

# ***Cost Management and Risk Control of Construction Projects under the Market Economy***

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**Abstract:** With the continuous development of construction enterprises, the cost management of engineering projects has received more attention as a factor that directly affects the profits of enterprises. Under the deployment of the market economy, which is closely related to it, the construction cost often presents a certain degree of uncertainty. In the face of this uncertainty, properly managing risks and optimizing cost management strategies have become an effective way to maximize the benefits of construction companies. Starting from the problems existing in the cost management of construction enterprises, this paper puts forward some suggestions for their risk control and cost management.

**Keywords:** cost management, construction economy, risk control

## **1. Introduction**

Since the country's opening of the market economy to the current domestic market economy related systems are relatively sound and the order is relatively stable, the construction engineering industry is also paying more and more attention to the cost management of construction projects and the corresponding risk control under the influence of the market economy. At the same time, cost engineering has long been an independent kind of professional activity. Engineering approach to the management of investment and production costs is widely used in industry and capital construction [1]. Market economy is an economic activity based on the allocation of social resources by the market based on supply and demand under the relatively sound trading order formulated by the state, under the influence of which the cost of materials has become the most important factor in the cost management of construction projects, which in turn leads to the negligence of other hidden costs, resulting in considerable economic losses. And Every construction organisation faces risks that occur in different construction environment and with different likelihoods and impacts. The risks associated with the construction sector can generate more or less severe consequences for an organisation [2]. If it is not perceived as an essential duty, various issues and losses will follow.

## **2. The Impact of Market Economy on the Economic Cost of Construction**

Since under normal circumstances, the construction period of construction projects is long, so it tends to cause certain fluctuations in various costs due to the regulation and control of the market economy during the cycle, with certain uncertainty. "From a macro point of view, the national market is relatively open, there are many choices for construction companies, and the local market relationship

will not affect the overall supply and demand relationship, and it also means that the prices of building materials in various places will not be too far apart [3]." Therefore, in most cases, the increase in material prices is based on the increase in labor costs and the increase in the price of production energy, but from the perspective of cost control, it is still feasible to consider materials in non-local areas, especially now that the transportation industry has developed relatively maturely and transportation costs have declined. As a result, the factors affecting the overall material cost have expanded, from the original general trend of material prices only considering the construction period to the logistics level, which expands the uncertainty of costs throughout the cycle. At the same time, because some construction projects require special building materials, when the market supply and demand is small, regional transportation, supplier selection and other factors, the material price is more likely to be unstable and the transaction cost is high. This also aggravates the difficulty of risk management and control for construction enterprises. Under the role of market economy, construction enterprises often compress various costs to reduce prices to compete for bids, but at the same time, compressing costs may also lead to large fluctuations in material prices, labor prices, transportation prices and other uncertain factors, unable to face risks in a limited manner, resulting in compressed profits to ensure the completion of construction, and even in the case of low quality of management personnel, it may lead to too extensive construction and reduce construction quality. More extreme can lead to long delays or stoppages of the project, with huge losses for both sides.

### **3. Problems in Cost Management and Risk Control**

#### **3.1. The Cost Management Concept of Construction Enterprises Is Backward**

For a long time, some construction enterprises have underestimated the importance of cost management, and have not updated the concept of construction cost management in time, resulting in their backward concept, and the cost is not competitive compared with other enterprises, and then lagging behind in the market competition. At present, most of the economic cost management of construction enterprises is limited to the control of resource consumption in project construction costs, and there is no comprehensive research on the supply chain of enterprises, does not pay attention to the optimization of cost expenditure in the process of resource supply, and does not plan the strategic cost of enterprises from the whole process of enterprise management. It is believed that cost management is only the responsibility of the cost management department or cost management personnel, and the business idea generally belongs to the extensive management mode of "heavy responsibility and light work", ignoring the prior and mid-event control of costs [4]. There are also some construction enterprises that lack a long-term vision for the management of construction costs, only pursuing the maximization of the benefits of a single project, while ignoring long-term economic benefits, which may lead to poor reputation in the industry and then lose some of their benefits. At the same time, some construction enterprises lack the control of time cost and labor management cost, resulting in a lot of manpower and time spent during the project preparation, which not only affects the bidding of the next construction project, but also increases the hidden cost of the current project, so that the construction cost cannot be effectively compressed.

#### **3.2. The Quality of Management Personnel Is Uneven**

At present, the problems of management personnel of construction enterprises are mainly reflected in the shortage of management talents and the low quality of management personnel. The main reason is that at present, the students trained by Chinese college students and the management talents required by enterprises have a gap in social experience, and enterprises often prefer to recruit talents with certain experience and certain achievements, rather than fresh graduates, which leads to a huge gap, enterprises are unwilling to recruit fresh graduates, and fresh graduates are also difficult to find

jobs to accumulate experience. This forces enterprises to recruit students who lack work experience to manage, so that the quality of managers is often not high, and there is no effective solution in dealing with problems. In situations involving inadequate information during the initial stages of the project, construction authorities typically use subjective experience judgments or draw analogies with similar projects to perform deterministic cost single-value estimates. As judgment capabilities differ among professional employees, differences with no scientific basis occur in estimation results [5]. While construction companies often have experienced staff to work with cost management or pre-work training activities, this also increases hidden costs.

### **3.3. The Cost Management System Is not Perfect**

Due to the lack of understanding of cost management, some construction enterprises lack a special department for cost management, but directly hand it over to the financial department. Although this method saves labor costs in the short term, because the financial department often lacks relevant cost management knowledge and experience, it may lack market investigation and material quality appraisal in the process of cost management, which is not conducive to the long-term development of the cost management system. At present, the responsibility of many domestic construction enterprises for cost management is only a formality. The project manager of the project often has unclear responsibilities and responsibilities, the relative use of rights is chaotic, and the supervision and management department of the corresponding enterprise has not established the corresponding evaluation and reward and punishment system and measures, and even if it exists, it is not implemented in place, and does not play a key role in promoting the development and progress of cost management [6], resulting in some low-quality cost managers being bribed by suppliers by improper means when investigating the market and purchasing materials, and then selecting material suppliers with poor quality and higher prices to seek benefits for themselves, resulting in higher cost increases for construction enterprises, and may cause certain risks.

## **4. Optimization Strategy of Economic Risk Management and Control of Construction Projects**

In construction projects, risks are defined as the probability of an event that may negatively affect the life cycle or the schedule of the project and will expose the project to a viable loss. Various damaging consequences may occur on the project because of risks and uncertainty [7]. So it is essential to optimize Construction risk management as a positive and proactive process intended to reduce the likelihood and impact of unsatisfactory consequences to the project in its different stages, such as design, construction and operation [2].

### **4.1. Improve the Construction Cost Management System**

For construction enterprises, cost risk control is an important part of cost management. A good construction cost management system can effectively reduce the risks in construction projects. First of all, there must be a clear responsibility distribution system, assign each work to the corresponding person, and avoid overlapping responsibilities, so as not to cause waste of personnel and unclear responsibility distribution, so that the work is not completed in place, which poses certain risks to the cost management of construction projects. While determining the personal responsibility system, it is also necessary to determine the responsibilities between each team and jointly set goals for multiple teams according to needs, so as to improve the communication between each team and individuals, improve work efficiency, reduce hidden costs, and reduce the risk of errors due to poor communication, resulting in increased costs. At the same time, the cost manager must implement dynamic management of the project cost and track the project implementation process in real time,

so as to grasp the operation of the project and the progress of the project in time [8]. Considering the actual situation, the subordinate units of the general project can make appropriate regional adjustments according to the regional differences in project construction and the actual situation and standards of the local project to adapt to market changes [9]. Multiple people and multiple parties determine material prices, labor costs, suppliers, etc., to prevent managers from using private rights to make profits in the process of cost management, so that construction costs are increased and risks are increased.

#### **4.2. Strengthen Project Quality Management and Audit**

Engineering quality management and audit is also an important part of risk control. Some enterprises unilaterally emphasize the cost control of the project, in order to pursue cost reduction and improve profits while ignoring quality, may increase the additional costs paid due to failure to meet quality standards, and also bring reputational losses to the enterprise [4]. Some construction companies neglect the quality management and audit of engineering projects, and only require minimum standards, which leads to continuous problems in construction projects during acceptance, spending a lot of money and time to repair. Therefore, construction enterprises improve the responsibility system of each part in the project construction process, strengthen quality management in the construction process, and reduce the risk of cost increase caused by rework. At the same time, strict management is carried out in the process of project completion, and strict review of the project is carried out to prevent accidents in the use of the project, causing loss to the reputation of the construction enterprise and increasing the construction cost.

### **5. Cost Management Strategy of Construction Process**

#### **5.1. Updating Traditional Concepts**

While traditional cost management only takes the value of the internal capital movement of the enterprise as the control object, modern enterprises adopt open thinking, not only to study the internal conditions of the enterprise, but also to study the external environment, such as product market information, competitors, industrial technology and industrial transformation development trends, etc., to make strategic cost decisions [4]. Some construction enterprises have old concepts and lack limited management of costs, resulting in a large waste of resources, money and time. Limited cost management concept can save a lot of construction costs, but also strengthen the management of enterprises, construction enterprise cost management can effectively integrate the work of various departments during the preparation of the project, on the basis of the personal responsibility system, establish a common responsibility system to mobilize the cooperation and enthusiasm of various departments, reduce hidden costs, rather than completely push the responsibility to the individual, resulting in time costs and labor costs, while construction enterprises according to the relevant construction requirements, develop a feasible plan, Dynamically respond to changes in costs under the market economy, and arrange supervisors to conduct

#### **5.2. Appoint High-quality Personnel for Cost Control Management**

The quality of construction management personnel will directly affect the effect of construction economic cost management. The project success is correlated with three major aspects of cost, time, and quality where risks cannot be eliminated but can be effectively managed [7], mainly because they are the main person in charge of construction economic cost management as management personnel, and only when they have good professionalism and sense of responsibility, construction economic cost management can be better implemented. At the same time, when training and educating relevant

management personnel of construction projects, construction enterprises should first train ideological awareness, so that they can have a comprehensive understanding of their work content and responsibilities, so that they can consciously update and innovate management ideas and methods in their work, and then enrich their cost management experience and knowledge in practice, so that they can face the problems encountered in cost management, and at the same time increase the importance of construction enterprises to cost management, and formulate a complete investigation, analysis, The oversight process is used for cost management. At the same time, the appointment of high-quality talents as the management of cost control, and the setting of relevant reward and punishment systems, can effectively promote managers to train employees, promote exchanges between departments, and pass on their own experience to achieve better engineering results, indirectly saving labor costs. Managers can also experience the change of market prices, flexibly select procurement materials and suppliers, and supervise procurement personnel, and verify the cost list in a timely manner to achieve cost savings.

## 6. Conclusion

Under the allocation of market economy, construction project cost management and risk control have been affected by many factors. Nowadays, there are still relevant problems to be solved in various construction enterprises, such as backward concepts, imperfect systems, uneven personnel quality, etc., only the use of relatively correct strategies to solve these problems, in order to better promote the development of cost management in the enterprise, to achieve the purpose of ensuring the quality of the project for the maximum benefit of the enterprise.

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