

1 **Effectiveness of Contractors' Competitive Bidding**
2 **Strategies in the UAE Construction Industry**

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7 **Abstract.** Contractors seek different competitive bidding strategies in order to
8 increase their opportunity in winning projects. The United Arab Emirates (UAE)
9 construction industry is competitive. Additionally, nowadays, UAE companies
10 tend to expand globally, entering new international markets. Therefore, effective
11 bidding strategies need to be implemented to compete profitably in the UAE and
12 the international markets. The objective of this research is to identify the effective
13 competitive bidding strategies for construction companies in the UAE and
14 international markets. Common competitive bidding strategies were identified
15 through review of related literature. A questionnaire was then prepared and
16 distributed to construction companies in the UAE. Sixty five surveys were
17 completed and analysed. As a result, the top five effective strategies in the UAE
18 market are lowest bid, value management, achieving a combination of price &
19 performance, application of high technology, and public relations strategy. The
20 top five effective strategies in international market are noted to be achieving a
21 combination of price & performance, lowest bid, value management, application
22 of high technology, and public relationship. The results are particularly useful for
23 international contractors who want to enter the UAE construction market.

24 **Keywords:** Bidding Strategies, Construction Industry, UAE, International
25 Construction.

26 **1 Introduction**

27 Construction projects are normally awarded through the practice of competitive
28 bidding. Competitive bidding occurs when the client invites contractors to bid for a
29 project. The invitation is usually made through public advertisement. Bidding is the
30 process of submitting a bid proposal to the client for undertaking the construction
31 project at a certain price. During the bidding stage, the contractor analyses the project
32 documents and submits the bid price along with the required deliverables to the client.
33 The client evaluates the contractor bid submittals, and ultimately awards the project to
34 an eligible contractor. With low profit margins required to win bids in tight and
35 competitive construction markets, careful and accurate bidding is necessary for
36 contractor success [1]. The contractors' ability to win the right project at the right price

37 level is important for survival and making a profit [2]. Competitive bidding allows all
38 capable contractors to bid for the offered projects. Shash [3] defined competitive
39 bidding as a system in which the contractor is selected based on specific criteria to
40 perform a set task. This style of bidding is considered a stable bidding practice in the
41 construction market and is the most familiar method of distributing construction
42 contracts among contractors [4]. Direct competition through bidding is the most
43 common method of job distribution in the construction industry [2].

44 The construction industry witnessed an increase in the size and complexity of
45 construction projects during the past years [5]. Contractors adopt various competitive
46 bidding strategies in order to meet specific objectives [6] and to improve their chances
47 of winning projects [7]. Bidding strategies differ from one construction firm to another,
48 where each contractor will have a different degree of sensitivity towards the factors
49 affecting their bidding decisions [8]. The lowest bid strategy is one of the main
50 strategies used by contractors. Submitting a lowest bid is usually accepted as being the
51 key to winning a contract [2]. However, the lowest bidders may not be competent
52 enough to carry out the task [9]. Enshassi et al. [10] considered that the selection of the
53 lowest bidder is the main cause of problems in the construction industry. El-Sayegh and
54 Rabie [11] stated that choosing a contractor based on the lowest price may not be the
55 best approach as it may lead to delays and/or quality problems. Risk management is
56 vital for successful project completion [12].

57 The UAE is one of the largest construction markets in the Middle East. The
58 construction industry is still productive despite the decline in the number of offered
59 projects. Due to the high number of contractors in the market, the competition for
60 winning projects remains fierce. During recessions, contractors are forced to become
61 more competitive [13]. It is found that competition between contractors to bid becomes
62 brutal in bad years when few projects are available [14]. The current economic situation
63 has resulted in high competition between UAE construction companies to win projects
64 locally and internationally. Therefore, effective bidding strategies should be
65 implemented to compete profitably in the UAE and international markets. The objective
66 of this paper is to assess the effectiveness of the competitive bidding strategies for UAE
67 construction companies, in both local and international markets.

68 **2 Methodology**

69 The first step was to identify the common competitive bidding strategies based on the
70 review of related literature. Seventeen strategies were identified. A questionnaire was
71 used to get the perceptions of construction professionals in the UAE construction
72 industry. Sixty five questionnaires were collected. The respondents were asked to
73 indicate the effectiveness of the identified strategies using a 5-point Likert scale. The
74 scale ranged from 1 (not effective) to 5 (very effective) to measure the effectiveness of
75 the different strategies. There were separate questions for competitive strategies in the
76 local and international markets. The weighted average of the responses was then
77 calculated for each strategy. The Spearman rank correlation coefficient was used to

78 study the strength of relationships between the competitive strategies in the local and
79 international markets.

80 **3 Results**

81 The bidding strategies were examined in terms of their effectiveness. The effectiveness
82 is defined as winning the contract as a result of implementing a particular competition
83 strategy in bidding (Tan et al. 2010). Table 1 shows the weighted averages and rankings
84 of the effectiveness of the bidding strategies in the UAE and international markets.

85 **Table 1.** Bidding Strategy Effectiveness

Bidding Strategy	UAE		International	
	Rank	Average	Rank	Average
Lowest bid	1	4.51	2	4.29
Value management	2	3.97	3	4.25
Achieving combination of price & performance	3	3.95	1	4.44
Application of high technology	4	3.86	4	4.15
Public relations strategy	5	3.82	5	4.15
Technology transfer	6	3.58	8	3.87
Application of management innovation	7	3.52	9	3.77
Application of Risk management strategy	8	3.49	7	3.92
Sustainable practices	9	3.28	13	3.06
Social responsibility	10	3.14	10	3.69
Contractor shares risks in project	11	3.06	12	3.21
Joint venture	12	2.97	6	3.94
Design and Build	13	2.77	14	2.88
Partnership	14	2.54	11	3.67
Claim back strategy	15	2.34	16	1.94
Project finance options	16	2.26	15	2.37
Random bidding	17	1.83	17	1.46

86 **4 Discussion**

87 For the UAE market, the lowest bid strategy is the most effective way to guarantee
88 winning project's bid, especially when the contractor is dealing with familiar client.
89 The second most effective strategy is the value management strategy indicating the
90 importance of value management in terms of bidding. By applying this strategy
91 contractors save cost and time which allow them to compete effectively. The third
92 effective strategy is achieving combination of price and performance. This strategy
93 allows the contractors to meet the client's requirements (apart from the lowest bid
94 price), such as the technical submissions etc. The lowest effective bidding strategy is

95 clearly random bidding when work level is low. Overall, responses from UAE
96 construction market disagree with private finance options strategy.

97 Achieving combination of price and performance strategy is the major strategy
98 used and most effective while bidding for international projects. The results indicate
99 that in the international market, complying with clients' requirements is the most
100 effective strategy. The lowest bid price comes in second place. This is where the
101 contractor has an experience in the market environment, as he will be in the safe side
102 when submitting a reasonable low bid price. Value management is very effective
103 strategy, as it saves cost and time, which allow the contractor to remain competitive.
104 Application of high technology and public relation strategy are clearly explained by the
105 fact that the international market is highly competitive. Applying high technology on
106 the bidding process or on construction methodology attracts clients and enhances a
107 contractor's chance to win the bid. Public relation strategy also operates as an effective
108 strategy to win bids, especially when coupled with a good reputation and relationship
109 with construction parties e.g. the client, designer, etc. On the other hand, the analysis
110 shows the most ineffective three strategies are random bidding (when work level is
111 low), claim back strategy, and private finance options.

112 As shown in Table 1, lowest bid is the most accepted strategy used as bidding
113 strategy for winning local construction projects in UAE, while in bidding for
114 international projects the main applied strategy is achieving combination of price and
115 performance. A further analysis of the strength of relationship between the UAE and
116 international market was performed using the Spearman Rank Correlation Coefficient
117 analysis. The correlation coefficient is 0.92 which indicates a strong positive correlation
118 between the two rankings. The comparison between the UAE and international market
119 shows that the lowest bid was ranked as the most effective strategy in the UAE market,
120 while it was ranked 2nd in the international market. This difference is due to the
121 uncertainty of the international market and the clients' multi requirements for
122 submitting the bid. A major discrepancy is the sustainable and environmental practices
123 strategy. For UAE projects, it ranked 9th while for international projects it ranked 13th.
124 This is because the UAE municipality and government are deeply concerned with
125 sustainability applications, with most projects containing sustainability application.
126 Thus, the contractors frequently use these applications as a strategy to gain the client's
127 attention. However, for international projects, not all countries apply sustainability
128 practices, thus limiting this strategy's effectiveness. Another discrepancy is the joint
129 venture strategy. For the UAE market, it was ranked 12th while it was ranked 6th for the
130 international market. In order for a contractor to enter a new country and be able to
131 know how to deal with the new environment, a joint venture partner is highly
132 complementary, increasing the chance of winning a project in the international market.
133 For the UAE market, JV is not as effective, as the contractor may only need a partner
134 when bidding for a large, complex project that needs other contractors' support..

135 **5 Conclusions**

136 The UAE is one of the largest construction markets in the Middle East. Due to the
 137 current global financial recession, the number of available projects declined, while the
 138 number of contractors remained relatively constant. This has led to an increased
 139 competition between contractors to win projects. As a result, UAE contractors are
 140 currently concerned with developing effective bidding strategies that can potentially
 141 increase their chances in winning projects.

142 In terms of effectiveness, the top five common effective strategies in the UAE market
 143 are: lowest bid, value management, achieving combination of price and performance,
 144 application of high technology, and technology transfer. The top five effective
 145 strategies in international market are: achieving combination of price and performance,
 146 lowest bid, value management, application of high technology, and public relationship
 147 strategy.

148 This paper provides an in-depth focus on the effectiveness of the competitive bidding
 149 strategies in the UAE and the international construction markets. This is particularly
 150 useful for international contractors who want to enter the UAE construction market.
 151 Due to the changing economic conditions, contractors need to adapt their competitive
 152 bidding strategies to increase their chances of winning project. Contractors need to pay
 153 special attention to the clients' requirements. There is a shift towards sustainable
 154 construction practices in the UAE and contractors need to capitalize on that as they
 155 compete for projects. This paper helps contractors formulate the appropriate and
 156 effective bidding strategies in local and international markets.

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