

Analysis of Factors Affecting Construction Cost and Measures for Reducing Construction Cost

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Abstract: With the gradual development of China's construction industry, more and more engineering projects need to be implemented in combination with engineering cost. The market competition in the construction industry is increasing. It can be said that the competition in the 21st century is engineering cost competition. In order to stand out in the fierce competition in the construction industry, enterprises need to innovate and improve, and the problem of engineering cost must be firmly controlled. On the premise of ensuring the construction quality and efficiency, it is very important for both the enterprise and the owner to continuously reduce the project cost, so as to avoid unnecessary loss of money. This article will analyze the factors that affect the project cost and the specific measures to reduce the project cost from various aspects.

1. Introduction

With the rapid development of China's real estate market and the rise of social infrastructure construction, the engineering cost consulting industry, rich in local resources, contacts and policy resources, has developed rapidly, gradually improved its business types and improved its engineering survey and design capabilities[1]. Rapid improvement. With good economic and social benefits, the engineering cost consulting industry still has many needs, but opportunities and challenges coexist, and the industry itself still needs to continuously improve and improve itself in the process of development. People can't live without food, clothing, housing and transportation. With the continuous development of science and technology, people have gradually got rid of the problem of food and clothing. More and more people are focusing on construction investment and other projects. The domestic market demand for the construction industry has also become greater and greater. For enterprises, construction projects are always limited. Therefore, the market competition is increasing and the construction profits are decreasing. Therefore, they want to obtain more profits and conform to the development of the times. Enterprises must pay attention to the project cost. During the construction of the whole project, from the cost evaluation to the result acceptance, the cost, budget and other expenses consumed during this period are all issues that need to be considered in the project cost. Only by reducing the project cost from various aspects on the premise of ensuring the income and quality, can the competitiveness and sustainability of enterprises be guaranteed and the competition level in the industry be maximized.

2. The Significance of Project Cost

All construction budgets and funds in the building are up to standard according to the project contents, construction conditions and post-construction functions booked at the very beginning and pass the final acceptance[2]. In the project cost, there are not only various costs at the initial stage of construction, but also project costs such as the purchase of instruments, materials and survey and design costs required at various stages of the implementation process. However, in more specific management projects, the project cost has different meanings and there are certain correlations between them. The other meaning is that the cost involved is all the components of the content included in the first meaning[3]. Under different construction conditions, we must refer to the

current construction stage and use different engineering cost meanings to evaluate the engineering assets so as to maximize the benefits. In the construction industry, the uniqueness of pricing, multiplicity of counting and diversity of counting methods, mutual combination of various pricing forms, etc. need to be taken into account in each cost evaluation. Construction projects facing different situations, different use functions and crowds need to be considered. The products used in construction are also various, and the different performance of these products leads to the need for separate valuation and evaluation in each project cost. In some large-scale projects, the construction period is often long, and the product usage and expenditure involved are relatively extensive and complicated. They must be distributed according to the process. At the same time, the characteristics of different stages must be clearly defined. According to the different characteristics, multiple pricing should be carried out in stages and time periods to ensure the accuracy, flexibility and applicability of the overall project. The cost method is divided into various methods such as productivity index evaluation and equipment coefficient evaluation used in cost evaluation[4].

3. The Project Cost Factors

Due to the needs of management and national policies, the relevant departments need to check the construction projects and formulate a series of relevant policies according to the construction procedures and resource consumption. In the implementation process of a construction project, it needs to go through the stages of resources, personnel preparation, construction design, project implementation and acceptance. At the same time, the relevant policies will have certain impact on the social economy. Designers also need to have a certain understanding of the current prices and economy and make reasonable evaluation. In construction projects, the company's management also plays a very important role in the project cost. In the implementation of a project, it is inseparable from the correct operation of the management. If the management makes some mistakes during this period, it will inevitably encounter some unnecessary troubles in the construction process, resulting in the reduction of construction efficiency, the increase of construction cost and other problems. First of all, it is necessary for the management to have certain professional qualities and the ability to complete the project cost assessment[5]. At the same time, we should also have a certain awareness of environmental protection. In the current era, policies mainly focus on people-oriented and environmental protection. Therefore, in the design and implementation of the project cost, we should also consider the problem of resources to reduce or even eliminate waste in the project. The following is the design drawings, which must be well reserved in the cost process. If there is a problem in the drawing process, it will certainly bring some troubles to the following work. First, the structure, building form, building scale, adopted technology, used area and applied technical means of the construction project need to be classified and integrated. In some previous cases, the product quality cannot meet the expectation and the construction period is prolonged. Therefore, designers and management should make full use of the advantages of the design drawings and carry out reasonable budget design. In the process of construction, it will have a certain impact on the project cost. Due to the influence of time limit for a project, construction scale, number and sequence of construction projects and other factors, senior management personnel cannot control these situations one by one. Therefore, sometimes it is impossible to achieve all aspects[6]. It is difficult to effectively supervise the project, resulting in omissions in supervision and insufficient supervision. Due to the unfixed personnel involved in the construction of different projects and their different professional levels, it also brings difficulties and tests to the supervision. Some construction units lack safety awareness and lack of management of the personnel under their control, which often leads to chaos in the construction site and inability to operate normally. Blind revision of design drawings leads to the construction process being quite different from the original one, bringing unnecessary troubles to the construction project. Furthermore, it is necessary to grasp the construction site and materials to be used in the construction to avoid waste and other situations[7]. Some enterprises often do not pay attention to the project cost management during the settlement period after completing the previous project cost projects, but this is wrong. During the settlement period, they should consider the overall cost of the project and report to the higher

authorities for processing. Sometimes, the upper management department does not pay attention to the project cost management again, resulting in the final cost waste.

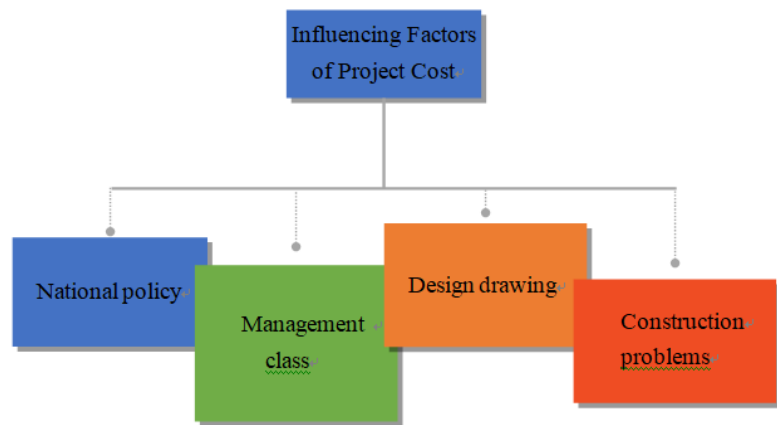


Fig.1. Influencing factors of project cost

4. Measures to Reduce Project Cost

In today's construction projects, all economic-based construction activities should take the market as the center, so that the projects built by enterprises meet the current market demand, meet the national standards, and achieve the purpose of making profits. In the construction project cost, everything should take the market as the premise, grasp the market trend, and establish a standardized management system in line with the market situation. Here, only with a perfect market production premise can the project cost be reduced, the profit gradually increased, and the interests of both parties of Party A and Party B be guaranteed. In the early stage of the project cost control can be handled according to the current situation, so that the cost becomes more reasonable, fully improve the supervision system, from the top to the bottom of the implementation of supervision, to ensure that the design drawings and project cost rigor and economic applicability, under the premise of not violating the market system as far as possible to do the best, in the project contract should choose stronger contractors, different project intersection should be unified processing. At the same time, the quality of upper-level project cost management personnel should be re-educated. The personal ability of management personnel fundamentally reflects the level of enterprise project cost. The personnel should be trained on a regular basis, the corresponding knowledge system should be constructed in a timely manner, and the quality of management personnel should be assessed in a timely manner. The quality of management personnel should be continuously improved to meet the needs of today's market, so that personnel and enterprises can make progress together[8]. For the owner of Party B, in order to obtain a satisfactory expectation, what should be considered is how to reduce the investment and capital expenditure of the project capital as much as possible on the premise of ensuring the quality. Therefore, the enterprise should communicate with the owner in a timely manner during this period and make corresponding adjustments to the policy according to the owner's ideas. The completion period of the project is also an important link in the construction project. It is appropriate to make statistics on the project data and the total amount of the project, exclude the unfinished projects in a timely manner, review the contract and eliminate the unreasonable points. During this period, a certain degree of openness and transparency are achieved to ensure the credibility.

5. Conclusion

Construction project cost mainly has the characteristics of diversity of valuation methods, uniqueness of valuation, multiple valuation, higher complexity of pricing basis, and each project has its own specific use function construction standard and construction period[9]. The geographical location of the project is different from the external environment. At the same time, the market factors, technical factors and potential competition factors in the project area are also different.

Individual differences of these products determine that each item must be priced separately. In a word, the factors that affect the construction cost are mainly policy factors. Construction enterprises should improve the level of project cost management, strive to improve the quality of project cost management personnel, strengthen the coordination of various departments, carry out necessary control in the construction stage, and strive to reasonably control the project cost. The foundation to ensure the quality of construction projects. Within the scope of the company, improve the economic benefits of the enterprise, so that the enterprise can achieve sustainable development. In the process of construction project cost, the most reasonable and effective policies and policies must be put forward on the premise of ensuring project quality. At the same time, we should strengthen the management of construction machinery and materials. During construction, we must improve the construction organization. At the same time, it is of great significance to reduce the construction cost to improve the overall quality of construction personnel and improve the management level of management personnel.

References

- [1] Burton J, Eggleston B, Brenner J. Community-Based Health Education Programs Designed to Improve Clinical Measures Are Unlikely to Reduce Short-Term Costs or Utilization Without Additional Features Targeting These Outcomes. *Population Health Management*, 2017, 20(2):93-98.
- [2] Guo C F. Design Difference Analysis and Coping Strategies for International Project. *Journal of Railway Engineering Society*, 2017, 34(7):1-4 and 16.
- [3] Ericson Berg A, Hammersberg P, Fundin A. Factors influencing control charts usage of operational measures. *Measuring Business Excellence*, 2017, 21(3):225-238.
- [4] Ralston S L, Atwood E C, Garber M D. What Works to Reduce Unnecessary Care for Bronchiolitis A Qualitative Analysis of a National Collaborative. *Academic Pediatrics*, 2017, 17(2):198-204.
- [5] Raynor H A, Davidson P G, Burns H. Medical Nutrition Therapy and Weight Loss Questions for the Evidence Analysis Library Prevention of Type 2 Diabetes Project: Systematic Reviews. *Journal of the Academy of Nutrition and Dietetics*, 2017, 117(10):1578-1611.
- [6] Kouam M K, Moussala J O. Assessment of Factors Influencing the Implementation of Biosecurity Measures on Pig Farms in the Western Highlands of Cameroon (Central Africa). *Veterinary Medicine International*, 2018, 2018:1-9.
- [7] Odole A C, Odunaiya N A, Ojo J O. Factors influencing the use of outcome measures in knee osteoarthritis: A mixed method study of physiotherapists in Nigeria. *Physiotherapy Theory and Practice*, 2018:1-10.
- [8] Lehn F, Bahrs E. Analysis of factors influencing standard farmland values with regard to stronger interventions in the German farmland market. *Land Use Policy*, 2018, 73:138-146.
- [9] Nomura K J, Kaplan D M, Beckensteiner J. Comparative analysis of factors influencing spatial distributions of marine protected areas and territorial use rights for fisheries in Japan. *Marine Policy*, 2017, 82:59-67.