ABSTRACT

Manual asset management methods, such as using Excel spreadsheets or physical documents, often lead to various issues including unstructured data, lack of proper documentation, and difficulty in tracking asset locations. PT Tera Putra Muara, an IT consulting company handling multiple asset management projects, faces similar challenges. This study aims to design a digital solution in the form of a mobile-based asset management application to address these problems. The method used is the Design Thinking approach, which consists of five stages: Empathize, Define, Ideate, Prototype, and Testing. During the Empathize stage, data were gathered through semi-structured interviews with PT Tera Putra Muara's internal team and analysis of FSD documents to understand user needs. In the Testing phase, validation was carried out using two methods: Usability Testing and the User Experience Questionnaire – Short (UEQ-S). Scenario-based Usability Testing was conducted with a participant involved from the initial stages to validate how well the prototype addressed the defined problem statements. The results showed that all tasks were completed easily, and the proposed solutions were considered relevant and functional. Additionally, the UEQ-S test conducted with five internal respondents produced an average score of 2.00 for Pragmatic Quality and 2.10 for Hedonic Quality, both categorized as "Excellent." These findings indicate that the BRANA application's user interface supports user tasks effectively while providing a pleasant visual experience. This study demonstrates that the Design Thinking approach is effective in creating digital solutions based on real user needs.

Keywords: *Asset Management, Design Thinking, Mobile Application, UI/UX, Usability Testing, UEQ-S, Prototyping*