

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



**OLEH  
PUTU DHANU DRIYA  
NIM 1815091035**

**PROGRAM STUDI SISTEM INFORMASI  
JURUSAN TEKNIK INFORMATIKA  
FAKULTAS TEKNIK DAN KEJURUAN  
UNIVERSITAS PENDIDIKAN GANESHA  
2022**

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APPLICATION: A DESIGN THINKING APPROACH**

**SKRIPSI**

**Diajukan kepada  
Universitas Pendidikan Ganesha  
Untuk Memenuhi Salah Satu Persyaratan dalam menyelesaikan  
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**PROGRAM STUDI SISTEM INFORMASI  
JURUSAN TEKNIK INFORMATIKA  
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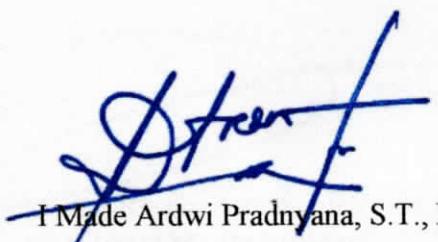
## **SKRIPSI**

**DIAJUKAN UNTUK MELENGKAPI TUGAS DAN  
MEMENUHI SYARAT-SYARAT UNTUK MENCAPI  
GELAR SARJANA KOMPUTER**

**Menyetujui,**

Pembimbing Utama,

Pembimbing Pendamping,



I Made Ardwi Pradnyana, S.T., M.T.  
NIP. 198611182015041001



I Ketut Resika Arthana, S.T., M.Kom.  
NIP. 198412012012121002

Skripsi oleh Putu Dhanu Driya  
Telah di pertahankan di depan dewan penguji  
Pada tanggal 21 Januari 2022

Dewan Penguji



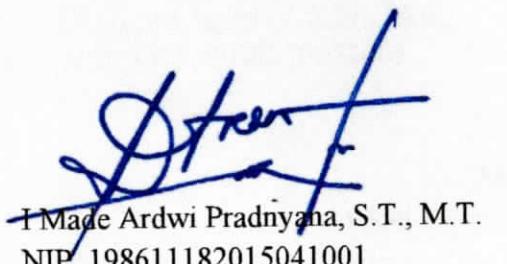
Dr. Gede Rasben Dantes, S.T., M.T.I.  
NIP. 197502212003121001

Ketua



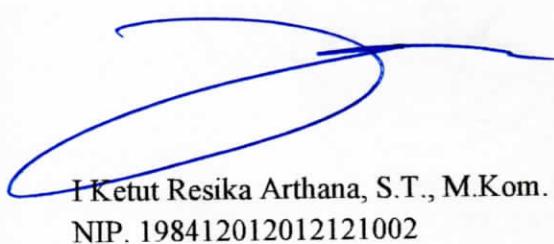
Putu Yudia Pratiwi, S.Pd., M.Eng.  
NIP. 199308042020122008

Anggota



I Made Ardwi Pradnyana, S.T., M.T.  
NIP. 198611182015041001

Anggota



Ketut Resika Arthana, S.T., M.Kom.  
NIP. 198412012012121002

Anggota

Diterima oleh Panitia Ujian Fakultas Teknik dan Kejuruan  
Universitas Pendidikan Ganesha  
Guna memenuhi syarat-syarat untuk mencapai gelar sarjana Komputer

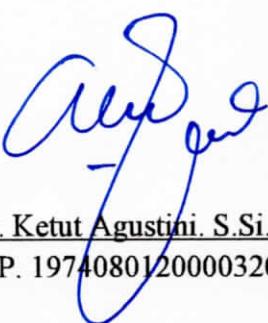
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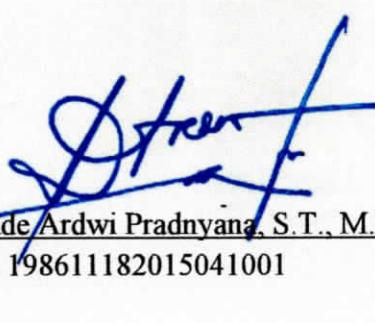
Hari : Selasa  
Tanggal : 22 Februari 2022

Mengetahui,

Ketua Ujian,

Sekretaris Ujian,

  
Dr. Ketut Agustini, S.Si., M.Si.  
NIP. 197408012000032001

  
I Made Ardwi Pradnyana, S.T., M.T.  
NIP. 198611182015041001

Mengesahkan  
Dekan Fakultas Teknik dan Kejuruan



  
Dr. I Gede Sudirtha, S.Pd., M.Pd.  
NIP. 197106161996021001

## **PERNYATAAN**

Dengan ini saya menyatakan bahwa karya tulis yang berjudul "*Designing the User Experience for e-Learning Undiksha Mobile Application: A Design Thinking Approach*" beserta seluruh isinya adalah benar-benar karya saya sendiri, dan tidak melakukan penjiplakan dan mengutip dengan cara yang tidak sesuai dengan etika yang berlaku dalam masyarakat keilmuan. Atas pernyataan ini, saya menganggung risiko/sanksi yang dijatuhkan kepada saya apabila kemudian ditemukan adanya pelanggaran atas etika keilmuan dalam karya saya ini, atau ada klaim terhadap keaslian karya saya ini.

Singaraja, 21 Januari 2022

Yang membuat pernyataan,



Putu Dhanu Driya

NIM. 1815091035

MOTTO

“

*No pain, No gain*

”



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Penulis

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

**From**  
**Putu Dhanu Driya, NIM. 1815091035**  
**Information System Study Program**  
**Informatics Engineering Department**  
**Faculty of Engineering and Vocational**  
**Universitas Pendidikan Ganesha**  
**Email: dhanu@undiksha.ac.id**

## **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.*

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