

Research on Performance Evaluation of Construction Project Management

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Abstract. In the construction of Engineering projects, management becomes more and more important. At present, there are not many studies on performance evaluation of construction project management in China. With the continuous improvement of project management in China's engineering construction, the performance evaluation of project management has begun to be taken seriously. This paper mainly studies the performance evaluation system of construction project management.

1. Introduction

The most important resource in project construction is human resources. For human resources, its core is performance evaluation, which can not only encourage all employees in the construction of the project to a certain extent, but also restrict all employees. Therefore, in order to make the construction progress of the project more smoothly, it is necessary to establish a complete performance evaluation system to encourage all employees of the project to complete the project more seriously and responsibly.

2. Present Situation of Performance Evaluation of Construction Project Management

In the management of engineering construction projects, there are many objects of performance evaluation. The main personnel are project management personnel, project construction personnel, project procurement personnel, etc. Because the positions of construction workers are different, there are also some differences in performance evaluation methods for different personnel. For example, the performance evaluation of project managers mainly includes two parts, one is the level of individual competence of project managers, the other is the results achieved by project managers. For project managers, their performance evaluation also includes two parts, one is their work attitude, the other is their comprehensive quality. For project builders, their performance evaluation mainly depends on the quality of task completion^[1]. However, the evaluation cycle of construction projects is relatively long. Usually, the evaluation cycle is one year, but if the scale of construction projects is relatively large, the evaluation cycle of project-related personnel will also increase. Some projects have evaluation cycles of 2-3 years or longer. The evaluation cycle is mainly related to the duration of the project. Although the performance evaluation of engineering construction projects has its own characteristics, there are some problems in any way of performance evaluation.



3. Problems in the Performance Evaluation System of Traditional Construction Project Management

The traditional performance evaluation system of construction project management mainly examines the financial indicators, and evaluates the overall performance level of the project through the results of the investigation. Usually, there are two kinds of inspection methods, one is the goal management method, the other is the key performance indicators method, but both methods are relatively single. There are several shortcomings in evaluating the overall performance level of a project by investigating financial indicators. Firstly, evaluating the overall performance of a project by investigating financial indicators is somewhat one-sided, which leads to the lack of objective integrity of the evaluation results. Secondly, the content of the evaluation is too concerned about the results and the attention to the evaluation process is not enough, which makes the project team unable to clearly recognize the factors affecting the performance. It is not conducive to internal and external communication and coordination through financial indicators, leading to the neglect of the impact of external environment on the enterprise itself to a certain extent. Fourthly, the current financial indicators will make the enterprise blindly focus on short-term interests, which is very unfavourable to the future development of the enterprise^[2]. From this, we can see that the traditional performance evaluation system of construction management has obvious problems, and it is difficult to objectively and scientifically evaluate the performance of construction projects.

4. Performance Evaluation System of Construction Projects Based on Balanced Scorecard

Balanced Scorecard is a performance management evaluation tool developed from the company's perspective. This performance evaluation tool mainly carries out performance evaluation from four aspects. On the one hand, it is the financial indicators of construction projects, on the other hand, it is the internal business process indicators of construction projects, it is the customer indicators of construction projects, it is the learning indicators of construction projects. The last three indicators are non-financial indicators. From the perspective of enterprise strategy, the performance evaluation index system of different dimensions is constructed. The main evaluation idea advocated by the balanced scorecard is all-round and multi-dimensional, which has a high reference value for the performance evaluation of project management. Balanced scorecard, as a performance management evaluation tool, can reflect the real performance of construction projects more comprehensively and objectively. For engineering construction projects, it has many unsafe factors, such as the time limit of the project can not be fully determined, the process of the project is more complex. And the content of project management is also widespread. There are many evaluation indicators in the evaluation system of project management, such as project quality indicators, project progress indicators, and risk prevention indicators. Therefore, the above indicators should be taken as key performance indicators in the performance evaluation system of construction project management^[3]. Using the performance dimension of the Balanced Scorecard to construct the key performance indicators in the project management evaluation system will make the performance evaluation more accurate and comprehensive. The performance evaluation index also includes three non-financial indicators, one is customer, one is internal business process, and the other is learning and innovation. The advantages of using balanced scorecard to evaluate construction project management are as follows: first, paying attention to the current interests of financial results; second, promoting the smooth progress of construction projects; third, enriching performance evaluation indicators; and fourth, improving the evaluation system of construction projects.

5. Implementing Effective Performance Evaluation Measures

In the management of construction projects, the principle of selecting indicators should be clear. Therefore, this requires a more scientific performance evaluation index system, through a variety of different evaluation indicators so that the evaluation work has a certain degree of operability. The most important thing to pay attention to is the connotation of performance evaluation indicators. The connotation of performance evaluation indicators should not only be clear, but also be clearer, mainly

in order to avoid some differences in the understanding of the content of evaluation indicators among different evaluators. Performance evaluation index also has two characteristics, one is independence, the other is pertinence. For example, the nature of different positions in construction projects will be different, and the responsibilities of different positions will also be different. For different positions, specific performance indicators should be able to reflect the performance standards of corresponding positions. In the performance evaluation system, the evaluation indicators of different positions should be included, and different evaluation indicators should be classified reasonably ^[4]. For example, work performance and work attitude can be divided into the same category, soft indicators and hard indicators can be divided into the same category. The so-called hard indicators are mainly based on statistical data, using mathematical means to calculate the results, which will make the results relatively objective. However, the results calculated by mathematical means are less flexible. It should be noted that the data can not fully reflect the facts. Soft indicators mainly refer to the evaluation indicators that people get according to their subjective consciousness. Usually, the subjective consciousness indicators refer to the evaluation of experts to a certain extent. These indicators are not controlled by data indicators and can fully display people's wisdom. However, the accuracy of the subjective evaluation indicators depends more on the quality of the evaluators themselves. There are several methods to select performance evaluation indicators, one is job analysis, one is case study, and the other is questionnaire survey. No matter which of the above three methods is adopted, the evaluation indexes of different positions in construction projects should be determined according to the characteristics of the evaluation objects. For project managers, the evaluation indicators are mainly the ability level of project managers and the results they have achieved; for managers, the evaluation indicators are mainly their work attitude and comprehensive quality; for construction personnel, the evaluation indicators are mainly the quality of the tasks they have completed ^[5]. It can be seen that the evaluation indexes are different for different positions. It needs to be emphasized that no matter what evaluation indexes are selected, the evaluation indexes must be operable and applicable. Only in this way can the evaluation indexes be meaningful and make the evaluation results more accurate, and finally achieve the management effect.

6. Concluding remarks

To sum up, the performance evaluation of construction project management is relatively complex and technical. In the process of evaluation, it is necessary to have a thorough understanding of each key part of performance management and to determine the evaluation indicators so that performance evaluation can play the greatest role. The results of performance evaluation can not only restrict the relevant staff, but also give them the greatest encouragement, improve the enthusiasm of the project staff, so that the project can achieve better quality standards and ensure the smooth completion of the project.

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