Thesis Title	Prototyping a Traceability System for Coffee Value Chain: A Case Study of Local Farmers in Pangkhon, Chiang Rai
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ABSTRACT

The coffee industry plays a crucial role in the global agricultural sector, and the demand for traceability and value-added products has increased. This research focuses on prototyping a traceability system for the coffee value chain in Pangkhon, Chiang Rai, to improve transparency, enhance quality, support sustainability, and add value to the coffee produced in this region. The research methodology consists of data collection, design and prototypes, and prototype evaluation. In the data collection phase, information is gathered on objectives, regulatory requirements, products/ingredients, position in the food chain, the flow of materials, information requirements, procedures, documentation, and feed and food chain coordination. Based on the collected data, prototypes of the traceability system are designed and developed, incorporating the principles and requirements of ISO 22005: Traceability in the Feed and food chain. The prototypes are then evaluated through a survey of local stakeholders in the Pangkhon coffee supply chain, utilizing the User Acceptance Model and statistical analysis techniques. The expected outcomes of this research include increased transparency in the coffee supply chain, value addition to the coffee from Pangkhon, and insights into the acceptance and usability of the traceability system prototypes. The findings from this research will contribute to developing effective traceability systems in the coffee industry, promoting sustainability, trust, and consumer confidence in coffee products.

Keywords: Coffee, Value Chain, Traceability System, Blockchain, Technology Acceptance Model