Assessment of Selected Pre-Qualification Exercise in Lagos State

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Abstract:- One of the most crucial choices a client can make for the progress of the project is the choice of a qualified contractor for a building project. Prequalification is a process to assess and evaluate a contractor's competence and skills to effectively finish a project if it is assigned to them. The purpose of this study is to evaluate a few prequalification processes in Lagos State. In this research project, survey research was used. A thorough study of the available literature was done, along with a well-designed questionnaire. A questionnaire that was sent to clients and contractors (Architects, Builders, Engineers and Quantity Surveyors) was used to gather the data. A statistical table, frequency chart, and percentage were used to present the data. This study's findings rank experience criteria as the most important criteria which is also used to maximize time at the decision stage in case of ample time. It also shows the relative importance indices for each prequalification criteria, and financial criteria as the best practiced in Lagos state.

Keywords:- Prequalification, Experience, Contractor, Time, Construction.

I. INTRODUCTION

Construction is a difficult process with several stages that need to be properly handled and corrected. Due to the organisational and technological complexity of building projects, which create tremendous risks, the requirement for evaluating contractor performance becomes increasingly critical as projects get more complicated (Thamhain, 2013). This assessment makes it possible to choose a qualified contractor who can complete the project within the client's goals.

Following contractor selection and project execution for engineering and infrastructure projects, the country's construction industry has prospered over time, improving the standard of living for citizens (Xie, L. L., Xia, B., Hu, Y., Shan, M., Le, Y., & Chan, A. P., 2017). The choice of a competent construction contractor is one of the most crucial jobs a customer must do if they want excellent project outcomes.

The prequalification requirements are frequently customised in several nations to choose qualified contractors. The client can then trust the contractor to perform the project after an appropriate selection process has been completed. To assure the client that their satisfaction requirements were taken into account, the prequalification process is carried out (Aje, 2012).

II. LITERATURE REVIEW

A. Prequalification Criteria

Prequalification is a process for evaluating potential contractors' abilities to see if they can complete the project successfully (Aje, 2012). In order to get the best value for your money, you must choose the contractor who will deliver the project exactly as the client has stipulated (Mpofu, B., Ochieng, E. G., Moobela, C., & Pretorius, A. , 2017). Stakeholders are more confident that the chosen contractor can complete the project on time and on budget when a qualified contractor is chosen. It is difficult to analyse the trade-offs involved in decision-making in the construction sector since the significance of contractor selection is frequently undervalued and ignored.

➢ Financial criteria

Almost all prequalifying teams include a list of players with a history of financial stability. This demonstrates the contractor's ability to properly fulfil financial obligations (Wilbanks, 2017). A contractor's desire to use credit facilities for the realisation of projected projects and expansion of business opportunities is hampered by financial difficulty. In contrast to the contractor's current financial situation, historical financial repute data should be given more weight in the examination of financial soundness (Hatush, Z., & Skitmore, M., 1998).

➢ Experience criteria

A contractor's technical aptitude reflects his experience, facility and equipment, staff, and overall aptitude. Since the owner will be responsible for living with the outcomes of the project, performance and quality of work are crucial to its success (Smith, N. J., Merna, T., & Jobling, P., 2014). This explains why hiring a contractor is frequently based on past performance, word of mouth, knowledge with the project, or prior interactions with the client or agents. The degree of responsibility demonstrated, the number of years in the construction industry, the contractor's performance in ex-post invitations, the calibre of referrals, and the capability to manage client-contractor relationships are some of the covariables of past performance that affect contractor selection (Ahmed, 2022)

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> Managerial capability criteria

The inclusion of contractors in construction projects necessitates that they be able to use both their conventional bias in the design and construction process and their understanding of modern management (Forbes, L. H., & Ahmed, S. M., 2010). Good managerial abilities and increased productivity are needed in the construction business due to the increased competition.

The co-variables for the managerial competency criteria include the directors' integrity, the organization's registration status, historical performance and contract execution quality, construction management expertise, and a quality control programme. Corporate social responsibility was considered one of the co-variables of management ability, bringing to light its contribution to advancing the project host communities through the employment of adolescents and supply of infrastructure facilities to assist community development. The project could not be practicable without effective public relations; therefore, managerial capacity should include these efforts as well.

➤ Health and safety criteria

Accidents that occur while construction is underway may cause human injuries as well as expensive consequences.

Therefore, proactive serious accident prevention on project sites is a sign of successful project management. Recent times have seen health and safety concerns rise to the top of building firms' agendas. This is a result of laws regulating the design and procurement phases as well as the use of managerial abilities to determine adequate costs for project safety.

The sub-criteria of occupational safety policy, the availability of health insurance for employees, the degree of compliance with health and safety regulations, the cadence of safety meetings, and the compliance with environmental regulations serve as the foundation for compliance with health, safety, and environmental records. In other words, it is important to screen out contractors that have a poor track record of protecting the environment, health, and safety (Hughes, P., & Ferrett, E. D., 2012)

Contractor's reputation and image

Contractor's past failures in completed projects, number of years in construction, past client relationships and cooperation with contactors is been considered during selection phase to be sure that the project is been committed to a reputable contractor.

Criteria	Sub-criteria
Owned financial funds	i.Financial stability
	ii.Turnover, profit, obligations, amounts due
	iii.Owned financial funds
Technical Ability	i.Experience
	ii.Plant and equipment
	iii.Personnel
Management Capability	i.Past performance and quality
	ii.Quality control policy
	iii.Project management system
	iv.Experience of technical personnel
	v.Management knowledge
Health and safety	i.Accidents
	ii.Health and safety management system
	iii.Insurance policy
Reputation	i.Past failures in completed projects
	ii.Number of years in construction
	iii.Past client relationships
	iv.Cooperation with contactors

Table 1: Prequalification criteria and sub - criteria.

Source: (Oluwaseyi Modupe Ajayi, Olabode Ogunsanmi, Godwin Idoro, 2016)

B. Ease of Usage of Contractor Selection Criteria

The contractor selection procedure should be rather straightforward to utilise; else, it may become sheer tedium for the parties involved. One requirement is the ease of conducting the bid evaluation, but another element of the procedure is the simplicity of implementing the selection criteria in a specific contractor selection model. In other words, it is irrational if the application process is complicated by a number of elements that are intended to advance the contractor selection goal. The ease of use of the contractor selection criteria within this framework was also evaluated in this study (Akadiri, P. O., Olomolaiye, P. O., & Chinyio, E. A., 2013). When assessing the contractor selection criteria, emphasis will be given to the significance and ease of use of the many stakeholders, including clients, consultants, and contractors in the study region.

III. METHODOLOGY

Survey research method was employed in carrying out this study. The research population and sample frame comprise of two independent population parameters made up of client and contractors in Lagos State. The population of contractors within the study area comprises Architects, Quantity Surveyors, Consulting Engineers, Builders, and Project Managers from their respective professional

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institutions. The data collection instrument used was well structured questionnaire which was distributed randomly to the sample size of 100 respondents. An extensive literature review was conducted using different tools such as books, journal... etc. related to the topic.

IV. FINDINGS AND DISCUSSION

Table 2: Sample frame	e and size of resp	ondents.
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Building	Professional	No of	Percentage
professional	bodies	respondent	
Architect	NIA	30	30%
Builder	NIOB	15	15%
Engineer	NSE	18	18%
Quantity	NIQS	9	9%
surveyor			
Project		5	5%
manager			
Client		23	23%
Total		100	100
0			•

Source: author's field work 2022

Table 2 above shows the sample frame and size of respondents, the building professionals – architect, builder, engineer, quantity surveyor, project manager and client. Architect has a total respondent of 30 which constitute 30%, builder has a total respondent of 15 which constitute 15%, engineer has 18 respondents which constitute 18%. Quantity surveyor has a frequency of 9 which constitute 9%, project manager has a frequency of 5 which constitute 5% and clients, a frequency of 23 which constitute 23%.

 Table 3: Assessing the knowledge of building professionals on prequalification exercise.

Category	Building professionals	1	2	3	4	5
Financial	Architect				•	
criteria	Builder				•	
	Engineer				•	
	Quantity					•
	surveyor					
	Project manager				•	
	Client					•

Category	Building professionals	1	2	3	4	5
Experience	Architect					
criteria	Builder					•
	Engineer					•
	Quantity				•	
	surveyor					
	Project					•
	manager					
	Client					

Category	Building professionals	1	2	3	4	5
Managerial	Architect				۲	
capability criteria	Builder			٠		
	Engineer				•	

Quantity surveyor		٠		
Project				۲
manager				
Client			•	

Category	Building professionals	1	2	3	4	5
Health and	Architect					•
safety criteria	Builder					-
-	Engineer					
	Quantity			•		
	surveyor					
	Project					•
	manager					
	Client					•

Category	Building professionals	1	2	3	4	5
Contractor's	Architect					•
reputation and	Builder					•
image	Engineer				•	
	Quantity			•		
	surveyor					
	Project					
	manager					
	Client					

Source: author's field work 2022

Table 3 above presents the knowledge rating of building professionals on the selected prequalification exercise. Building professionals have a good knowledge of financial criteria. Architect rates 4 (aware), builder rates 4 (aware), engineer rates 4 (aware), quantity surveyor rates 5 (very much aware), project manager's rates 4 (aware) and then the client rates 5 (very much aware).

Building professionals have a good knowledge of experience criteria. Architect rates 5 (very much aware), builder rates 5 (very much aware), engineer rates 5 (very much aware), quantity surveyor rates 4 (aware), project manager's rates 5 (very much aware) and then the client rates 5 (very much aware).

Building professionals have an average knowledge of managerial capability criteria. Architect rates 4 (aware), builder rates 3 (neutral), engineer rates 4 (aware), quantity surveyor rates 3 (neutral), project manager's rates 5 (very much aware) and then the client rates 4 (aware).

Building professionals have an average knowledge of health and safety criteria. Architect rates 5 (very much aware), builder rates 4 (aware), engineer rates 4 (aware), quantity surveyor rates 3 (neutral), project manager's rates 5 (very much aware) and then the client rates 5 (very much aware).

Building professionals have an average knowledge of contractor's reputation and image. Architect rates 5 (very much aware), builder rates 5 (very much aware), engineer rates 4 (aware), quantity surveyor rates 3 (neutral), project manager's rates 4 (aware) and then the client rates 5 (very much aware).

Table 4: Assessing the prequalification criteria best
 practiced in Lagos state.

Prequalification	Frequency	Percentage	Rank
exercise			
Financial criteria	45	45%	1
Experience criteria	22	22%	2
Managerial	5	5%	5
capability criteria			
Health and safety	11	11%	4
criteria			
Contractor's	17	17%	3
reputation and			
image			

Source: author's field work 2022

Table 4 above presents an assessment prequalification criterion best practiced in Lagos. Financial criteria with a frequency of 45 which constitute 45% ranks 1st, followed by experience criteria with a frequency of 22 which constitute 22%. Contractor's reputation and image ranks 3rd with a frequency of 17 which constitute 17% and health and safety criteria with a frequency of 11 which constitute 11% ranks 4th. Managerial capability criteria with a frequency of 5 which constitute 5% ranks 5th on the pregualification criteria scale best practiced in Lagos.

Table 5: Prequalification criteria used to maximize time at
decision stage in case of ample time.

Prequalification	Frequency	Percentage	Rank
exercise			
Financial criteria	12	12%	3
Experience criteria	53	53%	1
Managerial	3	3%	5
capability criteria			
Health and safety	5	5%	4
criteria			
Contractor's	27	27%	2
reputation and			
image			

Source: author's field work 2022

Table 5 above presents an assessment of pregualification criteria used to maximize time at decision stage in case of ample time. Experience criteria with a frequency of 53 which constitute 53% ranks 1st, followed by contractor's reputation and image criteria with a frequency of 27 which constitute 27%. Financial criteria rank 3rd with a frequency of 12 which constitute 12% and health and safety criteria with a frequency of 5 which constitute 5% ranks 4th. Managerial capability criteria with a frequency of 3 which constitute 3% ranks 5th on the prequalification criteria scale used to maximize time at decision stage in case of ample time.

Frequency	Percentage	Rank
28	28%	2
33	33%	1
7	7%	5
13	13%	4
19	19%	3
	28 33 7 13	28 28% 33 33% 7 7% 13 13%

Source: author's field work 2022

Table 6 above presents importance index of prequalification exercise. Experience criteria with a frequency of 33 which constitute 33% ranks 1st, followed by financial criteria with a frequency of 28 which constitute 28%. Contractor's reputation and image criteria rank 3rd with a frequency of 19 which constitute 19% and health and safety criteria with a frequency of 13 which constitute 13% ranks 4th. Managerial capability criteria with a frequency of 7 which constitute 7% ranks 5th on the importance index of prequalification exercise.

V. CONCLUSION

Choosing a competent construction contractor is one of the most important tasks faced by the client and that usually has a significant impact on the success of a project and the achievement of best value for money. It is concluded that all the criteria assessed were found to be significant. This study's findings rank experience criteria as the most important criteria which is also used to maximize time at the decision stage in case of ample time. It also shows the relative importance indices for each prequalification criteria, and financial criteria as the best practiced in Lagos state.

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