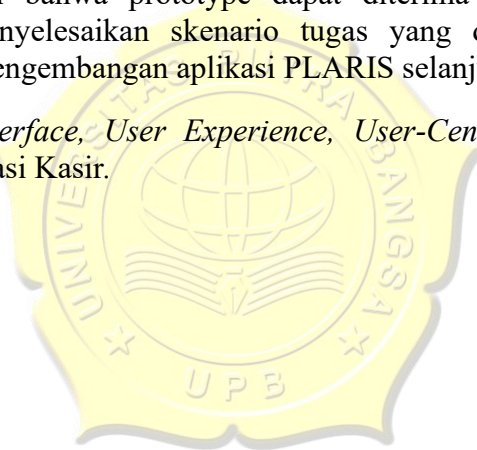


ABSTRAK

Perkembangan teknologi informasi mendorong UMKM memanfaatkan aplikasi kasir digital untuk meningkatkan efisiensi operasional. Namun, hasil observasi dan wawancara menunjukkan masih terdapat kendala, seperti pengelolaan stok yang belum optimal, pencarian produk yang kurang efisien, serta antarmuka yang kurang mudah dipahami. Penelitian ini bertujuan merancang desain *User Interface* (UI) dan *User Experience* (UX) aplikasi kasir *multi-platform* PLARIS menggunakan pendekatan *User-Centered Design* (UCD) serta mengevaluasi *usability prototype* menggunakan *System Usability Scale* (SUS). Penelitian mengacu pada ISO 9241-210:2019 melalui empat tahapan UCD, yaitu memahami konteks penggunaan, menentukan kebutuhan pengguna, menghasilkan solusi desain, dan mengevaluasi desain. *Prototype* dikembangkan menggunakan Figma pada platform web, tablet, dan smartphone Android, kemudian dievaluasi melalui usability testing dan kuesioner SUS terhadap 14 responden. Hasil evaluasi memperoleh total skor SUS sebesar 1.080 dengan rata-rata skor 77,14 yang termasuk kategori Acceptable, Grade Scale B, dan Adjective Rating Good. Hasil tersebut menunjukkan bahwa *prototype* dapat diterima dan digunakan oleh responden dalam menyelesaikan skenario tugas yang diberikan serta dapat menjadi dasar untuk pengembangan aplikasi PLARIS selanjutnya.

Kata kunci: *User Interface*, *User Experience*, *User-Centered Design*, *System Usability Scale*, Aplikasi Kasir.



ABSTRACT

The development of information technology has encouraged Micro, Small, and Medium Enterprises (MSMEs) to adopt digital cashier applications to improve operational efficiency. However, observations and interviews revealed several challenges, including suboptimal stock management, inefficient product searching, and an interface that was not easy to understand. This study aimed to design the User Interface (UI) and User Experience (UX) of the PLARIS multi-platform cashier application using the User-Centered Design (UCD) approach and to evaluate the usability of the prototype using the System Usability Scale (SUS). The study referred to ISO 9241-210:2019 and applied four UCD stages, namely understanding and specifying the context of use, specifying user requirements, producing design solutions, and evaluating designs against requirements. The prototype was developed using Figma for web, tablet, and Android smartphone platforms, and was evaluated through usability testing and a SUS questionnaire involving 14 respondents. The evaluation resulted in a total SUS score of 1,080 with an average score of 77.14, which was categorized as Acceptable, Grade B, and Good. These results indicate that the prototype was acceptable and could be used by respondents to complete the assigned task scenarios, and could serve as a basis for further development of the PLARIS application.

Keywords: User Interface, User Experience, User-Centered Design, System Usability Scale, cashier application.