DECENTRALIZED LOGBOOK FOR AIRCRAFT MAINTENANCE USING BLOCKCHAIN

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Abstract

The aviation industry has been growing rapidly worldwide and the

industry has seen an ever- increasing growth in passenger count. With an

increasing number of passengers and aircrafts there is a need for better

systems to be implemented for handling the massive amount of data

including passenger identities, tickets, baggage and cargo, aircraft

registrations, supply chain management and aircraft maintenance records.

Blockchain technology has been getting increasingly popular since its

inception and many industries including healthcare, finance, banking

and real estate have been focused on implementing blockchain based

solutions for their needs.

A blockchain based solution for aircraft maintenance will allow for the

creation of a digital twin of an aircraft that uses the state of all the individual

aircraft components to reflect the present state of the aircraft which would be

critical to predict when maintenance is needed and to reduce delays and

disasters caused by unpredictable failure of aircraft components.

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