

VR Borobudur Game

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Methodology

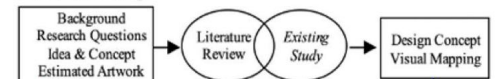
This VR Borobudur artistic research employs a practice-led research methodology. The data collection techniques used were literature reviews, existing studies, interviews, questionnaires, observations of playing experiences, and FGDs.

Design Process

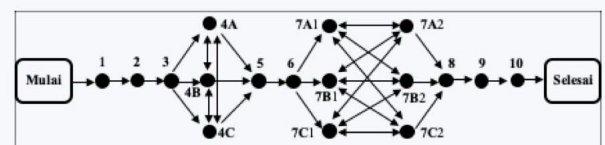
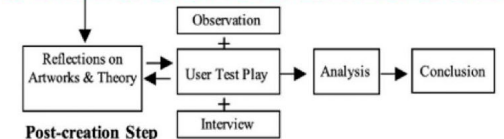
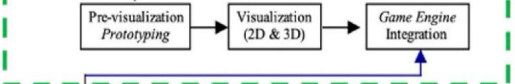
After conducting initial research, a design concept was developed. This design concept was based on data from literature reviews and interviews about spiritual experiences. This concept was then used to develop a narrative and 2D scene illustrations, followed by verification through a questionnaire of the script and scene illustrations. This questionnaire aimed to obtain a general overview of the respondents' sensations and perceptions of spiritual experiences, based on the narrative and scene illustrations. Based on the sensation and perception data, an interactive narrative was developed, which then became the basis for the interactivity of the Borobudur VR game.

The next step was to create a prototype, 2D visualizations, and 3D assets. All 3D assets were integrated into the game engine, and the game was ready for users to play.

Pre-creation Step



Creation Step



VR Borobudur Game

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The artistic research of the VR Borobudur game was motivated by the visual experiences of the Borobudur temple that felt by the researcher, which are the sensation of golden light, imaginary movement – sounds, and nuances of darkness when the researcher looks at a relief. In addition, researcher also feels the presence of immersion experiences when playing and designing games as the background of this art creation research. Both of these aesthetic experiences are the conditions of immersion that felt by the researcher. Through this artistic research, the researcher presents the sensation of immersion through the creation of the VR Borobudur game which applied the spiritual meaning of Borobudur as its interactive narrative content. The process of creating the VR Borobudur game employs practice-led research methodology and is supported by several other research approaches such as activity psychology (be- level & motor-level), aesthetics of interaction, the LeBlanc's MDA, and the punctum concept. The research synthesis describes the process of researcher seeking the liberation of aesthetic experiences outside of the VR Borobudur game as an object, so that subjectivity is born through the mind's imagination. The VR Borobudur game is teaching its players to find the rhythm of life, a condition that invites users to feel a contemplative atmosphere but also actively makes choices in the dynamics of their play experiences. This dynamic contemplation experience is one of the findings of the aesthetic experience in this artistic research and then offers a contribution to the discourse of the aesthetic of interaction

Sustainable Development Goal(s) Relevancy

Goal 4: Quality Education

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Short Biography

Dr.Sn. Yusup Sigit Martyastiadi is an Assistant Professor and Senior Lecturer at the Interaction Design major, Study Program of Visual Communication Design, Faculty of Art & Design at Universitas Multimedia Nusantara, Indonesia. His research is focused on Aesthetic of Interaction, Game Design, Interaction Design, Virtualization, 3D Visualization, and Borobudur Temple. He holds a Bachelor of Engineering in Control System & Robotics from the Sanata Dharma University, Indonesia, a Master of Information Technology in Multimedia Games Development from the James Cook University Australia and a Doctor of Arts in Game Design from the Indonesia Institute of the Arts Yogyakarta, Indonesia.

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Hadi Purnama, S.Ds., M.M., serving as a team member and Interaction Design Specialist, is a lecturer in Visual Communication Design at Universitas Multimedia Nusantara, located in Tangerang, Indonesia. He holds both Bachelor's and Master's degrees from Universitas Multimedia Nusantara (UMN). Hadi possesses professional experience within the creative industry, including a tenure at a game studio where he held the positions of lead programmer and interaction specialist. His research interests primarily revolve around interaction design and User Experience. In addition to his role as a researcher, Hadi also contributes as an interaction specialist and programmer in the creation of this work.



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Clemens Felix Setiyawan, S.Sn., M.Hum., is a lecturer in the Visual Communication Design Study Program, Faculty of Arts & Design, Multimedia Nusantara University (UMN), Tangerang. He serves as a lecturer and has research interests in immersive technology development as well as human-centered design, especially for children and Generation Z. He is currently still active as a music designer for film, advertisements, jingles, traditional dance performances, theater, and other performances. As a composer, he is known through his work in various Indonesian films, including: Pilgrimage (2016), Skull (2018), and The Draft! (2023). His works reflect a fusion between traditional Nusantara music and a modern experimental approach. He is also active in research that combines art, technology, and culture. In addition, he is involved in community service projects, such as village profile video creation, village website development, and training in and production of batik motifs in Padabeunghar Village. Clemens Felix Setiyawan is a multidisciplinary figure who combines art, technology, and education in his work. With a background in ethnomusicology and an interest in immersive technology, he continues to contribute to the development of arts and culture in Indonesia.



Title

VR Borobudur Game

Production Process Years

2019-2020, 2024 (redesigned interactive VR system)

Publication Year

2024

Publication Details

VR Borobudur 3D Game Exhibition, Nusakara Art and Design Center, Indonesia
(26 August – 13 Sept 2024)

Publication Media

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Recognition

-

Grants

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Additional

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