

REDESIGN USER INTERFACE DAN USER EXPERIENCE
APLIKASI KRL ACCESS BERBASIS MOBILE DENGAN METODE
DESIGN THINKING DAN PENDEKATAN USER EXPERIENCE
QUESTIONNAIRE (UEQ)

Amelia Azzahra Chairun Nisa

ABSTRAK

PT. KAI *Commuter* Jabodetabek sebagai penyedia layanan transportasi umum di wilayah Jabodetabek dan sekitarnya, telah menerapkan teknologi informasi berupa Aplikasi *Mobile KRL Access*. Namun, hanya 0,406% dari jumlah pengguna KRL Jabodetabek pada tahun 2022 yang menggunakan Aplikasi *Mobile KRL Access* sedangkan PT. KAI *Commuter* Jabodetabek telah menyarankan penggunaan aplikasi sebagai media dalam mengakses informasi dan jadwal kereta. Untuk memastikan kepuasan pengguna dan memahami *User Experience* (UX) aplikasi, peneliti melakukan penyebaran kuesioner terhadap 100 responden menggunakan pendekatan *User Experience Questionnaire* (UEQ) yang disajikan dalam evaluasi 6 skala penilaian yaitu *attractiveness*, *perspicuity*, *efficiency*, *dependability*, *stimulation*, dan *novelty*. Hasil evaluasi Aplikasi *Mobile KRL Access* dengan *benchmark* UEQ, diketahui bahwa skala *Perspicuity* dinilai *below average* (dibawah rata-rata) dan lima skala lainnya yaitu *attractiveness*, *efficiency*, *dependability*, *stimulation*, dan *novelty* dinilai *bad* (buruk). Selain itu, dalam penyebaran kuesioner peneliti mengumpulkan kritik dan saran dari responden yang dituangkan dalam *Affinity Diagram* dimana dihasilkan 73 *Insight Card*. Berdasarkan evaluasi tersebut terdapat 17 temuan masalah terkait *UI/UX Design* aplikasi yang dikelompokkan ke dalam 6 skala penilaian UEQ. Penelitian ini menghasilkan 30 solusi *redesign* aplikasi yang disajikan dalam bentuk *high-fidelity prototype* menggunakan *tools* figma dengan metode *Design Thinking* sebagai metode pengembangan desain aplikasi. Pada penelitian ini kualitas *User Experience* Aplikasi *Mobile KRL Access* setelah dilakukan *redesign* meningkat yang diukur dalam 6 skala penilaian UEQ dengan hasil rata-rata keseluruhan skala 1,471. Solusi yang diberikan diharapkan mampu diterapkan dalam Aplikasi *Mobile KRL Access* guna mendukung mewujudkan Visi dan Misi PT.KAI *Commuter* Jabodetabek.

Kata Kunci: *KRL Access*, *Redesign*, *Design Thinking*, *User Experience* (UX), *User Experience Questionnaire* (UEQ), *User Interface* (UI), *Affinity Diagram*, PT. KAI *Commuter* Jabodetabek.

REDESIGN USER INTERFACE AND USER EXPERIENCE MOBILE-BASED KRL ACCESS APPLICATION USING DESIGN THINKING METHOD AND USER EXPERIENCE QUESTIONNAIRE (UEQ) APPROACH

Amelia Azzahra Chairun Nisa

ABSTRACT

PT. KAI Commuter Jabodetabek, as a provider of public transportation services in the Jabodetabek area and its surroundings, has implemented an information technology solution called the KRL Access Mobile Application. However, only 0.406% of the total KRL Jabodetabek users in 2022 utilized the KRL Access Mobile Application, despite PT. KAI Commuter Jabodetabek suggesting its use as a means to access information and train schedules. In order to ensure user satisfaction and understand the User Experience (UX) of the application, researchers conducted a survey using the User Experience Questionnaire (UEQ) approach with 100 respondents. The survey evaluated the application across six scales: attractiveness, perspicuity, efficiency, dependability, stimulation, and novelty. The evaluation results of the KRL Access Mobile Application using the UEQ benchmark revealed that the perspicuity scale was rated below average, while the other five scales—attractiveness, efficiency, dependability, stimulation, and novelty—were rated as bad. Furthermore, during the survey, researchers collected criticisms and suggestions from respondents, which were organized into an Affinity Diagram and resulted in 73 Insight Cards. Based on this evaluation, 17 UI/UX design-related issues were identified and categorized into the six UEQ scales. This study produced 30 redesign solutions for the application, presented in the form of a high-fidelity prototype using Figma as a design development tool. The Design Thinking method was employed in the development of the application design. The research findings indicated an improvement in the User Experience quality of the KRL Access Mobile Application after the redesign, measured across the six UEQ scales, with an overall average score of 1,471. It is expected that the proposed solutions can be implemented in the KRL Access Mobile Application to support the realization of PT. KAI Commuter Jabodetabek's Vision and Mission.

Keywords: KRL Access, Redesign, Design Thinking, User Experience (UX), User Experience Questionnaire (UEQ), User Interface (UI), Affinity Diagram, PT. KAI Commuter Jabodetabek.