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RESEARCH ARTICLE

Stakeholders' Conflicts within Engineering Professional Practice in Bahrain

Shereen Khalifa, Huda Almadhoob

University of Bahrain, College of Engineering, Department of Architecture and Interior Design, Bahrain.

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Corresponding Author: Shereen Khalifa, University of Bahrain, College of Engineering, Department of Architecture and Interior Design, Bahrain.

Abstract

Engineering practices in Bahrain currently face a significant relationship gap. Research has shown that conflicts in courts are related to conflicts between the stakeholders within the engineering practice field. This research aims to investigate the main reasons behind the conflicts in the engineering practice field and identify several ways to minimize the conflict. Based on a review of the literature on several conflicts between the stakeholders within engineering practice, interviews were conducted with experts involved in those cases. Samples were selected using non-probability sampling using the snowball sampling technique. Analysis of the interviewees demonstrated that the contract, stakeholders' experiences, project variations, financial aspects, workflow mechanisms, poor supervision, and unexpected aspects were the main reasons behind the conflicts. The analysis identified that strict law; proper stakeholder selection; valid contracts, contract templates, studied workflow mechanisms; precise supervision and thoughtful financial plan are ways to reduce conflicts. The results indicate that engineering practice in Bahrain does have several causes for the conflicts between the stakeholders. On this basis, it is recommended that engineering practice organizations use an electronic contract template to reduce the conflicts between the stakeholders. Further research is needed to identify the reason behind the stakeholder conflicts within different types of projects, which could strengthen the effectiveness of this research paper.

Keywords: Engineering Practice, Stakeholders Conflicts, Engineering, Management.

1. Introduction

According to the Royal Institute of British Architects (1887), Relationships are one of the main principles in engineering practice. As relationships are the dominant aspect between all parties involved in the professional practice, its purpose is to ensure that the pertinent rights and interests of others must be respected, and members must work to uphold them. Moreover, members must treat others respectfully and work hard to be inclusive, moral, and cooperative in everything they do. In other words, members must work to advance social justice.

1.1 Overview of the Conflicts within Engineering Practice in Bahrain

In Bahrain, conflicts often arise within the engineering practice field, particularly between contractors, consultants, and clients. The Council for Regulating the Practice of Engineering Professions (CRPEP) is the main organization responsible for formulating rules and regulations related to engineering professions in Bahrain. According to CRPEP (2014), CRPEP sets regulations that simplify engineering practice and aim to reduce conflicts among different stakeholders.

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According to Al-Ahli (2019A) and Al-Ahli (2019B), the contracting sector in Bahrain is closely tied to the real estate sector, and conflicts within the former can have negative repercussions on its reputation among investors and project owners. Moreover, timely completion of work and adherence to contractual obligations are crucial for maintaining a good relationship between the main subcontractors, project owners, and contractors. Shakl (2022) highlights that instances of conflicts between contractors and clients have been reported, often resulting in legal disputes and financial repercussions.

1.2 Scope of the Research

This paper aimed to search for the main reasons behind the conflicts that happen between the contractor and other parties in Bahrain. The paper will give the engineering practice sector in Bahrain awareness of the reasons that might be behind any conflict that might face the stakeholders. Moreover, the paper will cover the solutions to reduce those conflicts. The objectives of the research are to highlight several cases of conflict within the engineering practice field in Bahrain, to understand the main reasons behind the stakeholder's conflicts within engineering practice in Bahrain, and to identify several ways to reduce those conflicts. The research will answer this question: What are the main reasons behind the conflicts that happen between the owner, contractor, and consultant in the professional practice of engineering in Bahrain, and what are the ways to reduce those conflicts?

2. Materials and Methods

This exploratory research identifies the main reasons behind the conflicts in Bahrain between the engineering practice stakeholders, such as the owner, contractor, and consultant team. Moreover, the research is inductive and presents several ideas to reduce the conflicts between the parties within the engineering professional practice field in Bahrain.

The research depends on the observations and experiences of the people that were involved in those conflicts, directly or indirectly. Because of that, a qualitative method has been used to realize the main reasons behind those conflicts and list the solutions for them. As a result, the qualitative methodology was used to collect information and data.

2.1 Research Methods and Data Collection

The data was collected using two methods. The first method is the theoretical method, and the second is analytical which covers through the personal interview method. The theoretical method covers the roles and regulations for RIBA and CRPEP in shaping professional engineering practice. In the case study method, several cases were selected in Bahrain. The cases present conflicts between the contractor and the client or the contractor and the consultant. The selected case studies investigated the root causes of those conflicts and demonstrated how the parties attempted to resolve them. Researchers' observations and visuals were used to analyze the case studies. However, the interview method went parallel with the studied cases.

The second method to collect data is the semi-structured interview method. The interview method was used to collect data from experts in the stakeholders' engineering practice conflicts in Bahrain. Non-probability sampling is used to interview Twenty participants for the data collection process. Moreover, a snowball sampling technique was used to select the experts for the data collection process. The data collected through the interview method was based on the expert's experiences within the engineering practice field.

2.2 Data Analysis

In the case study method, the observations and virtual are collected as data and analyzed. The recorded interviews were converted into a transcribed file called the data in the interview method. Moreover, thematic qualitative data analysis was used to analyze the transcribed file. Several themes were extracted from the transcribed file. The extracted themes reflect the main reasons for conflicts that occur between the stakeholders in the engineering practice, as well as several ways to reduce the number of those conflicts. After data analysis, results and discussions were introduced based on those themes. Interviewee quotes and case study observations support the results.

3. Results

The results described the themes related to the leading causes behind the conflict between the owner, consultant, and contractor within Bahrain's engineering professional practice field. Moreover, the results have highlighted ways to minimize stakeholder conflict. The themes collected from thematic qualitative data analysis are presented in (Table 1).

Table 1. *Themes Extracted*

The Main Reasons behind the Conflicts	Several Ways to Minimize the Conflicts
The contract	Strict laws
Stakeholders experience	Proper stakeholder selection
Project variations	Accurate contract
Financial aspects	Contract template
Workflow mechanism	Studied workflow mechanism
Poor supervision	Precise supervision
Unexpected aspects	Thoughtful financial plan

Source: *Author*

3.1 Understand the Main Reasons behind the Conflicts

There are seven main reasons behind the conflicts that happen within the engineering professional practice field in Bahrain which are the contract, stakeholders experience, project variations, financial aspects, workflow mechanism, lack of supervision and unexpected aspects. (Fig. 1).

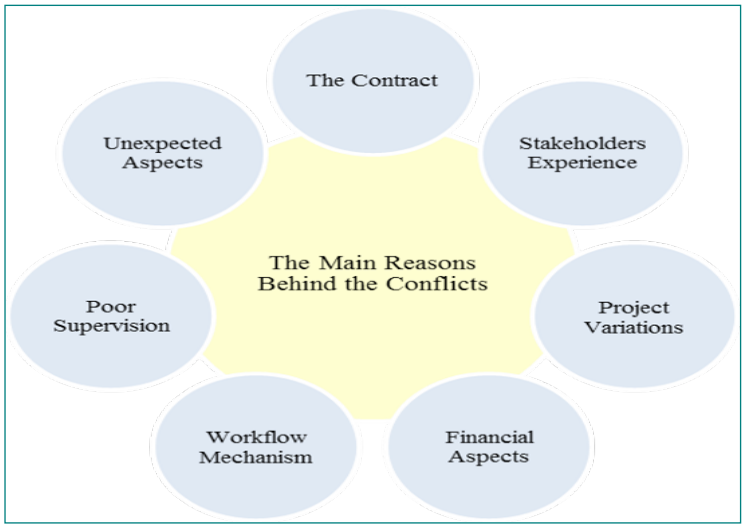

Figure 1. *The reasons behind the conflicts* **Source:** *Author*

3.1.1 The Contract

The contract in its beginning stages causes those conflicts between the owner, contractor, and consultant. 75% of the interviewees agreed that the contract was the most critical reason behind the conflicts. Interviewee (Int.) 1 confirmed that there must be a contract in any professional engineering practice. The contract is the law of the contracting parties, meaning that each party has obligations and duties. The contract must be clear and thoughtful, especially in large projects, and be reviewed by a legal man, a lawyer, and an engineer. However, Int. 1 and Int. 2 agreed that the jurist must address the contract and study its clauses and contents. Moreover, Int. 1 highlighted that one of the most important reasons for disputes is the ambiguity of the contract, the lack of correct clauses, or the absence of these clauses. Int. 1 referred to the fact that the parties argue with each other, and each party blames the other for verbal promises that it did not abide by. In other words, anything that the owner or contractor desires must exist as a clause in the contract for it to be committed. Moreover, Int. 3 highlighted that one of the main reasons that the contract causes conflicts is that it may include some clauses that do not follow the Bahraini Civil Code. As a result, Int. 4 and Int. 5 explained that if the agreement or contract does not clearly define the scope of work, conditions, and specifications, in addition to the scarcity of details in the engineering plans, many conflicts will arise between the stakeholders

3.1.2 Stakeholder's Experience

Although the contract is a critical reason behind the conflicts, stakeholder experience is the most important one, as all interviewees agreed upon it. Int.2 explained that the inaccuracy of technical specifications and specifications of building materials and checking them upon arrival, storage, or implementation causes many conflicts because of inexperienced stakeholders' hiring. Int. 6 highlighted the lack of sufficient experience for some contractors and the failure to choose the county servicer, who is the person who evaluates the cost of the qualified project. Or the county server may not be

familiar with the market price details, which results in many problems, including giving the contractor a specific price at the beginning of the project and changing the price by increasing it after a period due to financial hardship or incorrect pricing. In turn, the owner did not say to pay additional money because he had agreed with the contractor on a specific amount in the contract, and from here the conflicts began. While Int. 1 covers the experience from the contractor's side, Int. 2 covers it from the quality of the outcome. Int. 2 explained that when the contractor hires anyone as a dyer or a carpenter, many problems arise in the quality of the work, resulting in a dispute between the parties. In other words, Int. 6 highlighted that the lack of well-trained and qualified human resources leads to poor performance and quality of construction work. Furthermore, Int. 3 and Int. 4 stated that each stakeholder should stick to his or her duties that are appropriate for his or her level of experience. They highlighted that unfamiliarity creates many problems for the project and, therefore, for the stakeholders. Moreover, Int. 4 explained that each contractor should select a project related to his background. Conflicts will arise if the contractor takes on a school project and his background is not in this type of project. As a result, the lack of know-how and experience among the parties with the necessary knowledge in the implementation of projects concerning the rules, foundations, conditions, specifications, procedures, and requirements for the proper and correct implementation of projects is one of the main reasons behind the conflict in the engineering practice in Bahrain.

3.1.3 Project Variations

Any changes that occur without prior agreement must be in writing and documented as an integral part of the contract. Int. 7 and Int. 8 explained that the contractor might agree with the owner that changes will occur, but when he makes these modifications, the owner says he was unaware of the cost and refuses to pay. In other words, variations on the owner's side cause many financial problems. Int. 7 highlighted an example in Bahrain, where a contractor built a building consisting of ten floors, and the contractor appointed a subcontractor for all the doors. The contract was for a certain amount that included the cost of the doors. After the subcontractor made a door model, the consultant rejected it and changed it orally. Hence, the subcontractor ordered the materials from outside Bahrain and contacted the owner, telling him that the price of the doors was this amount. The owner told him that I wanted to know more details about the changes before he ordered the materials. The subcontractor did not pay any attention and ordered the materials. After completing the doors, he asked the main contractor for the additional amount. The surprise was that the main contractor did not know about these changes. All these changes were between the subcontractor, the owner, and the consultant, so the main contractor refused to pay the additional amount to the subcontractor, who subsequently filed a lawsuit against him. There was a change order that occurred to the doors. As a result, changes without a contract are considered one of the most important causes of conflict between the contractor and the owner or between the main contractor and a subcontractor.

3.1.4 Financial Aspects

75% of the interviewees agreed that financial or economic reasons are compassionate reasons behind the stakeholders' conflicts. As Int. 2 and Int. 4 highlighted, financial aspects cover the lack of money with the owner or the contractor to buy building materials, pay salaries, or give money to the subcontractor on time. In other words, when the contractor or the owner is late in paying, problems and conflicts begin. Int. 9 explained that in the case of real estate development projects on which developers are based on selling off-plan housing units, apartments, or houses, the applicable laws allow developers to implement their projects based on pre-implementation plans without having sufficient financial capabilities to implement and complete projects without approval. Real estate development projects cause a lot of conflicts as they depend on collecting installment payments from buyers. Moreover, Int. 9 and Int. 10 highlighted the financial aspects from the owner's side. The amount that the owner keeps to hand over to the contractor at the end of the project after the maintenance period, which is called the precautionary amount or retention, causes many conflicts. Moreover, after completing the project, the owner will either delay paying this amount to the contractor or may not make a payment at all. In Bahrain, there are a lot of issues due to this reason.

3.1.5 Workflow Mechanism

Failure to provide a correct mechanism for the workflow is one of the most important reasons. Int. 10 highlighted that the contractor might, in agreement with the owner, provide him with building materials, and in turn, the contractor carries out the construction process. When the owner delays in providing building materials, it affects the productivity of the contractor,

who plays a role in procrastination, absenteeism, and reducing the number of workers. As a result, a correct work mechanism must be provided, and the owner's ability to provide materials must be ensured before signing the contract so that the workflow is not negatively affected. Int. 1, Int. 2, and Int. 3 highlighted the main reason behind the failure of the workflow mechanism, which is the lack of management. Moreover, lack of clarity in the work plan and project management and failure to follow the correct steps in project management, such as filling out forms or schedules, cover risk management, change order management, and time management. However, the lack of a clear work schedule is the foundation of the workflow mechanism. Before starting any work, a work plan that includes the start and end dates must be available. Some contractors create an inaccurate work plan or fail to include it in the scope, which has a negative impact on the workflow process. As a result, the project delivery will be delayed without the correct work plan, leading to many disputes between the contractor and the owner.

3.1.6 Lack of Supervision

Poor or lack of supervision is one of the main aspects when we highlight the reasons behind the conflicts within the professional practice field. All interviewees explained that the engineering office or consultant engineer might not be present at the site, which leads to a defect in supervising the workflow. This is due to the owner's agreement with the consultant to visit the site once a week in order to reduce the cost of supervising the work. Moreover, supervision does not have to be like that, but the amount of supervision must be open and unconditional, and the consultant should follow up on the work progress on-site at least three times a week. As a result, many construction errors occur that the consultant needs to be made aware of due to his absence on the site, and there will not be an assurance of quality and safety in the implementation works. Int. 2 highlighted that one of the main reasons that leads to poor supervision is a large number of contracts. Int. 2 explained that a large number of contracts between the supplier and the main subcontractor may lead to a delay in the progress of work or a delay in receiving the amounts paid between the parties. As a result, the conflicts between the owner and the main contractor and between the main and the subcontractor or supplier are exacerbated. Moreover, Int. 4 highlighted that poor supervision might lead to an unclear authority's approval process. When the authority approves of something, and something else happens in reality, the authority will come and judge who was responsible for that. Each stakeholder will start to blame other stakeholders, and the conflicts will start. Int. 3 explained that the lack of accurate documentation of all works leads to accumulating undocumented events, from which problems may arise; therefore, precise documentation is essential.

3.1.7 Unexpected Aspects

Although it is not as critical as other reasons, it is still considered one of the reasons behind the conflicts between the engineering practice stakeholders in Bahrain. Int. 11 explained that one of the causes of conflicts might be things beyond the parties' control, such as the delivery of electricity and services or any natural disasters. The vision may not be clear from the beginning, and delaying any part may, in turn, delay work progress.

3.2 Identifying Solutions to Minimize Those Conflicts

Based on the literature review and the data analyzed, there are seven suggested ways to minimize conflicts within Bahrain's engineering professional practice field. (Fig. 2).

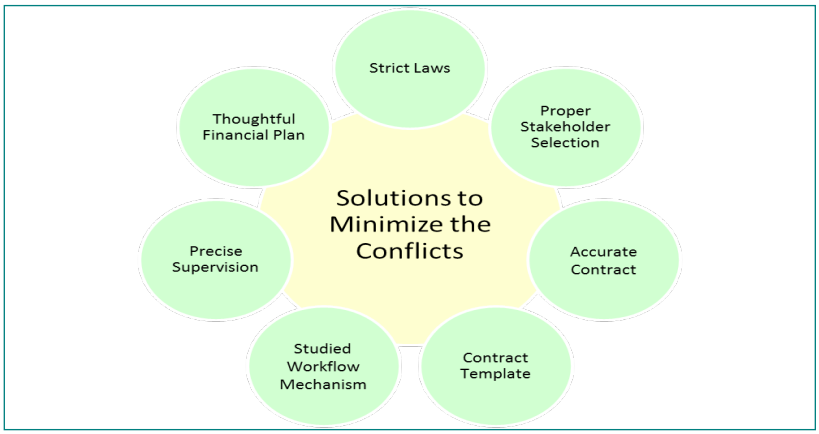

Figure 2. *The solutions to minimize the conflicts* **Source:** *Author*

3.2.1 Strict Laws

The first solution to reduce the conflict between the parties is to have strict and clear laws. Int. 1 and Int. 2 agreed that strict laws must be available to all parties, including the owner, the contractor, and the consultant, as the laws will protect all workers and professionals. Moreover, developing laws may regulate the financial problems between contractors and owners. One of the laws regarding the financial field requires that you ensure that the money is available and decide on the correct payment method before starting the project.

3.2.2 Proper Stakeholder Selection

One of the keys to reducing stakeholder conflicts is a proper stakeholder selection strategy. Int. 12 and Int. 13 agreed that there are several rules to follow to select a suitable contractor and subcontractors. First, it must be ensured that the contractor is qualified and able to carry out the work fully, as this is the owner's responsibility. Second, the contractor must be chosen in collaboration with the consultant. The consultant shall nominate the names of the contractors who are able to complete the work. Moreover, selecting a contractor with few commitments may impact the quality and timeliness of project delivery, as increasing the number of projects he works on may increase the contractor's burden. The owner may be one of the new victims of a contractor under pressure. Then, the contractor should hire the subcontractors, not the owner. As Int. 14 highlighted, the main contractor cannot be the main one if the sub-contractors are under his direct authority, because most of the problems come from the owner's sub-contractors, which the owner forces the main contractor to take under his umbrella. Finally, it must be ensured that the contractor has a sufficient number of workers and a real office, as some contractors take projects and throw them at other contractors, which results in a lot of problems. Choosing a contractor registered with the Ministry of Commerce and Industry is essential, as there are many laws and requirements to follow. Int. 2 highlights that selecting the proper stakeholders for the contract stage is also essential. Int. 2 explained the availability of experts to resolve disputes, including lawyers, jurists, engineers, architects, and civilians.

3.2.3 Accurate Contract

An express contract is the primary means of minimizing conflicts. Int. 1 explained that the contract must be clear, thoughtful, and accurate; the lawyer and the engineer should review it before signing. The contract should not be signed for the sake of the low price alone; all the clauses in it must be studied. Moreover, the contractor and the projects he worked on must be studied. Furthermore, 75% of the respondents highlighted that the contractor's contract must be comprehensive and accurate for all works and their details and include a clear and detailed work plan. Int. 2 highlighted that one of the ways to have accurate contracts is to educate contractors with information on contracts, a good workflow plan, the definition of legal aspects, and model contracts. Moreover, Int. 15 agreed with Int. 2 that ensuring the quality of engineering and construction contracts is very important and could be done through training courses, conferences, intensifying awareness through visual, audio, and print media programs, and all social media.

3.2.4 Contract Template

Another way to reduce the conflicts related to contract issues is to have a contract template, as Int. 5 highlights. Int. 1 explained that in Bahrain, there are standard contracts that the owner and the consultant can use, but there are none for the contractor. Int. 1 highlighted that each contractor formulates his contract in the manner he deems appropriate for him, in contrast to many other countries, which have a contract template that the contractor can use and is even obligated to follow. Moreover, Int. 4 suggests having the contract template be an electronic template. Moreover, Int. 4 explained that the online standard contract will be available to everyone and will be clear, adequate, and accurate. Int. 4 explained that for small or inexperienced clients with ICT skills, written documents should be an option for them to simplify their contractual process. Moreover, Int. 4 emphasized the electronic contract template process, in which stakeholders should access the form online, read all of the conditions, standards, and responsibilities, and sign it online. As a result, the online contract will clearly show the standard conditions and document all the important aspects electronically.

3.2.5 Studied Workflow Mechanism

If the workflow mechanism is studied and clarified for all the stakeholders, most of the conflicts will be solved. Int. 3 highlighted that the design and its objectives must be apparent and discussed before implementation, as discussing the design during implementation is not recommended. Moreover, one of the keys to smoothing the workflow is that each stakeholder should take responsibility for their role.

The consultant should play his role as a neutral, not the owner's representative. Because he played the role of the client's representative, he always made decisions in the client's interest. Furthermore, Int. 3 highlighted that one of the aspects that avoids any futuristic obstacles in the workflow mechanism is to explain any potential issues from the owner's side before signing the contract. The problems might relate to the financial flow, problems with the supply of some of its materials, or problems with its subcontractors. Int. 16 highlighted several steps to study workflow mechanisms within engineering professional practice. To start with, Int. 16 referred to the fact that the resources for the workflow should be identified and listed. Int. 17 highlights that after listing the resources, the tasks that should be accomplished within the workflow should be clearly highlighted. Moreover, roles should be assigned for each step and responsibilities to the proper person. In any studied workflow mechanism, the workflow process visualization will simplify it and make it clear to everyone. Furthermore, Int. 17 highlighted that before starting the workflow mechanism, in real life, the process should be tested to minimize the chances of failure. Int.17 explained that the team should be trained on the workflow plan before starting it so the workflow will be familiar to the team. Finally, In.17 highlighted that the workflow plan should be deployed to the team so everyone will be ready and aware of their responsibilities within the correct time. Int.17 explained that by following those steps in the workflow mechanism, a well-studied workflow plan will be created, which will minimize a lot of conflict that might happen in the future.

3.2.6 Precise Supervision

Int. 1, Int. 2, and Int. 18 highlighted that supervision accuracy is another key to minimizing conflicts. There are several ways to supervise projects successfully; one is to follow up on existing technical specifications and organize the supervision of contract implementation. Moreover, engineering consulting offices should be scrutinized since some offices take projects for the sake of the material without committing to implement them. Furthermore, ensuring the presence and safety of engineering supervision by activating the supervisory roles of municipalities and the Council for Regulating the Practice of Engineering Professions is another way to have good supervision within engineering practice professionally. Finally, the previous points describe several ways that ensure rich supervision within a professional engineering practice by adopting a program for qualification, classification, and accreditation for all professions involved in the implementation of construction works under the supervision of the Ministry of Labor.

3.2.7 Thoughtful Financial Plan

A well-studied financial plan can solve many of Bahrain's stakeholders' conflicts. Int. 19 and Int. 20 explained that the owner must study with the consultant the stages of the contractor's payment as the contractor, in the contract, draws up a plan that includes the stages of payment to benefit his interests. Moreover, the owner must investigate the proportionality of the value of the amount with the work performed in the payment stage plan, as the contractor may place a large amount at some stage compared to the work done, causing the owner damage. Furthermore, Int. 3 explained that the performance guarantee should not be less than 10% and come from a bank or financial company. However, paper payments should not be valid because it is possible for the owner to zero out the account, whereas in the case of a bank or financial company, this cannot be done without the written permission of the owner.

4. Discussion

The data gathered various experts' experiences about the causes of conflict between the owner, contractor, and consultant in Bahrain and suggested several ways to minimize those conflicts. The data indicate the main theme and most common among them: it indicates how the situation can cause much conflict among the stakeholders in the engineering practice field in Bahrain. As the analysis identifies, stakeholder experience and poor supervision are the leading causes of those conflicts. Moreover, the data collected different ideas from the experts to reduce the engineering practice conflicts in Bahrain. A valid contract was the prominent and dominant solution for those conflicts.

Most samples agreed that stakeholder experiences are one of the leading causes of conflicts in the engineering field. The findings support Toor and Ogunlana's (2008) assertion that one of the causes of project delays is a contractor's lack of experience. They explain that the lack of experience was one problem that caused the delay of one of the projects in Thailand, resulting in many other conflicts. Moreover, the results indicated that project variations are one of the main reasons behind those conflicts, which

supports the Osuizugbo and Okuntade (2020) study. They explained that changes in design, unforeseen technical challenges, and modifications to project specifications can disrupt established plans and create tensions between stakeholders. Furthermore, studying workflow mechanisms is one way to control the conflicts that arise within the engineering practice field in Bahrain. The finding supports Heravi, Coffey, and Trigunarsyah's (2015) assertion that inefficient or unclear workflow processes can lead to delays, errors, and conflicts. Establishing well-defined workflows, roles, and responsibilities, along with regular communication and coordination, can reduce the likelihood of disputes.

The result ensures that many conflicts may arise from poor supervision, another leading cause of those conflicts. Fadhil and Mahmoud (2022) also emphasized poor supervision. Fadhil and Mahmoud have shown an example highlighting the significance of scheduling and management. They highlighted a case in Iraq that was late in completion because of poor supervision, scheduling, and time management. In professional engineering practice in Bahrain, the first and most important step that the results highlighted to reduce conflicts is to have an accurate and studied contract, which was supported by Nabi et al. (2021). They agreed that an accurate contract would lead to a smooth transition of projects from construction to operation. Moreover, the results support Schaffhauser-Linzatti's (2009) assertion that electronic achievement is crucial to minimizing conflict between the stakeholders. She highlights that because the traditional archival procedure mostly relies on paper documents, there is a greater chance of stakeholder conflicts arising. Furthermore, the human inputs and rewritings in the previous method led to an inefficient use of resources. Besides that, the results indicated that a thoughtful financial plan is crucial to minimizing conflicts, which supports the Oyegoke (2010) study. Oyegoke (2010) says that proper financial planning, transparent financial reporting, and mechanisms for resolving payment disputes are crucial for maintaining trust and minimizing conflicts.

While each study explains the reasons for conflicts in engineering practice from one point of view, the results reflect it from multiple points of view. The results showed a variety of understandings of this topic from different samples' perspectives. The result indicates how the experts deeply understand those conflicts, from the minor reason to the simplest solution.

The samples selected for this research were experts in Bahrain from different fields and ages, which gives an overall view of the conflicts. Nonprobability sampling is used to collect data. Because of time and money constraints, the samples were selected from Bahrain only. The results could be more general if samples from different continents were selected. Different people from different continents may have different ways of understanding, which makes the results more general. Although the interview method was sufficient to reach the results, other methods, such as surveys, could be used in parallel with the interview method to support the results.

To keep up with the professional practice life in engineering, we must first understand any constraints that may exist. When we realize the reasons behind the conflicts that exist between different stakeholders in the engineering practice field in Bahrain, we will understand how the workflow might be smoother in real and practical life. In turn, we keep pace with any conflict that might arise in our practical lives. In other words, while this study focuses on a specific class or group of people, namely stakeholders in the engineering and contractual fields, its effects also affect ordinary people.

This research will be used to understand and analyze the reasons or causes behind the conflicts that might happen between the owner, consultant, and contractor while practicing professional engineering in Bahrain. The results that depend on real cases are very useful in generating precise research findings, which will be very appreciated by those involved in engineering practice, lawyers, or even academics. Moreover, the conflicts in the engineering practice field are related to the workflow of any project and social life; therefore, it is beneficial for future engineers, legal men, or project owners to study this research before starting their projects or practical lives. Moreover, future researchers can undertake similar research using more methods in parallel with the interview method to support the results, such as surveys. However, the researcher can use the interview method only by selecting samples from different countries and continents; this will give generalized results. Moreover, future researchers can undertake similar research for more precise types of projects, such as conflicts related to governmental projects, private projects, small projects, or large ones.

5. Conclusion

To conclude, this research indicates that the main reasons behind the engineering practice stakeholder

conflicts in Bahrain are the contractual aspects, stakeholder experience, project variations, financial issues, workflow mechanisms, poor supervision, and unexpected aspects. Moreover, those conflicts might be reduced by following a valid or template contract, rich supervision, a sound financial plan, a studied workflow mechanism, proper selection of the stakeholders, and at the end, strict laws that will direct all the stakeholders to the correct path.

Professional engineering practice entails more than just following the rules; it extends to the profession's humanity. When the workflow runs smoothly, all stakeholders are at ease, and their engineering practice includes positive social interactions; the result is more than just an outcome; it is a valuable, rich, and meaningful one.

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