The Dynamic Management Control Analysis of Construction Cost

Yetao Pang, Xiaoman Zheng
Chongqing Real Estate College, China

Keywords: construction engineering, engineering cost, dynamic management, control analysis

Abstract: In the context of the rapid development of the construction industry, it is necessary to highlight the cost control mechanism of the management project to ensure that the dynamic management and integration mechanism is realistic. While applying the corresponding management methods, it can also provide guarantee for the overall optimization of the quality of construction projects, and achieve a win-win situation for both economic and social benefits.

1. Introduction

With the continuous improvement of China's economic level, the urbanization development process is getting faster and faster, which has brought a lot of foundation for the development of the construction industry. At the same time, the construction industry is also facing more challenges. In this kind of environment, the construction unit needs to incorporate the project cost into the scope of project management, and do a good job in cost management to facilitate maximum economic benefits. At present, the dynamic management of cost has achieved an ideal application effect in construction engineering. Dynamic management is a new type of management mode. It is mainly based on the progress of the project, which regulates the construction cost management and realizes the precision and scientifization of cost management [1]. The construction cost can ensure that the construction cost is effectively controlled. In the bidding, the construction unit can measure the cost control, project management and construction technology of the bidding enterprise through the project cost, and evaluates the strength of the construction enterprise. In recent years, the competition in the construction industry has become more and more fierce [1]. If the project cost is unreasonable, it will lead to the construction company being in a disadvantaged position, unable to occupy a place in the fierce competition and doing a good job in engineering cost can promote the construction enterprise. The long-term development ensures that enterprises achieve higher economic benefits.

2. The status quo and problems analysis of dynamic management of china's construction engineering cost control

In the era of planned economy, since the construction industry was not regarded as an independent department engaged in material production, people did not pay enough attention to the project cost management, and the pricing method also simply adopted an administrative management plan. With the in-depth development of reform and opening up, traditional practices have been greatly impacted. People have to try to introduce advanced and scientific management models from abroad to re-understand the dynamic management of engineering cost control [1]. At present, China generally implements the budgetary quota management model. It is impossible to scientifically and reasonably determine the project investment. It is difficult to objectively and truthfully reflect the construction project cost. There is a general problem of “final budget over budget, budget over budget estimate, overestimation of budget estimate” and thus break through planned investment.

Dynamic management of project cost can play an important role in the management and control of the construction phase, ensuring effective construction work. The implementation of the project cost management should be carried out within the scope of contract signing, to achieve reasonable and scientific management of the construction process, establish a cost management system, supervise the construction process, and reduce the construction cost under the premise of ensuring the quality of the project. Economic benefits are of great significance. Although the cost of construction projects has
changed a lot compared with the past, from the overall situation, there are still many problems, and the traditional management methods have not been completely eliminated [2]. The construction project cost involves more content and is more difficult to manage. At the current stage of management, there are mainly the following problems:

2.1 The government has more policy implications.

In an economic environment in which the market plays a leading role, resource allocation is achieved through a price mechanism. The government does not directly determine whether prices do not directly intervene in the economy, but rather functions by formulating alternative economic policies and guiding production investment behavior [2]. However, at the current stage of social transformation, the government tends to adopt policy adjustment measures to establish a new economic operation mechanism faster and better, which has a great impact on project cost control.

2.2 The awareness of active construction cost of construction projects is not strong.

At present, the cost of construction projects generally has a phenomenon of less active control beforehand and more passive control afterwards. People pay attention to the completion settlement and despise the construction drawing budget, pay attention to the design budget of large and medium-sized projects and despise the design budget of small projects [2]. Due to the lack of the verification plan and approval procedures for the construction drawing budget, the project construction cost has been seriously weakened, resulting in a disconnect between the construction drawing budget and the completion settlement, which has increased the workload due to duplication of work and created a project cost over investment limit.

2.3 The basics of dynamic management are weak.

During the preparation of the feasibility study report, some investment estimation indicators have not yet met the needs of the work. The estimated quotas and indicators required in the preparation of the preliminary design budget estimates, although the various departments have provisions but the sources are not smooth [3]. There are no specific provisions for the budget estimates for civil construction projects. The price of equipment and materials has not yet been improved, and the lack of regularly published material price indices makes the project cost difficult to predict and adjust.

2.4 The quality of employees is generally low.

At present, there are as many as 800,000 workers engaged in project cost management. Among them, undergraduate graduates are less than 1/3, and graduates in engineering cost management are even less than 1%. Most of them are only junior colleges, correspondence graduates, and some even have no specialist diplomas. Most of the employees graduated from engineering management and investment economy [3]. Their work often only stays on the budget, and lacks the vision and ability to conduct dynamic management of project budget control in an all-round way.

3. Link analysis of dynamic management control construction cost

3.1 The initial analysis phase of a construction project.

The initial analysis stage of the construction project cost before the construction of the construction project plays an important role in the development of the entire construction project. The analysis of the data is used to carry out the dynamic control management of the construction project, and the corresponding plan is formulated to plan the construction project according to the plan. The overall cost is determined, so that corresponding measures are taken for various factors [3]. In the process of analysis, we must pay attention to two factors. First, we must consider the basic scale of construction projects. There are many construction projects in our country that focus on the pursuit of scale and neglect the economic benefits of construction. There is no process for economic evaluation in the process. This will have a certain negative impact on the economic benefits of the entire society. Secondly, it is the choice of construction sites. When most construction units are engaged in construction projects, the choice of construction sites must take into account the location of raw
materials [4]. On the one hand, the traffic at the construction site is smooth, thus greatly reducing the construction materials.

3.2 The design phase of a construction project.

The design stage of the construction project plays an important role in the construction of the entire construction project. The specific design plan is responsible for the professional design personnel. In the process of design, the relevant factors of the construction cost should be taken into consideration, so that the comprehensive analysis can be carried out to develop the entire design [4]. In the technical design process of construction engineering, the main task is to prepare for the design work and the preliminary preparation work for the bidding.

4. Dynamic management and control of construction cost

4.1 Improve the dynamic cost management system.

For construction enterprises, in order to ensure the smooth progress of the project cost management, it is necessary to strengthen the coordinated development of enterprise benefits, economic benefits and social benefits, and avoid the situation of insufficient internal competitiveness of the market. Generally, based on the dynamic engineering cost theory, combined with the current construction market, establish a dynamic management system that satisfies the development of the enterprise, and optimize the project cost management system based on the specificity of the project [2]. The engineering experience shows that to improve the rationality of the dynamic management control of construction project cost, on the one hand, the investment can be reasonably reduced on the premise of ensuring the quality of the project, and on the other hand, the work behavior of relevant departments can be restrained. With the help of the relevant content of the project cost management system, it can ensure the construction workers to work more effectively, which is conducive to the improvement of construction quality. It is an important measure to maximize the benefits of the enterprise and maximize the economic benefits for the cost management operation.

4.2 Implement responsibility management and control.

Reasonably divide the content of cost control to make the content more specific, and propose a business model based on cost control. This model has the characteristics of calculation estimation and control, including the following basic contents [5]: First, determine controllable Cost, such as production and management costs, equipment rental and use costs, fixed asset use costs, etc. Second, the preparation of management budget, management budget is the basis for the project department to control the cost; third, the implementation of process control, the core of the cost control it is to strengthen management and control measures and reduce management costs. After the budget is determined, the management area should be used as the basis for arranging fixed management personnel to be responsible for the cost management of their respective regions. After implementation, it should be determined in writing to clarify the responsibilities of all management personnel.

4.3 Improve the professional ability of engineering cost practitioners.

As a relatively systematic management system, construction project cost control can directly reflect the production efficiency of the construction unit, so it has high professional requirements for personnel. This requires regular and irregular training of cost expertise to comprehensively improve the professional skills of cost professionals. To this end, relevant personnel need to understand building common sense, economic and management related content, and ensure the effective combination of technology and economy in project cost [5]. The practitioners of dynamic engineering cost management must master various details such as engineering quantity calculation, quota analysis, and comprehensive unit price analysis. They must also flexibly analyze various costs and take effective measures to reduce cost input. Thereby achieving precise control of the dynamic control of project cost and comprehensively improving the level of dynamic control of construction project cost.
4.4 Carry out cost supervision throughout the process.

Dynamic cost supervision cannot be lack of cost supervision, and all the processes must carry out comprehensive cost supervision. Through the use of cost supervision measures, the rationality of the cost supervision mode itself can be reflected, and the use of supervision means for dynamic cost control can be ensured. In order to improve the cost supervision, the relevant departments must strengthen the most fundamental market supervision, and severely punish the frequent violations and violations [6]. Dynamic cost control is reflected in the characteristics of the whole cycle, the key of which is project design, project construction and project acceptance. Therefore, for each cycle, dynamic construction cost supervision must be implemented. It is necessary for construction enterprises to follow the basic principles of post responsibility to improve dynamic cost monitoring, and adjust the cost coefficient accordingly to ensure that it meets the current basic situation of the construction market.

5. Dynamic management and control method analysis of construction cost

The control of dynamic management of project cost plays an important role in all aspects of an engineering construction project, and these effects are irreplaceable [1]. However, as far as the current status of China's current project cost management is concerned, many construction companies still have some problems in this application, and these problems have also seriously affected the effectiveness of project cost management. Here, the author has carried out a certain analysis on the control of the dynamic management of project cost, hoping to make suggestions for the progress of the construction field in the dynamic management of project cost management.

5.1 Dynamic control of cost in the decision-making stage.

The construction cost management of construction enterprises can only be implemented after the decision of the management. Therefore, it is necessary to strengthen management and control of project cost in the decision-making stage. In the decision-making stage, the construction and construction enterprises will comprehensively demonstrate the feasibility and necessity of the project from multiple angles, pay attention to improve the accuracy of project decision-making, and carry out effective investment and benefit estimation to ensure the effectiveness of budget evaluation of the construction plan. In order to select the optimal investment plan, provide a basis for scientific and reasonable cost management in the design and construction phase, and help enterprises to use the best construction plan to start construction work [6].

5.2 Dynamic control of cost in the design phase.

The engineering design stage determines more than half of the cost of construction projects, so the cost control work in the design phase is especially important. The dynamic management and control of project cost requires the designer to consider the entire project carefully and comprehensively. In the design process, the designer comprehensively considers the role of the limit design and the value engineering to control the project cost, and can minimize the project cost when the quality and quantity are completed. Screening and control options can be based on investment limits, which will ensure that the actual cost is beyond the allowable range of the total investment limit [7]. When formulating the design plan, considering the economic, aesthetic and applicable principles, we must also consider the rationality of the design structure, the operability of the construction technology, the building function and the environmental protection and energy saving requirements to ensure the selection of safe, accurate and advanced design. Program. Based on the limited amount, the designer formulates an excellent design plan by specific measurement of the various factors of the building and specific analysis of the construction project, and keeps the design plan as far as possible.

5.3 Dynamic control of construction cost and construction phase.

Since the construction cost is the most important part of the construction process, the completion stage will affect the construction cost of the construction cost to a certain extent. Therefore, the focus of the cost management and control work is on the construction project [7]. Construction and
completion stages are carried out.

The construction phase of the construction project should control the cost of the project as much as possible on the basis of ensuring the progress and quality of the project. Also pay attention to the strengthening of contract management, select supervisory units and construction units with excellent technology, perfect management system and good reputation, so as to facilitate the optimization of the construction management process and reduce the cost waste in the construction project [3]. Due to the rapid development of the modern market economy, the price competition in the market has become more intense. The emergence of various product brands has enabled the construction materials market to provide construction companies with more abundant product varieties and to make the prices of construction materials more reasonable. Similarly, the intensive management of material entry work and construction site materials is essential to avoid unsafe construction and completion problems [5]. In the procurement of materials, master the market of materials, grasp the first-hand price data, and formulate procurement plans for construction materials based on construction design and market price, so as to avoid the phenomenon of large backlog of materials and insufficient supply.

5.4 Dynamic management of construction costs during the completion phase.

The completion stage does not have a substantial impact on the control and management of the project cost in the entire project management system [6]. However, when the project cost is settled, the completion stage will have a certain degree of impact on the cost of the project construction. Therefore, the settlement of the completion process is a crucial part of the cost management work and must be carefully reviewed. When the construction process is completed to the completion stage, it is necessary to select audit institutions with good reputation and strong sense of responsibility to audit settlement amounts of various taxes, engineering quantities and unit prices. After the completion of the project, carefully check and check the project to confirm whether the actual construction situation is consistent with the requirements at the time of signing the contract, and detailed review and review the data to ensure the authenticity and reliability of the settlement process [7]. It is also important to check in detail the unfinished or changed projects in order to reduce the settlement amount and avoid the waste of funds.

6. Summary

The dynamic management control of construction project cost is still in the stage of development and improvement. There are still corresponding deficiencies, mainly in terms of technical aspects, personnel aspects and operational aspects. However, its role cannot be concealed, and the construction project achieves stable development under the dynamic management control of construction project cost. All in all, the dynamic management of building construction cost control and quality improvement operations are scientific and rational, and can actually ensure the further improvement of the construction industry.

References

