

ABSTRACT

The operational monitoring system of food and beverage (F&B) stores is becoming increasingly important to ensure efficiency and safety. This research aims to develop an IoT (Internet of Things) system using more than one IP-cam integrated with a Flutter-based mobile application. The system uses Raspberry Pi and Firestore to support real-time monitoring. By implementing a phased iterative approach, the system is designed to provide a practical solution for point-of-sale (F&B) managers to optimize operations management and improve customer experience. Tests were conducted to evaluate the system's performance in real-life scenarios. The results show the potential to improve the efficiency and effectiveness of operational monitoring.

Keywords: *Monitoring System, Internet of Things, IP Camera, Flutter, Raspberry Pi, Iterative Incremental*