



Huai'an Environmental Sculpture Art Uses Metaverse Digital Technology Management

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Abstract

Background and Aims: Metaverse digital technology is an emerging digital technology with highly virtualized, intelligent, and interconnected characteristics. Thus, this article aims to (1) study the current situation of environmental sculpture art management in Huai'an City. (2) Study the operation mode of the metaverse digital system. (3) Create an implementation plan for managing environmental sculpture art in Huai'an City through a metaverse digital system.

Methodology: Using a field investigation questionnaire survey and face-to-face interviews, the questionnaire results were analyzed. Heterogeneity sampling was used to select 7 interviewees, all of whom have professional titles of associate professor or professor and have been engaged in related industries for decades. And conduct a thematic analysis of the data.

Results: (1) The historical evolution of environmental sculpture art in Huai'an City. (2) There are problems in the management of environmental sculpture art in Huai'an City. (3) Implementation plan for metaverse digital technology. The integration of digital technology and art management can help art managers manage and operate art projects more effectively, and improve the innovation and sustainable development of environmental sculpture artworks in Huai'an City, injecting new vitality into the cultural construction of Huai'an City.

Conclusion: Digital technology integration in art management can help Huai'an City manage environmental sculpting art by encouraging sustainability and innovation and bringing life to cultural development.

Keywords: Huai'an Cultural Environment Sculpture Art; Metaverse Digital Technology Art; Management

Introduction

Metaverse digital technology is an emerging digital technology with highly virtualized, intelligent, and interconnected characteristics. It is not only an Internet application form, but also a form of social organization. It integrates multiple technologies such as extended reality technology, digital twin technology, blockchain technology, big data, and artificial intelligence. By providing users with an immersive experience, cross-virtual reality interaction, open editing, and decentralized transactions, it realizes the integration and transformation of the virtual world and the real world at the identity system, social system, economic system, and other levels. Taiwanese technology company HTC has released one of the most ambitious and comprehensive metaverse platforms, Viverse, which is an interoperable ecosystem where different content platforms are interconnected, providing users with a seamless, decentralized, and secure VR experience. Professor Zhu Shangxi, the planner of the "Metaverse Sculpture Lecture Hall," researched "Sculpture Setting Sail in the Metaverse." Research by Professor Fang Xin, Director of the Digital Art Department of Shaanxi Sculpture Academy, on the current status and prospects of the sculpture industry under the theme of the metaverse. In the management of environmental sculpture art, metaverse digital technology can provide a wider display space and richer interactive experience, providing new ideas and methods for the management and promotion of artworks.

The development history of environmental sculpture art in Huai'an City is long, enriching the cultural connotation of the city. Through on-site investigation and expert interview results analysis, it was found that most people have a low level of attention to environmental sculpture, insufficient maintenance of environmental sculpture, and poor dissemination of environmental sculpture art and culture. Traditional environmental sculpture art is no longer able to meet the needs of contemporary people for artistic works, and the application of new technologies has become an inevitable choice. It is urgent to introduce metaverse digital technology into the management of environmental sculpture art, to enhance the soft power of urban culture, enhance urban image, and promote the development of urban cultural undertakings.



This article studies the management of environmental sculptures in Huai'an City through the metaverse digital system, aiming to attract more attention to the charm of environmental sculpture art and the charm of metaverse digital technology.

Objectives

The objective of this study is to obtain the current situation of environmental sculpture management in Huai'an and the problems in the management. Create the implementation plan for managing the environmental sculpture art in Huai'an City with the Metaverse digital system. Organize, display, and manage the environmental sculpture works to provide a wider range of visiting and experience spaces for art lovers and citizens. Create a more convenient and convenient interactive environment for artists and audiences. Supervise and maintain environmental sculpture artworks, reduce the risk of damage and theft, and protect urban art property.

Literature review:

The History and culture of Huai'an city

Huai'an City is a prefecture-level city in Jiangsu Province, located in the northeast of Jiangsu Province and the east of the Jianghuai Plain. Located in the Yangtze River Delta region, It is an important central city in northern Jiangsu province, Modern central city in the northern part of the Yangtze River Delta, a Member city of the Nanjing metropolitan area, The first city in the Huaihe River Ecological Economic Belt, Located at the intersection of the ancient Huaihe River and the Beijing-Hangzhou Grand Canal, On the "Qinling Mountains- -Huaihe River" line, the north-south boundary of China, With Hongze Lake, the fourth largest freshwater lake in China, Is a national civilized city, The National Famous Historical and Cultural City, The National Health City, The National Garden City, The National Model City for Environmental Protection, The National Low-carbon pilot city, One of the main cradles of Huaiyang cuisine, As the "Food Capital of the World", Is one of the cradles of ancient culture in the Jianghuai River Basin, The area is 10,030 square kilometers (<http://m.86lsw.com/whls/17774.html>)



(Geographical location map of Huai'an City, Jiangsu Province)

The history of Huai'an can be traced back to the "Qingliangang Culture" in the Neolithic Age more than 5,000 years ago, which was named after the Qingliangang found in Huai'an. From the seventh year of the Reign of the Eastern Jin Dynasty to the 1600 years of the late Qing Dynasty, Huai'an was a rule of prefectures, prefectures, roads, and prefectures for a long time, becoming an enduring political and cultural center in the Jianghuai River Basin.



(Location map of Qingliangang Cultural Site)

Huai'an City has a history of more than 2,200 years, qin County-Sishui County Huaiyin County. Up to now, there are "Qingliangang Culture" sites in Huaiyin Wharf Town. It was once the hub of grain transport, and salt transport, stationed in the grain transport governor's office, the Jiangnan River governor's office. Historically, Suzhou, Hangzhou, and Yangzhou are the "four major cities" along the canal, "the place where the south and the north meet", and are known as the Canal capital of China. The Huai'an section of the Grand Canal of China has been listed on the World Heritage List. By the end of 2021, Huai'an had a permanent population of 4556,230. In 2022, the regional GDP of Huai'an city reached 474.242 billion yuan.

Huai'an is the hometown of Premier Zhou Enlai. In history, there were great military strategist Han Xin, Han Fu, Liang Hongyu, a heroine, Wu Cheng' en, Guan Tianpei, a national hero, Liu E, author of Travel Notes of the Old and the Disabled, etc.



(Scene picture of Zhou Enlai Memorial Hall)

Huai'an city has the famous red tourist attractions, Zhou Enlai hometown scenic spot, Liulaozhuang Company Memorial Park of the New Fourth Army, Huanghuatang New Fourth Army Military Memorial Hall, the former site of the Central China Branch of the CPC Central Committee, the memorial hall of the former site of the Jiangsu and Anhui Border area government, etc. Ecological tourism scenic spot ancient Huaihe River cultural scenic spot, the canal cultural corridor, etc. (<http://m.86lsw.com/whls/17774.html>)

Artistic characteristics of environmental sculpture in Huai'an city

First of all, the early art characteristics of environmental sculpture in Huai'an city. Due to the small demand in the early stage, the construction of sculpture was designed and produced by relevant experts from other places. The main representatives are, in 1990, Wu Cheng 'en's former residence commissioned professor Ruan Yong Chong of Nanjing University of the Arts to design the stone statue of Wu Cheng'en, which was placed in the scenic spot.

Then, recent Huai'an environment sculpture art characteristics, in recent years, the city sculpture demand is gradually increased, involved in the design and production of artists covers domestic famous experts and local sculptors, the main representative, bowl pool mountain "Lao zi" statue, Huai yin district "wu Jutong" statue, Qinghai new west journey park square "journey to the west" theme sculpture, the author of these works is wu, vice chairman of China artists association. In 2009, Huai'an Municipal Transportation Bureau commissioned Professor Qian Dajing of Shanghai University to design and produce a large-scale theme sculpture "South Ship and North Horse", which is located at the south entrance of Huai' a Municipal Expressway.

(1) The planning and construction management of urban public art, several key points to grasp - - -take Taizhou urban sculpture planning and construction as an example.

Urban sculpture planning is a new and special special planning, which is still in its infancy. At present, many cities are compiling urban sculpture planning, so it is necessary to issue the corresponding technical specifications as soon as possible, to facilitate the management department to grasp the depth and content of the planning in the process of compilation and approval.

Due to the chaotic market of urban sculpture creation, narrow information surface, and other reasons, some works with low creation levels are repeated construction in many cities, or even "mass production", which affects the improvement of the overall city image in China. If the network can be



used to publicize urban sculpture projects in China (including abroad), it can avoid the phenomenon of "one thousand cities", which is aggravated by the disorderly "mass production" of urban sculpture to a certain extent. (Chen, 2007)

Modern urban public art problems and its countermeasures

The city must build management agencies for public art, strengthen the functions of the government, carry out standardized management, and promote the sustainable development of urban public art. At the same time, the common characteristics of the operation of the management organization are as follows: the composition of personnel must include government personnel, non-governmental associations, news media, and representatives of the masses, and there must be two categories in the setting of departments. One is the office, which is mainly engaged in the organization, design, planning, and coordinated management of urban public art. The second is the committee members, planners, artists, gardeners, architects, and social professionals, who are mainly responsible for the review and evaluation of public art.

Urban public art is mainly for the public, actively expanding the influence of urban public art, can effectively enhance the public's interest and appreciation level of art, but also improve the ability of creators, so that urban public art continues to integrate with society.

Digital management of metauniverse (Metaverse)

As a comprehensive technology application form, meta-universe (Metaverse) provides innovation space for digital resource management and the optimization of various processes.

First, the drive of Moore's Law. According to the international data company IDC (International Data Corporation), the total amount of global data will be about 53 ZB in 2020 and is expected to reach 175 ZB in 2025. Moore's Law of big data still exists. With the application of interactive technologies such as VR, AR, MR, and holography, unstructured data such as images and speech will be generated in large numbers.

Second, the a need for diversified data management. In the metacosmic digital system, with the increase of data volume, data generation sources, existing forms, and use scenarios are more and more diversified and diversified, user data rights confirmation, privacy protection, cross-border legal definition, etc., need artificial intelligence computing, careful consideration, and the formulation of a series of rules.

Then, the need for data-sharing and co-governance. The digital world and the real world are constantly interacting and integrating, the social attributes of the digital world are constantly enriched, and large-scale online activities are bound to be richer. Immersive vision, sound, touch, and other experience requirements will inevitably bring about the use of equipment terminals. It is needed to provide secure, reliable and low-latency shared co-governance services.

Pan-sculpture in the background of the meta-universe

Sichuan Music College of Chengdu Academy of Fine Arts teachers Zhang Sheng research, sculpture further from entity to 3D virtual, from static to movement, from eternal to fast, from artist-independent creation to interactive creation, from gallery to digital media display, from physical collection to digital collection, from art concept to asset concept, the theme of the sculpture more diverse, cultural diversity, secondary yuan culture, cyberculture, game culture, fantasy culture, virtual people will appear.

Sculpture, as data, is compatible with various display interfaces on the meta-universe, such as games, media platforms, social platforms, shopping platforms, automobile and home appliances, and other intelligent platforms that are interconnected, to achieve multi-scene sculpture applications. Commercial IP and the fan economy of "we media" further influence the creation mode of sculptors. The game will become a stage for artists, and with the help of the flow effect of the super popular game, artists begin to show their art in the metaverse world through the game. (Zhu, 2023)

(2) The current situation and future road of the sculpture industry under the issue of the universe

The research of Fang Xin, director of the Digital Art Department of Shaanxi Sculpture Institute, the current situation and future road of the sculpture industry under the issue of the universe. At present, the metauniverse is a hot topic. Although it is in the stage of exploration and definition, I think it will inevitably open a mode of virtual interconnection around the world and realize the mapping effect of the virtual world to the real world, which is its real value, rather than a complete roaming in

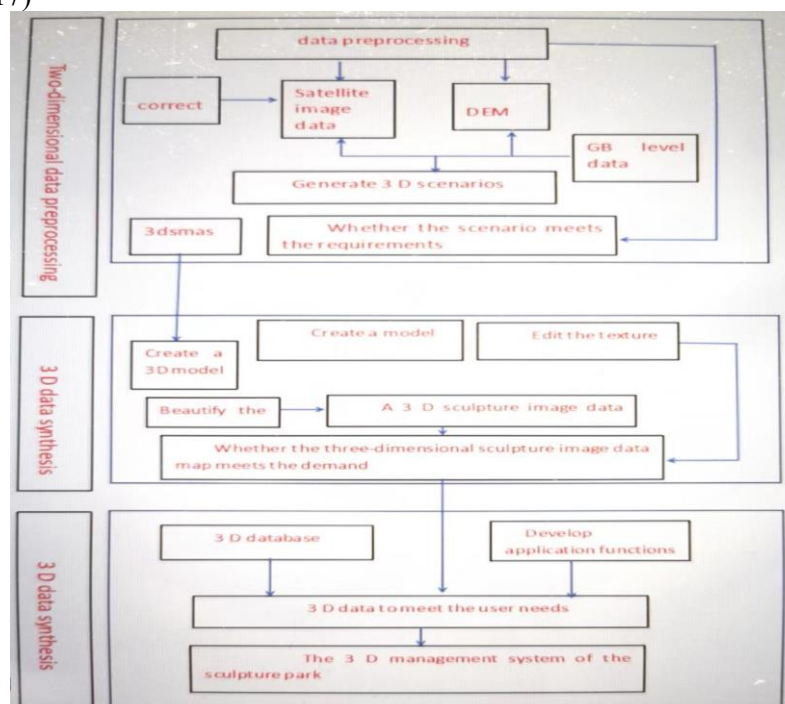


the virtual world. In the current parallel of AR, MR, and XR, the technology that can be applied to processing and manufacturing focuses more on the stronger reality, which will greatly reduce the technical training time of operators and become a tool for the incubation of new industrial workers. (FANG(2023)

(3) Mutual reality and reality: the National College Sculpture Teaching Cloud Forum
Hebei Academy of Fine Arts, director of the sculpture teaching cloud BBS, digital sculpture for the influence of traditional sculpture form is huge, if the industrial revolution changed the manufacturing and people's way of life, so, the digital sculpture also more or less changed the creation means and ways of traditional sculpture. It breaks the boundary between virtual and reality and will have new possibilities for the form and presentation of art. (Zhang, 2022)

(4) From modeling to creation- - - -thinking on meta-cosmic sculpture
Nanjing Art Institute of Fine Arts Academy of Sculpture teacher Xue asks for research, Humans have never stopped the imagination of the real world, the virtual reality near the universe, to sail out of our familiar perception- - - - -how far galaxy, open up how many different worlds, largely depends on the established rules, and science forward look different, this time interstellar sailing, perhaps can take the traditional "border" perception, broaden our constraints by the vision of modernity. (Xue, 2022)

(5) Design of a 3-D management system for the sculpture park
Shaanxi Art Vocational College of Shi ZhenYing professor research "sculpture park 3 d management system design", to be able to fully embody the sculpture park, make it interactive, dynamic, and lifelike, thus intuitive and show real park scene, to design sculpture park 3 d management system. (Shi, 2017)



Source: Shi Zhenying, 2017)

(When the camp.2017. Design framework of 3 D management system of Sculpture Park)

(6) The development, management progress, and promotion strategy of Tianjin urban sculpture
Wang He associate professor, school of Architecture, Tianjin University research, "the development of Tianjin city sculpture, management progress, and promotion strategy", urban sculpture construction system of Tianjin since 1990, combined with the establishment of the Tianjin City sculpture management system and the implementation of the method, according to the Chicago, Kobe, and Tianjin two close to the construction of the city achievement comb valuable experience, provide theoretical support for the healthy development of Tianjin city sculpture, to boost Tianjin cultural soft



power. Which put forward with the aid of Beijing's international influence and human resources in Hebei province, speed up the development and tourism and the combination of the sculpture garden, the city sculpture construction, and economic and socially coordinated development, should be a period in Tianjin city sculpture functions, artists need to explore and vigorously practice the subject (Wang, 2019)

(7) Where does urban sculpture go- - - -Transformation of urban sculpture management under the new normal

Mr.Li Qiang studied the construction and development of urban sculpture management in Shanghai in 2015, Summarize the transformation and development of urban sculpture- - - -urban public space, Art, and culture of public space exist in every link of urban construction, The administrative department, as the builder and manager of the city, Artistic transformation brought about by the development of The Times, To guide the construction and management of art and culture in urban public space, Actively create relaxed opportunities for art creation in public space, To inspire the creative passion of the artists, Effective coordination on specific issues, Establish a reasonable dialogue mechanism, Strengthen communication between administrators, planners, designers, artists, and the public, To achieve the interaction of art and culture construction in public space, Realize the public art space art and culture of the republic, joint construction, sharing! (Liu, 2018)

(8) Sculpture has set sail in the metaverse

Professor Zhu Shangxi, the planner of the "Yuan Universe Sculpture Lecture Hall", "Sculpture sets sail in the Yuan Universe". In the shaping and turning of urban sculpture, it has been replaced by a numerical control carving foam model. In the field of shaping, 3d printed wax and sand have appeared, and digital forging technology has also appeared in the field of metal forging. In the sculpture creation crowd, the same situation is also changing dramatically. Today's sculptors are using cosmic science and technology to create works to varying degrees, enjoying its accurate, efficient, and convenient benefits. In the field of sculpture education, almost all colleges are studying and trying virtual digital sculpture education due to the powerful situation of digital technology. It can be said that the influence of the meta-universe on sculpture is the trinity of manufacturing, creation, and education, which is very comprehensive. The process of digital technology sculpture in the name of the yuan-universe has just begun. Everything is on the road, and everything is in the process. What we need to do is to embrace boldly, strive to practice and persevere (Zhang, 2021)

(9) Viverse (HTC)

In 2022, Taiwanese technology company HTC released one of the most ambitious and comprehensive platforms, Viverse, an interoperable ecosystem with different content platforms connected to provide users with a seamless decentralized, and secure way to VR experience. MeTime: You can have your own space in the meta-universe through a series of private VR Spaces, for you to choose according to your needs. Art and Exhibition: Watching the Louvre and other famous exhibits Only a moment away in this universe, you will be able to attend your favorite activities and enjoy them with your friends and relatives, while experiencing art in a new immersive way. Virtual Concert: Watching your favorite artist's concert from a premium perspective, Viverse offers holographic imaging and a 360-degree view, while ensuring a highly interactive experience. Social gatherings: You can be used to bring friends to a new level through VR. Conference: No matter where you are, you can meet and work with your team, and VR makes remote work more immersive and resonates with your team.



(Viverse Private VR space experience scene diagram)

To create one of the best meta-universes that can seamlessly integrate the digital and physical worlds, HTC is working with Tier 1 blockchain Liminal, founded by Avalanche author Niels Stephenson and Bitcoin Foundation co-founder Peter Visens. This enables the company to increase the efficiency of the virtual worlds. Similarly, it will allow users to use digital assets such as avatars, clothes, art, etc.

Conceptual framework:

In-depth understanding and study of the history and culture of Huai'an city, analysis of the current characteristics of environmental sculpture art, and the current situation and deficiencies. Explain the relevant content of digital management in the era of the digital economy. This paper introduces the relevant knowledge of yuan-cosmic digital technology, combines the current management policies of the culture and art industry, and uses the knowledge of management, statistics, sociology, communication, and other disciplines to study the value reproduction of urban environmental sculpture art. Comprehensively analyze the direction of digital management of regional cultural integration in Huai'an city, and create the digital system of environmental sculpture art. To enhance the regional cultural tourism of Huai'an city.

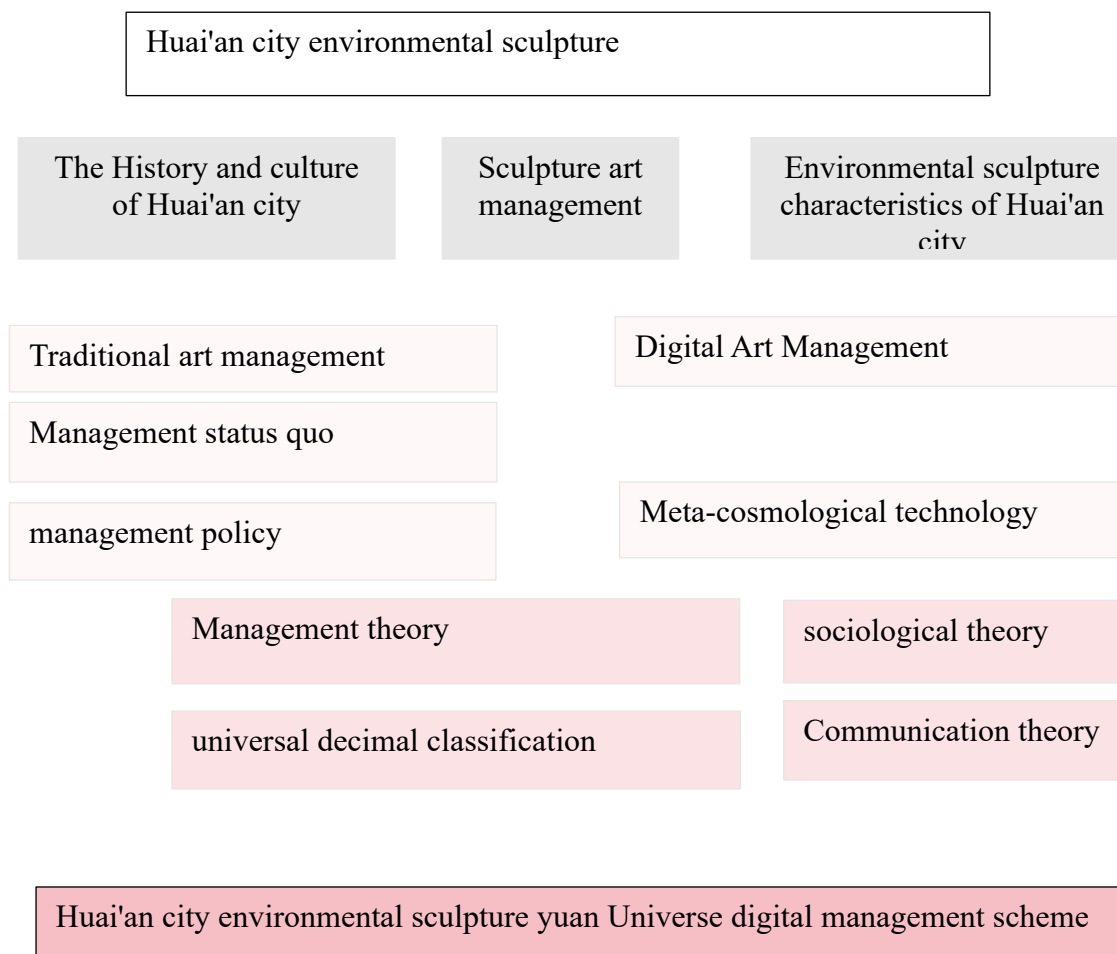


Figure 1 Conceptual framework

Methodology

The literature research method is used to investigate the development characteristics of environmental sculpture art in Huai'an, and the field investigation method is used to summarize and analyze the current situation and existing problems of environmental sculpture art management in Huai'an. The questionnaire was designed, and a questionnaire survey was conducted on 100 tourists of different ages, occupations, and education around Huai'an Environmental Sculpture in three months. Using the case analysis method to analyze the application of metauniverse (Metaverse) digital technology in the field of art, and use the management research method to create the metauniverse (Metaverse) digital system for the environmental sculpture art of Huai'an city. Expert interviews were used to demonstrate the feasibility of the study results.



(Field survey chart)



order number	question	answer
1	Your gender?	<input type="checkbox"/> men and women <input type="checkbox"/>
2	Your age?	<input type="checkbox"/> 10 years old- -19 years old <input type="checkbox"/> 20 years old- - - - -39 years old <input type="checkbox"/> 40- -59 <input type="checkbox"/> Over 60 years old
3	What is your education level?	<input type="checkbox"/> High school and below/in study <input type="checkbox"/> Junior college/reading <input type="checkbox"/> Undergraduate / in-study <input type="checkbox"/> Master / in-study <input type="checkbox"/> Dr.and above
4	Your career?	<input type="checkbox"/> student <input type="checkbox"/> teacher <input type="checkbox"/> public functionary <input type="checkbox"/> Enterprise personnel <input type="checkbox"/> other
5	Cultural dissemination strength of environmental sculpture	<input type="checkbox"/> 5 points for the highest level of satisfaction <input type="checkbox"/> A score of 4 indicates great satisfaction <input type="checkbox"/> 3 points to indicate moderate satisfaction <input type="checkbox"/> 2 indicates a low level of satisfaction <input type="checkbox"/> A point of 1 indicates the lowest level of satisfaction
6	Daily maintenance of the environmental sculptures	<input type="checkbox"/> 5 points indicate the highest level of satisfaction <input type="checkbox"/> A score of 4 indicates great satisfaction <input type="checkbox"/> 3 points to indicate moderate satisfaction <input type="checkbox"/> 2 indicates a low level of satisfaction <input type="checkbox"/> A point of 1 indicates the lowest level of satisfaction
7	The visual effect of the environmental sculpture	<input type="checkbox"/> 5 points for the highest level of satisfaction <input type="checkbox"/> A score of 4 indicates great satisfaction <input type="checkbox"/> 3 points to indicate moderate satisfaction <input type="checkbox"/> 2 indicates a low level of satisfaction <input type="checkbox"/> A point of 1 indicates the lowest level of satisfaction
8	The cultural content of the environmental sculpture	<input type="checkbox"/> 5 points indicate the highest level of satisfaction <input type="checkbox"/> A score of 4 indicates great satisfaction <input type="checkbox"/> 3 points to indicate moderate satisfaction <input type="checkbox"/> 2 indicates a low level of satisfaction <input type="checkbox"/> A point of 1 indicates the lowest level of satisfaction
9	The material of the environmental sculpture	<input type="checkbox"/> 5 points indicate the highest level of satisfaction <input type="checkbox"/> A score of 4 indicates great satisfaction <input type="checkbox"/> 3 points to indicate moderate satisfaction <input type="checkbox"/> 2 indicates a low level of satisfaction <input type="checkbox"/> A point of 1 indicates the lowest level of satisfaction



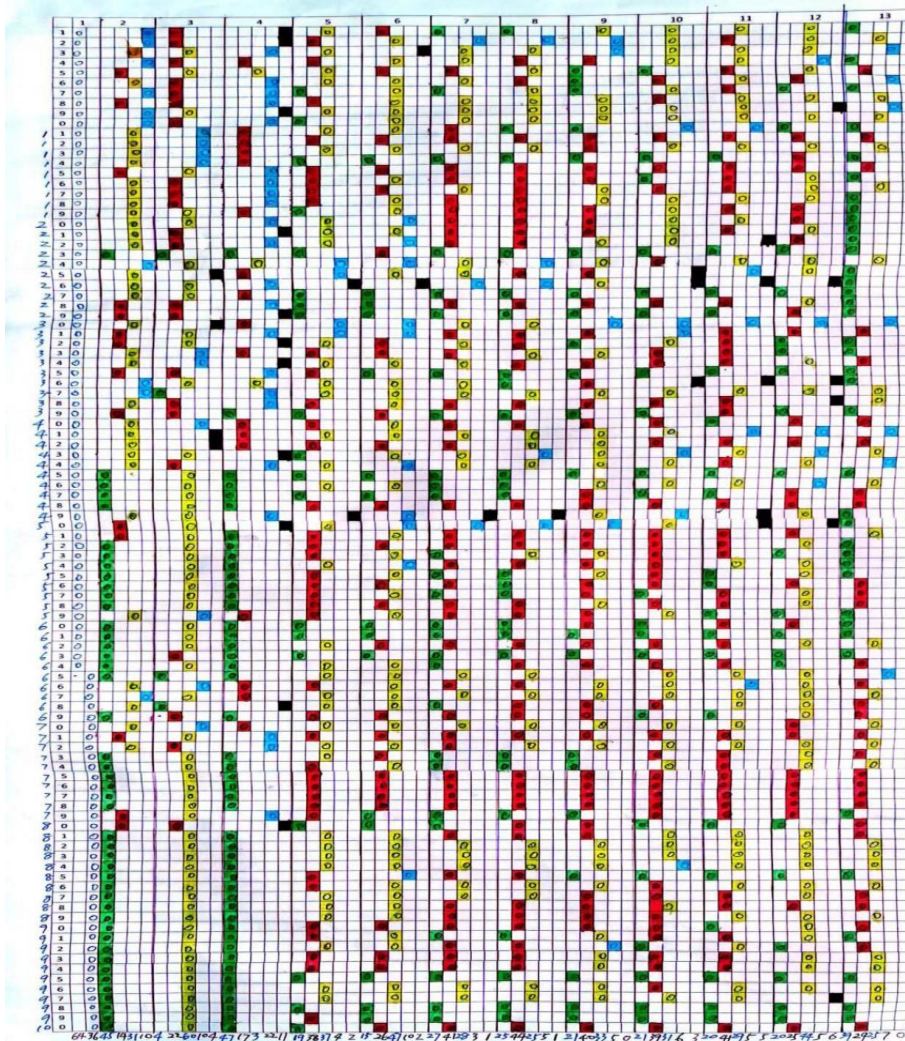
order number	question	answer
10	Cultural transmission way of environmental sculpture	<input type="checkbox"/> 5 points indicate the highest level of satisfaction <input type="checkbox"/> A score of 4 indicates great satisfaction <input type="checkbox"/> 3 points to indicate moderate satisfaction <input type="checkbox"/> 2 indicates a low level of satisfaction <input type="checkbox"/> A point of 1 indicates the lowest level of satisfaction
11	Derivative value of environmental sculpture	<input type="checkbox"/> 5 points indicate the highest level of satisfaction <input type="checkbox"/> A score of 4 indicates great satisfaction <input type="checkbox"/> 3 points to indicate moderate satisfaction <input type="checkbox"/> 2 indicates a low level of satisfaction <input type="checkbox"/> A point of 1 indicates the lowest level of satisfaction
12	Whether you know anything about the meta-verse	<input type="checkbox"/> 5 points indicate the highest level of satisfaction <input type="checkbox"/> A score of 4 indicates great satisfaction <input type="checkbox"/> 3 points to indicate moderate satisfaction <input type="checkbox"/> 2 indicates a low level of satisfaction <input type="checkbox"/> A point of 1 indicates the lowest level of satisfaction
13	Can accept the metaverse system management of Huai'an environmental sculpture	<input type="checkbox"/> 5 points indicate the highest level of satisfaction <input type="checkbox"/> A score of 4 indicates great satisfaction <input type="checkbox"/> 3 points to indicate moderate satisfaction <input type="checkbox"/> 2 indicates a low level of satisfaction <input type="checkbox"/> A point of 1 indicates the lowest level of satisfaction

Results:

1. The historical evolution of environmental sculpture art in Huai'an City

The origin of environmental sculpture art in Huai'an city can be traced back to ancient times. During the ancient civilization period, there was sculpture art in Huai' an area, which is mainly manifested in architecture, sculpture, and utensils. With the development of society and the prosperity of the economy, the environmental sculpture art in Huai'an City has gradually flourished and become an indispensable part of people's lives and urban construction. The development characteristics of environmental sculpture art in Huai'an city include: (1) the combination of tradition and modernity: based on traditional culture, Huai' a city environmental sculpture art absorbs the elements of modern art and forms a unique style. (2) Reflect local characteristics: The environmental sculpture art of Huai'an city pays attention to reflecting the unique cultural and folk traditions of the Huai'an an area in the selection of expression forms and themes. (3) Breakthrough through traditional style: With the development of society and the change of people's aesthetic concept, the environmental sculpture art of Huai' an has gradually stepped out of the traditional restrictions and shown more innovative and personalized works.

2. There are some problems in the management of environmental sculpture art in Huai'an City.



(Statistical chart of Huaian Environmental Sculpture Social Survey questionnaire)

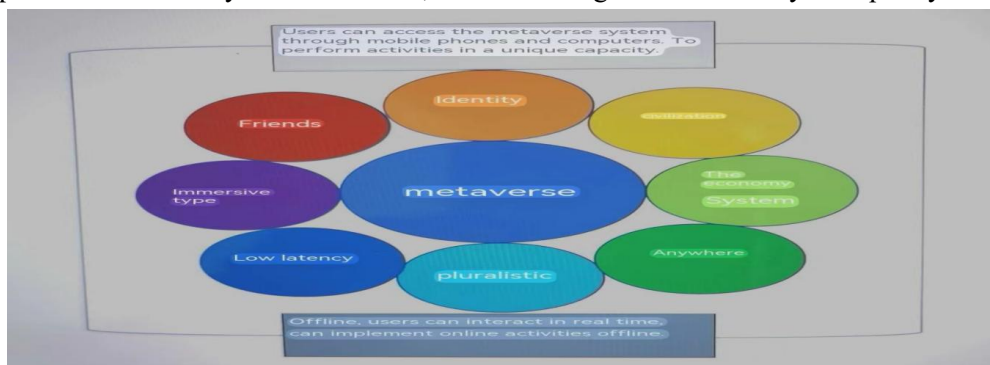
Researchers conducted field visits on 30 environmental sculptures in Huai'an city and selected 100 people of different ages, occupations, and academic qualifications for a questionnaire survey. The results showed that among the people who pay attention to environmental sculpture, the majority are young people with bachelor's degrees, accounting for 60% of the total number of the questionnaire. The results of the seven questions related to the art of environmental sculpture in the questionnaire showed that the ratio of moderate satisfaction and good satisfaction was 72%, the ratio of the lowest satisfaction was 2%, and the ratio of the highest satisfaction was 21%. For the questions related to the meta-verse, 69% said they just heard or knew a little, and 20% knew it. Thirty-nine percent of people can actively accept the digital system for managing the environmental sculpture, 29 percent will reluctantly accept it, 25 percent are in a neutral state, and no one will accept it at all.

According to the analysis, there are still some problems in the management of environmental sculpture art in Huai'an City. (1) the lack of professional management institutions: at present, there is a lack of institutions specifically responsible for environmental sculpture management in Huai'an city, which leads to the dispersion and confusion of the management work. (2) Lack of unified management standards and norms: the quality and style of each sculpture work are quite different, which cannot form a good overall effect. (3) Poor maintenance and protection: some environmental sculpture works have the problems of poor maintenance and protection, resulting in the damage and decay of the works.

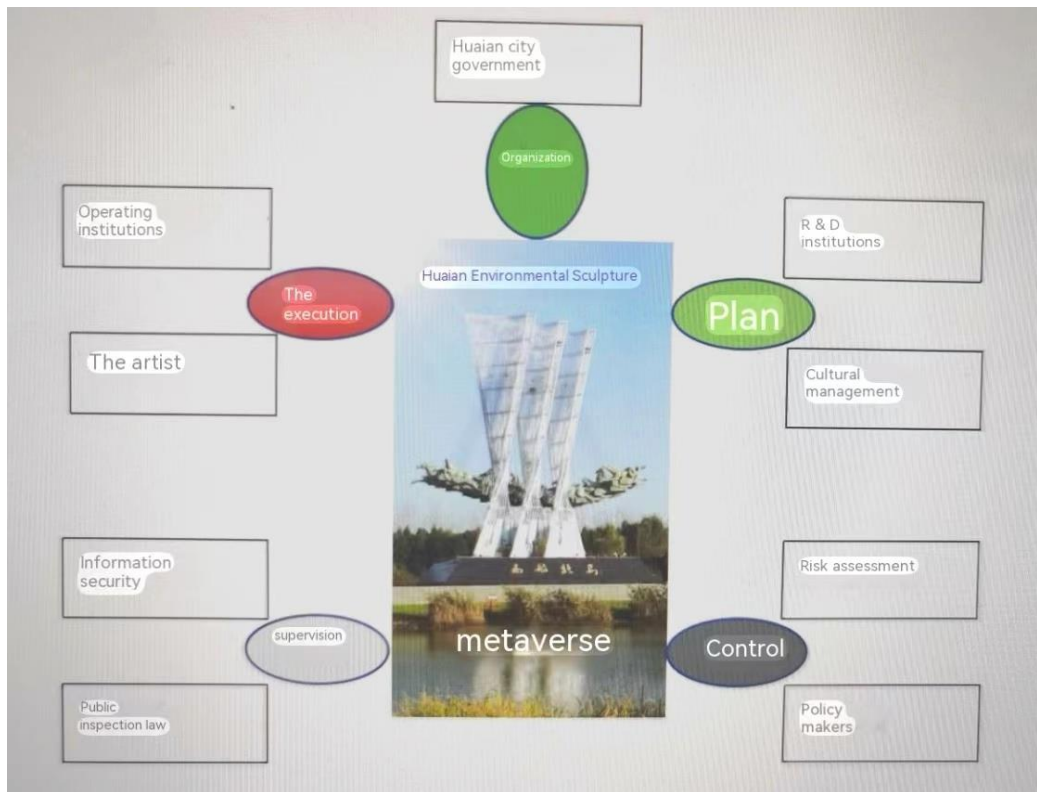
3. Implementation plan of the metaverse digital technology



Through the expert interview and the case analysis and demonstration, given the existing problems of environmental sculpture management in Huai'an City, this paper proposes the application strategy of introducing the meta-universe digital management system. Specifically, it includes the establishment of a large model of Huai'an environmental sculpture, the computing power database, the development of an artwork monitoring system, and the optimization of the management process. Through these strategies, the comprehensive management and monitoring of the environmental sculpture in Huaian City can be realized, and the management efficiency and quality can be improved.



(Operation diagram of the universe digital system)



(Implementation Plan of Huai'an City)

Discussion

By using Metaverse digital technology to manage the environmental sculpture art of Huai'an city, it can enhance the cultural image of the city, enhance the cultural pride and sense of belonging of the citizens, and promote the development of the urban cultural industry. At the same time, digital technology also provides more management and promotion means for art managers, injecting new vitality and impetus into the construction of urban culture. It is hoped that the research results of this paper can provide some reference for the cultural management departments and art institutions of Huai'an City, and promote the development and diversification of urban environmental sculpture art.

Metaverse digital system is an integrated management system based on digital technology, which can help art management institutions realize digital management, display, and promotion. As a city with rich environmental sculpture resources, Huai'an city can manage and display these artworks through the meta-cosmic digital system. This paper, through the interpretation of the literature review, analyzes the historical and cultural characteristics and Huai'an environment sculpture art characteristics, the Huai'an environment sculpture for many field trips, and the environment sculpture surrounding tourists' field questionnaire survey, the government management agencies, sculpture art, environmental design, yuan universe four areas seven experts' expert interview, and summarizes the interview results are analyzed. This paper discusses the application and advantages of the digital system in art management and puts forward the implementation plan and management analysis of the digital system management in Huai'an City. The relevant issues in the research process are discussed, and the future development direction of this study is discussed.

Recommendation

This research believes that the metaverse digital system will provide a comprehensive information management and display platform for the management of environmental sculpture art in Huai'an City. The meta-space digital system can also be integrated with other cultural tourism resources to provide tourists with a richer and more diversified cultural tourism experience. It is



suggested that the government actively promote the digital system management of Huai'an environmental sculpture.

This research puts forward suggestions for the development of digital sculpture art. To better develop digital sculpture art, technology research and development, and equipment popularization should be strengthened to reduce the cost of digital sculpture art so that more people can experience the charm of digital art. At the same time, digital sculpture art education should be strengthened to cultivate more talents with digital technology and artistic creation ability. In addition, interdisciplinary cooperation should be strengthened to promote the integration of digital sculpture art and other art forms and to create more innovative and unique works.

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