

Utilization of Blockchain with Internet of Things in Food Supply Chain

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Abstract

The prevention of food loss throughout the supply chain has become a major challenge all over the world. It was reported that about one-third of the produced food has been wasted yearly. Therefore, Food quality and safety issues have growing concern from society. Recently, digital technologies can contribute to a more efficient and secure food supply. The integration of blockchain and internet of things is one of the digital innovations that has enormous potential to create the data-driven food supply chain and also protect and trace the source of food. The objective of this paper is to provide analysis of current state of traceability systems in food supply chain based on the blockchain and internet of things technology. Moreover, the paper investigates the feasibility and development of such innovation in developing countries.

Keywords

Food Supply Chain, Blockchain, Internet of things, Food Traceability, Digital Technology

Biography

Ahmed Mehrem is currently a Ph.D. Student at faculty of Engineering, Transport systems and Logistics department at Duisburg - Essen university in Germany. He obtained his master degree in logistics at Molde university in Norway 2011. He has received his bachelor degree in electronics and communication engineer at Arab Academy for science and technology & Maritime Transport at Egypt in 2006