

# RESEARCH ON THE RELATIONSHIP BETWEEN BIM TECHNOLOGY AND PROJECT INFORMATION MANAGEMENT

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**Annotation.** This paper analyzes the basic content of BIM technology, describes the relevance of BIM technology and project information management, and puts forward the application of BIM technology in project information management. BIM technology enables project information to be effectively acquired, stored, and archived through the information management of the project's system, work, and data. Ultimately, it achieves the purpose of improving the information management efficiency of construction projects, effectively carrying out project information transmission and controlling project construction, and providing basic guarantee for project quality.

Accompanied by global economic growth and the development of the construction industry, large-scale engineering and construction projects are increasing. Large-scale engineering construction projects are characterized by large-scale investment, long implementation cycle, high technical compliance, special resource requirements, etc., which require a high level of engineering management. Through the application of BIM technology in project information management, it can effectively improve the efficiency of construction project information management and reduce the occurrence of unnecessary problems caused by project information errors.

Building information modeling (BIM) technology is a technical means of building information modeling [1], and BIM technology will scientifically manage the development, construction, use of building materials, software development, maintenance and other aspects of the project. Project information management is the reasonable organization and control of information transmission, through the collection, processing, transmission and application of engineering information, thereby enhancing the efficiency and accuracy of project management. The flow chart of project information management is shown in fig. 1:

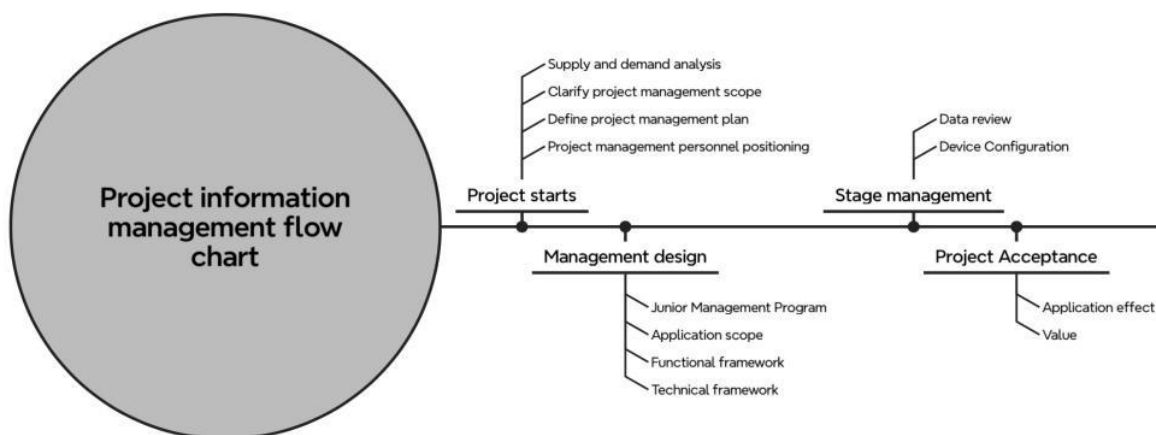


Figure 1 – Project Information Management Flowchart

Combine the construction of Four Dimensional Building Information Modeling (4D-BIM) with project information management. 4D-BIM technology makes it easier to track project information and link 3D models to project delivery schedules by construction phase. Ultimately, information resource planning is organized by location and productivity. The four-dimensional building information modeling diagram is shown in fig. 2:

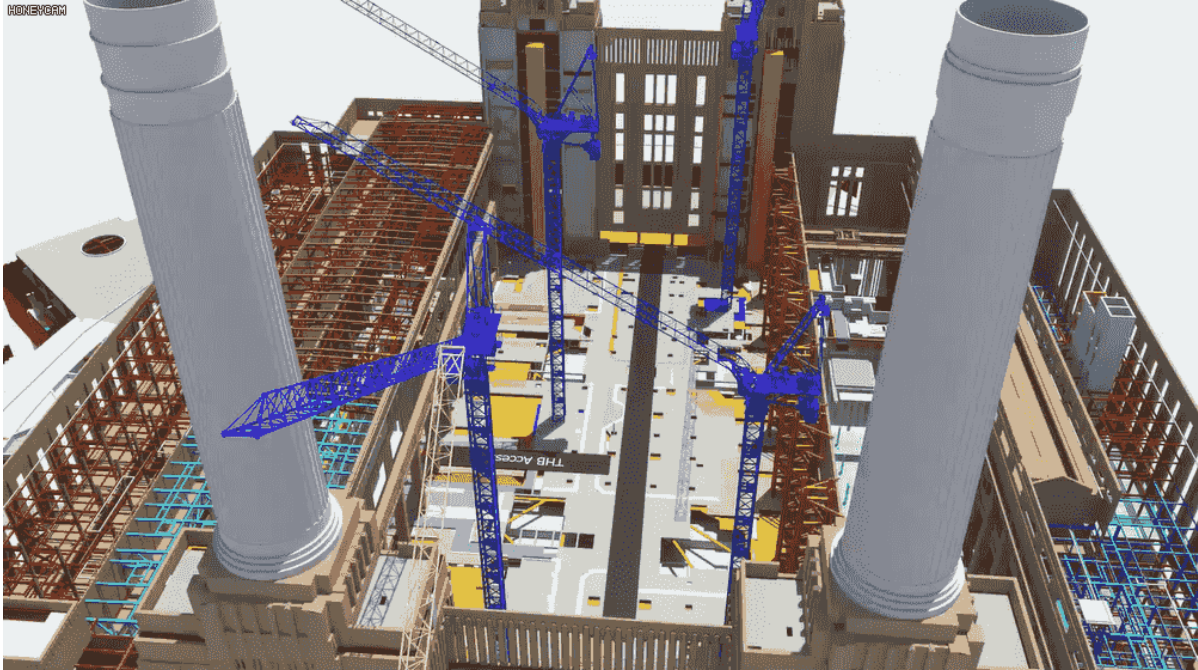


Figure 2 – The four-dimensional building information modeling

The four-dimensional building information model can be combined with the fire protection design plan, water conservation design plan, cultural heritage design plan, health design plan, transportation planning design plan, seismic design plan, energy-saving design plan, and confidentiality design plan to carry out complete project information management. And in the bidding stage to retain the bidding, construction, supervision contracts, notice of award and other information materials; in the design stage to retain the construction drawings design materials; in the construction stage to retain the construction safety supervision procedures information materials; in the completion stage to retain the record materials and project handover materials.

### References

1. Unified standard for building information modeling application: gb/t 51212-2016 [S]. – Beijing: China Construction Industry Press, 2016.