An Immutable Data Storage using Algorand Blockchain (ABC) Consensus Mechanism in the Supply CHAIN

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Abstract: *In recent years, many frameworks and applications have been proposed to ensure tamper resistant data in supply chain using Block chain technologies. Block chain technology as a base design ensures that the content of the information is 'tamper-resistant'. So far, no other study was presented with a low impact on the environment and minimum cost for each transaction sent by the supply chain. In order to protect the access of malicious user, we tend to propose an immutable data storage environment that is based on Algorand Blockchain. It uses the Pure Proof-of-Stake mechanism of consensus that needs less computational power, and is highly scalable and environmentally sustainable. It will make the data immutable and available in real-time for final consumers. Hence it can tolerate malicious users and achieving consensus without a central authority.*

Keywords: Block chain, Supply chain, Algorand Blockchain, Sustainability

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