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Factors Influencing Bidding Strategy

Prajakta Palkar¹ and Madhav Kumthekar²

M. Tech, Department of Construction Management¹ Associate Professor, Department of Civil Engineering² Government College of Engineering, Karad, Maharashtra, India

Abstract: The construction branch is one of the important branches for achieving the country's economy. So it is obligatory to find out a competent contractor among all, for successfully complete work. Construction bidding is the process of offering a proposal to undertake a construction project. And it is one of the methods for the selection of contractors. Bidding strategies vary from contractor to contractor and each contractor has a different view of the factors affecting their bid decisions. This study aims to find an effective strategy for the selection of competent contractors and bid evaluation. There are many factors that influence the bidding strategy. These factors influence depend on the situation when the research is done.

Keywords: Construction Bidding; Strategy

I. INTRODUCTION

The construction branch is one of the important branches for achieving the economy of a country because it involves major projects such as the construction of roads, bridges, tunnels, railways, etc. It costs high but it gives economic welfare to the country. Also, larger employment is there so the problem may arise during the selection of competent one i.e. Selection of a competent contractor. A competent contractor means an experienced contractor has the highest skills and knowledge with particular experience in the construction field. due to development in the construction sector, expectations of a client increase from the contractor. The way demand from the clients increases day by day because of the larger availability of contractors, so the selection of a competent contractor is a need in today's life.

II. BIDDING STRATEGY

A strategy is an action plan for achieving a goal in the right way. In simple language, we can say that a strategy is a plan to grab the job. Bidding strategy involves managing all the available resources both physical and financial, to create competitive bidding by considering various aspects including the internal and external environment. It aims to win the bid competition and to deliver maximum performance in the job. Similarly, the construction field is spread out in different parts such as residential, commercial, infrastructure, recreational, healthcare, etc., which requires different skill levels, management approaches, and resource aspects. It is evident from the past research work that the strategy for operating and managing these projects varies with the type of project, size of the project, and client. Hence, selecting the right strategy is necessary for financial growth and successfully achieving the work.

III. FACTORS AFFECTING BIDDING STRATEGY

Many factors affect the bidding strategy. These depend on the situation at that time. Every contractor has different views and mind sets toward the project. Various factors are classified into three categories such as internal, environmental, and external. Internal factors consist of the experience, knowledge, skills, and potential of the contractors. External factors consist of no. Of competitors in the market, type of project, risk, etc. Environmental factors consist of the availability of machines, equipment, qualified staff, and skilled labor

Internal	External	Environmental
Project finance	Client characteristics	Bidding situation
Company characteristics	Project characteristics	Economic condition
• Experience	• No. Of competitors	• Availability of machinery
Benefit of business	• Type of project	• Competition in the market
• Knowledge	• Risk	

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Skills	Relationship with owner	 Availability of qualified staff and skilled labor.

IV. NEED OF BIDDING DICISION

Due to globalization, the construction sector becomes very competitive. A large number of people are there or a large number of employment is there in the field of construction. Contractor from every part of the world competes for getting the work. Quicker elimination of unsuitable proposals contributes to saving the valuable time required for the analysis and preparation of proposals. It must be kept in mind that future operations depend on the selected project for bidding. If a selection of the project does not satisfy the requirement or if it does not fall under the core area then there may be the chances of risk related to profit, finance, time, etc. The contracting organization has to consider the different factors such as market condition, number of bidders, size of an organization, financial conditions, etc.

Due to advancements in the construction industry, it attracts the entire business world. It is the dream of any new contracting organization to enter the world of construction. However, success and survival in the competitive market for a long time are difficult. Contractors from every part of the world compete to get the work. The main aim of a contract is to get a job at the cheapest rate, best quality and least time. But today what happens is contractors go for the least cost for getting the work it may disturb the quality of the work. hence, there is a need to have a perfect balance between the probability of getting the work and the probability of getting a profit balance all these conditions competent contractor is a need in today's life.

V. QUANTITATIVE METHOD IN BID DECISION

Analysis of quantitative method or system, is an important part to improve the level of decision and to make accurate decision either to go for bid or not. It is to study the problems of management, expressed as a mathematical model, and then by calculation or simulation methods, optimization in under specified constraints, thus providing scientific, quantitative decision-making basis. This method is also widely used in the bidding.

The Method of Linear Programming

Through the establishment of linear equation satisfy the constraint conditions, and draw the corresponding image, draw the feasible region, the maximum profit. To determine the ultimate solution. This needs according to their own ability, Weigh two engineering level of profitability, make the right bid scheme.

Decision Tree

According to the decision of the probability distribution, there is a certain risk, so the risk decision. Decision tree is one of the best ways to solve the risk decision making. Decision tree is a tree branch growth process simulation, from the starting point began to branch to express various possibilities to analyse problems, and to maximize the expected value of the branch as the basis for the selection.

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