

ABSTRACT

Ikat weaving, as one of the cultural heritages from Kelimutu District, East Nusa Tenggara, holds significant cultural value and unique characteristics. However, this heritage faces various challenges in terms of appreciation and preservation. International tourists who wish to learn about ikat weaving often encounter language barriers that hinder their understanding of the history and cultural values embedded within it. The lack of government attention and limited budget for providing adequate educational facilities for both the public and tourists also remains a major obstacle in the preservation efforts. To address these challenges, a virtual Ikat Weaving Museum was designed to be accessible online, making it more cost-efficient. The system was developed using the Design Thinking method, which consists of five stages: Empathize, Define, Ideate, Prototype, and Testing. This virtual museum aims to raise awareness and promote the ikat weaving cultural heritage to the public and tourists, especially in the Kelimutu area of East Nusa Tenggara. The core features of the system include the management of ikat weaving data such as cloth names, types, images, and explanations of weaving motifs, as well as data on weaving tools complete with information on their year of production. System testing was carried out using the User Experience Questionnaire (UEQ) method to evaluate user experience while interacting with the virtual museum, covering aspects such as attractiveness, clarity of information, efficiency, dependability, stimulation, and innovation. The results showed that the highest average score was found in the Perspicuity scale with a score of 1.64, indicating that users found the website easy to understand and use, while the lowest score was in the Novelty scale with a value of 0.77, highlighting the need for improvement in design innovation. Furthermore, the comparison with the UEQ version 12 benchmark revealed that all scales were categorized as Above Average, except for Efficiency, which achieved the Good category. These results indicate that overall, the user experience with the virtual museum is at a positive level and has met user expectations in terms of navigation, effectiveness in delivering information, and an engaging user interface design.

Keywords: Front End, Website, Design Thinking, User Experience, Ikat Weaving