

## ABSTRACT

As part of efforts to enhance application quality at PT. Warung Pangan Indonesia, application testing has become a top priority to ensure the application operates optimally and without disruption. The test aims to explore and evaluate the application in various usage scenarios to ensure its reliability and efficiency in the development process. The development team initially employed manual testing methods, but this approach often faced challenges such as repeating test steps during application updates, inefficiency in time management, and errors caused by human factors. These conditions encouraged a transition to automated testing using tools that meet the company's requirements, such as supporting user interface testing, end-to-end testing approaches, and JavaScript-based implementation. An analysis of tools like Selenium, Cypress, and TestCafe was conducted to evaluate their respective advantages. The results indicated that Selenium excelled in execution speed, reliability, and resource efficiency, with an execution time of 2 minutes 3.2 seconds, a 100% success rate in all test cases, and the most efficient use of CPU and memory.

**Keywords:** Quality assurance, user interface, javascript, end-to-end testing