

ABSTRACT

The rapid growth of the E-commerce sector in agribusiness demands digital platforms that not only function optimally but also meet users' psychological needs and preferences. This study aims to design the User Interface (UI) for the TUS Mart Website, a campus-based E-commerce platform that facilitates transactions for agricultural products, utilizing Kansei Engineering Type 2. This approach is employed to translate users' feelings and expectations into design parameters that focus on enhancing the user experience. The research begins with the collection of Kansei Words through Benchmarking analysis of similar E-commerce platforms, such as Segari.id and Sayurbox.com, which are then analyzed using Principal Component Analysis (PCA) to identify patterns in Kansei Words and Partial Least Square Regression (PLS-R) to measure the relationship between design elements and emotional factors. The analysis resulted in one primary design concept, "Refreshing," which integrates elements such as interactivity, adaptability, informativeness, transparency, user-friendliness, and seamless transitions between elements to create an engaging, intuitive, and efficient user experience. The final prototype design follows Google Material Design guidelines, combining modern visual elements with easy navigation to enhance the platform's usability and appeal. Prototype evaluation using the System Usability Scale (SUS) involving 161 respondents yielded an average score of 85.59, indicating a very high level of user satisfaction. Additionally, the Partial Least Square (PLS) test resulted in an average value of 0.0014297, further strengthening the relevance and effectiveness of using Kansei Engineering in creating UI designs that not only fulfill functional requirements but also establish a strong emotional connection with users. The findings of this study indicate that integrating emotional and functional aspects in the development of user interfaces for agribusiness E-commerce platforms can produce innovative, user-centered solutions that ultimately create an optimal user experience.

keywords: TUS Mart, User Interface (UI), Design Thinking, Kansei Engineering, Web-Commerce.