

ABSTRACT

Hospital websites are vital for public health information access. The previous RSUD dr. Loekmono Hadi Kudus website had significant usability and functional issues, with many features non-operational, necessitating a redesign for better quality and user engagement. This study assesses the functional efficiency enhancement of the RSUD dr. Loekmono Hadi Kudus website post-redesign, focusing on a quantitative comparison of functional integrity between the old and new versions via Blackbox testing. The website redesign followed the Design Thinking approach, focusing on understanding user needs and developing empathetic, user-centered solutions. Functional efficiency was evaluated through Blackbox testing on ten core features representing the hospital website's main functionalities: (1) homepage navigation links, (2) automatic banner slide, (3) manual banner navigation buttons, (4) "About Us" dropdown, (5) main "Doctor" menu, (6) doctor search feature, (7) "Doctor Schedule" access, (8) "Facilities" dropdown, (9) detailed facility information access, and (10) "Service Tariff" dropdown for transparent service fee information. Blackbox testing showed profound functional efficiency improvement. The redesigned website achieved 100% functional validity for all 10 tested features, a significant rise from the original's 30% operational rate for the same features. Strategic Design Thinking application, meticulous development, and rigorous testing significantly enhanced the RSUD dr. Loekmono Hadi Kudus website's functional efficiency from 30% to 100%, improving reliable function execution and fostering better human-computer interaction.

Keywords— blackbox testing; functional efficiency; hospital website; human-computer interaction; website redesign