

## ABSTRACT

The research is motivated by the issues faced by Waroeng Pak Muh Buah Batu, a company operating in the fast-food industry. Based on interviews with the owner and supply chain manager of the company, the inventory management process involves manual data entry using Microsoft Excel and handwritten stock usage reports, resulting in discrepancies between actual warehouse inventory and the database records. This inconsistency impacts decision-making in procurement and leads to material inventory losses. The objective of this study is to design improvements in the business process and web-based information system mockup to enhance the efficiency and accuracy of inventory management at Waroeng Pak Muh Buah Batu Bandung.

The research employs the Business Process Improvement (BPI) method with a Waterfall approach. BPI is chosen due to its suitability for existing business processes that require enhancement through innovation to improve performance. After identifying the business processes that need improvement, the study proceeds with the design process to address the identified issues.

The research findings indicate that the design of the business process and mockup web-based information system successfully reduced the discrepancies between actual inventory and the database in the bakso category by 2%, mie category by 5%, and other items by 17%. Additionally, it improved the accuracy by 3%, from 94% in the existing system to 97% in the proposed system. Furthermore, there was a decrease in inventory loss amounting to Rp3,060,100 based on the difference between the existing condition and the improvement in the bakso, mie, and other item categories. With the implementation of the new design, the use of the web-based information system allows for a more structured and automated inventory management process, thereby minimizing errors in the business process.

**Keywords: Inventory, Improvement, Business Process, Information System, Website**