

# Construction Project Bidding Agency and Cost Management Strategy in Bidding Stage

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**Abstract:** In the social development, bidding agency plays an important part, providing services for the development of construction project bidding, and endows the development of construction project bidding with a diversified characteristic. The cost management of a construction project bidding stage has a dynamic characteristic. The bidding agency can provide bidding related business for the construction enterprises to ensure the quality and the effect of the bidding service, leading to the foundation for the sustainable development of the construction enterprises. This paper analyzes the deficiency in the bidding agency, and cost management in the bidding stage of the construction projects, as well provide some effective countermeasures or recommendation, to improve the value, and the role of the bidding agency in managing and controlling the construction project cost within the scope allowed by the law, and regulations, and also to ensure the comprehensive benefits of construction projects for the construction enterprise.

**Keywords:** Architectural engineering; Bidding agency; Cost management

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## 1. Introduction

In the bidding agency work scope, a relevant bidding agency accepts the entrustment of the owner, operate with fairness, impartiality, and openness as the basic principle, and also provides relevant professional services to meet the needs and the demands of the owner. For new tender, the bidding agency plays a role as a bridge between the tender company and the bidder. In the bidding process of construction projects, the government standardizes, and control the bidding process through the bidding agency.

## 2. Problems in bidding agency and cost management in bidding stage of construction projects

### 2.1. Lack of standardization of bidding agency

In the terms of the actual work scope of the bidding agency, it is necessary to provide services based on the basic principles of fairness, impartiality, and openness, however many biddings agency shows lack in the standardization of the agency process and services, which have to be given a priority<sup>[1]</sup>. At present, in order to obtain the tender, many agencies take some opportunistic means in the bidding process, and willing to accept unreasonable requirements of the tender owner, which might be against the law and regulations. Even, during the bidding process, the bidding agency breaks the laws and regulations, and also adopts the method of black box operation, where the winning bidder has already been selected. In this scenario, even if the bidding enterprise fails to meet the construction conditions, they can still win the bid or obtain the tender through illegal means, which means the quality of the building in the construction project might be low and be dangerous to human. Some bidding agencies also collude with the bidder to take kickbacks, and

promote a particular bidder to win the bid in the way of project omission during project liquidation, to gain private interests. Therefore, there is obviously a deficiency in the standardization of bidding agency workflow [2].

## **2.2. Lack of professional bidding agency talent support**

In order to meet the actual needs of the construction project bidder agency, the agency need to ensure that they are good in the term of their bidding qualification, strengthen of the talents, and the ability to form a professional bidding agency team [3]. However, according to the actual situation, the current construction project bidding agency has some drawbacks such as insufficient in the internal personnel professionalism, low in the level of professional cultural knowledge and lack of good professional quality, which may cause a negative impact in the service quality of the bidding agency [4]. Some of the existing bidding agency personnel have not received a systematic professional knowledge training and education in the bidding process. Further, they do not have a good grasp of the bidding process and legal provisions, as well their scope of knowledge are narrow, and their professional ability is relatively weak, which can lead to a very distinct blindness in the bidding process [5]. Additionally, some bidding personnel have a low professional level, where their ideas are not aligned with the current development, which caused them to have misunderstanding on the bidding process, as well not aware of their responsibilities, and positions in the bidding agency, which will further affect the progress and quality of the bidding. The management of certain bidding agencies are not strict, where the qualification, quality, and the skills of the bidding personnel is not strictly reviewed, which can lead to the lack of fairness in the bidding process, as well the fairness of bidding competition of construction enterprises can be affected [6]. The professional bidding agency should thoughtfully formulate construction period, progress, node, and other schemes, according to the actual situation of the project. The bidding agency personnel also should understand the construction process, construction period quota and other basis, to ensure the effective realization of the objectives of the bidding period is carefully analyzed. Special personnel should be assigned to study the relevant situation reports of the project, to deal with some existing problems, implement post responsibilities, strictly ensure the control of time nodes in the subsequent bidding process, and finally, ensure the smooth implementation, and successful delivery of the project, as well participate in the review of the contract meeting after completion of the bidding work. The contract terms that are proposed should be signed strictly and carefully, and the construction period should also be reasonable, to solve the worries of the tender's owner.

## **2.3. Budget preparation is not scientific**

In the construction project management, the cost management is easily affected by many factors, therefore the complexity of cost management is high and difficult to estimate. Especially during the complex economic situation, where the market has a large economic fluctuation. During the construction project bidding stage, it is impossible to scientifically estimate the price or project cost because the period of a construction project is long, and material price fluctuation is something obvious to happen, therefore there is always a risk for a construction project cost exceeding the estimated budget [7]. In the budget preparation process, bidding agency personnel who are lack in the professional skills, lack in the experience, and do not carry field research may fail to grasp the whole situation or fail to recognize the factors which may influence the project cost, further leads to the wrong estimation of the budget [8]. Professional bidding agency, should ensure the preciseness, accuracy, and comprehensiveness of the terms of the bidding document, project cost, and related expenses, and control the project investment within the reasonable range by repeatedly reviewing the rationality of the cost control strategy.

### **3. Strategy of bidding agency and cost management in bidding stage of construction projects**

By taking the overall reconstruction project of Shanghai Baoshan Renhe Hospital as an example, the construction party of the project is Renhe Hospital, with a total investment of 100 million yuan. The total land area of the project is 25090 square meters, including outpatient and emergency building, ward building, and medical technology building. The facade reconstruction includes the structural reinforcement of canteen, ambulance station, boiler room, guard room, and the medical technology building. Based on the actual situation, the construction process, and the construction period quota, the bidding agency should formulate plans in term of the progress and the construction period, carefully study the project situation, fully discusses the bidding plan, adopt the prequalification system, and let the tender owner to determine the prequalified applicants to participate in the bidding under the collective decision-making mechanism. The implementation of project bidding agency and cost management or budget the in the bidding stage shall achieve the points as described below.

#### **3.1. Establish training institutions for bidding agency services to improve the quality of bidding agency services**

Bidding agency is mainly composed of professional personnel. In order to ensure the service quality of the bidding agency, they should pay attention to the improvement of professional knowledge level of their personnel to have an ideology and moral quality <sup>[9]</sup>. The bidding agency shall attach importance to the construction of the professional training institutions and carry out professional training for the agents, by focusing on the professional knowledge, skills, the comprehensive quality of the agents, ideology, and morality, legal knowledge, sense of responsibility, and business skills as the content of the training. After passing the evaluation, the agency can ensure that the particular personnel are competent to work for the bidding agency. The training institutions for bidding agency services should ensure the strictness on their training management, and ensure that the personnel meet the post requirements. The person, who is in charge of the agency should have relevant professional knowledge, technical ability, and have a comprehensive quality, in order to generate professional personnel who can support the bidding agency work in the construction projects, subsequently promote the significant improvement of bidding agency service quality <sup>[10]</sup>.

#### **3.2. Establish integrity archives and supervise the work of bidding agencies**

For the use of agency rights, the bidding agency needs to give a full responsibility to the competent department of construction engineering, and comprehensively supervises the whole process of bidding agency. The supervision contents include the establishment conditions of the agency, specific agency behavior, and to ensure the is no legal, or law break in the process. Through the implementation of comprehensive supervision, the poor bidding agency during the term of their process can be eliminated, indirectly improve the service quality, and the level of construction project bidding agency <sup>[11]</sup>. If the bidding agency can meet all the basic requirements, they should allow the actual agency process through the establishment of the integrity archives supervision department to standardize the supervision of the bidding agency, effectively supervise the daily work of the agency, accurately record the non-standard behavior and bad behavior of the agency, take targeted measures according to the specific severity of such acts, and give corresponding punishment to the agency, in order to bring awareness to the agency at the same time to promote the standardized development of the bidding agency services. In more severe cases, the agency qualification as bidding agency should be cancelled, which can effectively control the quality of agency service process, and promote the benign operation of the whole market <sup>[12]</sup>.

### **3.3. Improve the preparation level of bidding documents and standardize the behavior of bidding agencies**

During the preparation of bidding agency documents, if the market research is not sufficient, or the project cost calculation was inaccurate, it is very easy to cause a significant difference in the quotation of different bidding personnel <sup>[13]</sup>. In the actual bidding process, it is necessary to determine the bidding standards of each unit based on the principles of objectivity and systematizations. However, according to the actual situation of the current bidding agency, the evaluation of the bidding unit is mainly realized by the main person who is in charge of the project, who can be very vulnerable to the influence of subjective thoughts and personal feelings, resulting in the difficulty of ensuring the scientific, and objectivity of the evaluation <sup>[14]</sup>. During the actual preparation of bidding documents, it is necessary to ensure the reliable quality of the bidding documents, and strict review of the units that is participating in the bidding. If the bidding unit did not meet any of the bidding requirements, they agency shall be eliminated. To ensure all the bidding requirements are fully filled, it is necessary to organize, and carry out technical exchange meetings, comprehensively analyze the technical schemes of each unit, to clarify the specific direction of the preparation of the bidding documents, and for the clarification and concretization of bidding contents based on specific design requirements <sup>[15]</sup>.

### **3.4. Strictly review cost management personnel and continuously promote cost management control**

To improve the efficiency of project management, the workflow on the implementation of the construction and management of the construction projects needs to be given to the cost managers <sup>[16]</sup>. If the quality and the skills of the cost managers is limited, further if they did not meet the requirements, and could not deal with the technical and economic problems in the project in a timely and effective manner, can cause serious consequences to the project, mainly on estimating the project funds. Therefore, in the construction project bidding agency, one should pay attention to the training of the cost management talents, and implement qualification examination to ensure the quality, and the skills of the cost management are aligned with relevant requirements, and finally, allow them to participate in the actual work of project cost management after passing the examination to ensure the sustainability and effectiveness of cost management, and also to maintain the comprehensive benefits of the whole construction project <sup>[17]</sup>.

### **3.5. Implement budget preparation and solve the problem of project cost exceeding budget**

In combination with the reality of construction projects, the implementation of cost management in the bidding stage should standardize in the term of the preparation of project budget, introduce scientific prevention, scientifically, and reasonable control of the project funds, promote the effective exertion of fund utilization value, and effectively solve the problem of over budget <sup>[18]</sup>. In the actual operation, one should comprehensively grasp the specific situation of the construction project, summarize the project information, ensure the pertinence, and feasibility of the construction design scheme, conduct specific analysis on the charging standard, and obtain relevant data, to prepare the project cost <sup>[19]</sup>. It is necessary to carry out budget preparation after conducting a detailed analysis of the design drawings and skillfully calculates the pricing amount. In addition, it is necessary to deeply analyze the market material price to ensure the dynamic management mode, to implement scientific prediction method for the construction project cost <sup>[20]</sup>.

## **4. Conclusion**

In the environment of the rapid development of the construction industry, the bidding agency plays an important role in the construction project bidding, which plays a certain role in promoting the development of the bidding industry. In order to promote the benign development of the bidding market, one should

improve the understanding level of bidding institutions, comprehensively improve the quality of bidding agency work, and promote the fundamental solution for the bidding problems and the cost management problems. In this regard, it is necessary to supervise the work of the bidding agency, to ensure the standardization of their behavior, strengthen the budget preparation, management solves the problem of cost exceeding the budget, ensure the fairness of the bidding agency process, and significantly improve the overall service quality of the bidding agency.

### **Disclosure statement**

The author declares no conflict of interest.

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