

How to Reasonably Control the Project Cost

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Abstract: In recent years, with the rapid development of China's social economy, significant advances have also been made in the field of construction engineering. At the same time, with the advancement of urbanization and the increase in the demand for the construction of various infrastructure and service facilities, the number of construction projects has continued to increase. In project construction, project cost control plays a vital role. Implementing effective cost control measures at all stages of the project is an important task to ensure the company's economic benefits. Hereon, this article focuses on the importance of project cost, the factors that affect the cost control, and the related measures to reasonably control the cost at various stages of the project. It is hoped that this will have a certain reference value and will contribute to the improvement of project cost management and control.

Keywords: Project cost; reasonable control; influencing factors; measures analysis

Introduction

Building engineering is closely related to national economy and people's livelihood, and has gradually developed into one of the important economic pillars in China. With the growth of social demand, the number of construction projects has been increasing in recent years, and enterprises are also paying more attention to construction profits. The effective control of project cost is an important way to ensure the rational allocation of construction funds, reduce construction costs and increase corporate profits. Project cost involves all aspects of engineering construction. Materials, labor and mechanical equipment are all important parts of capital consumption. In order to control the construction cost better, the enterprises should pay attention to the shortage in the construction cost, recognize the importance of the reasonable cost control, and take effective measures according to the existing problems. Pay attention to cost management at all stages of engineering construction, formulate comprehensive and detailed cost management measures, and continuously enhance the economic benefits of enterprises^[1].

1. An overview of project cost control

The control of project cost refers to the management and control of the total cost of the construction project investment and the price of the project. That is to say, it should pay attention to the effectiveness and rationality of the cost in the control and management of the project cost, and also pay attention to the fair and reasonable price. The cost management during the entire process of the project needs to control the total cost of the construction investment within a reasonable limit standard. The project cost involves many aspects, including the preparatory costs for the construction of the project, the cost of the design survey, the labor, materials, and equipment costs during the construction of the

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project. In order to effectively raise the cost level and promote the maximum economic benefits of engineering construction, the construction enterprises must establish the correct concept of cost management in the whole process of construction, and effectively control the cost in the whole process of the project, namely, the stage of investment decision, the stage of investigation and design, the preparation stage of the early construction, the construction stage and the completion settlement stage.

2. The significance of reasonable project cost control

2.1 It helps to improve the market competitiveness of building products

Due to the increasing number of construction products, it is necessary to strengthen cost control in order to effectively occupy the market. Because the price of building products will be influenced by many factors, in order to obtain higher economic benefits, enterprises must know the market market in time, pay attention to the economic dynamics in real time, and promote the important role of cost control in reducing cost and creating economic profits. Under the premise of ensuring the quality of engineering construction projects to be up to standard, the company's cost management level can be improved to be more conducive to the improvement of the market competitiveness of enterprises^[2].

2.2 The internal foundation of economic benefits for construction projects

All construction enterprises will have on-site management department, which is the grass-roots part of the management organization, and plays an important role in the management and control of the whole project. At the same time, during the process of cost control for the entire construction process, the on-site management department is responsible for implementing its own management tasks. Not only can the scientific management plan effectively enhance the technical level of the staff, coordinate the construction progress, but also effectively control the cost control in the construction process, which is of great significance for the realization of the economic benefits of the company.

2.3 Reflecting the level of project management activities

All major construction enterprises aim at achieving maximum economic benefits under the premise of ensuring the quality of construction projects. The whole process of project cost control and scientific cost management will help to reduce the waste of resources and effectively control costs. At the same time, the level of cost control is also a reflection of the overall management level of the enterprise. It not only reflects the advanced or not of the enterprise management concept, but also reflects the important prospects for the development of the enterprise. The improvement of the cost management control level has important significance for the entire management activity.

2.4 It is beneficial to realize effective control and supervision

In the process of comprehensive evaluation of project construction, cost management achievements play an important role in the evaluation system. The cost management of the whole process of the construction project is conducive to a more comprehensive assessment of the project in the comprehensive evaluation, and effectively improve the various deficiencies of the project construction in light of existing problems. Therefore, during the construction of the project, it effectively manages and supervises all aspects of the project construction and promotes the improvement of the project.

3. Analysis of factors affecting project cost

3.1 Analysis of factors in design stage

In recent years, large-scale engineering construction projects have been increasing. In order to be able to more systematically grasp and control the overall project, we must pay attention to the cost management and control of the project design stage. In order to effectively ensure the smooth construction of the construction project in the later stage, it is necessary to combine the actual situation of the construction site and the expected requirements of the project, and

rationally plan the allocation of the proportion of capital investment for materials and equipment in the previous period. And develop a reasonable construction plan and program. In the design process, it is necessary to form a relatively ideal design plan and make reasonable plans for the demand for materials and equipment, staff employment expectations, and specific technical inputs. In addition, we should pay more attention to the backup of the scheme. The influence of these factors on the cost of the project is very obvious. The cost control of the design stage affects the success of the construction of the project, which is of great significance.

3.2 Analysis of factors in construction stage

The selection of materials, the selection and use of equipment and the application of construction technology directly affect the control of construction cost. In the construction of the project, if the professional ethics of the staff is not high enough or the technical level is low, an effective cooperative construction cannot be carried out, and the modern equipment is not sufficiently understood. The construction schedule cannot be effectively ensured, and even the quality of the project construction is affected. This will not only delay the construction period, but also finish the later maintenance trouble and waste of resources, which is not conducive to cost control. In addition, in the concrete construction process, the engineering technicians do not strictly follow the design requirements, which leads to the large gap between the completed and the expected results, and also needs more repair steps. The engineering measure changes greatly, the consumption of materials and resources increases, which is very unfavorable to the control of the project price making.

3.3 Analysis of management factors

Effective management is an important guarantee for the smooth progress of project construction and reasonable control of project cost. Systematic management work helps to control project costs at all stages of engineering construction. However, as far as the actual project management process is concerned, the cost management of many projects is not comprehensive enough. The general cost control only stays in the final acceptance stage, and there is no cost control during the refinement phase of the construction process. Some companies also have poor qualifications, lack of experience, and inadequate management. In addition, the level of supervision is also an important factor affecting the rationality of management. For example, in the process of material transportation, we need to make reasonable arrangements for the place of origin, transportation route and mode of transportation, and do well in supervision and management. In actual work, if the supervision and management of materials transportation is not in place, it may cause the increase of transportation costs, and the unreasonable control of transportation time will also affect the construction period, which is not conducive to the effective control of engineering construction costs and the improvement of engineering construction level.

4. Measures for reasonable construction cost control

4.1 Cost control in the stage of investment

Investment decision-making stage has a significant impact on the benefits of engineering construction projects. In the investment decision-making stage, reasonable control of project cost can achieve a control of the overall situation. As far as the proportion of cost cost in the investment decision-making stage is concerned, it is very small, accounting for only 0.2%-0.5% of the cost of the entire project. However, the impact of investment decision-making cost is very far-reaching. Therefore, we must pay attention to the cost control and management of investment decision-making stage. First of all, it is necessary to fully understand the market conditions, through a comprehensive market research, combined with the characteristics of the project itself and the actual situation of the construction site, to develop a reasonable cost control program. Secondly, it is necessary to analyze the economic benefits, social benefits and market expected value of investment construction projects. In the analysis process, the results of market research need to be integrated to ensure the rationality of cost control. In addition, we should pay attention to the rational choice of design units. Fully consider the qualification conditions of the design unit, after confirming the design unit, conduct effective

cost budgeting and cost management according to the design proposal provided by the design unit, and compare the project with the expected economic indicators, and select a plan that is more in line with the project construction requirements^[3].

4.2 Cost control during the design phase

First, limit design. When designing, it is necessary to carry out preliminary design based on the estimated value of the investment decision, and to design the construction drawings according to the general design budget. It is necessary to strictly control the design process to ensure that the performance of the construction project is up to the standard. Second, pay attention to the supervision and review of the design budget. The design of some parts which are easily affected by uncertain factors should be strictly controlled. Through more comprehensive reference data and more accurate design estimates, investment gaps and investment gaps can be found effectively. Third, strictly regulate the approval process for design changes. If there is a need to change the design content, it will inevitably cause changes in the amount of work and the construction plan. Therefore, it is necessary to discuss with the representatives of Party A and carry out on-site verification to ensure that the advanced and rational design of the design is changed, and the engineering changes caused by unnecessary changes are reduced, thereby reducing the impact on the project cost control. Fourth, to achieve unified design change management. If part of the design needs to be changed, it must be done according to a fixed procedure and pattern. Standardize the continuity of the change number number, and pay attention to the audit of design changes, and ensure that the accuracy is changed. Fifth, refine the design of each part of the project so that the cost budget can be more reasonable. If the design process is rough, some detailed consumption cannot be effectively reflected in the budget, leading to a lower accuracy of the final budget results. Sixth, cost engineers need to determine reasonable budget prices for materials and equipment. In the past few cases, some enterprises have not fully understood and studied the market price changes of the materials and equipment used in the construction in order to reduce the cost of the work. Cost control only depends on information price and equipment reference price, which ultimately leads to unreasonable cost control and widening gap with actual situation. Therefore, engineers must pay attention to market concerns and promote reasonable control of project cost.

4.3 Cost control in the stage of project bidding

The project cost control during the bidding phase can be carried out in the following three aspects. First, determine a reasonable bid scheme. Many projects have the problem of marking, and a reasonable separation of standards can reduce the contradictions caused by too many cross events, and effectively avoid the conflict of distribution caused by too many sub marks, reduce the temporary change of the site or increase the cost of construction and equipment. Second, determine a reasonable limit price. In the bidding process of past projects, the “lowest reasonable price method” is the tendering method frequently used by commercial reviewers. That is, the lowest reasonable price unit is selected as the successful bidder among the various bidders that meet the requirements. In order to standardize the order in the bidding process and prevent bidders from bidding or bidding at random, it is necessary to set a maximum limit price and reasonably control the scope of the bid price. Third, the reasonable preparation of the bidding documents. Documents need to be prepared in detail in the list of engineering quantities, tender drawings should be given priority to the construction of detailed drawings, the contract terms should be clear, comprehensive and detailed, so as to effectively ensure smooth bidding, but also conducive to the smooth construction of the next step^[4].

4.4 Cost control in construction stage

4.4.1 Cost of equipment and material procurement

The purchase of building materials and equipment and the cost of leasing are the major share of cost, which is an important part of project cost control. The quality of construction materials and the operation of construction equipment are the basis for ensuring the smooth progress of the project. In the process of purchasing materials and equipment, it is necessary to meet the requirements of the construction of the project as a principle, the selection of the construction

materials and the reasonable cost control of the lease use of the equipment. Nowadays, there are many kinds of materials in the market and supply channels are gradually increasing. There will also be certain price differences between materials of the same quality. This requires the cost control personnel to realize the dynamic understanding of the market, pay attention to the changes in the price of materials, check and authenticate the supply channels of the ideal materials, and more accurately and comprehensively grasp all aspects of information. In addition, we should pay more attention to the supervision of procurement process and purchasing personnel, control the cost of purchasing materials within the budget, and pay attention to the inspection of the purchase list, ensure a sufficient understanding of the purchase and consumption of materials, so as to facilitate a clearer understanding of the expenditure and the integration of cost consumption.

4.4.2 Reasonable construction method and construction progress

There are certain differences in the construction effect of different construction methods, and the technical requirements of different construction methods are different, and there are specific requirements in the selection of construction personnel and the application of equipment. Selection of construction method according to construction requirements is an important way to control construction cost. In order to effectively control the construction cost, the enterprise needs to consider the comprehensive capacity of the construction unit, such as the technical level and the hardware facilities of the enterprise, and select the reasonable construction method and the construction guidance plan according to the climate conditions and geological conditions of the construction site, thus promoting the realization of the project construction cost control target. In addition, the construction schedule should be controlled reasonably. The slow progress of the project will result in a large amount of manpower and material resources, and the cost cannot be effectively controlled. If the progress is too fast, the quality of the project construction cannot be effectively guaranteed. Not only can it not achieve the construction goals, but it may also bring about a large number of later-stage restoration projects, resulting in excessive cost input. Therefore, the construction management personnel must reasonably control the construction progress, reduce the idleness of the personnel and the idleness of the machinery and equipment, and reasonably allocate the construction content, reduce the time-out period, and promote the construction project to reach the construction target within the expected time.

4.5 Strengthening the cost control in the stage of completion

Completion settlement stage is very important for engineering projects, and is an important step for ending and analyzing the whole project construction. The cost control during the completion phase is an important basis for successful completion of the settlement. When completing the settlement, it is necessary to strictly verify the completion of the project, calculate the use or surplus of materials, and check the validity of the on-site visa to ensure the authenticity of the content. Check the data of all parties, avoid duplication of calculation, and make clear the amount of payment to ensure that the cost control in completion settlement is clear.

Conclusion

In a word, with the increasing number of construction projects, it is very important to control the cost of the project in order to gain a lasting competitive power in the market and obtain more ideal economic benefits. Relevant personnel must do a good job in cost budgeting and control. In the whole process of project construction, reasonable budget control will be adopted, and a more comprehensive and effective method will be adopted to achieve cost control in the project investment decision-making, project design, tendering, construction, and completion acceptance stages. The cost engineer also needs to comprehensively consider various factors, pay attention to the market dynamics in real time, and reduce the gap between budget and real expenses. Only by ensuring the reasonableness and accuracy of cost control can companies obtain more economic benefits and achieve longer-term development^[5].

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