

Strategies for Strengthening Project Management and Improving Project Quality

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Abstract: The rapid development of our society has put forward higher requirements for engineering management technology and engineering quality. The relationship between project management and project quality is complementary and inseparable. Therefore, this paper first expounds the importance of strengthening project management and improving project quality, then analyzes the internal and external factors that affect project management and project quality, and then points out that there are problems in project management and project quality. There is a need for innovation in project management models. The construction technology has not been innovated, and the engineering construction cost has not been effectively controlled. Finally, suggestions are put forward to improve the skills of project management personnel, conduct market research and quality inspection of raw material supply, improve the internal engineering management system of construction enterprises, and give full play to the supervision function of government functional departments.

Keywords: Engineering Management, Engineering Quality, Strategy.

1. Introduction

Under the current situation of rapid economic development, people's living standards and happiness index are getting higher and higher, so they also put forward higher requirements for the quality of residential houses, which also subtly affects the further improvement of my country's engineering quality. However, in recent years, my country's construction industry has developed rapidly, focusing too much on the speed of development and ignoring the quality assurance, which has also led to frequent problems in my country's construction industry. Therefore, strengthening the engineering management in the construction process of the construction industry, that is, the engineering management of the whole process from the start of the construction project to the end of the project construction^[1], is essential for the quality of the project. The healthy development of the construction industry.

2. The Importance of Strengthening Project Management and Improving Project Quality

For the construction industry, strengthening project management and improving project quality are not contradictory. On the contrary, it can be said that they complement each other. For a construction project, the quality of project management is directly related to the progress, quality and order of construction projects^[2]. Therefore, strengthening project management can efficiently arrange resources, make reasonable scheduling, ensure efficient project construction, and ensure construction safety. And improving the quality of the project can well reflect the value of a construction project, but also reflect the level of project management. Therefore, in a construction project, it is very important to strengthen project management and improve project quality. Effective project management can play a role in guaranteeing construction safety and quality. In construction projects, there are potential safety hazards,

which requires project management personnel to have strong on-the-spot response experience and superb operating skills to ensure the construction quality of the construction site project and the personal safety of construction personnel. Therefore, in modern project management, people pay more and more attention to the safety education of construction personnel. At the same time, in order to improve the quality of the project, we must pay attention to strengthening the project management of the project. Efficient, safe and fast project management is the guarantee for improving the reliability of the project quality.

3. Factors Affecting Project Management and Project Quality

3.1. External factors

In modern engineering construction projects, the most important factor affecting engineering quality is external factors. Good construction materials are the key to ensuring the quality of project construction^[3], but in many engineering constructions, the construction party or raw material supplier uses some inferior materials in order to pursue high profits, resulting in the quality of the engineering project not meeting the standard. This is an important reason for project quality problems, in addition to other reasons, such as the rise in raw material prices due to market price fluctuations, the new laws and regulations issued by the national government restricting the normal progress of construction, and sudden weather The shutdown of the entire project has forced the construction party to speed up the construction to ensure that the project can be completed as scheduled, so the quality of the project cannot be guaranteed. In addition, due to the late start and rapid development of my country's construction industry, the project supervision system has not been perfected, which also hinders the improvement of project quality.

3.2. Internal factors

Since the main body of the project is people, and people's subjective consciousness and construction behavior directly

affect the quality of the project. In actual engineering projects, in order to save construction costs, the construction party uses a large number of migrant workers among the construction personnel. Many migrant workers have weak awareness and concepts, often reject innovative systems, and are not very motivated in their work. They still use traditional concepts to accept traditional concepts. To a certain extent, it hinders the efficient operation of project management and reduces the quality of the project. In addition, the hydropower, HVAC and other projects of engineering projects generally adopt the outsourcing model, and a third party is introduced to participate in the construction of the project, so that the quality of the project cannot be better guaranteed, and it also causes difficulties in project management.

4. Problems Existing in Project Management and Project Quality

4.1. Project management model needs innovation

For the existing project management mode in the society, the mode adopted by most enterprises is basically the same. There are currently seven modes: EPC project general contracting, PPP mode, PMC project management contracting, BOT project management contracting, DBB project management contracting Parallel contracting, CM construction management contracting, DB design-build mode. Among them, the most commonly used is PMC project management contracting. Each mode has advantages and disadvantages, but PMC project management contracting is more suitable for the needs of most project management in the current society. responsibility. For each construction project under construction, it is necessary to seek truth from facts, make flexible arrangements according to local conditions, make arrangements according to the actual situation and actual needs, ensure that managers understand their responsibilities, fully coordinate the work of each project member, and strengthen the communication between members of each department. . Under the condition of ensuring the strengthening of project management, it is still possible to improve the quality of the project with the smallest cost and obtain good economic and social benefits.

4.2. Construction technology has not been innovated

The rapid development of infrastructure projects in my country has also brought about the rise of construction technology. However, more and more people are seeking to improve the quality of the project, which puts forward higher requirements for construction technology. However, the construction of engineering projects is very complicated, and all aspects of the project need to be considered. Since the construction technology is improved, the quality of the project must be ensured, and the project must be completed as scheduled. In this process, scientific and professional coordination is required. and ensure that the quality of the project conforms to national standards, thus forming the key to the core competitiveness of enterprises. However, at present, many enterprises still continue to use the same construction technology, and even neglect to coordinate the cooperation and exchanges of all parties. The project cannot be effectively managed by relevant agencies before and after construction, and the project promotion efficiency is low^[4], which ultimately makes the project completion time not

advanced. . In addition, the project construction managers did not have a good grasp of the construction technology, and could not guide other project personnel to use new construction technology for construction, resulting in a delay in the completion of the project. In addition, at present, the main body of project workers in my country are migrant workers, and their education level is generally not high, and their mobility is extremely high. Promotion and innovation of construction technology.

4.3. Construction costs are not effectively controlled

For the project construction party, the ability to effectively control the cost is the key to the completion of the project. Therefore, for the construction party and its emphasis on the supply of raw materials for the project, it is necessary to formulate a scientific and reasonable supply plan, neither using some inferior materials for construction, nor using raw materials that exceed the budget for construction, so that the capital invested by the owner can be maximized. benefit. However, in actual engineering projects, because the construction party failed to effectively supervise the budget for the supply of raw materials, and did not adopt an effective strategy, the phenomenon of widespread waste occurred in the actual process, resulting in economic benefits. cannot be maximized. The internal management mode of the construction enterprise, the management method of the on-site management personnel, and the material cost control scheme are the reasons why the construction cost of the project is not effectively controlled, and a lot of budget is wasted in the end.

5. Strategies and Suggestions for Strengthening Project Management and Improving Project Quality

5.1. Upgrading the skills of project managers

For a construction project, the management level of the project managers affects the quality of the project. Therefore, analyzing from the perspective of management science, and further improving the knowledge level and professional skills of the project managers, can greatly improve the quality of the project. . Therefore, it is possible to strengthen the assessment and training of project management personnel, adopt the assessment method combining theory with practice, and strengthen the application level of project personnel to theory, so as to apply what they have learned and improve the quality of project management personnel in an all-round way. After the training, it is necessary to further consolidate the hard-won training results. For all construction units and personnel involved in the project, the project management personnel should arrive at the construction site to give necessary guidance to ensure that the training results are truly applied to the project construction, so as to ensure Project management and project quality have been improved. In addition, the knowledge level of construction personnel has been strengthened, and the knowledge level of each person participating in the project construction has been improved from the project up, so that every detail can be noticed during the project construction process, and the project will not appear as much as possible. defects, thereby improving the quality of the project.

5.2. Conduct market research and quality checks on raw material supplies

In engineering construction projects, the quality of construction raw materials directly affects the quality of engineering construction projects. If the materials do not meet the standards, the engineering quality cannot be guaranteed^[5]. Therefore, when purchasing raw materials for construction projects, the construction party needs to conduct on-the-spot investigations to investigate the quality of raw materials, and conduct measurement work to control the quality of raw materials from the source. However, the requirements, environment, conditions and budgets of construction projects are different. Therefore, it is necessary to conduct research on the raw material market based on the needs and actual conditions of each project, and compare the brands, characteristics and prices of raw materials in various aspects to ensure the project. The quality can reach the national standard. However, the characteristics and quality inspection of the materials need to be specifically tested. The test method can be used to simulate and test according to the requirements of the project to test the bearing performance and basic strength of the material, so as to ensure that the required engineering materials can be used according to local conditions. While improving the quality of the project, it can save the construction cost to the greatest extent.

5.3. Perfecting the Internal Engineering Management System of Construction Enterprises

In order to avoid the uneven level of each project management personnel in the construction unit to the greatest extent, the construction enterprise needs to further improve the internal management system, clarify the scope of responsibility of the project management personnel, and establish and improve the accountability and reward system. In the actual process of improving the project management system, the construction enterprise should improve the management system of the project construction team, construction content and safety guarantee. At the same time, on-site construction managers should clarify the types and sources of materials required for the project, strengthen on-site management of construction projects, and arrange the connection between construction procedures [6] to ensure the smooth completion of project construction. In addition, construction enterprises should scientifically and accurately assign construction personnel and management personnel to each project, find deficiencies in the process of project construction and timely feedback to improve the system to ensure that the various systems of the enterprise are implemented in practice, so as to further improve the quality of the project And the purpose of improving the project management system.

5.4. Give full play to the supervision function of government functional departments

As the leader of market supervision, the government needs to play a role in supervision. In daily work, it is necessary to

supervise some illegal acts on the construction site. Government departments need to strengthen law enforcement, so as to adhere to strict, standardized, impartial and civilized law enforcement, and to ensure that there are laws and regulations. It must be followed, law enforcement must be strict, violations must be punished, and illegal acts must be severely punished. At the same time, strengthen the approval of project design drawings and construction supervision, and strengthen surprise inspections on project construction sites. In addition, in the selection of construction technology, project managers need to choose safe, reliable and advanced technology as much as possible to reduce the overall safety risk of project construction, improve the quality of the project, and further promote the development of the enterprise. Therefore, in the process of project construction, government departments should exert their own subjective initiative, give full play to the supervision function of the project, and ensure that the project construction can be carried out in an orderly manner.

6. Summary

As the main body of the construction project, the construction unit needs to consider the combination of project management and project quality at the beginning of the project construction. It cannot just consider the project benefits and ignore the project quality. The project quality is the only standard to measure the quality of the project. Only the enterprise can improve the project management technology as much as possible and reduce the investment of the project construction cost while ensuring the quality of the project, so as to better enhance the social and economic benefits. Therefore, enterprises must strengthen project management and improve project quality, form corporate culture, and promote the formation of their own core competitiveness, in order to promote faster development of enterprises.

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