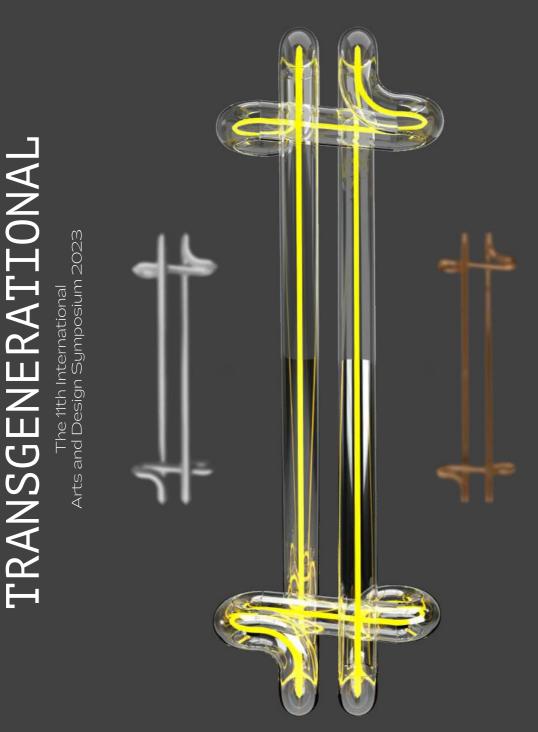
TRANSGENERATIONAL

The 11th International Arts and Design Symposium 2023



Association of Siamese Architects under the Royal Patronage (ASA) together with the Faculty of Digital Arts, College of Design and the







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TYVM Metaverse "Moment of Love" (A Use Case for Applying Metaverse to Entertainment Industry)

Assist. Prof. Mr.Monchai Bunyavipakul Mr.Detthana Pattaphat and Mr. Peerawich rujiraseree

Introduction :

Metaverse and the entertainment industry are closely related since Metaverse offers the entertainment industry new opportunities to create and distribute content as well as engage with audiences in new and creative ways (Strategic Market Research, 2022). It is predicted that by 2027, the market value of the virtual platform will reach \$ 127,022 million. TYVM Co., Ltd. is a company that provides technological support to creators in the entertainment industry. The company has launched its first movie, "Moment of Love" (Sukkhapisit, 2023), which is a "Y movie" (Y = Yaoi in Japanese, meaning love stories between men). The movie narrates the stories of 4 couples in each period of time in different tones through different storytelling. TYVM Metaverse Design Competition "Moment of Love", a competition for a location design of time and color of love in the metaverse, was organized. The film was opened for a global audience, which opened up new experiences for the audience and movie fans. The designer team participated in this contest with the goal of bringing architectural science to designs in the metaverse. The main idea is to apply continuous curves to connect each zone, signifying the good relationship between friends, family, or lovers in the movie. The secondary concept is the unlimited expansion of metaverse space in the future. Buildings and curves can be rearranged in a variety of ways to further develop generative design in future metaverse design projects.

The TYVM Metaverse design combined the architectural design process with the virtual world creation process, starting from the studies of project requirements, concept design, 3D Model design and simulation, asset bundle, and development on metaverse & testing. This creation for the Architectural Design Trial on Metaverse Contest was awarded first place. The movie "Moment of Love" was released on Metaverse on Valentines Day, February 14, 2023.

Objectives:

- 1. To apply architectural design concepts to the metaverse
- 2. To be a use case for metaverse application to the entertainment industry
- 3. To use the design process to improve the architectural design on the metaverse in the future

Methodology:

The process of architectural design combining with the virtual world creation process on Game Engine were used for the TYVM Metaverse Design Competition as follows:

1. Study the requirements of the design contest (ACRCIVERSE, 2022)

1.1 Functional aspect: cinema or movie screening area, stage for the fan meeting, NFT ART exhibition room/area, souvenir shop, promotional billboards at various points, other areas according to the designer team.

1.2 Size of the metaverse area for the contest: a square area at a size of 10×10 with square grids at a size of 5 meters x 5 meters each, calculated as an area of 50 meters x 50 meters in the physical world or 2,500 square meters (the standard size of the metaverse developer who publish the work).

1.3 Technique and standard for the metaverse to be operated on Unity Engine: the number of polygons of 3D Models and the file size to support a large number of simultaneous online access, for example.

2. Concept Design

2.1 The primary concept starts by using the continuous curves to signify the connection of good relationships, whether between friends, families, or lovers. From a high angle, the paths are connected to different zones and functions as well as complex and overlapping, symbolizing the complexity of thoughts and emotional distraction of humans or teenagers who are seeking for their true self and passion. White materials were selected for the flexibility for the seasonal lighting.

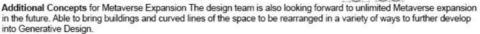
2.2 The secondary concept is for the metaverse expansion: the designer team is also looking forward to the unlimited metaverse expansion in the future. The buildings and curved lines of the space can be rearranged in a variety of ways to further develop into generative design.

- 3. Design process: 3 model creation and avatar perspective simulation for spatial visual test and space usage in different areas, such as various distances from the screen.
- 4. Asset bundle process: make the design available on Game Engine (Unity, 2019)
- 5. Development, infrastructure, and metaverse testing.

Techniques and Materials:

"Architecture on the metaverse" involves designing and creating buildings within a virtual world as well as using structures, materials, textures, lighting, and spatial organization to create immersive and visually appealing environments. One of the advantages of architecture in the metaverse is that it allows design experimentation and innovation. In addition, architecture on the metaverse also involves applying spatial design principles and user experience to create immersive and engaging environments.



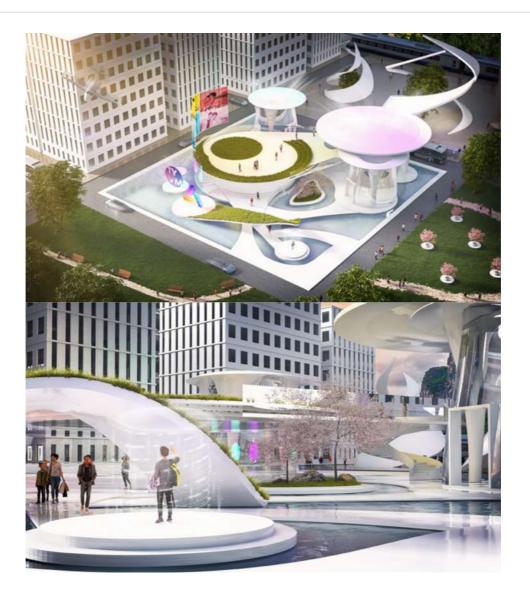


Conclusion:

By participating in the TYVM Metaverse Design Competition "Moment of Love," the designer team found that metaverse offers a significant opportunity for the entertainment industry to create unique and immersive experiences for users as well as expand distribution channels and create a new revenue stream for the entertainment industry, both producers and actors. Brands can support virtual events or place products in the metaverse while creators can sell virtual products or experiences to users.

This work was awarded as a winner by experts from TYVM Co.,LTD, and Thai Metaverse Association. It was launched for screening on the metaverse and in cinemas on February 14 th, 2023. It was the world's first LGBT-themed movie on the metaverse. The actors met with fans and did activities together as well.

From this beginning, the designer team has aimed to apply architectural science to the metaverse design to expand the boundaries of design from the physical world to the digital world. Buildings and space curves can be rearranged in a variety of ways to further develop generative design in future metaverse design projects and support the unlimited expansion of the metaverse space in the future.





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