## ABSTRACT

The DLU Ferry app is a mobile-based ferry ticket booking service from PT. Dharma Lautan Utama. Based on user reviews and initial evaluation results using the User Experience Questionnaire (UEQ), it was found that the quality of the application's User Interface (UI) and User Experience (UX) is still low. This is reflected in the average score falling into the Below Average category for five out of six UEQ scales, with the lowest score in the novelty aspect (0.008). This study aims to improve the quality of the app's UI/UX using a Human-Centered Design (HCD) approach, through three stages: inspiration, ideation, and implementation. The redesign process was carried out at the high-fidelity prototype stage, tested using the UEQ, and showed significant improvements across all scales. The design results were then implemented into the front-end stage and retested using the UEQ by 40 respondents. The final test results showed that all UEQ scales were in the Excellent category, except for the novelty aspect, which was in the Good category with a score of 1.200. Thus, the application of the HCD approach proved effective in improving the UI/UX quality of the DLU Ferry application, both pragmatically and hedonistically. This study is expected to serve as a reference in the development of mobile-based digital applications that are user-centric.

**Keywords**: Mobile Application, DLU Ferry, Human Centered Design (HCD), Redesign, User Interface/User Experience (UI/UX), User Experience Questionnaire (UEQ).