


# Chapter 8

## User Experience and Ideation Processes in Mobile Prototyping

María Gárgoles Navas

 <https://orcid.org/0000-0002-1523-6038>

*Universidad de Diseño, Innovación y Tecnología, Spain*

### ABSTRACT

*Nowadays, user experience (UX) emerges as essential in the design and development of digital products. The use of mobile versus other devices has led to a greater focus on the development of mobile applications focusing on the importance of an effective UX to ensure user satisfaction. This research explores the UX throughout the ideation and development process of mobile prototypes in the university context. This research provides insight into the impact of UX on the creation and ideation of mobile prototypes. Continuous feedback and iteration in the design process are key to fine-tune the interface as much as possible. User-centred methodologies, such as user experience design and user-centred design, offer a unique opportunity to engage students in hands-on projects that reflect real-world challenges. UX principles influence the design of mobile prototypes. The necessity to adopt a user-centred approach and integrate user feedback at all stages of the mobile app design process and development is emphasized to guarantee the creation of successful digital products.*

### INTRODUCTION

In the field of mobile application design, creative processes have emerged as a crucial component for the development of innovative and user-centred prototypes. This chapter is concerned with the integration of creative methodologies in mobile

DOI: 10.4018/979-8-3373-3678-7.ch008

prototype design, analysing both its benefits and challenges. As mobile technology continues to evolve at a rapid pace, it is of the utmost importance that designers adopt approaches that not only respond to technical demands, but also foster creativity and empathy with the end user. This analysis is set against a backdrop of growing academic and professional interest in enhancing the user experience and maximizing the commercial viability of mobile applications.

This chapter provides a comprehensive overview of how creative processes can transform the design of mobile prototypes. It examines a range of methodologies, including design thinking, and their practical application in the development of prototypes that are not only functional, but also innovative and aligned with user needs. Furthermore, the controversies and challenges associated with the implementation of these processes, such as subjectivity and the difficulty in measuring their effectiveness, are addressed. A comprehensive literature review and an analysis of recent studies allow for a detailed examination of the advantages and criticisms associated with these methodologies.

This issue is important as it addresses creative processes and how they can improve your results in evaluation processes. Perceptual processes have been extensively studied, resulting in the conclusion that reason and emotion are not separate processes, but rather, they are linked in coupled processes (Barrett, 2017; Clark, 1998; De Bono & Zimbalist, 1970; Penny, 2017). In this context, and with regard to experimental processes employed in the design of virtual environments, it has been demonstrated that it is feasible to generate awareness in the experience with virtual environments of virtual reality (Gárgoles, 2023).

In particular, this chapter highlights solutions and recommendations for overcoming the identified barriers, including the standardization of methodologies, the continuous training of designers, and the integration of objective evaluation tools. Furthermore, the implications of these processes for university teaching are discussed, emphasising the value of interdisciplinary training and the use of creative methods to better prepare students for the challenges of contemporary mobile application design.

The objectives of the chapter include an analysis of the creative processes involved in the design of mobile prototypes, identifying their benefits, challenges and controversies. Also, through creative methodologies, we propose to discuss solutions in the evaluation and measurement of these processes. The educational implications, including potential collaborations for improvement and iteration in creative processes, are also examined. Through these objectives, the chapter aims to provide a comprehensive and nuanced understanding of how creative processes can be strategically incorporated into the design of mobile prototypes, enhancing innovation and improving the user experience.

16 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: [www.igi-global.com/chapter/user-experience-and-ideation-processes-in-mobile-prototyping/374815](http://www.igi-global.com/chapter/user-experience-and-ideation-processes-in-mobile-prototyping/374815)

## Related Content

---

### Develop a Teaching Model Plan for a Differentiated Learning Approach

(2018). *Differentiated Instructional Design for Multicultural Environments: Emerging Research and Opportunities* (pp. 106-130).

[www.irma-international.org/chapter/develop-a-teaching-model-plan-for-a-differentiated-learning-approach/196011](http://www.irma-international.org/chapter/develop-a-teaching-model-plan-for-a-differentiated-learning-approach/196011)

### Applying Learning Analytics in Designing for Professional Skills and Attributes in Tertiary Education

Henk Huijser, Natasha Arthars, Roger Cook, Sam Cunningham, Steven Kickbusch, Kate Thompson, Daniela Vascoand Gavin Winter (2023). *Perspectives on Learning Analytics for Maximizing Student Outcomes* (pp. 246-262).

[www.irma-international.org/chapter/applying-learning-analytics-in-designing-for-professional-skills-and-attributes-in-tertiary-education/332985](http://www.irma-international.org/chapter/applying-learning-analytics-in-designing-for-professional-skills-and-attributes-in-tertiary-education/332985)

### Staying Employable Certifications of Competences in the Era of Real-Time Career Management: Degreefication to “Certification”

Constantine Vasilios Kiritsis (2018). *Handbook of Research on Educational Design and Cloud Computing in Modern Classroom Settings* (pp. 430-443).

[www.irma-international.org/chapter/staying-employable-certifications-of-competences-in-the-era-of-real-time-career-management/195286](http://www.irma-international.org/chapter/staying-employable-certifications-of-competences-in-the-era-of-real-time-career-management/195286)

### Developing Confident Computational Thinking through Teacher Twinning Online

Elizabeth Oldham, Pamela Cowan, Richard Millwood, Glenn Strong, Nina Bresnihan, Mags Amondand Lisa Hegarty (2022). *Research Anthology on Computational Thinking, Programming, and Robotics in the Classroom* (pp. 427-441).

[www.irma-international.org/chapter/developing-confident-computational-thinking-through-teacher-twinning-online/287350](http://www.irma-international.org/chapter/developing-confident-computational-thinking-through-teacher-twinning-online/287350)

## Effect of Computer Assisted Instructional Package on Students' Learning Outcomes in Basic Science

Simeon O. Olajide and Francisca O. Aladejana (2019). *International Journal of Technology-Enabled Student Support Services* (pp. 1-15).

[www.irma-international.org/article/effect-of-computer-assisted-instructional-package-on-students-learning-outcomes-in-basic-science/236071](http://www.irma-international.org/article/effect-of-computer-assisted-instructional-package-on-students-learning-outcomes-in-basic-science/236071)