

## ABSTRACT

The development of information technology is key to enhancing the effectiveness of warehouse management. A Warehouse Management System (WMS) enables companies to monitor inventory more accurately, reduce the risk of stock shortages or surpluses, and expedite production scheduling processes. This study aims to develop a web-based WMS at CV Joy Antara Fiha using the ICONIX Process methodology. This methodology was chosen for its systematic and structured approach, integrating requirements formulation, domain modeling, robustness analysis, system flow representation through sequence diagrams, and implementation. The system is built using the Next.js framework for the front end and Express.js for the back end, enabling fast and efficient data management. The implementation of this WMS allows storage processes, item movements, and stock monitoring to be performed digitally, reducing human error and increasing the operational efficiency of the warehouse. The results of this study are expected to optimize warehouse management at CV Joy Antara Fiha.

**Keywords** : Warehouse Management System (WMS), Warehouse Management, Information Technology, ICONIX Process, Next.js, Express.js