Research on Quality Cost Control Management Strategy of Engineering Project

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Abstract: For all engineering projects, ensuring that the quality of the project is okay will not only bring economic benefits and credibility to the enterprise, but also promote the development of the national economy. This article first analyzes and introduces the related theoretical concepts of quality cost control management. Second, it analyzes and analyzes the problems and deficiencies in quality cost management of engineering projects. Finally, according to the problems found, this paper proposes the corresponding aspects. The corresponding countermeasures and suggestions are of certain significance for the control and management of quality costs of similar projects in the future.

1. Introduction

Project quality has long been a problem that China attaches great importance to, and the policy of "hundred years plan, quality first" has been constantly emphasized. Under the strict requirements of quality for a long time, with the continuous development of reform and opening up, the overall quality of construction engineering in China has also shown a trend of continuous improvement. The quality is not only related to the interests of each user. From the perspective of the national engineering development strategy, quality is also related to China's national fate. Only with good quality can it be recognized and accepted by the world construction market. It can be said that "quality is a golden key to open the world construction market". In recent years, China's economic development has been relatively rapid. People have more requirements for engineering quality, such as building quality. In addition to meeting basic living and use requirements, they also have higher requirements for living environment. Driven by the economy, the tall buildings of our country have risen one after another, which has changed the appearance of the entire city. This tall building guards our fortress with super high quality. Project quality plays a very important role in promoting economic development, protecting the interests of the people, maintaining corporate reputation, and honoring the country [1].

The purpose of this article is to discuss and explore the relationship between cost and quality in engineering construction. At the same time, based on understanding the problem of quality cost control of engineering projects, it also puts forward suggestions and strategies for quality control of engineering projects in order to improve. When it comes to quality, the cost of quality is also effectively controlled.
2. The Main Problems in the Quality and Cost Control Management of Engineering Projects

2.1. Failure to Form a Complete Cost Management System Combining Responsibility and Rights

For cost management, responsibility cannot be attributed to a single department. For any management activity, a reasonable management system needs to be established. The most important of these is to combine responsibilities, rights, and interests, which is also established in cost management. However, in the current project cost management system, these three are often separated from each other, and there is no good organic unity. Many project managers attribute the issue of cost management entirely to the head of the cost management department. The way in which the problem is viewed is questionable. The result of this is mainly due to the lack of a complete cost management system [2].

2.2. Ignoring the Control of the Quality Cost of Engineering Projects

The quality of a project is its core part. It is well known that no country needs an engineering project without quality assurance. Although pursuing the quality of project engineering will cause an increase in quality costs, such costs need to be paid and must be paid. For a long time, some short-sighted project managers, in order to save some quality costs and pursue economic benefits, have ignored the importance of project engineering quality for a project. The result of this is that although in the short term or from a single project perspective, profits may improve to some extent. However, if this is continued for a long time, it will inevitably lead to the failure of many engineering projects to meet the quality standards, and instead lead to an increase in overall quality costs [3]. At the same time, such low-quality engineering projects will also have a negative impact on the image of the unit and even the country.

2.3. Ignoring the Control of Construction Project Cost

Due to certain requirements on the construction period in the process of project construction, a "construction period cost" is caused. The construction period cost refers to all expenses incurred to complete the project in accordance with the contract construction period. As one of the three major goals of project management, the construction period goal is one of the important conditions for the owner to check whether the project construction unit has credibility. As we all know, engineering projects need to be completed within the contract period. However, if there is no reasonable organization and planning of the project period, blindly rushing the construction period, rushing the schedule, etc., will inevitably cause a large increase in the cost of the project. In addition, some engineering projects also cause serious safety risks [4].

3. Countermeasures for Quality Cost Control of Engineering Projects

3.1. Establish a Stable Survey and Design Team

With the development of economy and design technology, the requirements for engineering designers are increasing. Compared with before, it now needs to take on more tasks, and with the advancement of technology, the difficulty has gradually increased, which is a great test for designers. The design basis of a project is based on survey data. Only a good survey team can produce good survey results. Therefore, it is very important for the design to establish a stable survey team. At the same time, construction engineering design is a behavior closely related to the
market. Therefore, in order to follow the development of the market, the design institute also needs to have a enthusiastic service attitude and meticulous work style.

3.2. Solutions to Quality Cost Control Problems in Construction Units

If the construction unit wants to obtain higher economic benefits, it needs to make greater efforts in cost management. The control of quality cost includes three factors, namely quality prevention fee, quality inspection fee and quality loss fee. As for the quality prevention fee, the cost of quality prevention will increase with the construction of the project, and continue to rise with the quality requirements. The same is true of quality inspection fees, which will also increase with the improvement of quality. The difference from the former two is the quality loss fee. The quality loss fee will decrease accordingly when the quality of the project of the construction unit is improved. Therefore, through the definition of these three, we can find that there is a cross effect between them. Since there is a cross, there must be an optimal scheme to make the quality cost of the construction unit the best control. At present, if the construction unit wants to effectively control the quality cost, it must formulate a reasonable and scientific construction process and plan, at the same time strengthen the level of construction technology, and do a good job of research on construction organization. Increase the level to reduce the quality cost of the project. Of course, doing a good business plan, and at the same time doing a good job of the direct relationship between budget costs and actual costs is also the key link to control quality costs. Construction units should pay attention to business work, combine business and technology, and cooperate with each other to find out construction plans that can ensure construction quality and reduce investment. Don't just know how to work hard and not control costs.

3.3. Improve the Training Standards for Supervision Engineers and Strengthen the Management of Registered Supervision Engineers

In the process of implementing the "three controls", most of them are mainly graduates of junior colleges and technical secondary schools at this stage. They have some or no experience in this area. The so-called external supervisors are actually mostly undocumented. From the construction unit, there will be many problems in the supervision and management of the construction unit. This requires that while strengthening the supervision issues and the popularization of laws and regulations, it is also necessary to raise the threshold for registered supervision engineers and carry out continuing education and training for those who have the qualifications of registered supervision engineers to enrich their knowledge structure. Through the improvement of the quality of registered supervision engineers, the supervision of construction projects and the quality of construction projects have been further improved.

4. Conclusions

Based on the theory of quality cost control of engineering projects, this paper sorts out the problems existing in the quality costs of engineering projects and analyzes the causes of the problems. Finally, based on the analysis, from the design unit, the construction unit, and the supervision unit, it puts forward suggestions on how to guarantee the quality of the project and how to reasonably control the quality cost of the project.
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