

Working Paper Presentation Format

Title: Design a website that recreates an interactive underwater universe, complemented by animated shorts, with the purpose of communicating to young adults between 19 and 21 years old about the deterioration of the coral reef in San Andrés, from 2020 to the present.

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Abstract: Kolah Koral is a project that seeks to communicate the deterioration of the coral reef in San Andrés, affected by pollution and excessive tourism. It emerged as a visual proposal aimed at young adults aged 19 to 21, with the purpose of promoting marine care and conservation. Through an interactive website, the project combines illustration, narrative, and animation to recreate an underwater environment that allows users to explore, learn, and reflect on the importance of protecting corals and maintaining the balance of the ocean ecosystem.

Keywords: Interactivity; Environmental stewardship; Conservation; Marine ecosystem.

Introduction: The Kolah Kóral project addresses the deterioration of the coral reef in San Andrés, affected by pollution and irresponsible tourism. Its objective is to design an interactive website that communicates this issue to young adults between 19 and 21 years old through a visual and educational universe.

Using the project methodology, the project involved phases of analysis, problem definition, solution development, and implementation, resulting in a design that combines illustration, animation, and visual narrative to communicate environmental damage.

State of the art:

The coral reefs in San Andrés are one of the most valuable ecosystems in the Colombian Caribbean due to their biodiversity and their social and economic contribution, especially to artisanal fishing and tourism (Colombia Verde, n.d.). However, reports agree that they are facing a crisis caused by wastewater discharge, chemical pollution, and mass tourism, factors that cause disease, loss of sunlight, and coral bleaching (Coral.org, n.d.; EPA, 2018).

Media and environmental organizations warn of the urgent need to implement urban control, sanitation, and environmental education measures to guarantee the sustainability of this ecosystem (Señal Colombia, 2024). Despite the abundance of technical and scientific information, much of it is presented in lengthy, textual formats that are difficult for young audiences to access (El Tiempo, 2024; Minambiente, 2023). The lack of visual strategies limits understanding and reduces youth participation in reef protection.

In light of this, design takes on a mediating role. The abundance of technical reports justifies a digital interface that prioritizes visual narrative over textuality, while low youth participation dictates an accessible and emotional graphic language that connects knowledge and empathy. Thus, the Kolah Kóral project proposal proposes a website with illustrations and animations inspired by references such as Paranice.co, to translate scientific information into meaningful visual experiences.

From a design for sustainability perspective, the project is based on authors such as Papanek (1985) and Fry (2009), who assert that responsible design is not limited to aesthetics but also promotes social awareness and action. Walker (2011) reinforces this view by understanding design as a form of ecological education, capable of communicating in a sensorial and participatory manner. Together, these approaches position design as an educational and transformative tool, capable of transforming environmental information into aesthetic and memorable experiences.

Goals:

General objective: To design an interactive website that creates an underwater universe to educate young adults between the ages of 19 and 21 about the deterioration of the coral reef in San Andrés from 2020 to the present.

Specific objectives:

Define the graphic and narrative elements the website should contain to effectively communicate the deterioration of the coral reef in San Andrés.

Analyze information on the current state of the coral reef in San Andrés from 2020 to the present to inform the website's content.

Methodology: Kolah Koral is developed using an applied and exploratory methodology with a qualitative approach. Through a structure based on the design project process, it seeks to understand the problem of coral reef deterioration in San Andrés and transform it into a digital communication experience through a website and an educational app on how to care for coral.

The methodological phases were problem formulation, analysis, solution development, implementation, and solution specification.

The exploratory component is generated in the initial stages by reviewing digital sources, articles, and environmental documentaries, which allowed for the identification of the problem and understanding of the environmental damage. In the analysis phase, graphic references and similar interactive projects were studied, establishing the conceptual foundations of the design. The following phases integrate the applied approach by developing, implementing, and evaluating a digital proposal that combines visual resources and animation to communicate to young people about reef conservation.

Detailed information by phase is presented in the following infographic, sectioned for better visualization:



Results:

The project successfully developed an interactive website that recreates an informative and engaging underwater universe, focused on communicating environmental damage. Through illustrations, animations, and dynamic visual narratives, the deterioration of the coral reef in San Andrés was effectively communicated, encouraging reflection and commitment among young people to protecting marine ecosystems.

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