

# DESIGNING THE USER EXPERIENCE FOR E-LEARNING UNDIKSHA MOBILE APPLICATION: A DESIGN THINKING APPROACH

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## ABSTRACT

Nowadays, it is mandatory for any organization, including Universitas Pendidikan Ganesha, to have IS/IT that supports the business process. Undiksha, as one of the well-known universities in Bali, has already implemented e-Ganesha to support the learning process for its students. e-Ganesha is an application that contains many sub-features; one of them is e-Learning. In the current situation, especially in this pandemic where all learning activities are conducted online, e-Learning becomes an essential application. According to the result in Preliminary Research, the main reasons students use e-Ganesha to access the e-Learning. Still, because it is a web application for desktop that opened its smartphone, it tends to give the user a bad experience. Students wanted to have a specific e-Learning application. This research adopted a design thinking framework that consists of five phases: empathize, define, ideate, prototype, and test. Design thinking is a dynamic framework for creating a new product that emphasizes solving problems using a double diamond scheme (divergent and convergent). Empathize is the fundamental phase in this framework, so it is essential to carefully design the User Experience Research Plan using usability testing, System Usability Scale, and Single Ease Question to gather insight from the participants and map the emotional aspect of the participants. The participants will be inexperienced users from various faculty except for IT Department. This research adopted 18 methods from the empathize phase until the testing phase to get an actual and decent product design. Most of the methods focus on gathering user needs, pain points, and problems. The final product shows that on the heatmaps result, most of the participants spend their time in the expected path. There is 90% direct task success with increasing the system usability score from 54.5 to 80.5 and increasing user satisfaction from 5.3 to 6.2. Although the result indicates many good aspects of user experience, this research still needs iteration since design thinking is not just one-time research progress.

**Keywords:** *user experience, design thinking, user experience research. Usability.*