

Construction Industry Conflicts and Disputes: A Study of Disputes Resolution Mechanisms in The State of Qatar

Ayman Aref M. Radi¹

¹Director of construction, Chairman Trading and Contracting, Qatar.

Corresponding Author: radi_006@yahoo.com

Abstract— Construction projects, whether in the private or public sector, demand on-time completion, adherence to budgets, quality standards, and safety measures. The success of these projects relies on various factors, including the ability of project stakeholders to manage and resolve conflicts effectively. This study addresses the causes and management strategies of conflict in construction projects within the Qatari context, with the primary objective being to identify the areas and phases where conflicts frequently occur.

The study is divided into two distinct parts. Firstly, it conducts a comprehensive investigation into the nature of conflicts in construction projects in Qatar. This involves identifying conflict indicators, triggering problems, and resolution methods. The study is grounded in a thorough literature review, an assessment of previous conflicts in Qatar, and a comparison with findings from existing literature. The second phase involves face-to-face interviews, facilitating a qualitative analysis of collected data on conflicts. These interviews serve to examine the emergence and management of conflicts in the context of a specific construction project in Qatar, giving the study a practical dimension.

This research contributes to a nuanced understanding of how conflict manifests in the Qatari construction industry and provides insights into effective management strategies.

Index Terms— Construction, Qatar, Nature of conflicts.

1. Introduction

Human nature inherently gravitates towards conflict; strife is as much a part of human existence as good and evil. Acknowledging this inherent aspect of human behavior, the philosophy of research cannot be unilateral but should encompass various dimensions. This research, therefore, seeks a solution to a problem and develops an approach to conflict and dispute resolution in the construction industry. Recognizing the long-standing nature of the issue, attempts have been made to develop a mechanism to control conflict and dispute in the industry.

Manuscript revised November 12, 2023; accepted November 14, 2023. Date of publication November 16, 2023.

This paper available online at www.ijprse.com
ISSN (Online): 2582-7898; SJIF: 5.59

In the construction industry, actors from complex environments are involved, and each has their own agenda and understanding of how to manage a project (Khekale and Futane, 2015). This acknowledgement sets the stage for understanding the multifaceted nature of conflicts in construction and the diverse perspectives of industry stakeholders.

An essential piece of information for project management is the precise definition of the term "project". According to the Knowledge Guide to Project Management - PMBOK, the best

definition for a project is: "A project is a temporary endeavour undertaken to create a unique product, service or result" (PMBOK, 2013: 3). Similarly, the standard ISO 10006 (2003: 2) defines a project as "a unique process consisting of a group of coordinated and controlled with start and end dates, for activities undertaken to reach a goal according to specific requirements, including constraints of time, cost and resources".

In the PMBOK (2013), a project is described as having three fundamental factors, referred to as a "triple constraint". This triple constraint is composed of cost, time and scope. The quality of the project, which is at the center of this triangle, is always affected by the variations of these three factors. As early as the 5th edition of the PMBOK (2013:6), the concept of the triple constraint was abandoned, and other conflicting constraints, such as scope, quality, resources, budget, schedule, and risks were introduced. Kerzner (2011:23) argues that customer satisfaction was not part of the triple constraint. Therefore, other factors, including business components, need to be considered to measure a project's success.

Meredith and Mantel (2011: 29) stated that a "successful project implementation is no longer subject to the traditional 'triple constraint.' That is, the days when projects were evaluated solely on adherence to budget, schedule, and performance criteria are past." All are concerned with customer satisfaction. Therefore, project managers must expand their measures for project success and include" a fourth item: client use and satisfaction" (Meredith and Mantel, 2011: 29).

2. Research Objective

This research's main objective is to study the construction industry in Qatar, mainly conflicts and disputes and their effects

on the industry. I am investigating the possibility of developing a method to draw a road map for conflict resolution in the construction industry. However, before reaching this point, I have to define the problem before trying to resolve it. To do so, I am adopting approaches to Qualitative research to guide my research works. Conflicts are part of human nature, and the study shall touch on humans' actions and reactions to conflicts and disputes. The required research philosophy shall be several, not just limited to one.

Researchers studying conflict in the construction industry have found that disputes are synonymous with construction projects. A study of the Pakistani construction industry identified several causes of conflict and disputes (Khahro and Ali, 2014). The researchers found that there are direct and indirect causes of conflict. The direct causes include payment delays, contract disputes, public disruption, poor communication, site conditions and contract changes. The indirect causes of conflict can be summarised as lack of funds, poor financial planning, bureaucratic processes and delays.

In a pilot study by the author of 10 construction projects in Qatar, five were public, and five were semi-public. These were built between 2010 and 2014. The research found that all the projects studied were behind schedule, over budget, and had poor workmanship quality, and clients were dissatisfied with the final product. The following points were identified as causes of the problems:

- The designers did not understand the client's requirements. The final design was not as required.
- Contractors did not conform to contract specifications during the construction stage.
- Designers and contractors did not deliver in the specified time frame.
- The client and his representatives did not respect the claims release procedure as stated in the contracts.
- Project costs were beyond projected levels.

If the above issues are not studied and resolved, they will create an environment of mistrust and conflict. Therefore, a study is needed to understand this environment, manage it effectively and achieve the objectives desired by the client or contractor.

The study aims to provide the necessary knowledge in the field of project conflicts and disputes in Qatar. The study is also normative in nature as it aims to provide recommendations on how conflicts can be managed most effectively. The research objectives are:

- Identify conflicts and their causes among the project team.
- Identify conflict resolution approaches/mechanisms used in resolving project disputes in Qatar.
- Present a methodology for effective project management dispute resolution in Qatar.

A. Research Questions

The research questions were worded differently; some were

open questions to get more than a yes or no answer. There were open questions aimed at getting more information and elaboration from the respondents. The main purpose was to allow the respondent to formulate the answers in their own words.

The following are the main research questions:

- Introductory questions: name, date of birth, place of birth, where you live and education.
- Are you aware of the most common approaches to conflict management?
- How are conflicts formed in the construction industry?
- What are the reasons for conflicts?
- Talk about your experience in applying Dispute Avoidance Procedures.
- What is your experience with the court's procedures in Qatar?

3. Literature Review

In the construction industry, it is difficult to find a design that has been planned and executed without problems or mishaps, especially in terms of budget, deadline and quality. It is also not easy to maintain a friendly and professional partnership with clients. Although no project is perfect, some can be completed with minimal problems; despite the difficulties, many projects are completed successfully (Abowitz and Toole, 2010). On the other hand, it is not uncommon for a project manager to have been involved in projects that have failed completely or in part. Project closure is also very common, but the project budget is severely affected in the process. The other side of the problem is a customer who has not received the product or service with all the features and functions they contracted for or expected. Project problems have many possible causes (Alutu and Udhawuve, 2009). However, the most common mistakes that can lead to these problems are: Inadequate planning and lack of scope definition; Tampering with the work plan; Inadequate or insufficient human and financial resources; Inadequate management scope changes; Communication failure between the stakeholders; No display of project risks; Failures in quality management (Abowitz and Toole, 2010).

Therefore, knowledge of critical practical cases with a good manager can prevent the recurrence of errors and eliminate conflicts and disputes, reducing failure factors and keeping the project on track.

A. What are the leading causes of conflicts in the construction industry

Looking at another evaluation of causes of disputes in the construction industry, Khekale and Futane (2015) and Sinha and Wayal (2013) found the following as reasons for conflicts. They used an interpretivism qualitative approach to investigate conflicts caused in the construction industry:

- Contract documents ambiguities.
- Unrealistic time/cost/quality targets by the client,

- Delay in releasing the site to the contractor.
- Unrealistic owner's expectations concerning time, cost and quality.
- The contractor did not receive site support as agreed.
- The contractor did receive design documents on time, which caused project delays.
- The contractor did complete the project as per the agreed dates.

B. Project Management

Project management is a science concerned with the planning and control of projects by management using the skills and knowledge of best practices and tools. However, good practice does not mean that the knowledge and procedures should be applied uniformly to all projects without considering their appropriateness (Abowitz and Toole, 2010).

One can say that managing a project means planning your running before starting it and then monitoring work execution. The main elements of the project are established in the planning phase, which includes the goals, the definition and the scope of tasks to be performed, and its role in sequencing the resources needed and available (Alutu and Udhawuve, 2009).

Controlling a project means measuring progress and performance using a predetermined logical system. The great advantage of managing a project well is that its implementation does not differentiate significantly from what was planned. A well-designed plan will mean a project runs on time and at the correct cost (Alutu and Udhawuve, 2009) in the best possible quality.

Every project must have a well-defined scope of work, timelines from start to end, an established budget, and the level of performance to be achieved. However, it can be stated that a project is a unique and temporary work because it has a purpose, and that purpose is only reached when project goals are completed. If the project does not have a clearly defined plan, there is a risk of not achieving the project's primary goal of generating results and bringing profit to the organization (Arh & Schwartz, 2009).

Specialized projects with a single particular product mean that a product or service produced at the end of a project will be somehow different from all other products or services generated in similar projects. Being single and not being created before in a project brings many risks and uncertainties, especially in the beginning. It, therefore, must be developed and managed progressively. This characteristic is the high risk that approximates the design concept of innovation.

The studies by Baldwin and Manthie (1971) were one of the earliest works to investigate project delays. They found that major construction projects suffer considerable damage and losses when delays occur. Despite the different viewpoints of the research participants interviewed, there were clear areas of agreement between them. All groups felt that weather, labour supply and subcontractor scheduling were the leading causes of delays.

Akinsiku and Akinsulire (2012) argued that project delays

can only be reduced if their causes are identified and summarised; determining the cause of each delay in a construction project would help to avoid the same. Table.1 is a summary of Akinsiku and Akinsulire's (2012) research on the causes of delays as identified by previous researchers:

C. The Inherent Risks in Project Management

Risks are inherent in any project; in the beginning, risks will be more significant due to the need to meet the project objectives. As time goes on, risks decrease, but on the other hand, the risk of reworking parts built or made could be a significant issue since this would increase project costs. For this reason, the entire project must be managed by applying knowledge, skills, tools and techniques to achieve the expected results. Therefore, project management involves people, processes and tools. Alutu and Udhawuve (2009) view innovation as the instrument that will ensure the future survival of many companies, offering competitive advantages in the market. Innovation is closely linked to doing something new. And all that is new and unknown involves risks. Therefore, innovation is often associated with project management tools.

D. Failure in the management skills of team members

Project resources are crucial. Matching resources to the tasks at hand is critical to the success of a project. Good leaders know how to get the best out of their people and how best to match the skills and expertise of team members to the task at hand. For example, it is not enough to know that three web developers on staff are "jack of all trades" (Arh & Schwartz, 2009). The project manager and his team need to measure strengths and weaknesses between the development databases, coding, or the user interface, which will allow for optimizing the abilities of their staff.

E. Inexperienced Project Manager

Assuming responsibility for a project is inherently complex, and the challenge intensifies when the individual in charge lacks sufficient experience. Particularly for high-profile projects involving intricate activities or those with more than ten staff members (Nawi et al., 2012), it is advisable to appoint a project manager with extensive experience. Such a manager is adept at handling various aspects, from conducting status meetings to managing risks and expectations effectively.

A project manager's experience must not be compromised when dealing with a project's critical activities. Bandura (1986) argues that a competent project manager must be able to manipulate various subjects simultaneously. This argument does not contradict the fact that managers of successful projects often have expertise in a particular specialization.

F. Inadequate Project Scope

The scope does not need to be etched in stone. However, it requires commitment, and the project managers must establish a scope management process for handling requests that alter the scope. They need to know and understand precisely how this

Table 1
 MAJOR CAUSES OF DELAYS & CONFLICTS (Akinsiku and Akinsulire, 2012)

Researcher	Country	Major causes of delay
1 Okpala and Aniekwu	Nigeria	1. Failure to pay for completed works 2. Poor contract management
2 Mansfield, Ugwu and Doran	Nigeria	3. Shortages of materials 1. Fluctuations in costs 2. Improper financial and payment arrangements 3. Inaccurate cost estimates 4. Poor contract management
3 Semple, Hartman and Jergeas	Canada	5. Shortages of materials 1. Increases in the scope of work 2. Inclement Weather 3. Restricted access
4 Assaf, Al-Khalim and Al-Hazmi	Saudi Arabia	1. Changes in design/design errors 2. Delay in payment to contractors 3. Poor quality 4. Shortages of labour supply
5 Chan and Kumaraswamy	Hong Kong	5. Slow preparation and approval of shop drawing 1. Client-initiated variation 2. Poor site management and supervision 3. Slow decision-making by the project team 4. Unforeseen site conditions
6 Ogunlana and Promkuntong	Thailand	1. Changes in design/design errors 2. Liaison problems among the contracting parties 3. Shortages of materials
7 Odeyinka and Yusif	Nigeria	1. Variation in orders. 2. Slow decision-making. 3. Financial/Cash flow difficulties 4. Resources management problems 5. Planning and Scheduling problems 6. Inadequate site inspection 7. Inclement weather and acts of nature 8. Labour disputes and strikes
8 Mezheh and Tawil	Lebanon	1. Material shortages and changes in type and specification during construction 2. Skilled and Unskilled labour shortages and Poor productivity. 3. Shortages of equipment, Unskilled operators, slow maintenance and old equipment. 4. Cash flow during construction, delay in contractors' progress payment by owners, contractor financing problems and varying material costs. 5. Design changes by owners, design errors by consultants, geographical problems and unexpected site conditions 6. Permits from municipal permits for foreign expatriates, building codes, bureaucracy in government agencies and Urban planning permits. 7. Shop drawings, preparation of network scheduling, lack of personnel training and management support, poor judgment in estimating time and resources and poor initial site planning.
9 Al-Momani	Jordan	1. Change orders/ design 2. Inclement Weather 3. Late delivery 4. Poor design 5. Unforeseen site conditions
10 Lo, Fung and Tung	Hong Kong	1. Exceptionally low bid 2. Insufficient resources due to the contractors' lack of capital 3. Inexperienced contractors 4. Poor site management and supervision by consultants 5. Unforeseen ground conditions 6. Works in conflict with existing utilities

request will impact everything from the budget to the schedule.

G. Inadequate Project Scope

The scope does not need to be etched in stone. However, it requires commitment, and the project managers must establish a scope management process for handling requests that alter the scope. They need to know and understand precisely how this request will impact everything from the budget to the schedule. According to Nawi. et al. (2012), the project manager must then

make a call to assess whether this request can be fulfilled.

H. Lack of Project Schedule Management

The project schedule is there for a reason: it helps keep the project ongoing and finish on time, and it is one of the most critical steps to a successful project. It also helps prevent the domino effect, resulting in project tasks being left behind (Nawi. et al. 2012). Project managers must be strong and competent when establishing a schedule and ensure that all

project participants know this schedule and any changes. One of the most common surprises that cause problems in a project is when a customer is unaware of upcoming deadlines. Therefore, the project schedule must be in all project-related discussions (Selviaridis and Spring, 2010).

I. Attitude Barriers

Project managers should never have an opinion that discourages team members from making suggestions. The fact that the final decision will always be with the project manager does not justify the attitude of "my way or no way". This attitude discourages valuable feedback from team members to be placed on the table. This also appears condescending to the customer, cultivates poor team morale, and overstates the role of the project manager (Selviaridis and Spring, 2010). The role of the project manager is to ensure that the team members work optimally to achieve project objectives and not be a "king" of others (Blacud. et al. 2009: 199-206).

J. Undervaluing the Project Workload

Project managers must remain realistic about the project's requirements to avoid problems later. Project managers' main target is to please their clients. However, in doing so, they often submit project plans, ignoring conflicts regarding cost, schedule, or a newly assigned budget (Blacud. et al. 2009: 199-206). This form of underestimating is especially problematic because ensuring the work is done faster and at a lower cost fall on the team members (Bourgeois. et al. 2010).

K. Overlooking Minor Issues

If problematic situations arise in the project, they must be addressed immediately. If an employee misinterprets a project task, rework is required or an error occurs in the project budget, the project manager must address these problems as soon as they arise. Many projects fail because small problems become big problems and create mistrust between the client and the project team. So, if a problem arises, you should address it directly (Bourgeois et al. 2010).

4. Research Philosophy

Creswell (2012) has described several philosophical positions that can be applied in qualitative research, and for this research, I will use the postpositivist research method. Postpositivists believe that there is a reality that can only be imperfectly known. Postpositivists also rely on social constructivism in developing their understanding and definition of reality. Social constructivism helps the researcher to understand the world in which they live and work, to develop multiple meanings for issues and to look for the complexity of viewpoints (ibid). In this approach, the researcher employs a strategy of posing broad, general, and open-ended questions. The emphasis is on delving into the processes of interaction among participants while taking into account their cultural and historical background. Moreover, this methodology recognizes and delves into the varied ways in which participants

comprehend and interpret the world surrounding them.

Ponelis (2015) sees qualitative research as a way of gaining a holistic understanding of rich, contextual and generally unstructured, non-numerical data by conducting conversations with research participants in a natural setting.

A. What is Qualitative Research Interviewing

The study followed the postpositivist model, which assumes that the interview process provides direct access to the knowledge that is already in the mind of the interviewee. Another definition states that "an interview is a professional conversation in which knowledge is constructed in the interaction between the interviewer and the interviewee" (Rowley, 2012). It is therefore an exchange of opinions between two people talking about a topic of common interest. The interviewer works to understand the central topic of the research.

Interviews are primarily used in qualitative research when the researcher is interested in collecting data or facts and looking for perceptions, opinions, expertise and behaviors (Rowley, 2012). There are various methods of data collection that can be compared to interviews. This is a common consideration for an inexperienced researcher trying to choose between interviews and questionnaires.

Amundsen's (2003, p. 104) view on the use of interviews in research: "Our research utilized in-depth interviews as we tried to understand the full story of the unemployment experience. One surprising finding was that participants often reported that the research interviews were more helpful than most of their previous counselling sessions. It was not our intention to do counselling, but apparently this type of qualitative research gathering contained some strong counselling elements. As I continued participating in qualitative research, I noticed the same dynamic developing in many other studies." This therapeutic benefit experienced by the participants was an unintended consequence of the interview process. This occurred when the researcher encouraged reflection and disclosure, which gave participants a new perspective on their experiences when they shared them with the researcher.

McCrory and O'Donnell (2016) believe that both the therapeutic and helping situations in a qualitative research setting are critical to the success of the undertaking, as they are able to establish and develop an effective working relationship or "rapport" in a short period of time and maintain this throughout the interview. The researcher's capacity to engage with participants in a qualitative study is crucial, as it greatly enhances the ability to explore their experiences as thoroughly and appropriately as possible.

B. Which type of interview is best?

Kvale (1996, p.145) quality criteria for qualitative interviews is that a researcher can evaluate interviews according to the answers collected if they are spontaneous, rich, specific and relevant short questions with longer answers. The interviewer provides the required clarification to the meanings of suitable

answers. The interviewer attempts to verify interpretations of participants' answers.

Hannabuss (1996) recommends a number of skills for interviewing: First, the interviewer must establish rapport with the interviewee; second, the interviewer must learn to keep the conversation moving; third, the interviewer must know when to interrupt the interviewee and focus on the conversation; fourth, the interviewer should adopt a nonjudgmental attitude and practice patience.

Interviews can be structured, similar to questionnaires. The unstructured interview is based on a limited number of topics where the focus is on encouraging the interviewee to talk about the topic, and the interviewer can use the interviewee's comments and develop new questions and questioning approaches according to the interviewee's abilities. The semi-structured interview is the most common approach. The interviewer can use different forms of questions and ask more questions as the interview progresses. In this approach, the experienced interviewer can change the style, pace and order of the questions. Using the interview guide helps the interviewer to maneuver during the interview.

Chivers (2003) describes his experience during his research interviews, where he used in-depth interviewing and conducted one-to-one interviews as a helpful and profound experience for those he interviewed.

C. Drafting Interview Questions

Interview questions are designed to generate facts which will answer research questions. However, these questions given to the interviewee may not match the researcher's questions; in this case, the questions should adopt the intended participant, encouraging the interviewee to talk about the subject at hand. Research questions can be informed by practice or experience. There are two primary research approaches: inductive and deductive. In the inductive approach, researchers employ a previously established theory to guide their investigation. On the other hand, in the deductive approach, researchers derive the theory from the data collected during their study. Research shows that many studies use inductive and deductive approaches to formulate research findings (Rowley, 2012).

D. Research data collection

Part of this research data collection includes interviews with people with expertise and knowledge of the Qatari construction industry. The primary objective is to acquire insight and understanding into experiences, opinions, attitudes, behaviors, processes, and predictions. This qualitative approach is designed to offer a comprehensive view of the dynamics within the industry. My first choice was the engineers I worked with because of their knowledge and experience in the construction industry. I chose to start with a Qatari national rather than an expatriate. However, I will include expatriates at a later stage. The candidate for this interview was a Qatari engineer who has been in the industry since 1990 and has made it from junior engineer to director of engineering services.

I have used a semi-structured interview approach. This methodology allows for flexibility while ensuring key areas of interest are covered during the interview process. The questions started with simple introductory and background information, and then I started with general knowledge about conflict assessment. Then, I moved on to scenarios of problems and asked the interviewee to state their point of view. In the next phase, I asked direct questions about conflict resolution approaches, and the last stage was about government agencies created to educate industry stakeholders and resolve conflicts and disputes expeditiously to save time and costs for all parties.

The interviews were constructed to show how senior management in the Qatari construction industry works and deals with conflict and disputes. The questions were structured to explore the interviewees' understanding of conflict resolution methods and alternatives, assess their knowledge of contracts and construction law, whether they take a logical approach to conflict resolution, and finally, assess their knowledge of the construction environment in Qatar and the government's efforts to find alternatives to eliminate conflict and expedite conflict resolution mechanisms.

The interviews were semi-structured. The questions served as a guide and were not asked in the same order. However, the order of the questions was structured to lead from one area to another. The structure was changed during the interview due to the nature of the answers given.

The first part was about simple facts: Name, nationality, education, and years of experience. The next part of the interview was about the interviewee's general knowledge and experience in engineering and construction, and the answers were designed to assess the interviewee's experience in the industry. The next part of the interview was to identify the respondent's understanding of project conflict and different approaches to conflict management. The answers were intended to provide information about the interviewee's experience with conflict management. However, the responses did not meet the required level of senior managers, probably because they did not have to deal with conflict themselves. The practice was to send the case to the legal department and entrust them with conflict management.

The last two sections of the interviews were designed to examine the research problem and to understand how a senior staff who worked as an engineer and then became a senior manager would tackle conflicts and disputes. The feedback on the interview showed that for the construction industry in Qatar to develop an approach to conflicts and dispute management, there must be a structured program where stakeholders are involved in a series of awareness and training programs on how to deal with conflicts and disputes and where to go if a dispute is a materializing and there must be a resolution. My understanding of the construction industry in Qatar requires further investigations to reach the necessary view of the industry.

A total of 45 individuals were interviewed for this study. The sample size was deliberately chosen using the purposive

sampling technique (Given, 2008, p.799). This method ensured a purposeful and targeted selection of participants, aligning precisely with the specific goals and scope of the research. The decision was made based on the participants in the study and the researcher's familiarity with the topic. The participants represent all stakeholders in the Qatari construction industry and come from many nations, ethnicities and language groups. The diverse participant selection aims to capture a broad spectrum of perspectives, enriching the qualitative data and providing a comprehensive understanding of the industry. Table 2 shows the number and type of study participants.

E. Research Data Analysis Method

1) Content Analysis

To analyze the collected data, the researcher utilized the content analysis method. This technique facilitates the identification of key elements within the material by interpreting the meaning of textual data. Specific methods and procedures were implemented to categorize and summarize the textual data effectively. The researcher carefully collects information from written, spoken or visual documents such as speeches, books, newspapers and magazines (White and Marsh, 2006).

F. Research Findings

1) Leading Causes of conflicts in the Qatari construction industry

Comparing the data collected in the interview in Qatar with the studies by Khekale and Futane (2015) and Sinha and Wayal (2013), it can be concluded that the causes of conflict in the construction industry are always the same: Problems with the contract documents, payment problems, delays in work progress, design errors, payment evaluation problems, too many claims by the contractor, and administration of the contract by incompetent personnel (Pawar and Patil, 2014).

One of the main causes of conflict in the construction industry is the handling of claims. When a contractor submits a claim, they expect automatic approval. However, this is not the case for many projects. The contractor's first reaction is that the decision is unfair. AIBINU, A. (2006). Another cause of conflict in the industry is the politics involved in processing claims, which can lead to the end result being unfair to the contractor.

Procedure for avoiding disputes in the construction industry

A significant weakness in the Qatari construction industry is the lack of knowledge of dispute avoidance procedures (DAP). The interviews revealed a lack of knowledge and commitment to the primary DAP methods, such as engaging a dispute resolution advisor or a dispute review board. Using a DAP is much better than waiting for a conflict to escalate into a dispute. The research findings suggest that project managers should work to prevent and resolve conflicts before they become disputes and court cases.

A major setback in the interview is that the majority of respondents reject the use of third-party intervention. This DAP

process is similar to the Dispute Adjudication Board (DAB) and the Dispute Resolution Adviser (DRA). Research by Danuri et al. (2010) has shown that the Dispute Adjudication Board (DAB) is a successful dispute resolution mechanism. The FIDIC form of contract provides for the DRA as one of the main methods for resolving disputes in a project. And it can be used by all parties.

2) Arbitration & Litigation Procedures

The respondent stated that arbitration would be the last resort before litigation. However, alternative dispute resolution methods make arbitration unattractive to the parties as this approach requires formal hearings and orders, and everything happens after the project is completed (Overcash, A., 2015).

3) Construction Projects Success

A critical success factor is that the project was completed on time, within budget and to the required quality and material standards (Cheung et al., 2000, cited in Danuri et al., 2010, p. 350). The success of a construction project depends on many factors, one of which is how the project team handles conflicts that the project faces. Disputes and conflicts can be disruptive in any area of life, and projects are no different. Conflict is a major source of mistrust between members of a project team, creating a hostile environment and weakening collaboration

Table 2
Interview Participants

Title	Number of Participants
Clients	3
Architects	5
Contractors	10
Sub-contractors	10
Engineers (structural, civil & quantity surveyors)	10
Quantity surveyors	5
Lawyers (legal Firms)	2
TOTAL	45

between members. All of this can undermine project management, resource coordination and communication channels, and project management no longer has control over project time.

5. Conclusion

The construction sector in Qatar mirrors the situation in other countries. However, the findings from the interviews and respondent feedback indicate an urgent need for additional research and training in the Qatari construction industry. Stakeholders need to improve their ability to address and mitigate conflicts before they develop into disputes and court cases. This underlines the need for a proactive approach to conflict resolution.

The use of Alternative Dispute Resolution (ADR) and conflict resolution methods early on in a project is the recipe for a successful project, which unfortunately was not adopted by the interviewees. This emphasizes the missed opportunity for effective conflict management strategies. The study identifies

areas of conflict in the Qatari construction industry and shows how these conflicts can be overcome.

The construction industry in Qatar has evolved in recent years, particularly with the significant development of multi-billion-dollar projects and the need to redefine the scope of government agencies, courts, and the Chamber of Commerce to control and manage all major new infrastructure developments in Qatar. This evolution underscores the necessity for updated conflict management tools to align with the changing landscape of the industry.

New mechanisms to govern this new era of construction in Qatar also require a new tool to manage and control conflicts and disputes in the construction industry. Otherwise, the purpose of the development will never be achieved, and parties will sue each other. This emphasizes the critical link between effective conflict resolution and the successful completion of construction projects.

The research has shown that most parties involved in the construction industry in Qatar do not know how to use the legal system to their advantage. This underscores a significant knowledge gap in the industry, specifically in leveraging legal mechanisms for dispute resolution. While there are approaches to dispute resolution, most contractors are unaware of these approaches.

This points to a crucial need for increased awareness and education within the construction industry regarding dispute resolution methods, ensuring stakeholders are equipped to navigate conflicts effectively.

References

- [1]. Abowitz, D. & Toole, T. (2010) Mixed method research: fundamental issues of design, validity, and reliability in construction research. *Journal of Construction Engineering and Management*. 136(1), 108-116.
- [2]. Aibinu, A. (2006) The relationship between distribution of control, fairness and potential for dispute in the claims handling process. *Construction Management and Economics*, 24, pp.45-54.
- [3]. Akinsiku, O. and Akinsulire, A. (2012) Stakeholders' Perception of the Causes and Effects of Construction Delays on Project Delivery. [online]. *KICEM Journal of Construction Engineering and Project Management*. 2 (4), 25-31.
- [4]. Alutu, O., & Udhawuve, M. (2009) Unethical practices in Nigerian engineering industries: Complications for project management. *Journal Of Management In Engineering*. 25(1), 40-43.
- [5]. Amundsen, N. (2003). *Active engagement: Enhancing the career counselling process*. Richmond: Ergon Communications.
- [6]. Arh, G., & Schwartz, R. (2009) Supporting program management by developing, implementing, and transferring knowledge from the performance indicator monitoring system (PIMS). *Public Performance and Management Review*. 33(2), 241-254.
- [7]. Baldwin, J. and Manthie, J. (1971) Causes of Delay in The Construction Industry. *Journal of Construction Division, ASCE*. 97(2), 177-187.
- [8]. Bandura, A. (1993) Perceived Self-Efficacy in Cognitive Development and Functioning. *Educational Psychologist*. 28(2), 117-148.
- [9]. Blacud, N., Bogus, S., Diekmann, J., & Molenaar, K. (2009) Sensitivity of construction activities under design uncertainty. *Journal Of Construction Engineering & Management*. 135(3), 199-206.
- [10]. Bourgeois, J., Pugmire, L., Stevenson, K. Swanson, N., & Swanson, B. (n.d.) The Delphi method: a qualitative means to a better future.
- [11]. Chivers, G. (2003) Utilizing reflective practice interviews in professional development. *Journal of European Industrial Training*, 27(1), pp.5-15.
- [12]. Creswell, J. (2012). *Qualitative inquiry and research design: Choosing among five approaches*. Thousand Oaks, CA: Sage.
- [13]. Danuri, M., Hussain, S., Mustaffa, N. and Jaafar, M. (2010) Growth of Dispute Avoidance Procedure in the Construction Industry: a Revisit and New Perspectives. *Construction Law Journal*, 26(5), pp.349-363.
- [14]. Given, L. M. (2008) *The SAGE Encyclopedia of Qualitative Research Methods*. Thousand Oaks, CA: SAGE Publications, Inc.
- [15]. Government of Canada (2010), *The tri-council ethics statement*.
- [16]. Hannabuss, S. (1996) Research interviews. *New Library World*, 97(1129), pp. 22-30.
- [17]. ISO 10006:2003, *Quality management systems - Guidelines for quality management in projects*, International Organization for Standardization.
- [18]. Kerzner, H. (2011) *Project Management Metrics, Kpis, And Dashboards - A Guide to Measuring and Monitoring Project Performance*. 1st ed. New Jersey: John Wiley and Sons.
- [19]. Khahro, S. and Ali, T. (2014), *Causes Leading to Conflicts in Construction Projects: A Viewpoint of Pakistani Construction Industry*. International Conference on challenges in IT, Engineering and Technology (ICCIET), pp.16-121.
- [20]. Khekale, C. and Futane, N. (2015) Management of Claims and Disputes in Construction Industry. *International Journal of Science and Research (IJSR)*, 4(5), pp.848-856.
- [21]. Kvale, S. (1996). *Interviews: An introduction to qualitative research interviewing*. Thousand Oaks, CA: Sage.
- [22]. McCrory, M., O'Donnell, V. (2016) Developing a Participant-Centered Approach to Qualitative Research Interviewing. *Theory and Method in Higher Education Research*, 2, pp. 157-175.
- [23]. Meredith, J. & Mantel S. (2011) *Project management: a managerial approach*. 7th ed. USA: John Wiley & Sons.
- [24]. Nawi, M., Lee, A., Kamar, K. and Hamid, Z. (2012), *A Critical Literature Review on the Concept of Team Integration in Industrialised Building System (IBS)*

- Construction Project. Malaysian Construction Research Journal. 9 (1).
- [25]. Ponelis, S. R. (2015). Using interpretive qualitative case studies for exploratory research in doctoral studies: A case of Information Systems research in small and medium enterprises. *International Journal of Doctoral Studies*, 10, pp535-550.
- [26]. Project Management Body of Knowledge (PMBOK) (2013). 5th ed. Project Management Institute (PMI).
- [27]. Qu, S., Dumay, J. (2011) The qualitative research interview. *Qualitative Research in Accounting & Management*, 8(3), pp.238-264.
- [28]. Rowley, J. (2012) Conducting research interviews. *Management Research Review*, 35(3/4), pp.260-271.
- [29]. Selviaridis, K. and Spring, M. (2010) The dynamics of business service exchanges: Insights from logistics outsourcing. *Journal of Purchasing & Supply Management*. 16, 171–184.
- [30]. Sinha, M. and Wayal, A. (2013) Dispute Causation in Construction Projects. *Journal of Mechanical & Civil Engineering (IOSR-JMCE)*. PP: 54-58
- [31]. White, M. and Marsh, E. (2006) Content Analysis: A Flexible Methodology. *Library Trends*. 55(1), pp. 22–45.