

## **ABSTRACT**

### ***EVALUATION AND IMPROVEMENT OF PURWOKERTO MOBILE APPLICATION INTERFACE DESIGN USING USER CENTERED DESIGN (UCD) METHOD***

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*Currently, Purwokerto Islamic Hospital has a digitalization breakthrough in a health service, namely the RSI Mobile Application. The RSI Mobile Application was built by the Purwokerto Islamic Hospital Information System Installation department. Based on the results of the usability testing of the RSI mobile application and the respondents' suggestions, several problems were found in the RSI mobile application, so it is necessary to improve the appearance of the RSI mobile application interface. Based on the usability results on the satisfaction component by distributing the SUS questionnaire for the current design, that is, the total SUS average score on the current RSI mobile application design is 52.8. This score is included in the 51-67 value interval, which means it is included in index D with the poor rating indicator. User Centered Design (UCD) is the method used in this study to make improvements to the RSI Mobile application interface design. Meanwhile, to evaluate the design of the Mobile RSI application interface, 4 usability components are used, namely learnability, efficiency, errors, and satisfaction. The results of the learnability test got a score of 93%, efficiency got a score of 0.04 task/second, Errors got a result of 0.07 or as much as 7% and satisfaction got an average SUS score on the new RSI mobile application design which was 80.25. The score is included in the value interval > 80.3, which means it is included in index B with an good rating indicator. Thus, the new design recommendations for the RSI mobile application can be well received and can be more easily used by patients.*

**Keywords:** *User Centered Design (UCD), System Usability Scale (SUS), Usability Testing, RSI Mobile App, Purwokerto Islamic Hospital.*