2025-Museum Project DESIGN

AR Museum Show

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PART 01

Background

Digital Transformation Trends in Museums

With the development of technology, museums around the world are seeking digital transformation one after another. According to a report by the International Council of Museums, over 70% of museums plan to introduce AR/VR technology by 2025 to enhance the visiting experience.
As an industry pioneer, the Science museum hopes to attract more young visitors through innovative display methods. AR technology has become the top choice, aligning with current trends and technological advancements.

The digital value of special collectibles

The Eumig P8 projector and the photo of the woman in the patchwork dress are precious collections of the Science Museum and have unique historical and cultural value. Through AR technology, they can be transformed from static displays to dynamic interactive exhibits.

Digitalized collections not only protect cultural relics but also enable audiences to gain a deeper understanding of the stories behind them, enhancing the educational function and cultural influence of museums.

Meet the audience's demand for interactive experiences

Modern audiences, especially the younger generation, are increasingly demanding interactive experiences. According to the survey, 85% of the audience indicated that they would prefer to visit exhibitions with interactive projects.
The AR archaeological exploration project, through innovative interactive methods, meets the audience's expectations for the integration of technology and culture, enhancing their sense of participation and immersion.

Project Objectives and significance

Enhance the visiting experience of the audience

Through AR technology, visitors can have a richer and more vivid experience during their visit. Transform from simple viewing to in-depth participation, and extend the audience's stay time in the museum.

By using AR interactive functions, such as sliding to dig sand and clicking to view details, the curiosity and desire to explore of the audience are stimulated, making the visiting process full of fun.

Disseminate knowledge of history and culture

With the help of AR technology, the historical and cultural stories behind the collections are presented to the audience in a vivid and visual way. Through virtual explanations, 3D displays and other means, the audience can have a more intuitive understanding of the historical background and cultural connotations of the cultural relics.

Take the Eumig P8 projector as an example. Through AR, it shows its important role in the imaging technology revolution of the 20th century, allowing the audience to deeply feel the promoting effect of technology on cultural development.

Promote digital innovation in museums

This project is an innovative attempt by the Science museum in the field of digitalization, providing new ideas and directions for the museum's future development.

After successful implementation, it can serve as a typical case of digital transformation in museums, providing reference and guidance for other museums and promoting the digitalization process of the entire industry.


PART 02
User Profile

Target user profile

User basic information

The target users are young people aged 25 to 35, who are interested in technology and culture, and have a relatively high level of education and consumption capacity.

Users of this age group are usually curious about new things and willing to try new ways of experiencing, making them the main audience for museum

User interests and hobbies

They are passionate about technological products and cultural activities. They have multiple AR applications installed in their mobile phones and visit museums or art galleries at least once a week.

For unique cultural experiences, they are willing to pay higher fees, such as purchasing tickets for special exhibitions or limited edition souvenirs.

User behavior habits

When visiting museums, they tend to use mobile phones or tablets to obtain information and like to share their experiences through social media.

For highly interactive exhibitions, they will spend more time participating and are willing to express their opinions and feelings on social platforms.

User Demand Analysis

Interactive experience requirements

Users hope that there will be more interactive links during the visit, such as participating in the restoration and excavation of cultural relics through mobile phone operations.
They are looking forward to obtaining immersive experiences through AR technology, such as seeing the usage scenarios or historical backgrounds of cultural relics in virtual scenes.

Exclusive content requirements

Users are interested in exclusive content such as the stories behind the cultural relics and their production techniques, and hope to gain a deeper understanding during the visit.
They hope that the museum can provide some unpublished materials or expert interpretations to satisfy their thirst for knowledge.

The require for social sharing

Users are willing to share their visiting experiences on social media, hoping to gain others' attention and recognition through sharing.
They hope that museums can offer some functions that facilitate sharing, such as generating personalized shared pictures or videos.

PART 03

Design Scheme

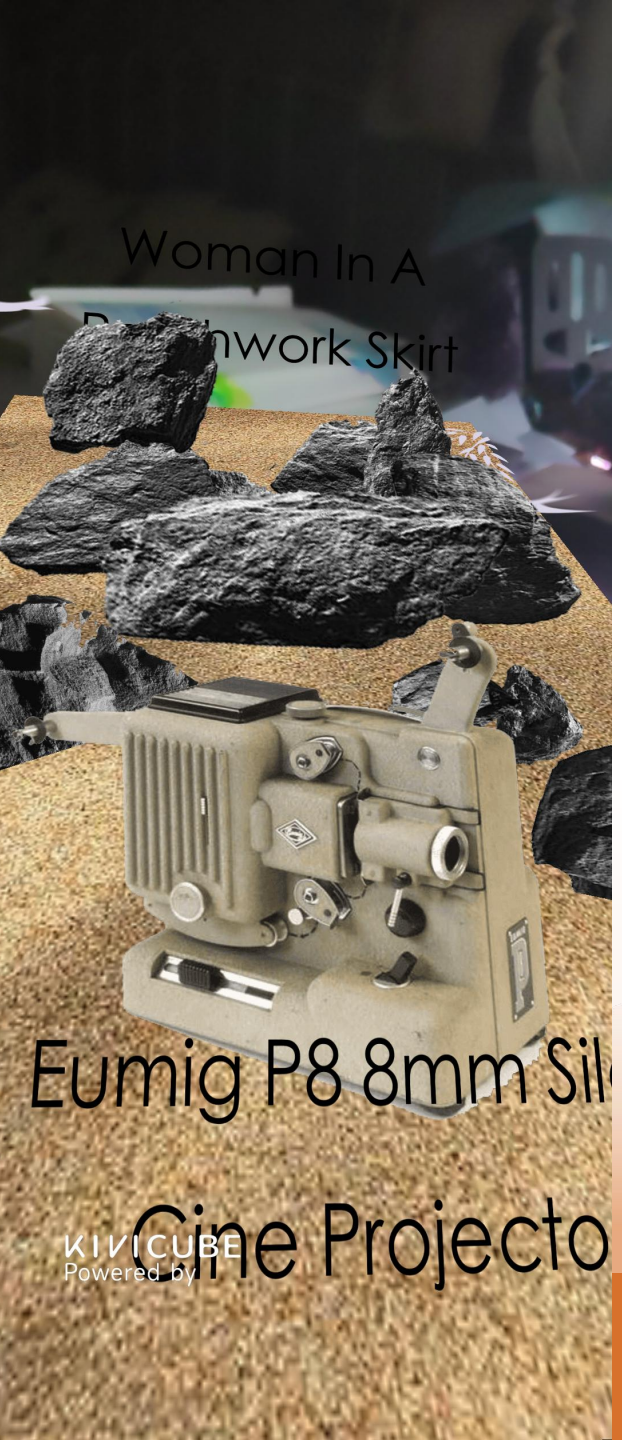
AR Function & Design

Practical operation demonstration
https://youtu.be/LWyQ7EVnh7A

Basic function

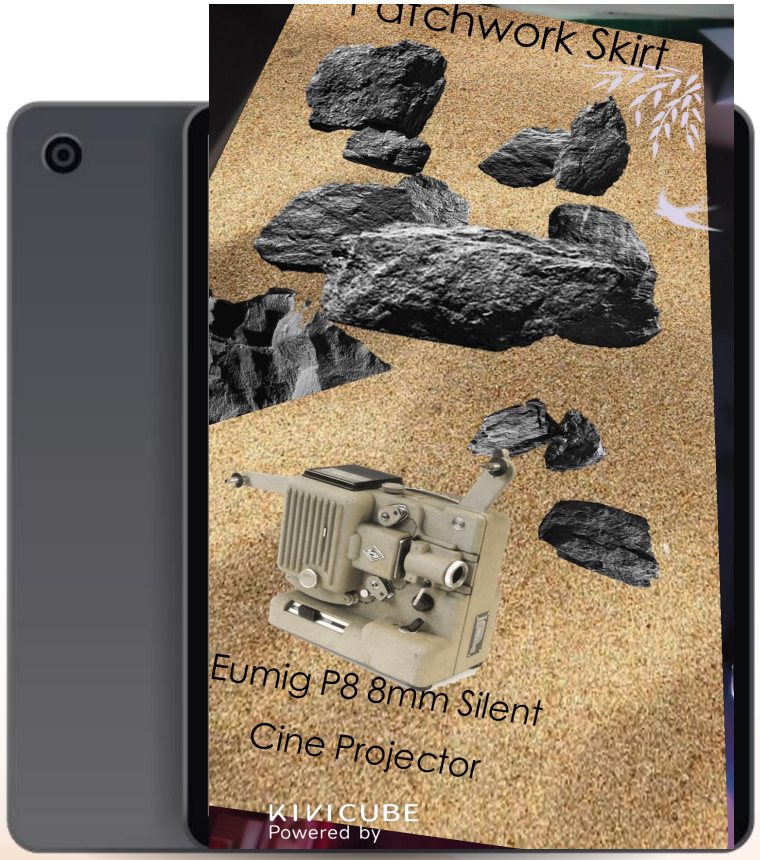
This design aims to recreate and experience a historical photo named "Woman in a Patchwork Skirt" through augmented reality (AR) technology and scene arrangement. The audience will wear a pure white dress of the same style as in the photo, stand in a specific sandy scene, and project the patchwork pattern onto the dress through the Eumig P8 8mm Silent Cine Projector to experience the situation and emotions in the photo firsthand.

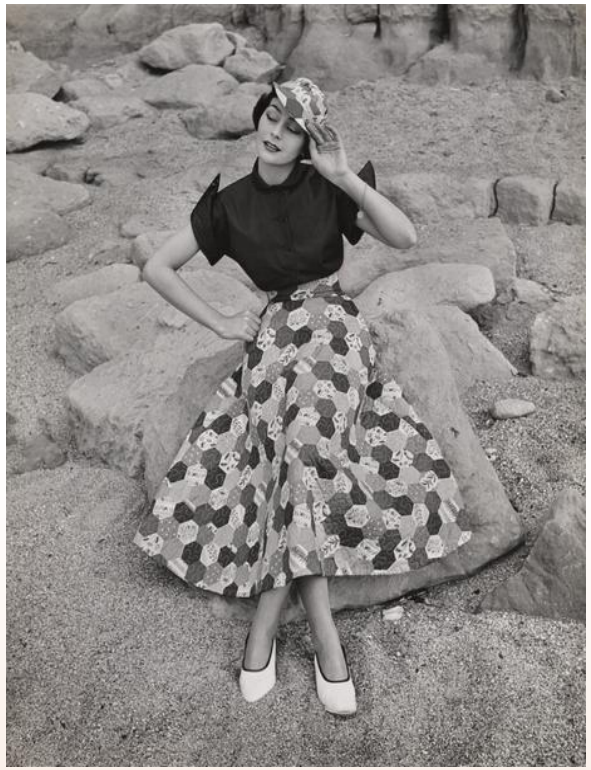
The Eumig P8 8mm silent film projector was a home projection device produced by the Austrian company EUMIG from 1954 to 1968. It was the world's first home movie projector to adopt a low-voltage lighting system (12 volts), featuring variable-speed projection, front and back projection, manual rewinding and other functions, representing an innovation in home entertainment technology at that time



"Woman in a Patchwork Dress" is a photograph taken by photographer Zoltan Glass in 1955, depicting a woman wearing a patchwork dress and a matching hat leaning against a rocky beach. This photo not only showcases the beauty of patchwork art, but also symbolizes the tenacity and reconstruction spirit of post-war women.
collection.sciencemuseumgroup.org.uk

In the design, the ground of the site is paved with fine sand to simulate a beach environment, and stones of different shapes are placed around it to create a natural atmosphere as shown in the photos. Set up an Eumig P8 8mm silent film projector in the distance as the projection equipment. The audience put on pure white dresses and stood at the designated positions. The projector projected the patchwork patterns onto the dresses, as if placing them in the photos.



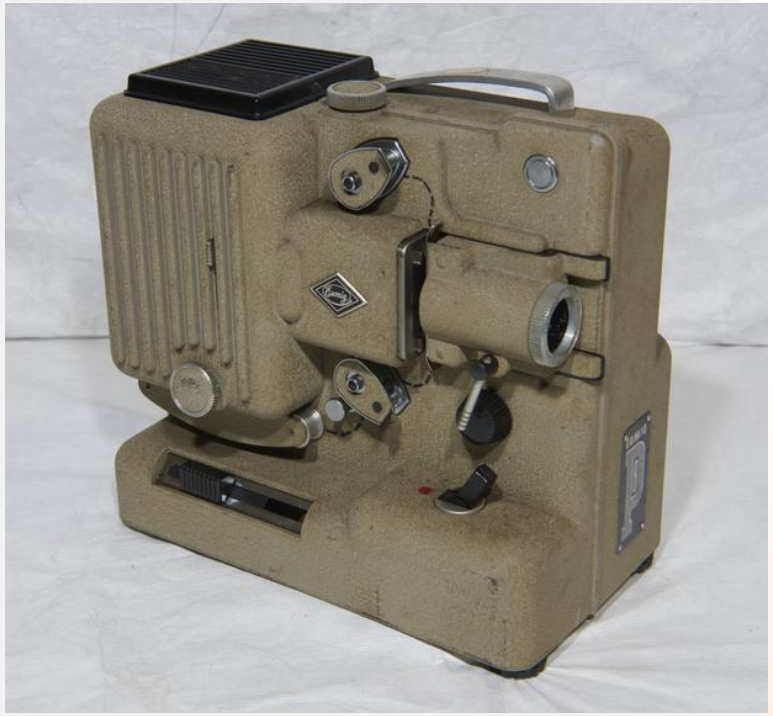


The symbolic meaning of patchwork skirts

The patchwork skirt was known as the "Nationale Feestrok" in the post-war Netherlands and was initiated and produced by the resistance fighter and feminist Mies Boissevain-van Lennep. This kind of dress is pieced together with fabrics of personal significance, symbolizing "reconstruction from fragmentation" and "unity in diversity", reflecting the important role of women in the post-war social reconstruction.

The historical value of projectors

The Eumig P8 projector is not only a representative of technological innovation, but also a symbol of family entertainment culture. Its emergence enables ordinary families to watch and share family movies, enhancing the emotional bond among family members. In this design, the use of the Eumig P8 projector not only restores the historical scene but also symbolizes the integration of technology and emotion.



Design principles and concepts

User-centered design principle

During the design process, we always take the needs of users as the guide and pay attention to user experience. From the perspective of users, design a simple and easy-to-use operation interface and rich interactive functions.

Through user research and feedback, continuously optimize the design plan to ensure that the application can meet the needs and expectations of users.

This AR archaeological museum experience program not only focuses on entertainment but also emphasizes education. Through vivid interactive experiences, the audience can learn historical and cultural knowledge while having fun.

By adopting an entertaining and educational approach, we aim to stimulate the audience's interest and love for cultural heritage, and enhance their cultural literacy and protection awareness.

In the design, emphasis is placed on innovation, introducing new technologies and concepts to bring a brand-new experience to the audience. Meanwhile, consider the sustainability of the project to ensure that the application can operate stably for a long time.

By constantly updating the content and functions, maintaining the freshness and appeal of the application, it provides continuous impetus for the digital development of the museum.