Application of Computer Application Technology in Engineering Project Management

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Abstract. In today's society, with the rapid development of economy, the scope of computer application technology has been gradually expanded and applied in various fields. And computer application technology plays a decisive role in engineering projects, the development of engineering project management must rely on the application of computer. Therefore, this article mainly discusses the application of computer application technology in engineering project management, hoping to provide some help for related workers.

1. Introduction

Engineering project management is a comprehensive professional discipline, and pays more attention to cultivating compound management talents in talent training. With the rapid development of computer electronic information technology, it has become an indispensable technical content in engineering project management. In the actual project engineering management, the application of computer technology can fully integrate all kinds of data information in engineering projects. It is also completely saving data information and making project engineering management more effective, and the scope of application of computer application technology is also extensive, making the management of engineering projects convenient and fast. This greatly improves the efficiency and effect of project management, and significantly improves the overall management quality of the project. It can be seen that the application of computer electronic information technology in engineering management is of great significance, enterprises need to pay more attention to this in engineering management.

2. Disadvantages of traditional engineering project management

2.1. Low attention to informatization

On the whole, there are still a large number of managers who have not established awareness of using information technology for project management, and do not actively pay attention to the latest developments in current information technology. Still using backward and inefficient management methods, it is make engineering management information inaccessible. In addition, the awareness of management personnel in the organization unit did not keep up with the trend in time, resulting in imperfect information system construction and low quality, and could not provide basic support for the information management of the project. So, China's engineering project management is still in a relatively backward situation.
2.2. **High working intensity**

Project management contains a wide range of content. If only rely on labour to handle these complicated processes, it will obviously increase the work intensity of employees. It may also affect the accuracy of the information data, thus affecting the construction of the project.

2.3. **Less contact with the international**

In terms of project management, future projects will inevitably be in line with international standards, traditional management models may not be able to meet the needs of modern project construction.

3. **The features of computer application technology**

3.1. **Resource Sharing**

Resource sharing refers to the relevant authority terminal and user project management information opened within the shared LAN according to the requirements. It needs to be carried out on the basis of database technology. For example, in engineering construction management, relevant management personnel need to count the required materials according to relevant standards and requirements [1], after verifying the information, the specific conditions of material consumption are entered into the database with the help of the computer. Enterprise financial personnel can get in-depth understanding of the enterprise’s current financial situation by collecting database material consumption information. It can be seen that the resource sharing characteristics of computer electronic information technology not only improve the efficiency of enterprises in engineering management to a certain extent, but also effectively avoid excessive consumption of labour cost and time cost.

3.2. **Precision management**

There are many design contents of project management, including technology, safety, quality, cost, labour and equipment. These links must be uniformly managed in accordance with relevant standards [2], which not only increases the pressure on managers at work, but also leads to omissions in the management process. In this case, the effective use of computer electronic information technology plays an important role in improving the service life of the project. In this work, managers can use the information management platform to finish related work in an orderly manner.

3.3. **Intelligent management**

At present, with the rapid development of society and economy, many things begin to develop towards intelligence, including computer electronic information technology. Because this technology has a certain anthropomorphic thinking in the application, it can deeply analyze and sort out relevant information [3]. In the practical application process, the computer can effectively avoid the errors that are easy to be generated by manual operations, thus improving the work efficiency to the greatest extent.

4. **Characteristics of computer engineering project management**

The transition from the traditional management model to the computer-based management model is an advanced reform measure. It's not just buying some computer equipment, but being able to manipulate them and master them. When using computer technology, it is necessary to fully understand its functions, so that it is possible to make the computer play a better level, solve the difficulties encountered in the project management project, and grasp the relationship between the manager and the controller. The management model and management system are matched with the computer management system, which is controlled by the computer. And a management mode is controlled by a computer, which is a special problem special treatment. But the computer management system also needs to be controlled by a good management technician, so that the computer can play a good role, advanced management must have advanced hardware facilities and high-capacity talents.
Traditional management is a paper plan, which is not efficient and has low work capacity, and consumes a lot of time and money. Modern engineering projects are large and involve more people, so they need to rely on computers to complete them, and improve efficiency, improve the quality of work, and promote the progress of the project.

Project management is a relatively complex network system. In the process of project planning and implementation, the project-related resources should be sorted out, and various tasks should be improved to achieve the highest level of management, which needs to rely on the engineering database and management database of computer technology. Therefore, it can be seen that the computer greatly affects the progress of the project.

5. Effective application of computer application technology in project management

5.1. Application of multimedia technology in project management

With the development of computer technology, there are more and more kinds of computer software and hardware, and the types of computer technology applied to project management have also increased. Among them, multimedia technology has been widely used in project management. At the present stage, the hardware facilities of computer technology in China have been fully meet the needs of project management. Therefore, more and more engineering project management company have begun to try to develop software facilities for computer technology. They present the contents of some engineering project management in the form of material objects through multimedia, which greatly improves the management efficiency of engineering projects, and enables staff to see the contents of engineering projects more intuitively, which is very beneficial to the development of engineering projects. However, in the application of multimedia technology, the relevant potential risks should also be fully considered. As multimedia technology is an open software, it is have certain security risks. Therefore, in actual use, the risk prevention should be strengthened to ensure the well implementation of the project [4].

5.2. Application of Network Communication Platform in Engineering Project Management

Large engineering projects often require the cooperation, participation and discussion of multiple enterprises. Only in this way can engineering projects be carried out well. Therefore, we should make full use of computer technology, establish a network communication platform, and establish a platform for communication when problems are found, they can be solved timely, and at the same time, each enterprise participating in the project can express their own views and make their own suggestions. Moreover, the network communication platform can also organize and collect information more conveniently and quickly, and then provide timely feedback. So that the project can be adjusted timely and effective, which makes the project management more timeliness and provides guarantee for the successful completion of the project.

In addition, in the initial stage of the project, the establishment of the network communication platform will enable the staff to collect and process various data and signals. At the same time, it also has the functions of synchronous input and implementation testing. In case of any abnormal situation of an engineering project, it can be quickly identified, which greatly improves the efficiency of the project, and can effectively reduce the probability of accidents in the project and promote the economic benefits of the project [5].

5.3. Using computer technology to carry out pre-management and quality management of engineering projects

The well development of engineering projects cannot be separated from the early planning work, so in the early planning of engineering projects, it is necessary to make full use of information technology for comprehensive consideration, thus laying a solid foundation for the project. In the pre-planning, the timeliness and convenience of computer technology can be used to comprehensively analyze the project, then according to the actual situation, develop a suitable project plan. Such comprehensive
preliminary planning can greatly improve the efficiency and effectiveness of the project. In addition, computer technology can effectively manage the quality of engineering projects. Because computer technology can effectively control the project materials, project personnel and project equipment, and carry out supervision and management of the implementation, so that the quality of project engineering can be optimally processed [6].

5.4. Application of Computer Technology in Risk Management of Engineering Projects
Generally, the construction period of engineering projects is relatively long, and the initial investment cost is also very large, which leads to some risks in the construction process of the project. Therefore, it is necessary to make reasonable use of computer technology to carry out risk management of engineering projects and to predict risks in real time. At the same time, when risks occur, solutions can be made in time to ensure the quality and safety of engineering projects and improve the quality of engineering projects.

6. Conclusion
In a word, computer application technology plays an important role in engineering projects, and it promotes the development of engineering project management. Although there are still many problems in the project management, the problems and disadvantages will certainly be solved through the efforts of all aspects of the society.

In engineering project management, computer application technology guarantees the quality of engineering project. Through the analysis of the application of computer technology in engineering management, it is concluded that the enterprise management personnel should pay attention to many aspects if they want to further improve the application effect of information technology in engineering management. With the help of these ways, the effect of computer application technology in project management can be maximized, and the level of enterprise engineering management can be improved to meet the needs of its own development, which plays an important role in promoting China’s social economic development.

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