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The perception of the government and private sectors on the procurement system delivery method in Saudi Arabia

Ahmed Alofi^{a*}, Jacob Kashiwagi^b, Dean Kashiwagi^c

^aM.S., School of Sustainable Engineering and the Built Environment, Arizona State University at Tempe, 660 S College Ave., Tempe, AZ 85281, United States

^bAssistant Research Professor, School of Sustainable Engineering and the Built Environment, Arizona State University at Tempe, 660 S College Ave., Tempe, AZ 85281, United States

^cProfessor, P.E., School of Sustainable Engineering and the Built Environment, Arizona State University at Tempe, 660 S College Ave., Tempe, AZ 85281, United States

Abstract

This paper is part of doctoral research to improve the current Saudi Arabian (SA) procurement system. SA has the largest construction market in the Middle East. However, the use of the traditional procurement system in SA has been identified as one of the causes for poor performance in the delivery of construction. The system has been identified as a major risk to the SA government, due to consistent increased costs and delays of up to 70% on projects. A survey was conducted with 1396 participants including engineers, buyers, contractors, consultants, academics, and architects. The purpose of the survey was to identify the validity of the recent claims that the procurement system in SA is broken. The participants work in both the private and government sectors. The survey results showed that the procurement system is a major risk to projects, affects construction projects negatively, and is in need of improvement.

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Keywords: Saudi Arabia; construction industry; low bid; delays of construction projects; procurement system

1. Introduction

The largest market in construction industry in the Middle East is Saudi Arabia (SA) [1]. It is expected that this growth will be continued until 2015 [1]. Al Turkey conducted a survey through 300 project managers from several sectors, about the important issues that face the construction industry in SA [2]. It has been found that 80% of projects suffer from increased costs and 97% of projects exceeded project schedule [2]. Al-Ghafly also conducted a survey to determine the degree of delays in construction projects among owners, contractors and consultants [3]. The consultants believe that 84% of the projects suffer from delays, and contractors only believe that 37% of projects have delays. Moreover, Zain Al- Abedien and Al-Sultan have found that around 70% of projects suffered from delays in SA [4, 5]. The delays were inescapable issues because the contractors were selected based on the lowest price [6]. Additional research also found the major cause of delay in SA construction projects is change orders [6]. Other reasons such as incorrect estimation, lack of experience, and inadequate decisions in companies' policy are strong causes of issues of construction projects in SA [7].

* Corresponding author. Tel.: (480)727-0753.
E-mail address: ahmed.alofi@asu.edu

2. Problem

The Saudi Arabian procurement system is the major cause of issues in construction projects in SA because the system leads to several delays and negative impact in projects. The negative outcomes come from the way of contractors' selection that have been selected only depending on lowest price [7]. In addition, the majority of contractors who have been chosen are not qualified [6]. Nasser Al-Hajri, who works in the eastern region at Chamber of Commerce and is involved with the procurement system in Saudi Arabia, says that the use of Saudi Arabian procurement system causes many problems and delays in construction projects [9]. Additionally, the system has not been optimized for a long time.

3. Proposal

The research proposes that by conducting a survey upon 1396 participants about the major issues arising from the using of the traditional Saudi Arabian procurement system, which selects contractors on the lowest price. The main objectives of the research are as follows:

- To identify the perceptions of a large number of interested professionals private and public sectors around the Saudi procurement system
- To prove that the system is the main reason for several delays in the most of construction projects in SA
- To identify if the professionals agree with any future improvement on the system
- Also, this research will be the beginning to propose solutions for the future development on the Saudi Arabian procurement system

4. Hypothesis

The Saudi Arabian procurement system delivery method is a major cause of poor performance in the construction industry in SA.

5. Research Methodology

- Identify that the most important problems of the construction industry are using the Saudi Arabian procurement system through literature reviews
- Propose hypothesis that the procurement system is broken and needs to be improved
- Conduct a survey about the perceptions of Saudi Arabian procurement system among a large number of participants who work in the construction industry with interest in the procurement system such as: contractors, owners, consultants, engineers, architects, academics, etc.
- Conduct an analysis on the data and compare perceptions

5.1. Survey design

The survey was carefully designed in order to obtain the participants' perceptions over the system of contractors' selection, the impact of the procurement system on the projects, and the impact of contractors who have been selected by the Saudi Arabian procurement system on projects. Also, the survey has been collected in order to identify the perceptions and satisfaction of the participants, who work in the construction industry in both private and governmental sectors with the current Saudi Arabian procurement system.

The questions that have been asked are as follows:

1. Do you think that the traditional Saudi procurement system chooses non-expert contractors?
2. Do you think that the traditional Saudi procurement system leads to project delays and increased costs?
3. Does the difference between market prices and the lowest proposal price leads to losses in time and money.
4. Do you think that contractors who have very low and high prices, affect the project negatively?
5. Do you think contractor selection depending on low-bid has a negative impact on construction projects?
6. Do you feel there needs to be a change in the traditional Saudi procurement system?
7. What is your satisfaction with the traditional Saudi procurement system? (1-10) 10 is the best.

The Professionals were able to answer the questions by using two different scales:

1. Strongly Agree; Agree; Don't know; Disagree; Strongly Disagree.
2. Yes; No; I am not sure.

A survey was sent out to the participants who have been licensed by the government engineering professional group in SA by using the organization access. The data was collected through 1,396 participants out of 12,683 participants, who are interested with the current procurement system and contracts in SA. The total number of participants who work in private sectors is 1,151 participants and that included 710 engineers, 223 consultants, 88 contractors, 26 owners and 104 architects. In addition, the information collected in this paper considers 245 participants who work in governmental sectors included 157 engineers, 33 consultants, 9 owners, 5 vendors, 28 architects and 13 academics. All the participants of the private and government sectors have experience between a year and more than 25 years in different types of construction areas such as residential and commercial buildings, healthcare buildings, industrial and heavy civil construction.

6. Survey Results

The survey questions were designed to examine the real perceptions of the participants about the Saudi Arabian procurement system. Some participants did not answer some statements, either for lack of their knowledge or for other specific reasons. Therefore, it has been considered in those who have enough knowledge of the survey questions. Around fifty-four percent (53.51%) of the participants who work in private sectors and eighty-one percent (80.61%) of them who work in government sectors think that the procurement system in Saudi Arabia chooses non-expert contractors as seen in figure 1.

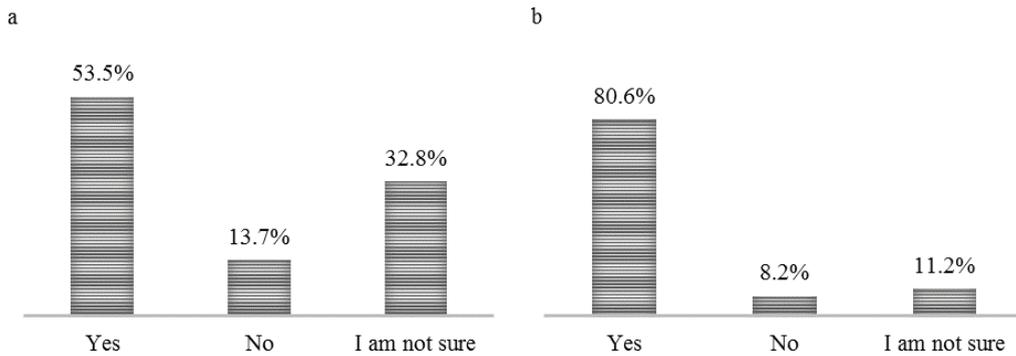


Fig. 1. (a) private sector; (b) government sector. The procurement system chooses non-expert contractors.

As seen in the figure 2, approximately seventy-three percent (73.41%) of the private participants think that the traditional Saudi procurement system leads to project delays and increased costs. While, around eighty-six percent (86.39%) of governmental participants agree with the question.

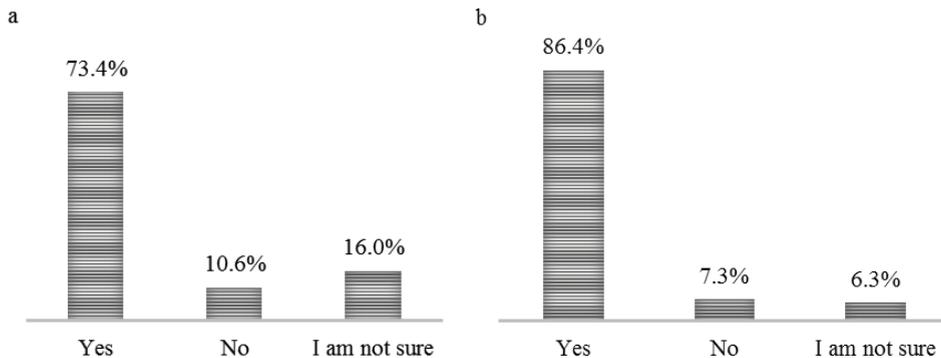


Fig. 2. (a) private sector; (b) government sector. The traditional Saudi procurement system leads to project delays and increased costs

Around seventy-two percent (72 %) from the participants who work in private and government sectors, agree that there is a large difference between market prices and the lowest proposal price (35% less than market prices) thus maximize losses in time and money. In contrast, only around eight percent (8%) of them disagree with it as is shown in figure 3. In addition, from the governmental participants, there are approximately ninety-four percent (94.1%) and eighty-eight percent (88.5%) from private sectors think that the contractors who have very low and high prices, affect the project negatively in Saudi Arabia as is seen in figure 4.

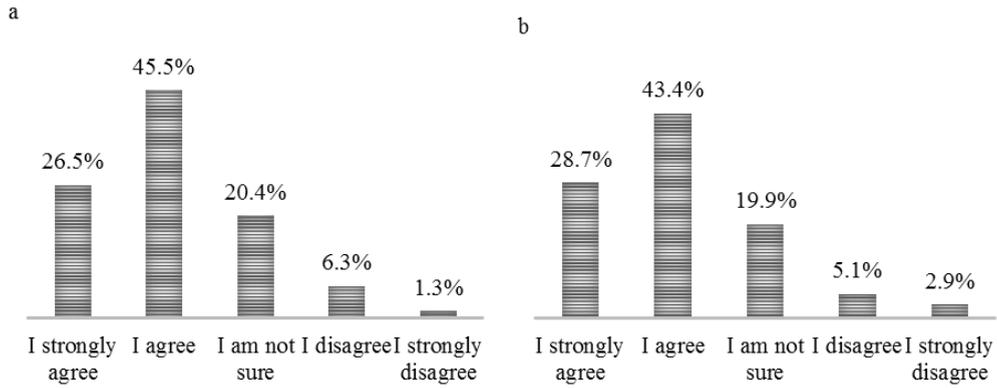


Fig. 3. (a) private sector; (b) government sector. Difference between market prices and the lowest proposal price leads to losses in time and money.

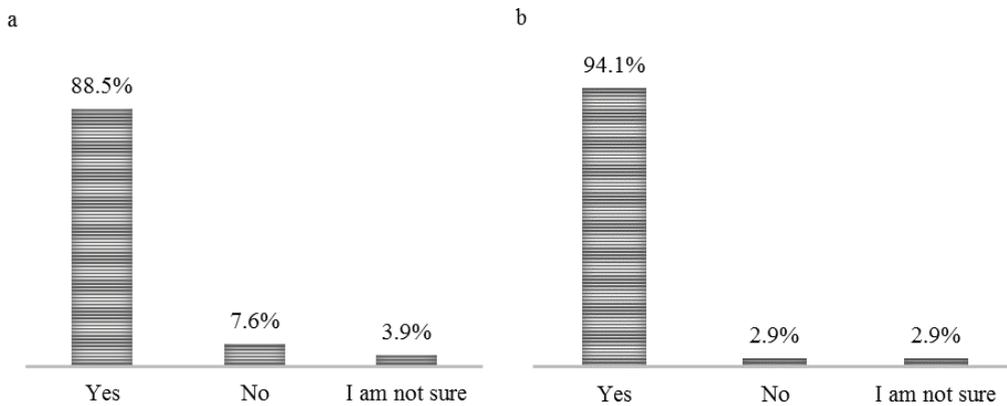


Fig. 4. (a) private sector; (b) government sector. The contractors who have very low and high proposals, affect the project negatively in Saudi Arabia.

Figure 5 shows that around ninety-three percent (93.4%) of the participants who work in private sectors and ninety-six percent (96%) of them who work in government sectors think that the contractors' selection depending on low bid has a negative impact on construction projects.

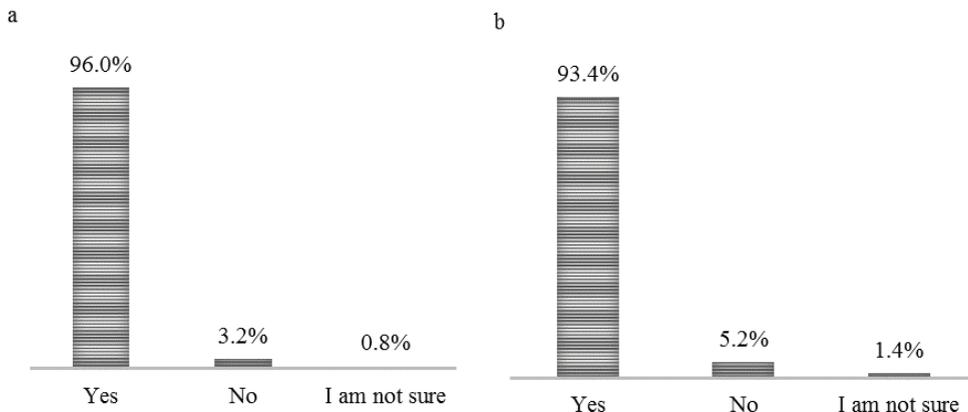


Fig. 5. (a) private sector; (b) government sector. Contractor selection depending on low-bid has a negative impact on construction projects.

Moreover, about ninety-six percent (96.2%) of participants of government sectors and around eighty-eight percent (87.8%) of participants of private sectors feel that there is a need to change the traditional Saudi procurement system as can be seen in figure 6. The participants' satisfaction from private sectors with the traditional Saudi procurement system is 5.03 out of 10 and the satisfaction of governmental participants is 4.21 out of 10 as can be seen in figure 7.

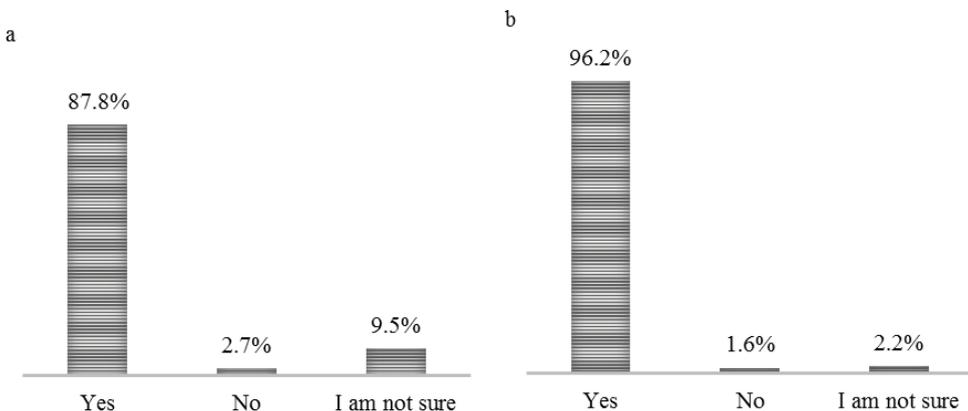


Fig. 6. (a) private sector; (b) government sector. Participants feel that there needs to be a change in the traditional Saudi procurement system.

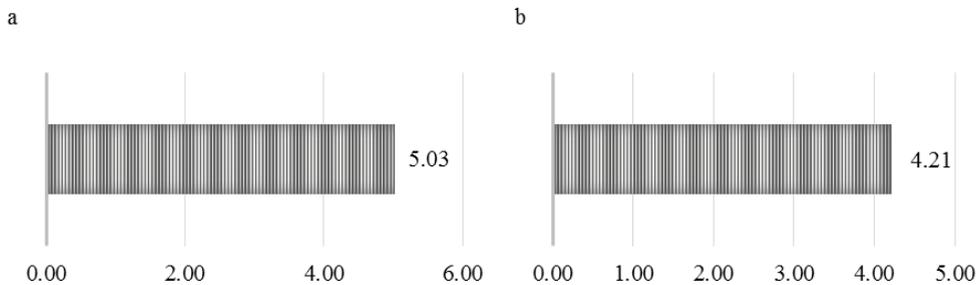


Fig. 7. (a) private sector; (b) government sector. The participant's satisfaction with the traditional Saudi procurement system, (1-10) 10 is the best.

7. Analysis

The survey results reflect real problems emanating from the procurement system in Saudi Arabia, which was one of the main reasons to write this paper. As is seen, the results are convergent between the perceptions of participants in the public and private sectors in Saudi Arabia. However, the results of the government sector reflected more willing and agreement with the objectives of the research compared to those who in the private sector. For instance, 89.33% of participants who work in the public sector agree that the Saudi Arabian procurement system leads to projects delays, chooses non expert contractors, the expensive and very cheap proposals affect the projects negatively and they feel that there must be a change in the Saudi procurement system, compared with 75.8 % participants in the private sectors which is 13.53% less than public sectors.

Only on a question, if contractor selection depending on low-bid has a negative impact on construction projects, the result is larger in the private sector by about 96% compared with government sector which gave a result around 93.4 %, with 2.6% difference between the two sectors. There is no difference in the results between the sectors concerning if the difference between market prices and the lowest proposal price, leads losses in time and money. Also, there are about 4.8 % from the government sector and 12.6% from the private sector are not sure about some questions, for lack of their experience or for other specific reasons or they are not fully informing them of the procurement system in Saudi Arabia.

8. Conclusion and Recommendation

Saudi Arabia has the largest construction industry in the Middle East. However, it suffers from several challenges and issues resulted from delays in the majority of construction projects. Many studies have been identified that the main reason for project delays is the contractors' selection who have been selected by Saudi Arabian procurement system delivery method. The contractors are selected only based on the lowest price, so the majority of contractors are not qualified.

A survey was conducted among 1396 participants from both private and public sectors on their perception and satisfaction about the procurement system in SA. The results show that the procurement system is broken, has negative impact on projects and in need of development.

After obtaining the perceptions of the participants in the survey, the researchers recommend the following:

- The Saudi Arabian procurement system must be improved and radical changes in the Saudi Arabian procurement system to improve its outputs
- There should be excluded all very low and expensive proposals
- Add new phases to test contractors to make sure if contractors are qualified before signing contracts
- Contractors should be monitored during construction work in order to ensure delivery of the project on time on cost
- reduce the owners' control on contractors
- Identify more researches to develop the procurement system due to its high value in the development of the construction industry in SA

The questionnaire was collected among 1,396 professional who are interested with the Saudi procurement system, and the results are as follows:

- (73.41%) of the private participants and (86.39%) of governmental participants think that the traditional Saudi procurement system leads to project delays and increased costs.
- Around seventy-two percent (72 %) from the participants who work in private and government sectors, agree that there is a large difference between market prices and the lowest proposal price, thus maximize losses in time and money, however while only around eight percent (8%) from them disagree with it.
- From the governmental participants, there are approximately ninety-four percent (94.1%), and eighty-eight (88.5%) from private sectors think that the contractors who have very low and high prices, affect the project negatively in Saudi Arabia.
- Around ninety-three percent (93.4%) of the participants who work in private sectors, and ninety-six percent (96%) of them who work in government sectors think that the contractors' selection depending on low bid has a negative impact on construction projects.
- About ninety-six percent (96.2%) of participants of government sectors, and around eighty-eight (87.8%) of participants of private sectors feel that there needs to be a change in the traditional Saudi procurement system.
- The participants' satisfaction from private sectors with the traditional Saudi procurement system is 5.03 out of 10, while the satisfaction of governmental participants is 4.21 out of 10.

Researchers have found one of the most successful procurement systems in the world: the Best Value performance information procurement system (BV PIPS) with 98% of customers' satisfaction [10]. It consists of four different phases to choose an expert contractor [11]. The model has been tested over 1850 times during 23 years in over 32 states in the United States of America.

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