ABSTRACT

This study discusses the design of a user interface for the Sawangan No.1 Purwokerto souvenir center website using the Design Thinking method, with the goal of producing an e-commerce prototype based on a Progressive Web App (PWA). This topic is important because Sawangan No.1 has so far relied solely on social media and thirdparty platforms, which lead to additional costs, limited data control, and an inadequate online shopping experience, creating a gap between current conditions and the expectations of both store owners and prospective buyers. The research was conducted through the five stages of Design Thinking: empathize, define, ideate, prototype, and test, with data collected through interviews, surveys, and literature studies. The results include the design of wireframes, a design system, and a highfidelity prototype implemented using ReactJS and integrated with a REST API. Based on usability testing using the System usability scale (SUS), the prototype achieved an average score of 84 for the admin role and 84.83 for the prospective buyer role, which falls under Grade A in the SUS Percentile Rank. These results indicate that the developed prototype meets high usability standards and successfully addresses the needs of both store owners and prospective buyers.

Keywords: design thinking, user interface, usability, e-commerce, progressive web app, system usability scale