

## **ABSTRACT**

Traditional paper-based solutions in restaurant management information systems are inefficient and unsuitable due to their vulnerability to human error and lack of data analysis capabilities. These systems hinder manager's capability to make well-informed and data-driven decisions. This capstone design project reveals CV Balibul's existing problem in the use of manual management techniques that are inefficient and ineffective for its management's operations.

In order to address these problems, the project presents an advanced digital restaurant management system that's specifically tailored for CV Balibul Restaurant Network. The System integrates state-of-the-art technologies such as cloud computing and machine learning to automate its operations and improve data analytics. The System guarantees reliable and secure management operations by leveraging Google Cloud's scalable infrastructure and strong security procedures.

The digital integration of CV Balibul's management System has achieved significant enhancements in operational efficiency and business decision-making. The results show significant improvement in management information system operations, data processing, and data visualization. The application testing results also demonstrate the management team's satisfaction with the app's capabilities and meet the expectations of the developer team and management team as promised. To summarize, the capstone design project helps CV Balibul Management improve its operational efficiencies and equips managers with robust data analysis to help with business decision-making.

**Keywords:** Business Decision-Making, Cloud Computing, Machine Learning, Management System, Restaurant Network.