Perancangan UI/UX Aplikasi Pelaporan Lingkungan Berbasis Mobile dengan Menggunakan Metode User-Centered Design

Faozan Sudrajat¹, Indra Lukmana Sardi², Shinta Yulia Puspitasari³

^{1,2,3}Fakultas Informatika, Universitas Telkom, Bandung ¹faozansudrajat@student.telkomuniversity.ac.id, ²indraluk@telkomuniversity.ac.id, ³shintayulia@telkomuniversity.ac.id

Abstract

The industrial revolution has significantly increased greenhouse gas emissions, leading to global warming and climate change, which burdens producers worldwide. This has driven efforts to develop policies aimed at reducing environmental damage. In Indonesia, PT United Tractors Tbk, as one of the key players in the heavy equipment industry, is actively involved in implementing government policies in the company's environmental management processes. Based on interviews with the environmental staff representatives of PT United Tractors Tbk at the PPI Cakung site, it was revealed that challenges remain in the environmental reporting process due to the varying geolocations of each environmental aspect. This results in the need to gather reporting data first, preventing real-time reporting. Additionally, the use of different media for each environmental aspect leads to frequent data loss and difficulty in tracking. Based on these issues, this research aims to design a mobile-based environmental reporting application user interface (UI) and user experience (UX) using the User-Centered Design (UCD) method to facilitate staff in carrying out environmental reporting activities. The application design was then evaluated using the System Usability Scale (SUS). The SUS results showed an average score above 70, specifically 89.4 from 12 potential users, indicating that the UI/UX design of the environmental reporting application is very satisfactory and well accepted by users (acceptable).

Keywords: environmental reporting; user interface; user experience; user-centered design; system usability scale