

Redesigning the User Interface of a University Laboratory Website Using the User-Centered Design Approach

Ahmad Luthfi Ridho, Dawam Dwi Jatmiko Suwawi*, Rosa Reska Riskiana

School of Computing, Telkom University, Bandung, Indonesia

Email: ¹ahmadluthfiridho@student.telkomuniversity.ac.id, ^{2,*}dawamdjs@telkomuniversity.ac.id, ³rosareskaa@telkomuniversity.ac.id

Correspondence Author Email: dawamdjs@telkomuniversity.ac.id

Abstract—This study was carried out on the Human Centric Engineering (HUMIC) website, which had not previously undergone redesign approaches such as User-Centered Design (UCD), Goal-Directed Design (GDD), or similar methods. Following the initial usability assessment utilizing the Single Ease Question (SEQ) encompassing 7 tasks to gauge the simplicity or complexity of the tested activities, along with the System Usability Scale (SUS) containing 10 queries for evaluating usability, the interim average SEQ score achieved was 5.5 out of 7. Meanwhile, the average SUS score was 43, falling below the typical score of 68. Based on the interview results with HUMIC website users, it was found that users felt uncomfortable when accessing the website due to a non-responsive user interface on smartphone screens, indicating the need for a redesign of the website's user interface. This article's aims are to enhance HUMIC website's user interface for better usability using the UCD approach, encompassing user engagement throughout the entire procedure. Following the redesign of the user interface, the ultimate test outcomes exhibited an average SEQ score of 6.4 out of 7 and an average SUS score of 80.5, surpassing the typical score of 68. Consequently, it can be inferred that the application of the UCD method led to a successful user interface redesign with enhanced usability, fostering a comfortable user experience when navigating the HUMIC website.

Keywords: User-Centered Design; User Interface; Single Ease Question; System Usability Scale