

## Application of BIM Technology in Environmental Art Design

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**Keywords:** BIM Technology, Environmental Art Design, Optimization Design

**Abstract:** In today's new high-end technology society, BIM technology has gradually received more and more attention, recognition and promotion of the construction industry, in the last three to five years, the design industry, owners and enterprise construction teams, basically have been applied to BIM various applications of this technology and practical work. Environmental art design enterprises have also carried out a lot of practice and exploration in BIM technology and optimization design, site management of simulated construction and use management in the later stage of design.

### 1. Introduction

Along with the development of science and technology, BIM technology has gradually become the front-end technology in the field of architectural design and engineering, in recent years, gradually in the country and around the world widely used, recommended. At present, large and medium-sized enterprises in China have set up their own BIM technology studio or BIM technology team. And when it comes to BIM technology, most people in construction and design know more or less about it, which shows that BIM technology is being implemented quickly in China. However, as a relative management technology, it is a completely different management technology, because the BIA technology has completely changed the enterprise in the design, work medium management staff a work model. Thus, both in terms of the current BIM software and on the basis of the model of collaborative and integrated management innovation, the development of BIM technology has been promoted in all kinds of enterprises throughout the country with an overwhelming momentum. This is like a huge change in the world brought about by an innovation in information technology two decades ago. BIM technology has a profound and significant impact on design enterprises, construction enterprises, regulatory units or on the designers, managers and supervisors of their enterprises. This paper briefly expounds the current development and problems of BIM technology in our industry, and emphatically introduces the concrete application of BIM technology in the construction stage of environmental art design, and makes a bold prospect for the future vision of this technology [1].

### 2. Current Situation and Existing Problems of BIM Technology

Since the twenty-first century, with the BIM of the application of this technology in various aspects, such as 3 D three-dimensional construction drawings ,4 D 、 the establishment of data models for construction systems ,5 D construction management drawings, because it has a traditional 2 construction drawings can not achieve an advantage, has gradually made domestic construction enterprises feel the development potential of this technology and development space. According to the report, the various domestic construction enterprises, especially some domestic construction industry, their leaders have carried out various degrees of practice and exploration, in addition to the bidding for the project, but also in the design and improvement of engineering buildings, and most enterprises in the construction process, the use of auxiliary software, program QR code, operation and maintenance of the later period of these aspects of management have carried out their own research and development [2]. And a significant number of corporate

companies work with schools at home to develop indicators of BIM technology-themes. But even so, on the whole, the current BIM technology in our country is still underdeveloped, not fully developed stage, even if the technology has made a large amount of capital and technology investment, but the benefits are not so satisfactory. Nevertheless, despite the high level of investment, BIM technology has received strong support and approval in the bidding process of construction, and has also been used to a certain extent in the design of construction D calculation, index detection function, the basic role is still relatively chicken rib, most of them are still in the stage of use, there is no normal and rapid and efficient use.

### **3. Application of BIM Technology in Environmental Art Design**

#### **3.1. Components of Environmental Art Design**

It is well known that in the early stage of construction, there are many complicated procedures for the design part of the building, such as the overall design concept of the construction project, the selection of green plant distribution and planting area, and so on. In a professional complete design document will generally include the design of the design, design topics classification and design equipment requirements and so on. At the same time in this design process will also include the design of the overall schema, side analysis map, design of various equipment system diagram and so on will focus on the design of the drawings, as detailed as possible to mark out. Of course, the modeling of design models of environmental art generally requires the appearance of these models, as well as the internal shape, data accuracy as high as possible, has been guaranteed in the subsequent construction processing can be more accurate, reduce the occurrence of accidents or mistakes. And this series of processing can be obtained from the software of BIM technology.



Figure 1 Application of BIM technology

#### **3.2. Information Data Analysis of Environmental Art Design**

According to the relevant data analysis, we can know that the software of BIM technology class is able to make the plan drawing and design. In addition to the design of water flow in the design of drainage, other designs can be from the big database data support and help. However, the software used in the development of this system diagram lacks the specific experimental data, which leads to the influence of the accuracy when people do the calculation, so that there will be various errors and errors which can not be estimated during the operation. Generally speaking, in the process of using the software of BIM technology, we need to perfect all the relevant data in the database as far as possible to support the development of the software used in the later technology. Therefore, after formulating the general theme and direction of the database, we should firmly do the attributes of the database, perfect and integrate the data according to the arrangement of the attributes, and then develop and perfect the transmission and exchange between the data, and try to achieve the accuracy of the data in the process of use.



smoothly. Another is to set up a special BIM technology management department in the design department, the main responsibility is to carry out the work of opening up and applying BIM technology. Let it be a proponent of some mega-projects.

## **5. Summary**

To sum up, the current BIM technology in our country is still not perfect, under the situation of disproportionate investment and income, the major enterprises in our country still pay a lot of input in this technology, because the future development of BIM technology will be a good situation, and BIM technology itself will bring all kinds of convenience to our future undertakings, so that all industries can benefit from it. As a result, domestic enterprises are more keen to promote the use of BIM technology. Among the top companies, especially in these industries, they use BIM technology to make them better in the industry, so this shows that if the enterprise has made a great achievement in BIM technology, then he will be more competitive in the same industry than others, and more authoritative in technology. As a result, to some extent BIM the developed maturity of this technology will almost affect the future operation of enterprises and economic benefits.

## **References**

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