

ABSTRACT

A portal called Berbagi.link in their marketplace allows users to buy and sell products and services online. This study discusses the frontend redevelopment of the marketplace module on the Berbagi.link website using the Single Page Application (SPA) approach with React.js and Vite. Previously, the application was built with Laravel using a Multi Page Application (MPA) approach, which led to several issues such as slow navigation, full page reloads, and suboptimal user experience. The main objective of this redevelopment is to improve application performance and usability through SPA, while also restructuring the project for better maintainability. The development method applied is Scrum, which allows iterative development and continuous improvement. Evaluation was carried out using two approaches: User Acceptance Testing (UAT) and performance testing using Google Lighthouse. The UAT results from four participants indicated that all test cases were successfully passed (100% passed). Meanwhile, performance testing on five main pages showed significant improvements of 292%, 119%, 89.79%, 234%, and 172.2%, with an average improvement of 181.798%. The findings of this study show that the SPA approach can positively impact system performance and user experience, while also supporting a more maintainable frontend development process.

Keywords: *React.js, Laravel, Single Page Application, Multi Page Application, User Experience, Lighthouse, Scrum*