

**INVESTIGATE THE MOST SUITABLE
PROFESSIONAL TO BE AN ARBITRATOR IN THE SRI
LANKAN CONSTRUCTION INDUSTRY**

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Thesis/Dissertation submitted in partial fulfilment of the requirements
for the
Degree of Master of Science in Construction Law and Dispute
Resolution

Department of Building Economics

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Sri Lanka

November 2022

DECLARATION

I declare that this is my own work, and this dissertation does not incorporate without acknowledgement any material previously submitted for a Degree or Diploma in any other University or institute of higher learning, and to the best of my knowledge and belief, it does not contain any material previously published or written by another person except where the acknowledgement is made in the text.

Further, I acknowledge the intellectual contribution of my research supervisor Ch.QS. Prof. (Mrs.) B.A.K.S. Perera for the successful completion of this research dissertation. I affirm that I will not make any publication from this research without the name(s) of my research supervisor(s) as contributing author unless otherwise I have obtained written consent from my research supervisor.

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ABSTRACT

INVESTIGATE THE MOST SUITABLE PROFESSIONAL TO BE AN ARBITRATOR IN THE SRI LANKAN CONSTRUCTION INDUSTRY

Construction projects are performed in the construction industry under numerous legal agreements involving various parties. Mechanisms for resolving conflicts are required for the successful completion of construction projects. The merits of adopting Alternative Dispute Resolution (ADR) processes depend on the terms of the contract and the preferences of the disputing parties. Currently available studies fail to resolve the disagreement between the key competencies possesses that each of the professionals who serve as arbitrators for the construction industry Sri Lanka. Few authors, however, have conducted systematic studies on the critical competencies required for an arbitrator to succeed in their profession and provide the best, unbiased resolution after the arbitration process. In the Sri Lankan construction industry context, this illustrates the imperative requirement to evaluate and appreciate the qualifications of professionals in the industry. Thus, this study aims at the suitability of professionals as arbitrators in the construction industry based on their competencies. The research apprehends a qualitative approach, and the objectives were achieved through a literature review and sixteen (16) semi-structured interviews among arbitration professionals in the construction industry. Selected professionals for this study are Engineers, Quantity Surveyors, Architects, and Lawyers. The findings illuminated suitability, not suitability, and any modifications needed of those selected professionals. Furthermore, there is a comprehensive comparison of competencies required by an Arbitrator and the competencies of selected professionals for this study. Finally, the findings recommended the most suitable professional for the construction industry arbitration.

Keywords: Construction industry, Arbitration, Arbitrator, Competencies, Professionals in the construction industry

DEDICATION

**I dedicate this work
to my beloved parents and
husband
for their love, endless support,
and encouragement!**

ACKNOWLEDGEMENT

I express my sincere gratitude to all who supported me throughout my journey, inspiring and encouraging me at this moment of my dissertation submission.

First and foremost, I express my deepest gratitude to my supervisor Ch. QS Prof. (Mrs.) B. A. K. S. Perera for her utmost guidance, assistance, and confidence in my success in the research. I am indebted to my supervisor for steering me in the right direction throughout the process.

I would also like to acknowledge the Head of the Department, Ch. QS. Suranga Jayasena, Programme director, Prof (Mrs) Yasangika Sandanayake, and all staff members of the Department of Building Economics, University of Moratuwa, for the immense assistance and guidance given to me during the course of this research and throughout the four years of my academic career. My sincere gratitude is extended to the Programme assistant Mr Waruna Vidya Adikari, and all members of the non-academic staff of the Department of Building Economics for their support.

I am also indebted to all professionals who contributed to this study by sparing their immeasurable time for data collection and sharing their valuable knowledge despite their busy schedules.

Last but not least, I thank my beloved parents, husband, brother, friends, and all well-wishers for supporting me in countless ways in this dissertation and throughout my life.

Priyadarshani E. A. A.

October 2022

TABLE OF CONTENT

DECLARATION	I
ABSTRACT	II
DEDICATION	III
ACKNOWLEDGEMENT	IV
TABLE OF CONTENT.....	V
LIST OF TABLES.....	IX
LIST OF ABBREVIATION	X
CHAPTER 01	1
1.1 Background	1
1.2 Problem statement	3
1.3 Aim.....	4
1.4 Objectives	4
1.5 Scope and limitations	4
1.6 Methodology.....	5
1.7 Chapter breakdown.....	5
2 LITERATURE SYNTHESIS	6
2.1 Introduction	6
2.2 Construction industry	6
2.2.1 What is the construction industry?	6
2.2.2 Professionals involved in the construction industry.....	6
2.2.3 Why is the construction industry more prone to disputes?	7
2.3 Dispute resolution mechanisms in the construction industry	7
2.3.1 What is a dispute? Definition for disputes	7
2.3.2 The necessity of the dispute resolution process	7

2.3.3	Dispute resolution mechanisms in the construction industry	8
2.4	Arbitration	10
2.4.1	What is Arbitration?	10
2.4.2	History of arbitration and development history up to date	11
2.4.3	Characteristics of arbitration	11
2.4.4	Advantages of arbitration	12
2.4.5	Disadvantages of arbitration	12
2.4.6	Arbitration in the Sri Lankan context	13
2.5	An Arbitrator	13
2.5.1	Characteristics of an arbitrator	13
2.5.2	Duties of an arbitrator	13
2.5.3	Knowledge required by an arbitrator	14
2.5.4	Skills of an arbitrator	14
2.5.5	Qualifications of an arbitrator	14
2.5.6	How to become an arbitrator in Sri Lanka	15
2.5.7	Payments for arbitrator's job	15
2.6	Role and Competencies of an arbitrator	15
2.6.1	The job role of an arbitrator	15
2.6.2	Competencies of an arbitrator	16
2.7	Key professionals in the construction industry perform as arbitrators	17
2.7.1	Competencies of an Engineer	18
2.7.2	Competencies of a Quantity Surveyor	20
2.7.3	Competencies of an Architect	22
2.7.4	Competencies of a Lawyer	23
2.8	The current level of arbitration in the Sri Lankan construction industry	25
2.8.1	Arbitration in the construction industry in Sri Lanka	25
2.8.2	Whether achieved or not, characteristics of arbitration	25
2.8.3	How arbitration takes place in Sri Lanka in the present	26
2.8.4	Whether arbitration is commonly used or how far used to resolve disputes in the construction industry in Sri Lanka	26
2.9	Why is it required to investigate the most suitable professional in the construction industry as an arbitrator?	27
2.9.1	Purpose of using arbitration in the construction industry	27
2.9.2	Purpose of having construction industry professionals as arbitrators	28
2.9.3	Requirements of the arbitrator for the proper usage of arbitration	28
2.9.4	The necessity of investigating the most suitable professional in the construction industry as an arbitrator	29
2.10	Summary	29
CHAPTER 03		31
3	RESEARCH METHODOLOGY	31

3.1	Introduction	31
3.2	Research design.....	31
3.3	Research approaches.....	32
3.3.1	Available approaches.....	32
3.3.2	Selected Approaches for this Study.....	34
3.4	Research Method	34
3.4.1	Selected method for this study	34
3.5	Data Analysis Techniques	35
3.6	Research Process.....	36
3.7	Summary.....	36
CHAPTER 04	37	
4	DATA COLLECTION AND ANALYSIS	37
4.1	Introduction	37
4.2	Semi-Structured Interviews.....	37
4.3	Semi-Structured Interview Objectives	37
4.4	Respondents' details for interviews	38
4.5	Research Findings.....	40
4.5.1	Competencies required by an arbitrator.....	40
4.5.2	Professionals act as arbitrators in the construction industry	44
4.5.3	Competencies possess an engineer, which are required by an arbitrator	45
4.5.4	Competencies possess a Quantity Surveyor, which are required by an arbitrator	47
4.5.5	Competencies possess an Architect, which are required by an arbitrator.....	50
4.5.6	Competencies possess a Lawyer, which are required by an arbitrator.....	52
4.5.7	Evaluation of the level of suitability of the above professionals in performing arbitration.....	54
4.6	Pattern matching to the study.....	65
4.6.1	Professionals in the industry involved in the Arbitration procedure	65
4.6.2	Competencies possess an Engineer which are required by an arbitrator	66
4.6.3	Competencies possess a Quantity Surveyor which are required by an arbitrator	67
4.6.4	Competencies possess an Architect which are required by an arbitrator.....	68
4.6.5	Competencies possess a Lawyer, which are required by an arbitrator	68
4.6.6	The level of suitability of the above professionals in performing arbitration	69
4.7	Summary.....	69
5	CONCLUSION AND RECOMMENDATIONS	70

5.1	Introduction	70
5.2	Overview of Objectives Achieved in the Study	70
5.3	Recommendations	72
5.4	Limitations	73
5.5	Further Research	73
REFERENCES		74
APPENDIX A: SEMI-STRUCTURED INTERVIEW GUIDELINE.....		89

LIST OF TABLES

Table 2. 1: Competencies of an Arbitrator.....	16
Table 2. 2: Professionals act as an arbitrator in the construction industry.....	18
Table 2. 3: Competencies of an Engineer	18
Table 2. 4: Competencies of a Quantity Surveyor	20
Table 2. 5: Competencies of an Architect.....	22
Table 2. 6: Competencies of a Lawyer	24
Table 4. 1: Details of Interviewed Respondents	38
Table 4. 2: Competencies required by an arbitrator.....	41
Table 4. 3: Professionals working as arbitrators in the construction industry	44
Table 4. 4: Competencies of an engineer, which are required by an arbitrator	45
Table 4. 5: Competencies a Quantity Surveyor possess, required by an arbitrator ..	47
Table 4. 6: Competencies possessed by Architects, required by an arbitrator.....	50
Table 4. 7: Competencies a Lawyer possesses, which are required by an arbitrator.	52
Table 4. 8: Suitability and not suitability of professionals acting as arbitrators.....	55
Table 4. 9: Competencies fulfilment of an Arbitrator with other professionals	64

LIST OF ABBREVIATION

ADR	Alternative Dispute Resolution
AIAC	Asian International Arbitration Centre
CAS	The Court of Arbitration for Sport
CIETAC	The China International Economic and Trade Arbitration Commission
CRCICA	Cairo Regional Centre for International Commercial Arbitration
DIAC	The Dubai International Arbitration Centre
DR	Dispute Resolution
ICC	International Chamber of Commerce
ICDR	The International Centre for Dispute Resolution
ICSID	The International Centre for Settlement of Investment Disputes
KLRC	Kuala Lumpur Regional Centre for Arbitration
LCIA	The London Court of International Arbitration
PCA	The Permanent Court of Arbitration
SCC	Stockholm Chamber of Commerce
SIAC	The Singapore International Arbitration Centre
ICE	Institution of Civil Engineers
IESL	Institution of Engineers, Sri Lanka
NSPE	National Society of Professional Engineers
IQSSL	Institute of Quantity Surveyors Sri Lanka
AIQS	Australian Institute of Quantity Surveyors
RICS	Royal Institution of Chartered Surveyors
RIBA	Royal Institute of British Architects
SLIA	Sri Lanka Institute of Architects
ARB	Architects Registration Board
IBA	International Bar Association
BASL	Bar Association of Sri Lanka

CHAPTER 01

1.1 Background

The construction industry is constituted of different stakeholder types (Mitkus & Mitkus, 2014; Ng, Ismail, & Hashim, 2019; Sameer, Magar, & Parkar, 2016). The authors disclose that these stakeholders comprise various professionals with different skill types and competency levels.

The construction industry is complex (Sameer et al., 2016; Soni, Pandey, & Agrawal, 2017), and thus, it has become one of the industries which are more prone to disputes (Mix, 1996; Chong, Balamuralithara, & Chong, 2011; Sameer et al., 2016). Disputes are unavoidable in the construction industry, even though they are hostile and waste time and money (Kisi, Lee, Kayastha, & Kovel, 2020). As per Sameer et al. (2016), a dispute is simply a disagreement between the parties, and disputes in the construction industry occur because of the involvement of various parties and because any project process includes deadlines, coordination, financing concerns, profit motives, and poor communication. Soni et al. (2017) disclosed that unrealistic expectations, poor communication and misunderstandings between the parties, lack of knowledge and skill on construction, unavailability of the necessary information, and delay of payments by the employers lead to disputes in the construction industry. Therefore, dispute resolution mechanisms are essential to resolve those disputes.

Litigation and alternative dispute resolution (ADR) techniques like mediation, conciliation, and arbitration are available to settle issues in the construction sector (Moses, 2017; Illankoon, Tam, Le, & Ranadewa, 2019). Litigation and arbitration result in final and binding decisions (Besaiso, Fenn & Emsley, 2018). In addition, litigation is not suitable for construction industry disputes due to judges' lack of construction knowledge, longer time consumption, and difficulty in maintaining business relationships during the litigation period.

ADR methods have become a preferred method in the construction industry, considering the barriers mentioned above to the application of litigation (Besaiso et

al., 2018). These authors revealed that arbitration is one of the preferred dispute resolution methods in the construction industry.

Arbitration, in general, is a technique of resolving disputes that originated under Roman law in the first century BC (Kartuzov, 2015). Kartuzov (2015), Hansen (2019), and Ng et al. (2019) explained that arbitration is a private dispute resolution method that the parties choose and control to reach a final and binding decision regarding their rights and obligations. As viewed by Abeynayake and Weddikkara (2013), an arbitration clause should be incorporated into the construction project's contract by including such a clause in the contract conditions. Moreover, Sri Lankan construction contracts drafted based on the ICTAD or FIDIC condition of contracts by default have the provision for arbitration of disputes in the contract. Besides, in Sri Lanka, the Arbitration Act No. 11 of 1995, formed according to the UNCITRAL model law, incorporates the principles of arbitration into the Law of Sri Lanka (Abeynayake & Weddikkara, 2012). Abeynayake and Weddikkara (2013) and Hansen (2019) have further mentioned that the Arbitration act provides provisions for arbitration proceedings, awards and their enforcement and refusal, foreign arbitral awards, tribunal, and their jurisdiction.

Many authors have revealed many positives in arbitration for dispute resolution in the construction industry. According to Stipanowich (2010), Drahozal and Ware (2010), Bello (2014), and Moses (2017), arbitration is popular among people as it has many advantages; i.e., more efficient and faster than litigation, less costly than litigation, has confidentiality, which is crucial for business reputation, flexibility, and a final technique to resolve disputes. Moreover, Helm, Wistrich, and Rachlinski (2016) have disclosed that arbitration has narrowed the resolution approach to the dispute due to the informality and hassle-free procedural rules of arbitration to that of litigation. As Besaiso et al. (2018) described, arbitration is adversarial, confrontational, and expensive but comparatively economical, speedy, and affordable. Abeynayake and Dharmawardhana (2015) mentioned that arbitration is fast, has a minimum delay, is cheap, impartial, simple, flexible, and has confidential features and characteristics.

Another positivity of arbitration is the involvement of a neutral third party as the arbitrator, which can be selected according to the parties' choice (Abeynayake & Weddikkara, 2013). Though the parties select the arbitrator or the tribunal, they must act impartially and independently within their role as arbitrators (Jelinic, 2016). In addition, there is the opportunity to select expertise on the relevant subject matter, an added advantage of arbitration over litigation, where only judges sit as the final decision-maker. Besides, knowledge of contract documents and the legal background of the dispute is a vital competency of an arbitrator since some aspects, such as the enforcement of the award, shall be done in applicable courts.

When reviewing the above literature, the authors are overwhelmed by the fact that the features of arbitration and the competencies of arbitrators are unique. In the dispute resolution process of the construction industry by way of arbitration, professionals such as Lawyers, Judges, Engineers, Quantity Surveyors, and Architects act as arbitrators (Shafiei & Said, 2011). Therefore, it is imperative to investigate the required competencies of an arbitrator and the most suitable professional to perform the role of arbitrator.

1.2 Problem statement

The construction industry, with its complex nature, day by day it is increasing disputes (Soni et al., 2017). As commercial arbitration has unique features such as speed, cost-effectiveness, confidentiality, and legal enforcement, it is used to resolve disputes in the construction industry (Carrie, 2016). Furthermore, the ability to select arbitrators per the parties' requirements and the fact that each party has the opportunity to present their case to the sole arbitrator or the tribunal has led to more success. That is the flexibility in the arbitration process, and parties can follow principles previously used by arbitrators (Helm et al., 2016).

Illankoon et al. (2019) disclosed arbitration as the second most effective ADR method in Sri Lanka. The Sri Lankan construction industry has construction industry professionals as arbitrators and Lawyers (Pauwelyn, 2015; Schneiderman, 2015; Shafiei & Said, 2011). However, construction industry disputes contain many technical matters, and thus, parties select arbitrators from the industry, such as

engineers, Quantity Surveyors, and architects. The issue is the lack of qualified arbitrators in the industry (Moser, 2016). Therefore, as per Shafiei and Said (2011), it is essential to keep an eye on the competencies of various professionals such as Lawyers, engineers, Quantity Surveyors, and architects engaged as arbitrators in the construction industry disputes. As seen in available research, there is a failure to resolve the contradiction between the basic competencies held by each professional, as mentioned above, who currently act as construction industry arbitrators of Sri Lanka.

However, few writers have been able to draw systematic research into the critical competencies that are essential for an arbitrator to excel in the profession and come up with the best impartial solution at the end of the arbitration process. This indicates the critical need to evaluate and understand the suitability of construction industry professionals to act as arbitrators in the context of the Sri Lankan construction industry.

1.3 Aim

This research aims to investigate the most suitable professional to be an arbitrator in the construction industry in Sri Lanka.

1.4 Objectives

- Investigate professionals in the construction industry who involve in the Arbitration procedure
- Investigate the competencies possessed by above-identified professionals
- Investigate the competencies required by an arbitrator
- Evaluate the level of suitability of above professionals in performing arbitration

1.5 Scope and limitations

The scope of this research was limited to the competencies of professionals commonly involved in arbitration in the Sri Lankan construction industry.

1.6 Methodology

- Initially, a comprehensive literature review on the competencies of arbitrators was carried out by critically analysing books, journals, articles, and previous dissertations and using the internet.
- Then the competencies of each category of professionals involved as arbitrators were investigated by reviewing the websites of professional bodies.
- The next step was to conduct semi-structured interviews with the arbitrators involved in the dispute resolution process in the construction industry in Sri Lanka in various capacities. The experts were Engineers, Quantity Surveyors, Architects, and Lawyers.
- The data collected via the qualitative approach were analysed using manual content analysis.

1.7 Chapter breakdown

Chapter 01 - Introduction

This chapter consists of the background to the research, aim, objectives to achieve the aim, scope, and research limitations. A brief introduction to the research methodology is provided with the research structure.

Chapter 02 – Literature Synthesis

This chapter overviews the skills and competencies of the professionals engaged with arbitration as arbitrators and their suitability to be an arbitrator.

Chapter 03 – Research Methodology

This chapter describes the methodologies applied to accomplish the aim and objectives of this research.

Chapter 04 – Data Collection and Analysis

This chapter presents the collected data according to the research methodology and analyses those collected data.

Chapter 05 – Conclusions and Recommendations

This chapter consists of research findings and recommendations for those with further research approaches.

CHAPTER 02

2 LITERATURE SYNTHESIS

2.1 Introduction

The research's chosen subject regarding arbitration and the competencies of arbitrators in the Sri Lankan construction industry has vast literature. This chapter is developed to gather all relevant literature findings on the topic to aid in the completion of the research aim and objectives. The chapter comprehensively analyses local and foreign literature sources to address objectives 01, 02, and 03.

2.2 Construction industry

2.2.1 What is the construction industry?

The *construction industry* is where various professionals and organizations comprised of multiple types and skills, and knowledge of the construction process are involved (Mitkus & Mitkus, 2014; Ng et al., 2019; Sameer et al., 2016; Soni et al., 2017). It consists of many projects with separate contracts and contractual relationships (Gregory-Stevens, Frame, & Henjeweile, 2016). The construction industry highly contributes to the state of a nation's economy, society, and environment (Ortiz, Castells, & Sonnemann, 2009; Rashidi & Ibrahim, 2017), and a very complex trade (Edirisinghe, Marsh, Borthwick & Cotgrave, 2020; Gregory-Stevens et al., 2016; Gulghane & Khandve, 2015; Sameer et al., 2016; Soni et al., 2017).

2.2.2 Professionals involved in the construction industry

The involvement of various parties is a unique feature in the construction industry (Illankoon et al., 2019; Ng et al., 2019). In comparison to other sectors, stakeholder participation is a notable feature of the construction industry (Illankoon et al., 2019). Contractors, consultants, clients, designers, and suppliers are typically involved in the industry in a significant and dynamic way to collaborate as a crew to complete a project in the allotted time (Illankoon et al., 2019; Ng et al., 2019). As per Rashidi and Ibrahim (2017), the industry employs more professionals, such as engineers, architects, surveyors, and planners, than skilled and unskilled workers. The complexity of contractual relationships is sometimes attributed to the industry's adversarial existence

(Edirisinghe et al., 2020; Gregory-Stevens et al., 2016; Hansen, 2019). Hence, it is an industry prone to disputes (Mix, 1996; Chong et al., 2011; Sameer et al., 2016).

2.2.3 Why is the construction industry more prone to disputes?

Construction projects are becoming more complicated and increasing the possibility of conflict at any time during the project's lifespan (Alaloul, Hasaniyah, & Tayeh, 2019; Assaf, Hassanain, Abdallah, Sayed, & Alshahrani, 2019). Therefore, disagreements have long been accepted as a part of the industry, and, predictably, it is riddled with them (Assaf et al., 2019; Edirisinghe et al., 2020; Hansen, 2019; Illankoon et al., 2019). Disputes in the industry are very communal (Illankoon et al., 2019). Further, those occurred due to the presence of many stakeholders during the project's life cycle, including deadlines, coordination, financial issues, profit motives, and poor communication. If disagreements are not handled properly, they can rapidly turn into disputes (Alaloul et al., 2019; Illankoon et al., 2019). Moreover, they have been the subject of numerous government investigations to lessen the issues that lead to disputes and offer a quick, inexpensive way to resolve them (Edirisinghe et al., 2020; Gregory-Stevens et al., 2016).

2.3 Dispute resolution mechanisms in the construction industry

2.3.1 What is a dispute? Definition for disputes

According to Alaloul et al. (2019) and Sameer et al. (2016), a dispute is simply a disagreement between the parties. It can also be described as a conflict between at least two independent parties who see conflicting priorities, limited resources, and outside intervention (Alaloul et al., 2019; Ng et al., 2019). Contrarily, a conflict is any disagreement or contract issue that needs to be resolved without the involvement of the job site management (Alaloul et al., 2019). The Collins dictionary defines a dispute as a 'serious disagreement and argument about important issues' (Alaloul et al., 2019).

2.3.2 The necessity of the dispute resolution process

The adversarial nature of the project participants, which contributed to the creation of disputes, is one of the key causes of project failure (Alaloul et al., 2019). Another critical aspect is the methodologies used to resolve these conflicts as they arise (Alaloul et al., 2019). Disputes necessitate resolution and are thus linked to specific

justiciable issues (Alaloul et al., 2019). Third-party interference could be possible during the resolution process (Alaloul et al., 2019). It is easy to be referred to arbitration or court for major disputes once work is completed while it resolves the minor issues at the stage of ongoing work (Gregory-Stevens et al., 2016). Once a dispute has arisen, it needs to be settled as soon as feasible (Illankoon et al., 2019).

In addition, Project Managers would undoubtedly benefit from a thorough understanding of different types of dispute resolution procedures and their vital factors when dealing with conflicts (Illankoon et al., 2019). The parties must resolve the disputes to meet the project's goal of completion (Hansen, 2019). Construction disputes seem to continue and worsen if they are not immediately resolved, delaying projects and sometimes jeopardizing business ties (Edirisinghe et al., 2020; Illankoon et al., 2019).

2.3.3 Dispute resolution mechanisms in the construction industry

Construction disputes often revolve around cost, quality, or time issues, which necessitate expert evidence (Ng et al., 2019). Therefore, resolutions are necessary and linked to specific justifiable issues (Alaloul et al., 2019). Third-party interference could be possible during the resolution process (Alaloul et al., 2019). Once a disagreement arises, the case is referred to ADR or the courts if the parties are unable to resolve it in accordance with the CoC (Gregory-Stevens et al., 2016; Illankoon et al., 2019).

– Litigation and ADR

According to Illankoon et al. (2019), ADR functions as a 'replacement' for litigation. In general, disputing parties prefer ADR methods to go to court to resolve their disputes (Hansen, 2019). Numerous specialists agree that litigation is particularly ineffective for resolving construction disputes for legitimate reasons, including judges' lack of technical knowledge, higher litigation expenses, delays in the process, and substantial harm to future commercial relationships (Abeynayake & Weddikkara, 2013; Illankoon et al., 2019).

– *Litigation*

Litigation is simply the act of filing a case and the most common method of resolving disputes (Alaloul et al., 2019). It is the final step in settling construction disputes (Illankoon et al., 2019). It typically requires a longer duration of disclosure, inflexible procedures, and constant delays (Alaloul et al., 2019; Ng et al., 2019). Additionally, litigation is not the best choice where confidentiality and privacy are relevant (Alaloul et al., 2019). Taking a construction dispute to the District Courts is exceptional because legally enforceable contracts, such as FIDIC (1999), always direct disputes to ADR (Illankoon et al., 2019).

– *ADR*

Undoubtedly, ADR is a recent concept designed to resolve disagreements swiftly and amicably, notably in the construction industry (Hansen, 2019; Ng et al., 2019). Negotiation, mediation, conciliation, adjudication, arbitration, and litigation are the six most common DR approaches used in various countries in order of popularity (Abwunza, 2020; Hansen, 2019; Illankoon et al., 2019). The ultimate objective of the sector is that ADR processes can provide the most appropriate resolution to construction disputes in the quickest time possible while preserving the participants' interactions and integrity (Abeynayake & Weddikkara, 2012; Illankoon et al., 2019).

– *Negotiation*

Negotiation is a traditional first step in resolving disputes (Illankoon et al., 2019) and is unquestionably a common tool for resolving conflicts (Alaloul et al., 2019). In the Sri Lankan context, it is the most successful ADR process (Illankoon et al., 2019).

– *Mediation*

Once the negotiation is failed, the parties are more likely to seek help from a neutral and unbiased third-party adviser known as the *mediator*, who listens to all sides of the conflict and encourages talks between the parties called *Mediation* (Alaloul et al., 2019; Illankoon et al., 2019).

– *Conciliation*

Mediation is a cross between conciliation and arbitration (Chau, 2007; Illankoon et al., 2019). It is the process by which two parties involved in a dispute come to a voluntary agreement that reflects a fair and reasonable compromise of the conflict (Damodar, 2019). The conciliator might help them start communicating, clear up misunderstandings, deal with intense worries and emotions, and develop trust (Damodar, 2019).

– *Adjudication*

The construction industry established the Dispute Adjudication Board as a revolutionary form of primary dispute adjudication (Ndekugri & Russell, 2006; Illankoon et al., 2019). Adjudication was implemented in 1996 because of the litigious nature of the English construction industry (Gregory-Stevens et al., 2016). The dispute is frequently referred to a neutral third party, the “adjudicator,” who must make a decision within a certain number of days after the referral is made (Ndekugri & Russell, 2006; Illankoon et al., 2019)

– *Arbitration*

Arbitration is one of the most commonly used tools for resolving construction industry disputes (Hansen, 2019). It is the second most powerful process, and arbitration decisions can be challenged in court (Illankoon et al., 2019).

2.4 Arbitration

2.4.1 What is Arbitration?

Arbitration is a private dispute resolution system designated and controlled by the disputants to have the rights and obligations of the disputant parties to obtain a final and binding decision on the parties as an alternative to courts (Gulghane & Khandve, 2015; Kartuzov, 2015). “Arbitration is a decision taken by two rivals to choose someone to judge between them in their rivalry and case” (Dhakil Alla Al-Tarawneh, 2018). It is defined as “a mechanism in which a neutral third party or several persons are employed to analyse facts, listen to all parties arguments, and make a binding or non-binding decision and settle award” (Hansen, 2019). IAL defines Arbitration as “a

procedure for settling civil disputes outside of general courts based on an arbitration agreement entered into in writing by the disputing parties” (Hansen, 2019).

2.4.2 History of arbitration and development history up to date

For decades, traders have used arbitration to resolve disputes (Gulghane & Khandve, 2015). Generally, arbitration is a technique for resolving a dispute, which was well established under Roman law in the 1st century BC (Kartuzov, 2015). Traditionally, arbitration has been used to resolve disputes originating from civil engineering or construction contracts since 1871, while it was frustrated with litigation in the 1960s and 1970s (Alaloul et al., 2019; Chau, 2007; Mix, 1996). Commercial arbitration is now widely recognised and accepted as a method of settling disputes (Gulghane & Khandve, 2015). Today there are numerous institutes worldwide for arbitration, namely ICC, LCIA, ICDR, SCC, CIETAC, SIAC, DIAC, CRCICA, ICSID, PCA, and CAS (Gaillard, 2015).

2.4.3 Characteristics of arbitration

In most instances, arbitration is a cost-effective, fast, and a productive mechanism that concludes a dispute (Abwunza, 2020; Dhakil Alla Al-Tarawneh, 2018; Hansen, 2019). Legally, it would provide all disputing parties with a final and binding award (Hansen, 2019).

The regulations require arbitration to be completed within 160 days and be heard by a single arbitrator, except if the parties need a bigger tribunal (Ng et al., 2019). AIAC and KLRCA first established Fast-track arbitration in 2010 and revamped it in 2012 for individuals who desire an award as rapidly as possible while spending less (Ng et al., 2019).

All disputing parties are given a list of arbitrators chosen, which they can study and concur on before choosing arbitrators from the list (Alaloul et al., 2019; Dhakil Alla Al-Tarawneh, 2018). The arbitration procedure is supported by a court order to make the decision binding on all parties (Alaloul et al., 2019). The nature of arbitrations is consensual and private (Ranasinghe, Perera, & Rodrigo, 2018).

2.4.4 Advantages of arbitration

Choi, Fisch, and Pritchard (2014) and Dhakil Alla Al-Tarawneh (2018) highlight the arbitration process's advantages and disadvantages. They properly review why arbitration is practised in the industry and preferred by many disputed parties above all the other ADR methods. Furthermore, to resolve disputes in an impartial, private, rapid, flexible, more efficient, and less expensive method than litigation before national courts (Choi et al., 2014; Dhakil Alla Al-Tarawneh, 2018; Gulghane & Khandve, 2015; Stipanowich, 2010).

The right to select jurisdiction, the location and time of arbitration hearings and the arbitrators are all examples of choices of arbitration (Al-Humaidi, 2014; Hansen, 2019). In reality, the ability to compete with parties to select their own arbitrators with appropriate expertise in the matter at hand is the fundamental draw of arbitration in the construction industry (Hansen, 2019). Arbitration has a distinct advantage regarding equality (Hansen, 2019; Tanielian, 2013). People take advantage of arbitration since other dispute-resolution techniques do not eliminate the primary drawbacks (Dhakil Alla Al-Tarawneh, 2018). Moreover, according to Gulghane and Khandve (2015), arbitration hearings are private, and the award is binding and enforceable, which is highly advantageous.

2.4.5 Disadvantages of arbitration

Arbitration has several advantages, but it also has some drawbacks. According to Peters (2017), one of the major disadvantages is the cost of arbitration. Some of the main arbitration costs are fees and expenses for Lawyers, witnesses and expert evidence, transport costs, institutional fees, and arbitrators' fees (Peters, 2017). Other disadvantages are the inability to appeal and errors that cannot be rectified unless there is a valid reason for a challenge, which is rare. Furthermore, arbitrators do not have the same legal authority as regular courts (Peters, 2017). Another disadvantage, according to him, is that multi-party arbitration would take a long time and be difficult to comprehend.

2.4.6 Arbitration in the Sri Lankan context

The Sri Lankan Arbitration Act No. 11 of 1995 regulate arbitration in Sri Lanka (Illankoon et al., 2019; Ranasinghe, 2015; Sirohi, 2016). In the construction industry, out of many ADR methods, the arbitration procedure has more value and recognition due to its connectivity to the common law of the country and the legal enforceability afterwards in Sri Lanka (Ranasinghe, 2015.). Arbitrations in Sri Lanka could occur at one of the arbitration centres or any other location chosen by the parties (Ranasinghe, 2015).

2.5 An Arbitrator

An arbitrator is the sole person responsible for delivering the final decision-making procedure under arbitration (Choi et al., 2014). Arbitration cannot exist without parties or arbitrators, but it does exist without someone else (Gaillard, 2015). Moreover, it is called a tribunal for a group of arbitrators who determine the dispute (Gulghane & Khandve, 2015). The parties themselves, an impartial third party, or the Court can appoint an arbitrator, and parties have the discretion to choose the number of arbitrators (Dhakil Alla Al-Tarawneh, 2018; Gulghane & Khandve, 2015).

2.5.1 Characteristics of an arbitrator

The arbitrator is the keystone of the arbitration process, and the conflict will find no refuge to be resolved in the absence of the arbitrator (Dhakil Alla Al-Tarawneh, 2018). An arbitrator may be a person of any nationality (Gulghane & Khandve, 2015). On the other hand, the arbitrators are arguably the social group that has attracted the most focus from a sociological perspective (Gaillard, 2015). An arbitrator is impartial and independent (Gaillard, 2015). Moreover, they must be a neutral third party (Dhakil Alla Al-Tarawneh, 2018).

2.5.2 Duties of an arbitrator

Throughout the arbitration proceedings, the arbitrator's duty to be independent should be honoured (Dhakil Alla Al-Tarawneh, 2018). The obligation placed on arbitrators to follow the arbitration agreement also refers to the implementation and protection of the parties' procedural rights, including, but not limited to, the right to be heard, equal treatment, and the opportunity to submit their respective arguments (Welser &

Mimnagh, n.d.). Further, an arbitrator must disclose each context relevant to the arbitral process and the perception of its fairness and investigate all possible pathways that could lead to his final award being challenged (Dhakil Alla Al-Tarawneh, 2018). Adopting a qualified immunity norm that strikes a balance between arbitrators' obligations to work independently and give just rulings without fear of personal retaliation and the need to avoid bad-faith behaviour by arbitrators who do not want to obey the rule of law (Dhakil Alla Al-Tarawneh, 2018).

2.5.3 Knowledge required by an arbitrator

An arbitrator is not permitted to rely on his own knowledge of the case; instead, he must rely solely on the facts submitted before him (Dhakil Alla Al-Tarawneh, 2018). Further to Dhakil Alla Al-Tarawneh (2018), a reasonable third party knowledgeable of the pertinent facts and circumstances should be an arbitrator. The underlying rationale of a decision might sometimes be an important element the parties seek to obtain from the arbitral procedure. Time and cost considerations will not always be the primary priority of a party to an arbitration (Welser & Mimnagh, n.d.).

2.5.4 Skills of an arbitrator

The parties can choose their arbitrators with the appropriate special expertise, which is a significant advantage of arbitration (Gulghane & Khandve, 2015). The arbitral procedure benefits and assures proper arbitration proceedings, awards disciplines, and gets justice to the parties in a disagreement without remorse to arbitration throughout the selection of the most suitable arbitrator (Dhakil Alla Al-Tarawneh, 2018). In contrast, prior experience and what we subsequently refer to as the appointment bias of arbitrators in ISDS cases have received little to no attention (Donaubauer, Neumayer, & Nunnenkamp, 2018).

2.5.5 Qualifications of an arbitrator

Default provisions for the appointment of arbitrators are included in all arbitration laws and rules (Dhakil Alla Al-Tarawneh, 2018). An arbitration agreement is prescribed an arbitrator's qualifications, and unless the parties waive that qualification, the appointment of an arbitrator who does not meet that qualification is not legitimate (Gulghane & Khandve, 2015). An expert who is also qualified for arbitration as an

arbitrator might also be an expert chosen by both rival parties as their arbitrator (Dhakil Alla Al-Tarawneh, 2018). Arbitrators and parties/their counsel should facilitate the early identification of disqualifying criteria among eligible arbitrators (Dhakil Alla Al-Tarawneh, 2018).

Further to Dhakil Alla Al-Tarawneh (2018) and Connery (2020), explained in ICSID, disqualifications to be an arbitrator are a party with whom you have a close connection or close family relationship, participation in the parties' settlement negotiations, a substantial financial stake in the enterprise or dispute in question, or a party or its counsel, a Non-financial engagement in the relevant project, dispute, or the dispute's subject matter and a public statement on the specific issue at hand.

2.5.6 How to become an arbitrator in Sri Lanka

"Being an arbitrator has become a social-professional category of its own" (Gaillard, 2015). Followed by the Arbitration Act No. 11 of 1995, for a person or a professional to become an Arbitrator in Sri Lanka, qualifying is essential, either from Sri Lanka National Arbitration Centre or ICLP Arbitration Centre (Masroof, 2017). After obtaining the qualifications, the next step is collecting experience over years of commercial practice in the construction industry with an approach to both pre-contract consultancy and post-contract contractor practice (Shafiei & Said, 2011).

2.5.7 Payments for arbitrator's job

A growing number of specialised service providers are gravitating toward the key players in international arbitration (Gaillard, 2015). Arbitrators charge for their services because arbitration is intended to be a private form of justice (Gaillard, 2015). They are service providers in that regard, but they are not the only service providers (Gaillard, 2015).

2.6 Role and Competencies of an arbitrator

2.6.1 The job role of an arbitrator

Arbitrators, as arbiters of justice and fairness, play a significant role in advancing international arbitration and raising the respect in which it is held (Welser & Mimmagh, n.d.). They act as Co-arbitrators or presidents of an arbitral tribunal (Gaillard, 2015).

They depend on the document-based information to assess the validity of each case raised and decide which party, if any, is entitled to a monetary award (Illankoon et al., 2019).

2.6.2 Competencies of an arbitrator

The first step in the arbitration process is appointing an arbitrator or tribunal (Alaloul et al., 2019). Each party has the right to nominate one arbitrator in an arbitration with a panel of three arbitrators. The two arbitrators appointed by the parties according to the negotiated process will appoint the third arbitrator, who will perform as the head arbitrator (Gulghane & Khandve, 2015). Those chosen arbitrators should be independent and impartial (Dhakil Alla Al-Tarawneh, 2018). The impartiality of the arbitrator and the quality of information sharing in resolving a dispute are both important considerations in informational justice (Abwunza, 2020).

The two concepts may appear very similar, but they are not. *Independence* refers to the personal relationship between arbitrators and parties or their representatives. In contrast, *Impartiality* refers to the arbitrator's mind being free of any partiality or bias towards a party or the matter in dispute (Dhakil Alla Al-Tarawneh, 2018). The ICSID Convention is stipulated that arbitrators must be competent as follows: "Persons of high moral character and recognized competence in the fields of law, commerce, industry, or finance, who may be relied upon to exercise independent judgment" (Welser & Mimmagh, n.d.).

Table 2.1 discusses the competencies of an arbitrator identified by past researchers.

Table 2. 1: Competencies of an Arbitrator

Competencies of an Arbitrator		Authors									
		A	B	C	D	E	F	G	H	I	J
1	Impartiality & Independent	√	√	√	√		√	√	√	√	√
2	Decision-making ability		√	√	√		√	√	√	√	√
3	Dispute resolution techniques				√		√	√	√	√	√
4	Knowledge of the relevant area		√	√		√	√			√	√
5	Analytical skills				√	√		√	√		√
6	Professionalism			√		√	√			√	√
7	Integrity				√	√		√		√	

Competencies of an Arbitrator		Authors									
		A	B	C	D	E	F	G	H	I	J
8	Management skills					√	√	√		√	
9	Reliability		√		√			√			
10	Confidence					√	√	√			
11	Negotiation skills					√			√		
12	Confidentiality		√								
A – (Gaillard, 2015); B – (Dhakil Alla Al-Tarawneh, 2018); C – (Crook, 2019); D – (Connery, 2020); E – (La Rue & Symonette, 2019); F – (Welser & Mimmagh, n.d.); G – (Donaubauer et al., 2018); H – (Abwunza, 2020); I – (Rahmat & Abdul Rahim, 2020); J – (Besaiso, Fenn, & Emsley, 2018)											

The arbitrator, if appointed right and suitably, can no longer guarantee the bulk of the defendants and, more crucially, can avoid the drawbacks of arbitration and legal activities (Dhakil Alla Al-Tarawneh, 2018).

International arbitration continues to draw new practitioners, both through fresh Lawyers entering the scene and the development of international arbitration into new industries and acceptance by particular companies (Welser & Mimmagh, n.d.). This is a healthy development for all practitioners of arbitration as well as dispute resolution as a whole (Welser & Mimmagh, n.d.).

Arbitrators are appointed due to professional expectations and are given authority to meet those expectations (Welser & Mimmagh, n.d.). As a result, even if they disagree with the substance or strategy of a party's pleading, arbitrators must maintain their composure when conversing with the parties (Welser & Mimmagh, n.d.). Like judges in court, arbitrators have complete control over the hearing, and their final verdict is binding on all parties (Alaloul et al., 2019; Dhakil Alla Al-Tarawneh, 2018). Errors were a natural result of the arbitrator's lack of legal or professional experience, which may have resulted in the award being annulled (Besaiso et al., 2018).

2.7 Key professionals in the construction industry perform as arbitrators

Most professionals act as arbitrators as such specialists have a high reputation and expertise (Dhakil Alla Al-Tarawneh, 2018). Lawyers also act as arbitrators in the industry (Crook, 2019). According to Connery (2020), artists, engineers, surveyors, sea captains, and architects act as arbitrators in addition to lawyers and judges.

Arbitration in the construction industry is usually handled by experts in the field, such as architects, engineers, or construction management professionals (Rahmat & Abdul Rahim, 2020). Table 2.2 discusses the professionals who act as arbitrators in the construction industry, identified by past researchers.

Table 2. 2: Professionals act as an arbitrator in the construction industry

Professionals as Arbitrators		Authors									
		A	B	C	D	E	F	G	H	I	J
1	Architects	√	√	√	√	√	√				
2	Engineers	√	√	√	√	√	√				
3	Quantity Surveyors		√	√	√	√	√		√		
4	Lawyers	√	√			√	√	√		√	
5	Surveyors	√	√	√	√	√					
6	Judges	√	√			√					
7	Accountant		√								
A – (Connery, 2020); B – (Abwunza, 2020); C – (Rahmat & Abdul Rahim, 2020); D – (Jayalath, 2019); E – (Besaiso, Fenn, & Emsley, 2018); F – (Edirisinghe et al., 2020), G – (Crook, 2019); H – (Yogeshwaran, Perera, & Ariyachandra, 2018); I – (Welser & Mimmagh, n.d.)											

Table 2.2 shows that Architects, Engineers, Surveyors, Quantity Surveyors, Lawyers, Judges, and Accountants act as arbitrators in the construction industry. In the Sri Lankan context, Quantity Surveyors, Engineers, Architects, and Lawyers are involved in arbitration as arbitrators (Edirisinghe et al., 2020).

2.7.1 Competencies of an Engineer

Engineering is one of the most worldwide professions (Bourn, 2018). Engineers are construction industry professionals involved in arbitration as professional experts (Rahmat & Abdul Rahim, 2020). Non-technical and occupational skills are just as significant as technical skills in an engineer's competency (Azmi, Kamin, & Noordin, 2018). They can be formed when they study as engineers (Azmi et al., 2018). Table 2.3 discusses the competencies of an Engineer identified by past researchers.

Table 2. 3: Competencies of an Engineer

Competencies of an Engineer		Authors									
		A	B	C	D	E	F	G	H	I	J
1	Management skills		√	√	√	√	√	√	√		√
2	Teamwork & group dynamic skills		√	√	√	√	√	√	√	√	
3	Leadership		√	√	√	√	√	√	√	√	
4	Engineering Design and Analysis		√	√	√	√			√	√	√
5	Decision-making ability		√	√	√		√		√	√	√
6	Analytical skills		√	√	√	√			√	√	√
7	Professionalism	√	√	√		√			√	√	√
8	Strong communicational skills		√	√	√		√	√	√	√	
9	Understanding of social context			√		√	√	√	√	√	√
10	Protects the general public's interests	√		√	√	√	√		√		
11	Work to promote environmental protection and sustainability	√		√	√				√	√	√
12	Knowledge of the relevant area		√		√		√		√	√	√
13	Economies			√		√	√			√	√
14	Problem understanding & solving			√	√				√	√	√
15	Attentiveness			√		√	√			√	
16	Works up to self-competent levels	√				√	√				√
17	Adaptability and Flexibility								√	√	
18	Reading & writing skills								√		√
19	Integrity	√							√		
20	Dependability and Reliability								√		
A – (ICE, 2004); B – (NC state university, 2016); C – (Bourn, 2018); D – (Ebrahimi Nejad, 2017); E – (Boyatzis, Rochford, & Cavanagh, 2017); F – (Pokrovskaja, Petrov, & Gridneva, 2018); G – (Nittala & Jesiek, 2018); H – (Azmi et al., 2018); I – (Quelhas, Lima, Ludolf, Meiriño, Abreu, Anholon, & Rodrigues, 2019); J – (Ismail, Akasah, Nagapan, & Khamis, 2019)											

Table 2.3 illustrates several competencies of an engineer (on their own). An engineer's critical competencies are communication skills, business skills, teamwork skills, creativity, lifelong learning skills, and problem-solving skills (Azmi et al., 2018).

According to various past research, the following competencies are expected of an Engineer: Engineering Design and Analysis, Decision-making ability, Analytical skills, Management skills, Professionalism, Knowledge of the relevant area, teamwork & group dynamic skills, strong communicational skills and leadership. Almost all

those investigated competencies given in Table 2.3 are present once it passes through the ICE, IESL and NSPE websites.

2.7.2 Competencies of a Quantity Surveyor

Quantity surveying is a profession focused on obtaining the most value for money from building projects. It is one discipline with the capacity and capability to address most issues in the industry (Thadsagini & Waidyasekara, 2018). They are critical in successfully delivering projects among construction professionals (Abiramy & Disaratna, 2018). Preparation of bill of quantities, cost planning, tender preparation and pricing, preparation of development appraisal, advising on arbitration matters, preparation of contract documents, providing value engineering services, and preparation of interim and final accounts were among the quantity surveying services identified in the literature and validated for their relevance to Sri Lanka through interviews (Ranasinghe et al., 2018). By specialising in contract management and arbitration, the quantity surveying profession can help integrate the construction distribution network (Thadsagini & Waidyasekara, 2018; Yogeshwaran et al., 2018).

Table 2.4 discusses the competencies of a Quantity Surveyor identified by past researchers.

Table 2. 4: Competencies of a Quantity Surveyor

Competencies of a Quantity Surveyor		Authors									
		A	B	C	D	E	F	G	H	I	J
1	Management skills (cost, time, quality, risk)	√	√	√	√	√	√	√	√	√	√
2	Professionalism/ethics	√	√	√	√	√	√	√	√	√	√
3	Programming, planning, and forecasting	√		√	√	√		√	√	√	√
4	Communicational/negotiation skills	√		√		√	√	√	√	√	√
5	Knowledge of the relevant area		√	√	√	√	√	√	√	√	
6	Quantification and Costing		√		√	√	√	√	√	√	√
7	Accounting/economics	√	√	√	√			√	√	√	
8	Responsibleness	√			√		√	√		√	√
9	Contract administration			√	√	√	√	√	√		
10	Analytical skills			√	√		√	√		√	√

Competencies of a Quantity Surveyor		Authors									
		A	B	C	D	E	F	G	H	I	J
11	Conflict avoidance, management, & Dispute resolution procedures	√		√	√	√		√	√		
12	Teamwork	√		√			√	√	√		√
13	Procurement and tendering		√	√	√		√	√		√	
14	Leadership		√	√	√	√				√	
15	Highest standard of work	√	√		√					√	√
16	Documentation/ reporting			√		√	√	√			√
17	Evaluation/ Appraisal	√		√		√	√	√			
18	Client care	√		√				√		√	√
19	Sustainability	√		√	√	√					
20	Synthesis skills		√	√			√				
21	Integrity/ Confidence	√					√	√			
22	Decision-making ability				√			√		√	
23	Due diligence			√	√	√					
24	Awareness of law			√	√						
25	Respectfulness	√									
A- (RIBA, 2012); B – (Dada & Jagboro, 2018); C – (Yogeshwaran et al., 2018); D – (Chamikara, Perera, & Rodrigo, 2020); E –(Chandramohan, Perera, & Dewagoda, 2020); F – (Khairul Hisham & Othman, 2021); G – (Eshun & Kissi, 2021); H – (Noor, Tobi, & Salim, 2020); I – (Oke, Ogunsemi, & Adeyelu, 2018); J – (Spellacy, Edwards, Roberts, Hayhow, & Shelbourn, 2020)											

Table 2.4 illustrates many competencies of a Quantity Surveyor. Some communal competencies of a Quantity Surveyor, as per past research, are responsibility, programming, planning and forecasting, analytical skills, management skills, contract administration, professionalism, communicational skills, knowledge, leadership, conflict avoidance, management & dispute resolution procedures, teamwork, quantification & costing, and economics. Their participation in these fields will necessitate a variety of competencies to meet the industry's diverse demands (Yogeshwaran et al., 2018).

Further, they contribute to the overall accomplishment of building projects by acquiring, developing, and deploying the necessary competencies (Dada & Jagboro, 2018). Their participation in these new fields will necessitate a variety of skills to meet

the industry's diverse demands. Almost all those investigated competencies in Table 2.4 are also there once it passes through IQSSL, AIQS, and RICS websites.

2.7.3 Competencies of an Architect

Architects are construction industry professionals involved in arbitration as professional experts (Rahmat & Abdul Rahim, 2020). An architect must be a competent architect respected by their professionals and society (Mutaqi, 2020). Further, the competencies of an architect are someone with a high level of expertise and understanding in architectural disciplines as a result of their education, training, and experience.

Table 2.5 discusses the competencies of an Architect identified by past researchers.

Table 2. 5: Competencies of an Architect

Competencies of an Architect		Authors									
		A	B	C	D	E	F	G	H	I	J
1	Relationships	√		√	√		√	√	√	√	√
2	Planning and design		√	√	√	√		√	√	√	√
3	Ability to problem identification/ formulation		√	√	√	√		√	√	√	√
4	Social responsibility and global vision		√	√	√	√	√		√	√	√
5	Knowledge of the relevant area			√	√	√	√	√	√	√	√
6	Teamwork		√		√	√	√	√		√	√
7	Communication skills	√		√	√	√	√	√		√	
8	Professionalism		√		√	√	√		√		√
9	Presentation skills		√	√	√			√		√	
10	Management skills				√		√		√	√	√
11	Leadership				√		√	√			√
12	Analytical skills		√	√	√			√			
13	Integrity/ Confidence	√			√		√				
14	Ability to discuss		√				√	√			
15	Synthesis skills			√	√						
16	Simplifying skills			√				√			
17	Listening				√			√			
18	Lifelong learning and research		√								
19	Methodological & Executorial Competencies			√							
20	Focusing			√							

Competencies of an Architect	Authors									
	A	B	C	D	E	F	G	H	I	J
	A- (RIBA, 2005); B- (Department of Architecture, Ming Chuan University, n. d.); C – (McDermott & Salado, 2017); D – (Du Preez, Van der Merwe, & Matthee, 2018); E – (Borucka, Czyż, & Targowski, 2020); F – (Kwofie, Botchway, & Amos-Abanyie, 2018); G – (Kumwenda, 2017); H – (Mutaqi, 2018); I – (Wijaksono, Indrianti, & Widhoyoko, 2018); J – (Mutaqi, 2020)									

Table 2.5 illustrates that Architects also have a set of own competencies unique to their profession. Many authors have revealed that communication skills, relationships, ability to problem identification/ formulation, planning & design, social responsibility and global vision, knowledge, teamwork, and professionalism are their very common competencies. As per Table 2.5, some researchers have disclosed that architects have other competencies, such as the ability to discuss, analytical skills, presentation skills, management skills, and leadership. Almost all those investigated competencies in Table 2.5 are present once it passes through RIBA, SLIA, and ARB websites.

2.7.4 Competencies of a Lawyer

In the 18th century, Lawyers' prestige was not very high, but those who arbitrated disputes had a common advantage in their reputations (Clark, 2009). They are taught to be adversarial and to use whatever tactic to win (Alaloul et al., 2019). A construction professional would be quick to recognize what the parties actually want and will not concentrate solely on entitlement in pushing matters toward a settlement. On the other hand, Lawyers focus on the parties' entitlement, which may lead to mediation polarisation (Wall, Ankrah, & Charlson, 2016). Findings in both Canada and the United States support this view, pointing out that the evaluative style is dramatically reducing the parties' influence, with Lawyers turning disputes into legal arguments (Connery, 2020; Wall et al., 2016). Similar questions about the lack of the parties' right to self-determine their own conflict were posed by Clark (2009) in his analysis of Scottish Lawyers' views on mediation (Wall et al., 2016).

It is of secondary concern to Lawyers whether the parties' relationship is retained (Alaloul et al., 2019). The courts also chose Lawyers as arbitrators, and some are appreciated (Clark, 2009). There are concerns that the HGCRA no longer reduces

construction disputes or substantially reduces the expense of dispute settlement. It may be argued that it helps legal professionals more (Gregory-Stevens et al., 2016).

Table 2.6 discusses the competencies of a Lawyer identified by past researchers.

Table 2. 6: Competencies of a Lawyer

Competencies of a Lawyer		Authors									
		A	B	C	D	E	F	G	H	I	J
1	Strong communication skills		√	√	√	√	√	√	√	√	√
2	Strong judgment/access to justices		√	√	√	√	√	√	√		√
3	Leadership	√		√		√	√	√	√	√	√
4	Management skills		√			√	√	√	√	√	√
5	Ability to problem identification/ formulation				√	√	√	√	√	√	√
6	Knowledge			√	√	√	√		√	√	√
7	Professionalism			√		√	√		√	√	√
8	Logical and Analytical skills		√		√			√	√	√	√
9	Business skills		√			√	√	√	√		√
10	Relationships				√	√	√	√	√		√
11	Teamwork			√			√	√	√		√
12	Responsibleness						√	√	√	√	√
13	Integrity/ Confidence	√					√	√	√		√
14	Ability to listen & understand		√				√		√		√
15	Ethical						√	√	√		√
16	Data compiling						√		√		√
17	Critical/systematic/strategic thinking						√	√	√		
18	Ability to stress managing		√				√	√			
19	Independence			√				√	√		
20	Strategic vision			√			√				
21	Reliability						√		√		√
22	Decision-making ability						√		√		
23	Confidentiality	√							√		
24	Accuracy and precision		√				√				
25	Politeness and receptiveness		√		√						
A – (IBA, 1988); B – (Amazelaw, 2021); C – (Andreanova, Rozhkova, & Bulgakova, 2020); D – (Marsden & Buhler, 2017); E – (Paseuth & Thanitbenjasith, 2019); F – (Savangdy &											

Competencies of a Lawyer	Authors									
	A	B	C	D	E	F	G	H	I	J
Thanitbenjasith, 2020); G – (Hamilton, 2018); H – (Thanaraj, 2017); I – (Terry, 2017); J – (Hamilton, 2020)										

Table 2.6 illustrates a set of competencies of Lawyers according to past research. As per all the above authors in the table, Lawyers have strong communication skills. As per Amazelaw (2021), Hamilton (2018), Thanaraj (2017), Terry (2017), and Hamilton (2020), Lawyers have management skills and logical and analytical skills. They have the ability to problem identification or formulation (Marsden & Buhler, 2017; Paseuth & Thanitbenjasith, 2019; Savangdy & Thanitbenjasith, 2020; Hamilton, 2018; Thanaraj, 2017; Terry, 2017; Hamilton, 2020). Furthermore, past researchers have disclosed that Lawyers have more competencies, such as politeness & receptiveness, the ability to stress manage, professionalism, leadership, teamwork, and independence. Almost all those investigated competencies in Table 2.6 are present once it passes through IBA and BASL websites.

2.8 The current level of arbitration in the Sri Lankan construction industry

2.8.1 Arbitration in the construction industry in Sri Lanka

Construction industry arbitration has increased its importance (Hansen, 2019). The arbitration process comes under ADR methods, where the arbitrators are involved in the dispute resolution activity before moving to litigation (Abeynayake & Weddikkara, 2013). This provides a basis and an understanding of where arbitration is very similar to the litigation process (De Alwis, Abeynayake, & Francis, 2016). Arbitration, on the other hand, is not always the only choice with no drawbacks (Alaloul et al., 2019). Arbitration as a means of resolving disputes has grown in popularity in Sri Lanka's construction industry (Ranasinghe, 2015).

2.8.2 Whether achieved or not, characteristics of arbitration

In Sri Lanka, the doctrine of party autonomy permits a party to choose its arbitrators, arbitration seat, procedural legislation, and substantive law (Ranasinghe, 2015). Compared to litigation, arbitration allows almost all evidence; however, arbitrators

must pay careful attention to the weight they give each piece of evidence (Alaloul et al., 2019).

The informality of the procedure has started to change in recent years, and arbitration is now becoming a more organised, elaborate, and costly process than before. As a result, arbitration loses its competitive advantage over litigation (Alaloul et al., 2019). The procedure is also not expected to run smoothly because of scheduling conflicts between the parties and the arbitrators (Alaloul et al., 2019). If the rule is not strictly followed, the arbitration decision can be reversed, but this is also the case in litigation in general. Today's authors disagree about the effectiveness of litigation as a fast and cost-effective means of resolving disputes (Alaloul et al., 2019).

2.8.3 How arbitration takes place in Sri Lanka in the present

Out of many ADR methods in the construction industry, the arbitration procedure in Sri Lanka has more value and recognition due to its connectivity to the common law of the country and its legal enforceability afterwards (Abeynayake, 2008; Ranasinghe, 2015). Arbitrations in Sri Lanka could occur at one of the arbitration centres or any other location chosen by the parties (Ranasinghe, 2015).

The Sri Lankan Arbitration Act No. 11 of 1995 tends to regulate arbitration in Sri Lanka (Illankoon et al., 2019; Ranasinghe, 2015). Following the passage of this Act, any international contractor might resolve their problems through arbitration and have the award enforced in Sri Lanka, regardless of the arbitration seat, which could be a country of convenience for all contracting parties (Ranasinghe, 2015).

Sri Lanka conforms to the New York Convention and has been a party to it without hesitation (Ranasinghe, 2015). Since 1995, the country has been conducting arbitrations under the New York Convention for approximately 20 years (Ranasinghe, 2015).

2.8.4 Whether arbitration is commonly used or how far used to resolve disputes in the construction industry in Sri Lanka

Arbitration has grown in popularity as a means of resolving economic disputes on national and worldwide scales (Ranasinghe, 2015). As a result, the “fair” arbitrator must be considered the foundation for the parties’ expectations for any arbitral process,

just as the standards of impartiality and independence are essential to the arbitral mandate (Welser & Mimmagh, n.d.). In Sri Lanka, the doctrine of party autonomy permits a party to choose its arbitrators, arbitration seat, procedural legislation, and substantive law (Ranasinghe, 2015).

2.9 Why is it required to investigate the most suitable professional in the construction industry as an arbitrator?

2.9.1 Purpose of using arbitration in the construction industry

Arbitration is a practice that relies heavily on human confidence, particularly faith in arbitrators who have been selected and appointed (Welser & Mimmagh, n.d.). Arbitration hearings are confidential and take less time, giving this process additional benefits (Alaloul et al., 2019). Finally, disputants who want to preserve their partnership after settling the conflict should pursue arbitration (Alaloul et al., 2019). It resolves disputes in an impartial, private, rapid, flexible, and less expensive method than litigation before national courts (Choi et al., 2014; Dhakil Alla Al-Tarawneh, 2018; Gulghane & Khandve, 2015).

Professional associations such as the American Arbitration Association (AAA) maintain a directory of accredited arbitrators in the United States (Alaloul et al., 2019). All parties to the disagreement are given a list of selected arbitrators, which they can review and agree on before selecting arbitrators from the list (Alaloul et al., 2019; Dhakil Alla Al-Tarawneh, 2018). The arbitrator and the disputants then decide on a date for an arbitration hearing. The Lawyers for each side present any notes, testimony, or pieces of proof to the arbitrators (Alaloul et al., 2019). A court order supports the arbitration procedure by making the decision binding on all parties (Alaloul et al., 2019). The nature of arbitrations is consensual and private (Ranasinghe, 2015).

Compared to court judges, who are normally experts in their fields, arbitration hearings seldom include expert witnesses (Alaloul et al., 2019). It should reveal not just any previous or current affiliations with the parties but also any circumstances that could raise reasonable doubts about the arbitrator's integrity and reliability to render an unbiased judgment (Donaubauer et al., 2018).

2.9.2 Purpose of having construction industry professionals as arbitrators

When the applicable arbitration rules become more and more identical, the arbitrators and their personalities become the most crucial factor in determining how the proceedings are shaped (Welser & Mimmagh, n.d.). Furthermore, researchers believe that well-experienced state- or investor-appointed arbitrators can help to attenuate or reinforce the impact of presidents' appointment bias on arbitration decisions (Donaubauer et al., 2018).

The architect/engineer and the contractor are the two primary parties traditionally engaged in construction projects. Communication between these two groups is critical to the project's success (Herath, Coomasaru, & Perera, 2018). Arbitrators know that they have the opportunity to fulfil that job as a result of a party appointment or professional reputation, and the ultimate award is the parties' final impression (Welser & Mimmagh, n.d.). It should be presented in such a way that it satisfies the parties and gives them as less reason as possible to have any residual complaints about how the procedure was carried out and how it was decided (Welser & Mimmagh, n.d.). The majority of the arbitrators were construction professionals suggesting that they had the expertise that litigation judges lacked (Abwunza, 2020).

2.9.3 Requirements of the arbitrator for the proper usage of arbitration

Bishop Gilbert Burnet's posthumously published biography of his life is quoted multiple times in the book. It includes guidance on the significance of legal knowledge to pursue a career as an arbitrator (Roebuck, Boorman, Markless, & Nairn, 2019).

The parties anticipate the arbitrators to accommodate the parties' mutual perspectives, and this expectation continues after initiating the arbitration (Welser & Mimmagh, n.d.). Because they are usually not nominated only by one party, the president of an arbitration holds the most prominent position in arbitration, has the greatest responsibility in case management, and has the most influence in the final judgment (Donaubauer et al., 2018).

The arbitrators direct the arbitral process and, where necessary, impose procedural norms and safeguards (Welser & Mimmagh, n.d.). The two parties can choose more

qualified arbitrators who have participated in prior cases on the same line-up (Donaubauer et al., 2018).

2.9.4 The necessity of investigating the most suitable professional in the construction industry as an arbitrator

Disputants and their representatives are likely to benefit from a better knowledge of the importance of proper conduct, better approaches to evidence presentation, and ensuring that the arbitrators assigned have the necessary expertise to deal with the complexity of the dispute (Abwunza, Peter, & Muigua, 2021). Therefore, Legislative reforms, the development of new arbitration institutions, and the rise of qualified construction arbitrators (Besaiso et al., 2018).

Naturally, arbitrators cannot misuse the authority granted to them since they may vary from the parties' expectations and limit their legitimate opportunity to present their respective claims (Welser & Mimmagh, n.d.). Some evidence proves that more experienced arbitrators appointed by claimants increase the likelihood of client victories (Donaubauer et al., 2018). Even arbitrators with great academic and professional credentials may have personal styles or preferences that contrast with a party's preferred course of action in a particular case (Welser & Mimmagh, n.d.). According to the fairness heuristic theory, disputants' openness to arbitrator manipulation raises the ambiguity level in the arbitral process, lowering disputants' confidence in the arbitrator's ability to give fair outcomes (Abwunza et al., 2021).

Arbitrators must have a specialist understanding of the dispute's subject matter and expertise in arbitration practice and procedure (Abwunza et al., 2021). Arbitrators with construction industry experience are necessary as a particular background in the industry. Therefore, it is required to investigate the most suitable professional as an arbitrator in the construction industry among the construction professionals.

2.10 Summary

According to the above literature references, the construction industry is a complex industry involving many stakeholders, including professionals. Because of its complex nature and involvement of various parties, disputes are highly expected. Hence it is essential to have dispute resolution processes to proceed with construction success.

There is alternative dispute resolution and litigation for the solving construction industry. Then it becomes essential to involve experts and professionals in the industry in arbitration as one of the most influential alternative dispute resolution methods.

The discussion thus far allows one to assume that becoming an arbitrator in Sri Lanka is a straightforward process for professionals with extensive industry expertise and exposure. On the other hand, the relevance and usefulness of theoretical discoveries can be determined only by comparing them to industry practice. Finding the most suitable professional is essential, as many professionals act as arbitrators in the construction industry in Sri Lanka.

CHAPTER 03

3 RESEARCH METHODOLOGY

3.1 Introduction

Chapter 03 discusses the research methodology for the fulfilment of the aims and objectives of this research on the topic “Investigate the most suitable professional to be an arbitrator in the Sri Lankan construction industry”. Research is entailed methodical, creative work aimed at increasing knowledge and applying that knowledge to establish or confirm facts, solve problems, develop new theories, and provide inventive solutions (Basias & Pollalis, 2018). According to Nayak and Singh (2021), research methodology is a research technique that converts ontological and epistemological assumptions into rules, processes, and standards that guide research. Therefore, this chapter consists of Chapter Introduction, Research design, Research approaches, Research Method, Data Analysis Techniques, Research Process, and Chapter summary.

3.2 Research design

“A research design is the logical and systematic planning and directing of the research” (Nayak & Singh, 2021). According to William Zikmund, “Research design is a master plan specifying the methods and procedures for collection and analyzing the needed information” (Pandey & Pandey, 2021). Kerlinger stated that “Research design is the plan, structure, and strategy of investigation conceived to obtain answers to research questions and to control variance” (Pandey & Pandey, 2021).

The primary goal is to figure out how to find a solution to the research topic (Kumar, 2011). It is an action plan that spans the research process from the beginning to the end (Yin, 1994). The primary function of a research design is to ensure that the information obtained enables the researcher to answer the research problem very clearly (Punch, 2005). The research process includes selecting a research method, operationalising components of interest, and establishing an acceptable sampling strategy (Nayak & Singh, 2021). Further to those authors, a research design includes information about the problem, objectives, research questions, study area, sample plan, and data gathering and analysis methods and procedures.

3.3 Research approaches

3.3.1 Available approaches

The main three research approaches are, Quantitative, Qualitative, and Mixed research approaches (Creswell, 2014; Hong, Gonzalez-Reyes, & Pluye, 2018; Snyder, 2019).

1. Quantitative research approach

Quantitative research usually entails a systematic and empirical analysis of phenomena using statistics and mathematics, and numerical data processing (Basias & Pollalis, 2018; Hong et al., 2018). In quantitative research, the process of estimating numbers serves as a vital link between empirical observation and the mathematical expression of quantitative relationships (Basias & Pollalis, 2018). In addition, data are often selected and evaluated in a numerical format in quantitative research (Basias & Pollalis, 2018; Hong et al., 2018)

The quantitative research approach has several advantages (Basias & Pollalis, 2018): The result is numerical, so research may not be influenced by personal feelings or opinions in considering and representing research and facts; it simplifies the processing of a large amount of data; it allows easier data comparison. Besides, quantitative research enables the development of quantitative research methods (Basias & Pollalis, 2018; Hong et al., 2018). In summary, quantitative research is a study form in which the researcher determines what to research, asks specific and narrow questions, collects quantifiable data from participants, and performs statistical analyses (Creswell, 2014).

2. Qualitative research approach

In the early twentieth century, anthropologists and sociologists employed qualitative research first as a research approach (Mohajan, 2018). Further, Hong et al. (2018) and Mohajan (2018) explained that it is tough to characterise qualitative research properly and lacks a unique theory or paradigm of its own.

In summary, Qualitative research is a study type in which the researcher asks broad and general questions, collects data mainly in the form of words or text from participants, and describes and analyses these words. He performs the investigation in

a subjective manner (Creswell, 2014). Interviews and observations are common in qualitative research approaches, but they can also include case studies, surveys, and historical and document analyses (Mohajan, 2018). Ground theory, ethnography, phenomenological research, and narrative research are also present here (Nayak & Singh, 2021).

According to Bryman (2008), Qualitative research focuses on words rather than numbers while collecting and analysing data. Qualitative research differs from quantitative research in several ways as follows:

- An inductive approach to the link between theory and research is highlighted.
- It has rejected the natural scientific model's methods and norms in general, and positivism in particular, in favour of focusing on how people understand their social environments.
- It encapsulates a concept of social reality as an ever-shifting emergency property of an individual's fabrication.

Initially, this study performed a literature survey to collect data. Then semi-structured interviews are adopted as a qualitative research approach because the researcher needs an in-depth study and expert knowledge input.

3. Mixed research approach

According to Bryman (2008), in mixed research methods, the term “research” refers to studies that integrate quantitative and qualitative research approaches. The research may use various methods to reach multiple objectives (Hong et al., 2018). As per Creswell (2014), the mixed research method uses three general tactics, i.e., sequential mixed methods, concurrent mixed methods, and transformative mixed methods.

The mixed research approach has been recognised for its following benefits: Overcoming the shortcomings of a specific study method, compensating for the shortcomings and limitations of specific methods by gaining a better understanding of their individual strengths and view the subject under inquiry from several angles and perspectives to get a thorough picture.

3.3.2 Selected Approaches for this Study

Currently, professionals as arbitrators and arbitration in the construction industry are popular. Various professionals practise as arbitrators in the industry. However, the most suitable professional among those for practice as an arbitrator in the industry is a problem. Therefore, evaluation competencies required by an arbitrator with competencies of selected professionals are significant and would evaluate based on the requirement for basic research to be conducted. The most appropriate approach for this study is a qualitative approach, which considers the sample size, open-ended process, product quality, speed, affordability, and efficiency. According to Snyder (2019), determining the best approach for a specific review might be difficult. Still, the research topic and specific goal of the review always define the best tactic to apply. He further states that the systematic review is likely the most reliable and thorough method of collecting articles because it ensures covering all relevant data. Yet, it does necessitate a specific research question, which may not be practical or even appropriate for many project types—hence, semi-structured interviews are the most useful.

3.4 Research Method

3.4.1 Selected method for this study

Three basic types of interviews are available for research (Nayak & Singh, 2021):

- Structured interviews
- Semi-structured interviews
- Unstructured interviews

Structured interviews follow a strict set of guidelines and are very formal (Nayak & Singh, 2021). Basias and Pollalis (2018) and Nayak and Singh (2021) explain that the researcher has a list of questions prepared in advance, and each respondent is presented with the same questions. Furthermore, alternative answers are limited to a predetermined selection of options.

Semi-structured interviews entail a series of open-ended questions based on the topic wished to address and are somewhat flexible (Basias & Pollalis, 2018; Nayak & Singh, 2021).

Unstructured interviews differ from structured and semi-structured interviews as time is given to interviewees to develop their views and follow their train of thought once the researcher proposes a theme or issue (Basias & Pollalis, 2018; Nayak & Singh, 2021). Therefore, the selected research method for this research is semi-structured interviews.

Semi-structured interviews change, add, or delete the preliminary variables collected from the literature study (Lu, Zhang, & Pan, 2015). There was the requirement to collect information from experts on the relevant area, which the literature survey could not find. Hence, semi-structured interviews were selected for this study to confirm data from the literature.

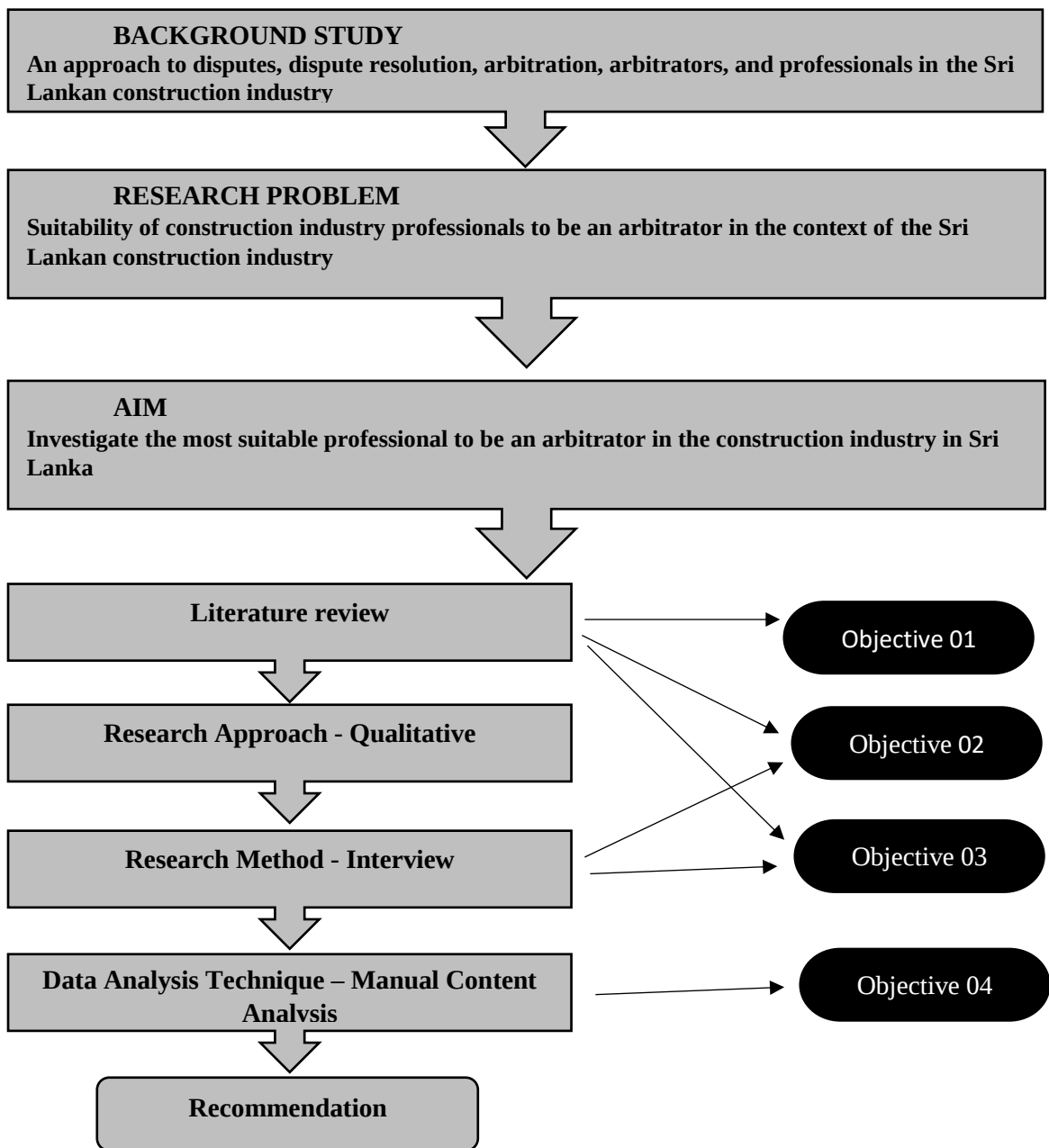
Sixteen (16) semi-structured interviews were held with four Engineers, four Quantity Surveyors, four Architects, and four Lawyers. They have been involved in arbitration or have acted as arbitrators for at least two arbitrations in the construction industry disputes.

3.5 Data Analysis Techniques

Context analysis is defined as “Making replicable and valid inferences from data to their context” (Krippendorff, 2012) and “Any technique for making inferences by **objectively** and **systematically** identifying specified characteristics of messages” (Holsti, 1969).

Collected data were analysed through a manual context analysis. According to Hsieh and Shannon (2005), content analysis is the most frequent method for analysing qualitative data. This selected technique is based on the codification of qualitative data to generate a systematic text description that can identify patterns in information presentation and reporting. The key benefits of content analysis are that it is content-sensitive, can be utilised in various research methods, and can analyse a wide range of qualitative data (Kyngäs, 2020).

3.6 Research Process



3.7 Summary

This chapter discussed the research design, available research approaches and selected research approach among them, research methods and selected method for this study, data analysis techniques, and the research process. The qualitative approach and semi-structured interviews were selected as the research approach and the research method, respectively. It uses manual content analysis for data analysis. Finally, this chapter presents the research process using a diagram.

CHAPTER 04

4 DATA COLLECTION AND ANALYSIS

4.1 Introduction

Chapter 04 presents data collected through the semi-structured interviews substantially with appropriate analysis. The interview guideline for these semi-structured interviews is based on the literature review and the objectives correspondingly to fulfil the study aim. The professionals who participated in the semi-structured interviews were Engineers, Architects, Quantity Surveyors, and Lawyers. A manual content analysis was carried out to fulfil the fourth objective of this study. This study expects to investigate the most suitable professional to appear as an arbitrator in construction disputes.

4.2 Semi-Structured Interviews

Sixteen (16) semi-structured interviews were held with the professionals who acted as arbitrators or were involved in construction industry arbitration. Respondents Selected among professionals for this study were Engineers, Architects, Quantity Surveyors, and Lawyers. Face-to-face and online interviews were conducted, each lasting for about 45 – 60 minutes. Respondents came up with different and more comprehensive observations to accomplish the objectives of this study.

4.3 Semi-Structured Interview Objectives

This study consists of four key objectives to accomplish its aim. A comprehensive literature review has contented its first three objectives respectively. Semi-structured interviews were held with relevant experienced professionals to re-evaluate those data based on past research and (predominantly) to fulfil the fourth objective of this research. Data gathered through the interviews have their own similarities and differentials based on respondents' experience and knowledge of the appropriate area.

The first objective of this research is to investigate professionals in the industry involved in the arbitration procedure. Those involved in the arbitration procedures could be explored via a literature review and confirmed with interviewees.

The second objective is investigating the competencies possessed by the above-identified professionals, and the third is investigating the competencies required by an arbitrator. Both were identified, first through the literature review and then through semi-structured interviews. The fourth objective is to evaluate the suitability level of the above professionals in performing arbitration, totally based on the data collected from respondents.

4.4 Respondents' details for interviews

Semi-structured interviews were carried out successfully with sixteen (16) respondents accordingly to the semi-structured interview guideline. All respondents had two to twenty (2 – 20) years of experience in construction industry arbitration in Sri Lanka and seven to forty-six (7- 46) years of professional experience. Table 4.1 presents the details of respondents who participated in fulfilling the research aim.

Table 4. 1: Details of Interviewed Respondents

Interviewee	Designation	Profession	Professional Qualification	Type of Organization	Total Experience (years)	Experience in Arbitration (years)	Key expertise areas
I 01	Senior Consultant	Engineer	Chartered	Consultancy	43	20	Contract administration
I 02	Consultant	Engineer	Chartered	Consultancy	46	15	Construction management
I 03	Contracts Manager	Engineer	PMP	Contractor	17	07	Construction management & Arbitration
I 04	Deputy General Manager	Engineer	Chartered	Consultancy	18	05	Contract management
I 05	Managing Director	Quantity Surveyor	Chartered	Other	25	15	Claims and dispute management

Interviewee	Designation	Profession	Professional Qualification	Type of Organization	Total Experience (years)	Experience in Arbitration (years)	Key expertise areas
I 06	Director	Quantity Surveyor	Chartered	Consultancy	14	04	Contract administration
I 07	Project Quantity Surveyor	Quantity Surveyor	Chartered	Consultancy	15	04	Contract administration & Claims Management
I 08	Manager – Monitoring and Controlling	Quantity Surveyor	Chartered	Contractor	07	03	Contract administration
I 09	Associate Director	Architect	Chartered	Consultancy	24	03	Project Management, Dispute resolution
I 10	Senior Architect	Architect	Chartered	Consultancy	21	03	Construction management, Dispute resolution
I 11	Project Architect	Architect	Chartered	Consultancy	13	02	Construction design, project management, Dispute resolution
I 12	Project Architect	Architect	Chartered	Consultancy	10	02	designing, coordinating, Dispute resolution
I 13	Senior Lecturer	Lawyer	Attorney-at-Law	Academic	18	15	Construction law, Dispute

Interviewee	Designation	Profession	Professional Qualification	Type of Organization	Total Experience (years)	Experience in Arbitration (years)	Key expertise areas
							resolution, Civil law
I 14	Senior Legal officer	Lawyer	Attorney-at-Law	Consultancy	15	10	Construction law, Arbitration & Civil law
I 15	Counsel, Attorney-at-Law	Lawyer	Attorney-at-Law	Other	11	8	Construction Arbitration and Adjudication
I 16	Legal officer	Lawyer	Attorney-at-Law	Consultancy	11	8	Construction law & Arbitration

Table 4.1 shows professionals from the construction industry and legal professional environment among the representatives who were highly helpful in collecting data for this study. Therefore, it was a comprehensive data collection via semi-structured interviews with well-experienced and conversant professionals in both industries who engage in construction arbitration.

4.5 Research Findings

4.5.1 Competencies required by an arbitrator

The literature review identified twelve (12) key competencies of an arbitrator. The respondents confirmed most of those competencies after conducting semi-structured interviews. Simultaneously, eight (8) other competencies apart from the literature review were identified from interviewees, as mentioned in Table 4.2.

Table 4.2 presents the identified competencies required by an arbitrator, as shown by the literature review and semi-structured interviews.

Table 4. 2: Competencies required by an arbitrator

No.	Competencies of an Arbitrator	Interviewee																
		Literature	I01	I02	I03	I04	I05	I06	I07	I08	I09	I10	I11	I12	I13	I14	I15	I16
1	Dispute resolution techniques	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	
2	Confidentiality	√	√	√	√	√	√	√		√	√	√	√		√	√	√	
3	Reliability	√	√	√	√	√	√	√	√	√	√		√		√	√	√	
4	Impartiality & Independent	√	√	√	√	√	√	√	√	√	√	√	√	√		√	√	
5	Integrity	√	√	√	√	√	√	√		√	√	√	√		√	√	√	√
6	Decision-making ability	√	√	√	√	√	√	√	√	√	√	√	√	√		√	√	√
7	Analytical skills	√	√	√	√	√	√	√	√	√	√	√	√	√		√	√	√
8	Management skills	√		√			√		√	√	√		√	√	√	√	√	
9	Negotiation skills	√		√		√	√	√	√	√	√	√	√	√		√	√	
10	Professionalism	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
11	Confidence	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	
12	Knowledge of the relevant area	√		√		√	√	√	√	√	√	√	√	√	√	√	√	√
13	Time-bound		√	√	√		√	√	√	√			√					√
14	Interpersonal qualities			√		√		√	√	√		√	√	√			√	√
15	Knowledge of Legality & ADR		√	√	√			√	√	√		√	√	√		√		
16	Understand Natural Justice		√	√	√				√	√				√	√	√	√	√
17	Communication skills		√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√

No.	Competencies of an Arbitrator	Interviewee																
		Literature	I01	I02	I03	I04	I05	I06	I07	I08	I09	I10	I11	I12	I13	I14	I15	I16
18	Knowledge contractual law		√	√	√	√	√	√	√	√						√		√
19	Technical skills required for construction		√	√	√	√	√		√	√	√		√	√				
20	Practical skills required for construction		√	√	√	√	√	√	√	√		√	√					

As per (Table 4.2) competencies of an arbitrator, most respondents confirmed the competencies required by an arbitrator were identified via literature review. The interviewees proposed a few other competencies in addition to the ones identified in the literature review.

I 08 stated that “... shall follow dispute resolution techniques to lead the parties for amicable settlement first”. Also, **I 09** stated that “Dispute resolution techniques are very important”. Considering confidentiality, **I 01** stated that “Information should not be disclosed to unauthorized parties”. Concurrently, **I 07** stated that “Sometimes cannot see with the arbitrators and they should be more confidential”. Furthermore, **I 09** stated that “It is very important for both parties the confidentiality of an arbitrator”. Regarding reliability, **I 01** stated that “The arbitrators must be reliable in attending to the arbitration process”.

I 01 said that “... should be seen to be impartiality and independency from arbitrators”, and **I 09** stated that “focus only to the attended situation with free mind” regarding impartiality and independence. According to **I 13**, “In many arbitral hearings, some arbitrators are biased/impartial to the other party; especially with retired judges”. About integrity, **I 01** stated that “honesty in conduct” and **I 07** stated that “... should be more advanced”.

Considering the decision-making ability, **I 01** stated that “... *should be able to analyse information and take correct decisions*”. According to **I 09**, “... *arbitrator capable of reaching creative decisions on the situational basis with a common understanding of both parties*”.

Furthermore, **I 13** said that “*Some arbitrators are not yet quick & appropriate decisions for the dispute. Sometimes they adjourned arbitral hearings due to lowest decision-making capacity*”. **I 15** stated that “*The decisions should be limited to the matters which parties have referred to arbitration*”. **I 01** stated that “... *to be able to analyse issues considering all factors*” regarding analytical skills.

As per **I 01**, “... *may not necessarily be possessed with management skills by some professionals*”, and **I 03** stated that “*Some arbitrators need not management skills, except for solo or head of the panel*”. **I 06** stated that “... *areas like dispute handling only need management skills*”. **I 08** stated that “... *shall be competent of situation analysis in addition to arithmetical analysis skills*”. **I 13** stated that “*They have no analytical power. They are not properly considering the analysis part of the dispute*”.

As per **I 01**, “... *not relevant negotiation skills since negotiations are not involved*”. **I 01** Further stated, “... *should display professionalism in all dealings*”, “... *should be able to command confidence*”, and “*An arbitrator should have confidence for a particular job*”. As per **I 01**, “... *may not necessarily be possessed with the knowledge on the relevant area by some professionals*”. Still, **I 02** specified that “*Knowledge of the relevant area is the top priority*”. **I 03** said that “*Knowledge on relevant subject area or law is essential*”, whereas **I 06** stated that “*Reasonable knowledge could be an added advantage*”. **I 08** stated that “... *necessary for both contractual and technical aspects*”, and **I 09** stated that “*It is very important knowledge on relevant area*”.

I 03 stated that “... *interpersonal qualities depend on the person*”. Finally, **I 01** affirmed that “*Construction industry arbitrators require technical skills and practical skills necessary for construction for having a successful arbitration in the construction industry*”.

4.5.2 Professionals act as arbitrators in the construction industry

This section contains the viewpoints of the interviewees regarding who are the professionals acting as arbitrators in the construction industry. After the literature review, it is possible to identify professionals who can act as arbitrators in the construction industry. Then the respondents of the interviews confirmed some, rejected some, and identified three (3) more professionals apart from the ones found in the literature review. Table 4.3 demonstrates the professionals working as arbitrators in the construction industry, as identified via literature review and interviews.

Table 4. 3: Professionals working as arbitrators in the construction industry

		Interviewee															
		Literature	I01	I02	I03	I04	I05	I06	I07	I08	I09	I10	I11	I12	I13	I14	I15
1	Architects	√	√	√	√	√	√	√	√	√	√	√	√		√		√
2	Engineers	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
3	Surveyors	√					√		√				√			√	
4	Quantity Surveyors	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
5	Lawyers	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
6	Judges	√		√	√	√	√		√			√	√			√	
7	Accountant	√					√		√				√				
8	Retired judges		√	√		√	√		√				√	√	√		√
9	Insurance professionals											√	√				
10	Banking professionals								√								

According to the literature review and to what all respondents identified, “*Engineers, Quantity Surveyors, and Lawyers act as arbitrators in the construction industry*”. Except for **I 13** and **I 15**, the literature review and the respondents said that “*Architects act as arbitrators in the construction industry*”. Throughout the literature review, the researcher also found that Surveyors work as arbitrators. Simultaneously **I 05**, **I 07**, **I**

12, and I 15 stated that “Surveyors too work as arbitrators in the construction industry”.

Furthermore, with literature, I 02, I 03, I 04, I 05, I 06, I 08, I 11, I 12, and I 15 respondents confirmed that Judges work as arbitrators in the industry. According to the literature review and I 05, I 07, and I 12 respondents, Accountants also work as arbitrators, whereas I 11 and I 12 stated that insurance professionals work as arbitrators in the industry. According to I 08, “Banking professionals as well work as arbitrators in the construction industry arbitration”.

4.5.3 Competencies possess an engineer, which are required by an arbitrator

This section consists of the competencies an engineer possesses, which are required by an arbitrator, identified from the literature review and interviews. The engineers are leading professionals in the construction industry. As found through the literature, they have various competencies identical to their profession. This study considered twenty (20) major competencies present among engineers. Table 4.4 shows the competencies especially possessed by an engineer throughout his profession, which are required by an arbitrator, revealed from the literature and the interviews.

Table 4. 4: Competencies possess an engineer, which are required by an arbitrator

No.	Competencies of an Arbitrator	Interviewee																
		Literature	I01	I02	I03	I04	I05	I06	I07	I08	I09	I10	I11	I12	I13	I14	I15	I16
1	Dispute resolution techniques		√	√	√	√			√	√	√	√	√	√			√	
2	Confidentiality		√	√	√	√	√	√		√		√		√	√	√	√	
3	Reliability	√	√	√	√	√	√	√	√	√	√				√	√	√	
4	Impartiality & Independent		√	√	√	√	√	√	√	√	√			√		√	√	
5	Integrity	√	√	√	√	√	√	√		√	√	√		√	√	√	√	√
6	Decision-making ability	√	√	√	√	√	√	√	√	√	√	√	√	√	√		√	√

No.	Competencies of an Arbitrator	Interviewee																
		Literature	I01	I02	I03	I04	I05	I06	I07	I08	I09	I10	I11	I12	I13	I14	I15	I16
7	Analytical skills	√	√	√	√	√	√	√	√	√	√	√	√	√			√	√
8	Management skills	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	
9	Negotiation skills			√	√	√	√	√		√	√	√		√			√	
10	Professionalism	√	√	√	√	√	√	√	√	√		√	√	√	√	√	√	√
11	Confidence		√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	
12	Knowledge of the relevant area	√	√	√	√	√			√	√	√	√	√	√	√	√	√	√
13	Time-bound		√	√	√		√		√			√	√	√		√		
14	Interpersonal qualities	√	√	√	√		√		√			√	√	√		√		
15	Knowledge of Legality & ADR			√										√				
16	Understand Natural Justice													√				
17	Communications skills	√	√	√	√				√	√			√	√			√	√
18	Knowledge contractual law			√	√													
19	Technical skills required for construction		√	√	√	√	√		√	√	√	√		√	√	√		
20	Practical skills required for construction		√	√	√	√		√	√		√	√			√	√		

In line with the literature review and the interviews, decision-making ability, analytical skills, management skills, and professionalism are some primary competencies of engineers required by an arbitrator.

The following competencies were not identified during the literature review as possessed by engineers: dispute resolution techniques, confidentiality, impartiality & independence, negotiation skills, confidence, time-bound, knowledge of legality & ADR, understanding of natural justice, and knowledge of contractual law.

However, the interviewed respondents stated that engineers have those competencies. Many interviewees have recognised that engineers have dispute resolution techniques, confidentiality, impartiality & independence, negotiation skills, confidence, and time-bound competencies, as required by an arbitrator. Most respondents and the literature stated that *“Engineers have interpersonal qualities as well”*. I 02 and I 12 stated that *“Engineers have knowledge on legality & alternative dispute resolution”*. Only I 12 said that *“Engineers understand Natural Justice”*. Only nine of the sixteen respondents and the literature review stated that *“Engineers have good communications skills”*. Furthermore, I 02 and I 03 mentioned that *“Engineers have knowledge of contractual law”*. Except for I 06, I 11, I 15, and I 16, others said that Engineers have the technical skills required for construction, while except for I 05, I 08, I 11, I 12, I 15, and I 16, others have stated that *“Engineers have practical skills essential for construction”*.

4.5.4 Competencies possess a Quantity Surveyor, which are required by an arbitrator

This section consists of the competencies of a Quantity Surveyor, required by an arbitrator, revealed through literature review and interviews. The Qs are professionals who play top roles in the construction industry. The literature found that they have various competencies identical to their profession. Twenty-five (25) major competencies of Qs among them were considered for this study. Table 4.5 presents the specific competencies possessed by a QS over his profession that are required by an arbitrator, as determined by the literature and interviews.

Table 4. 5: Competencies possess a Quantity Surveyor possess, required by an arbitrator

No.	Competencies of an Arbitrator	Interviewee																
		Literature	I01	I02	I03	I04	I05	I06	I07	I08	I09	I10	I11	I12	I13	I14	I15	I16
1	Dispute resolution techniques	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	
2	Confidentiality		√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	
3	Reliability		√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	
4	Impartiality & Independent		√	√	√	√	√	√	√	√		√	√	√	√	√		
5	Integrity	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
6	Decision- making ability	√	√	√	√	√	√	√	√		√	√	√	√			√	√
7	Analytical skills	√	√	√		√	√	√	√	√	√	√	√	√	√		√	
8	Management skills	√	√	√	√	√	√	√	√		√	√	√	√			√	
9	Negotiation skills			√		√	√	√	√	√	√		√	√			√	
10	Professionalism	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
11	confidence		√	√		√	√	√	√	√	√	√	√	√	√	√	√	
12	Knowledge of the relevant area	√	√	√		√	√	√	√	√	√	√	√	√	√	√	√	√
13	Time-bound		√	√	√		√		√			√	√	√		√		
14	Interpersonal qualities		√	√	√		√		√			√	√	√		√		
15	Knowledge of Legality & ADR	√	√	√			√	√	√	√		√	√	√				
16	Understand Natural Justice						√							√				
17	Communicatio ns skills	√	√	√	√		√	√	√	√	√	√			√			
18	Knowledge contractual law	√	√	√	√	√	√	√	√	√			√	√			√	√

No.	Competencies of an Arbitrator	Interviewee																
		Literature	I01	I02	I03	I04	I05	I06	I07	I08	I09	I10	I11	I12	I13	I14	I15	I16
19	Technical skills required for construction		√	√			√	√	√	√	√			√	√	√		√
20	Practical skills required for construction					√	√	√	√	√	√			√	√	√		√

All interviewees and the referred literature stated that “Quantity Surveyors hold Integrity and professionalism from their profession”. Except for **I 16**, all other respondents and the literature references stated that “QS professionals have dispute resolution techniques”. Anyhow, confidentiality, reliability, impartiality & independence, negotiation skills, confidence, time-bound, interpersonal qualities, and understanding of natural justice, identified as an arbitrator’s competencies, could not be found as key competencies of a QS in the literature review. Except for **I 16**, all other respondents stated that “Quantity Surveyors possess confidentiality and reliability from their profession”.

Furthermore, except for **I 10** and **I 16**, all other interviewees said that “They own independency and impartiality gained from their profession, which is an important competency of an arbitrator”. Literature and all respondents except **I 10** and **I 16** stated that “Qs have a good ability of decision-making”. Similarly, the literature review and the interviewees except for **I 03**, **I 14**, and **I 16** stated that “They have a great analytical skill from their profession specifically”. All respondents except **I 09**, **I 14**, and **I 16** said that “Qs are with management skills”. Furthermore, most respondents confirmed that Qs have competencies required by an arbitrator, such as negotiation skills, time-bound, interpersonal qualities, and knowledge of legality and ADR. Only **I 05** and **I 12** said that “Qs have understood natural justice”.

Further to literature findings and **I 01**, **I 02**, and **I 03**, all QS respondents stated that “Qs have great communication skills as the way to communicate between the parties

to the contracts and all other stakeholders”. Finally, as per the literature review, all engineer respondents and all QS respondents supposed that QSs have a great knowledge of contractual law. Except for **I 03, I 04, I 10, I 11, and I 15**, others said that QSs had obtained the technical skills necessary for the construction. According to all QS respondents, QSs have practical skills essential for construction.

4.5.5 Competencies possess an Architect, which are required by an arbitrator

This section deliberates on the competencies an Architect has, which are required by an arbitrator, as revealed by the literature review and semi-structured interviews. Architects are common professionals involved in construction projects from beginning to end. Therefore, the literature review found that they have experience in disputes among the parties to a contract and ADR. The researcher found twenty (20) foremost competencies of Architects relevant to the research area.

Table 4.6 shows the precise competencies possessed by a QS over his profession that are required by an arbitrator, determined by the literature review and semi-structured interviews.

Table 4. 6: Competencies possess an Architects, which are required by an arbitrator

		No.	Competencies of an Arbitrator	Interviewee															
				Literature	I01	I02	I03	I04	I05	I06	I07	I08	I09	I10	I11	I12	I13	I14	I15
	1	Dispute resolution techniques	√	√		√	√				√	√	√	√	√			√	
	2	Confidentiality		√	√	√	√	√	√		√	√	√	√	√	√	√	√	
	3	Reliability		√	√	√	√	√	√	√	√	√	√	√	√		√	√	√
	4	Impartiality & Independent		√	√	√	√	√	√	√	√	√	√	√	√		√	√	
	5	Integrity	√	√	√	√	√	√	√		√	√	√	√	√	√	√	√	√
	6	Decision-making ability		√	√	√	√	√	√	√	√		√	√	√			√	√
	7	Analytical skills	√	√				√		√	√	√	√	√	√			√	

No.	Competencies of an Arbitrator	Interviewee																
		Literature	I01	I02	I03	I04	I05	I06	I07	I08	I09	I10	I11	I12	I13	I14	I15	I16
8	Management skills	√	√				√	√	√	√	√	√	√	√	√		√	
9	Negotiation skills			√		√	√	√	√	√	√	√	√	√			√	
10	Professionalism	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
11	Confidence		√	√		√	√	√	√	√	√	√	√	√	√	√	√	
12	Knowledge of relevant area	√	√	√		√		√		√	√	√	√	√	√	√	√	√
13	Time-bound		√	√	√		√		√			√	√	√		√		
14	Interpersonal qualities		√	√	√		√		√			√	√	√		√		
15	Knowledge of Legality & ADR											√	√	√				
16	Understanding Natural Justice													√				
17	Communication s skills	√	√	√	√				√	√	√	√	√	√				
18	Knowledge of contractual law																	
19	Technical skills required for construction		√		√			√	√		√	√	√	√	√		√	√
20	Practical skills required for construction		√					√	√		√	√	√	√	√		√	√

Comparing the competencies possessed by an Architect with the competencies required to be an arbitrator, data from the literature showed that dispute resolution techniques, integrity, analytical skills, management skills, professionalism, knowledge of the relevant area, and communications skills were available in both. Nevertheless, according to respondents, Architects possessed many competencies required by an arbitrator.

Literature findings and all respondents indicate that Architects have professionalism. Except for **I 13**, all other interviewees stated that “*Architects are reliable*”. Except for **I 07**, all the other interviewees stated that “*They have integrity*”. All respondents, excluding **I 07** and **I 16**, said that “*Architects well-maintain their confidentiality*”. All other respondents, excluding **I 13** and **I 16**, stated that “*Arbitrators have independency and impartiality*”. Similarly, except for **I 13** and **I 16**, all other respondents said that “*They have the confidence as necessary*”. Most respondents believe that Architects possess decision-making ability, analytical skills, management skills, negotiation skills, and knowledge of the relevant area, which are the key competencies required by an Arbitrator.

A few respondents expressed that they have interpersonal qualities and can work for limited time periods. Only **I 10**, **I 11**, and **I 12** stated that “*Architects have the knowledge on legality & ADR*”. Similarly, **I 01**, **I 02**, **I 03**, **I 07**, **I 08**, and all Architect respondents stated, “*Architects have good communication skills*”. All the architect respondents and some others from each type of professional respondents stated that “*Architects have both the technical skills and the practical skills essential for construction*”. Only **I 12** said that “*Architects possess the understanding of natural Justice*”.

4.5.6 Competencies possess a Lawyer, which are required by an arbitrator

This section consists of the competencies a Lawyer possesses, which are required by an arbitrator, found out through the literature review and semi-structured interviews. According to the literature, Lawyers involve in many industries as legal officers, legal advisors, and lecturers. They also work on dispute resolution in the construction industry. Twenty-five (25) key competencies of Lawyers were identified in this study through the literature review. Table 4.7 compares the identified competencies possessed by a Lawyer over his profession with the competencies required by an arbitrator, according to the data collected via literature review and semi-structured interviews.

Table 4. 7: Competencies possess a Lawyer, which are required by an arbitrator

No.	Competencies of an Arbitrator	Interviewee													
		Literature	I01	I02	I03	I04	I05	I06	I07	I08	I09	I10	I11	I12	I13
1	Dispute resolution techniques		√	√	√	√	√	√	√	√	√	√	√	√	√
2	Confidentiality	√	√	√	√	√	√	√	√	√	√	√	√	√	√
3	Reliability	√	√	√	√	√	√	√	√	√	√	√	√	√	√
4	Impartiality & Independence	√	√	√	√	√	√	√	√	√	√	√	√	√	√
5	Integrity	√	√	√	√	√	√	√	√	√	√	√	√	√	√
6	Decision-making ability	√	√	√	√	√	√	√	√	√	√	√	√	√	√
7	Analytical skills	√	√	√	√	√	√	√	√	√	√	√	√	√	√
8	Management skills	√	√	√	√	√	√	√	√	√	√	√	√	√	√
9	Negotiation skills		√	√	√	√	√	√	√	√	√	√	√	√	√
10	Professionalism	√	√	√	√	√	√	√	√	√	√	√	√	√	√
11	confidence		√	√	√	√	√	√	√	√	√	√	√	√	√
12	Knowledge of the relevant area	√	√	√	√	√	√	√	√	√	√	√	√	√	√
13	Time-bound		√	√	√	√	√	√	√	√	√	√	√	√	√
14	Interpersonal qualities		√	√	√	√	√	√	√	√	√	√	√	√	√
15	Knowledge of Legality & ADR		√	√	√	√	√	√	√	√	√	√	√	√	√
16	Understand Natural Justice	√	√	√	√	√	√	√	√	√	√	√	√	√	√
17	Communications skills	√	√	√	√	√	√	√	√	√	√	√	√	√	√
18	Knowledge of contractual law		√	√	√	√	√	√	√	√	√	√	√	√	√
19	Technical skills required for construction														
20	Practical skills required for construction														

As per Table 4.7, all respondents said that “*Lawyers have Dispute resolution techniques and confidence*”; however, the literature review did not reveal this. The literature review and interviewees, except for I 13, identified that “*They have Decision-making ability*”. Also, all respondents other than I 09 stated that “*Lawyers are with professionalism*”. All interviewees except I 07, I 11, and the literature specified that “*Lawyers have integrity*”. Most respondents mentioned that Lawyers have competencies such as confidentiality, reliability, analytical skills, and

management skills. According to some respondents, Lawyers are impartial and independent. A significant number of respondents stated that *“Lawyers have knowledge on legality and ADR, and knowledge on contractual law, the understanding on natural justice, fair communication skills, and knowledge on contractual law”*.

However, a few respondents among all mentioned that *“Lawyers are time-bound and with interpersonal qualities”*. Still, none expressed that Lawyers have the technical and practical skills required for construction.

4.5.7 Evaluation of the level of suitability of the above professionals in performing arbitration

This section deliberates the opinion of respondents on the suitability of selected professionals to act as arbitrators. The selected respondents were the same profession-wise, and as the selected professionals act as arbitrators, it was easy to get their opinion on suitability. Sometimes the opinion on suitability of the respondents in the same profession was similar as well as have totally different ideas. Table 4.8 presents what the respondents basically said on suitability and not suitability of selected professionals. However, most of them stated that one or a few were the most suitable professionals.

Table 4. 8: Suitability and not suitability of professionals acting as arbitrators

Opinion of the professional Type of professional	Engineer	Quantity Surveyor	Architect	Lawyer
Engineer	Suitable	Suitable	Suitable	Not suitable
	Most Suitable -engage with contract management -mostly act as the Engineer for the contract -have the knowledge and background of the relevant dispute area -have thorough knowledge and experience in technical aspects relevant to construction	Suitable -for claims-related construction disputes	Not suitable not aware of contract management and technical aspects	Not suitable Have knowledge of Contract law and the law of Arbitration Do not have the construction knowledge
	Most Suitable -possess more key knowledge which will help decide, analyze the facts and arguments, and make the final decision	Suitable -for disputes within their subject area -experience is the key qualification	Suitable -but their subject area is limited -only suitable within their subject area	Suitable -suitable where the dispute is related to the application of the law, and the outcome is more dependent on than other subject areas -possess more skills to give an enforceable award
	Most Suitable -more knowledgeable on the subject matter	Most Suitable -for contractual and cost-related disputes	Not suitable -they have no experience and involvement in a highly technical nature	Not suitable -more concentrates on legal aspects

Opinion of the professional	Engineer	Quantity Surveyor	Architect	Lawyer
Type of professional				
	-maybe more experienced in similar nature of work that is in dispute -may help their personal knowledge rather than depending on available evidence			-lack of knowledge of technical aspects is a disadvantage
Quantity Surveyor	Not suitable -need further education on contract administration	Most Suitable -need to develop arbitration and gain advanced construction knowledge	Not suitable -need further education on contract administration	Suitable -need to develop negotiation skills -usually go to handle an arbitration as a court case
	Suitable -but should possess knowledge in areas like law, construction contracts, ADR	Most Suitable -obtaining knowledge in ADR and contract administration during their basic education -in their day-to-day work scope covers areas like claims, contracts etc	Not suitable	Suitable -obtaining knowledge in ADR and contract administration during their basic education -in their day-to-day work scope covers contracts and other legal aspects
	Not suitable -should be aware and improve the knowledge of contract documents, contract law, dispute resolution	Most Suitable -involved in contract administration from beginning to end of a construction project	Not suitable -should be aware and improve the knowledge of contract documents, contract law, dispute resolution	Not suitable -they have knowledge of construction law and dispute resolution mechanisms, but they do not have a thorough knowledge of construction project activities.

Opinion of the professional Type of professional	Engineer	Quantity Surveyor	Architect	Lawyer
		-aware of dispute resolution mechanism		
	Suitable -provided his/her competency is enhanced in the areas of Law of Contract / Law of Tort, and relevant Constitutional Provisions	Most Suitable -expertise in administering construction Contracts -provided his/her competency is enhanced in the areas of Law of Contract / Law of Tort, and relevant Constitutional Provisions	Not suitable -shall acquire other professional qualifications either as a Quantity Surveyor or an Attorney-at-Law	Not suitable -shall acquire hands-on experience in Construction project execution and standard forms of Contracts used in construction.
Architect	Suitable -should have experience in the disputed area	Most Suitable -they are engaging with contract administration	Most Suitable -involved in the project from the initiation stage to the completion stage -they should have experience in the disputed area	Suitable -should have experience in Arbitration in the related area
	Suitable -must improve his knowledge of contract administration and contract law	Most Suitable	Most Suitable -must improve his knowledge of contract administration and contract law	Suitable -must improve his knowledge on the construction industry and its nature
	Not suitable	Suitable	Suitable	Suitable

Opinion of the professional	Engineer	Quantity Surveyor	Architect	Lawyer
Type of professional				
	-not much conscious of contractual matters and resolve of them though they fully conscious of the construction	-have a proper idea of contractual matters, relevant documents and ADR procedures	-have a proper idea of contractual matters, relevant documents and ADR procedures	-have a proper idea of contractual matters, relevant documents and ADR procedures -but should gain more construction knowledge
	Not suitable -highly knowledgeable in designing, construction technology, and process -but not that much about documents and contracts	Most Suitable -have relevant knowledge and experience in construction technology and process and contractual documentation -specially for matters relevant to claims and document errors	Most Suitable -have relevant knowledge and experience in construction technology & process and contractual documentation	Not suitable -do not have sufficient construction knowledge and claims knowledge -they mostly direct arbitration as a court case
Lawyer	Not suitable -should have the knowledge of Construction law, Arbitration law, Dispute Resolution law, Dispute Resolution practice, and relevant case law to be an Arbitrator	Most Suitable -need to develop arbitration and gain advanced construction knowledge	Not suitable -have no communication skills, negotiation skills, and knowledge of measurement	Suitable -need to develop negotiation skills -usually go to handle an arbitration as a court case.
	Suitable	Suitable	Suitable	Most Suitable

Opinion of the professional	Engineer	Quantity Surveyor	Architect	Lawyer
Type of professional				
	-for highly technical matters, in which disputes arise on technical issues -It is better to select a person who is an expert in the subject area	-for the matters related to their subject area	-for architectural matters	-experts in arbitration and contracts have vast knowledge on contractual disputes
	Most Suitable -issues relating to construction engineering as they are aware of the process, practices, and issues relating to the industry -should acquaint themselves with the arbitration process and be made aware of the legal issues that could arise in the course of an arbitration	Suitable -involving issues relating to construction engineering -should acquaint themselves with the factual and legal issues that may arise in the course of the arbitration process	Suitable -involving issues relating to construction engineering -should acquaint themselves with the factual and legal issues that may arise in the course of the arbitration process	Most Suitable -should acquaint themselves with the aspects of construction engineering pertaining to the dispute/disputes -generally, be aware of the legal issues that may arise and be capable of issuing an enforceable arbitral award; to do justice to the parties, it is imperative that the award is sound on the factual matters and the legal matters
	Not suitable -has to develop negotiation skills as it is required to obtain awareness of dispute resolution techniques	Not suitable -has to develop negotiation skills as it is required to obtain awareness of dispute resolution techniques and other skills	Not suitable -has to develop negotiation skills as it is required to obtain awareness of dispute resolution techniques and other skills	Most Suitable -they evolve in dispute resolutions and have negotiation skills in their day-to-day professional activities

Table 4.8 on suitability and non-suitability of professionals acting as arbitrators is a brief of the responses of the selected professional respondents. The respondents produced various ideas on the suitability and non-suitability of selected professionals for work as an arbitrator.

Suitability of an Engineer

As per all Engineer respondents, two (2) QS respondents, two (2) Architect respondents, and two (2) Lawyer respondents, Engineers were suitable to be arbitrators. Among them, three (3) Engineers and one (1) Lawyer said that “*Engineers are most suitable professionals to act as an arbitrator*”. Quantity Surveyors' opinion about Engineers was they are suitable as arbitrators. Still, they should possess knowledge of the law, construction contracts, ADR, Law of Contract / Law of Tort, and relevant Constitutional Provisions. Architects who stated that Engineers are suitable expressed that “*they must improve their knowledge of contract administration and contract law and should have experience in the disputed area*”. A Lawyer respondent explained that Engineers are suitable for highly technical matters and disputes within their subject area. Further, a Lawyer respondent said that Engineers are ideal because of arbitrations involving issues relating to construction engineering as they are aware of the process, practices, and issues relating to the industry. However, they should acquaint themselves with the arbitration process and be made aware of the legal issues that could arise during arbitration, specifically because such matters could affect the enforceability of the arbitral award.

Not suitability of an Engineer

None of the Engineer respondents said Engineers are unsuitable to act as arbitrators. Nevertheless, two (2) QS respondents, two (2) Architect respondents, and two (2) Lawyer respondents believe that Engineers are not suitable to act as arbitrators. According to QS respondents, Engineers need further education on contract administration, and Engineers should be aware of and improve their knowledge of contract documents, contract law, and dispute resolution.

An Architect responded that engineers are not suitable as they are less conscious of contractual matters and resolving them, though they are fully conscious of construction. Another said they are highly knowledgeable in designing, construction technology, and processes but less about documents and contracts. A Lawyer respondent said ‘not suitable’ because they have to develop negotiation skills, and it is necessary to be aware of dispute resolution techniques. Another Lawyer, who agreed, felt that they should know Construction law, Arbitration law, Dispute Resolution law, Dispute Resolution practice, and relevant case laws to be an Arbitrator.

Suitability of a Quantity Surveyor

Except for one Lawyer respondent among 16 of the total respondents, all other respondents’ decided that a Quantity Surveyor is suitable to act as an arbitrator for the construction industry disputes. The majority of them stated that “QS is the most suitable professional to act as an Arbitrator in the construction industry in Sri Lanka”. As per the Engineer respondents, QSs professionals are suitable as arbitrators, especially for contractual, cost-related, and claims-related disputes, and confirmed by professional respondents of other categories.

According to Engineer respondents, their main qualification is their QS experience. As per QS respondents, they are most suitable because QS obtain knowledge in ADR and contract administration during their primary education. Also, their day-to-day work scope covers claims and contracts because they are involved in contract administration from the beginning to the end of a construction project. They are also aware of dispute resolution mechanisms.

Non-suitability of a Quantity Surveyor

Only one respondent among all respondents, a Lawyer professional, said that “QS is not suitable as the Arbitrator”. He further stated that a QS must develop negotiation skills, which are required to obtain awareness of dispute-resolution techniques and other skills.

Suitability of an Architect

Half of the respondents' said Architects are suitable as Arbitrators, while the other half said they are not suitable. All Architect respondents said they are suitable. The Engineer respondents said architects are suitable as arbitrators but have limited subject areas; hence they are appropriate only within their subject area. None of the QS respondents said Architects are suitable as arbitrators, but three Architect respondents among four said they are most suitable for dispute resolution in the construction industry. Architects are involved in the project from the initiation to the completion stage, but they should have experience in the disputed area. They have relevant knowledge and expertise in construction technology, process, and contractual documentation. Also, they have a fair idea of contractual matters, relevant documents, and ADR procedures. According to a Lawyer respondent, they are suitable for architectural matters.

Non-suitability of an Architect

According to all the QS respondents, Architects are not suitable to be Arbitrators. Two Engineers and two Lawyer respondents also stated that Architects are not suitable to be Arbitrators because Architects are not aware of contract management and technical aspects and have no experience or involvement in a highly technical nature. According to a Lawyer respondent, they are not suitable as they lack communication skills, negotiation skills, and knowledge of measurement.

The Quantity Surveyors stated why they were not suitable and what they needed to achieve further to become Arbitrators: i.e., they should be aware of and improve their knowledge of contract documents, contract law, and dispute resolution to become arbitrators in the construction industry. Another QS respondent said personnel in the capacity of an Architect only would not be suitable as an arbitrator. They shall acquire other professional qualifications either as a Quantity Surveyor or an Attorney-at-Law to be an Arbitrator.

Suitability of a Lawyer

Among all the sixteen respondents, one Engineer, two QSs, three Architects and all Lawyer respondents said that Lawyers are suitable as Arbitrators in the construction industry. As per the Engineer respondent, a Lawyer professional is relevant where the dispute is related to the application of the law, and the outcome is more dependent than on other subject areas. Also, they possess more skills to give an enforceable award. Furthermore, during their basic education, they acquire knowledge in ADR and contract administration, and their day-to-day work scope covers contracts and other legal aspects. Therefore, they are most suitable as arbitrators. An Architect respondent stated that “... *their day-to-day work scope covers contracts and other legal aspects*”.

Lawyers are suitable to act as arbitrators in arbitrations involving issues relating to construction engineering, provided that they acquaint themselves with the aspects of construction engineering about disputes. While Lawyers would be generally aware of the possible legal issues and be capable of issuing an enforceable arbitral award of doing justice to the parties, the award must be sound on the factual and the legal matters. This can only be achieved if the arbitrator knows the facts of the dispute. Therefore, as the Lawyer respondents said, “*Lawyers are most suitable as Arbitrators in the construction industry*”.

Not suitability of a Lawyer

Half of the respondents from the total respondents mentioned Lawyers are not suitable as Arbitrators. Most said, they are mainly directed at the arbitration process as a court case and more concentrated on legal aspects. Though they have a good idea of contractual matters, relevant documents, and ADR procedures, they should gain more construction knowledge. As per the respondents, though Lawyers know construction law and dispute resolution mechanisms, they do not have a thorough understanding of construction project activities. Further, they should acquire hands-on experience in Construction project execution and standard forms of Contracts used in construction.

Table 4. 9: Competencies fulfilment of an Arbitrator with other professionals

No.	Competencies of an Arbitrator	Competencies of an Engineer	Competencies of a Quantity Surveyor	Competencies of an Architect	Competencies of a Lawyer
1	Dispute resolution techniques	√	√	√	√
2	Confidentiality	√	√	√	√
3	Reliability	√	√	√	√
4	Impartiality & Independence	√	√	√	√
5	Integrity	√	√	√	√
6	Decision-making ability	√	√	√	√
7	Analytical skills	√	√	√	√
8	Management skills	√	√	√	√
9	Negotiation skills	√	√	√	√
10	Professionalism	√	√	√	√
11	Confidence	√	√	√	√
12	Knowledge of the relevant area	√	√	√	√
13	Time-bound	√	√	√	x
14	Interpersonal qualities	√	√	√	x
15	Knowledge of Legality & ADR	x	√	x	√
16	Understand Natural Justice	x	x	x	√
17	Communications skills	√	√	√	√
18	Knowledge of contractual law	x	√	x	√
19	Technical skills required for construction	√	√	√	x
20	Practical skills required for construction	√	√	√	x

Table 4.9 considers the competencies of an Arbitrator with the competencies of each type of professional who participated in semi-structured interviews. It includes the competencies confirmed by the above 50% of participants in the semi-structured interviews. Out of the sixteen (16) selected professionals, twelve (12) identified

competencies of an arbitrator during the literature review, and eight (8) identified competencies during the semi-structured interviews. In Table 4.9, the first twelve competencies were identified during the comprehensive literature review and thirteen (13) to twenty (20) during the interviews, respectively.

According to the respondents, when it is considered half or above the respondents' confirmed data, each selected professional possesses all the competencies identified during the literature review. However, all professionals have only the "*communication skill*" among the newly identified competencies. Among those newly identified competencies, Engineers, QSs, and Architects possess "*time-bound*", "*Interpersonal qualities*", "*Technical skills required for construction*", and "*Practical skills required for construction*".

Data in Table 4.9 show that among all the competencies and all the selected professionals, QSs have the highest competencies of an Arbitrator. According to Table 4.9, they possessed nineteen (19) competencies of an arbitrator out of twenty (20), identified during the literature review and semi-structured interviews. Engineers and Architects have possessed seventeen (17) competencies of an Arbitrator out of twenty (20). However, the Lawyer professionals possessed the least competencies among those professionals; i.e., sixteen (16) competencies of an arbitrator out of twenty (20), identified during the literature review and semi-structured interviews.

4.6 Pattern matching to the study

Pattern matching focuses on contrasting the results of this study against already established information.

4.6.1 Professionals in the industry involved in the Arbitration procedure

A few authors have mentioned the professionals involved in arbitration as arbitrators. Also, some authors revealed that construction professionals and other professionals act as arbitrators in construction arbitration. Accordingly, the following professionals act as arbitrators in the industry: Architects, Engineers, Surveyors, Quantity Surveyors, Lawyers, Judges, and Accountants. According to Connery (2020), Abwunza (2020),

Rahmat and Abdul Rahim (2020), Jayalath (2019), Besaiso et al. (2018), and Edirisinghe et al. (2020), Engineers and Architects work as arbitrators in the construction industry arbitration. Other than Connery (2020), the same authors and Yogeshwaran et al. (2018) mentioned that Quantity Surveyors work as arbitrators.

Connery (2020), Abwunza (2020), Rahmat and Abdul Rahim (2020), Jayalath (2019), and Besaiso et al. (2018) declare that Surveyors act as arbitrators in construction disputes. Apart from construction professionals, Lawyers also work as arbitrators for construction industry disputes (Connery, 2020; Abwunza, 2020; Besaiso et al., 2018; Edirisinghe et al., 2020; Crook, 2019; Welser & Mimmagh, n.d.). Very few authors declared that judges also act as arbitrators. Furthermore, according to Abwunza (2020), Accountants are other professionals who act as arbitrators in the construction industry.

4.6.2 Competencies possess an Engineer which are required by an arbitrator

Past research works have reviewed the competencies required by an arbitrator, and some have discussed the competencies possessed by an Engineer. In semi-structured interviews, each respondent was questioned on the competencies possessed by an engineering professional, required by an arbitrator.

Based on the literature review and the interviews, decision-making ability, analytical skills, management skills, and professionalism were identified as some key competencies that an arbitrator would consider for an engineer. Many authors, such as Dhakil Alla Al-Tarawneh (2018), Crook (2019), Connery (2020), Welser and Mimmagh (n.d.), Donaubauer et al., 2018), Abwunza (2020), Rahmat and Abdul Rahim (2020), and Besaiso et al. (2018) have reported that Arbitrators need the decision-making ability. As per La Rue and Symonette (2019), arbitrators require analytical skills, management skills, and professionalism. Donaubauer et al. (2018) stated that arbitrators require analytical and management skills.

According to NC state university (2016), Bourn (2018), Azmi et al. (2018) and Ismail et al. (2019), Engineers possess decision-making ability, analytical skills, management skills, and professionalism. I 03's statement, "an Engineer possesses more key knowledge

which will be helpful in deciding, analysing the facts and arguments, and making the final decision”, also validated the same in the literature.

Comparing the competencies listed in the literature proved that engineers possess a few more competencies necessary for an arbitrator: e.g., Confidentiality, Reliability, Impartiality & independence, Integrity, Negotiation skills, Confidence, Knowledge of the relevant area, time-bound, interpersonal qualities, and communication. Nevertheless, engineers lacked the competencies of Legality & ADR, understanding of Natural Justice, and knowledge of Contractual Law.

4.6.3 Competencies possess a Quantity Surveyor which are required by an arbitrator

As per the Engineers, according to the literature, QSs also have many identical competencies from their profession. More similarities and a few differences could be noted when comparing those with the competencies required by an arbitrator. Table 4.2 demonstrates the competencies required by an arbitrator, found from literature and interviews. Further, Table 4.5 deliberates on competencies possessed by a Quantity Surveyor, which are necessary to be an arbitrator in the literature and the interviews.

According to Khairul Hisham and Othman (2021), Eshun and Kissi (2021), Noor et al. (2020), Oke et al. (2018), and Spellacy et al. (2020), QSs have possessed professionalism. Khairul Hisham & Othman, 2021) and (Eshun & Kissi, 2021) stated that QSs have integrity. As per La Rue and Symonette (2019) and Rahmat and Abdul Rahim (2020), arbitrators require integrity and professionalism. Same way, as per Table 4.5, all respondents and the referred literature confirmed that QS possess integrity and professionalism. Further to Table 4.5, dispute resolution techniques, confidentiality, reliability, Impartiality & Independence, decision-making ability, analytical skills, management skills, knowledge of relevant areas, and confidence and negotiation skills are other key competencies of QSs required by an arbitrator according to the literature and the respondents. As per I 06, *“Quantity Surveyors are obtaining the knowledge in ADR and contract administration during their basic education. Also, their day-to-day work scope*

covers areas like claims, contracts etc.”. As per the respondents and the literature, all the competencies required by an arbitrator except an understanding of Natural Justice are possessed by Qs.

4.6.4 Competencies possess an Architect which are required by an arbitrator

Table 4.2 establishes the competencies required by an arbitrator identified using the literature and interviews. Table 4.6 deliberates the competencies possessed by an Architect, which are required by an arbitrator, as found in literature and interviews.

As per Donaubauer et al. (2018), Abwunza (2020), Rahmat and Abdul Rahim (2020), and Besaiso et al. (2018), Arbitrators require dispute resolution techniques. McDermott and Salado (2017), Du Preez et al. (2018), and Borucka et al. (2020) disclosed that Architects have problem identification and formulation ability. The other professionals, **I 01, I 03, I 04, I 08, and I 15**, other than the Architect respondents, also mentioned that architects know dispute resolution techniques.

Arbitrators need knowledge in relevant areas, Analytical skills, Professionalism, Integrity, and Management skills (La Rue & Symonette, 2019). According to Du Preez et al. (2018), Architects possess all those competencies. The respondents, **I 01, I 09, I 10, I 11, and I 12**, confirmed that Architects have those competencies required by an arbitrator. Like Engineers, Architects also possess all competencies needed by an Arbitrator, except the Knowledge of Legality & ADR, Understanding of Natural Justice, and Knowledge of Contractual Law.

4.6.5 Competencies possess a Lawyer, which are required by an arbitrator

Similar to other professionals, Lawyers also have many competencies required by an arbitrator. Table 4.7 illustrates a Lawyer’s competencies required by an arbitrator, as revealed by literature and the interviews.

According to Connery (2020), Donaubauer et al. (2018), Abwunza (2020), and Besaiso et al. (2018), arbitrators require Impartiality & Independence, Decision-making ability, and knowledge in the relevant area. According to Thanaraj (2017), Lawyers have the same

competencies. Many respondents confirmed the same, e.g., **I 06, I 08, and I 15**. Connery (2020) and Donaubauer et al. (2018) report that arbitrators should have integrity and reliability. According to Savangdy and Thanitbenjasith (2020), Thanaraj (2017), and Hamilton (2020), Lawyers possess integrity and reliability. **I 01, I 02, I 04, I 05, I 06, I 08, I 09, I 13, I 14, I 15, and I 16** respondents disclosed the same. According to La Rue and Symonette (2019) and Donaubauer et al. (2018), arbitrators need analytical and management skills. According to Hamilton (2018), Thanaraj (2017), Terry (2017), and Hamilton (2020), Lawyers possess logical and analytical skills. Respondents **I 01, I 03, I 05, I 06, I 07, I 10, and I 12** revealed the same.

Lawyers lack a few competencies required by an arbitrator: i.e., Time-bound, Interpersonal qualities, Knowledge of Legality & ADR, and Knowledge of contractual law.

4.6.6 The level of suitability of the above professionals in performing arbitration

The level of suitability to act as an Arbitrator in the construction industry of the selected professional categories was evaluated via semi-structured interviews. The evaluation is totally based on the answers given in the semi-structured interviews. Each professional had suitabilities and non-suitabilities, according to the respondents. As per the results, Qs have the highest suitability level for acting as an arbitrator in the construction industry. Furthermore, both Engineers and Architects are at the same level of suitability but a bit less than Qs. Finally, regarding the level of suitability for acting as an Arbitrator in the construction industry, Lawyers are at a lower extent among those selected professionals.

4.7 Summary

Chapter 04 analysed data using manual content analysis. Those data were collected via literature review and semi-structured interviews conducted with four selected types of professionals: Engineers, Quantity Surveyors, Architects, and Lawyers, four (4) interviewees each, and all sixteen (16). Findings from those interviews and literature are elaborated comparatively in tables. The next chapter, the last chapter of this study, summarised the study's results and demonstrated the recommendations made.

CHAPTER 05

5 CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This is the final chapter of this report. Basically, Chapter 05 presents an overview of the objectives achieved in this study, recommendations, and limitations encountered while attaining the purpose of this study. This study aims to investigate the most suitable professional to be an arbitrator in the construction industry in Sri Lanka. There were four objectives to achieve the aim, and researchers employed a literature review and semi-structured interviews to accomplish those objectives.

5.2 Overview of Objectives Achieved in the Study

Objective 1 - Investigate professionals in the industry who involve in the Arbitration procedure

This objective was achieved through the literature review. Chapter 02 – Literature review - identified the key professionals working as Arbitrators in the construction industry. The literature survey identified four (4) major professionals among seven (7) professionals who act as arbitrators in the construction industry. They are Engineers, QSs, Architects, and Lawyers. The literature further disclosed that Surveyors, Accountants, and Judges act as arbitrators in handling construction industry disputes.

Objective 2 - Investigate the competencies possessed by the above-identified professionals

This objective was achieved through the literature review and from the websites of those identified major professional categories. Once this second objective was attained, the competencies that each category of professional encompasses could find. The referred literature found twenty (20) competencies of Engineers, twenty-five (25) competencies of QSs, twenty (20) competencies of Architects, and twenty-five (25) competencies of

Lawyers. Most of these competencies were identical to their profession. Some were common for every profession or some professions. Therefore, the referred literature and the websites of professional bodies were beneficial for investigating those competencies with each professional.

Objective 3 - Investigate the competencies required by an arbitrator

This objective was achieved through the literature review and semi-structured interviews. Initially, the literature identified twelve (12) competencies of an arbitrator. In addition, sixteen (16) semi-structured interviews were held with the selected professionals to evaluate whether an arbitrator has those competencies (or not) as per those respondents. In the interviews, each respondent was questioned regarding each competency of an arbitrator found through the literature. Most of them verified all twelve competencies. The respondents disclosed eight (8) more competencies of an arbitrator, which could not find in the literature. Altogether, the study identified twenty (20) competencies of an arbitrator to achieve this objective.

Objective 4 - Evaluate the level of suitability of the above professionals in performing arbitration

This objective was achieved through semi-structured interviews. The availability of the competencies identified above (of an arbitrator) with other selected professionals was questioned in the semi-structured interviews after fulfilling objective 03. Next, it was questioned why each selected type of professional was suitable/not suitable and what should be altered for them to act as arbitrators. Finally, the opinion was queried regarding the most suitable professional to act as an arbitrator in the construction industry arbitration in Sri Lanka and why they are suitable.

All professional respondents were questioned in the interviews whether each selected professionals have (or not) the competencies required by an arbitrator, identified through the literature and the semi-structured interviews and the suitability status. Their answers were analysed in detail in Table 4.8: Suitability and not suitability of professionals acting as arbitrators.

Furthermore, the required competencies of an Arbitrator with the competencies of selected professionals were mapped in Table 4.9 and made comparisons.

According to the comparison, Quantity Surveyors are the most suitable arbitrators in the construction industry because they are versatile in contract administration and relevant laws. Similarly, Engineers are suitable especially for handling disputes of a highly technical nature, and Architects are qualified particularly for matters within their subject area. Finally, the Lawyers are suitable as they are thorough on all the relevant laws and procedures.

5.3 Recommendations

The recommendations focus on suitability and necessary enhancements to suitability for being an Arbitrator in the construction industry in Sri Lanka.

Engineers: Once they have improved their knowledge of Construction law, Arbitration law, Dispute Resolution law, Dispute Resolution practice, relevant case law required to be an Arbitrator, and Constitutional Provisions, Engineers would be the most suitable professionals to be arbitrators in the construction industry arbitration in Sri Lanka.

Quantity Surveyors: Quantity Surveyors would be the most suitable professional to be an arbitrator in the construction industry arbitration in Sri Lanka.

Architects: Once architects have improved their knowledge and experience in Contract Administration, Construction law, Arbitration law, Dispute Resolution law, Dispute Resolution practice, relevant case law to be an Arbitrator, and relevant Constitutional Provisions, they would be the most suitable professionals to be arbitrators in the construction industry arbitration in Sri Lanka.

Lawyers: When they have improved their awareness of construction industry aspects and disputes while not directing an arbitration as a court case, Lawyers would be the most suitable professional to be arbitrators in the construction industry arbitration in Sri Lanka.

Suitability of a professional as an Arbitrator: When construction, contractual, and legal aspects are obtained in a balanced manner by those categories of professionals, it would be a straightforward approach to be an Arbitrator for construction industry matters in Sri Lanka. Further, the suitability depends on the nature of the dispute related to some occurrences.

5.4 Limitations

The samples were chosen within the professional education and hands-on work, predominantly in the construction industry dispute resolution background in Sri Lanka and out of Sri Lanka. These results cannot be used as communal for the world because this sample is limited to the construction industry professionals in Sri Lanka and lawyers involved in construction arbitration in Sri Lanka. This sample of respondents was within seven (7) to forty-six (46) years of professional experience and two (2) to twenty (20) years of Arbitration experience. The COVID-19 outbreak caused problems in contacting potential participants for the study.

5.5 Further Research

More researchable areas are listed below for future researchers considering the study limitations and availabilities.

- Comportments to enhance the professional education standard for construction industry arbitrators
- The adaptability of arbitrators, especially for construction industry arbitration
- Effectiveness of adaptability of arbitrators, especially for construction industry arbitration

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APPENDIX A: SEMI-STRUCTURED INTERVIEW GUIDELINE

COVERING LETTER FOR INTERVIEW GUIDELINE

Student - MSc in CLDR,
Department of Building Economics,
University of Moratuwa.

Dear Sir/Madam,

Conducting an Interview for a Dissertation

I am an MSc student in Construction Law and Dispute Resolution at the Department of Building Economics, University of Moratuwa. Currently, I am conducting research under the module of “**Dissertation**” on the topic of “**Investigate the most suitable professional to be an arbitrator in the Sri Lankan construction industry**”. The mode of data collection is deemed as a one-to-one interview.

The interviews will be conducted with the Engineers, Quantity Surveyors, Architects, and Lawyers experienced as arbitrators in the construction industry. I identified you as a potential participant who could provide me with valuable information for this research. Therefore, I would like to interview you for **approximately 30-45 minutes** on my research literature findings and get your expert opinion. The medium of collecting data will be **voice recording (with the interviewee's permission)** to collect data more precisely.

The information collected through this interview will not be disclosed to any other party, and confidentiality will be retained. It will be used only for the purpose of the dissertation.

I solicit you to facilitate my research by providing your valuable knowledge and opinion regarding this research topic.

Thank you.

Yours faithfully,

.....
Priyadarshani E. A. A.

INTERVIEW GUIDELINE

Research Topic -

Most suitable professional to act as an arbitrator in the Sri Lankan construction industry

Aim of the study -

This research aims to explore the most suitable professional for settling construction disputes as an arbitrator in the construction industry in Sri Lanka.

Objectives of the study -

- Investigate professionals in the industry involved in the Arbitration procedure
- To analyse the competencies possessed by identified professionals in the built environment sector
- To explore competencies required by an arbitrator in the built environment sector
- To make recommendations to explore the suitability of professionals in performing arbitration in the construction industry

Designation

.....

Profession

.....

Type of company

☐ Contractor ☐ Consultant ☐ Client or any other

**Total Experience –
(number of years)**

.....

**Experience in
arbitration –
(number of years)**

.....

Date -

...../...../.....

Key expertise areas related to the topic –

.....

1) General Questions

1.1) Who are the professionals who act as arbitrators in the Sri Lankan construction industry?

Item No.	Professionals act as Arbitrators	Yes	No
1	Architects	☐	☐
2	Engineers	☐	☐
3	Surveyors	☐	☐
4	Quantity Surveyors	☐	☐
5	Lawyers	☐	☐
6	Judges	☐	☐
7	Accountant	☐	☐
	Any other Professional act as an Arbitrator specify below		
8	Retired Judges	☐	☐
9		☐	☐
10		☐	☐

1.2) What are the competencies of an arbitrator?

No.	Competency	Yes	No	Modification	If yes/no, how is it used and the Comments If it is Modification, how is it modified
1	Knowing dispute resolution techniques	☐	☐	☐	
2	Confidentiality	☐	☐	☐	
3	Reliability	☐	☐	☐	
4	Impartiality & Independent	☐	☐	☐	
5	Integrity	☐	☐	☐	
6	Decision-making ability	☐	☐	☐	
7	Analytical skills	☐	☐	☐	
8	Management skills	☐	☐	☐	
9	Negotiation skills	☐	☐	☐	
10	Professionalism	☐	☐	☐	
11	Confidence	☐	☐	☐	
12	Knowledge of the relevant area	☐	☐	☐	
	Any other competency of an Arbitrator specify below				
13	Time-bound	☐	☐	☐	
14	Interpersonal qualities	☐	☐	☐	
15	Knowledge of Legality & ADR	☐	☐	☐	
16	Understanding of Natural Justice	☐	☐	☐	
17	Communications skills	☐	☐	☐	

No.	Competency	Yes	No	Modification	If yes/no, how is it used and the Comments If it is Modification, how is it modified
18	Knowledge contractual law	☐	☐	☐	
19	Technical skills required for construction	☐	☐	☐	
20	Practical skills required for construction	☐	☐	☐	

1.3) The following list provides the competencies required by an arbitrator. Select the competencies possessed by an Engineer, a Quantity Surveyor, an Architect, and a Lawyer.

No.	Competency	Engineer		Quantity Surveyor		Architect		Lawyer	
		Yes	No	Yes	No	Yes	No	Yes	No
1	Dispute resolution techniques	☐	☐	☐	☐	☐	☐	☐	☐
2	Confidentiality	☐	☐	☐	☐	☐	☐	☐	☐
3	Reliability	☐	☐	☐	☐	☐	☐	☐	☐
4	Impartiality & Independence	☐	☐	☐	☐	☐	☐	☐	☐
5	Integrity	☐	☐	☐	☐	☐	☐	☐	☐
6	Decision-making ability	☐	☐	☐	☐	☐	☐	☐	☐
7	Analytical skills	☐	☐	☐	☐	☐	☐	☐	☐
8	Management skills	☐	☐	☐	☐	☐	☐	☐	☐
9	Negotiation skills	☐	☐	☐	☐	☐	☐	☐	☐

No.	Competency	Engineer		Quantity Surveyor		Architect		Lawyer	
		Yes	No	Yes	No	Yes	No	Yes	No
10	Professionalism	☐	☐	☐	☐	☐	☐	☐	☐
11	Confidence	☐	☐	☐	☐	☐	☐	☐	☐
12	Knowledge of the relevant area	☐	☐	☐	☐	☐	☐	☐	☐
	Any other competency of an Arbitrator specified below								
13	Communications skills	☐	☐	☐	☐	☐	☐	☐	☐
14	Construction law knowledge	☐	☐	☐	☐	☐	☐	☐	☐
15	Knowledge contractual law	☐	☐	☐	☐	☐	☐	☐	☐
16	Understanding of Natural Justice	☐	☐	☐	☐	☐	☐	☐	☐
17	Communications skills	☐	☐	☐	☐	☐	☐	☐	☐
18	Knowledge of contractual law	☐	☐	☐	☐	☐	☐	☐	☐
19	Technical skills required for construction	☐	☐	☐	☐	☐	☐	☐	☐
20	Practical skills required for construction	☐	☐	☐	☐	☐	☐	☐	☐

1.4) Why do you think Engineers are suitable/ not suitable? What should be changed for an engineer to act as an arbitrator?

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1.5) Why do you think Architects are suitable/ not suitable? What should be changed for an Architect to act as an arbitrator?

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1.6) Why do you think Quantity Surveyors are suitable/ not suitable? What should be changed for a Quantity Surveyor to act as an arbitrator?

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1.7) Why do you think Lawyers are suitable/ not suitable? What should be changed for a Lawyer to act as an arbitrator?

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2) Recommendations

2.1) Your opinion on the most suitable professional as an arbitrator in construction industry arbitration in Sri Lanka. Why? Mention reasons for your opinion.

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3) Any other comments

The selected arbitrator must have knowledge of the subject area with contractual knowledge.

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Thank you.

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