

Bidding/Tendering Strategies: As Success Determinants of Construction Tenders

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DOI: 10.56201/wjimt.v6.no1.2022.pg1.18

ABSTRACT

Bidding/Tendering Strategies provide the means through which contractors win jobs. This research examines tenders submitted by contractors with a view to assessing several of the factors that are critical and predominant in the success equation towards winning jobs. The Research also assesses the factors that influence contractors' tenders as well as the challenges faced in the course of submitting tenders. Using both primary and secondary data sources, the research obtains data on several of the factors that impact on tenders. The statistical technique of central tendency was used for the analysis of the factors which impact on tenders. Research findings reveals as follows: Financial stability of contractor, availability of resources size of construction firm, work experience of construction firm, professional affiliation of contractors are significant variables that impact on tenders. The listed variables recorded values that were between 4.00 and 2.76. The research concludes that financial stability of the contractors with a mean score of 4.00 is the highest ranked factor whilst number of competitors with a mean score of 2.76 is ranked the least factor affecting contractors tender. The research recommends that contractors' financial stability is a critical factor for consideration during the evaluation of tenders to be submitted by contractors and subsequently the award.

Keywords: *Construction Tenders, Contractors, Clients, Consultants, Bidding/Tendering Strategies.*

Introduction

Tenders generally provide the means through which construction contractors win jobs. Tendering is the procedure through which contractors offer to execute jobs. In order to attain success, contractors adopt strategies when submitting their tenders using guidelines and requirements streamlined by client/consultants as relevant basis. The contractor's tender is the price for which he offers to carry out and complete, in accordance with the conditions of the contract, the work shown on the drawings and described in the bills of quantities and/or specifications and schedules in accordance with conditions of contract (code of procedure for single stage selective tendering 1977). Tendering can be referred to as all the processes and procedures involved in the articulation and submission of bids for projects. In theory, the tendering process commences contractual relationships. Hackett et-al (2007), described tendering as a procedure that helps client to obtain an acceptable offer from contractors, at an appropriate time and circumstance.

Estimating can be referred to all the technical process and procedures involved towards the submission of an estimate. An estimate is the figure arrived from the estimating process. The tender figure is the converted Estimate figure. The tender figure is arrived at by the addition of mark-up or profit to the estimated figure. The estimated figure is addition of the computed direct costs, on-costs and mark-up. According to Harrison (1981) a tender is an offer to carryout defined work understated condition for a stated reimbursement. Mudorch and Hughes (2008), have counter arguments against the “tendering theory” forwarding an explanation that distinguishes between “the lower price” and “actual price”. This means that a contractor who bids low for the mere purpose of winning of job could be out of business by the time that work is complete. That is one reason why clients should endeavour to award work to the right contractor at a fair price.

The publications of Runeson and Skitmore (1999), Skitmore and Smyth (2007) and Skitmore (2006), cited by Laryea (2012) examined the subject of tendering theory and construction price formation in detail. The objective of tendering theory is on how to make the best use of market characteristics to achieving best price. Thus, traditionally, clients believe that the best can be gained by making contractors bid for work, so that the lowest price gets the job. In recent years, there has been shift in focus from “Lowest Price” to “most economically advantageous tender”.

Construction procurement, in simple terms, often refers to the strategic process of how construction contracts are created managed and fulfilled (ISO 10845:2010). This involves all the steps from the establishment of the project or products to be procured, to soliciting and evaluating tender offers, to awarding and administering contracts and confirming compliance with requirements. The procurement process in construction covers the stages where the details of a project are specified, a builder is selected and a contract award. The completeness of tendering documents before award of contract increases the certainty of a tender price because the full scope of works is significantly known (OGC, 2003). Procurement can simply be explained as the method used for the acquisition of goods, services, works and utilities. As risk allocation often forms the basis of most procurement methods in construction, many procurer of construction work may wish to record their transaction using a formal contract just in case things to wrong. Most contractual arrangement in construction are created by the process of tender which involves the use of market competition. This means that price and selection of a supplier in construction procurement occur in a tendering process regulated by market forces (Laryea 2012).

Further explanations on estimating, estimate, profit/mark up as terms associated with procurement and bidding for construction processes are extensively reviewed elsewhere: see Enterkin and Reynold (1978)’s assertions as it relate to estimating as a system of building up or compiling notes. See also Mc Caffer and Baldwin (1986) articulations on Tenders and its elements – Direct Cost, On Costs, Mark-Ups or Profit, as well as the constituents of contractors selling price to include allowances for materials handling and wastage, plant idle time, erection and dismantling of temporary works, such as scaffolding and false work, temporary works such as piling and consumable materials not built into the permanent works. On – costs are costs which can be directly attributable to a contract and broadly include: site staff, transport costs, welfare and site office costs, insurance and bonds.

Laryea’s (2012), headings provide further relevant discussions on the definitions of some of the main concepts relating to a construction price: bidding price, mark-up and contingency. A review of the origins and practice of tendering theory in construction explained that competition does not always lead to value for money. (Runeson and Skit More, 1990, cited in Laryea 2012) In periods of high competition, clients may obtain prices from contractors that would appear on the face of it to be exceptional value. However such price may not

prove to be “bargains” in the end and could lead to cases of claims and in solvencies. Traditionally, the evaluation of contractors has emphasized on the tender price, with less attention given to evaluating a contractor’s performance attributes. Nevertheless, the recognition that a high-quality service cannot be obtained if only the lowest tender is accepted has led to a growing urge for a shift from a the “Lowest-price wins” to the “Multi Criteria Selection” practice in the contractor selection process. Here there arises a need to study the competitive bidding process and development of bid strategy in the construction industry. Competition can bring real benefits and knowing when and how to but using competitive method is down to the skill of purchasing manager. Prajapati, Pitroda and Bhavsar (2015) A significant amount of engineering construction work is let through competitive bidding. Direct competition through bidding is the most common method of job distribution in the construction industry. Contractors need to make strategic decisions in respect of: (i) Project selection determination of bid for a job and (ii) choose to bid. With limited response to time to different bidding opportunities, contractors need to strive for projects that put them at an advantage in terms of pricing efficiency. In examine the “right” price in construction bids. Company must have the capability to deal with various bidding situations successfully in today’s highly competitive construction market. Whether to bid or not to bid when they received a tender invitation is the first stop. The contractor’s decision is affected by various factors and influences. This decision is highly reliant to the specified project and the macro environment.

In considering the purpose of tendering one must think in the broadest terms. A tender quotes not just a price but also a standard of quality and a time within which the work will be completed. The purpose of tendering may not be for one Job. It may be necessary to consider it in terms of total programme, of which that Just one project. (Aqua Grap 2007). Tenders based on “Lowest Bid” could be misleading in terms of achieving success in the overall construction project. Such tenders have the propensity to distort planned contract time, thereby causing delays and cost overrun. Simon committee 1994, cited in Seeley (1996) has drawn attention to the fact that “Low prices resulting from indiscriminate tendering result in bad building. Contracts that are awarded solely on financial ground (Lowest bid) have the propensity to record delays, leading to claims. Shumank et-al (2017), have observed that Indian construction, especially public sector organizations and government department mostly depend on lowest financial bidder for award of contracts. At some point time of these projects it has become a common scenario that there is a schedule delay resulting in extension of time. So it can be mentioned that modern contract handing procedures require an overhauling. The selection of inappropriate contractor for the Job increases the chance of dispute and dissatisfaction amongst stake holders (Uher and Runeson 1984). Consequently, these occurrences potentially cause huge financial losses resulting in poor business practices or bankruptcy to contractor (Doloi 2009), (Uher and Runeson 1984). The criteria for pre-qualification in relation to the contractor’s ability to meet the client’s requirements and achieve success in projects are still a topic for investigation lam et-al 2009) (Holt 1998). Contrastingly, the lowest bid price is a highly weighted criterion, yet it is a prime cause of problem for selection of contractors in most works (Ng and Luu 2008) (Raisbeck, 2008)

Based on the assertions the research begins to contribute towards agenda of obtaining or forwarding effective tenders adopting pricing strategies that do not necessarily aim at submitting lowest tenders. This research on bidding/tendering strategies is one of such efforts. This research elucidates the factors that enhance/inhibit success of construction tenders and subsequently wining Jobs, when multi-selection criteria are used during tendering process. This result of this research will also contribute towards eliminating some of the managerial as technical problems of construction contractors that impact on winning Jobs.

See Agbo's (1993) assertion as cited by Mac-Barango (2008), which reveals that problems connected with finance would include abandonment, bankruptcy delays and determination of the contractors. This research, also appraises how the paradigm shift from the "Lowest bid" tender winning the Job and how several of the factors that form basis for Multi-Selection criteria could lead to effectiveness in the tender selection process. The research aims at revealing the essential strategic measures needed for obtaining effective pricing method so as to win Jobs, adopting Multi-Selection criteria with a view to towards minimizing the long term practice, where winning of Jobs is based on the lowest tender. This research was able to achieve by articulating those factors/variables which govern the "Bid or No Bid" Decision. The research also reveals, the Snag associated with lowest tender practice. It also appraises the factors which enhance/inhibit the factors which and subsequently winning Jobs in a Multi-Selection criteria setting, as well as determining which of the factors have greater impacts in the success equation towards winning Jobs. The research draws from previous work by earlier scholars on competitive bidding procedure in order to ascertain the truism of the situation.

Prajapati et-al (2015), articulated an array of previous research works undertaken by various researchers: see for example Ahmad's et-al (1888)'s work which studied that bidding decision are greatly influenced by subjectively evaluated criteria such as time of Job, Location, size of Job, need for work, owner, subcontractors, degree of hazard and difficulty of difficulty. Competition and profitability, although significant, are not the top ranked factors. Drew and skit more (1992), examined the relationship between the competitiveness of contract bids entered by bidders through the bidders size, contract value and project type. Large bidders seem to be more competitive on large contracts. In addition there is evidence to suggest that medium and small bidders are more competitive on smaller contracts. There typical factors, which provide guidance for contractors in identifying better competition strategies by considering their own strength and selection criteria collectively. Contractors should consider the advantages embodied in different types of competition strategies to improve the possibility of winning in competition. Drew and Skitmore (1997), found the nature and form of the Competitive area for the contractor in construction contracting is largely determined by the client and/ or advisors. The choice of bidding system coupled with bidder selection practices has a direct bearing on the degree of competition since it affects both the number and identities of bidders competing for a particular contract. Mills et-al (1999) examined that contractors do work for mainly private sector clients and contractors doing work for mainly private sector clients, and construction prequalifies clients. The result shows that both clients and contractors have divergent opinions on the important and value on the criteria in use. The possible reasons for these differences are discussed and the likely implications for future research in the topic. Loannou et-al (2000) found out that the basic advance of the average bid method, from an owner's perspective, is that, it safeguards against signing a construction contract for an unrealistically Low bid price that almost certainly will lead to adversarial relationships during construction. Drew et-al (2001) offered a bidding strategy model for use by contractors as part of a more informed approach in selecting which contracts to bid for, and as basis for determining the most appropriate mark-up level for various types and sizes of construction work and client types. Lin et-al (2003), suggested that the ideal competitive bidding system is only effective when contractor's opportunistic bidding behaviours are restrained. The emphasis on the government's policies should be placed on inhibiting the opportunistic bidding, as it is the leverage point to improve the efficiency of the public construction market. Fu et-al (2003) tested that the assertion that experienced contractors are more competitive than inexperienced by measuring the effect of experience on bidding competitiveness for building contracts procured by a regular client.

Contractors are grasped into experienced and inexperienced contractors, and two levels of contractors' experience are identified bidding experience only and bidding plus construction experience. Banki et-al (2008), found that increasing the number of bidders will result in decreased bid prices. The current research studied the deviation between the low bid and the pre bid estimate compared to the number of bidders, since in earlier studies, these were the metrics that were evaluated. The established relationship of this work is between the low bid offer, and the number of bidders. Ravanshadria et-al (2011) discussed that bidding is a strategic decision that helps contractor to survive. Traditionally, bidding behaviours are highly unstructured in construction companies.

Enshassi et-al (2011), the results illustrate that, the financial capability of the contractor, the reputation of the clients, the financial value, of the project, the availability of construction raw materials in the Local markets and the stability of the construction industry were the most critical factors affecting the contractors bid-no bid decisions. The study suggests that contractors and clients should improve their financial systems and capabilities in order to stay in business. Eyinda et-al (2011) studied that the contractor selection criteria considered include experience, financial stability/soundness, available manpower resources and relevant equipment criteria. However, selecting the most appropriate contractor for a project can be a daunting challenge for any private or public client. Contractor selection represents a crucial decision which can affect the progress of any government construction project. Huang et-al (2011) analyzed the relevant theoretical methods for contractor evaluation and examined the relevant theoretical methods for contractor evaluation and the actual criteria for the selection of contractors. Mohammed et-al (2012) proposed an empirical frame work for making the bid / no – bid decision. The proposed frame work consists of two consecutive components. Component determines key bidding factors that are considered by contractors when evaluating bids, whereas component 2 utilizes DEA (data envelopment analysis) to make the bid/no-bid decision. Ajayi et-al (2012) identified the process of selecting contractors for a proposed project is a major decision which may of any construction project.

The following define the scope of the research within which results hold: the research Location, Owerri, the capital of Imo State of Nigeria, Lies between Latitudes 5.476910N and Longitude 7.025853E. The study examines the factors affecting the success or affecting contractors tenders Submitted for construction projects, adopting a Multi-Criteria selection practice. The vast majority of the respondents were small contractors in Imo State. The reason is that the researchers were not aware of the contractors' size prior to inviting them for participation in the research study. The characteristics of the respondents with respect to their categorization (Stratification) as contractors were not put into cognizance. The accuracy of the result could also have been affected. The application of the result should therefore be with the desired modifications could also have been affected. The application of the result should therefore be with desired modifications.

The structure of the paper is as follows: First it focuses on the theoretical basis and the strategy for successful tenders/winning jobs; second it undertakes a review of related literature on the factors that form the basis for strategic bidding, adopting multi-selection criteria. Third, it highlights the methodology as well as the research method adopted, stating the method of data collection and the statistical technique. Fourthly, it presents and discusses the outcome of analysis. Finally the research draws conclusions and recommendations.

Review of Related Literature:

Competitive Bidding Procedure and Pricing Strategy

Pricing/Bidding for construction projects, Pricing is an important strategic exercises in all economic and business endeavors, It is referred to as the method by which a business

calculates the amount to charge for a product or services as reported by Laryea (2012). In construction, there are guidance available in publications as it relates to pricing strategies, such as Best (1997), who categorized pricing strategies used by the industry into cost-based and, market based approaches. In cost-based pricing, the price of product is established by adding a profit margin to the total cost of the product. In market based pricing, the price of the product is based on the required size of market needed to achieve a attain level of profit. Mochtar and Arditi (2001) used a similar terminology to describe the pricing philosophies of 400 US contractors. Skit more et-al (2006), however referred to the pricing strategies or approaches as full – cost (cost – based) pricing and neoclassical micro – economic (market – based) pricing.

In Laryea’s (2012) opinion, it may be appropriate to view their approaches as pricing models or methods of arriving a price rather than pricing strategies per se, further revealing that a survey of the top 400 U.S contractors by Mochtar and Aroiti (2000), Showed that the factors that influence a contractor’s pricing strategy are: project size/complexity, financial gods of a company, company’s strength and weakness, expected future project form the owner-need-week, owner’s characteristics, project Location, demand/economic conditions, Competition, owner’s consultant characterization and sub contractor’s Characteristic.

Murdoch and Hughes (2000), Posited that there are two purposes in tendering. First, suitable contractor should be selected at a suitable time. Second, the offer of a price is required from the contractor at an appropriate time. This offer of a price (tender) will be the basis of for the ensuing contract. The wise contractor will take account of the conditions of contract when calculating contract price. The way that risk are distributed in a building contract may have a significant effort upon the contractor’s pricing strategy although in many cases a contractor’s need for work may be stronger than the desire to add a premium for a risking project. There is a very strong tradition that the best price can be gained by making contractor bid for work, so that the lowest price gets the Job. However, there is also an increasing level of dissatisfaction with competition, because all that is really guaranties is the tender price. This is not the same as the actual price that will be paid for the works once they are finished. For example, a contractor who bids Low, in order to be sure of getting, may find the job actually loses money. Contractors who bid as low as this tend to be those who are desperate for work because the, are at the brink of insolvency, while a low tender may seem appealing at tender stage, it becomes very sour when the contractor ceases trading and the employer has to appoint others to complete the works. This can cost the employer a great deal more than a higher initial bid would have done.

Competitive Bidding Procedure: From Contractor’s Perspective

Obtaining a contract price transcends a “Lowest tender price”, competitive bidding procedure for a Contracting Organization, should therefore be Systematic, also taking into Cognizance, elements of risk and the conditions of contract. Seeley (1996), has asserted that all tendering procedures aim at selecting a suitable contractor and obtaining from a him at an appropriate time, an acceptable offer, or tender, upon which a contract can be let. Tendering is a complex process whereby the tendering contractor who is anxious to secure a particular contract needs to pitch his tender at the right level, having regard to the resources and method of execution without reducing his profit margin to an excessively low level.

Prajapati and Bhauvasar (2015)’s headings provide relevant basis for discussions on competitive bidding procedure and strategy of successful bidding. The competitive bidding

procedure for a contracting organization is a systematic process which involves.

1. Notice for prequalification. 2. Submission of prequalification proposal. 3. Collection of tender document and study. 4. Prepare tender Summary 5. Decision to Bid 6. Site visit and Investigation. 7. Consultation, Queries, meeting and other associated works. 8. Preparation Construction and related Scheduled. 9. Collection of Material, Labour, Plant and Equipment information. 10. Determination of direct cost, indirect cost and mark up. 11. Determination and Submission of bid price. 12. Project Award. 13. Appoint Project team and execute the project.

Strategies towards the Winning of Jobs by Contractors:

Contractors involved some strategic measures towards forwarding successful tenders. These measures commence even before the receipt of tenders. Enterkin and Reynold's (1978), articulation with relevant headings have revealed some of the strategic measures needed for the submission of successful tenders: Re – assess the conditions of contract; quotations, workload, prevailing market conditions etc. before final submission of tender. Others measures are to obtain first – aid information absent from his fore man, site – agent or contracts manager or visit site himself, production of a programme of work sequence. Even before the receipt of tender documents, the contractor takes a decision. According to Cartlidge (2009), the decision by the contractor whether or not to tender for a project will be influenced by: Workload, Future commitments, Market conditions, Capital, Risk, Estimating workload.

Tactical Measures towards the Winning of Jobs by Contractors.

Aside strategic measures towards winning of jobs, contractors adopt tactical measures as well. Cartlidge (2009)'s heading provide relevant basis for discussion of these issues. Careful examination of the drawings, bill of quantities, visitations of site, preparation of method analysis and description of how the contractor proposes to carryout complicated parts of the works. Others include adjudication by senior members who decide on the level of overhead, profit/mark up levels. The level of profit is kept a closely guarded secret. Murdoch and Hughes (2008), provided an array of variables which form the basis for discussion on tactical approach towards winning of jobs. Back-end loading, front-end loading and so on. According to Skitmore and Wilcox (1994), contractors adopt the tactics of reducing the cost of their pretender preparation and risk appraised to a minimum; this increases competitiveness and reduce the bid price. Rooke et-al (2004) have also revealed that contractors bid at prices that reflect the expectation that the ultimate price of the job will be inflated by claims. According to Smith (1990), some of the tactics adopted by contractors include general contracting negotiating with subcontractors after they are awarded a contract. They will include a given subcontractors quotation in the bids but, in an effort to increase their own profit, they tend to persuade the subcontractor to reduce their prices. In response, the following time, the subcontractor either avoid working for the such a contractor or inflate their quotations by 5-10%, when they take the job because they need it, if all possible they would reduce the amount of equipment needed at anytime, rework the specification to allow for alternatives and so on.

A contractor's decision whether or not to request contract documents from a client and prepare a tender according to Mc Caffer and Baldwin (1986) is influenced by an array of determinants: The Company's financial resources, the availability of the reserves to undertake the work, the Location of the contract and the identity of the promoter and his representative. Furthermore, they have argued that the decision to submit a tender should

result from the implementation of a company tendering policy from trading and marketing information such as: turn over target, divided to show in which markets and in what proportions the total turnover can be obtained. Overhead budget, gross and the profit targets. Anticipated volume of enquiries required to achieve the turnover. The decision, whether or not to tender can be can also be influenced by the outcome of a review of the contract document normally undertaken by the contractor's senior management.

Enterkin and Reynold (1978), have advanced the following measures as panacea to likely damages that may results due to improper planning/inadequate scrutiny of tender documents: visit the Architects and other consultants considered necessary at an early date. Inspect the drawings, site reports and other available information. The estimator is to be acquainted with project. Discuss manner in which job is to be carried out with those directly responsible, such as site agent or the programme of construction, plant, etc, if the tender is accepted. Tah et al (1994), Skit more and Wilcock (1994) shahs (1998), Rook et-al (2004) and Murdoch and Hughes (2008), cited in (Laryea 2012) have found out in terms of pricing strategies, some of ones that contractor use in practice for purpose of winning work, include ensuring a healthy cash flow or achieving a reasonable profit.

According to Projapati, Bhavator and Pitroda (2015), the most important factors affecting contractors bidding strategy are items of payment, current financial situation of the company, possessing enough qualified technical staff to do the job, history of client's payment in past projects (considering delays, shortages), financial status of your company (working cash requirement of project) and availability of the required materials within the region.

Factors Influencing Whether To Bid Or Not

In general terms, companies capabilities to deal with various bidding situations successfully in today's highly competitive construction market is of utmost relevance in the procurement process. This decision to bid is the first step. This is a function of several variables. Skitmore (1989), has found out that in practice, the decision about whether to submit a tender or not will depend upon a number of factors to do with the present and forecast future state of the contractor's business at the time. Furthermore, CIOB (1983), as cited in Skitmore (1989), reported that the decision to bid or not will be taken largely on the basis of the type of work (i.e. whether it fits into one of the categories in which the company has expertise), together with the availability of the necessary resources both to prepare the estimate and to carry out the work, where as other authors postulate that the key factors in the decision will be the contractor's present work load and/or the availability of key personnel. This finding is important, as it reveals that the bid/on bid and mark -up decisions are separate activities which may share the same factors. Bagis and fortune (2009), further reported the results of the research of the Shash (1993), identifying 55 factors that influence the bid/no bid and mark-up decision by top UK contractors. The findings of that study are also in tandem with the findings of Ahmad and Minkarah (1988) in opposing the assumption that competitiveness and profitability are the basis of current bidding models. Furthermore, Bagis and Fortune (2009) established the ranking order of the factors affecting the bid/no bid decision and identified their weights of importance. According to that study the most influential characteristics that affected their assessment of the weight of importance are contractor size, classification status of the contractor and the main client type of decision process in the USA. The research identified 31 factors, which showed that some of the identified factors were considered to be very important at the mark-up decision but not in the bid/no bid decision stage, while other factors were considered important in both stages. Thus from the ranking of

the factors that affect the Bid/no bid decision according to their relative importance from the perspective of the contracting parties operating in the Gaza strip, Palestine has established that financial capability of the contractors, financial capability of the clients, the financial values of the project, the due date of payments, the availability of construction raw materials in Local markets, and the stability of the construction industry were the most critical factors affecting the bid/no bid decision as agreed by the respondents.

Neeraj (2011), forwards an array of factors affecting the bidding decision. Segmented into three broad groups: (i) Firm related factors (ii) projected related (iii) Market conditions/ Demand and Strategic conditions. (a) **Firm related factors** which affect the decision to bid are: Need of work, Strength of firm. (b) **Project related factors** include the following: Project conditioning contributing to profitability, risk of project, completion considering current project. (c) Market Condition's/Demand strategic conditions related factors include competition considering the current market conditions only, strategies considerations and client's expectations.

Shokri-Ghasabeh (2016) form an extensively literature review grouped the most common bid/no bid decision- making criteria into five (5) distinct categories namely: Project, Market, Contractor, Client and contract. The review from the categories identified 26 most common factors that influence the bid/no bid decision making. The research revealed bidding conditions, strength/weakness contract payment terms and Number of Competitors / bidders as the highly ranked four (4) factors; whilst contractors financial situation, project duration and contractors material availability, were ranked the Least. Clients financial capability was also rated highly for smaller Australian Construction Contractors (ACCS). The medium ACCS had "Project risk" as highly ranked.

Methodology

The aspect of the study covers the explanation of how the research was undertaken and set up, the various techniques, and procedures adopted for the collection, administration and analysis of data. This research examines contractors' tenders for construction project, with a view to identifying the variables that influence their winning of Jobs. The research adopts the administration of questionnaire as well as interviews as its primary source of data. Secondary source of data were collected through text books, journals and via internet searches.

Research Design: This is the research organization, it describes the elements or parameters a research are configured or organized, also revealing the interrelationships between them. Asika (2009), opines that research designs are investigation aimed at identifying variables and their relationships to one another. In this research the method of structuring of the various investigation was the questionnaire technique, which serves as a useful guide towards the generation of data through the respondents. The questionnaire as a survey and exploratory provides answer, to the research questions and hypotheses therein. The questionnaire was divided into two. Section A and B. Section A, dealt with the personal data of the respondents, while section B contains configured, the research statement in line with the postulated hypothesis. A total population of 345 duly registered contractors, small and medium scale was spelt out in questionnaires for their responses

Random Sampling technique was adopted for the research. A total of 50 contractors were selected randomly from the total number of 345 duly registered contractors, the selection cut across the 55 Local government areas of the study area (Imo State of Nigeria). In order to

ensure the reliability - the accuracy of precision of the measuring instrument as well as its validity, which shows to what extent the research instrument, measures what it ought to have to measure. In this research to ensure the validity of the instrument, the questions within the questionnaire were free from ambiguity, the questions were devoid of complexity and for the reliability, the questionnaire was complimented with the interviews of the directed to the respondents. Such interactive sections were embarked on, to fundamentally clarify and guide respondents on issues and questions contained in the questionnaires. The data collected in the questionnaires were coded, this to enhance efficiency and effectiveness during the collection, collation and analysis of data. The statistical techniques of percentile as well central tendency was employed in the computation and analysis of data as contained in the questionnaires, as well as tables showing data.

Presentation Of Research Data, Analysis And Discussions On Findings:

Presentation of Data: Tables 4.1 to 4.6 (See Appendices) present the Research data used for analysis as well as the basis for discussion:

Analysis: From The Research Data:

Table 4.1 shows the background of the questionnaire distributed. A total of 50 questionnaire were distributed, with 45 responses this represents a retrieval rate of 90%. This response rate was therefore considered appropriate to commence an analysis. Table 4.2, shows the background of the respondents. All the 45 respondents were professionals of the construction industry. Table 4.3, shows the year of experience of respondents. That is as follows, 0.5 years 6-10 years, 10-15 years, 15 years and above recorded response rates of 20%, 28% .89%, 40% & 11.11% respectively.

Discussion On Findings:

The outcome of the analysis establishes as follows: from Table 4.1, a retrieval rate of 90% from the total number of enhances the reliability of the results obtained from other analysis: Table 4.2, the result shows that all the respondents have a background in construction related profession (Architect, Quantity Surveyed, Mechanical and Electrical engineers and Civil engineers). This gives further impetus to the reliability of the outcome of the analysis on the factors which influence contractors during bidding process, due to the knowledge and skills they have gathered as professionals. Table 4.3, shows that majority of the professionals, have considerably years of experience, and therefore competent to respond on issues that border on bidding/tendering processes. Table 4.4, shows a 100% respondents rate, indicating that all respondents have been involved in tendering process and bided for contracts. Table 4.4, shows the frequency of involvement of respondents in tender/bid process. All the respondents representing 100% of the Sample Study indicated that they have Submitted bids for contract works. Table 4.5, shows the Success rate of respondents in bidding for contracts. 84.44% and 15.56% of the respondent indicated that they have been (Success or unsuccessful) respectively in bid submitted. Table 4.5 establishes a high success rate of the respondents who have been involved in tendering process. The outcome of that analysis is just able, by the fact that all the respondents have a construction related background, and have requisite skills and knowledge, they have all been involved in tendering process and bidding for contracts established from Table 4.6. Table 4.6 shows, the Respondents involved in various businesses. The respondent rates on various businesses indicated percentages that were between 4.45-46.67. Respondents' involved Building and Civil work recorded the highest 46.67% while involved in only electrical work recorded the least, 2.22%. Table 4.7, shows, the factors affecting tenders in construction work. The mean score values of the factors were used as the

basis. The mean Limit of 3.41, is used as basis in tender decision making; factors equal to or above 3.41 are considered as important, while factors that scored mean values 3.41 are considered as not important or less important.

Table 4:7: Factors Affecting Contractors Tender for Construction Tender.

S/No	FACTORS AFFECTING CONTRACTORS	SA	A	N	D	SD	MEAN	RANK
	Tender in construction project	5	4	3	2	1		
1.	Size of construction firm	14	14	10	6	1	3.76	4
2.	Work experience of construction firm	14	15	7	4	5	3.64	10
3.	Professional affiliations of contractors	8	14	10	8	5	3.27	19
4.	Bribery and corruption	3	12	16	6	8	2.91	28
5.	Poor executions of job	4	15	11	6	9	2.98	26
6.	Unfinished jobs	6	13	8	10	8	2.98	26
7.	Requirement of the clients tenders board	9	14	9	8	5	3.31	17
8.	Financial stability of constructor	19	11	12	2	1	4.00	1
9.	Profit and overhead	13	14	12	5	1	3.73	6
10.	Time	9	16	6	7	7	3.29	18
11.	Favouritism	9	12	11	7	6	3.24	20
12.	Chances of getting the job	16	13	10	4	2	3.82	3
13.	Project size	13	16	11	2	3	3.76	4
14.	Relations with client	12	17	8	5	3	3.67	9
15.	Availability of resources	17	14	10	4	0	3.98	2
16.	Project location	8	13	11	4	9	3.16	21
17.	Fluctuation in the price of materials for construction	7	17	6	5	9	3.11	24
18.	Site condition	9	16	8	5	7	3.33	16
19.	Site accessibility	10	17	7	5	6	3.44	14
20.	Numbers of competitors	7	12	9	10	7	3.04	25
21.	Types of contracts	7	15	9	6	8	3.16	21
22.	Tendering method	5	8	13	9	10	3.76	29
23.	Fulfilling the tender condition	13	11	10	7	4	3.49	12
24.	Experience in similar project	9	14	7	9	6	3.24	20
25.	Availability of other project	14	16	8	3	4	3.73	6
26.	Type of project	11	15	9	4	6	3.47	13
27.	Project complexity	13	13	9	6	4	3.56	11
28.	Availability of similar project	10	14	9	10	4	3.44	14
29.	Need for the c contractors work	14	14	10	4	3	3.71	8

Table 4.7: the outcome of Tables 4.1 to 4.6 impacted on the identifying the factors affecting contractors tender for construction as highlighted in Table 4.7. The results, established that financial stability of the contractors with mean score of 4.0 is the most important to be considered when arriving at the decision to tender or not for a construction project. From the

analysis other factors to be considered according to the analysis include availability of resources; chances of getting the Job, size of confirm firm, the project size and fulfilling the tender condition with mean values scores of 3.98, 3.82, 3.76, and 3.73 respectively. Bribery and corruption, poor Job execution, with mean score of 2.76 is shown to have the least importance in the tender decision.

The research of Ahmad and Minkarah (1988) as cited by Bagis and Fortune (2009) are intandem with the result of this research. The factors that score a mean limit above 3.41 are considered very important as basis for decision making whether or not to bid. Shash (1993), cited by Bagis and Fortune (2009), revealed 55 factors that influence the bid/no bid and mark up decisions by top UK contractors. Those factors are in agreement with as ones identified by this research. Mohammed and Enhassai (2010)'s result resonance with the factors of this research as it relates to the Bid/no bid decision. The outcome of this research agrees with the result of Neeraj (2011)'s array of factors affecting bidding decisions. Prajapati, Bhavasar and Pitroda (2015) result, are also in oscillation with the result of this research as it relates to the most important factors affecting contractors bidding strategy. Shokri-Ghasabeh (2016) result on 26 most common factors that influence the bid/no bid decision are however not intandem with those of this research.

Summary Of Research Findings.

A significant amount of engineering construction is through competitive bidding. Director competition through bidding is the most common method of distribution in the construction industry.

There however exist a snag as it relates to the competitiveness of bidding during the procurement of construction projects. This stems from the fact that bidding for construction projects have largely adopted a traditional method of selecting contractors; an approach were the Lowest Bid wins the job. The Lowest Bid does not necessarily portray the best price for the job.

Based on the aforementioned, contractors need to make strategic decisions in respect of: Project Selection, whether or not to bid for a job and the determination of bid price if contractor choose to bid. In this research, the study focuses on the bidders competitiveness (strategies) during the procurement stage in the project life cycle, as well as those factors that assist contractors make informed decision on the price effectiveness of bids submitted by them, adopting a multi-criteria selection practice towards submitting tenders. The competitiveness bidding procedure for a contracting organization involves a systematic process. Even before the receipt of tender documents, the contractor takes a decision to bid/or not to. The answer to this question is dependent on a number of factors. Can the company's resources match the work load, bearing in mind the amount of work in hand, the company's resources, location of the contractor and the identity of the promoter. Other factors include tendering policy turnover target, gross and net over head budget, the risk involved, etc.

Research finding established the following as variables which influence contractors tender for construction. Financial stability, the availability of resources, the chances of getting the job, the size of firm, the project size. Other factors at the lower scale which influence contractors' tenders include bribery and corruption, poor job execution. A high-quality service cannot be obtained if only the lowest tender is accepted has led to a growing urge for a shift from the lowest price wins to the "Multi Criteria Selection" practice in the contractor selection

process.

Conclusion

The decision to bid/or not as well as the degree of mark-up are strategies that influence the winning of jobs by contractors in the mist of other counter veiling variables, during procurement of construction jobs. These variables, the bid/no bid decision as well as mark-ups play significant roles in the success equation of contractors bidding/tendering for jobs. This research established financial stability of constructors, is the most important to be considered when arriving at the decision to tender or not for a construction project. Other factors, include availability of resources, chances of getting the jobs, size of firms, the project size and fulfilling the tender condition. Bribery and corruption, poor job execution are established to have the least importance as it relates to variables influencing contractors tender.

Recommendation

The research from extensive review literature bordering on competitive pricing as well as the factors that affect the bid/no bid decision recommends that contractors while tendering for jobs, should adopt a multi-selection strategy, relying less on the traditional Lowest Bid syndrome as basis for submitting tenders. In doing so, it would appear pertinent to consider these specific variables. The financial capabilities, staff and competencies as well as recognizing locational variables and their impact on bidding prices.

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Appendices:

Table 4.1: Breakdown of questionnaire distributed

Questionnaire	No of Response	Percentage
Issue questionnaire	50	
Relieved questionnaire	45	90%

Table 4.2: Professional background of respondents

Professions	No of Response	Percentage
Architect	10	22.22%
Quantity	22	48.89%
Mechanical engineer	3	6.67%
Electrical	2	4.44%
Civil engineer	8	17.78%
Total	45	100

Table 4.3: Years of experience of respondents

Years	No of Response	Percentage
0 – 5 years	9	20%
6 – 10 years	13	28.89%
10 – 15 years	18	40%
15 years and above	5	11.11%
Total	45	100%

Table 4.4: Involvement in tendering process

S/No	Response	Frequency	Percentage
1.	Yes	45	100%
2.	No	0	0
Total	-	45	100%

Table 4.5: success of respondent in tendering process

S/No	Response	Frequency	Percentage
1.	Yes	38	84.44%
2.	No	7	15.56%
Total	-	45	100%

Table 4.6: Category of construction respondent are involved in

Construction activities	Responses	Percentage
Building only	14	31.11%
Civil engineering work	5	11.11%
Building & civil work only	21	46.67%

Electrical work only	1	2.22%
Mechanical work only	2	9.44%
Electrical & mechanical work	2	4.45%
Total	45	100%
