

Research on Construction Cost Based on Dynamic Management Engineering Cost

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Abstract. With the construction cost management of construction has become the focus of attention, in order to strengthen the construction cost to optimize the dynamic cost and cost, and to rationally control the continuous development of the basic cost and cost, the dynamic management and control of construction project cost has become an important issue in reducing construction cost management. The more attention you attach. For the project investment cost, improve the project cost efficiency, the construction project cost management runs through the whole process of the project, how to control the project cost and the high efficiency management, for each construction company must face the problem. This paper discusses the development of high efficiency of the company's engineering cost management.

Introduction

In the management research of construction project cost dynamics, many experts and scholars have conducted research and discussion. As special as: 2019 [1] Hu Xuelin. Analysis of the management and control of construction project cost; 2019 [2] Miao Zhao. Research on the dynamic management of cost in construction project engineering; 2018[3] Lin Yihuan also analyzes the cost control party in the construction phase of the construction project; 2018 [4] Liu Ying and others to dynamically manage and control the project cost; 2018 [5] Yang Haiming. Research on Dynamic Management and Control of Installation Engineering Cost; 2017[6] He Li, Zhao Dong. Dynamic management of construction cost for construction phase; 2017[7] Xue Jingjing. Analysis of dynamic engineering cost management and control mode; 2017[8] Zhao Anfu's analysis of construction project cost management and control issues; 2017[9] Fu Haibao's dynamic management and control analysis of construction project cost; 2015 [10] Liu Hehua dynamic management and control of construction cost; 2015[11] Wei Feng's discussion and analysis of cost management and control in construction engineering; 2013[12] Yang Decai analyzes the dynamic management and control of construction project cost. This paper believes that the existing theories and research are still necessary for in-depth study and discussion. The following is the research and view of the construction management of the dynamic management project cost.

Current Status of Construction Cost Management and Control

In recent years, engineering cost management has gradually become a key factor in engineering cost control in the construction industry. Through engineering cost management, comprehensive analysis of engineering construction cost, profit, risk and other information, so as to provide enterprises with reasonable investment, management and other information support. Dynamic engineering cost management is a slow development management method, and the application of domestic engineering cost building dynamic management and control is not extensive. Although the engineering cost has achieved some remarkable results in research, it has not been combined with practice in theory. Most of the research is based on the theoretical basis, and there is no more substantive solution. The lack of practice leads to the disconnection between theory and practice, and

to a certain extent, the application and development of the dynamic management and control of engineering cost construction.

Due to the insufficiency of traditional building engineering management regulations, it has hindered the application and promotion of it, resulting in the lack of understanding and understanding of the dynamic management of engineering cost in construction engineering. If you want to achieve the established goals of dynamic management and control of construction cost, you need to use scientific and effective methods to supervise the whole process, effectively reduce or avoid various uncertain factors in the process of dynamic management and control of construction cost, and reduce the engineering The impact of cost management dynamic management and control changes on costs.

A Comprehensive Understanding of the Dynamic Management and Control of Construction Project Cost

In view of its development status: construction personnel should strengthen the combination of theoretical knowledge and practical operation of construction engineering cost management and control to improve its technical level and improve the efficiency of engineering construction; Managers should enhance their ability to dynamically manage and control construction project costs and apply them to relevant construction projects; Engineering and construction enterprises should strengthen their understanding and understanding of the dynamic management and control of construction project cost, and strengthen the training of managers and construction personnel; The government should strengthen the emphasis on the management and control of construction cost construction and assist in the promotion and implementation.

Actively Improve the Dynamic Management System

If you want to promote the dynamic management and control of construction project cost and obtain better development, you need to actively improve the system and laws and regulations concerning the dynamic management and control of engineering cost construction, so as to ensure that all aspects of work can be regulated according to law. Implemented in an orderly manner. It can be managed in the following five aspects (as shown in Figure 1):

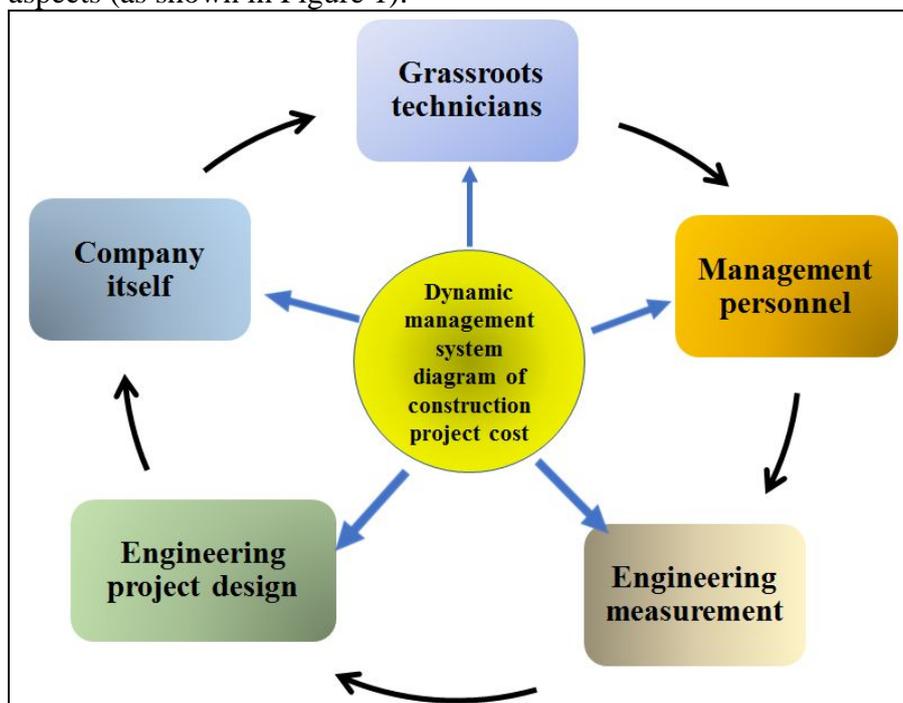


Figure 1. Dynamic management system

Grassroots Technicians

The grassroots technicians are the main force of the project. In the recruitment system, it is necessary to respond to the recruitment of personnel and construction teams for the ethics and talents. It is necessary to have both technical level and innovative thinking. Focus on improving the overall quality of grassroots technical personnel, and at the same time improve the management concept of construction project cost dynamics. In order to smoothly implement construction engineering, grassroots technicians should communicate with engineers and managers.

Management Personnel

Management personnel played an important role in the comprehensive consideration of various factors in the process of building construction dynamic cost management and control. The management itself owns the construction technology and management methods, and develops a management system corresponding to this according to different situations. Communicate with superior and grassroots technical personnel to ensure the normal implementation of engineering construction.

The Company itself

In order to improve the correct economic benefits of their own management thinking, enterprises will raise the investment level and continuously improve the management model of construction engineering cost management and control technology. Strengthen the management of construction sites and improve the cost consciousness and skill operation ability of construction workers, and develop a series of management systems more suitable for construction projects.

Engineering Project Design

The design before the completion of each construction project increases the difficulty of the actual project time schedule and various cost construction, and the engineering design phase is the basis for determining the project cost and plays a decisive role in the project cost. In actual engineering projects, there are often cases where design drawings are changed. The reasons for the changes are as follows: (a) The design is not flexible enough and innovative. (b) The drawing design and construction are out of touch. (c) arbitrarily changing the design and changing the construction methods and materials, resulting in an increase in the cost of the project. Therefore, enterprises should correctly understand the dynamic management and control of construction project cost to make the design phase audit more scientific and rational, strengthen the design phase of audit and management, and optimize the design team.

Engineering Measurement

There are few engineering measurement problems in the construction of the project. The general engineering measurement is based on the completion of the project, on the basis of the recognition of the project quality, and after the actual construction project quantity and quality are met, the supervisor will sign the opinion and submit it. Approved by the project department. In the specific operation, usually some staff of the project department violated the relevant management principles, and there are phenomena that do not do more or even do not count in the measurement work, which makes the engineering measurement and actuality inconsistent, and the project cost is serious. Excessively, the project cost is out of control and the cost is increased. Therefore, it is necessary to strengthen the management of measurement in engineering construction, to ensure true and effective measurement and to ensure the rationality of engineering costs.

Establish and Improve the Dynamic Cost Management System Mechanism

The construction period of the project is relatively long, and the frequency of change in the construction market is relatively fast. In different construction periods, the price fluctuation of construction materials is relatively large. In addition, engineering project design changes will cause

the project cost information to be constantly changing. If you want to effectively manage and control the project cost, you need to establish a sound project cost management system mechanism, standardize the engineering construction market, and formulate some relevant rules and regulations so that there are laws to follow and laws to follow. Actively promote the normal development of the construction industry, improve the technical level of engineering construction, and effectively manage and control the cost of construction costs.

Continuously improve the dynamic engineering cost system In the process of project management, summarizing and analyzing and proposing a reasonable system design plan is conducive to improving the level of project cost management. Based on the Web three-layer B/S system structure as the research object, the system design in the research is shown in Figure 2.

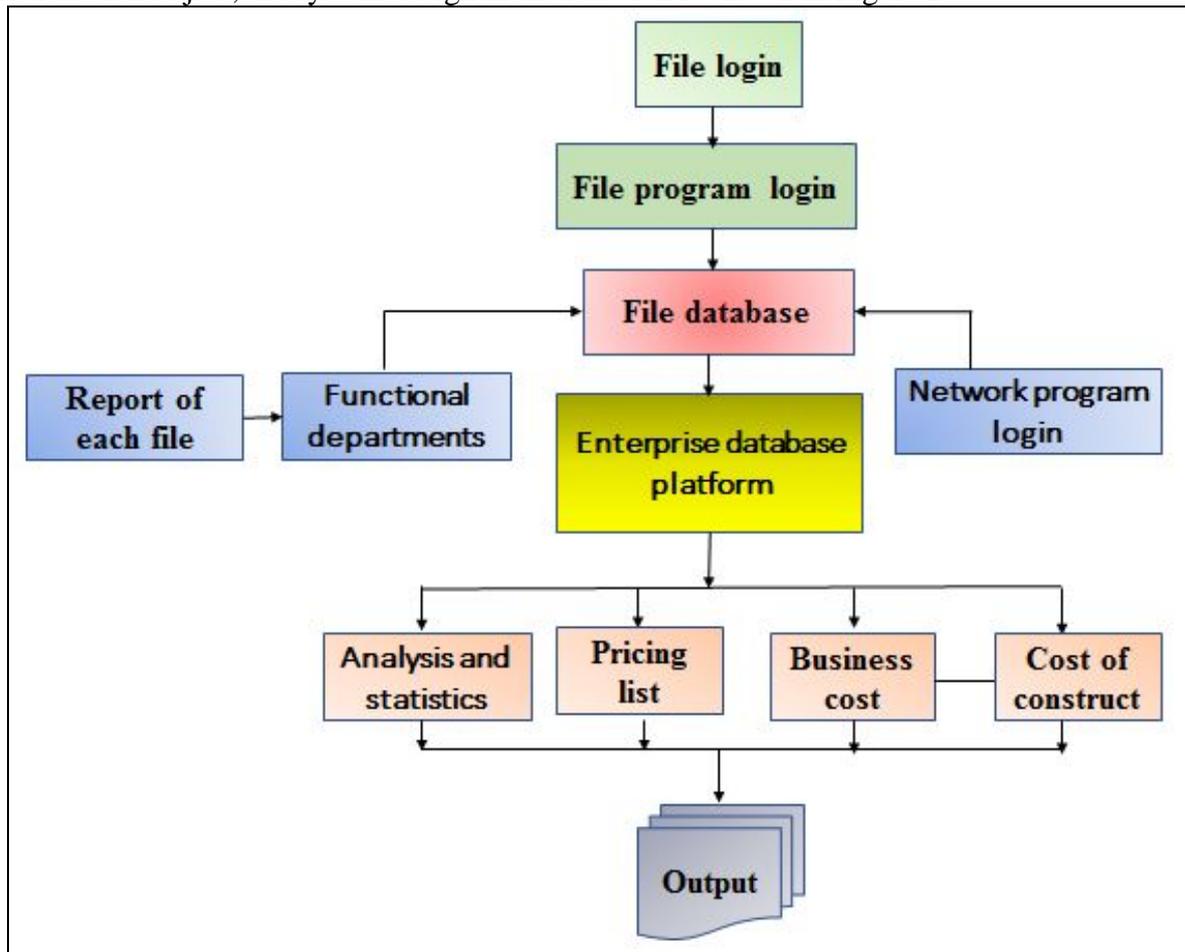


Figure 2. B/S three-tier management system diagram

The structure of B/S has a multi-layer distributed structure information management system, a system composed of a browser and a server. The server is composed of a web database and an application server. In the actual application of the server, the user first submits an application by the web server, and then performs user real name verification analysis. After the verification is successful, the information can be displayed to the user. To the user. The Web-based three-layer B/S structure is a kind of client mode, which can complete data processing, upgrade and maintenance, and is beneficial to reduce engineering cost management costs. The system network has the characteristics of openness, which can effectively realize the connection and sharing of the dynamic cost information data of engineering projects, and build a standard information database to facilitate users to query and use the data. The dynamic engineering cost information management system can effectively save the cost and time required for project cost management, improve the collection, collation, analysis and use efficiency of project cost information, and provide the basis for decision-making and management of project management personnel. At the same time, it can also Optimize its research on market price information.

Summary

Based on the above, the dynamic engineering informationization cost management system based on Web three-layer B/S structure is introduced and analyzed. Through the dynamic engineering cost management information system, the materials and equipment market prices and their changes in construction are recorded in detail, and various engineering cost information is collected, summarized, organized, analyzed and applied, which can effectively improve the efficiency of project cost management.

The implementation of dynamic management of building construction engineering can formulate scientific and effective dynamic cost management plan, strengthen the research and analysis of construction project cost dynamic management through theoretical level, provide theoretical basis for actual project implementation, and lay a theoretical foundation for actual cost dynamic management.

References

- [1] Hu Xuelin. "Dynamic Management and Control Analysis of Construction Engineering Cost" [J], 2019, V.3: 111.
- [2] Miao Zhao. "Research on Dynamic Management of Construction Project Cost" [J], 2019.V.4
- [3] He Li, Zhao Dong. "Research on Dynamic Management of Construction Cost in Construction Stage"[J]. Sichuan Cement, 2017.V.02:165.
- [4] Lin Yihuan. "Analysis of the cost control method of construction engineering construction stage" [J]. Building Materials and Decoration, 2018, (23): 147 - 148.
- [5] Liu Ying, Li Zhuojia, Tang Ran. "Dynamic Management and Control of Engineering Cost" [J]. Chinese and foreign entrepreneurs, 2018, (11): 151 - 152.
- [6] Xue Jingjing. "Dynamic management and control analysis of engineering cost" [J]. Urban Construction Theory Research (electronic version), 2017, (09): 116.
- [7] Yang Haiming. "Dynamic Management and Control of Installation Engineering Cost" [J]. Building Materials and Decoration, 2018, (25): 197 - 198.
- [8] HZhao Anfu. "Analysis of Dynamic Management and Control of Construction Engineering Cost" [J]. Human Resource Management, 2017(3): 224-225.
- [9] Fu Haibao. "Dynamic management and control analysis of construction project cost" [J]. Residential and Real Estate, 2017(3) : 235.
- [10] Yang Decai. "Analysis of Dynamic Management and Control of Construction Engineering Cost" [J]. Technology and Enterprise, 2013, 17: 104.
- [11] Liu Hehua. "Dynamic Management and Control of Construction Engineering Cost" [J]. Jiangxi Building Materials, 2015 (03): 258-259.
- [12] Wei Feng. "Discussion and Analysis of Cost Management and Control in Construction Engineering" [J]. Doors and Windows, 2015(04): 82,87.
- [13] Li Liqin. "Analysis of Dynamic Management and Cost Optimization Control of Construction Engineering Costs" [J]. Jiangxi Building Materials, 2015(16): 267-268.
- [14] WANG Yueming, LIN Qunxian, WU Fang. "The Dynamic Control Method of Construction Cost in the Construction Stage of Construction Engineering—The Application of the Value Theory and the Application of MATLAB Software" [J]. Sichuan Architectural Science Research, 2012(05): 180-183.
- [15] Yu Xuelian, Xu Zhuhua. "Analysis of Dynamic Management Control of Construction Engineering Cost". Architecture and Decoration, Engineering Management, 2018(20): 1-2.