Research on the Influence of Computer Internet on the Informatization of Project Cost Management

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Abstract. Project cost management (hereinafter referred to as PCM) is an important basic work, which runs through the whole process of the project. The traditional Project cost (hereinafter referred to as PC) needs a lot of manpower, which also has a lot of artificial errors. Therefore, the traditional PCM relies on the practical experience of the team. With the popularity of computer Internet, information management is gradually applied in PCM, which can improve the level of PCM. Through informatization, PCM can carry out information standardization. Through the establishment of a shared PC information network, we can establish a standardized PC pricing software audit procedures, which will be more scientific control of PCs, including engineering, equipment, materials, prices, etc. Through the PC, we can promote the comprehensive management, which can constantly improve the scientific thinking. First of all, this paper analyzes the influence of computer Internet on the informatization of PCM. Then, this paper puts forward some problems. Finally, some suggestions are put forward.

Keywords: Computer Internet, PC, Management Informatization, Influence

1. Introduction
With the popularity of the Internet, the engineering information data is increasing, which leads to the traditional calculation method is difficult to manage scientifically. Therefore, we must build the PCM information, which can more scientifically solve the problem of lag and error [1]. At this stage, big data has become an important support for the engineering cost information system, which can make full use of the information of engineering, equipment, materials, prices and so on. Through informatization, we can fully collect the engineering cost index, which will better account for economic indicators [2]. The Internet has changed the management mode of PC, which promotes the cross regional sharing of information resources [3]. Through the database, people can realize the classification, processing, processing and statistics of information resources, which can be more convenient for the rapid retrieval of PC. Through informatization, we can standardize standards, interfaces, management, etc., which will reduce the problem of redundant construction [4]. Through informatization, PCM can be more scientific for the whole process management, including investment
estimation, design concept, construction drawing budget, contract value, completion settlement and other processes [5].

2. Analysis of the influence of Internet on project cost management
The Internet puts forward new thinking and solutions, which will inevitably bring many effects on the PCM. The main management contents of PCM include valuation standard, cost system, cost information, employees, cost supervision, investment estimation, budget, project settlement, completion final accounts, etc. Therefore, the Internet will have a positive impact on the entire scope of management, as shown in Figure 1.

![Figure 1. Analysis of the impact of Internet on PCM.](image)

2.1. Improve the efficiency of PCM
Cost data runs through the whole process and penetrates into all aspects. The whole process of engineering construction is more complex, which is related to more participating units. In terms of PC, docking and communication are basically based on cost data. However, the current PC data information is in a relatively independent state, which is a lack of systematic, compatible, comprehensive management [6-8]. Therefore, the traditional PC is prone to wrangle, which will also cause the low efficiency of the whole management. Through Internet thinking, we can fully integrate the PC data information, which will realize data sharing. Through the Internet, we can scale all kinds of cost data, mode system and unit standard, which can unify the storage format of each cost data management system. By improving the data exchange interface and protocol, we can improve the efficiency of PCM. In this paper, the accuracy and time-consuming of the traditional algorithm and the improved algorithm are compared, and Figure 2 and figure 3 are obtained. The improved algorithm based on Internet has high accuracy and greatly improves the evaluation efficiency, which improves the efficiency of cost estimation [9].

![Figure 2. The accuracy of different algorithms was compared.](image)
2.2. Improve the investment control level of construction units
The construction unit is the investment unit of infrastructure construction, which needs to be able to accurately predict the construction cost to the maximum extent. By controlling the cost, we can improve the level of unit investment control, which will achieve the maximum overall benefits. Through the deep integration of Internet and PC data, we can use the improved algorithm for data mining, which can make more scientific and reasonable management decisions. First, through Internet thinking, we can deeply mine and analyze the PC data, which can be related to the cost of the whole project construction, including transportation, materials, water and electricity, labor remuneration, etc. According to the actual situation of the project, we can establish the PC impact model, which can realize the comprehensive and local subtle search of the cost. Second, strengthen the combination with technology. In the early stage of research, we can compare multiple schemes, which will achieve the optimal engineering design scheme. By choosing the best scheme, we can greatly reduce the PC at the source, which will improve the cost control level. Third, through the Internet, we can predict the change trend of each component of the cost according to the actual change of the market, which can further determine the PC reasonably. By improving the accuracy of PC, we can improve the investment control level of construction units [10].

2.3. Promote the establishment of enterprise quota
Engineering construction project has many characteristics, such as long construction period, many uncertain factors, large investment amount, many participants, high risk and so on. Therefore, enterprises must achieve good cost control, which will make more profits. By strengthening the Internet and our own cost accounting, we can continuously strengthen our own market competitiveness, which needs to further form the enterprise quota. By strengthening our own equipment and management level, we can improve the price competition level and advantage of enterprises. In the Internet environment, the construction cost data is relatively transparent. Therefore, enterprises must be able to discover the data in project management through data mining. At the same time, the enterprise can establish a database, which can store the price level and consumption in time. Through the rapid comparison and in-depth analysis of massive databases, we can provide reference for cost control, which will improve the level of enterprise cost control [11].

2.4. Promote the information construction of PCM
In the market economy environment, the comprehensiveness of information and the ability to process information are the key to its management level. The comprehensiveness of information has a direct impact on the preparation of quotation in the bidding stage. In the construction stage, we need to take effective control measures at the first time, which needs to constantly update the cost information. Therefore, the more perfect, comprehensive and accurate the information construction is, the higher the quality of the corresponding cost management will be. The stronger the cost information processing ability, the more reasonable the corresponding management, which will better achieve the
management objectives. In the Internet era, people have more possibilities to expand the storage database, which can provide more powerful conditions for data acquisition and storage. At the same time, Internet mining and analysis methods are in-depth and mature, such as decision tree algorithm, fish swarm algorithm, which can fully obtain the value information hidden behind the massive data. Through the Internet, we have enhanced the rationality and scientificity of management informatization. Based on a unified and compatible platform, we can integrate different interfaces and protocols, which will maximize data sharing. Internet research can present easy to understand ways, such as animation, video, icon and so on, which reduces the threshold of cost management informatization. Therefore, the Internet is conducive to the communication between more professionals and non-professionals, which will promote the construction of cost management information [12].

3. Main measures to promote informatization of project cost management

3.1. Speed up related infrastructure construction
In order to realize the information management of PC, enterprises should carry out infrastructure construction from all aspects of information management. It is better for different regions to break through regional restrictions, which can maintain a standardized and unified information infrastructure. Through the infrastructure construction, we can get the follow-up PC data more easily, which will be easier to communicate with each other in different regions.

3.2. Establishment of completed PC database
Completed PC database is mainly used to record all completed project related cost data and information. Therefore, data and information must be refined as much as possible, including project overview, cost data analysis, main material consumption and so on. The completed PC database can be estimated and referenced before the construction of similar projects in the future, which will facilitate the timely adjustment of the project budget and plan.

3.3. Establishing database of engineering cost index
For some typical PC indicators, we need to place them in the PC index database, including unilateral cost index, unilateral quantity index and so on. The index database can carry out targeted index query before the implementation of subsequent projects, which will meet the comparative analysis of the same index between different projects. Through the comparative analysis of indicators, we can provide a reference for the rapid preparation of estimates and budget estimates.

3.4. Improve the professional quality of PCM personnel
In the selection of construction talents for information management of PC, enterprises must be inclined to choose talents who understand relevant advanced information technology and PC business. This standard puts forward higher requirements for PCM personnel, which shows that enterprises need to strengthen the cultivation of comprehensive management personnel through different ways. PCM personnel themselves should also have the consciousness of self-conscious and continuous learning. In the work, employees should be able to master more information technology, which will promote the information development of PCM. In order to make the information development of PCM more comprehensive, PCM personnel should make full use of network technology to improve all aspects of PCM. Through the reasonable analysis of cost indicators, we can make the people who use the PCM system can accurately obtain the relevant data and information.

4. Conclusion
With the popularity of the Internet, PCM information will become the mainstream in the future, which needs continuous improvement of enterprises. Cost management involves many industries, which
requires complex new technology. Therefore, enterprises must establish a sound information management mechanism of PC, which will better improve the information level of PCM.

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