Research on Computer Information Management Platform of Construction Technology in Construction Enterprises

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Abstract. With the continuous progress of society, people's demand for quality of life is higher and higher, and in the work, all industries are paying more and more attention to excellence. In the construction of construction enterprises, with the progress of construction technology and the more powerful function of mechanical equipment, the position of computer information management in it is becoming more and more important. This paper discusses the function and necessity of computer information management system in building construction technology, and demonstrates it with examples.

Keywords: Construction, Construction Technology, Computer Information

1. Introduction
With the continuous integration of China's economy with the international, all kinds of enterprise management has gradually moved towards regularization and modernization, followed by enterprise information. Enterprise information is that enterprises use all kinds of modern information technology to collect and analyze all kinds of information of enterprises, so as to provide comprehensive and scientific information services for enterprises, make scientific decisions, and promote the healthy and stable development of enterprises[1]. Enterprise information management is the key of enterprise scientific management and scientific decision-making, and computer technology is the core of enterprise information management.

Project management aims to maximize the economic benefits of construction enterprises, and it is of great significance to continuously improve the management level of enterprises. With the rapid development of computer technology, the application of computer technology to construction management is an inevitable trend in the development of construction enterprises. In the increasingly fierce market competition, efficient enterprise management and scientific enterprise management constantly bring strong competitiveness to construction enterprises. In such an environment, construction information management system came into being. The construction management
information system takes the project as the goal, uses the computer aided engineering project management information system, to a certain extent enhances the construction enterprise information, and enhances the construction enterprise work efficiency and the construction management validity scientific nature.

2. Computer information management platform

2.1. Role of information management systems
Management information is an important resource, and management information is the basis of decision-making. At the same time, management information is the basis for the implementation of management control and the link between the organization and the outside. For enterprises, the five most important resources include people, materials, energy, funds and information. People, materials, energy, capital are visible tangible resource. Information is a relative to tangible resources in terms of intangible resources. Since entering the era of information society and knowledge economy, the status of information resources in enterprises has become increasingly important. Because the information resources you, not only the human and the natural struggle in the knowledge crystallization, at the same time the enterprise grasps the information resources, can make better use of the tangible resources, so that the tangible resources are better play, better benefit. And decision-making is very closely related to information[2-4]. Some enterprises in the past, often only by experience or the kind of decision-making, it is easy to make mistakes in decision-making, bring bad influence to enterprises. In the process of management control, the enterprise gradually uses information to control the whole production process and the operation of the service process, at the same time, it also relies on the feedback of information to constantly revise the enterprise's existing plans, and the enterprise also relies on information to implement the management control. In normal production there are a lot of things cannot be well controlled, the most fundamental reason is that there is no good grasp of comprehensive information.

2.2. Application of construction information management in china
In recent years, more and more funds have been invested in the development of information management in China. To a certain extent, the investment in the development of information management in construction projects has stimulated the vigorous development of the construction industry, which is conducive to improving the level and status of information technology in China and strengthening the strength of the construction industry. The information system can be used to manage the construction personnel, the project design and the information of the design process. However, some enterprises still use the traditional management mode to manage the construction. In the construction project management, the information dissemination is relatively slow. By comparing the construction supervision and construction design, we can see that the information management technology in our country is still in a backward stage in use. In addition, in the construction engineering market, the software used for supervision is very little, which leads to the supervision work not in place in the construction, which often appears some irregularities and affects the construction quality. Figure 1 is the construction technology computer information platform organization chart.
3. The necessity of computer information management construction technology

In construction engineering projects, information management is a management mode based on advanced information technology and aimed at optimizing management. Using information management, enterprises can realize the scientific and reasonable allocation and scientific utilization of related resources of enterprises. It also has very important practical significance in the development process of construction projects, including project decision management, project construction management, project use management, and so on. (1) The application of information technology in construction project management makes the construction project management become information. When some work involves the field of information, many works becomes simple. Information technology is the way to make construction project management work become simple. (2) The application of information technology to the construction project management has greatly improved the efficiency of the construction project management, made the work progress more orderly, and finally made the speed of production to the maximum extent. So that production efficiency is also greatly improved. In short, information management of construction projects can effectively improve the efficiency of construction. (3) Building engineering has a large amount of information, the generation of new information at all times, the promotion of new technologies and materials, the exchange of various information and consulting information, and the search for cooperative information, so it is extremely necessary to create a building engineering information system, which can ensure the timeliness of information. In the process of system data circulation, if there is resistance to hinder the transmission of information, it will produce unnecessary waste of human resources, opportunities to harm the interests of enterprises, and will affect the development of the construction market[5-6]. It can be seen that the use of information management can make up for the imperfect information feedback and transmission mechanism. Network information management in the implementation of the project can make the material suppliers, equipment suppliers and developers owners, subcontractors, contractors, designers, engineers and so on to work together to achieve the
goal of reducing risk, reducing costs, ensuring quality while shortening the duration of the project.

4. Construction project management information system

4.1. The necessity of developing information system for construction project management

With the increasing trend of large-scale, integrated and complicated construction projects, and the further strict constraints of input, schedule, quality, safety and environment, improving the efficiency of project management, completing contracts with high quality and meeting the requirements of safety and environment under limited time and input has become a major challenge to the current construction project management. Accurate, timely and relevant information is the essence of the project decision-making process, and information is a very important resource for the project manager. However, project managers are always unable to submit the kinds of information that ensure the success of the project, so building a project management information system is a way to meet the important project information needs, as well as an important infrastructure and means of large-scale project management. In the increasingly fierce environment, many large construction enterprises are faced with many management difficulties, which need to improve the management level by means of information technology. Under the existing environment and conditions, it is of great practical significance for enterprises to study how to build and implement a safe, effective, reliable project management information system that can change with the development of enterprises to support project management, so as to improve the ability of project management and then enhance the competitiveness in the market environment.

4.2. Construction technology management information system

Project management information system is an information system which aims at engineering project and uses computer aided engineering project management. It is based on the management analysis of project running information and provides information services and decision support tools for project management. Project management information system, involving all aspects of the overall planning, organization, leadership, control and evaluation of the project, including quality control, schedule control, cost estimation and cost control, material control and document control, and the implementation of dynamic management and control of the whole process of the project. PMIS do not have only personnel files, wages, finance and other routine static management information as before, but add a lot of production real-time dynamic control in the process of production construction. There is a lot of real-time data and information to be processed, need a variety of charts, real records of the project execution process, constantly adjusted plans. The key to the realization of these functions is to integrate the more mature and advanced project management software with the information management software of engineering enterprises, and realize the real-time information sharing and interoperability.

5. Main contents of computer information system

5.1. Requirement analysis

The basic task at this stage is to answer the question of what to do. Through the investigation of the enterprise, through the investigation of the enterprise, understand the enterprise's purchase, sale and storage management process and the enterprise's requirements for the system, and then refine, analyze and review these requirements. The most direct benefit of the application of construction information
The management system is the economic benefit, and more importantly, the long-term benefit to the enterprise. After the implementation of the construction information management system, enterprises will greatly improve the competitiveness of enterprises in the market, which is conducive to the further development of enterprises. Through the implementation of the construction information management system, the company's sustainable development brought a huge role in promoting. The exact requirements of the system are determined from four aspects: the functional requirements of the system, the performance requirements of the system, the operational requirements and the possible requirements in the future. There are several modules: contract management, cost management, project management, schedule management, quality management and document file management.

5.2. System function

Construction technology computer information management progress flow is shown in figure 2. From the flow chart we can clearly see the sequence of each step of the system and the role in the system structure.

![Diagram](image-url)

**Figure 2.** Progress flow of construction technology computer information management

6. Conclusion

China's enterprises in the process of international integration, the degree of information is constantly improving, the rapid development of computer technology for China's construction technology information management provides a strong guarantee. And the application of computer technology in enterprise information management ensures the smooth progress of construction technology information. The computer information process plays an unparalleled role in the construction technology management of construction enterprises. It is the product of information and is produced and developed by construction enterprises under the condition that the information requirements are constantly improving. Its applications will wings for the development of construction enterprises and help construction enterprises to get faster and better development!
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