http://ojs.bbwpublisher.com/index.php/JARD

Online ISSN: 2208-3537 Print ISSN: 2208-3529

Discussion on Construction Project Cost Budget Settlement Review

Hongfeng Liu*, Yumin Yuan

Chongqing University of Science & Technology, Chongqing 401331, China

*Corresponding author: Hongfeng Liu, 2002015@cqust.edu.cn

Copyright: © 2024 Author(s). This is an open-access article distributed under the terms of the Creative Commons Attribution License (CC BY 4.0), permitting distribution and reproduction in any medium, provided the original work is cited.

Abstract: Construction project cost control involves many complex contents, forming a large amount of data information. If the processing method is unreasonable, it will likely affect the cost control efficiency. Therefore, in the current construction project management, the review of project cost budget settlement is the focus to solve the cost management problems of construction projects and promote the development of the construction industry. This article mainly analyzes the influencing factors and current situation of construction project cost budget settlement review, and based on this, it explores the project cost budget settlement review strategy to promote the healthy development of construction project cost work.

Keywords: Construction project; Cost; Budget settlement; Review strategy

Online publication: January 23, 2024

1. Introduction

Project cost budget settlement review is a key approach and effective construction project cost control method. A budget settlement review can fully cover and manage project cost work. It is helpful to discover loopholes and deviations in project budget settlement promptly and improve the level of project cost control. Many factors affect the budget and settlement review of construction project costs. At the same time, the problems in budget settlement review are diverse. It is necessary to adopt effective review strategies based on these factors to ensure construction project cost control efficiency.

2. Factors affecting construction project cost budget settlement review

(1) Operation and management

During construction projects, the operation and management work content is relatively complex, including pricing methods, contract signing, investment costs, etc. Construction units did not optimize construction project management and social reputation to obtain greater profits. Instead, they focused entirely on high quotas and construction project quantities to increase the cost of construction projects [1]. In addition, there are many construction project cost management projects that are prone to changes

in the later period. The calculation basis and procedures are relatively complex, easily leading to calculation errors.

(2) Lack of quota items

The preparation of budget and settlement for construction projects is relatively complex and requires the preparation of accounting content based on various economic activities. Therefore, budget and settlement preparers must have strong professional skills and qualities. However, judging from the actual work situation, there are still many problems and deviations in the preparation of budget settlements. For example, the method of converting quotas is unscientific. At the same time, with new materials and technologies constantly being updated, it is easy to cause missing items in the quota, and many problems need to be addressed. However, due to the lack of survey data on settlement quotas, there are many unreasonable problems.

(3) Budget preparation

In the construction project cost estimate and settlement, the budget preparer should conduct an investigation and analysis in advance according to the construction project situation to ensure in-depth research and prevent missing items from being included in the later project cost budget preparation, making it difficult to fully reflect the project quantities and expenses. To ensure the progress and quality of construction projects, some units have no choice but to exceed the budget.

(4) Project implementation

The construction stage of a building project is a critical stage of cost control and the stage with the largest capital investment. This stage must strictly implement the construction work per the contract management requirements. A large number of studies on the construction stage of construction projects have found that it greatly impacts the project cost, and it is also the stage with the most difficulty in cost control. Therefore, construction units tend to neglect the cost budget and settlement review work. The implementation stage of a construction project is where funds are most likely to be wasted. On the one hand, the waste of funds is due to insufficient personnel control capabilities; on the other hand, it is also directly related to contract changes, organizational errors, etc. Therefore, construction units must strengthen budget review during the project implementation phase.

3. Analysis of the current situation of construction project cost budget settlement review

(1) False reporting of project quantities

During the construction project cost estimate and settlement review work, the false reporting of project quantities was relatively obvious. The main reason for this problem was that the estimation of the project quantities before the start of the construction project was unscientific. As a result, the construction unit did not make adjustments based on the construction conditions during the construction. The adjustment of the engineering quantity is made, but the adjustment change of the engineering quantity is ignored in the settlement. In addition, construction workers did not pay enough attention to the cost estimation and settlement of construction projects. They did not understand the specific work content, resulting in false reporting of project quantities.

(2) Fictitious audit fees

In the construction project cost budget settlement process, the probability of cost fictitiousness is relatively high. For example, during the construction of a construction project, due to the construction location being in a relatively prosperous neighborhood, it is very easy to increase project

transportation costs due to traffic problems during construction. However, in the construction project cost budget settlement, the staff did not determine the impact of traffic problems on the cost according to the specific conditions of the construction, resulting in this part of the cost being fictitious. In addition, to increase project profits, some companies will pretend that the construction unit incurs some environmental protection expenses, but this part of the expenses is not applied to environmental protection work, resulting in this part of the cost being wasted [2].

(3) Inaccurate preliminary settlement results

Various new technologies and materials are constantly emerging in the development of construction projects. These new technologies and materials provide new assistance to the development of the construction industry. However, applying these new technologies and new materials in construction will cause the results of the budget settlement review to be inaccurate due to the lack of corresponding specifications and standards. At the same time, some personnel tend to double-count sub-item quotas during the budget settlement stage. For example, in the calculation of building decoration materials, some materials are included in separate calculation items and appear in consolidated calculation items, resulting in repeated calculations and making it difficult to ensure the accuracy of calculation results.

(4) Unreasonable review preparation

The construction period of a construction project is relatively long, ranging from a few months to several years. At the same time, many contents are involved in the construction of construction projects, and staff need to conduct budget review according to the corresponding construction standards. Before the construction of a building project begins, staff must conduct a scientific evaluation of the project costs based on standards and conduct a cost analysis. It is necessary to establish a construction project cost budget settlement review system based on the actual construction conditions of the project, find existing problems, analyze the causes of the problems, and predict the possibility of over-budget problems.

4. Construction project cost budget settlement review strategies

(1) Strengthening project quantity review

The calculation and review of construction project quantities must be conducted strictly by the construction contract and construction drawings to ensure that the project quantities comply with construction standards. For example, in the calculation of engineering quantities, if some engineering items have been calculated in the comprehensive sub-item, separate calculations will no longer be performed. During the review of project quantities, it is necessary to strictly combine the hidden projects and design change records to complete the review work and determine whether the review procedures are reasonable and complete. In calculating engineering quantities and determination of units, relevant guidelines must be strictly followed to avoid errors in results. Reviewing project quantities requires examining whether there are any corners-cutting at the construction site, conducting on-site surveys, accurately measuring the dimensions of each building structure, and keeping accurate records [3]. At the same time, the quantity and quality of materials are checked. The project quantities are randomly checked through drawings to determine whether they meet the organization's construction requirements, and changes in architectural design are measured. The review of project quantities is relatively cumbersome and requires correct review methods. There are currently many methods for auditing project quantities, including standard budget audits, comprehensive audits, etc. Corresponding methods can be adopted based on project characteristics, tasks, and time. Auditors

should focus on accumulating experience when reviewing project quantities and comparing projects of the same type. In addition, the current development of engineering quantity calculation software is relatively mature, thus calculating engineering quantities through computer software can be attempted.

(2) Clarifying raw material prices and rates

In project cost calculation, it is necessary to ensure the scientificity of the calculation method and the accuracy of the rate. When carrying out accounting work, staff must first understand the material prices in the market, collect the price range and fluctuations of materials through market surveys, and determine the unit price of budget settlement through multiple comparisons. In calculating construction costs, the unit price must be combined to ensure the accuracy of the calculation. Therefore, the review of materials must be rigorous and cautious, and records of the material review work must be kept to provide sufficient reference for subsequent material review.

(3) Paying attention to the construction cost review

During construction projects, construction units and supervisory departments must focus on reviewing project cost budgets and final accounts to ensure the efficiency and quality of budget and final account reviews. Review work is conducted strictly by relevant laws, regulations, and industry standards for project cost budget settlement. In reviewing construction costs, it is necessary to manage the reviewers well to ensure that the review work is implemented rigorously and meticulously and to improve the accuracy of the project review. In the review, we must fully consider the impact of various information, solve various problems during the review, and promote the smooth development of the cost review work.

(4) Emphasis on drawing visa review

The construction project cost estimate and settlement review are in progress. To ensure the quality and efficiency of the review, it is necessary to ensure the accuracy of the construction visa and as-built drawings. When reviewing construction project cost estimates and settlements, reviewers must report project changes and review changes and visa documents in a timely manner. If it is found that there are unclear semantics or expressions, the reviewers should further review based on these issues to ensure the accuracy of the review. At the same time, the cost review will be carried out through an on-site investigation based on the actual situation.

(5) Optimizing the budget and settlement review process

As the construction project cost budget and settlement review work are being carried out, it is necessary to ensure the completeness of the review process, which is related to the supervision and control effect of the project cost work. To ensure the project construction and review level of the project cost budget and final accounts, the project cost budget and final accounts review process are first optimized. During the preparation stage of a construction project, auditors must collect relevant audit data to ensure the accuracy and comprehensiveness of data collection. At the same time, the information collected must be authoritative and referential, such as bidding materials, procurement contracts, etc., to avoid the mixing of informal materials that will affect the review effect; during the project construction phase, a dynamic management method needs to be adopted to cover labor costs, construction materials and cost, etc. It is also necessary to strengthen auditing and monitoring in many aspects to ensure that construction costs meet market industry standards ^[4]; lastly, the settlement stage of the construction project, which is the end of the project, is an important process of cost control. In the actual management of project costs, false cost reporting is relatively serious, and private appropriation of project equipment and materials often occurs, which has a relatively large impact on project cost management. Therefore, it is also an important content in the audit, and the rigor of the audit must be ensured ^[5].

(6) Developing a scientific review system

In reviewing construction project cost estimates and settlements, a complete review system is required to ensure that the review work is carried out in a standardized manner. Before the audit work begins, the construction unit must summarize the problems that may exist in the audit work, formulate scientific audit procedures, improve the previous audit problems, and re-establish the audit system. After the audit is completed, the person in charge must keep a record of the process and sign for confirmation. The person in charge can be contacted if there are any audit problems later. Staff should also focus on innovating audit methods to improve audit efficiency, such as using modern information technology, BIM (Building Information Modelling) technology, etc., to ensure the threedimensionality of audit data and the accuracy of audit results through modeling. Applying automated measurement, calculation, and audit equipment in audit work can achieve twice the result with half the effort. In addition, at the contract signing stage, both parties must choose a scientific budget and settlement preparation method based on the project's specific conditions [6]. If the company has a stable business, it can use a fixed budget method to optimize preparation. If the business changes of the enterprise project are relatively frequent, the rolling preparation method can be used for preparation. The optimization and adjustment of the preparation method can better meet the engineering requirements.

(7) Promoting collaboration among departments

In the construction management of construction projects, the cost budget settlement review is not only the responsibility of the financial department. It requires cooperation and communication among various departments to improve the efficiency of construction project cost budget settlement review. Auditors should cooperate with the project's design, construction, supervision, suppliers, and other units and departments to obtain more comprehensive and detailed construction information. We also went deep into the front line to collect relevant materials comprehensively and accurately at different stages of construction to ensure the authenticity of the materials. At the same time, it is necessary to actively communicate with the construction personnel to understand the real situation of the construction [7]. To ensure smooth communication, an efficient communication model can be established through information management platforms and technical means, ensuring the efficiency of information transmission and sharing and promoting the intelligent and automated development of construction project cost budget settlement work [8].

(8) Building an excellent review team

The review of construction project cost budget settlement has relatively high requirements on the professional ability of reviewers. Reviewers' ability and professional quality will affect the quality of construction project cost budget settlement review. For example, certain auditors do not understand material prices during construction, resulting in incorrect quotations, which will inevitably increase construction costs. The material quality control during the review was not in place, and some inferior materials were mixed in, resulting in having to be reworked later and increasing the economic losses of the construction [9]. In response to this situation, construction companies must strengthen the training of budget settlement review personnel. In terms of professional skills, it is necessary to provide training based on the most advanced budget settlement work methods and technical means to avoid affecting accounting efficiency due to unfamiliarity with budget settlement work. At the same time, we should also strengthen training in professional ethics to enhance the social and professional responsibility of cost budget and settlement auditors and avoid budget settlement errors caused by

self-interest affecting cost control and human operating errors [10]. In addition to professional training, an accounting talent training model can also be established in the enterprise to bring old and new accounting talents to increase the practical experience of auditors.

5. Conclusion

To sum up, the construction project cost budget settlement review involves many contents and is difficult to carry out. Many contents are relatively detailed. If the review is not in place, it can easily cause huge economic losses and affect the cost control of the enterprise. Judging from the current development of construction project cost budget settlement review work, many deficiencies still affect the efficiency of the review work. Therefore, it is also necessary to start from the details and strengthen the improvement of systems, methods, personnel, and other aspects based on the characteristics of construction project cost budget settlement review work to ensure its efficiency.

Disclosure statement

The authors declare no conflict of interest.

References

- [1] Huang J, 2023, Research on Key Points of Construction Project Cost Budget Settlement Review. Intelligent Building and Engineering Machinery, 5(3): 72–74.
- [2] Deng Z, 2023, Research on Key Points and Management Standards of Construction Project Cost Budget Settlement Review. Brick World, 2023(9): 106–108.
- [3] Lin S, 2023, Discussion on the Review of Construction Project Cost Budget and Settlement. Juye, 2023(9): 113–115.
- [4] Rao D, 2022, Research on Key Points of Construction Project Cost Budget Settlement Review. Intelligent Building and Engineering Machinery, 4(9): 73–75.
- [5] Hu S, 2022, Analysis of Key Points and Management Measures for Construction Project Cost Budget Settlement Review. Enterprise Technology and Development, 2022(9): 167–169.
- [6] Feng X, 2021, Key Points in Construction Project Cost Budget Settlement Review. Architecture and Budget, 2021(7): 20–22.
- [7] Tian G, 2023, Construction Project Cost Budget Settlement Review and Construction Cost Management Analysis. Engineering Technology Research, 8(2): 121–123.
- [8] Hao F, 2023, Analysis of Key Points and Management Standards of Construction Project Cost Budget Settlement Review. Henan Building Materials, 2023(4): 108–110.
- [9] Yu X, 2022, Application of Project Cost Budget Settlement Review in Construction Project Management. Construction Enterprise Management, 2022(1): 61–63.
- [10] Ji W, 2022, Research on the Relationship Between Construction Project Cost Budget Settlement Review and Construction Cost Management. Modern Property: Mid-Term Issue, 2022(6): 88–90.

Publisher's note

Bio-Byword Scientific Publishing remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.