

INTISARI

PERANCANGAN ANTARMUKA APLIKASI BUDIDAYA PERTANIAN MITRA PANEN BERBASIS MOBILE MENGGUNAKAN METODE *USER-CENTERED* *DESIGN*

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Sektor pertanian di Indonesia memiliki peran penting dalam perekonomian negara dan menjadi sumber pendapatan utama bagi sebagian besar masyarakat. Namun, pemanfaatan teknologi digital dalam sektor ini masih belum diprioritaskan oleh pemerintah. Oleh karena itu, PT Adma Digital Solusi sebagai mitra industri ingin merancang aplikasi budidaya pertanian Mitra Panen berbasis *mobile* yang dapat mengelola data aktivitas budidaya pertanian. Proyek akhir ini dibuat untuk memberikan solusi mitra dalam merancang antarmuka aplikasi budidaya pertanian dengan mengimplementasikan metode *User Centered Design* (UCD) untuk memastikan antarmuka aplikasi sesuai dengan kebutuhan pengguna. Metode penelitian ini melibatkan tahap identifikasi masalah, studi literatur, dan pengembangan prototipe. Pengujian menggunakan metode *A/B Testing* digunakan untuk menentukan desain terbaik dengan memilih kombinasi dua rancangan desain. Selanjutnya, dilakukan *Usability Testing* untuk mengevaluasi desain antarmuka dan tingkat kepuasan pengguna. Hasil akhir pengujian menunjukkan bahwa desain antarmuka yang dihasilkan memiliki tingkat efektivitas (*success rate*) sebesar 93,75% tergolong sangat efektif. Selain itu, efisiensi (*time-based efficiency*) desain mencapai 0,054 *sec/goals* tergolong sangat cepat. Skor akhir dari kepuasan (*system usability scale*) sebesar 71 tergolong *good grade C*, menunjukkan tingkat kepuasan yang baik terhadap antarmuka aplikasi.

Kata kunci: aplikasi budidaya pertanian, antarmuka, *user centered design* (UCD), *A/B testing*, *usability testing*, teknologi digital

ABSTRACT

***INTERFACE DESIGN OF MOBILE-BASED MITRA PANEN AGRICULTURAL
CULTIVATION APPLICATION USING USER-CENTERED DESIGN METHOD***

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The agricultural sector in Indonesia plays an important role in the country's economy and is the main source of income for most people. However, the utilization of digital technology in this sector is still not prioritized by the government. Therefore, PT Adma Digital Solusi as an industry partner wants to design a mobile-based Mitra Panen agricultural cultivation application that can manage agricultural cultivation activity data. This final project was created to provide partner solutions in designing the interface of the agricultural cultivation application by implementing the User Centered Design (UCD) method to ensure the application interface is in accordance with user needs. This research method involves the stages of problem identification, literature study, and prototype development. Testing using the A/B Testing method was used to determine the best design by selecting a combination of two designs. Furthermore, Usability Testing was conducted to evaluate the interface design and user satisfaction level. The results of the test showed that the interface design produced had an effectiveness rate (success rate) of 93.75%, classified as very effective. In addition, the efficiency (time-based efficiency) of the design reached 0.054 sec/goals classified as very fast. The final score of satisfaction (system usability scale) of 71 is classified as good grade C, indicating a good level of satisfaction with the application interface.

Keywords: agricultural cultivation application, interface, user centered design (UCD), A/B testing, usability testing, digital technology