

ABSTRACT

OhMyCake is a small business that has not yet adopted an e-commerce website for its ordering system, resulting in all processes being handled manually by a single administrator. This leads to delays in responding to customer inquiries and decreases overall service satisfaction. This study aims to design and implement an e-commerce website interface using the User-Centered Design (UCD) methodology to enable customers to place orders independently without waiting for admin responses. The design process was conducted iteratively, starting from identifying user needs to evaluation using standardized Usability Metrics. The results indicate a satisfactory level of effectiveness with a completion rate of 67.86%, and time-based efficiency averaging 1 minute and 32 seconds per task—well below the 3-minute tolerance threshold. In addition, the overall relative efficiency reached 66.96%, showing that most interaction time was used productively by successful users. User satisfaction, measured using the User Experience Questionnaire (UEQ), shows that five out of six scales were rated as “Excellent,” particularly in comfort, efficiency, and ease of use. Expert validation confirmed that the iterative design process improved information clarity, navigation structure, and visualization of order status, while recommending the development of high-impact features in future phases.

Keywords: *E-commerce, User Centered Design, UI/UX Design, Usability Testing, Usability Metrics, User Experience Questionnaire.*