

Project Title: A Blockchain-enabled IoT System for Pallet-pooling Management

研究項目: 區塊鏈結合物聯網系統以發展共用卡板管理

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Abstract

Most recent studies on logistics and supply chain management have focused on improvements to operational efficiency, information management, and network. Pallet management is a crucial yet less-researched aspect of the logistics industry. Currently, the closed-loop network for pallet management is preferred in the logistics industry, as positive environmental and economic impacts can be obtained. However, logistics networks are relatively complex and difficult to manage, due to the presence of the reverse logistics process. Therefore, a blockchain-enabled IoT system for pallet-pooling management is proposed in this project. This system integrates the development of blockchain and IoT technologies to identify, control, and monitor pallets in a closed-loop logistics network. Consequently, pallet standardisation can be established in the Guangdong-Hong Kong-Macao greater bay area, while the efficiency of logistics operations can be further enhanced.

