University of Salford

School of the Built Environment

MSc Quantity Surveying

The dispute in the construction industry in the Kingdom of Bahrain

with a view to developing a dispute mitigation strategy

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United Kingdom
Abstract

Objectives

This research aimed to critically appraise dispute triggers on construction projects in the Kingdom of Bahrain in order to develop a dispute mitigation strategy. The study then looked to provide recommendations that could be implemented within the construction industry to avoid or mitigate disputes.

Methodology

The research adopted a qualitative strategy with its use of survey methodology. Semi-structured interviews were used to produce primary data and to widen the knowledge in the study in relation to the literature review. This adopted methodology provided more reliability and valid data to the findings.

Findings

The results appear to be consistent over the chosen sample and also consistent with studies conducted in other countries. The main findings of dispute causes in Bahrain are: 1) delays in payment and approvals from the client side, 2) alteration to the standard conditions of contracts, 3) design changes and variations, 4) poor communication and documentation, 5) lack of human resources, 6) misinterpretation of contracts and 7) lack of construction legislation.

Conclusions

The research showed the proper understanding of the importance of implementing a dispute avoidance and mitigation strategy within the Bahrain construction industry and further concluded that there is a lack of construction legislation to regulate the industry. Finally, the dissertation laid out a set of recommendations to be implemented on the governmental level as well as on the project participant level, followed by recommendations for future studies.
# Table of Contents

Abstract ...............................................................................................................................................i
Dedication ...........................................................................................................................................v
Acknowledgments ...............................................................................................................................vi

## Chapter 1: Introduction ..................................................................................................................1
1.1 The Kingdom of Bahrain Overview .........................................................................................1
1.2 Kingdom of Bahrain Economics Overview ...........................................................................2
1.3 Kingdom of Bahrain Construction Overview ........................................................................2
1.4 The Research Justification .......................................................................................................4
1.5 Research Aim and Objectives ...............................................................................................5
1.6 Methodology Outline ..............................................................................................................5
1.7 Dissertation Structure ..............................................................................................................5

## Chapter 2: Literature Review ........................................................................................................7
2.1 The Construction Industry ......................................................................................................7
2.2 Disputes in construction .........................................................................................................8
2.2.1 Impacts of Construction Disputes ...................................................................................8
2.2.2 Research related to construction disputes .......................................................................9
2.2.3 Causes of construction disputes ....................................................................................13
2.3 Dispute Avoidance and Resolution (DAR) ........................................................................16
2.3.1. Alternative Dispute Resolution (ADR) ........................................................................17
2.4 Summary .................................................................................................................................22

## Chapter 3: Research Methodology ..............................................................................................23
3.1 Research Strategy .....................................................................................................................23
3.1.1 Experiment .......................................................................................................................23
3.1.2 Survey ..............................................................................................................................24
3.1.3 Case study .......................................................................................................................24
3.1.4 Secondary data .................................................................................................................24
3.1.5 Mixed methods ................................................................................................................24
3.2 Research Method Selection ....................................................................................................25
3.2.1 Questionnaires ................................................................................................................25
3.2.2 Interviews .........................................................................................................................25
Dedication

This dissertation is dedicated to the memory of my father, Abdulkarim Salem, may God Almighty have mercy on him. I miss him every day and wish he was beside me.

This dissertation is also dedicated to Eng Khalid Bu Hamood, who has recently passed away, may God Almighty have mercy on him, for being a good friend and an amazing mentor through the last few years.

I also make a special dedication to my mom, for dealing with me being miles away and for all the good wishes and taking care of my kids.

And I dedicate this dissertation to my wife, for pushing and encouraging me to keep going every day, no matter how hard it got. Thank you so much for your patience.
Acknowledgments

I would like to acknowledge Dr Anthony Higham and express my regards for his support as an advisor and mentor. His guidance and support has helped in putting this dissertation together.

I would also like to wish many thanks to my colleagues at the Ministry of Interior in Bahrain, who helped me and supported me throughout my studies: Lt General Khalid Al Absi, Brigadier Shk Abdulla Bin Ahmed Al Khalifa, Eng Isa Jamsheer and Lt Colonel Adnan Al Qattan, to name a few.

These acknowledgements would not be complete without expressing my gratitude to those who have dedicated their time and agreed to participate in this research, since without their support, this study would not have been possible.
Chapter 1: Introduction

This chapter gives an introduction to the dissertation and provides an outline of the Kingdom of Bahrain’s economic situation and the construction industry, followed by a justification for the research, aim and objectives and methodology outline.

1.1 The Kingdom of Bahrain Overview

The Gulf region has only one island country, the Kingdom of Bahrain, which is among the several nations that form the Cooperation Council for the Arab States of the Gulf (GCC).

The Kingdom of Bahrain is located on the southern coast of the Gulf region and shares a border on the east coast with the Kingdom of Saudi Arabia (KSA) and also with the Qatar peninsula. With more than 33 islands, Bahrain is an archipelago, with Bahrain being the largest island with a total area of 586 sq. kms. (‘Bahrain Brief’, 2010). It is divided into five governorates: the capitol (Asamah), southern (Janubiyah), northern (Shamaliya), Muharraq, and central (Alwusta) (Organisation 2012).

Figure 1.1. Map of Bahrain and its location in the Arabian Gulf (‘Bahrain Brief’, 2010)
1.2 Kingdom of Bahrain Economics Overview

The main sources of income in the Kingdom of Bahrain were agriculture and fishing prior to the discovery of oil. However, both are still practiced to date. It has not taken long for Bahrain to experience strong growth in the economic sector. After oil, Bahrain’s second most important export is aluminium, and the financial and construction sectors are also important. To reduce its dependency on oil, Bahrain is attempting to privatise its economy (‘The World Factbook’, 2015). Bahrain has become an international banking centre, which is one more step that it is taking to reduce its dependency on oil, thus diversifying its economy. Its main exports are petroleum, aluminium and textiles, while crude oil, machinery and chemicals are some of its major imports. Foreign investments are encouraged in the Kingdom of Bahrain. Bahrain was ranked seventh in the ‘paying taxes’ category and achieved a rank of 82 for safeguarding investors in 2013 (‘Ease of Doing Business in Bahrain’ 2015).


<table>
<thead>
<tr>
<th>Indicator</th>
<th>Value</th>
<th>Forecast</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP at current market price (2014)</td>
<td>BD 23,735 million</td>
<td>N/A</td>
</tr>
<tr>
<td>GDP at 2010 constant price (2014)</td>
<td>BD 11,257 million</td>
<td>N/A</td>
</tr>
<tr>
<td>Real GDP growth (2014)</td>
<td>4.5%</td>
<td>2015: 3.6%</td>
</tr>
<tr>
<td>Inflation CPI (2006 = 100), annual changes (February 2015)</td>
<td>2.1%</td>
<td>N/A</td>
</tr>
<tr>
<td>Population</td>
<td>1,234,571 (2010)</td>
<td>N/A</td>
</tr>
<tr>
<td>Total Employment (December 2014)</td>
<td>687,145</td>
<td>N/A</td>
</tr>
<tr>
<td>- Bahrainan</td>
<td>22.8%</td>
<td>N/A</td>
</tr>
<tr>
<td>- Non-Bahrainan</td>
<td>77.2%</td>
<td>N/A</td>
</tr>
<tr>
<td>Unemployment rate (Bahraini, December 2014)</td>
<td>3.8%</td>
<td>N/A</td>
</tr>
<tr>
<td>Public sector debt (% of GDP, 2013)</td>
<td>43.5%</td>
<td>N/A</td>
</tr>
<tr>
<td>Current account (% of GDP, 2013)</td>
<td>7.8%</td>
<td>N/A</td>
</tr>
<tr>
<td>Industrial production growth (2014)</td>
<td>4.5</td>
<td>N/A</td>
</tr>
<tr>
<td>Revenues budget (2014)</td>
<td>$7.808 billion</td>
<td>N/A</td>
</tr>
<tr>
<td>Expenditure budget (2014)</td>
<td>$8.896 billion</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Bahrain’s growth rate of industrial production is 4.5%, while the growth rate of the gross domestic product (GDP) is 7.8%, as can be seen in the Table 1.1. The GDP’s growth rate comprised 5% from the health sector and 2.9% from the field of education.

Bahrain’s expenditures and revenues are very close, which can be better understood by seeing the figures; the country’s revenue is $7.808 billion and budget expenditure is $8.896 billion. It is important to mention that the services of healthcare and education are given as welfare because they are free for Bahrainis and people who visit the country (‘The World Factbook’,2015).

The Bahrain economy is very strong, particularly in the field of banking. One Bahraini dinar (BD) is equal to $0.376. In 2015, the country’s GDP per capita (PPP) is $51,400,477, and the inflation rate is 2.1% (‘Economy’, 2015; ‘The World Factbook’,2015). The Bahrain Economic Development Board (‘Why Invest in Bahrain’, 2015) states that increasing competitiveness in the economy and providing clear direction for developing the economy are part of the economic vision of Bahrain for 2030. To achieve this vision, Bahrain believes that they have to facilitate easy accessibility to the rest of the countries in the Middle East; construct a well-established business infrastructure; and gain more experience in understanding and responding to the requirements for doing business with foreign countries and companies.
1.3 Kingdom of Bahrain Construction Overview

The Bahrain Economic Development Board (EDB) states that the country’s economic sector is presently going through a boom. The communications and transport facilities in the country are highly developed. Moreover, the lifestyle in the country has been significantly improved by numerous projects that have made this nation one of the most favourable business destinations for various multinational firms (‘Why Invest in Bahrain’, 2015).

Table 1.2: The Sector Contribution Percentages in Bahrain (‘Maps by Governorate’, n.d.)

<table>
<thead>
<tr>
<th>Industries</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mining</td>
<td>22</td>
<td>21.1</td>
<td>21.5</td>
<td>19</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>14.6</td>
<td>14.5</td>
<td>14.7</td>
<td>15.5</td>
</tr>
<tr>
<td>Electricity &amp; Water</td>
<td>1.1</td>
<td>1.3</td>
<td>1.3</td>
<td>1.4</td>
</tr>
<tr>
<td>Hotels &amp; Restaurants</td>
<td>2.5</td>
<td>2.7</td>
<td>2.2</td>
<td>2.7</td>
</tr>
<tr>
<td>Construction</td>
<td>7.6</td>
<td>7.4</td>
<td>6.8</td>
<td>6.8</td>
</tr>
<tr>
<td>Transport &amp; Communications</td>
<td>6.7</td>
<td>6.7</td>
<td>6.8</td>
<td>7</td>
</tr>
<tr>
<td>Financial Services</td>
<td>17.1</td>
<td>17.5</td>
<td>17.1</td>
<td>17.1</td>
</tr>
<tr>
<td>Business Services</td>
<td>1.5</td>
<td>1.5</td>
<td>1.5</td>
<td>1.5</td>
</tr>
<tr>
<td>Real Estate</td>
<td>4.6</td>
<td>4.6</td>
<td>4.2</td>
<td>4.2</td>
</tr>
</tbody>
</table>

Between the years 2009 and 2013, the construction sector contributed to an average of 7.15% to the GDP. In 2009, it was 7.6%, and in 2012, it declined to 6.8%. However, in 2013 it increased to 7% (‘Maps by Governorate’, n.d.). According to the Bahrain EDB (‘Why Invest in Bahrain’, 2015), among the most open economic markets in the world, Bahrain holds the 12th position and has a liberal environment. For instance, 100% ownership of business is offered in Bahrain; it also provides an open business relationship and easy accessibility to the rest of the Gulf region, and private companies and the Gulf market benefit from taxation of zero percent. Jobs in the construction business increased very significantly between 2002 and 2009; for instance, an 18% rise was observed in the rate of employment in the country, and a 160% increase was observed in the rate of employment for foreign workers (‘Why Invest in Bahrain’, 2015). From 2001 to 2013, a 4% to 7% rise was seen in the construction sector that contributed to the GDP (‘Maps by Governorate’, n.d.).

In the case of dealing with construction permits, Bahrain was ranked 7th in 2013 (‘Ease of Doing Business in Bahrain’ 2015). The number of construction permits issued between 2010 and 2013 is shown in Table 1.3 below, along with the construction sector’s percentage of contribution to the GDP (‘Economic Indicators’, 2014).

Table 1.3: The number of construction permits in Bahrain (‘Economic Indicators’, 2014)

<table>
<thead>
<tr>
<th>Year</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction Permits</td>
<td>10,228</td>
<td>8,189</td>
<td>7,902</td>
<td>7,214</td>
</tr>
<tr>
<td>Construction (%) to the GDP</td>
<td>7.4</td>
<td>6.8</td>
<td>6.8</td>
<td>7</td>
</tr>
</tbody>
</table>

The construction industry has become weaker due to several factors, particularly the impact of the global financial crisis, which resulted in the lowering of real estate asset prices, the collapse of oil prices and an obvious decline in export revenues. These were all main factors in the weakening of the construction sector in Bahrain (‘Back to Building’, 2012). However, a 7% increase was seen in the construction sector in 2013 (‘Why Invest in Bahrain’, 2015). Similarly, the number of construction permits peaked in 2008 and then began declining until 2011, when it reached 8,189 permits. But in the first half of 2012, the construction sector began showing smaller reductions (‘Economic Indicators’, 2014).
‘Bouncing Back’ (2015) noted that the GCC Fund’s financial aid, amounting to USD 10 billion and approved in 2011 by GCC member countries, has affected the construction of roads and social housing in the Kingdom of Bahrain. In this regard, there are plans to complete several major townships, comprising 40,000 homes, in the next five years. In addition, major road projects are being undertaken, including the Muharraq Ring Road and the Nuwaidrat and Alba intersection projects. Furthermore, a causeway project will begin this year to link Bahrain with Saudi Arabia.

This project, which will include a road connection and a rail link, promises potential benefits to the trade, industrial and manufacturing sectors in Bahrain. In addition, work is expected to begin on the airport modernisation program’s second phase at Bahrain International Airport, and more projects are expected. In light of this, Bahrain needs to establish a dispute-avoidance/mitigation strategy for its construction industry. The risk of increased costs due to disputes and litigation compels the industry to find more efficient techniques of resolving and avoiding disputes early in the project life cycle (Jannadia, Assaf, Bubshait & Naji, 2000).

1.4 The Research Justification

According to ‘Construction Conflict Management and Resolution’ (1992), the construction industry is the largest in most nations, with complex operations and a high value. In addition, it employs many people, with various professional qualifications, including quantity and building surveyors, geologists, electrical and mechanical engineers and landscape architects, among others. Furthermore, there are a number of specialists engaged in various aspects of the construction industry, such as in demolition, steel erection, cladding, roofing, glazing, air conditioning and heating, bricklaying, decoration, damp proofing and concrete reinforcing, as well as other activities. The construction industry has a variety of clients, such as large office developers, the Highway Authority and those requiring their house to be repainted.

Capper (1995) and ‘Construction Conflict Management and Resolution’ (1992) note that because the construction industry is so large and fragmented, many individuals, authorities and partnerships participate in it. In addition, construction work must be performed on open sites in which conditions are quite distinct from those in factories, meaning that failure of an individual or group can affect all parties involved in the project. Construction work usually takes significant time to complete, during which changing economic conditions can alter the progress of the work, and disputes are likely to occur. Jannadia et al., (2000) note that it is usual for owners, contractors and designers to negotiate small, uncomplicated disputes, but the lengthy legal issues associated with more complex disputes often hinder progress of a project. Thus, Latham (1994) asserts that the best solution to reduce the construction industry’s adversarial nature is to avoid disputes by enhancing procedures relating to tendering and procurement.

Sahawneh (2000) notes that there are many factors that cause and prolong business disputes. Among them are the psychological and political factors inherent in any group, including corporate groups. In addition, there are variations in attitudes toward conflict and the manner in which litigation is used to protect interests. Furthermore, the method of doing business in the Middle East is a contributing factor in differences of opinion among contractors, consultants and owners of diverse nationalities and cultures. Currently, disputes remain inevitable in the execution of contracts.
1.5 Research Aim and Objectives

Research Aim:

The aim of this research is to critically appraise dispute triggers on construction projects in the Kingdom of Bahrain, with a view to develop a dispute mitigation strategy.

Research Objectives:

The objectives for this dissertation to contribute to the aim of the research are as follows:
- to establish a knowledge base of the reasons for contractual disputes in construction projects;
- to establish a knowledge base of the strategies for dispute mitigation and avoidance;
- to investigate the practical causes of contractual disputes and the avoidance measures taken in construction projects in the Kingdom of Bahrain; and
- to discuss and recommend techniques that could be implemented early in projects to avoid or mitigate disputes.

1.6 Methodology Outline

The researcher originally intended to make use of a mixed-method approach, since it would combine the advantages of both quantitative and qualitative methods, in order to obtain a stronger analysis that could not be obtained by other methods alone. Moreover, the use of a mixed-method approach would allow the researcher to gain in-depth knowledge of the construction dispute situation in Bahrain by conducting several interviews with industry professionals. That knowledge could then be applied to a larger sample in order to measure the impact and magnitude of disputes on the personal, organisational and economic levels.

However, because of time limitations and the fact that construction disputes are under-researched in Bahrain, it has been concluded that the use of a qualitative method would be most appropriate in order to achieve the research objectives. The collection of qualitative data will be done by the use of surveys and interviews.

Interviews were chosen as a method to support the survey data collection strategy. An interview method allows the researcher to obtain valid, credible and reliable data through exploring further assessments of the interviewee answers to the interview questions.

Additionally, there are three different types of interviews: structured interviews, semi-structured interviews and unstructured interviews. For the purpose of this dissertation, semi-structured interviews have been selected since they would give the researcher the freedom to reflect on the answers and would allow the interviewees to speak freely.
1.7 Dissertation Structure

This dissertation is broadly outlined in five chapters: introduction, literature review, research methodology, data analysis and discussion and conclusion with a set of recommendations.

CHAPTER 1: Introduction. This chapter gives an introduction to the dissertation and provides an outline of the Kingdom of Bahrain’s economic situation and the construction industry, followed by a justification for the research, aim and objectives and methodology outline.

CHAPTER 2: Literature review. This chapter discusses and explores the different theories that have been established with regards to construction disputes. Additionally, a review of the data provides a theoretical foundation in order to establish the interview questions.

CHAPTER 3: Research methodology. This chapter elaborates on the approaches and strategies for the data collection that are presented in the following chapter, and it also discusses the research techniques.

CHAPTER 4: Data analysis and discussion. This chapter discusses the sample size of the interviews and how the interviewees were chosen. The data collected from the interviews are analysed and categorised to form a set of dispute factors in Bahrain and a model for how to avoid disputes.

CHAPTER 5: Conclusion and recommendations. This chapter summarises the entire dissertation by drawing together the different factors contributing to disputes that have been collected from the literature review and extracted from the interviews to formulate a set of recommendations and future actions that can form a dispute avoidance and mitigation framework.
Chapter 2: Literature Review

This chapter outlines the importance of the construction industry and its contribution to the economy. Further, a wide range of literature is discussed to create knowledge of the different dispute factors and how dispute is inevitable in construction projects. Finally, a discussion on different dispute methods and how they can be beneficial to the construction industry is presented.

2.1 The Construction Industry

Internationally, one of the major sectors that accounts for a considerable percentage of the Gross Domestic Product (GDP) in various nations is the construction industry. According to Mawhinney (2001), the contribution of the construction industry to a country’s GDP is approximately 5%–15% percent, with 8%–10% considered typical value. Ng et al. (2007) state that 55 largest nations in the world spend approximately $4 trillion on the construction industry. This attests that the construction industry plays a significant role in the economy. This significance is related to any other aspect that contributes to the achievement of this industry and minimizes its losses. For example, the construction industry in the United Kingdom employs approximately 350,000 firms that range from small to large and employ approximately 3.2 million individuals, ranging from low-skilled employees to highly-skilled experts who work in the industry in various roles (UKCG 2012).

Moreover, it is a fact that this industry is essentially a collection of other industries—for example, a finished building results from blending an assembly of building material, tools, and elements that are manufactured by different industries (Kwakye, 1997). Consequently, it is a fact that any factor that affects the construction industry directly impacts the entire economy of other industries; conflicts and disputes that are poorly managed are two such factors that affect the industry.

As suggested by Ballard and Howell (1998), this industry is considered ‘unique’. This declaration of uniqueness in the field of construction is associated with an integration of two features. Firstly, the product/project belongs to the group of fixed-position manufacturing, which means that the final product of the construction project is fixed in position. Construction has the characteristics of site-based manufacture, which implies that assembly should be conducted on site. Secondly, the product/project is fixed in one place. This characteristic causes differentiation and uncertainty.

The construction industry is dynamic in nature; however, in the past 20 years, some of the factors within the construction environment have evolved because of increased uncertainties in budget, technology, and development of the processes used (Silas et al., 1996; Albert and Ada, 2004). Therefore, the environment of the construction industry has become much more dynamic now than it was earlier (Langford, 2001), and also extra complicated in terms of different activities and parties involved within one particular project (Turner, 1999); all these aspects characterize the construction industry.

Furthermore, construction projects are entirely dependent on estimates of future occurrences. Quantity surveyors and estimators must work on cost and time-related estimates for a project that is essentially unpredictable and unstable in nature (Ward and Chapman, 2003). Therefore, it is evident that this industry is also associated with risk, as every project differs in various aspects, such as the project’s location, technology used, and the level of the design (Ashworth 2013).

Due to these aspects, the construction industry is likely to have a natural potential for disputes and conflicts and is also adversarial (Ashworth 2013). This results from the reality that every construction project is a multifaceted process that necessitates the harmonized effort of a temporarily assembled multiple-member association of various distinct groups, where every group has its unique organizational culture, goals and needs, and professional ethics and culture; moreover, every group aims at maximizing their own profits and benefits (Cheung and Suen, 2002; Weddikkara 2003). The key parties engaged in a construction project are the Consultants/Architect, Client, and Contractor. Moreover, there are other significant characteristics that are intrinsic in the construction industry such as fragmented, temporary, and short-term (Albert and Ada, 2004). Subsequently, according to Ashworth (2013), disputes are the one common...
aspect of the construction industry anywhere. The construction industry always involves multidisciplinary players, which further hinders the ability of this industry to evade dispute (Emmitt, 2003).

2.2 Disputes in construction
This section discusses the impact of disputes on the construction industry, different research conducted on construction disputes, the causes of construction disputes, and different dispute-resolution methods.

2.2.1 Impacts of Construction Disputes
Conflicts and disputes in every construction project are always viewed as negative events which occur in the different stages of a project’s development cycle. In most cases, conflicts and disputes have negative impacts on the project’s completion, cost, and performance (Zack Jr, 1995). Disputes are inherent within the construction industry; therefore, they are always expected during the course of the construction project. Disputes cause a delay in completing the project on time and within budget (Fenn, 2007). Moreover, disputes consume more time, cost more money than the estimated cost, and also lead to the ruining of relations which may have taken numerous years to establish (Ashworth, 2012).

According to Gebken (2006), to avoid disputes from becoming formal claims, it is important to solve disputes as soon as they emerge in the workplace, without the intervention of a third party. This reduces the chances of any worsening in the relationship among the parties involved in the construction work. It also results in less stress and lower costs for all parties. In turn, this results in augmented productivity, fewer court claims in employment, lower costs of human resource and better job relations Gibbons (2007). In other words, disputes always lead to failure and destruction of relationships.

The public construction industry involves mass construction projects throughout the entire nation and these are strongly supported by the government. However, the project process is associated with more complexity as a result of the enormous size and number of projects in the sector (Ashworth 2013).

On the other hand, construction disputes may seem like a waste of resources as well as time. The resources which are used in solving disputes can be better used to make construction work more authentic or to improve the quality of management in the project (Fenn, 2007). In other words, disputes on a construction project only add to the costs of the project, whereas that money can be used to build bigger and better projects by diverting the money spent on resolving the dispute into the budget for the project (Commerce, 2002).

Now, from the aspects discussed above, it is very clear that disputes in a construction project can cause much harm to all stakeholders in the construction industry. Thus, it is wise to avoid disputes rather than resolving them when they have already occurred. According to Latham (1994), the best solution for reducing the adversarial nature of the construction industry is to avoid disputes. Furthermore, Turner (1999) added that the first step in dealing with disputes is to avoid the occurrence of problems on the project site to the furthest extent possible. However, for an organization to be able to avoid disputes in the workplace, it is important that they recognize the causes of disputes in a construction project (Fenn, 2007). The recognition of these causes will enable organizations to avoid or mitigate disputes in future projects. Therefore, the management must conduct a detailed examination of the causal factors of disputes where feasible.
THE DISPUTE IN THE CONSTRUCTION INDUSTRY IN THE KINGDOM OF BAHRAIN

2.2.2 Research related to construction disputes

Research conducted on construction disputes has shown that disputes in the construction industry are not restricted to a specific national system. In their book entitled *Dispute Resolution and Conflict Management in Construction*, Fenn et al. (1998) evaluated the various legal systems of 20 nations from Europe and North America to the Middle East and Asia. It was established that disputes in a construction project may be because of other supplementary disputes which are related to a country’s nature or location, or due to its social, political, cultural, religious, and environmental aspects. Daoud and Azzam (1999) observed the cause of disputes in construction projects in the Middle East. Although their study did not appear to specify the sample size and the countries in which the study took place, it revealed that there are five main causes of construction disputes.

One of the primary causes of disputes revealed in their study was modifications made by owners to the standard conditions of the contract. The second cause of disputes was found to be the lack of understanding of key clauses in the contract by concerned parties. The third cause of disputes was poor documentation during the administration of the contract. The fourth cause was many regulations and endless legislation changes, and the fifth cause was local cultural influence on the performance of the parties involved in the contract.

Further, empirical work conducted by Kumaraswamy (1997) in Hong Kong to establish the general claims and disputes that occur in construction projects. The researcher came up with an explanation for the causes and disputes and categorized them into two types: proximate causes and root causes. Diversities among consultants, clients, and contractors as the cause of construction grievances impelled him to differentiate between ‘proximate causes’ and ‘root causes’. According to Gould (1999), probable conflict and disputes are alleged to be the results of root causes. For example, conflicts and disputes might arise due to the lack of proficiency of project contributors, lack of determination, or clients’ lack of information. In addition, proximate causes are immediately noticeable; for example, slow client response or changes by clients, etc. Finally, these proximate causes lead to claims and disputes.
Figure 2.1: Common sources of construction claim and disputes (Kumaraswamy 1997)
THE DISPUTE IN THE CONSTRUCTION INDUSTRY IN THE KINGDOM OF BAHRAIN

In addition, negligence has been determined to be the most common causes of dispute in the United Kingdom, while decisiveness and failure are the most common causes in Australia. A study was conducted by Watts and Scrivener (1995), and they collected data from 60 building issues within the two nations. Only 290 causes from these issues have been established. The causes were further categorized into 21 different categories that were again sub-divided into 5 sub-groups depending on their nature. The five subgroups and their frequencies are illustrated below.

Table 2.1: Sources of dispute (Watts and Scrivener 1995)

<table>
<thead>
<tr>
<th>Subgroup by cause of dispute</th>
<th>Number of disputes in Australia</th>
<th>% of all Australian disputes</th>
<th>Number of disputes in the United Kingdom</th>
<th>% of all UK disputes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Payment</td>
<td>44</td>
<td>33%</td>
<td>67</td>
<td>43%</td>
</tr>
<tr>
<td>Decisiveness of the agreement</td>
<td>35</td>
<td>27%</td>
<td>26</td>
<td>17%</td>
</tr>
<tr>
<td>Time</td>
<td>22</td>
<td>17%</td>
<td>23</td>
<td>14%</td>
</tr>
<tr>
<td>Tort</td>
<td>17</td>
<td>13%</td>
<td>24</td>
<td>15%</td>
</tr>
<tr>
<td>The location and implementation of work</td>
<td>14</td>
<td>10%</td>
<td>18</td>
<td>11%</td>
</tr>
<tr>
<td>Total</td>
<td>132</td>
<td>100%</td>
<td>158</td>
<td>100%</td>
</tr>
</tbody>
</table>

Furthermore, a further empirical study performed in Canada by Bristow and Vasilopoulos (1995) established five major causes of dispute:
- Impracticable expectations by the parties involved
- Indistinct contract documents
- Lack of effective communication among project contributors
- Lack of instant responses from participants to changes and projected conditions

Additionally, a relative analysis was conducted by Mitropoulos and Howell (2001) to analyse 24 disputes that occurred in 14 projects in the United States. They came up with a model that explains why disputes occur and developed an explanation of the ‘problem situation’ on the basis of three aspects: contract, project uncertainty, working relations, and problem-solving efficiency. This model is explained in Figure 2.2

Figure 2.2: Dispute Development and Resolution Model (Mitropoulos and Howell 2001)
A number of studies have been conducted in several countries across the world and revealed that there are different types of construction disputes, which are summarized in the table below.

<table>
<thead>
<tr>
<th>Researcher</th>
<th>Area</th>
<th>Finding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daoud and Azzam, 1999</td>
<td>Middle East</td>
<td>Five major causes of dispute in construction contracts: Alterations, lack of understanding, variations in legislation and guidelines, poor communication, and the impact of local culture.</td>
</tr>
<tr>
<td>Kumaraswamy, 1997</td>
<td>Hong Kong</td>
<td>Two areas: root causes and proximate causes</td>
</tr>
<tr>
<td>Watts and Scrivener, 1995</td>
<td>United Kingdom &amp; Australia</td>
<td>Comparison of 60 sued construction disputes in UK &amp; Australia; 290 causes of dispute categorized into 5 sub-groups.</td>
</tr>
<tr>
<td>Bristow and Vasilopoulos, 1995</td>
<td>Canada</td>
<td>Five major causes of dispute: impracticable expectations by the parties, indistinct contract documents, poor communications among project contributors, lack of cooperation among contributors, and failure of contributors to instantly handle changes and projected conditions.</td>
</tr>
<tr>
<td>Mitropoulos and Howell, 2001</td>
<td>United States</td>
<td>A categorization of problem circumstances produces a model based on project uncertainty, contract, working relations, and problem-solving efficiency.</td>
</tr>
</tbody>
</table>

Table 2.2: Synopsis of dispute causes as established in the literature

The literature on construction disputes could be considered scarce regardless of the research that has already been conducted. In his article entitled ‘Predicting Construction Disputes’, Fenn (2007) commented that the literature of disputes in the construction industry might be termed thin, considering the size and the significance of the industry to a nation. Further, he suggested that more research should be conducted and argued that the relatively small foundation of research is responsible for the differences between legal and scientific logic and the lack of taxonomy to define the problem.

In other words, the recognition of the causal factors of construction disputes was found to vary from one research to another, with no tangible causes found for disputes in project management. This simply implies that no agreed causal factors of construction dispute were found in existing literature. Fenn (2002) argued that this could only imply that the characters involved in the construction industry are not willing to conduct in-depth research into the matter. This being evident, Fenn (2002) further states that other researchers took up the challenge and decided to explore this subject further by identifying the vast categories of conflicts and their causes through the use of an appropriate and established procedure.
2.2.3 Causes of construction disputes

The research conducted herein aims at addressing the issue of construction disputes and proposing a reliable strategy to help minimize disputes and ultimately avoiding them completely in the construction industry in the Kingdom of Bahrain. However, it is wise to first identify the causes of disputes and their origin before any other step is taken. Despite the many research studies conducted, the causal factors of construction disputes cannot be put into a single framework. However, it was found that some of the causal factors were contributed by the employer, contractor, consultant, and the contract itself.

Consequently, this dissertation categorizes construction disputes into three major themes: Contract, Employer and Consultant, and Contractor; this is indicated in the summarized table below which was established by Ashworth (2012) and Ashworth (2013).

<table>
<thead>
<tr>
<th>Contributor</th>
<th>Causes of Dispute</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contract and the nature of industry</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Adversarial nature of construction contracts</td>
</tr>
<tr>
<td></td>
<td>Poor communication between the parties involved</td>
</tr>
<tr>
<td></td>
<td>Propagation of types of contract and warranties</td>
</tr>
<tr>
<td></td>
<td>Division in the industry</td>
</tr>
<tr>
<td></td>
<td>Tendering guidelines and procedures</td>
</tr>
<tr>
<td>Employers and Consultants</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Poor consultation and briefing</td>
</tr>
<tr>
<td></td>
<td>Changes and distinction requirements</td>
</tr>
<tr>
<td></td>
<td>Alterations to standard conditions of contract</td>
</tr>
<tr>
<td></td>
<td>Meddling in the contractual roles of the contract manager</td>
</tr>
<tr>
<td></td>
<td>Delayed payments</td>
</tr>
<tr>
<td></td>
<td>Design insufficiency</td>
</tr>
<tr>
<td></td>
<td>Lack of necessary proficiency and experience</td>
</tr>
<tr>
<td></td>
<td>Late and deficient information</td>
</tr>
<tr>
<td></td>
<td>Lack of harmonization</td>
</tr>
<tr>
<td></td>
<td>Indistinct allocation of responsibilities</td>
</tr>
<tr>
<td>Contractors</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Poor site management</td>
</tr>
<tr>
<td></td>
<td>Poor planning and programming</td>
</tr>
<tr>
<td></td>
<td>Poor standards of workmanship</td>
</tr>
<tr>
<td></td>
<td>Disputes with subcontractors</td>
</tr>
<tr>
<td></td>
<td>Late imbursement to subcontractors</td>
</tr>
<tr>
<td></td>
<td>Harmonization of subcontractors</td>
</tr>
</tbody>
</table>

Similarly, in the US, the American Arbitration Association cautions the construction industry regarding the weightiness of disputes that occurs in construction projects and has reported that most US construction activities have been tainted during the past 50 years—from positive affiliation among all parties of the projects to a competition consumed in fault-finding and defensiveness that results in legal action. Thus, the construction industry has become tremendously adversarial; therefore, an optimistic association among the parties involved in construction activities is essential to a winning project; disputes will persist if all people continue not to trust each other (Association, 1996).

Allen (2012) declared that construction is fundamentally attached to the general strength of the global economy; a number of construction projects are entangled in disputes that incur a lot of expenditure. Expenses related to dispute management become elevated and also have other impacts like holding up key personnel for considerable periods of time. Therefore, it is important to consider conflict management and dispute resolution within all subdivisions of the construction industry, that is, consultants and advisers, researchers, and analysts, and providers of legal services (Allen, 2012).
In research conducted in the Australian construction industry, Dawson (2007) established that cost and plan overruns were the major contributing aspects to disputes. Furthermore, in the US, approximately US$ five billion were spent annually on legal action related to disputes and it was anticipated to increase by 10% annually (Michel, 1998). Consequently, disputes are anticipated to increase the cost to the Australian construction industry. This indicates that there is a serious impact on the construction industry and all endeavours must be focused on establishing successful solutions to minimize or completely avoid disputes (Love et al., 2009).

On the other hand, developing nations have been adversely affected by elevating cases of disputes. As indicated in Table 2.4 below, the Middle East has been experiencing the highest costs related to disputes as compared to Europe, USA, and UK. The data in the table indicates that in 2011, the cost of disputes for Middle East reached $112.5 million and resolving these disputes took nine months on average. Plimmer (2013) indicates that in another study conducted in 2012, the total value of costs attributed to disputes was estimated to be £41.8 million, while it was £17.7 million and £5.8 million in the United Kingdom and United States, respectively—the disputes in the United States being of the lowest value. Further, Plimmer (2013) reported that the costs may be even higher as many cases did not even make it to the court because of the high costs involved. This is because it is not only that the amount of disputes has increased but also that the time taken to resolve these disputes has increased as well. Although the data appears to suggest that the disputes would cost considerably more in the Middle East compared to other nations, the data is highly questionable since there is no reflection of the industry output of the Middle East in contrast to other nations. In other words, the high cost of disputes could imply that there are more construction projects in the Middle East as compared to other nations. The table below presents a broad summary of the cost of disputes and the time taken for resolution (Allen, 2012).

Even though the current research does not include data regarding the construction industry’s disputes in the Kingdom of Bahrain, the data of the Middle East can be of great significance in widely ascertaining the situation in this nation. Bahrain is part of the Middle East countries and hence it has got many similarities and characteristics of the other nations in this region. In the Middle East, Bahrain is considered as one of the key players in the construction industry, thereby encouraging various local and international investors to invest in major projects in the country (Bahrain.com, 2015). Accordingly, the high number of disputes contrasted with the previously mentioned nations also reflects a high number of disputes in Bahrain’s construction industry. The escalating cost of disputes in the construction industry necessitates a broad research to establish the core causes responsible for a high number of disputes.

Table 2.4: The Global Construction Disputes Status 2011 (Allen, 2012; Plimmer, 2013)

<table>
<thead>
<tr>
<th>Region</th>
<th>Dispute Value (US $ millions)</th>
<th>Length of Dispute (Months)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2011</td>
<td>2010</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>10.2</td>
<td>7.5</td>
</tr>
<tr>
<td>Europe</td>
<td>35.1</td>
<td>33.3</td>
</tr>
<tr>
<td>Middle East</td>
<td>112.5</td>
<td>56.25</td>
</tr>
<tr>
<td>Asian</td>
<td>53.1</td>
<td>64.5</td>
</tr>
<tr>
<td>United States</td>
<td>10.5</td>
<td>64.5</td>
</tr>
<tr>
<td>Global Average</td>
<td>32.2</td>
<td>35.1</td>
</tr>
</tbody>
</table>

Diekmann et al. (1994) established that there were three main aspects of the causes of disputes: process, people, and product. The product aspect lies in the nature of construction projects and uncertainty that occasionally results in confusion and changes. The process aspect entails contractual matters like inadequate information that causes performance to suffer. The people aspect is associated with a lack of adequate skills and qualifications among the contributors of a project.
Love et al. (2009) conducted an analysis through two focus groups in a public construction project, namely, a client organization and a contractor organization. The two parties’ perception towards disputes varied. The client workers such as project managers, quantity surveyors, and architects reported aspects such as contractor’s opportunistic actions, poor workmanship, imperfect documents, poor planning, and a lack of resources. On the contrary, the main contractor’s workers focused on environmental situations such as unexpected and uncontrolled variations as the key aspects for emerging disputes. The two parties, the client and contractor, incurred a high cost on disputes. Further, Kumar et al. (2006) conducted a study to establish the causes of conflicts in the Korean construction industry. Out of many established dispute causes, the authors further categorized the causes into six root factors. These factors include public interruptions, changed site conditions, changed order evaluation, design errors, excessive quantity variation, and double meaning of specification. The various categories and their root conflict and dispute aspects are illustrated in Figure 2.3 below.

![Critical factors of construction disputes (Kumar et al. 2006)](image)

A study on the causes of delays in publically funded construction projects was conducted by Arditi et al. (1985) in Turkey for the period 1970–1980. They established 23 causes of construction delays and concluded that the main causes were deficiency of materials, complexity of receiving payments from agencies, complexities associated with the contractor, and organizational features of contracting firms and public agencies.

Nevertheless, Mansfield et al. (1994) identified that a number of disputes where triggered at a personal human level or inefficiencies in management that were not contractual or technical. The list of key aspects included poor contract supervision, finance and payment strategies, material adequacy, erroneous estimation, and overall price instabilities. Support for this was offered in the study by Chan and Kumaraswamy (1997), who discovered five key aspects for disputes associated with delays; poor risk management and supervision, unexpected site conditions, slow decision-making, client-initiated variations, and work variations.
In order to avoid disputes, faultless contract documentation is of great importance. Attempts have been made by researchers to reduce disputes by selecting the acceptable contract procurement approach. Jannadia et al. (2000) recommended a range of approaches that can be integrated in planning construction contracts to avoid disputes; these include fair provision of contract risks, incorporate dispute clauses within contracts, team building, and stipulation of an unbiased negotiator, and binding negotiation and arbitration. Additionally, contractual aspects have been identified as causes of disputes, and if these are not dealt with effectively, they may evolve into disputes among project players (Bristow and Vasilopoulos 1995; Conlin et al. 1996; Smith, 1996; Mitropoulos and Howell 2001).

Allen (2012) extensively researched the causes of disputes in the construction industry across the world and established that there were some major factors that contribute to causing disputes. These include failure to correctly manage the contract, vagueness in the contract file, failure to make provisional awards on extra time and provide related reimbursement, deficient design information, and employment prerequisites conflicting party interests. According to Allen (2012), these causes have been regular over the decades, and even though from their evaluation, the industry may be changing, these issues persist to cause tension and hinder projects from progressing. The project management team may be able to establish the most suitable avoidance and resolution approaches if the causes of disputes are identified. Angus and Robert (2007) defined disputes and conflicts as pathological conditions that require identification of causes and proposed remedies for their prevention. In the subsequent section, dispute resolution approaches are analysed with a focus on how firms can reduce disputes.

2.3 Dispute Avoidance and Resolution (DAR)

By reviewing the reported impacts of disputes on construction projects and the damage to relations among the key players involved, it is essential that researchers focus on establishing an effective approach to minimize cases of disputes. This fact is supported by Kirk (2003), who insists that the establishment of an effective and pertinent approach is critical in identifying conflicts during the early phases of the project; if this is achieved, disputes and their associated costs can be minimized. However, the proposed remedies have to survive the multifaceted nature and instability of the construction industry.

Jannadia et al. (2000) asserted that it is general practice for designers, owners, and contractors to discuss small and simple disputes, although larger and more complicated disputes regularly hamper construction projects if engaged in prolonged legal matters. Normally, if the parties involved fail to reach a resolution, costly, time-consuming legal proceedings begin, thereby negatively affecting all parties. In every project, disputes are a reality and there is no appropriate way of dealing with them; minor issues can grow and this results in crippling impacts for project contributors. The increasing costs, delay, and risk of litigation in construction disputes has pressed the construction industry to search for innovative and more effective means to settle disputes outside the courts.

The principal aim of this dissertation is to propose a strategy to avoid disputes by minimizing and avoiding the causes of disputes before they happen, and to evaluate strategies for appropriately handling or minimizing the impacts of disputes when they happen. This implies proposing proactive measures by recommending a consistent framework that entails processes and strategies to reduce disputes by initiating and implementing Alternative Dispute Resolution (ADR) approaches for the construction industry in the Kingdom of Bahrain. The basis behind focusing on ADR in this section is that most disputes studies have been dedicated to establishing innovative processes and techniques to resolve disputes before legal action is taken. Consequently, this will minimize the costs associated with a dispute. By becoming familiar with the approaches of dispute resolution and enhancements in ADR, it is important to suggest a solution for avoiding disputes. Even though dispute resolution and dispute prevention are two different fields, they are connected to each other.
2.3.1. Alternative Dispute Resolution (ADR)

In the previous century, different academic institutions proposed various methods for dispute resolution. Even though the formal, binding conventional methods have been the customary means of dispute resolution within the construction industry, informal, non-binding methods like negotiation or arbitration are gaining ground (Jannadia et al. 2000). According to Kovach (1994), Alternative Dispute Resolution (ADR) could be described as any approach used to resolve disputes and conflict without undergoing the litigation process. As revealed by Fenn et al. (1997), ADR entails binding and non-binding techniques and this classification can be used to deal with conflicts and resolve disputes, with the players involved in the project deciding the most effective technique to resolve the dispute. The DRA model is designed on the conviction that disputes must be dealt with within the shortest time possible and that the project contributors must, in the first instance, attempt to handle these disputes internally at site level before they run out of control and eventually impact the parties’ working relationship (International Construction Management, 1992).

For a long time, researchers have proposed that when remedy is implemented sooner rather than later and when this remedy is comparatively non-confrontational, the probability of avoiding litigation is high. International Construction Management (1992) argued that there are some merits that tend to be lost in the perspective of adjudication proceedings:

- Enhanced communication
- Sustained business relations
- Vigorous administration of the dispute
- More alternatives for settlement
- Speed
- Minimized costs in attaining settlement
- Confidentiality
- Control of the result and procedure

ADR methods range from negotiation, mediation/conciliation, neutral evaluation, dispute board, and arbitration (Kellogg, 1992; Cheung et al., 2000; Commerce 2002). Figure 2.4 below indicates a range of dispute-resolution techniques and their elevating costs and hostilities as contrasted to the control that the parties preserve in the process (Richter, 2000). Dispute resolution methods that maintain control of the dispute dealt with by the parties in disagreements can apparently incur less cost during the resolution process and reduce the effect of hostility. On the other hand, disputes that depend entirely on the decisions of other individuals (litigation and binding negotiation) are believed to have higher costs and escalated hostilities.
2.3.1.1 Negotiation

Negotiation is usually the primary and the closing step essential to deal with disputes, in the environment of construction industry. It is normally only when negotiation fails or fails repetitively, that an issue becomes a full-blown dispute. According to Mays (2003), negotiation is mostly perceived as a low-cost, cooperative effort, and preferred over more costly and challenging processes.

Negotiation is a process which is not commonly successful irrespective of its established merits. Loosemore (1999) has found that negotiation can fail as a result of deliberate miscalculations. The strengths of this procedure lie in its confidentiality and the privacy it offers, together with its flexibility and the opportunities it gives to parties to air their own settlement terms at a low cost. However, its consensual scenery remains its weakness and power simultaneously.

Negotiation can be used to solve a dispute throughout the life span of a project even if another mechanism of resolution is being used. Nevertheless, a willing party and one which is ready to negotiate cannot coerce another party that is not ready for negotiation. Disputes are most likely to arise in the construction industry due to disagreements between the client or his representative and the contractor. Such claims can be solved via negotiations (Peter et al., 2010). Most of the activities which are conducted depend on the readiness of the parties concerned, for example, cost reduction, speed and efficiency all rely on the parties’ preparation and willingness of negotiation (Blake et al., 2014). On the other hand, if the issues involved are multifaceted, whether legal or technical, then there is the likelihood that the result may not be successful.
2.3.1.2 Mediation and Conciliation
If parties feel that negotiations cannot help them solve their differences, they are advised to seek help from another neutral party, should they envisage that negotiating may be impossible. The neutral party will help them arrive at a settlement and mediation is definitely one of the available procedures that would involve a third neutral party in dispute resolution. In this case, the two parties own the procedures which lead to a decision and the result itself. The mediator is expected to be unbiased, neutral, and very independent. The parties expect that the mediator will help them through this confidential and private procedure with the aim of arriving at an acceptable solution which is mutual and which is not biased (Gaitskell 2006).

The mediator plays the role of creating an environment and opportunity for the parties involved to come together and discuss their dispute. In addition, mediators ensure that both parties table their cases, explore their real needs, learn the perspectives of each group and place more emphasis on the issues which are at stake (Brown and Marriott, 1999; Stitt, 2004). However, mediation has its own merits along with the method of conciliation. Some of the merits include dependence on a party’s willingness to participate, lack of compulsion, and issues which are related with enforcement outcomes. There are other factors which are openly considered as weaknesses of mediation. They include the discernment that the party promoter for mediation does not have a strong case, there is worry that one party might unveil their strong aspects to an opposing party, and there is also the fear that mediation itself may lead to a delay in negotiation and commencement of proceedings (Blake, 2014).

2.3.1.3 Early Neutral Evaluation
This is a neutral third party process which is non-bonding. Early neutral evaluation involves a procedure where the parties involved ask for a neutral method to help evaluate various matters which are involved in a dispute on the basis of law to determine the advantages of the cases of the parties. This will be the beginning of using other processes of resolution (Gaitskell, 2006). This process is considered very private and confidential. The parties decide on who will bear the responsibility of conducting the evaluation. The parties also decide the timing and extent of valuation.

However, just like mediation, this non-binding process has its own weaknesses. It depends on the information which is made available to the parties engaged, either before or during the employment of other processes of dispute resolution for it to be a strong, consensual method.

2.3.1.4 Dispute Boards
Another resolution method is Dispute Boards (DB), which entails the use of neutral dispute resolution methods and might comprise one or three self-governing, highly-skilled professionals who are jointly selected by the parties to a project at the commencement and before a probable dispute emerges (Harmon, 2008). The team remains in position all through the project’s lifespan. According to Thompson et al. (2000), the team’s principal role is to tackle disputes as they occur or indeed prevent disputes before they turn into complicated disputes.

To effectively carry out its function, the DB team should have excellent knowledge of the project location and its development. Hence, the DB should have access to the documents related to the project and must pay frequent visits to project locations where representatives of the parties are met with and the development of the project is discussed and any awaiting issues are taken care of (Gerber, 2000; Harmon, 2003; McMillan and Rubin, 2005). Anytime a dispute occurs and the parties are incapable of dealing with it through negotiations, it is passed on to the DB. Therefore, a decision is reached after informal guidelines that are agreed upon by the parties are followed and the issue at hand investigated. The nature of the decision concluded relies on the variant of DB that is used (Matyas, 1996; Ndekugri et al., 2013).
2.3.1.5 Arbitration
Arbitration is one of (if not) the commonest dispute resolution mechanisms among parties involved in the construction industry. According to Bernstein (2003), like all the other dispute resolution mechanisms discussed above, arbitration is based on an agreement among parties to refer a dispute or a difference to a third party neutral or an arbitrator, who is clothed with authority by virtue of his instructions to make a binding award.

2.3.1.6 The Dispute Resolution Advisor (DRA)
Another method of preventing disputes is the Dispute Resolution Advisor (DRA), as clarified by Cheung and Yeung (1998). Unlike other options of dispute resolution methods, where a neutral party is chosen by the parties when a dispute occurs, the DRA system necessitates the appointment of a DRA at the beginning of the project. The participation of the DRA is not restricted to conducting meetings only if a dispute occurs. Instead, the employer and the contractor, either individually or jointly, attempts to resolve issues that occur before they grow into major disputes and predict issues that may occur in the future. The DRA is also necessitated by contract to meet regularly with the contractor and the employer. Figure 2.5 below illustrates the working framework of the DRA in conjunction with the project.
Figure 2.5: Working guidelines of the DRA system (Cheung and Yeung 1998)
2.4 Summary
This chapter has contributed to framing a basic knowledge of the causes of construction disputes by reviewing different studies that have been conducted in different countries for several years. The literature review has further established that the construction industry has a direct impact on the national economy since it is a collection of other industries; moreover, disputes are inherent in the construction industry and they consume time and entail added cost if they are to be resolved. Additionally, the literature set out a number of significant factors in the construction industry that result in disputes such as poor communication among project participants, modification to the standard condition of contracts, project uncertainty and design insufficiency, and uncontrolled variations and changes.

The review of the impact of disputes on the construction industry is fundamental to establishing an effective approach to minimize or avoid disputes with the industry. Therefore, the literature discusses different alternative dispute resolution methods such as negotiation, mediation, dispute board, and arbitration and their benefit to the industry in contrast with the regular prolonged processes associated with proceedings.

Moreover, the literature formed the base for the entire dissertation and further outlined the gaps that require further exploration in the Bahrain construction industry. The next chapter describes the research methodology to be adapted for collecting the necessary data for the research.
Chapter 3: Research Methodology

The following chapter discusses the advantages and disadvantages of the different research strategies, examines the various research methods, and outlines the relevant ethical considerations and study limitations.

3.1 Research Strategy

Research methodology can be defined as the whole process of the research study (Collis and Hussey, 2013). Therefore, the research methodology revolves around the problem to be examined in the research study and depends entirely upon that problem. Choosing the best methodology to suit the research is important not only to meet the specified objective but also to enhance the study’s credibility. According to Fink (2014), the term methodology is used to explain the approach a researcher follows to explore a problem. In order to do this, the researcher may use either of the two major types of approaches: quantitative or qualitative.

The choice of methodology is concerned with whether to use a qualitative, quantitative, or mixed method design (Saunders, 2012). Each methodology has advantages and disadvantages, depending on the aims of the research. Quantitative methodology aims to analyse correlations among various predefined variables. According to Hart and Banbury (1994) and Marx and Lechner (2005), the quantitative method has four major advantages: (1) precise, explicit results (the hypothesis is either rejected or supported); (2) the results of other research can be compared; (3) due to using clear, analytical tools, the results of the study have greater reliability and objectivity; and (4) high external validity and generalisability. However, Love et al. (2010) criticise these same advantages as follows: (1) too much focus is on the external phenomena of the group or individual, leading to neglect of the internal phenomena of the same; (2) quantitative techniques are not appropriate to account for contextual and situational meaning; (3) social activities cannot be observed using quantitative techniques; and (4) there is a risk of false interpretation.

In contrast, qualitative research aims to capture authentic incidents so as to explore reality. Quantitative research looks at a narrower number of relations, but qualitative research deals with a large amount of information from which it extracts important findings and creates theories (Weick & Kiesler, 1979). According to Miles (1994), the following are the advantages of qualitative methodology: (1) it focuses on ordinary issues in a natural setting and illustrates real life; (2) it deals with holistic, rich data; (3) it is best used in studies that require long periods of observation; (4) it is best suited for exploring and discovering new fields of research. However, qualitative techniques have some disadvantages due to their inflexibility and their emergent rather than precise definitions of data: (1) their methods are inflexible and lack a fixed design; (2) their techniques are vulnerable to subjectively interpreting the data; (3) there is a high risk of generalising the findings when using this method; (4) difficulty in interpreting the research (Katz, 1983; Denzin & Lincoln, 2009).

The term research technique refers to the method or strategy used to conduct the research. There are a number of methodologies that can complement a research strategy such as experiments, surveys and case studies (Robson, 2002). According to Sapsford and Jupp (2006), it is essential to choose the correct research methodology; otherwise, the collected data may be obsolete.

3.1.1 Experiment

This type of research methodology is anchored in the natural sciences, despite the fact that its features are strongly based on psychology and the social sciences. The reason for most experiments is to find ways of studying the probabilities that a change can be initiated in an independent setting, thus leading to change taking place in variables in a dependent setting (Saunders, 2012). Hence, for this proposal, the experiment will not be validated as a perfect research technique, as the research necessitates that information be gathered from professionals working in Bahrain’s construction industry. Experiments would be ideal for any data that requires verification, as it would be subjected to the quantitative approach in which the research focuses on proving facts and perceiving the outcomes from different adjustments (Maxwell, 2012).
3.1.2 Survey
The survey is the most widely and popularly applied research methodology in business and management settings, as it usually solicits reliable answers to the “who,” “what,” “where,” “how much,” and “how many” questions. The survey strategy allows researchers to gather quantitative data to make suggestions about why specific links exist between variables and to generate patterns for those links (Saunders, 2012).

3.1.3 Case study
A case study is a practical inquiry used when conducting investigations of present-day phenomena within the context of a real-life scenario, especially when the demarcation between phenomenon and context is blurred.

Yin (2014) asserts that the use of case studies as a research methodology has long been popular in psychology, sociology, political science, and anthropology. Other fields that use case studies include social work, business, education, nursing, and community planning. The need to use case studies in research emanates from the desire to gain a good knowledge of complex social phenomena. In a nutshell, the case study strategy makes it possible to preserve holistic, meaningful features of real-life settings. These real-life settings include the life cycles of individuals, characteristics and behaviours of small groups, organisational and managerial procedures in businesses, and changes taking place in neighbourhoods.

3.1.4 Secondary data
Based on explanations by Curtis (2008) and Saunders (2012), secondary data is what has already been collected and used in previous studies or for some other purpose. Such information can come in the form of raw data or published summaries that are usually available to anyone in books, journals, or Internet articles. Secondary data provide many advantages, as it is easier to collect, cheaper to acquire and faster to access, thereby helping the researcher develop a mind-set regarding the direction of the research. In addition, secondary data helps the researcher narrow his/her research question, since it summarises results gathered from a primary research study; in this way, the researcher can re-analyse the data to find new themes that would help with his/her study. On the other hand, secondary research has certain disadvantages, since the data it produces might not be enough to cover everything required by the current study. In addition, there is the possibility that data coming from secondary research might be of low quality—its reliability and authenticity might be questionable (Saunders, 2012).

3.1.5 Mixed methods
Mixed methods combine both quantitative and qualitative forms and are used when using just one method cannot capture the necessary information. More complex results are reached with a combination of the two methods because they complement each other (Greene et al., 1989; Tashakkori and Teddlie, 1998). Creswell (2013) explains that the mixed methods approach is used to collect both qualitative and quantitative data in order to gain a wider knowledge of the matter at hand.

According to Saunders (2012), a research strategy is a conclusive plan used by the researcher to show how he/she will go about answering research questions. In contrast, Remenyi et al. (2003) defines research strategy as the direction in which the research study is conducted. Saunders (2012) states that a suitable research strategy should be chosen depending on research objectives and questions. Depending on the amount of time and resources available, the magnitude of the knowledge about the question should be researched extensively. Then, the research strategy to be used should be chosen based on three criteria: the control the researcher has over real behavioural events, the nature of the research question, and the extent of focus on existing or historical events (Yin, 2014).
3.2 Research Method Selection
Gray (2009) categorises surveys as analytical and descriptive. Analytical surveys mostly focus on the experimental category, whereas descriptive surveys are designed to comprehend the general situation.

Colton and Covert (2007) reiterated the usefulness of surveys in exploring relationships and examining beliefs and attitudes as well as when trying to reach a wider audience. However, surveys are always open to misinterpretation; they also suffer from certain limitations, especially in collecting available data. Nevertheless, surveys make it possible to use methods of study that are mixed and focused and to integrate both quantitative and qualitative communication in a single space.

In addition, using surveys makes it possible for researchers to study more variables at the same time than they could in the laboratory or a field experiment setting and to gather data on practical world environments (Colton & Covert, 2007). The use of survey implies the use of the following two data collection methods.

3.2.1 Questionnaires
DeVaus (2002, cited in Saunders, 2012, 416) used broad terms in defining questionnaires by referring to them as strategies for gathering data in which all informants are asked to respond to the same questions in a predetermined order. Questionnaires can comprise structured interviews, telephone surveys, and online questionnaires. The questionnaire technique is usually used in descriptive or explanatory research and features standardised questions. In practice, questionnaires are not effective in exploratory research or for seeking answers to open-ended questions.

3.2.2 Interviews
Saunders (2012, 372) “defined the research interview as a deliberate one that takes place between two individuals or among many and in which one individual serving as the interviewer establishes rapport and asks questions that are concise or ambiguous while interviewees listen attentively and then respond”. In general, this technique calls for further assessment of the answers given to deliberate questions. Researchers are able to obtain valid, credible, and reliable data through interviews. Saunders (2012) established three categories of interview:

- **Structured interviews:** Here, an identical set of questions is used to interview all respondents, also known as an interviewer-administered questionnaire, since respondents are expected or required to answer each question and a standardised schedule is used to record answers. This type of interview usually gathers quantifiable data.
- **Semi-structured interviews:** These are called non-standardised interviews. Here, the researcher prepares a list of themes and major questions, some of which may be cancelled in favour of others while the interview is in progress. In addition, the order of questions may be changed from one interview to the next, and notes or comments may be added to further promote discussion.
- **Unstructured interviews:** These are also known as in-depth interviews because they explore a general subject in detail. Usually, an unstructured interview does not require a prepared list of questions; instead, the interviewer freely discusses and pursues in detail any point of interest related to the topic. That is why this type of interview is classified as an informative interview.

3.2.3 Observation
In this technique, objectives laid down in the study are accomplished through the researcher’s observation of people; the research may partake in some of their activities and behaviours. Such observation methods may be accomplished through systematic observation and recording, description, analysis, and interpretation (Saunders, 2012). This type of research technique is no longer used much in business and management research.
3.2.4 The selection
A mixed research method using a survey research strategy appears to be the most appropriate technique to attain the objectives of this study; it will facilitate in-depth knowledge through the qualitative data that can be applied to a larger sample of the construction industry in Bahrain. This conclusion is based on a review of the research methodologies and strategies available, taking into consideration the research objectives analysed thus far. Because of the limited amount of time in which to undertake the present study, a quantitative approach will be used in accordance with the aim of the survey strategy. In addition, the use of a survey will make it possible to collect qualitative data, which in turn will help to formulate a method to collect far-reaching data to answer the “who,” “what,” “where,” “how much,” and “how many” questions that are so important to the current study.

Based on the data collection techniques discussed above and taking the research objectives into consideration, it appears that the data to be used for this study will be gathered through semi-structured interviews. The research data will be collected from experts in Bahrain’s construction industry in order to comprehend their familiarity with disputes related to construction. The causes of disputes and solutions gathered from interviewees will be recorded and analysed to explore how those causes impact the construction industry and how they can be prevented. Further, the interviewees’ opinions will facilitate the researcher to design a dispute prevention/avoidance/mitigation structure in the construction industry of Bahrain.

3.3 Ethical Considerations
Research ethics are the moral standards of behaviour guiding researchers to respect the rights and wishes of those individuals who become the subjects of research or who are affected by the research (Saunders, 2012, 226). Since research efforts involve informants’ personal data, it is necessary to gain their consent in order for the researcher to use the data in his/her work. An ethical code focuses on the anonymity and privacy of the data provided from the source to the researcher.

In addition, the informants might share personal information, and gaining the participants approval will assist in winning their confidence and building rapport.

Ethical issues that come up at various stages during the course of the study include the following:

- All informants must be informed and their consent gained; their participation must remain anonymous.
- Every informant has the option of withdrawing from the study at any time, and all data so far generated for him/her must be destroyed, especially if the informant withdraws from the study after being interviewed.
- Due to privacy concerns, every piece of data must be treated with the utmost confidentiality and anonymity. In the current study, all data will be coded and stored in a secure computer.
- All interviewees will be sent an e-mail explaining the research study; it will transparently and explicitly state that all information collected will be used only for research purposes and that no third party ever will have access to it.

In conclusion, since this research is a Type 2 research, it will follow every process of ethical approval as indicated by the University of Salford whereby the researcher accordingly endorses all forms and the supervisor oversees the work.

3.4 Limitations of the Study
Conflicts and disputes are common in the construction world. Disputing parties can experience inimicality to the opposing party and usually transmute the project disputes into personal combats. Objective data can frequently be an arduous task to discern because of faulty records, a paucity of correct measurements, or magnified positional stands, to name a few. Project teams frequently transfer conflicts and disputes to legal experts, claims experts, and consultants, who often do not have either the scientific knowledge to comprehend the conflict or a good idea of the particular disputed issue. The current study centres on Bahrain’s construction industry, where information confidentiality is thought to be one of the highly significant facets of any organisation or company. Furthermore, the Middle East frequently covers up disagreements related to construction by ignoring them; hence, it might be challenging to conduct interviews with government officials in Bahrain.
As already stated, this study will explore construction conflicts and disputes in Bahrain and how they can be avoided or mitigated. Although the sample for data collection will not be randomly selected, all knowledge resources gathered in this study may not be viable to the full sector. The capability to draw conclusions regarding the full demographics of the Bahraini construction industry will require intricately drafted caveats. However, every effort will be made to display the correct factors behind conflicts and their influence on construction in Bahrain.

3.5 Summary
The use of mixed methods, combining the qualitative and quantitative, appeared to be most appropriate since it enables primary data collection from industry professionals through interviews. It can then be generalised to a larger sample of the industry, which will be beneficial due to the limited time frame to conduct study. Therefore, the approach chosen for this dissertation was survey paired with semi-structured interview. Semi-structured interviews allow the researcher to draw additional data from the interviewees in order to form a stronger base for the discussion presented in Chapter 4.
Chapter 4: Data Analysis and Discussion

The current study proposes exploring and investigating the root causes of the construction disputes in Bahrain and their impact on the industry, followed by developing an avoidance and mitigation framework. Additionally, the purpose of the semi-structured interview is to be able to extract the causes of dispute in the Bahraini construction industry from those who are involved within the construction industry and have experienced dispute cases in Bahrain, which would not be conveyed through the use of quantitative methods. Moreover, the interviews allowed the researcher to be able to investigate the current measures that are in place for dispute resolution in Bahrain and to propose a future view for dispute avoidance and resolution. This chapter will outline the structure of the interviews and will discuss the common themes that were found.

4.1 Selection of Interviewees

Eight semi-structured interviews were planned to be conducted with four arbitrators, two contractors, and two clients/client representatives. They were chosen based on their experience in the Bahrain construction industry.

The interviewed arbitrators, who will be referred to as Arbitrator 1, 2, 3, and 4, have extensive experience in the construction industry and in arbitration, both in Bahrain and across the GCC region. Arbitrator 1 and 2, who are both Fellow RICS, have worked very close with the Bahraini construction industry. On one hand, Arbitrator 1 is also a chartered surveyor and owns a civil surveying company in Bahrain that has participated in major projects in Bahrain; he is also a court expert and has been commissioned by the Bahraini courts for several construction dispute cases. Arbitrator 2, on the other hand, as well as being a Fellow RICS, is also an Associate of the Charted Institute of Arbitrators (ACIarb), and has been working in the Middle East construction industry for over 15 years in total, with about 5 years in Bahrain.

Arbitrator 3, who has over 25 years of experience as a barrister and solicitor, worked with tribunals that do arbitration, mediation, and dispute resolution in the Middle East region. In addition, Arbitrator 4, who works for a construction law firm in Bahrain (not particularly in construction dispute), mainly deals with the front end of the construction process, where they work on the preparation and drafting of construction contracts, or on the back end of the construction process, in terms of evaluating construction claims.

In addition to the arbitrators, for the purpose of this study, the researcher interviewed two contractors who have accumulated a total of more than 40 years’ experience in the Bahrain construction industry. Both contractors have completed and are currently working on major projects in Bahrain for both public and private clients. One of the contractors occupies a leading position in the Bahrain Contractors Society. The society strives to upgrade the contracting sector through the application of international standards with the creation of a specialized centre for development competencies (Bahrain Contractors Society, 2015). The other contractor used to be employed by the Ministry of Works in a leading management position before resigning and joining his father’s contracting company, which is one of the leading contracting companies in Bahrain, with a substantial profile of projects, ranging from residential to mega projects for both governmental projects and private developers.

Finally, the researcher interviewed the operations manager of one of the leading consultancy engineering firms in Bahrain, which deals with the architectural, civil engineering, and electrical and mechanical disciplines. Moreover, they are also categorised as a Category A consultant by the Bahraini Committee for Organizing Engineering Professional Practice (COEPP). The firm has an intensive range of projects, ranging from commercial, residential, industrial, educational, and governmental projects, where they played different roles, such as designers, supervisors, and client representatives. Besides being the operations manager of the
firm, the interviewee holds an architectural degree from the University of Bahrain, and holds an MSc degree in construction project management from the University of Manchester.

Therefore, the interviewees were not randomly selected. However, they were a convenient sample to be able to cover up for governmental personnel, specifically after the discovery that the Bahrain Chamber of Dispute Resolution (BCDR), being a government entity, did not deal with any construction disputes in the five years of it being operational. Since the small sample of interviewees would not allow for statistical analysis, the interviews are reviewed and summarized to group common causes and resolution themes of disputes in Bahrain.

Unfortunately, an interview with one client representative could not be undertaken due to personal reasons for the participant, and with the time left, the researcher could not arrange for another client representative to participate in the study.

Moreover, a semi-structured interview format was selected because it follows a sequence of topics with suggested questions, but allows for rearrangement and additional questioning if necessary (Kvale, 1996). Furthermore, the semi-structured interview structure allows the interviewees the freedom to relate personal experiences into their responses adding richness to the collected data.

The following section and subsequent sections will discuss and analyse the interviews to extract common dispute causes and resolution themes. A copy of the interviews transcription can be found from Appendix B to Appendix F.

4.2 Findings and Discussions

While compiling and reviewing the interviews, it was apparent that disputes in the construction industry in Bahrain can be grouped into client factors, contractor factors, and general factors. The themes extracted from the interviews will be discussed below.

4.2.1 Clients Factors

After conducting all the interviews, themes of client factors that causes the dispute have been categorised into 1) delays, 2) the market is dominated by governmental projects, 3) contracting contracts, 4) the tendering process, and 5) variations.

4.2.1.1 Delays

Delays in construction projects always have a negative impact on projects and mainly lead to conflicts and disputes. The term delay could be associated with delays in approval required by clients for materials, or it could also be delays in payments, as was expressed by one of the arbitrators with regards to the delay of payments: “As you know, in construction, money is the lifeblood of the project, and if anything stops the flow of money around the project, then the project stops.”

Delays in payment from clients is considered by almost all interviewees to be the major factor that contributes to disputes in Bahrain, since payment being delayed instead of as stipulated in the contract will have a direct impact on the project. Consequently, the delay will trickle down the line to sub-contractors and suppliers.

Construction projects are heavily associated with other industries, as many different types of materials and equipment are used all over the project, such as glass, aluminium, air conditioning, electrical items, and so on. Most of the materials and items are procured by the contractor; however, they are based on the specifications and requirements of the client or the client’s designer. Thus, the contractor needs to gain client
THE DISPUTE IN THE CONSTRUCTION INDUSTRY IN THE KINGDOM OF BAHRAIN

approval on almost all the materials used in the project, and if the materials approval is delayed, that will subsequently delay the arrival of those materials, which will cause delays in completion.

All in all, as agreed by almost all the interviewees, delayed payment plays a major role in causing conflicts and disputes in the construction industry, as do delays in materials approval, specifically those materials that have to be shipped from overseas and have a long manufacturing and delivery period.

4.2.1.2 Government Projects Dominating the Market
A factor that could have a great impact on the entire construction industry is the fact that the construction industry is dominated by governmental projects in Bahrain, as well as the fact that governmental construction ideology is not coping with the everyday evolving industry. This was strongly expressed by one of the interviewees: “The government ideology is inflexible and stuck in a time loop.”

The inability to incorporate new technologies and techniques into the construction industry encourages the adversarial nature of the industry to remain. Moreover, the lack of innovation in implementing different types of procurement methods within projects is a problem, as governmental projects are still executed traditionally, where the design is done by an independent party and the tenders are then passed to the contractors for pricing, and each party involved in a project is working with a different set of objectives.

In addition, the unwillingness of the government to initiate a dispute resolution mechanism into the construction industry could be classified as a contributing factor to disputes in Bahrain.

4.2.1.3 Contracting Contracts
The construction industry has a wide range of conditions of contracts, such as the Joint Contracts Tribunal (JCT), the International Federation of Consulting Engineers (FIDIC) family of contracts, and the New Engineering Contracts (NEC), to name a few. All these types of contracts are created to be used as guidance for the industry and to act as a governing tool for construction projects, so as to manage the relationships between the parties involved. However, since they were created, many editions have been published in order to maintain the same level of standards.

Although the new editions of contracts are available for different types of construction projects, some of the contracts used in some projects are not written well, or have been taken from other projects and applied to the current project, which could conflict with the project specifications and requirements and the site conditions: “They just copy and paste an old contract, and change the project title, the client name, and the location of the project, without going through the contract point by point.”

It was also stated by one of the contractors and arbitrators that some of the contracts used by clients in construction projects go back to the 1960s. Besides the use of outdated contracts, some contractors go further and change the contract clauses to their interest: “They play around with it, the change clauses to their own interest which is not good.”

On one hand, this practice could be seen more on governmental projects, as it was mentioned above that the construction sector is dominated by governmental projects. The government clients feel that they can dictate the contracts and manipulate them so that they can have the upper hand over the contractor, and almost all the risk is transferred to the contractor, regardless of whether he can handle it: “The risk allocation sometimes is a bit skewed, perhaps, where you have governments being a party to the contract.”
On the other hand, some clients draft their own contracts, even though they lack the engineering and legal background to do so properly. That leads to disputes as well, as clients would be surprised by contractor claims that are not covered in the contract. The client representative stated that “Some clients draft their own contracts, and maybe they don’t have the proper engineering background, which causes disputes later on.”

4.2.1.4 The Tendering Process
It has been seen from the interviews that the lack of an efficient tendering process also contributes to construction disputes in Bahrain. It has been mentioned that the tendering period given to the contractors to prepare bids by clients are to some extent short, which could ultimately result in disputes. The short tender period does not allow the contractor to have a thorough study and review of the project drawings, documents, and specifications, which creates confusion, and wrong prices will be incorporated into the tenders, and will consequently result in disputes.

As well as the short tendering periods given to the contractors, some clients tend to abbreviate the design process provided to the architects in order to see an early start to construction: “When we submit our design proposal with a timeline for the design phase of the project, including the concept design, schematic details, and the tender period, they try their best to shrink the period by 50% or 60%, because they are willing to start the construction immediately.”

Shrinking the design phase will only result in the architect overlooking substantial details to the project that could widen the dispute circle to include the architect/consultant, client, and contractors, which could escalate to the termination of the project.

The Ministry of Works in Bahrain has an approved and prequalified list of contractors. The prequalification process been done based on the number of staff, number of specialised/qualified staff, the number of projects completed, the level of experience that the contracting company has, as well as many other factors, and categorised them into groups (AA, A, B, C, and D). The AA category is the highest. This prequalification process has been initiated by the government as a mechanism to help both public and private clients when it comes to sending tenders for pricing. However, some clients tend to invite different category contractors to bid for one project; for example, a Category D contractor could be invited to a project that should only be handled by a Category A contractor, because the client has worked with that contractor on another job, and is neglecting the fact that the Category D contractor will not be able to handle a project beyond his capabilities, which can lead to disputes later on in the project.

Another contributing factor to disputes in the Bahrain construction industry is the awarding process. The prevailing mentality of clients is to award the project to the lowest bidding contractor, neglecting the technical evaluation related to the experience of the contractor, the number of qualified and specialised staff they have, the number of the plants, and how many projects they have completed that are similar to the current project.

A price-based awarding process always results in conflicts and disputes during the construction period of the project, since the low price could sometimes means that the contractor has overlooked an item in the contract, or even worse, that the low price has been submitted intentionally. However, if proper due diligence has been done on the contractor, taking into consideration other factors than the price, and they are still the lowest, then there will be no harm in awarding the project to them.

4.2.1.5 Variations
Variations are always associated with construction projects, since construction projects are unlike any other projects. They take place in an open and uncontrolled environment always associated with unpredicted future
events. Variations can also arise when the project scope is not well defined, as well as when the design is uncompleted. It was stated in one of the interviews that “Modification sometimes happen when the design is uncompleted or due to developments in the clients requirements.”

Since variations are contiguous with construction projects, the available contracts allow for them. However, the questions is to what extent changes and variations are allowed in a projects. Variations fuel disputes in projects, since some variations and changes to a project require some work to be undone or removed.

In addition to variations, some clients requires work to be extended or replaced where it has not been included in the original designs. New work adds to the project, requiring new prices and added cost to the project that some clients are unaware of or unwilling to accommodate, which results in disputes. Therefore, minimal changes or controlled variations are always encouraged to avoid disputes in construction projects.

4.2.2 Contractor Factors
In addition to the client factors that causes disputes, the interviews revealed that there are factors caused by contractors. The can be grouped into 1) under-pricing, 2) the misinterpretation of contracts, and 3) a lack of resources.

4.2.2.1 Under-Pricing
Although under-pricing is an unethical and an unacceptable practice in construction, it is unfortunately practiced by some contractors in Bahrain, as stated by one of the interviewees: “Some contractors do under-price for projects, in order to make up their loss on other projects or through variations.”

Construction contracting is a business, and contractors are obliged to submit their lowest best price. However, submitting a low price purposely will always lead to disputes, as clients will get into conflicts with contractors over the claim requests submitted by the contractor. This attitude was clearly expressed by one of the interviewees: “Most contractors think, ‘How much can we get out of these people in extras?’ They under-priced the job, knowing full well the design is faulty in some way, shape, or form, and then seek to make as much money as they can on the claims.”

Therefore, taking advantage of unexperienced clients or entering the market with the mentality to gain as much money as possible through claims by under-pricing the projects is one of the main factors that contributes to disputes, and also creates a bad reputation for the contractor.

4.2.2.2 Misinterpretation of Contracts
As has been mentioned before, construction projects are taking place in an open and uncontrolled environment. Therefore, it is always important for the contractor to study the project and its requirements properly in order to submit the right price. As an example, the price of the project could change based on the location of the project, since the price of a project that is in a rocky area could be higher if the project is on soft soil.

In contrast to short tendering periods being a factor in disputes, some contractors, although the time allocated to prepare the tenders and prices is sufficient, fail to practice their contractual right by raising issues to clients and designers for clarification, and end up submitting their prices based on their interpretation of the design and the contract, which might be incorrect.

In addition to the misinterpretation of contracts and lack of proper review of the design requirements being dispute factors, and although there are contractor categorisations in Bahrain, contractors can still bid for projects that are above their category, specifically on private projects, which can contribute to disputes: “We
THE DISPUTE IN THE CONSTRUCTION INDUSTRY IN THE KINGDOM OF BAHRAIN

do not have a rule in Bahrain to stop the contractor from doing a project of more than, for example, 1 million BD if he was classification B.”

Moreover, the construction project could last for few years, and as was established before, the construction industry is associated with future events and also depends on materials from other industries, such as glass, aluminium, and steel. The prices of those materials can change over time, especially if the project is running for a long period. As contributors to disputes, some contractors fail to allocate the proper price margins for the increase in prices and turn to the client, claiming additional costs that clients are not willing to pay; most of the time, the contractor will have to handle the loss themselves.

Finally, each variation or change to the project could have time or cost implications, or sometimes both. Therefore, when a change is requested by the client, he has to be made aware of the time and cost implications if there are any. However, some contractors fail to inform the client as soon as an additional work and/or change in work is requested, and tend to leave this to the end of the project, which can create disputes, since the client might not be aware of the added cost and the extended time of those changes and may refuse to grant an extension of time or additional payment to the contractor.

4.2.2.3 Lack of Resources
Another prevailing factor in cases of disputes is the contractor’s lack of resources. The lack of resources could include human resources, labour, and plants or machinery. The right allocation of resources is very beneficial to the project. Some clients request certain levels of expertise of the project manager on site in order to maintain high standards. However, some contractors fail to provide the right skilled/specialised personnel on site, which could attribute to poor quality, delays in completion, and abortive work, which again lead to disputes. The client representative stated that “We approve some people to work on site, who are qualified based on the papers submitted by the contractor, but when it comes to reality, the resources allocated on site are totally different than what we have approved.”

Another interviewee emphasised the same, stating that “Contractors who do not have the right resources, such as equipment, materials, and staff, could attribute to claims, as the project will not go on the right pace and the right quality, and there will be a lot of delays, and that can raise disputes.”

Therefore, it is very important that contractors have a proper review of the project requirements, in order to determine if those requirements can be met or not, before taking on a project, so as to minimise or avoid disputes that would have negative impacts on both clients and contractors.

4.2.3 General Factors
In addition to the themes mentioned above, it was clear from the interviews that the construction industry in Bahrain lacks proper means of communications from all parties involved, as well as poor documentation. As it has been mentioned previously, the study conducted by Bristow and Vasilopoulos (1995) stated that poor communications amongst the project participants is a direct cause of disputes in the construction industry.

Furthermore, it appears that the data extracted from the interviews are consistent with the study conducted by Daoud and Azzam (1999) in the Middle East, which reveals that construction disputes are caused by poor documentation, as well as modifications of standard contract conditions by clients.

Additionally, the lack of laws governing the construction industry in Bahrain can contribute significantly to disputes. That can be a result of the unwillingness of the government to change its construction process and to implement new technologies.
The late involvement of lawyers in drafting construction contracts could also be a cause of dispute, especially with the fact that clients tend to alter the contracts by removing or changing some clauses, neglecting that those changes might imbalance the contracts to their side, or might put them in a very vulnerable position. It has been stated by one of the arbitrators that “Another factor is not getting the lawyers involved early enough. Projects in Bahrain take place where a lawyer has not been anywhere near the project until there is a dispute.”

4.3 Dispute Avoidance Measures in Bahrain

The interviews reveal that there are no measures implemented within the construction industry to avoid or mitigate disputes. It was also stated in one of the interviews that the dispute resolution conditions stated in the contracts are unclear and only allow for arbitration and then court proceedings, which could take longer to solve and would incur further costs to all parties involved.

Moreover, although there is the Bahrain Chamber of Dispute Resolution (BCDR), according to an arbitrator, according to regulations, when a financial disputes that exceeds 500,000 Bahraini dinar is raised in courts, they are directly transferred to BCDR, and that is between financial institutions, not construction parties. However, for construction disputes, the parties involved have to agree to the use of BCDR conditions and regulations for their disputes, and it is not mandatory for the dispute to be managed by the BCDR.

Therefore, in addition to avoiding all the factors mentioned above, the interviewees have proposed some measures to avoid and/or mitigate disputes in Bahrain:

- Governmental initiatives to implement new construction laws and specialized construction disputes courts.
- Setting up a construction profession regulating body like the Bahraini Committee for Organizing Engineering Professional Practice (COEPP). Appointing a Dispute Resolution Board for the projects that would be involved in projects from start to finish; that will help make claims flow properly in the project and they would deal with any potential disputes before they occur.
- The implementation of alternative dispute resolution methods, such as mediation.
- The correct implementation of the different procurement methods available and the incorporation of new technologies.
- Proper review and allocation of the risks associated with a project.
- The correct use of different and up-to-date contracts.
- Encouraging partnership within the construction industry in Bahrain, and working towards common objectives.
4.4 Summary

In this chapter, sequences of seven interviews were used to be able to extract the main dispute causes in the Bahrain construction industry. The client factors are 1) delays, 2) the market is dominated by governmental projects, 3) contracting contracts, 4) the tendering process, and 5) variations. The contractor factors are 1) under-pricing, 2) the misinterpretation of contracts, and 3) a lack of resources. General factors are 1) poor communications and documentation, 2) a lack of construction laws, and 3) the late involvement of lawyers within the project.

Finally, the data analysis reveals the lack of implementation of dispute resolution methods in Bahrain, which can have a significant negative impact on the industry and on the economy of Bahrain in general. Therefore, it is a prevailing matter to implement all the necessary actions to avoid and mitigate disputes through the implementation of new technologies; the avoidance of alterations of standard condition of contracts, allowing enough time for contractors to study a project; and most importantly, the implementation of new laws that would regulate the construction industry and would incorporate dispute resolution methods.
Chapter 5: Conclusion and Recommendations

This chapter summarises the entire dissertation by drawing together the different factors contributing to disputes that have been collected from the literature review and extracted from the interviews, to formulate a set of recommendations and future actions that can form a dispute avoidance and mitigation framework.

5.1 Conclusion

The entire dissertation draws attention to the significance of the construction industry, how it is a major contributor to the nation’s economy and the fact that the construction industry is a multifaceted industry binding other industries together within single projects (Kwakye, 1997). Therefore, any factor that affects the construction industry will consequently impact other industries and the economy as a whole.

The construction industry is also associated with risk, since construction projects are entirely dependent on the estimations of future occurrences and on the individuality and uniqueness of the projects with respect to different aspects such as the location, the technology used and the sophistication of the design, which also contribute to the risk.

Due to those features, the construction industry is likely to experience conflicts and disputes, since a construction project requires the temporary assembly of a multi-member association of various distinct groups, where each group have their own goals, needs, and culture, with a predominant attitude of wanting to maximise their profits and benefits (Cheung & Suen, 2002; Weddikkara, 2003). Ashworth (2013) has also stated that disputes are one of the common factors in the industry.

The inheritance of disputes in the construction industry and the negative impact they have on times and costs of the project, in addition to the destruction of relations between the project participants, has encouraged the emergence of different studies around the world on the causes of disputes and how they can be avoided.

The literature reveals many dispute causes; some are general, and others are more specific to the locations in the study. These causes can be summarised as follows:

- poor communications and documentation;
- variations and design changes;
- contracts and contract alterations by employers;
- tendering guidelines and procedures;
- delay of payment;
- poor site management and
- poor workmanship.

The increasing costs, delay and risk of litigation in construction disputes has pressed the construction industry to search for more innovative and effective means to settle disputes outside the courts. Therefore, many dispute studies have been dedicated to the aim of establishing innovative processes and techniques to resolve disputes before litigation.

Based on the above, this dissertation establishes and discusses the necessity of using the Alternative Dispute Resolution (ADR) and its benefits to the industry by its minimisation of the rise in the impacts and costs of disputes. A range of different ADR methods has been discussed: negotiation, mediation, neutral evaluation, dispute board and arbitration as well as the use of the Dispute Resolution Advisor (DRA).

Finally, interviews were conducted with four arbitrators, two contractors and one client representative in Bahrain. The interviews with arbitrators formed a base for subsequent interviews, where data extracted from
them applied to both the contractors and the client representative, in order to measure the consistency of the data.

The data analysed reveals that there are different dispute factors that are caused by clients and contractors as well as other general factors that are summarised in the Table 5.1.

Table 5.1 A summary of dispute factors in the Kingdom of Bahrain

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<th>Group</th>
<th>Dispute Factor</th>
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<td>Client Factors</td>
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<td>➢ The domination of government projects in the market</td>
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<td>Contractor Factors</td>
<td>➢ Under-pricing</td>
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<td>➢ Misinterpretation of contracts</td>
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<td>General Factors</td>
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<td>➢ Lack of construction legislation</td>
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<td>➢ Late involvement of lawyers in the construction projects</td>
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The above factors appear to be consistent with factors in other studies; however, there appears to be a lack of studies regarding disputes and their impacts or an avoidance framework in Bahrain. This lack of studies could be a reason for the increase of disputes in Bahrain.

5.2 Recommendations

Although the relatively small sample size presented in this dissertation and the data extracted do not represent the entire construction industry in Bahrain, they do illustrate the magnitude of the disputes needing to be further studied as well as the requirement to implement a dispute mitigation framework.

Therefore, this dissertation recognises the pressing need for the implementation of legislation within the Kingdom of Bahrain in order to regulate the construction profession and to encourage the use of new technologies and techniques in line with the constantly evolving industry. This could minimise or aid in the avoidance of disputes.

In addition to legislation, the dissertation recommends the creation of a specialised construction dispute chamber that would utilise construction and contractual techniques to assess and resolve disputes as they occur. The Bahrain Chamber of Dispute Resolution could also further study the technical requirements to allow resolution of construction dispute cases.

It is further recommended that construction clients allow sufficient time for the design phase, so the designers are able to produce a comprehensive design in order to minimise changes during the construction phase. Contractors also need enough time to study the tender documents and project requirements, so they can produce as complete bids as possible.

A review of the project awarding process is also recommended, as well as the conducting of complete due diligence on contractors to establish their capability of handling the project in hand; the lowest bid is not always the best bid.
THE DISPUTE IN THE CONSTRUCTION INDUSTRY IN THE KINGDOM OF BAHRAIN

Contractors, on the other hand, are recommended to use their own experience to assess project requirements before submitting bids, to avoid taking on projects that are beyond their level of experience. Furthermore, practicing professional ethics is always beneficial; therefore, it is strongly recommended that purposeful under-pricing be avoided due to the negative consequences that follow. Moreover, contractors are recommended to familiarise themselves with the different conditions of the contracts, so they are able to follow their procedures, for example, for claim submittals.

Finally, it is recommended that future studies be conducted in the Kingdom of Bahrain to further examine the level of disputes and their impact on the economy. Other studies could examine the level of alternative dispute resolution methods within the industry and how those methods could be implemented. Moreover, since poor communication is the predominant cause of disputes, this study recommends examining ways in which communication within the construction industry could be enhanced as a dispute avoidance measure.
References


THE DISPUTE IN THE CONSTRUCTION INDUSTRY IN THE KINGDOM OF BAHRAIN


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Appendices

Appendix A – Ethical Approval

School of the Built Environment

Ethics Feedback Form

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<th>Student Name:</th>
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<td>Supervisor:</td>
<td>Dr. Anthony Higham</td>
<td>Ethics Reviewer:</td>
<td>Marcus Ormerod</td>
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Project Title: The dispute in the construction industry in the Kingdom of Bahrain with a view to developing a dispute mitigation strategy.

Feedback on Ethical Approval Application

Based on the documentation submitted ethical approval is granted. Please can you ensure that tailor your participant consent form to exactly suit your research, unless you really are doing a research exercise will you be taking digital photographs? If not then this checkbox is not required.

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This is a Type 2 project. Provided that you address feedback set out above (if any) to your Supervisor’s satisfaction, and that you carry out your data collection substantially in accordance with the procedure you have described, and using the explanatory and confirmatory documentation supplied, then you have ethical approval for your research.

**IMPORTANT REMINDER - EXTENSIONS**

CHECK THAT YOU KNOW WHEN YOUR RESEARCH PHASE ENDS. REQUEST ANY EXTENSION BEFORE YOUR CURRENT RESEARCH PHASE ENDS BY REQUESTING AN EXTENSION FORM FROM sobe-programme-support@salford.ac.uk (include your Student ID) AND THEN RETURNING IT BEFORE YOUR RESEARCH PHASE ENDS
Appendix B – Arbitrator 1 Interview transcription

Q: So have you been in a dispute or have you dealt with a dispute before?

A: I've dealt with many disputes in my career. In fact, I've only been to court twice. The biggest one I worked on was one in Hong Kong. Back in the 80's when the company I worked for at the time, were taken to court by the Hong Kong government.

Failure to implement a contract, a property contract, but fortunately, we won in the high court. We won at the Court of Appeal. The government appealed again and went to the House of Laws because Hong Kong was still part of the British administration then and we won there. And that was 60 million pounds in the 80's. I suppose that must have been about 400 million Dinars today.

Q: How long did that last for?

A: The whole thing took about two years to resolve from start to finish. But the actual court procedure, once we got going, was over and done within about four months. It was fast tracked. And lots of very, very capable lawyers involved and barristers and so on and so forth. Fascinating.

Q: So what do you think of the dispute in Bahrain construction?

A: In Bahrain? Again, I've come close to a dispute but it was reconciled with. That was in 2013. The company I worked for at the time, was the preferred bidder for the PPP for the social housing program?

Q: So if we talk about the causes of disputes in Bahrain, what do you think the causes of disputes at the early point of the project?

A: The vast majority of construction contracts in Bahrain are from the government. Very few are from the private sector. That's number one. So there isn't this flexibility within the government ideology. The government-- with the greatest respect to the government - have been stuck in a time loop. None of the contract or tender formats-- I was looking at one just before this interview. I was looking at one. It was a very simple one, a new artificial turf for a sports field. And a very simple job, a small works job fundamentally. But the contract documentation is enormous that goes with it. From the government's has not changed since construction contract ideology still works to FIDIC type of contracts and tried to make FIDIC to be the “be end and end all” of its solution.

These contracts, FIDIC’s, are very much in favour of the employer. Now, they originally started if I remember, for the oil and gas industry a long time ago and they've been modified for construction purposes over the period of time, people have used them and so on and so forth. But there's no innovation within Bahrain and Bahrain is not peculiar-- Saudi Arabia is exactly the same problem. They don't change because there's nobody at the senior management level, with the greatest respect. But there's nobody at the senior level qualified. And again I use these words politically correctly, qualified. To actually instigate the change because the people at the middle management level are not prepared to put their head above water.

The fundamental problem is, there's no review of the contractual documentation or procedures. So we end up with a situation with about five or six different variations of a contract trying to fit everything.

For example, a project was the creation of a new fishing pier somewhere in Bahrain. For fishing boats to tie up against. And of course the contract didn't fit it. And it went ahead to tender and of course, with something like that, it's a civil engineering piece of work and civil engineering is generally considered to be an adventure rather than a building contract.

Nine times out of ten, you try to do something that-- something’s in the ground and don't know what the real problem is until you dig up the ground. And of course, they dug up the ground and it wasn't it what it was supposed to be or it was envisaged by the designer off they go. But the next problem was, well time was of the element, essence, rather. And so off they went and altered it slightly. Obviously, the contractor made a claim for additional work of course. But
there was a dispute. "Why? No, you should've reported it. Etcetera, etcetera." They didn't report it. The function was there. “Yes, they did report it.” They claimed and so on and so forth.

Construction is a battle as soon as from day one, from day one. I mean, most contractors are-- "How much can we get out these people in extras." Under-priced the job knowing full well the design is faulty in some way, shape or form and then seek to make as much money on the claims.

Interviewer: So that is a factor that falls on the contractor's shoulders of under-pricing the contract just to get as much money they can?

A: Yes, I mean construction contracting is a business. You got to win the work. It's no good being the perfect contractor price. The price isn't right the first time so you're never going to get a job.

Q: So you have mentioned that contracts are inflexible, old and the other thing is that because the mentality of the contractors since contracting is a business, they need to win, to make. So what could be done in Bahrain to somehow resolve these matters?

A: I've always been impressed with it. It's fast. I remember going on holiday once to Miami with my family. We hired a villa and it was the Christmas period. And in the UK, traditionally construction just shuts down for two to three weeks. In America, it only shut down for Christmas day.

And the following day, they were on-site. They were individual contractors - sub-contractors - and they built this villa in the two weeks that we were there. I look out of my window here. I live in Janabiya. There's a villa across the road. And I've been in this villa five years. They've still not finished it.

The problem is, we're also stuck in this ideology of additional contractor. There is no reason to change, nobody wants to change. Submit the price, that's the price, there's supposed to be a lump sum price, etcetera. And we are driven by that ideology. You'll always get contractors looking for a price. And what happens is, you got every contract-- and again, these are government contracts, A) you got to be, as a contractor, you got to be an approved contractor on the list regulated to be able to do something.

So that stops new contractors coming in, first and foremost. Most of the bid contractors here inevitably bring in expatriate’s management systems into their own organizations but they can't be expressed on-site when dealing with the government. It can be expressed when dealing with private clients and you can go down what I call the American system of construction management where-- One of my pet subjects at the moment is affordable housing. Affordable housing I reckon, you can build a villa for 37000 BD. Maybe it's 40000, by using the ability to take positions with contractors.

So if you manage the construction process-- If you imagine the construction process: one is the foundation, then the superstructure, then the MEP, then the roof glazing and so on and so forth. Now in the Bahrain method, its one man does the job and then he engages loads of sub-contractors and they do it for a price. Mr. Main Contractor adds 10% to that and that's the price he puts in. But as a client, if you dealt with those subcontractors or specialized contractors directly, you reduce it fundamentally by 10-15%. The downside of that is that you then, you as the client take home the risk of delivery construction manager. What is the risk? You are a professional construction managing organization. And then just look at the government for example, and Bahrain government is no exception to this. The Bahrain government has got loads of very, very qualified people in its employ but then again, engages consultants, to do design things.

The UK government realized this for financial reason and then other reasons back in the 1980's and-- 70's-80's and it started de-centralizing. So all the government ever does in the UK is set the rules on regulations. The government doesn't actually build anything anymore. Want a new motorway? Goes out to tender, they're all designing build ideologies and so on and so forth. Guaranteed maximum price it does make mistakes. Big projects notoriously run out of budget such as the Scottish parliament and the Channel Tunnel. Some of these things do go wrong but it is the way forward.
The idea of a PPP is public, private, partnership. And the partners, are partners, and they do what's best for each other. So the government is making the regulations. Government should get planning permissions and the design approval. Fast track and the contractor should build it as fast as possible. That didn’t happen in Bahrain it took three years of negotiations to make it happen.

Q: what else could contribute into disputes in Bahrain?

A: Another thing in Bahrain and we go slightly off tangent here, everybody uses project managers; project manager for this, project manager for that. What does that project manager do? What's he supposed to do? What we're really looking for is somebody to manage the construction process. The project manager, you're just managing the project which is very different to managing the construction process. In fact, many project managers never even leave their office.

You want somebody who's actually out on the site and knows what concrete looks like and can actually say, "Oh, no. That's the wrong-- failed its lump test." or "It's this test." or "That's the wrong type of rebar." and so on and so forth.

So the way we set up at the moment in Bahrain-- And again, I qualify this by saying it's not peculiar to Bahrain. The design, not to change the construction ideology or the contraction contract ideology, is a license for dispute and a license for contractors to make money.

Q: As a solution again, do you think that the government, to reduce the amount of disputes should incorporate a new technology such as BIM for example? Would that help?

A: Exactly. I mean, there's lots of things which need to be done. New construction technology is desperately needed. I mean, Bahrain is a supporter of saving the planet-- green building codes, etcetera. Can you actually name any green building code in Bahrain?

For example, things like insulation of buildings. This villa that I'm living in is five years old. I was the first tenant. And it's a traditional concrete block building. No insulation whatsoever in terms of keeping it cool, the air-conditioning is all their system which is notoriously more expensive way of doing it, so on and so forth.

This is an observation, the government and its highest most senior level is making the right noises, making the right statements. It's missing. And to me, your management system which implements this at government level, this is the problem.

Q: So if I jump back to the tender stage, is the way of evaluating and awarding the tenders, is that a factor to dispute or a cause of dispute later on in the project?

A: Yes and no. I mean, there are two things there. I have been dealt with a number of government tenders who go to the same rigmarole every time. "Please provide all the documentation." It's the same documentation every time we do a tender. We were established in 1942 and we've been in business this long, this is our board of directors, all those sorts of things. You send the same information for tender this week as you will next week and next year and the next 20 years. Evaluation? What's the evaluation? "Have you done this work before?" "Yes." And that’s it.

Q: Since I worked for the government, I think the mentality is always towards awarding the job to the lowest bidder. Is that a field of dispute later on in the project?

A: Exactly. Because why is he the lowest? Evaluation should be done in two parts and I'm not sure they actually do this in the government. And there's a technical evaluation and you should not open the bid documents at all - the financial documents. They should be A and B. So A is the technical evaluation and you eliminate people or you rate people in the tender bid arising from their technical evaluation. Next you've got to score 50 points to get into the next round. The next round should be financial consideration. And if there's a wide difference-- and you just look at the published tenders there's wide differences in the prices. What differences? Shouldn't we question why there's a wide
difference? Why somebody bidding a million and someone bid 2 million. That's a 150% difference. Either they don't want the job or there I say, there's a rigging system going on. Or the lowest just made a mistake.

Q: So on the contractor's side, I think or I would summarize it as a lack of knowledge into evaluating the tenders that would eventually lead into dispute later on in the project.

A: Again I'll put it, should it not be independent evaluation? Should the government be evaluating its own tenders? Should they not be an independent professional body? Charted surveyors who should doing the evaluation, somebody professionally responsible.

Q: What are the factors that the contractors fell into that would create disputes later on the project?

A: Well, under pricings is obviously a major factor. The more fundamental factor is complete misunderstanding of the tender documents themselves. Again, I speak from experience from my social housing tender. There were three major bidders for this project. One I know for a fact, completely submitted a tender which was in no way shape or form bare any resemblance to what was actually in the tender documents. They actually became number two of the preferred bidders. On the face of it, they should have been thrown out. There was obviously a reason to keep them in, political, whatever reason that may be or whatever.

There were two potential bidders. But the problem also there, because this was a PPP – Public Private Partnership – bear in mind Bahrain had never done it before for social housing. They've done it for sewage works. That became problematic as a dispute because the government forgot-- In order to put a new sewage system in, you got to have land to gain access to drill holes to put the sewage system in. The government left off the land in the tender. The contractor said "Well, give us the land." and the government said "No, it’s in the PPP.""No, it isn’t." And that went on for a year.

Q: They tendered a project without allocating the actual land?

A: Without access to the land. The sewer is in spot X but in order to get to spot X, you got to cross land Y. and there's no permission to cross the land Y. It’s somebody else's land. Now, that's a fundamental oversight on Bahrain. Like with the King Hamad Hospital, it was given somebody it would appear, who was not qualified to do the job. It would appear. I'm only repeating what I've been told. It's hearsay. You see, what is the evaluation process on the undertaking to do? Is the Ministry of Health qualified to actually to do a construction job? No, the Ministry of Works are the people, quoting, "Who are supposed to be construction experts." So they should deal with tenders on behalf of all government departments. But you have all these other departments going up to tender for construction works. But there still needs to be a central procurement process so there’s continuity in what they're doing.

Q: You've mentioned something about a contractor should have been thrown out from the beginning but politically he was there. So does that play a role into disputes?

A: Of course it does. My company realized that he was there politically and only there to keep us in the game. Politically, you could not have a tender with only one qualified tender, could you?

Interviewer: No.

Interviewee: You got to have two. Now this particular PPP, again going back, Bahrain has never done a PPP for social housing before in its life. What did it do? Engaged lawyers to prepare contractual documents in a hurry because they suddenly wanted this in a hurry and they produced all these wonderful contractual documents, ten volumes and what it was-- If I'm being perfectly honest because, and bear in mind I'm English, I could read all this things quite fast. It's my native tongue. It actually was a copy paste from a UK PPP tender. In fact, if I'm being cynical the word "United Kingdom" was just changed to Kingdom of Bahrain. But again, why did they go for that process? Why do you have PPP? You have PPP’s because A), you don't have the skillset to produce whatever you wanted to be produced. B), you got to have the money to produce whatever you want to. It’s a more costly effect of doing because you’re borrowing something it is fundamentally a higher purchase in the system. But it works for governments with no money. And Bahrain it’s one of the richest of the gold states. In theory, it should work quite well.
But that only works when you start having a decentralized government system. When you have government which is the central to the economy, you have problems. Where if you get economies like the UK -- I have to keep quoting or anywhere in the western world which are decentralized. They've made the rules and regulations, deal and going to partnerships. “That's it. This is what we want. You have to do this, that and the other.” In this way, you build it to the specification fit for the purpose. Putting in the American system, it’s a guaranteed maximum price ideology, lump sum, lease what contractors you like and if you come in under budgeted under the guaranteed maximum price, there's an incentive we share the paint and gain.

Interviewer: From working in a governmental entity I have noticed there are lot of disputes and a lot of things go wrong although they get resolved, but they should not have gone wrong from the first point. For example -- and that is a personal input, we tender jobs and get the quotations back or the tenders back within a month. Even the contractor won't actually have time to evaluate the project properly in order to put the right price forward. Every tender you issue within a week, you get all of contractors claiming for an extension of time?

A: No, no. It’s unnecessary. It's a lack of experience or a lack of unwilling to change. Every tender must be one month? Why can't it be six weeks? Or two months as a standard format?

On the other hand, the tender board is public in its application. This decision-making process is strange. There is provision in the tender board rules and regulations for negotiation with the contractors but nobody negotiates because everybody wants to do everything at arm's length. That's also one of the problems. On the face of it, everything must be done at arm's length because -- obviously, the risk of corruption or that type of thing and I fully support that. But there's a better way of doing that, witnesses and recorded conversations and all sorts of things.

Q: Is there anything else you would like to add before we finish?

A: I think it's up to people like you that should take up the challenge of driving it forward because it's only through you that these things are going to-- people like you that these things are going to happen.
Appendix C – Arbitrator 2 Interview transcription

Q: So have you been in a dispute regardless whether it is front end or back end in general and specifically it is front and it would be better if you being in that kind of dispute?
A: Yes I have been involved in quite a few disputes over the years.

Q: Can you talk to me about the nature of those disputes? What causes those disputes?
A: I’ve been involved in cases and disputes on both sides so I have been on the client side or employer side as we sometimes refer to it. From the contractor’s side, I think most of the disputes really revolved around issues of payment first of all and secondly on whether the contractor is entitled to certain relief under the contract for certain events or whether the contractor is really entitled to an extension of time or to additional costs. Those types of questions mostly arise under whether there has been a delaying event or when there has been a variation or a change to the technical requirements while the construction period is ongoing. On the employer side again mostly to do with variations, the quality of the contractor’s work is. I think I have a fair amount of experience in dealing with issues where the quality of the contractor’s work is not up to the required standard and there’s been a loss caused to the employer as a result of that.

Q: So when you talk about the contractor’s side, you mentioned that issues of payment, is that a factor caused by the employer or the client?
A: It is and there are problems with delays in payment or just non-payment, really.

Q: So what other factors that are caused by the client that led to dispute?
A: I think that really on the client side I think perhaps poor contractual management is often a factor or not managing the construction process proactively enough. Letting issues get out of hand where if they could be dealt with quickly and then they wouldn’t cause so many issues but sometimes there is an issue that a person is not dealt with quickly enough and there is a snow-ball effect where the delay in actually managing the issue makes the issue more severe than it otherwise would have been. So poor contractual management on the employer’s side is probably one issue that I’ve seen reasonably frequently. Also I think actually scoping – making sure the technical scope of the project is as defined as it possibly can be.

Quite a lot of problems that I see on projects arise from variations which are requested by the employer and there are always changes. There are always changes to a construction project while it is ongoing. It is a question of the extent of the changes and the scale of the changes. So quite often reasonably significant changes are ordered during the construction process and those are significantly detrimental to the process, particularly if you’ve got large technical changes which require additional manpower for example, additional materials, often require some of the works to be undone, changed, and that can have a significantly detrimental impact on the construction process. Those are two factors that I’ve seen. I think a third factor is not getting the lawyers involved early enough in the project. But a lot of construction projects take place in Bahrain and pretty sizeable ones as well where a lawyer hasn’t been anywhere near the project until there is a dispute. Until something happens and they say, “Oh, my goodness, we need to get the lawyers involved”. So you know, we can clear off and there is a couple of instances that I’ve been involved in where a client or a contractor has approached us and one of the first questions we ask is who drafted the construction contract. And rather than it being, “Oh, it was X law firm” or, “It was Y law firm”, it was, “Well, we just did it and we based it on a contract that we used two years ago or five years ago”. And another one I get quite often is who drafted the construction contract and they will mention a name and it’s like that’s not a law firm, that’s a quantity survey or a cost consultant. Quite often those guys will just pull a construction contract and just say use that, and they’ll be quite happy. They think they’re saving money, but they’re not.
Q: But aren’t there standard contracts that they can follow or that they can pull out and they would be helpful?

A: There are standard form contracts, certainly. If you are studying construction in the UK, you will be familiar with JCT and if you are in Scotland, SPCC. JCT, I don’t think is a very popular contract out here. I’m much, much more used to using FIDIC. As you are probably aware, no one actually no one uses a standard form just off the shelf. They will make amendments to it, they’ll draft a schedule of amendments or even they’ll breach copyright and just drop amendments directly onto the standard form, which you’re not supposed to do but the issue is that the lawyers generally aren’t involved in doing that. You’ll get schedules of amendments which had been drafted by some consultants, not a law firm but a cost consultant.

Q: I think we both agree that whether a standard form of contract was used or an amended form of contract was used, from what you said I think poor following of the contract, that primarily the cause of a dispute, is that correct?

A: That is a large factor in dispute. Yes. The contract isn’t great in the first place, which no one looked back at anyway. So it’s just, “Put that in the drawer and close the drawer”. And then three years later when there’s a dispute it’s like, “What does the contract say?” “I don’t know, where the contract is?”

Q: Another thing you mentioned that some of the disputes that you’ve been involved in from the client side are mainly to do with the quality of the work of the contractor. Well, if I put it this way, I am the client, I chose this contractor to do the job, and then why would I complain about his quality later on in the project? Is that an award factor of dispute? Was my awarding process wrong that led me into a dispute? Is that what you mean?

A: Yes, it’s a good question, I actually for the most part, no, for the most part it’s competent contractors. There are quality issues on construction projects are not uncommon and the best projects can sometimes have quality issues with even the best contractors. It is just a fact of life. Sometimes however you are correct. Sometimes there is a question of has the client done sufficient due diligence on a contractor. Has the client in terms of awarding the contract, has the client paid too much attention to the price that is being done for. So I think one of the problems in the Middle East with clients is that they are very, very price focused. And they are too price focused in my opinion and they will focus on the price to the detriment of other factors and quality is one of those factors.

Another issue that I have come across actually, recently, was just a complete lack of due diligence being done on the contractor. I am aware of a major construction project that has taken place in Bahrain very recently where the contractor was awarded the contract on the basis of a job he had done previously which the client was very happy with. But they didn’t take into account the fact that it was a completely different job and the second job was a job where the contractor – and this is an international contractor but internationally, it had absolutely no experience at taking on this type of project and this caused problems. So it is a very competent, well-known, well-regarded international contractor. They just don’t have the experience on that particular type of project.

Q: What do you think contractors and clients should change in order to avoid a dispute? I’m sure we’ve mentioned that from what we said but if we summarize it to action that should be done from both sides.

A: Yes, you’re right, I have covered some of the points that I wanted to raise, one of them being from the client’s side properly scoping the project, making sure their requirements align with what the client actually wants so that six months down the line it’s not saying, “Oh, you know what, I don’t want that to be cladding, I want it to be a different kind of façade or I want a different type of stone to be used”. That is one issue. I think also, yes, proper tender processes perhaps not focusing so much on price although that is a very difficult thing to do in the economic circumstances. I think another thing again, as a lawyer, I would say just make sure you’ve got a properly drafted contract.

Make sure you’ve got an up-to-date contract. There are reasons that standard form contracts do get updated and if you’re using. I couldn’t tell you how many times I’ve across FIDIC 1987. I’m sure you are aware the last FIDIC update was 1999 and the international Chamber of Commerce is currently undertaking a review with a view to
The Dispute in the Construction Industry in the Kingdom of Bahrain

Releasing a new suite of FIDIC contracts and I think it is scheduled for next year but I am still seeing FIDIC 1987 contracts all the time.

My point is that there is a reason that these things get updated, there is a reason the JCT issued a contract in 2011 and before that issued a contract in 2005 and before that and before that and before that. It is because these contracts are improved and each time there is a release, the release is based on a consultation which has taken place like the consultation that the ICC is currently doing for FIDIC. So if you are not using an up-to-date contract you are really missing out because you are missing out on really interactional contractual best practice and to me, your construction contract is always the first thing and if it is not up to date and if you have not had properly qualified legal advisers looking over it for you and drafting it for you, you are starting the project at a massive disadvantage.

Q: Now, I know that there is Bahrain Chamber of Dispute Resolution but how about the measures that Bahrain has taken in avoiding or mitigating construction disputes? What do you know about that?

A: BCDR is certainly one initiative that I would probably talk about. I’m sure you are aware of the importance of having an institution like the BCDR. It does a lot for Bahrain’s credibility on an international standpoint and having an institution like that is definitely a big bonus. It placed Bahrain on a footing with places like Dubai with plenty of arbitration institutions which can only be a good thing. Bahrain was ahead of the game, I think it was the first Gulf country to sign the New York Convention and it’s had its arbitration law in place since I think about 1994. So yes, Bahrain is ahead of the game in terms of things like that or at least it is keeping pace with the UAE.

Q: I had a small discussion with the vice-president of Bahraini Contractors Society and he somewhere in the local news suggest that Bahrain should have a specialized construction dispute court, they were calling for Bahrain Ministry of Justice to have a court specializing in construction dispute. What do you think of that? I don’t know if you heard about it. Does Ministry of Justice have something like that specifically for construction?

A: Not to my knowledge. I think it would make far more sense for that to be done on – I think it is a decent proposal, something like the TCC in the UK. Probably I should say in England. In Scotland they have the commercial division of the Court of Session. I think something like that would make sense, to specialize and to make sure that the quality of the people making the determinations is as high as possible. I think it would make more sense to have something like that done under the auspices of the BCDR.

Q: To my knowledge BCDR only deals with disputes that 500,000 and above and actually I tried to have an interview with one of their gentlemen there but unfortunately the response I got, they have not dealt with any construction dispute case since they’ve started work.

A: I’m reasonably surprised to hear that, because lots of construction, I haven’t done any disputes in the BCDR, I have to confess. I’m surprised there haven’t been any because a lot of the construction disputes I deal with, I deal with them before they go to formal proceedings but they have got BCDR as a dispute resolution forum. I am actually reasonably surprised to hear that. Far be it from me to call it into question but I am very surprised because I know some of the other construction lawyers on the island and I was under the impression, I won’t go any further than that, but I was under the impression that they had in fact I thought they were currently dealing with construction disputes at BCDR.

Interviewer: Well, I was as surprised as you are because my first intention, with all respect to you as a lawyer, was to conduct interviews with BCDR officials.

Interviewee: They would have been far more knowledgeable than I be.

Interviewer: Thinking that they would have dealt with construction disputes but when I approached them I got the response that unfortunately they haven’t dealt with any construction dispute and it was very surprising for me.

Interviewee: That is surprising. Let’s not forget arbitration is a confidential thing. Just one small point, BCDR has two jurisdictions. You mentioned 500,000 BD. That’s the first jurisdiction. So they’ve got what is called mandatory discretion and I suppose discretionary discretion. So the BCDR’s mandatory discretion kicks in when there is a claim
exceeding 500,000 BD, which would fall within the jurisdictions of the courts of Bahrain and which involves hiring an international commercial dispute or a CBB-licensed entity and to back the Bahrain licensed entity. The other jurisdiction is just when the parties have written it into their contract that disputes will be resolved under the auspices of the BCDR. There are two examples, two circumstances in which the BCDR would have jurisdiction over the dispute.

Q: I don’t know if you want to add something before we finish.

A: Just a couple of points that I jotted down in relation to the last couple of questions. I think what you said about measures in Bahrain to avoid disputes. I think one of the things the BCDR is pushing at the moment is their mediation capability. And mediation as a dispute resolution choice or forum which is very much in its infancy in the Middle East and I think one of the things that could be done is to push some kind of government initiative or some other official push to try and make the parties go into some form of mediation before they actually start formal dispute resolution proceedings that is one idea. Another idea I thought would be possible is if there was some kind of government mandate another kind of proceedings such as adjudication in the UK? Adjudication is a statutory right. Any party to a construction contract has a right to have a dispute resolved by adjudication and adjudication is a very, very quick - it is what we call a quick and dirty process. It is obviously subject to appeal to the courts but it is very useful in the sense that construction disputes are not allowed to fester and go on for months and months and months. They are allowed to be resolved very, very quickly. The parties can enforce the judgments very quickly and that is very useful for a contractor’s cash-flow.

If there is some kind of procedure like that instituted I think that would go a long way to resolving some of the issues in the industry. The major issue is that construction disputes, as far as I’m aware, are a relatively new phenomenon. What used to happen was that if there was a problem on a construction project what used to happen was one of two things. Either the parties would just say, “Look, if I’m a client and you’re the contractor, we would just say to each other”, “Look”, you know, frankly our directors going to sort this out at the end of the construction project the chief executive of the client, the chief executive of the contractor and they sat down, have a coffee and they have a key and they say well, here are all the problems in the project, “I tell you what, I’ll give you some money and it goes away.”

That was the first thing that would happen. The second thing that would happen was just contractors would just say, “You know what, we’ll make it up on the next job”. That is obviously not happening now with the downturn in the industry and that’s what caused the real upsurge in the last few years in construction disputes.

Appendix D – Arbitrator 3 Interview transcription
Q: so from your experience, have you worked on a dispute case in Bahrain specifically in the construction sector?
A: I have gone through a lot of disputed as an arbitrator or a court expect in Bahrain with regards to construction.

Q: What was the cause of dispute in that project or what have escalated the dispute? What are the factors that generated the dispute?
A: there are many elements that fuelled the dispute in that particular project. First of all, the payments were not done on the proper timing of invoices as it was stipulated in the contract and agreement, which has resulted in the contractor not being able to reschedule the work to finish within the required time. Another the changes and variations in project, further poor selection of the supervision consultants and also changes in the specifications of materials.

Q: Right, but I do understand that most of contracts allow the client to have changes so why would that be a dispute in that case?
A: Because sometimes some contracts, maybe one of the reasons for disputes that the contracts are not well written, and again the changes or the variations, they, both sides, don't follow the proper procedures for accepting or invoicing for the variations. For example, they said, "No, you didn't tell me this would cost this much extra or not? This material is not available or so.” So that is what causes the disputes.

Q: So we can say no proper following of contracts?
A: Yes.

Q: So I will leave this matter for now and I will jump to the reasons that are created by the contractors. What do you think those are?
A: For the contractors there are different issues. Sometimes they are not capable of handling the size or magnitude of the project, they don't have the resources, labour, or manpower to do the project, or the skills. They don't have the proper supervision, or let's say the proper skilled staff, say engineers or so on, and also maybe mismanagement. Mainly it's mismanagement let's say, from the contractor's side.

Q: So if we go back to the contracts, I know that there are certain contracts like JCT, FIDIC, and Bahrain Ministry of Works have their own contract. Do you really think that misinterpretation of those contracts are a major causes of disputes in Bahrain?
A: It is not the matter of interpretation but it is the matter of following up, following the contracts, because mainly the contracts are done by the legal advisors or legal sections within that public sector and it is implemented by the engineering or technical staff. Maybe the technical staff are not aware of the exact project contract and they'll not raise any finger or any hand to resolve a dispute until it is too late, when they find that there is a breach for the contract.

Q: So in a summary I could say that contracts are prepared by legal bodies and implemented by technical so that where the conflict happens?
A: That's where the gap usually is.
Q: I understand that there is BCDR, Bahrain Chamber of Dispute Resolution, but from the small research I've done they have not dealt with any construction dispute, so as the BCDR or the initiation of BCDR in Bahrain, is that a step toward dispute resolution that the Kingdom of Bahrain is taking, or not?

A: Well, as I understand it, BCDR, their mandate is also to resolve construction disputes. Until now according to the regulations or bylaws that any dispute, financial dispute, in Bahrain, which is more than 500,000 that is raised in court is directly transferred to BCDR, according to law. So, that is a financial dispute between financial institutions.

Q: All right, not construction?

A: Not construction, but BCDR is capable of handling those disputes for the time being and during one arbitration case where the two parties agreed to do it according to BCDR rules. Okay, but it is not managed by BCDR.

Q: Few weeks ago I read an article in Al Ayam newspaper, the Vice President of Bahraini Contractors Society, he was urging that Bahrain should have specialized construction dispute court. Do you think that is something possible or why is it not being implemented in Bahrain yet? If we forget the fact that BCDR deals with projects above 500,000, but if there are projects below that number, what could happen in that case?

A: Okay, above 500,000 is only for financial disputes, not for construction.

Q: Right, so there is nothing specialized for construction in Bahrain?

A: Unless the two parties agree by themselves to take their case to BCDR. That has not happened yet.

Q: So what needs to be done in Bahrain to fulfill the requirements of construction dispute?

A: As you said of what the Vice president of the Contractors Committee about having a specialized court to investigate or to look into the disputes about construction and so on, I don't think it is a bad idea but it has to be well-organized because you have to set the proper laws for it, regulations and who should handle it, and how to classify and categorize all the disputes, and which case to go through this court or not. So it has to go to certain procedures and who is going to look into those cases so at least you have some judges or legal personnel besides technical people aware of issues in construction, aware of disputes in constructions.

Q: Another thing that I've experienced, I don't know if you've been through it, in the tender stage there are a lot of factors that actually contribute into dispute later on the project. For example, like a very short tender period. What are the factors that contribute into disputes, pre-contractually?

A: Sometimes the project is not well defined. There are a lot of assumptions being kept for later stages, or for example, I had a dispute earlier between one government entity and a consultant. The problem is that sometimes the tender for consultancy for certain projects which is not designed yet. So you want a designer, so you've sent it for a tender. Then they are not aware what the project is exactly? The definition, or the scope of work required, or the budget required for that? For example, let's see, I'm not referring to that project, but let's say we are going to build a school site and you want to tender for consultancy services, then depends how much is the budget for the school and accordingly on what basis you are going to analyze the proposals submitted by the different consultants, and to choose which one is the right one. Is it the lowest in price? Or is it the specification, or are there other elements that you want to judge in your selection? So that actually sometimes is not the best way to select the consultant for such projects. And also, if you are going to tender for build and design, again, the same problem.
Q: The best requirement?

A: Right, now I understand that there are a few procurement methods in the construction world, for example, traditional, design and build, construction management, management construction, all those different things. Do you think that the correct implementation of those types of procurement, would benefit the construction of Bahrain?

Q: So, again from your personal experience in working for the government, we normally take things traditionally. Like, we have the design, we tender the project, we analyze the tenders, and we award it. Do you think that the different types of procurement methods, for example, design and build type of contracts, or construction management, do you think that if those types of procurement were implemented correctly would lower the amount of disputes in projects in Bahrain?

A: I personally might not be able to comment on this, but my personal point is that might not, because in those methods unless the factors, or let's say the unknown factors, are defined very well, then yes. Because the traditional method of construction still is quantified, you have the bill of quantities available but for the others it is not, so it makes it, there are so many unknowns for the contract between the two parties that should be resolved and should be equipped for disputes.

Q: I don't know if you want to add something before we finish?

A: I actually suggested, or recommended, to use dispute resolution board, a year ago or more, maybe two years ago, that for certain projects of certain magnitude, that at least from the tender stage that is well-defined that there should be a resolution dispute board for each project. Individually, for each, from at the tender stage.

So that each party will appoint one person, not necessarily from their own management, it might be a lawyer, it might be another expert, and maybe they appoint a third person with them so that they meet very quickly during the project and then if there is any dispute this board would give their award or resolution on the spot and it has to be implemented. The two parties, they have the right to appeal, but they have to implement it first. They can raise their issues separately but the project should not stop. That's the beauty of it, that they should give an answer for any dispute to go ahead and then if there's any consideration from any party then it is being forwarded, later on will look after separately, but the dispute resolution board should give answers immediately for such issues. Because the board is appointed by both, the contractor and the client. Okay? And they work together and meet maybe every month or quarterly and see what the issues to be resolved are. And maybe they’ll not be able to resolve all the disputes but at least maybe 85% of the disputes could be resolved. Maybe some of the parties or maybe one or more of the parties will have their own reservation of the board's resolution but still they have the right to appeal but the project should not stop.
Appendix E – Arbitrator 4 Interview transcription

Q: Have you handled or been in a construction dispute case before?

A: Yes, I have done construction dispute case.

Q: Could you talk to me about those in particular please?

A: Sure. As you likely know the main cause for the area of dispute you get in construction here is that most of the employers are governments or government related entities and so that adds a sort of a dimension to the issue that you may not get another place where it's totally private-sector because governments have a particular mission to accomplish for their country, and they are not simply driven by market forces.

They are driven by having to fulfil a certain mandate that they set out for themselves for the nation. So the construction is I wouldn't say secondary, but its part of their vision, part of their plan. So they want the thing to continue and they say we are the government, we can set the agenda. So we just want to proceed with it.

Now sometimes overzealous people on their side feel that contractors shouldn't be able to get in their way of fulfilling that mandate and so I think sometimes there is a perception on the employer side that they should be able to dictate more of the terms than would be normal in a properly, in a normally negotiated construction contract where, as you know, it's a balance of risks and rewards.

The risk is balanced to the various parties and of course as you know from risk analysis, the party who can most readily deal with the problem is the one who should bear the risk for that, and so the risk allocation sometimes is a bit skewed perhaps where you have governments being a party to the contract or a government entity. Sometimes I think that raises some of the issues.

Also just from the point of view as we have seen in Qatar typically is that they don't want, the government as employer does not want to have a dispute resolution system where they might lose.

Q: The government refusing?

A: No, well let’s not say refusing. Let’s just say that they don’t offer it.

Q: Can we call it not willing?

A: Yes, not willing. That's good.

Q: Yes, all right?

A: And so rather than -- I wouldn't say the government has been draconian in that sense. But what they do is they have been reluctant to agree to regular arbitration processes. I should say in the UAE, they are a bit more willing to embrace arbitration and in fact, if an arbitration award goes against them, they do pay, certainly, in Dubai they’ve come to terms with that.

And I think in Abu Dhabi as well, I haven't heard that in Abu Dhabi they are less willing to, but perhaps a good reflection of that lack of willingness generally is the reluctance to agree to DAB’s Dispute Adjudication Boards in the FIDIC contracts or in contracts generally, as they are written into the newer suite of contracts. Typically they like to take that out and leave it to the engineer and the engineer is not an objective body. The engineer is an agent of the employer although, according to the professional duties of the engineers, they are supposed to conduct themselves fairly objectively so you have that balance there too. So these all give rise to certain issues.
Q: So you said the main causes are, the unwillingness of governments to have a dispute resolution system. Is that a cause to the actual dispute? Is that what you mean?

A: Oh, no, no. It’s not a cause to the dispute. It’s more a bigger issue because disputes are caused, it kind of goes to number four question, how do you avoid disputes? Well, you avoid disputes by first negotiating a contract that allows both parties to do what their duties are in the contract that is allowing. I mean, understaffing is a problem here. People tend to bid low and try and get away with less people so they under-staff on their contract and they shouldn’t.

Under-capitalization is sometimes a problem. They have to allow the contractors and subcontractors enough money under the contract to do the work because, as you know in construction, money is the lifeblood of the project, and if anything stops the flow of money around the project, then the project stops. So those are key things.

To a certain extent, having government or a government entity being part of the negotiation perhaps tilts negotiation, so perhaps that first issue that we discussed is part of the cause of disputes if it skews negotiation because negotiation should be done on a market basis, and I say allocating risks to the party that can most reasonably bear that risk, and allowing for staffing and money to allow the contractors and subcontractors to continue so capitalization is important.

And those are all initial issues that you have to attend to. If you’ve attended to those initial issues then and as a sub text I did mention the standing DAB is always a good thing to have in a contract because then I think that's a key dispute avoidance technique to have that in there as part of your negotiation. And then the rest of it from then on is what I call good hygiene that means keeping good records, having good communication, keeping good minutes of meetings, having communication where all parties are free to raise potential problems early.

There is a tendency in this part of the world to minimize problems or to hide them, and that always leads to disputes. I mean, if you hide a problem, it's not going to go away, it never does. And people are not allowed to admit having ever made a mistake. They feel they’ll get fired and deported and everything else, bad will happen to them so they really don't want to admit a mistake and as you go up any chain in any company the people upstairs sometimes want to hear about mistakes.

So it's all of that and you can’t have that in a complex system like a construction project because you have a program and it's all programmed out and each contractor and subcontractor has their part to play, and they have to do it on time and on budget. And if there is a potential problem, that needs to be flagged early so that some workaround can be done to solve that, and that's why disputes occur because claims, we’ve distinguished between claims and disputes. I mean, the construction contracts have built claims into the process and claims are not a bad thing. They just are -- they just exist. Claims aren’t disputes. Disputes exist when claims cannot properly be dealt with.

And that’s why the dispute adjudication board is good because it deals with both. It deals with claims in terms of being informed. The standing board is good because it knows members of the standing DAB know the project. They are privy to the minutes and other communications. They can see what's happening from a higher level and then they can potentially flag up and deal with disputes before they occur, potential disputes, and so that's why it's good to have that in there.
THE DISPUTE IN THE CONSTRUCTION INDUSTRY IN THE KINGDOM OF BAHRAIN

Q: So, just a reflection because I’ve conducted two other interviews with two arbitrators before you, and they both agreed that the use of contract or not following the contracts is one of the main causes of disputes. And that takes me back to the four things that you’ve said. You’ve mentioned that allocating risk is not probably done in the region, and the tendency to minimize or hide problem of course raise the disputes, not admitting a mistake by whichever party again that causes the dispute. So these three statements that you’ve made for me fits with that statement of the other two arbitrators have said that there are no proper following of contracts. What do you think of this?

A: Well, yes, I think that's right. I mean, as you know the contract says a certain thing. A contract basically sets out your basic duty and allocates risk in a certain way, and there are many steps to achieving whatever responsibility that is under the contract and it's all in all of the little steps where the contract may not be followed because the contract sets out a general principle of what a party is supposed to do or accomplish and what’s their responsibility to accomplish.

And, as you know, there are many, many steps in a construction project to make that happen. And so that's why I say one has to be careful about all of the minutes of the meetings and making sure everyone is on task and focused and communicating clearly and honestly, and with their supervisors to make sure the proper information flows upward to where the results are being analysed because without proper and clear information, it's difficult to make proper decisions and allow for changes because there will be changes. Every construction project has many changes to it, many variations and because that's just natural. That’s normal. But in order to inform that change process, the change management process, you need good information. So that's where a lot of times it can fall down.

Q: So if we categorize it, would you think that the factors that a client do, whether they are aware of it or not aware of it, that eventually will lead to disputes? If we kind of narrow it down to pre-contract part of the actual project, what do you think the factors that clients do or have that would raise disputes wherever on a project?

A: Pre-contract, it's an imbalance of bargaining power obviously, if you and that that leads to what I was saying about the government being involved or government entities being involved. If you have the force of the state on one side and then you’ve got a good contractor who wants the work and then may be under bids or has not enough staffing, not enough capital, somehow just doesn't bring to bear the full force of the market forces that they should do in negotiating the contract, I think that's it because nowadays with the powerful software that everyone has, people should know what the job is going to cost and what time is going to be involved and what all the numbers are.

They should know the metrics. So it really does in pre-contract, well it just comes down to an imbalance of bargaining power where the contractor says, “Well, I really want to get into this market and maybe I'll have to shave some off of my hand in order to get that work and compete over other bidders.” But in doing that and then I suppose they must be thinking in the back of their mind as we go along we’ll get -- there will be variations, there’ll be changes, we can make it up. And then that doesn't happen. So then that's really the problem. Or perhaps a misallocation of risk where a contractor on the same front will take on a risk that perhaps they shouldn’t have taken on again to appear to be a better bidder, a better competitor.

Q: So what can be done, in your opinion, to minimize that or avoid that nature of contractors are desperately wanting to put into business and eventually minimize disputes?

A: Yes, more sophistication. Well, more sophistication on the part of the employer to understand that when they're taking on the role of employer, they're taking on a private sector role and they have to treat the contract like a private-sector contract. It's not something that they can command. They can't dictate part of the contract.

They have to know that there are market forces. There are risk allocation forces. There are capital requirements. There are time requirements. There are safety requirements. There are staffing requirements, and they have to be willing to meet those, and to do that on a technically proper basis in order to have the project proceed properly so I think that's the first step.
And then secondly, some contractors may have to admit they can't afford to work if the requirements aren't going to be there for them. They have to admit, “Look, we can’t enter this market right now because we can't meet those requirements and not do it and not underbid what they should be bidding.”

Q: From a personal experience, especially in Bahrain I see that there is more tendency towards awarding a contract to the lowest bidder without actually proper looking into his bid. Do you think that’s an issue for dispute?

A: Oh, yes, I mean it’s the second part of what you said, that’s the key one we know without the proper due diligence, without the proper examination of the bid. There is nothing wrong with being the lowest if it’s legitimately there. If all the elements we’ve discussed have been taken into account, that’s staffing and safety and capital requirements and time requirements, if all of those things have been taken into account, they still end up being the low bidder, that's just fine.

It's if they read from the wrong side of the menu. If you will, you look over on the price side and don't look at the ingredients side and just take it because the number is the smallest, that's as much due diligence as you do. That’s certainly not going to work out.

Q: Yes. Well, I think we have touched on what could be done like as part of the government and as you say, there should be more awareness of dispute resolution and they should, as we just mentioned that the awarding process should be more looked at to in order to avoid disputes. Well, I think that we've covered everything unless you would like to add something.

A: No, I think that's good for now.
Q: Since you are a consultancy office, I believe that you are representing some clients whether they are on governmental projects or private projects. Have you encountered any kind of disputes along your working line? If you have, could you talk to me about the nature of those disputes?

A: If we are talking about the disputes, we can say starting from a conflict or something like that to make it clearer, because we have a lot of disputes in our field as you know. We have a lot of parties in the project starting from the client, consultant, contractors and subcontractors, suppliers and so on.

So the main conflict starts or the main dispute starts when there is a conflict between the client and the contractor with a lot of clauses, which were not involved in the contract due to some maybe issues between the client and the contractors starting from the financial process.

And basically, here in the Kingdom of Bahrain the problem with our project is, everyone wants their project to be started, giving no time for the consultant or for the contractors to go through the drawings perfectly to avoid any disputes. So when it comes down to the construction side, we face a lot of problems due to the changes raised by the client and of course the contractors is eligible for some financial issues, but at the end of the project we face a lot of disputes because of that.

For example, I had a lot of projects recently. The contractor signed the contract with the client. There is some certain bill of quantity for the project, and at the end of the project there are a lot of variations and there we saw the problems, like the client does not want to pay the contractor these amount of variations. At last, the contractor is giving the variation with no relation to the contract. So we can find that the variation caused, for example, a 10,000 BD variation and the contractor is asking for 20 whereas the client wants to pay 5,000 BD. So this is one of the major disputes.

Other disputes mainly is the mentality of the client and the mentality of the contractors where they cannot understand the engineering field like for example, they come to the consultants for us, they come to the consultants and they want the project which costs us, for example, X amount, they want this for half price, while we cannot do that because of the overhead and then you start to giving them your quotation or your proposal, and then they go to other consultants, which they can with less overhead and profit and they ask for like half of our price. And then this is the big dispute.

Where comes the dispute from? It comes because the client does not understand that there is a quality of work given by X people which cannot be given by other people, and comes to us after finalizing the design, which is the other consultants telling us that this design is totally wrong and please correct it fast. There comes the dispute where we can say they are coming for us to help them redesign the project while the dispute is with their other consultants that they have a big fight with the other consultants because the other consultants do not carry out their needs or their design thing.

These are too small things that I could not explain in detail because there are a lot of disputes because of this. And we are facing these disputes with the contractors, clients, suppliers and these people on every single day.

Q: One of the points that you’ve said, is the variation submitted by the contractors does not normally have a cost implication with it? In another way or another example that a contractor would submit the variation,
would say that the changes that the client wanted would take this long time, and it will affect the process of the project, but normally it does not or they don't submit a cost implication or a clear cost implication to those variation. Is that a cause of the dispute? Is that what you mean?

A: Yes. Plus one point I can add to your point. Some of the clients do not trust the consultants 100% to do the draft contract to go through with between the contractor and the client and they prefer to do it themselves, which cause the disputes later on, because as a client maybe he does not have the engineering background, and then he starts doing the contract himself and then he cannot cover all the clauses, which we cover as a consultant.

And then when we sign the contract, when we start the construction of his project, he gets surprised when the contractor raise the variation which is not covered under his contract because he did not agree on unit rates, for example, or a specific price for any variation. Here comes the dispute. While if he did give us the contract to do it from day one, he could avoid this cost implication or cost variation.

Q: Another point has been mentioned to me before, that some of the contracts are not fit for purpose for the actual project. Do you think that is true?

A: Correct, 100%. They take a contract from somewhere else and they just copy paste the entire contract to follow their -- for example, they just change some items like the name, the client, the location and the cost, that’s it, the amount of the contract without going through the contract and the condition of contract point by point.

This caused a lot of problems when it comes to reality. Because as you know, every single project has its own criteria and different backgrounds from other projects. For example, a residential project is totally different than a commercial project than an educational or industrial project.

Q: Yes, very true. The first point you’ve mentioned that most client’s wants to kick start their projects quickly, and by that, they give a very short time for the contractor and the consultant to actually study the project? Could you elaborate more on that please?

A: Yes, sure. For example, when they come for the meeting, we submit to them a proposal followed with a timeline of the project like starting from the concept design, like our design stages, concept, schematic details followed by the municipality approval, and the tender package around these so -- they try their best to shrink the period, like from 50% or 60% out of it, because they are willing to start the construction immediately. This mentality is being taken by different kind of people here in Bahrain, by the people who does not have the right background for the real estate industry.

As you know, if you give more time for the consultants or the designers to give some more details in the design, for example, giving them one or two months extra, it can save you a lot of money and a lot of time when it comes to the construction period. While if you don’t give the design period that the sufficient time and the resources, you'll face a lot of problems and disputes onsite when it comes to reality. A lot of points will not be covered because of the timeline, and the client does not understand that thing.

Also, when it comes to the contractor side, when we come and negotiate to the contractor, we ask the contractor, for example, to get the quotation based on a 24 months project, while when it comes to the final negotiation with the client, the client shrink that period 24 to 18 or even 20 months, which causes the contractor a lot of headache and overhead as well. And he, will for sure, he will compensate on the quality of the project and the quality of work he will be doing.
THE DISPUTE IN THE CONSTRUCTION INDUSTRY IN THE KINGDOM OF BAHRAIN

Q: Another thing that’s been mentioned to me, since you are a client’s representative for both sectors, private and public, a point that has been mentioned to me before that some of the clients dictate the clauses of the contract.

A: Okay. Basically, the client dictates the contract based on what they need, but not based on what the project needs, and that makes a big difference because what you need is something else than the construction need. For example, some of the clients cover a lot of points that they need like, for the substructure when it comes to concrete and these stuff. When it comes to finishing, they like to finish it themselves without giving an idea to the contractor what are they willing to do and then there will be a conflict between the client and the contractor when it comes to reality because the contractor does not have the full idea of the project or the full needs of the project from day one.

And here comes the dispute because the contract did not cover these points from day one, and here comes the fight between the contractor and the client, and of course the consultant will be involved in that part, but won’t be able to solve it properly because of the contract signed from day one.

Q: We’ve talked a lot about clients and the factors that they contribute to disputes, but what about contractors? What do contractors do that basically turn into disputes later on?

A: Yes, contractors here in Bahrain or any other country, they are a profit organization 100%. And they are not a charity. They are not willing to do the project just for the sake of having this project. They are 100% profit makers. And they are -- what I call the contractor is the most dangerous field in the world because the contractor wants to make more profit and because of that he will concentrate on the quality, on the material, on the resources, on these stuff.

A lot of disputes we face between the contractors and the project itself that we sign a contract with the contractor based on a specific material and specific drawing, and when it comes to reality as we have our site team, when it comes to reality, the material purchased by the contractor to be implemented in this site is totally different than what we’ve signed, and here comes the dispute between us and the contractor.

Other disputes can be done by the contractor, is the resources allocated on the site. We approve some people to work on sites which are qualified based on their papers, but when it comes to reality, the resources allocated on site is totally different than what we have signed on or what we have approved.

And one more thing which can be added to is, some contractors start jumping over the consultants, avoiding them and going directly to the client to approve something which we, as a consultant, does not approve just to finalize the project, just to speed up the project as you know the clients will approve that because he wants the project done, and he will not look into the quality thing while we as a consultant will not approve because we won’t compensate on quality and we want the project outcome to be 100% matching with our quality and standards of work.

Q: Another thing that was mentioned to me before, that in addition to the lack of human resources, some contractors actually go into a project that they are not capable of. So what do you think of that?

A: Correct, 100%. I have a real example for this. We have tendered the project through one of the semi-government organizations in the Kingdom of Bahrain. And we specifically mentioned that we need a category (A) contractor, category (A) or category (AA) contractor, to bid for this project. When we asked the contractors to collect the tenders or the public tenders for the selected tender, so when we asked the contractor, the Tender Board for that semi-government authority passed out the tender without even looking into the qualification of the contractor. Usually, when we bid for the project, when we tender – we look at the qualification of the contractor before giving the tender.
THE DISPUTE IN THE CONSTRUCTION INDUSTRY IN THE KINGDOM OF BAHRAIN

In that particular project the Tender Board of the semi-government authority tender out the project and gave the tender package to the contractor without looking into the classification of that contractor, and we were against that 100% of the client which is the semi-government authority to give it out. And when we came to the tender valuation, we could not reject that tender from that category B contractor because the client gave package already.

And when we started evaluating the project, the tender went finally to that category B contractor because of the recommendation of the client. And when we came to the construction field, when we started the project, the project got delayed for more than 90 days because of the lack of the human resources and the qualification of the contractor. This is a real example which was happened to us.

And the contractors here in Bahrain have a different classification, but we don’t have a rule to avoid disputes for this. We need like an authority or a committee to classify and qualify the contractors for this kind of project. We don’t have a rule here in Bahrain to stop the contractor of doing a project of more than, for example, 1 million BD if he was a classification B. While we do have it in our field, which is our consultancy, we have a committee to stop the consultant of doing a project of more than X amount if he is category B or category C, which we need exactly a same rule to be applied on the contractors here. We have the rule, but that’s only for the Ministry of Housing and Ministry of works. That’s it. We don’t have it for the private sector.

Q: I’m just going back to one point that you’ve mentioned. What do you think of the awarding process, project awarding process in Bahrain, and their contribution to dispute later on in the project?

A: In general, there is a big lack of coordination, because the tender was usually, when they tender off the project, first of all, they look into the financial figure. They don’t look into technical figure. For example, we can have two different contractors. I don’t want to talk about consultants. Two different contractors with different categories, with different classifications, with different overhead and profits and number of people working for those organizations tendering for the same project, and of course the one with less resources, less material, will be lower project than the higher one. Here comes the lack -- and the problem in the Tender Board that if they want to award the project, they have to evaluate the project apple to apple. There comes the difference between the two contractors.

The same issue is happening with us as a consultant, we quote for a lot of projects, and we got confused and surprised when the project goes to a lower grade than us, while you have -- if you want to invite me to quote, you have to invite someone with the same category of mine. For example, I’m a category (A) consultant. They have to invite the category (A) consultants to quote for the same project. Don’t put me with a category (C) or category (B) consultant.

The problem starts from the invitation. Invite people with the same category and the classification and same experience. I can be a category (A) consultant, but I did not have enough projects or portfolios not high, like other consultants. I have, for example, let’s say 10 projects and other consultants does not have the same number of projects. There will be a lack of experience between both of us.

Q: Now as overall do you think that the disputes in Bahrain, are they more driven by client factors or contractor factors?

A: To some extent between both, between clients and the contractors, and sometimes they have disputes because of the consultants as well: not understanding the project, not understanding the type of the project as well. But basically, we need a full coordination between the parties to have the same outputs of the project.

Q: As an overall from what you say that the contractual causes of disputes would be unclear scope of work from what you say?
THE DISPUTE IN THE CONSTRUCTION INDUSTRY IN THE KINGDOM OF BAHRAIN

A: Exactly. Yes, and not understanding the project and the scope of the project.

Q: Now that will take me to the last two questions. What are the measures that currently in Bahrain, which would help the construction industry to have less disputes?

A: Having the right people in the right places. That is the main thing. We need a committee for these tasks, to lead and give some courses for the people involved in the construction industry to avoid these disputes.

Q: What about legally or measures that could be done by both clients and contractors? What do you think those are in your opinion? What could be done?

A: What can be done? Following a standard contract for each type of project to be approved by the client first of all, and giving the consultant the full authority to finalize this contracts and not interfering in that.

Q: Two suggestions I’ve been given by other interviewees, that one, that the contracts should be drafted by legal entity or legal offices?

A: But the legal entities does not have the real estate background or the contractual background for the property itself. They may have a legal background for some other fields but not the construction field. We have the two books that we follow which are FIDIC and JCT as you know, which can give us the exact contract for each type of project.

Q: And another suggestion was that for both the client and the contractor, to appoint a dispute resolution board, or a dispute resolution officer for each project. Do you think this would help?

A: Yes. As I said, we need a committee to give their opinion for every kind of project to avoid these disputes. Lately as, maybe you know, that we had a dispute board for the project which was on hold or they stopped project in Kingdom of Bahrain, to solve the disputes between the end users and the developer itself.

As you may know that we have couple of projects stopped back in the global crisis which was caused because of the economy, which is Marina West, Villamar and Amwaj Gateway and other projects. Kingdom of Bahrain government created a committee or a dispute resolution board to solve the issues between the main developer and the end user, and they are starting the process. This process is a good process to start with, and to be implemented in the entire Kingdom of Bahrain project, to have a full dispute resolution board for any, even small or big, conflict.

Q: I don’t know if you want to add something before we finish.

A: What I want to add is the construction field in the Kingdom of Bahrain is picking up now, and to be honest it’s picking up in a good way, better than what we had back in 2005, 2006, which was the re-boom of the properties. That was the unhealthy boom, but what I see now in the Kingdom of Bahrain that we have a healthy and steady booming in the construction field with more understanding from all parties of the project starting from the client, consultant and the contractor as well.

So what I see is that we have certain gaps in this industry which can be filled easily if we all together raise these problems and these issues and raise a solution for each and every party. For example, as we say, raising -- doing engineering firm which is only focused on solving the disputes between all parties of the project, giving some courses or lessons for all parties of the project, this can lead us to a perfect industry of the construction in the Kingdom of Bahrain.