

Analysis of the Whole Process Cost Consulting Management of Engineering Project Construction

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Abstract

With the development of the socialist market economy, in the process of engineering cost consultation, the whole process of cost management is gradually paid attention to. With the pressure of social environment, changes in market rules and the needs of customers, the cost consulting business is continuously expanding the scope and content of work, and is gradually involved in each stage of project management, forming a state of cost consulting management throughout the project construction. This article analyzes and discusses the cost management of the whole process of project construction.

Keywords

Project construction, Cost, Consulting management.

1. Introduction

Some large-scale engineering projects have a long construction period, many project links, and a large amount of engineering. Therefore, the departments involved in the overall cost management of the project construction are also very complicated, which brings certain difficulties to the cost consulting management. Facing the shortcomings in the cost consulting management, improving the management level and supervision are the issues that need to be paid attention to in the current project cost control. Improving the cost control level of engineering projects is of positive significance for solving the delay in construction progress caused by capital problems and improving engineering efficiency.

2. Background

In recent years, China's construction industry has developed by leaps and bounds in terms of market size, number of enterprises, and technical capabilities. It has become a pillar industry of the country's economic development. It has not only absorbed many rural labor transfer cities, but also driven a large number of related industries. At the same time, it has greatly improved the residents' environment and the quality of life, and has brought huge fiscal and tax revenue to local governments. But after 2016, the construction industry market began to show significant weakness. It can be seen from Figure 2 that in fact, the decline in construction is also a sign. If you consider the increase in the price of most materials in the output value, then the decline in the added value of the construction industry and the growth rate of the added value of the construction industry can better illustrate that the construction industry has encountered an impossibility Avoid bottlenecks. Therefore, if you want to promote the development of the industry, you cannot rely on the market just for regulation and control. You should also see the aspects that can be corrected and improved in the previous extensive development. For example, the more prominent regulatory systems and mechanisms are not perfect, the engineering construction organization is backward, and the architectural design level Problems need to be improved, quality and safety accidents occur from time to time, there are many market violations of laws and regulations, the company's core competitiveness is not strong, and the skills and quality of workers are low, and rectification is initiated from these aspects, so as to promote the construction industry to accelerate industrial upgrading. In February 2017, the General Office of the State Council issued the "Opinions of the General Office of the State Council on Promoting the Sustainable and Healthy Development of the Construction Industry" (Guobanfa [2017] No. 19), which aims to "deepen the reform of the construction industry, simplify administration and

decentralize power, and improve construction Organization model, strengthen engineering quality and safety management, optimize the construction market environment, improve the quality of practitioners, and promote the modernization of the construction industry. " One of them is to "cultivate full-process engineering consulting. Encourage investment consulting, survey, design, supervision, bidding agency, cost and other enterprises to adopt joint operations, mergers and acquisitions and restructuring to develop full-process engineering consulting, and cultivate a batch of international-level full-process engineering consulting. Consulting companies. Formulate technical standards and contract models for full-process engineering consulting services. Government-invested projects should take the lead in implementing full-process engineering consulting and encourage non-governmental investment projects to entrust full-process engineering consulting services. In civil construction projects, give full play to the leading role of architects Function and encourage the provision of full-process engineering consulting services. "

The whole process of cost consulting management process is a systematic process. The first is the decision-making stage. In the decision-making stage, the cost consulting company needs to estimate the overall cost of the project, and at the same time consider whether the future benefits of the project can attract investment. The overall planning of the location conditions around the project is carried out. The cost calculation includes collecting project cost data, pollution degree, personnel and department reserves, etc., and then estimating the project's revenue and overall cost. The second is the initial design stage and the construction drawing design stage. This stage needs to take into account the professionalism of the project. On the basis of ensuring that the cost is not overflowed, through judging and reviewing the construction environment, planning the optimal construction that is conducive to tender Drawings and initial design. The third is the bidding link of the project. The consulting unit should show the design plan and construction process to the investor, and estimate the construction period and cost, and objectively present the project revenue. It is best to be detailed in the project node at each stage Report the construction cost and construction period of the project to avoid unnecessary claims and contract loopholes. The fourth is the implementation phase of the engineering project, that is, the process of evolving the project from drawings to construction. The cost of this stage accounts for about 60% of the project cost. The construction enterprise is a test, and the pressure on the cost consulting department is also great. At this stage, the consulting management company should regularly calculate the cost of each project, control the cost, and avoid the cost overflow caused by unstable factors. The final stage is the acceptance stage, which is not only the acceptance stage of the project, but also the construction quality assurance and acceptance stage. In the acceptance stage, the work purpose of the cost consulting service system is to compare and verify the project construction expenditures and benefits, and then to identify the deficiencies in the project and complete the rectification before the project cuts the ribbon.

3. Research Process

As a university teacher, in order to ensure that the content of professors can be applied to practice, it should keep pace with the times and always stand at the forefront of the industry. The work visit project gave me the opportunity to work in the frontline of the cost industry. I realized the current dilemma and future trends of the industry and realized the urgent need for transformation and upgrading. Through school-enterprise cooperation, on the one hand, it solves technical problems for enterprises and expands the scope of business services. On the one hand, it accumulates practical experience for teaching, enriches teaching resources, improves teaching methods, and better serves students.

"Europa New Europe Small and Micro Enterprise Pioneering Park Project" full-process cost consultation, mainly for the entire process of project construction from feasibility study through preliminary design, initial design expansion, construction drawing design, bidding, construction, commissioning, completion, acceptance Dynamic control and management. The unified standard form, unified information collection, and unified feedback archiving undoubtedly greatly improved

the work efficiency, and also facilitated the collection of data, which brought convenience to the proposal of feasible measures and effective solutions.

4. Problems in Current Cost Consulting Management

4.1 Poor management

In the cost consulting management of the whole process of project construction, due to insufficient management level, the cost control effect is not good. This is mainly reflected in two aspects: first, the cost consulting management is highly professional and requires personnel with certain project experience to participate, but in the specific operation, many management talents lack sufficient work experience despite having sufficient theoretical reserves ; Secondly, many construction companies do not attach importance to the role of cost consulting management. In the bidding process, they forcibly cut prices in order to win the bid, without comprehensive consideration of the project's revenue and actual costs. The design drawings and construction plans presented to the investors are not detailed enough, even after the bid As a result, the claims caused by the cost overflow and the breakage of the capital flow have further reversed the level of cost consulting management throughout the project.

4.2 Insufficient supervision

At present, the cost control of engineering projects is generally carried out by cost consulting companies. When undertaking a project, the cost consulting unit should first collect the operation information of the project, and formulate a cost control plan at each node of the project step by step. To improve the management and operation level, the construction company must not blindly reduce the project price because of the eager bidding and financing. The expenditures and benefits should be compared in detail in order to reduce the risk of improper operation of funds in project construction. Relevant departments should strengthen supervision and regulate the bad habits and management systems of the industry. Only in this way can the management level be improved, and the role of cost consulting enterprises in cost control should be properly played.

4.3 Lack of fairness in the consulting management process.

In the context of economic system reform, the government and some cost consulting agencies cooperate to undertake the project cost management of some projects. This kind of cooperative relationship was originally used to reduce the cost of government-funded engineering projects to reduce financial expenditure. However, due to These institutions are protected by the government, which objectively reduces the timeliness and fairness of the project cost. The consequence of this phenomenon is that during the construction of some projects, the actual construction cost is much higher than the cost forecast, which not only severely overflows financial expenditure, but also causes damage to the market environment.

5. Effective Methods to Improve Management

5.1 Do a good job in communication before construction

First of all, it is necessary to do a full-process cost consultation management before the start of construction, systematically collect relevant information on engineering construction, and only before the construction is transparent about the data of each node can we further cooperate with the construction party to formulate a thorough construction plan. For example, in the design process of a new landmark building in Pudong, Shanghai, not only well-known design firms such as the School of Architecture of Tongji University, SOM and KPF in the United States participated in the design work. A professional engineering cost consulting unit, in the case of multi-party funds involved in the project, only in this way can the speed of capital circulation be accelerated, and in a tight construction cycle, under the premise of not wasting resources and cost overflow, quality and quantity Complete the construction. Secondly, before construction, it is necessary to estimate the cost of construction based on the location conditions, transportation factors, geological environment and other factors of the project location, and make a comprehensive judgment based on the labor market, material market and other information.

5.2 Do a good job of cost consulting management during the construction process

First of all, it is necessary to properly compare the difference between the theoretical budget of construction and the actual input cost, find out the direction of capital investment, and find out the cause of the premium. Secondly, under the premise of ensuring quality and construction standards, control the cost of material management, and want to do a good job in budget management, on the one hand, we must pay close attention to the market of materials, find out the best season for material procurement, and reduce transportation costs; On the one hand, we must reduce waste, improve the quality of the construction team, and avoid rework. Finally, it is necessary to strengthen the speed of information matching and updating, and timely feedback on the construction situation and matching degree of the scheme on the construction site. If uncontrollable factors occur, the plan should be modified in time. For example, during the construction of a landmark project, during the installation of the glass curtain wall covering the building, in order to avoid the hidden dangers caused by typhoons and indoor and outdoor temperature differences, the construction department designed multiple protections for the double-layer curtain wall. The cost consulting unit demonstrated in detail the possible unexpected plans to the investors before the bidding. Therefore, the material replacement during the construction process did not cause a serious spillover of the cost, which provided a guarantee for the smooth progress of the project.

5.3 Do a good job of cost consulting management at the completion stage

The content of work at this stage mainly includes project evaluation, settlement and settlement statistical review, etc. First, the cost consulting unit should do a good job of project review and evaluation. If any delay in construction caused by breach of contract is found, the contractor should be compensated to protect the interests of the owner ; Second, check the use of materials in the construction process to see if there are materials left to avoid contractors wasting resources and embezzling engineering materials. If there are unexpected reasons to change the construction plan, the construction process must be strictly reviewed Material procurement and capital flow. For example, during the settlement of the CBD office building project in a certain city, due to the serious delay of the construction period, the owner 's settlement time was lagging, causing economic losses to the owner. After investigation, the contractor was eager to finance during the bidding period and had reservations in the construction budget estimate. In addition to the changes in the price of engineering materials, there was a shortage of funds in the second half of the project, and the inability to construct during the winter frozen soil period further delayed the completion and delivery time. The case finally determined that the contractor should bear the loss of the owner under the trial of the arbitration institution, and transferred the relevant materials to the court for further judgment. Doing a good job of cost consultation management and project evaluation at the completion stage is essential to promote project integrity and completion settlement.

6. Conclusion

In the current environment of continuous expansion of project scale and rising engineering cost, in order to avoid the breakdown of capital flow during project construction, it is necessary for relevant departments to improve the cost consulting management level of the entire process of engineering project construction. It is necessary to face up to the problems in the project cost consulting management, and do a good job of analyzing and communicating the consulting management at all stages of the project. It is hoped that this article can attract the attention of relevant institutions and play an objective guiding role in rationally controlling the project cost and improving the cost consulting management level.

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