

# Research on the dynamic design of art exhibitions based on digital media

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**Abstract.** In today's art exhibitions, art works are no longer the traditional static display exhibition, but have a more diversified space to create, communication channels, experience ways. Dynamic design has become an irresistible force in today's art exhibition, which greatly innovates the form of art display, improves the effect of art communication, and plays an important role in promoting the construction of public culture. Based on digital media, this paper mainly puts forward corresponding dynamic design strategies from four aspects of dynamic information chart, dynamic observation perspective and dynamic exhibition narrative, so as to enrich the exhibition form and promote the integration of art and technology.

**Keywords:** digital media; art exhibition; dynamic design; interactive experience.

## 1. Foreword

With the rapid development of digital technology, various industries are accelerating the digital transformation. The new form of digital media has injected fresh vitality into art exhibitions, breaking the traditional exhibition mode and created a more creative and interactive exhibition space. Nowadays, the dynamic exhibition has been developing towards a more and more powerful direction. Both at home and abroad are actively using this feature in the operation and management of art museums. In recent years, more and more pavilions are constantly breaking through traditional and innovative exhibition forms to make works more powerful and attract more audiences. Therefore, modern art museums also need to make breakthroughs from various angles and make dynamic design of art exhibitions with the help of digital technology.

## 2. Overview of the dynamic design

Dynamic design is a design concept that emphasizes the introduction of movement, change and interaction elements in the design. The concept has applications in a variety of fields, including digital media, art exhibitions, user interface design, architectural design, and more. In the art exhibition under digital media, dynamic design focuses on the use of digital technology and interaction to break the static form of traditional art exhibition, so that the audience can participate in the exhibition and interact with the art works, so as to create a richer and vivid viewing experience. The core ideas of dynamic design include:

(1) Interactivity and participation. Dynamic design encourages visitors to actively participate in the exhibition, no longer limited to passively viewing art. Through the interactive design of digital media, the audience can interact with the artwork, change its presentation form, and even participate in the process of artistic creation.

(2) Movement and change. With the introduction of movement and change elements, the exhibition space is no longer static, but full of life and vitality. This can be achieved through projection, virtual reality, video and other technical means, so that the art works can present a more diverse state in time and space.

(3) Personalized experience. The dynamic design also emphasizes the personalized experience, that is, to customize the unique exhibition experience for the audience according to the audience's interest and participation degree. This can be achieved through data analysis and intelligent technology, so that each audience can find their own relevant elements and interaction points in the exhibition.

### **3. Dynamic design strategy of art exhibitions based on digital media**

#### **3.1 The infographic is dynamic**

In the era of big data, the amount of information shows an explosive growth, which is very important for data integration and analysis. Information chart data is the most intuitive and eye-catching way of data display. However, the static information charts in traditional art exhibitions have small information carrying capacity, simple illustrations, and cannot be added into the hearing of information transmission process, which leads to the weak ability to spread information in information charts, and it is difficult to achieve the purpose of effective communication. The dynamic presentation of information charts is one of the effective ways to enhance the audience experience and exhibition attraction. The application of digital interactive devices, virtual reality and augmented reality technology enables the audience to interact with the art, deeply understand the creative intention of the creators, and stimulate the audience's thinking and feeling. This interactivity not only increases the participation of audiences, but also expands the boundaries of art exhibitions, making them more open and inclusive. Through the dynamic design of the infographic, the art exhibition radiates new vitality in the digital transformation, providing the audience with a more rich and in-depth art experience. In Henan province art museum, for example, through the dynamic design of experience area information chart, realize dynamic data, let originally boring obscure data become vivid and interesting, using dynamic rendering instead of traditional statistics, discounted figure, fan, etc., by using the dynamic design, can quickly attract audience attention, in addition, the audience through intelligent interaction mode better and faster access to corresponding information, enhance the audience read interest, improve the data interaction.

#### **3.2 View the streamline is dynamic**

Streamlines can effectively divide and organize the space. Streamline design and planning in art exhibitions play an important role in watching the exhibition rhythmically. With the help of digital media technology, the dynamic design of viewing streamline is carried out, the traditional viewing streamline is broken, and the more flexible streamline organization is adopted. For example, the main methods are wall segmentation, curve enclosure, and curtain segmentation. The plane layout is cleverly designed, making the streamline more changeable, and making the audience in a state of visiting movement in the exhibition space. In Chengdu museum, for example, curator application is radiation series, exhibition line is multi-directional, each exhibition unit can flexible shuttle, exhibition hall internal multimedia items, using the way can good separation of personnel, in order to avoid people jam, at the same time, to the audience maximum exhibition freedom.

#### **3.3 Dynamic observation perspective**

Through digital technology, virtual reality and augmented reality, the exhibition space can present a more vivid and diversified visual experience in front of the audience. By introducing interactive devices, projection technology, and holograms, the audience can interact with the artworks in more diverse ways. The audience can change the images in the exhibition space by gestures, sound or touch to adjust the Angle and content of the observation. This interactivity not only enables the audience to participate in the process of artistic creation, but also creates a more personalized exhibition experience. Through virtual reality technology, audiences can be immersed in a digital art world, thus expanding the dimension of observation. The head tracking technology can change the perspective of the audience and perceive the art in a new way, making the exhibition process more rich and immersive. This dynamic design not only breaks the limitation of traditional exhibition viewing, but also provides the audience with a more avant-garde and innovative viewing experience, and further stimulates their curiosity and desire for deep understanding of art.

### 3.4 Dynamic exhibition narrative

In the information age, the audience is more and more eager to get a rich, vivid and interesting exhibition experience. The traditional exhibition narrative is often static, mostly using a single and straightforward linear narrative form, which is difficult to meet the needs of the audience. Museums urgently need to change their narrative thinking to a more diversified story expression, so as to improve the communication effect. Through the introduction of digital technology, multimedia interaction and virtual reality, the exhibition narrative radiates more vivid and diverse vitality. The dynamic exhibition narrative puts the audience in a participatory narrative experience through the digital platform, real-time interaction and virtual elements. The audience no longer passively receives the exhibition information, but can construct the exhibition story together by triggering interactive elements, participating in decisions or choosing different exhibition paths. The audience can experience the narrative plot in the virtual scene and have a more intimate connection with the artwork. This dynamic design not only enriches the narrative form of the exhibition, but also makes the audience become the co-creator of the story in the exhibition, promoting the more profound interaction and communication between the art exhibition and the visitors.

## 4. Conclusion

The extensive use of digital media has given the exhibition hall a greater creative space, and promoted the development of traditional exhibition forms to a more interactive and personalized direction. The introduction of identification technology, virtual reality technology and multimedia technology enriches the interactive experience between the audience and the art, making the exhibition become a dynamic and vivid space. In addition, the integration of digital technology also provides a richer means of expression for artistic creation. The dynamic design of art exhibition under digital media provides new possibilities for the integration of art and technology, and points out the forward direction for the development of future exhibition design.

## References

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