

Evaluation of Pre-qualification Criteria: Client Perspective; Jordan Case Study

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Abstract: The purpose of this work is to identify the perception of the major clients on the importance of the pre-qualification criteria used to qualify contractors in the Jordanian construction industry. Also, it is aimed to provide suggestions for contractors to increase their chances in being pre-qualified by major clients. To achieve the objective of this work, the findings of previous exploratory qualitative interviews with owners, directors and senior managers of major client organizations in Jordan have been examined. The findings of this work indicated that public and private clients have different views about the importance and priorities of the pre-qualification criteria. Public clients place more weight on price after the contractor has been qualified. Special pre-qualification criteria are highly needed in Jordanian construction industry to meet the new requirement such as good manufacturing practice.

Key words: Pre-qualification, client expectation, contractor performance, criteria assessment

INTRODUCTION

It is well known that construction industry may be considered as one of the most hostile, uncertain and unforgiving industry in the world^[1]. The construction industry in Jordan is not an exception. Uncertainty exists in what criteria to include in the contractors' evaluation process, how the criteria predict the future performance of the candidate contractor, how to measure each criteria, as well as the uncertainty of the criteria themselves. Other source of uncertainty includes the quality of data and its interpretation by the decision makers within the client's organization. These factors would place more pressure on the Jordanian contractors' organization to explore clients' perspective on the pre-qualification criteria. Contractors' also need to acknowledge the priority and importance of these criteria to clients and their advisors and strive to satisfy their expectations.

In general, the aim of the pre-qualification process is to ensure that clients obtain a number of competitive, reasonable and easy-to-evaluate bids submitted by equally suitable and experienced contractors^[2-4]. Therefore, contractors' ability to perform a project prior the bidding process is evaluated during this process. This evaluation process allows clients and their consultants to select contractors based on the contractors' performance and reputation of delivering quality service^[5,6]. Qualifying and selection of a capable and adequate contractor is essential for satisfying clients via completing their projects successfully^[6,7].

Results of previous research indicated that client and consultants' expectations are mainly shaped by a number of factors^[5-8]. Of those factors are contractors' track record and past experience in similar works, clients own experience with the same contractor and their financial status, contractors' reputation, managerial and communication skills. Clients and their advisors' perceptions of those factors and others play an essential role in qualifying contractors for future projects and thus repeated business^[6,7].

Pre-qualification process provides contractors with the opportunity to differentiate themselves from their competitors and to impress clients and their advisors to have a place on their tender list^[7]. It is important for contractors to keep up-to-date with client priority of the criteria that they use in reviewing their tender list. The selection of the relevant criteria and their level of influence on the decisions within client organizations are dependant upon the project and client characteristics^[2,8].

In general, despite great concern with the pre-qualification process in general as a critical issue in the marketing performance of a contractor and the importance and distinctive characteristics of the Jordanian construction industry, little attention has been paid to clients and contractors' perceptions toward pre-qualification criteria used by Jordanian clients^[6]. Previous work that has been published on pre-qualification in construction is an exploratory and general research with no attention to the unique characteristics of the construction industry in Jordan or

the clients perception on the priority and importance of the pre-qualification criteria^[5-8].

However, the major objective of this research is to obtain the clients perception on the priority and importance of the pre-qualification criteria obtained in the previous exploratory research conducted with a number of major contractors organisation^[6]. It seems to be a clear need for this type of research to bridge the gap in the knowledge about the priority and importance of the pre-qualification criteria employed by client and their advisors to qualify contractors in Jordan. The approach followed in the current research will help to confirm and analyse the priority and importance of the pre-qualification criteria used by Jordanian clients and provides contractors with a clearer understanding of client's priority and perceptions and any improvement required to the contractors operations.

Pre-qualification decision-making process is a complex subject. The success of a contractor on past projects may not assure success on the project under consideration. Future performance can be predicted by evaluating a number of factors related to the company's technical, financial and staff quality^[3,4,6,8-11]. Russell and Skibniewski^[11] performed statistical analysis of the importance of a number of those factors. The data on which they based there analysis was gathered from public and private owners and construction managers. Data analysis of owners and construction managers revealed nine Composite Decision Factors (CDF), namely: financial and experience, failed performance in general, capacity of assuming new projects, management, bonding, location, resources and safety.

Potter and Sanvido^[9] presented the development of a model for a public-sector owner to select appropriate member of organization and managers for a design/build team. The design/build pre-qualification system (DBPS) represents the initial stages of pre-qualification that an owner should employ once a management decision to deliver a project has been taken. Potter and Sanvido^[9] divided the DBPS into a three-step process. The first step is: Project-Specific Criteria, based on the project delivery selection system and the facility programming product model. This step represents management's conscious initial decisions to identify key risk factors (i.e., completion time, project cost, quality complexity, project size, etc.) and complete the program information. The second step is Business Criteria. After the decision is made to employ design/build delivery management, business criteria can be evaluated. The three key elements are financial, registration /licensing and performance. The third step is Technical Team Skills

Criteria. This could be divided into two major categories: team member constraints and local and staff experience.

However, most of the above findings were confirmed by results of other researchers such as Kashiwagi^[5] and Hatush and Skitmore^[8] and Tarawneh, Al-Rodan and Maaiah^[6]. Kashiwagi^[5] criticized the current practice of construction clients in selecting the low bid contractor in which clients assume that all bidding contractors perform at the same level. The model stated by Kashiwagi^[5] as a result of his research, which is named "value added performance", stated that clients make purchase decisions based on actual contractor/system performance data and not only on bid price. Based on this "value added performance" model clients would use eight types of contractor performance information to make their selection. According to Kashiwagi^[5] those factors are: expertise and experience, price, contractor's margins and financial stability, previous size of jobs, previous types of jobs and completion rates on time and budget, performance of previously constructed facilities and proposed personnel for construction managements.

MATERIALS AND METHODS

Based on the findings of a previous research^[6] and the pre-qualification literature a questionnaire was designed and distributed on a pre-prepared sample of major clients in the Jordanian construction industry. The questionnaire is sent to the client organization in the name of the requited person (i.e., engineer). They have been asked in the cover letter to direct the questionnaire to the required person who where believed to be involved in the pre-qualification process. To be sure that the questionnaire has been received by the right person (engineer), a telephone call is followed after two or three days to ask if they have received the questionnaire and to assist in directing it to the right person (engineer).

To increase the reliability and validity of the research the sample was prepared from the top fifty of the major clients concerning with construction activities in Jordan as explained later. Therefore, a five-point liker scale was used to obtain the contractors perceptions on the importance of the pre-qualification criteria obtain in the exploratory qualitative study in the previous research^[6]. This procedure of qualitative exploratory study followed by quantitative one would help in confirming and validate the research of the whole programme of research.

Given the nature of this research the main source of the data are from Jordanian organizations involved in the pre-qualification process during the last three years. A national, cross industry study investigating the concepts

Appendices: The following points present the areas investigated concerning pre-qualification process.

Section one : background information

1-Which Best Describe your occupation in your organization? (Please tick)

Owner	Project Director	Project Manager	Construction Supervisor	Design Leader	Client Agent
Others, Please Specify					

2-How many projects has your organization worked on in the last five years? (Please tick for the number of projects with a minimum size of 100.000 JD)

1	2	3	4	5	6
Others, Please Specify					

3-Which best describes your company's average annual expenditure on projects, over the last five years? (Please tick, where M = Million in JD)

Less than 0.50 M	0.50M-0.90 M	1.0M-4.99 M	5.0M-9.99M	More than 10.0M

4-Which most closely describes your organization? (Please tick)

Private Organization	Public Organization

Section two : importance of the pre-qualification criteria

5-Listed below are the features pertaining to Contractors' firms and the service they offer during the pre-qualification process of your project. We would like to know how important each of these features is to you when you pre-qualify contractors. Please answer this question by placing (v) in the appropriate box.

	Very Important	Important	Neither/Nor	Of less Important	Of No. Important
Contractors' ability to provide high quality recommendation from previous satisfied clients					
Contractors ability to provide detailed programme to execute the project					
Contractor' ability to select competent sub-contractors from a list provided by the client					
Contractors ability to handle the safety requirements					
Contractors' specific environmental policy					
Contractor' ability to provide clear information which is easy to understand					
Contractors' ability to have regular meetings with the client					
Contractors interest to concentrate on the project to understand the clients' business requirements					
The courtesy of the contractors' employees in dealing with the client					
Contractors' ability to convey confidence and trust					
Contractors effectiveness and attitude to work with the client as a team					
Contractors' competence and knowledge to do the job					
Contractors' strength and financial arrangements					
Contractors' previous track record and past experience in similar projects					

Contractors' size in relation to project size					
Contractors' managerial capability and supervisory staff competence for the project					
Contractors' managerial communication skills					
Clients' previous satisfactory experience with the same contractor					
Contractors' proposal in terms of creativity and attention to details					
Contractors attitude to allocate and manage the project risk					
Contractors' quality assurance and control procedure in place					
Contractors' individual qualification and quality in terms of attitude in dealing with the client					
Contractor's quality in dealing with the consultants					
Contractors' individual experience and competence					
Contractors' current work load and obligations					
Contractors' convenient location					
Availability of the contractors suitable equipments					
Contractors' reputation in the construction market					
Contractors ability to foresee construction problems and to provide creative solutions					
Contractors' long term relationship with competent sub-contractors					
Contractors' willingness to offer reasonable and competitive price to do the job after being qualified					

of pre-qualification was undertaken. A sampling frame was prepared from the Construction Contractors Directory in Jordan. The research questions, related to the research objectives, were directed toward experienced and senior managers within clients' organization who were specifically involved in the pre-qualification process. The questionnaire is presented in the Appendices.

For purposes of this questionnaire, "Person" (i.e., the engineer) is defined as individuals who constitute the management of a corporate or other legal entity. Additionally, it includes any individual or other legal entity that: (a) directly or indirectly (e.g. through an affiliate), submits offers for or is awarded, or reasonably may be expected to submit offers for or be awarded, a contract, or a subcontract under a contract; or, (b) conducts business, or reasonably may be expected to conduct business.

The sample: A judgmental selective sample was prepared for this research. This type of sampling was selected because it is judged that the sampling units are indicative or typical of the population as a whole. Therefore, experienced and senior individuals within major clients' organizations in Jordan were targeted. This indicates that

one key or senior individual was judged to be a reliable source of information on their organizations' activities than lower-ranking managers^[12]. In concord with Philips^[12] conclusion Patterson and Spreng^[13] reported that one key respondent is appropriate if he/she has a senior or ownership position. They added that such respondents and their direct involvement in their organizations' "boundary-spanning activities" qualify them to respond on behalf of their companies. Conant, Mokwa and Varadarajan^[14] indicated "in the face of time and resources constraints the single informant approach allows for a large number of organizations to be surveyed". Likewise Patterson and Spreng^[13] state that it will be very difficult to hunt multiple respondents over several months and it may decrease the response rate due to respondents changing functions within the company and becoming too busy to continue participation or leaving the company altogether.

RESULTS AND DISCUSSION

The study goal was introducing a further understanding of the concept of pre-qualification from clients' perspective and what advantages can

Table 1: Frequency of respondents weight given to each of the pre-qualification criteria

Pre-qualification criteria	Frequency of respondents for the whole sample				
	Very Important	Important	Neither Nor	Of Little Importance	Of No importance
Contractors' ability to provide high quality recommendation from satisfied clients	11	15	2	2	0
Contractors' ability to provide detailed programme to execute the project	11	14	5	0	0
Contractor' ability to select competent sub-contractors from a list provided by the client	13	13	2	2	0
Contractors ability to handle the safety requirements	9	13	2	6	0
Contractors' specific environmental policy	0	9	13	8	0
Contractor' ability to provide clear information which is easy to understand	5	19	4	2	0
Contractors' ability to have regular meetings with the client	6	13	6	2	3
Contractors interest to concentrate on the project to understand the clients' business requirements	0	22	1	3	4
The courtesy of the contractors' employees in dealing with the client	0	12	5	4	9
Contractors' ability to convey confidence and trust	9	13	2	4	2
Contractors effectiveness and attitude to work with the client as a team	11	13	4	2	0
Contractors' competence and knowledge to do the job	15	13	0	2	0
Contractors' strength and financial arrangements	18	10	2	0	0
Contractors' previous track record and past experience in similar projects	14	16	0	0	0
Contractors' size in relation to project size	11	15	0	4	0
Contractors' managerial capability and supervisory staff competence for the project	11	17	2	0	0
Contractors' managerial communication skills	4	13	3	8	2
Clients' previous satisfactory experience with the same contractor	1	21	3	5	0
Contractors' proposal in terms of creativity and attention to details	4	19	1	6	0
Contractors attitude to allocate and manage the project risk	0	20	1	8	1
Contractors' quality assurance and control procedure in place	0	17	7	2	4
Contractors' individual qualification and quality in terms of attitude in dealing with the client	6	12	6	6	0
Contractor's quality in dealing with the consultants	1	10	7	6	6
Contractors' individual experience and competence	3	19	5	3	0
Contractors' current work load and obligations	4	15	7	4	0
Contractors' convenient location	2	4	7	9	8
Availability of the contractors suitable equipments	11	13	3	3	0
Contractors' reputation in the construction market	3	16	2	9	0
Contractors ability to foresee construction problems and to provide creative solutions	10	12	1	7	0
Contractors' long term relationship with competent sub-contractors	0	15	4	11	0
Contractors' willingness to offer reasonable and competitive price to do the job after being qualified	18	12	0	0	0

pre-qualification give to them. Thus, the importance of the pre-qualification criteria obtained from the exploratory study and the literature are examined further via questionnaire survey. The questionnaire is designed based on the literature and the findings of the exploratory study as indicated earlier.

General information: As shown above, that experienced and senior individuals within major clients' organizations in Jordan were targeted for this research. However, the size and experience of clients' organizations were assured when preparing the sample. Also questionnaires that did not satisfy the above points were excluded from the

analysis. The sample involves thirty (N=30) respondents from major clients' organizations in Jordan. Of the thirty clients twenty two (N=22) are public clients and eight (N=8) are private clients. The smaller number of private clients is because of the small size of the construction market of the private sector in Jordan and the whole construction market is dominant by the public sector. However, the names of the interviewees and firms are not mentioned for confidentiality reason.

Table 1 presents the thirty-one pre-qualification criteria and the frequency of the clients respondents of the whole sample concerning the importance of these criteria from the clients' perspective.

Table 2: Statistical information for respondents weight to pre-qualification criteria for the whole sample

Pre-qualification criteria	Total weight	Average	RII	Rank
Contractors' willingness to offer reasonable and competitive price to do the job after being qualified	138	4.60	0.92	1
Contractors' strength and financial arrangements	136	4.53	0.90	2
Contractors' previous track record and past experience in similar projects	134	4.46	0.89	3
Contractors' ability to provide high quality recommendation from satisfied clients	125	4.16	0.88	4
Contractors' competence and knowledge to do the job	131	4.36	0.87	5
Contractors' managerial capability and supervisory staff competence for the project	129	4.30	0.86	6
Contractor' ability to select competent sub-contractors from a list provided by the client	127	4.23	0.84	7
Contractors' ability to provide detailed programme to execute the project	126	4.20	0.84	8
Contractors effectiveness and attitude to work with the client as a team	123	4.10	0.82	9
Contractors' size in relation to project size	123	4.10	0.82	9
Availability of the contractors suitable equipments	122	4.06	0.81	11
Contractor' ability to provide clear information which is easy to understand	117	3.90	0.78	12
Contractors ability to handle the safety requirements	115	3.83	0.76	13
Contractors ability to foresee construction problems and to provide creative solutions	115	3.83	0.76	13
Contractors' ability to convey confidence and trust	113	3.76	0.75	15
Contractors' individual experience and competence	112	3.73	0.74	16
Contractors' proposal in terms of creativity and attention to details	111	3.70	0.74	17
Contractors' current work load and obligations	109	3.63	0.72	18
Clients' previous satisfactory experience with the same contractor	108	3.60	0.72	19
Contractors' individual qualification and quality in terms of attitude in dealing with the client	108	3.60	0.72	19
Contractors' ability to have regular meetings with the client	107	3.56	0.71	21
Contractors' reputation in the construction market	103	3.43	0.68	22
Contractors interest to concentrate on the project to understand the clients' business requirements	101	3.36	0.67	23
Contractors attitude to allocate and manage the project risk	100	3.33	0.66	24
Contractors' managerial communication skills	99	3.30	0.66	25
Contractors' quality assurance and control procedure in place	97	3.23	0.64	26
Contractors' long term relationship with competent sub-contractors	94	3.13	0.62	27
Contractors' specific environmental policy	91	3.03	0.60	28
Contractor's quality in dealing with the consultants	84	2.80	0.56	29
The courtesy of the contractors' employees in dealing with the client	80	2.66	0.53	30
Contractors' convenient location	73	2.43	0.48	31

The data presented in Table 1, represents the frequency of the client respondents weight given to each of the pre-qualification criteria. Based on the information presented in Table 1, the mean values or the averages and the relative importance index for each criterion are presented in Table 2. However, the relative importance index (RII) is calculated as follows^[15].

$$RII = \frac{\sum w}{A * N}$$

Where,

w = is the weight given by respondents to each pre-qualification criterion ranged from 1 to 5.

A = is the maximum weight, 5 in this case,

N = is the sample size.

A critical and thorough examination of the information presented in Table 2 based on the whole sample-indicated that there is a consensus among the client organizations concerning the contractors' quality attributes. The Table 2 also shows the priority given by clients to the pre-qualification criteria. However, as expected bid price plays a major rule in awarding public projects in Jordan. This conclusion is expected based on the size and nature of the sample where public clients are dominant and also, this conclusion, is consistence with the findings of other researches such as Hampton^[16].

In addition, Table 2 also shows a number of the top pre-qualification criteria as they are ranked by the whole sample of client organizations in Jordan. These items are Contractors' willingness to offer reasonable and competitive price to do the job after being qualified, Contractors' strength and financial arrangements, Contractors' previous track record and past experience in similar projects, Contractors' ability to provide high quality recommendation from satisfied clients, Contractors' competence and knowledge to do the job, Contractors' managerial capability and supervisory staff competence for the project, Contractor' ability to select competent sub-contractors from a list provided by the client, Contractors' ability to provide detailed programme to execute the project, Contractors effectiveness and attitude to work with the client as a team. The conclusion of this research is confirmed by the findings of previous research by Tarawneh, Al-Rodan and Maaitah^[6] and Hatush and Skitmore^[8].

Table 2 presents the information of the respondents from public client organizations on the importance of the pre-qualification criteria. The pre-qualification criteria that have the high priority for public client are as follows: Contractors' willingness to offer reasonable and competitive price to do the job after being qualified, Contractors' strength and financial arrangements,

Table 3: Statistical information for respondents weight to pre-qualification criteria for public clients

Pre-qualification criteria	Average	RII	Rank
Contractors' willingness to offer reasonable and competitive price to do the job after being qualified	4.68	0.93	1
Contractors' strength and financial arrangements	4.50	0.90	2
Contractors' previous track record and past experience in similar projects	4.45	0.89	3
Contractor' ability to select competent sub-contractors from a list provided by the client	4.36	0.87	4
Contractors' competence and knowledge to do the job	4.31	0.86	5
Contractors' managerial capability and supervisory staff competence for the project	4.18	0.83	6
Contractors' ability to provide high quality recommendation from satisfied clients	4.09	0.81	7
Contractors' ability to provide detailed programme to execute the project	4.09	0.81	7
Contractors' size in relation to project size	4.00	0.80	9
Availability of the contractors suitable equipments	4.00	0.80	9
Contractor' ability to provide clear information which is easy to understand	3.90	0.78	11
Contractors effectiveness and attitude to work with the client as a team	3.81	0.76	12
Contractors ability to handle the safety requirements	3.68	0.73	13
Contractors' current work load and obligations	3.68	0.73	13
Contractors' individual qualification and quality in terms of attitude in dealing with the client	3.63	0.72	15
Contractors' individual experience and competence	3.63	0.72	15
Contractors ability to foresee construction problems and to provide creative solutions	3.63	0.72	15
Clients' previous satisfactory experience with the same contractor	3.59	0.71	18
Contractors' proposal in terms of creativity and attention to details	3.59	0.71	18
Contractors' reputation in the construction market	3.59	0.71	18
Contractors' ability to convey confidence and trust	3.54	0.70	21
Contractors interest to concentrate on the project to understand the clients' business requirements	3.40	0.68	22
Contractors' ability to have regular meetings with the client	3.22	0.64	23
Contractors' quality assurance and control procedure in place	3.22	0.64	23
Contractors attitude to allocate and manage the project risk	3.18	0.63	25
Contractors' long term relationship with competent sub-contractors	3.04	0.60	26
Contractors' managerial communication skills	2.95	0.59	27
Contractors' specific environmental policy	2.86	0.57	28
Contractor's quality in dealing with the consultants	2.59	0.51	29
Contractors' convenient location	2.59	0.51	29
The courtesy of the contractors' employees in dealing with the client	2.36	0.47	31

Table 4: Statistical information for respondents weight to pre-qualification criteria for private clients

Pre-qualification criteria	Average	RII	Rank
Contractors effectiveness and attitude to work with the client as a team	4.87	0.97	1
Contractors' strength and financial arrangements	4.62	0.92	2
Contractors' managerial capability and supervisory staff competence for the project	4.62	0.92	2
Contractors' ability to provide detailed programme to execute the project	4.50	0.90	4
Contractors' ability to have regular meetings with the client	4.50	0.90	4
Contractors' competence and knowledge to do the job	4.50	0.90	4
Contractors' previous track record and past experience in similar projects	4.50	0.90	4
Contractors' ability to provide high quality recommendation from satisfied clients	4.37	0.87	8
Contractors' ability to convey confidence and trust	4.37	0.87	8
Contractors' size in relation to project size	4.37	0.87	8
Contractors ability to foresee construction problems and to provide creative solutions	4.37	0.87	8
Contractors' willingness to offer reasonable and competitive price to do the job after being qualified	4.37	0.87	8
Contractors ability to handle the safety requirements	4.25	0.85	13
Contractors' managerial communication skills	4.25	0.85	13
Availability of the contractors suitable equipments	4.25	0.85	13
Contractors' proposal in terms of creativity and attention to details	4.00	0.80	16
Contractors' individual experience and competence	4.00	0.80	16
Contractor' ability to select competent sub-contractors from a list provided by the client	3.87	0.77	18
Contractor' ability to provide clear information which is easy to understand	3.87	0.77	18
Contractors attitude to allocate and manage the project risk	3.75	0.75	20
Clients' previous satisfactory experience with the same contractor	3.62	0.72	21
Contractors' specific environmental policy	3.50	0.70	22
The courtesy of the contractors' employees in dealing with the client	3.50	0.70	22
Contractors' individual qualification and quality in terms of attitude in dealing with the client	3.50	0.70	22
Contractors' current work load and obligations	3.50	0.70	22
Contractor's quality in dealing with the consultants	3.37	0.67	26
Contractors' long term relationship with competent sub-contractors	3.37	0.67	26
Contractors interest to concentrate on the project to understand the clients' business requirements	3.25	0.65	28
Contractors' quality assurance and control procedure in place	3.25	0.65	28
Contractors' reputation in the construction market	3.00	0.60	30
Contractors' convenient location	2.00	0.40	31

Table 5: Statistical information for respondents weight to pre-qualification criteria for public and private clients

Pre-qualification criteria	Average		RII		Rank	
	Public	Private	Public	Private	Public	Private
Contractors' willingness to offer reasonable and competitive price to do the job after being qualified	4.68	4.37	0.93	0.87	1	8
Contractors' strength and financial arrangements	4.50	4.62	0.90	0.92	2	2
Contractors' previous track record and past experience in similar projects	4.45	4.50	0.89	0.90	3	4
Contractor' ability to select competent sub-contractors from a list provided by the client	4.36	3.87	0.87	0.77	4	18
Contractors' competence and knowledge to do the job	4.31	4.50	0.86	0.90	5	4
Contractors' managerial capability and supervisory staff competence for the project	4.18	4.62	0.83	0.92	6	2
Contractors' ability to provide high quality recommendation from satisfied clients	4.09	4.37	0.81	0.87	7	8
Contractors' ability to provide detailed programme to execute the project	4.09	4.50	0.81	0.90	7	4
Contractors' size in relation to project size	4.00	4.37	0.80	0.87	9	8
Availability of the contractors suitable equipments	4.00	4.25	0.80	0.85	9	13
Contractor' ability to provide clear information which is easy to understand	3.90	3.87	0.78	0.77	11	18
Contractors effectiveness and attitude to work with the client as a team	3.81	4.87	0.76	0.97	12	1
Contractors ability to handle the safety requirements	3.68	4.25	0.73	0.85	13	13
Contractors' current work load and obligations	3.68	3.50	0.73	0.70	13	22
Contractors' individual qualification and quality in terms of attitude in dealing with the client	3.63	3.50	0.72	0.70	15	22
Contractors' individual experience and competence	3.63	4.00	0.72	0.80	15	16
Contractors ability to foresee construction problems and to provide creative solutions	3.63	4.37	0.72	0.87	15	8
Clients' previous satisfactory experience with the same contractor	3.59	3.62	0.71	0.72	18	21
Contractors' proposal in terms of creativity and attention to details	3.59	4.00	0.71	0.80	18	16
Contractors' reputation in the construction market	3.59	3.00	0.71	0.60	18	30
Contractors' ability to convey confidence and trust	3.54	4.37	0.70	0.87	21	8
Contractors interest to concentrate on the project to understand the clients' business requirements	3.40	3.25	0.68	0.65	22	28
Contractors' ability to have regular meetings with the client	3.22	4.50	0.64	0.90	23	4
Contractors' quality assurance and control procedure in place	3.22	3.25	0.64	0.65	23	28
Contractors attitude to allocate and manage the project risk	3.18	3.75	0.63	0.75	25	20
Contractors' long term relationship with competent sub-contractors	3.04	3.37	0.60	0.67	26	26
Contractors' managerial communication skills	2.95	4.25	0.59	0.85	27	13
Contractors' specific environmental policy	2.86	3.50	0.57	0.70	28	22
Contractor's quality in dealing with the consultants	2.59	3.37	0.51	0.67	29	26
Contractors' convenient location	2.59	2.00	0.51	0.40	29	31
The courtesy of the contractors' employees in dealing with the client	2.36	3.50	0.47	0.70	31	22

Contractors' previous track record and past experience in similar projects, Contractor' ability to select competent sub-contractors from a list provided by the client, Contractors' competence and knowledge to do the job, Contractors' managerial capability and supervisory staff competence for the project, Contractors' ability to provide high quality recommendation from satisfied clients, Contractors' ability to provide detailed programme to execute the project.

However, an examination of the top eight pre-qualification criteria presented in Table 2 (for the whole sample) and Table 3 (for the public client sample) indicated that these criteria are approximately the same. This may be because of the large number of respondents from public client organizations.

Table 4 indicated that private clients have different opinion concerning the priority of the pre-qualification criteria from that of the whole sample and the public clients. While price plays a major rule of the public clients it comes in the twelve place for private clients. This may be due to that accountability system is not a great issue for private client when they award their projects. While public clients goes under high criticism and scrutiny and

have to make a full justification for awarding their projects to a contractor who does not offer the lowest price.

Table 4 shows a number of the top pre-qualification criteria as they ranked by respondents from private client organizations. These items are as follows: Contractors effectiveness and attitude to work with the client as a team, Contractors' strength and financial arrangements, Contractors' managerial capability and supervisory staff competence for the project, Contractors' ability to provide detailed programme to execute the project, Contractors' ability to have regular meetings with the client, Contractors' competence and knowledge to do the job, Contractors' previous track record and past experience in similar projects, Contractors' ability to provide high quality recommendation from satisfied clients and Contractors' ability to convey confidence and trust.

Table 5 presents the pre-qualification criteria and the averages, RII and ranks given to each item by respondents from public and private client organizations. The suggestion from Table 5 indicated that public and private clients do not have the same priority for the importance of pre-qualification criteria. As indicated earlier that public clients give more priority to

Contractors' willingness to offer reasonable and competitive price to do the job after being qualified, Contractors' strength and financial arrangements, Contractors' previous track record and past experience in similar projects, Contractor' ability to select competent sub-contractors from a list provided by the client, Contractors' competence and knowledge to do the job.

At the same time it is found that private clients give more weight to Contractors effectiveness and attitude to work with the client as a team, Contractors' strength and financial arrangements, Contractors' managerial capability and supervisory staff competence for the project, Contractors' ability to provide detailed programme to execute the project, Contractors' ability to have regular meetings with the client.

Therefore, based on the previous discussion, it is clear that private clients are concerned about team building and long-term relationship with their contractors. Whilst, reasonable price offered by the contractors are of much concern for private clients. Knowing clients priorities , public and private, give contractors a yardstick in dealing with different types of client organization. It also helps contractors to build different strategies in dealing with different groups of client based on what each group prefer. Thus, contractors are invited to revise their ways of dealing with clients at the pre-qualification stages and after ward.

The contractor must be able to answer "Yes" to all of these statements before he complete and submit his Pre-Qualification Questionnaire and Financial Statements for review:

1. I am bidding as the prime contractor.
2. I am appropriately licensed, insured and bondable.
3. I have either Compiled, Reviewed or Audited financial statements, dated within the last twelve (12) months.
4. I am eligible to bid on a public works contract.

To conclude the contractor for any new joint ventures are not excluded from forming on a project by project basis after the pre-qualification process. However, in such cases, all parties to the joint venture must have individually pre-qualified in order to bid

The above tables refer only to disputes between contractor firm and the owner of a project. Do not include information about disputes between contractor firm and the supplier, another contractor, or subcontractor. The contractor should not include information about "pass-through" disputes in which the actual dispute is between a sub-contractor and a project owner.

The contractor should complete and accurate answers to the questions in the Pre-Qualification Questionnaire and Financial Statements are required. These documents will be the basis of rating contractors with respect to the size and scope of contracts for which contractors are qualified to bid.

The Pre-Qualification Questionnaire and Financial Statements are not public records, subject to the Public Records Act and are not open for public inspection. All information provided should be kept confidential to the extent permitted by law.

Each Pre-Qualification Questionnaire and any other submitted pages, must be signed under penalty of perjury by an individual who has the legal authority to bind the contractor on whose behalf that person is signing. If any information provided by a contractor is inaccurate, the contractor must immediately notify and provide to the owner with updated, accurate information in writing and under penalty of perjury.

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