEs and how technology, organization, and environment frameworks can guarantee the success of blockchain implementation have been revealed.

Keywords : blockchain technology, small and medium enterprises, food traceability, blockchain architecture

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