



**UNIVERSITI PUTRA MALAYSIA**

***ALTERNATIVE DISPUTE RESOLUTION AS FEASIBLE RESOLUTION  
FOR CONSTRUCTION DISPUTES FROM THE PERSPECTIVE OF  
CIDB G7 CONTRACTORS***

**FARAH AIN BINTI ZAINUDIN**

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CONTRACTORS**

By

**FARAH AIN BINTI ZAINUDIN**

**Thesis Submitted to the School of Graduate Studies, Universiti Putra Malaysia, in  
Fulfilment of the Requirements for the Degree of Master of Science**

**February 2021**

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Abstract of thesis presented to the Senate of Universiti Putra Malaysia in fulfilment of the requirement for the degree of Master of Science

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**February 2021**

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Alternative Dispute Resolution (ADR) is seen as a feasible mean of settling disputes due to its method that embraces flexibility, amicability, informality, confidentiality, overall satisfaction, direct control, optimization of minimal resources, responsiveness, speed and is low in cost. The aim of this research is to highlight ADR's feasible features upon implementation particularly in the construction industry, reveal the CIDB G7 contractors' perspective towards ADR and develop a framework of guideline that can be used to streamline the understanding of construction industry players on the merit of each method under ADR according to sound practices.

A mixed method of research design (qualitative and quantitative) was used in the data collection phase of the study. The data obtained were analysed using descriptive analysis, Principal component analysis, content analysis, Pareto analysis, Cronbach's alpha test and Pearson's product moment correlation analysis. The result from the Pareto analysis showed that 'confidentiality' and 'speed' were the two (2) main pertinent feasible features of ADR that could manifest ADR as the feasible resolution for construction disputes. Other findings of the analysis which were obtained from Grade G7 contractors' perspective have shown that 'guideline enhancement and/or simplification' were the most agreed enhancement mechanism of ADR to be implemented in order to encourage the implementation of ADR among the Malaysian construction industry players. The results of the study also showed that there is a positive relationship between the ADR's feasible features and ADR's enhancement mechanisms, which means that the result of implementing the enhancement mechanisms of ADR, more feasible features of ADR can be optimized. The relationship was used as means for the development of a new ADR's framework which serves as the guideline for industry players particularly those in Malaysian construction industry. The contribution of this research is it offers the field of project management and Malaysian construction industry insights to the main pertinent features and enhancement mechanisms of ADR

which is believed to be the means for ADR is more feasible method in resolving construction disputes compared to traditional litigation system.



Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk Ijazah Master Sains

**PENYELESAIAN PERTIKAIAN ALTERNATIF SEBAGAI MEKANISME  
YANG BERKESAN UNTUK RESOLUSI PERTIKAIAN DALAM PROJEK  
PEMBINAAN DARI PERSPEKTIF KONTRAKTOR CIDB G7**

Oleh

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Penyelesaian Pertikaian Alternatif (PPA) dilihat sebagai kaedah yang berkesan untuk dilaksanakan kerana didapati mempunyai ciri-ciri yang fleksibil, mudah, tidak formal, tertutup, kepuasan yang menyeluruh, kawalan secara langsung, penggunaan optimum sumber yang minimum, responsif, cepat dan murah. Tujuan penyelidikan ini adalah untuk menunjukkan ciri-ciri berkesan PPA ketika perlaksanaannya terutama dalam industri pembinaan, mendedahkan perspektif kontraktor CIDB G7 ke atas kaedah PPA dan membangunkan garis panduan yang boleh digunakan untuk memperkembangkan pemahaman pemain industri pembinaan terhadap merit dalam setiap kaedah di bawah PPA berdasarkan cara kerja yang terbaik.

Kaedah gabungan bagi rekabentuk penyelidikan (kualitatif dan kuantitatif) telah digunakan dalam fasa pengumpulan data kajian. Data yang diperolehi dianalisis dengan menggunakan analisis deskriptif, analisis komponen utama, analisis kandungan, analisis Pareto, ujian alpha Cronbach dan analisis korelasi masa produk Pearson. Hasil daripada analisis Pareto menunjukkan bahawa ciri 'tertutup' dan 'kelajuan' adalah dua (2) ciri-ciri berkesan PPA yang utama untuk menunjukkan PPA sebagai kaedah resolusi yang berkesan untuk menyelesaikan pertikaian dalam projek pembinaan. Penemuan lain analisis yang diperolehi daripada perspektif kontraktor Gred G7 pula telah menunjukkan bahawa 'penambahbaikan dan/atau memudahkan garis panduan' adalah mekanisme penambahbaikan PPA yang paling dipersetujui untuk dilaksanakan bagi menggalakkan pelaksanaan kaedah PPA dalam kalangan pemain industri pembinaan Malaysia. Hasil kajian ini juga menunjukkan bahawa terdapat hubungan yang positif di antara ciri-ciri berkesan PPA dan mekanisme penambahbaikan PPA, yang bermaksud bahawa hasil dari pelaksanaan mekanisme penambahbaikan PPA, ciri-ciri berkesan PPA boleh dioptimumkan. Hubungan ini kemudian digunakan untuk membangunkan rangka kerja PPA baharu yang berfungsi sebagai garis panduan kepada pemain industri khususnya dalam industri pembinaan di Malaysia. Sumbangan penyelidikan ini kepada bidang

pengurusan projek dan industri pembinaan Malaysia ialah mengenal pasti ciri-ciri berkesan utama PPA dan mekanisme-mekanisme penambahbaikan PPA yang dipercayai menjadikan PPA merupakan kaedah resolusi yang lebih berkesan dalam menyelesaikan pertikaian dalam projek pembinaan berbanding sistem litigasi.



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This thesis was submitted to the Senate of Universiti Putra Malaysia and has been accepted as fulfilment of the requirement for the degree of Master of Science. The members of the Supervisory Committee were as follows:

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## LIST OF ABBREVIATIONS

ADR	Alternative Dispute Resolution
AIAC	Asian International Arbitration Centre
APM	Association for Project Management
CIDB	Construction Industry Development Board Malaysia
CIPAA	Construction Industry Payment and Adjudication Act
CPC	Certificate of Practical Completion
EFA	Exploratory Factor Analysis
FA	Factor Analysis
FIDIC	Fédération Internationale des Ingénieurs-Conseils
GDP	Gross Domestic Product
IEM	Institution of Engineers Malaysia
IPMA	International Project Management Association
ISO	International Organization for Standardization
KLRCA	Kuala Lumpur Regional Centre for Arbitration
KMO	Kaiser-Meyer-Olkin
MMC	Malaysian Mediation Centre
MSA	Measure of Sampling Adequacy
PAM	Pertubuhan Akitek Malaysia
PMI	Project Management Institute
PWD	Public Works Department
RO	Research Objective
SPSS	Statistical Package for the Social Sciences

UNCITRAL United Nations Commission on International Commercial  
Arbitration

UPM Universiti Putra Malaysia



## CHAPTER 1

### INTRODUCTION

This thesis starts with an introductory chapter. This chapter is dedicated to provide a background of this study, enlighten the readers on the relevance of the research problem and to explain the importance of this study. Throughout this chapter, it will outline the research problem, research questions, research objectives, significance of the study, scope of the study and provide an insight into the research methodology.

#### 1.1 Background of the Study

The Malaysian construction sector constitutes an important element of the Malaysian economy as well as being a significant contributor to Malaysia's gross domestic product (GDP). Based on the current trend for the past few years, the Malaysian Country Report by the Construction Industry Development Board Malaysia (CIDB, 2017) reported that Malaysian GDP growth in 2017 will once again be led by the construction sector and is expected to grow by 8.0%.

Furthermore, although the construction sector accounted for a moderate growth at only 7.4% in 2016, the value of construction projects has increased to 57.5% from RM141.8 billion in 2015 which this could prove a sustainable demand of this sector (CIDB, 2017). According to Sundaraj (2006), the existence of demand in construction is due to the wealth creation and life quality demand which require the development to happen. Thus, construction sector is seen as a major productive sector in Malaysia that contributes significantly to the national economic development besides being a valuable customer for other existing industries in Malaysia (CIDB, 2016); (Dwikojuliardi, 2016).

Due to the rapid growth of the construction sector, there is a continuously expanding complexity of this industry which leads towards the occurrence of complications and disputes at any stage of the project lifecycle (Alaloul, Liew, Zawawi & Mohammed, 2018). In addition, the abundance of involvement of parties in a particular construction project creates numerous points at which disputes can occur. Thus, disputes are an almost inevitable phenomena in construction projects (Love, Davis, London & Jasper, 2008); (Pétursson, 2015); (Cook, 2016).

A plethora of dispute definitions can be found in the literature. Interchangeable use of the terms 'dispute' and 'conflict' are often seen despite their different meanings (Al-Tabtabai & Thomas, 2004). According to Diekmann & Girard (1995), dispute is defined as any questions or controversy regarding the contract that must be resolved beyond the management of the project whilst conflict is defined as the argument between the parties who discover the irreconcilable and interference of goals (Wilmot & Hocker, 1998).

The fragmented nature of the industry, adversarial nature of contracts, improper contract documentation and administration, complex tendering policy and system, payment default issues and ineffective communication are some of the various factors that contribute to the development of disputes in construction projects (Tayeh, Alaloul & Al-Hallaq, 2018). Despite the list, the Global Construction Disputes Report 2018 by Arcadis highlights that the root cause for disputes in construction projects for five (5) years in row is improper contract administration.

When the factors that lead to a dispute continuously happen, this can give a serious impact on the whole life-cycle of a project. In order for the project to be able to continue, any disputes that arise have to be resolved to avoid a halt in the construction process (Koutsogiannis, 2017). Hence, the methodologies used for dispute settlement are the most important element to be contemplated in terms of the impact to the overall project prior its implementation (Alaloul, Liew & Zawawi, 2015).

Litigation has been a widely used and traditional method for dispute settlement (Gad, Esmaeili, Momoh & Gransberg, 2015); (Raji, Ali Mohamed & Oseni, 2015) which is recently concurred by Alaloul, Hasaniyah & Tayeh, (2019). In addition, the study by Tazelaar & Snijders (2010) claims that dispute resolution in construction industry by litigation continues to proliferate and Chong (2013) added, there is an inclination of people to resolve their disputes in court. As the consequences to this trend, litigation has been the preferred form of dispute resolution in construction projects (Raji *et al.*, 2015).

Based on Murray (2018), litigation in construction is defined as a process to resolve a dispute by referring to court for any possible legal actions. Since litigation is a process of defending a case in a civil court of law, the setting and proceeding of settlement is usually non-confidential and accessible to the public (Bristow & Vasilopoulos, 1995). Private litigation could be done but the possibility is very low and it is only allowed in certain event (Cook, 2016).

Due to the extensive use of litigation method for dispute settlement in construction industry, litigation becomes more expensive and ineffective (Martin, 2007); Redmans Commercial Team (RCT, 2012); (Worthington, 2014); (Raji *et al.*, 2015). Besides that, RCT (2012) also added that this method of dispute settlement can potentially be burdensome, particularly in genuinely complex cases. Moreover, inflexible procedure and a considerable extended disclosure time make the process of litigation constantly delayed hence making the whole process time-consuming Rendell (2000); (Martin, 2007); (RCT, 2012); (Worthington, 2014).

The shortcomings of litigation had echoed for the last few decades which resulted to multiple attempts on finding other immediate means for construction of dispute resolution (Raji *et al.*, 2015). Other than that, the disappointment from the failure of litigation in addressing dispute, with its growing challenges and demands, has invoked the industry to look for other alternative methods (Pena-Mora, Sosa & McCone, 2003).

Consequently, in spite of having litigation as the main mechanism for disputes settlement, Alternative Dispute Resolution (ADR) has emerged as an alternative to court litigation for resolving disputes. ADR based on Aggarwal (2017) is known as the procedure for settling disputes without going to court, such as negotiation, mediation and adjudication. Alongside providing confidentiality, choice of neutral parties and flexibility in procedure (Love, 2011), according to Cheung (2006), ADR is a generic term used to indicate a wide range of dispute settlement mechanisms that aim to resolve dispute efficiently in terms of time and cost consumption. Similarly, Worthington (2014) and Cook (2016) share the same view that ADR has the advantage to avoid a lengthy process and costly traditional litigation.

Amongst the impacts of inefficient process of dispute settlement would be the lost business opportunities due to damaged working relationships (Abdul Ghadas, Mohd Zafian & Mohamed, 2019). Hence, one of the main purposes of ADR is also to resolve dispute harmoniously through compromising, systematic problem-solving, consideration of the interest and needs of parties involved as well as preserving good relationships (Ayupp & Abdul Latif, 2017). In short, ADR is simply shorthand for solving a dispute amicably without going to court (Raes, 2019).

Notably, ADR methods were continually praised for its advantages in saving time and cost, avoiding and relieving the adversarial relationship among disputants and reducing the burden of courts in dispute settlement via traditional judicial procedures (Allison, 1990); (Treacy, 1995); Civil Justice Review Report by Victorian Law Reform Commission (VLRC, 2008); (Harbans Singh, 2017).

## **1.2 Problem Statement**

The construction sector is synonym with disputes ridden industry due its characteristic mix of complex contractual and projects relationship, large sums of money at stake and rigid time pressure (Holtham, Russell, Hird & Stevenson, 1999); (Mackie, Miles, Marsh & Allen, 2000). Thus traditionally, parties would enter into litigation (Gad *et al.*, 2015); (Raji *et al.*, 2015); (Alaloul *et al.*, 2019) although a length-time and high-cost often the means of resolving a dispute (Harmon, 2003); (Martin, 2007); (RCT, 2012); (Worthington, 2014); (Cook, 2016); (Boyer, 2020). Therefore, various methods of Alternative Disputes Resolution (ADR) have been introduced into this industry to avoid the arduous approach of litigation.

However, the recent data as per the Construction Law Report by CIDB (2018) shows that the total number of construction cases registered at the High Court in 2017 has risen by 92.57% in comparison to 377 registered cases only in 2016. Although Cheung (2006) claimed that ADR is rapidly spreading around the globe due its wide implementation in developed countries' construction industries, the number of cases that were registered in the third fiscal year for dispute resolution via ADR method as per based on CIPAA Conference 2017 by Kuala Lumpur Regional Centre for Arbitration (KLRC, 2017) is

only 547 cases which is lesser than the cases registered through litigation settlement i.e.: 726 numbers in 2017 of Construction Law Report (CIDB, 2018).

On top of that, although there are several attempts to introduce mediation as an alternative to traditional litigation in construction industry through few standard forms of contracts, its implementation is surprisingly low (Ameer Ali, 2010). Similarly more recently, Lee (2017), Ooi (2017) and Mohd Majid (2019) reveal the actual implementation and appreciation of ADR in Malaysian Construction Industry are understandably low as some of the alternative methods in ADR have not yet been widely-accepted.

As a result of this set of circumstances, ADR which an alternative to traditional litigation and is very well-known for its benefits by many scholars i.e.: (Allison, 1990), (Treacy, 1995), (Cheung, 2006), (Love, 2011), (Worthington, 2014), (Cook, 2016), (Harbans Singh, 2017), (Ayupp & Abdul Latif, 2017) & (Raes, 2019) needs to reveal its feasible resolution to encourage and increase the preference on ADR in order to defeat the high-statistic of dispute resolution in the courthouse. It should be noted that having ADR is to allow early settlement of disputes or to intervene particularly the pre-litigation stage of dispute resolution, which could reduce the caseload in court (Markowitz, 2016); (Rooney, 2016); (Chandrasekaran, 2020).

### **1.3 Research Gap**

Despite an army of previous researchers had studied the issues associated with ADR, there is insufficient study made on negotiation, mediation, adjudication and arbitration as a whole or in one context of research that is well-suited for Malaysian construction industry context. Furthermore, some previous studies are limited to an individual method.

Moreover, the main pertinent features of ADR that contribute to the method being the most feasible resolution into dispute settlement, the perspective of the most affected party by disputes in Malaysian construction industry and framework of guideline which combines the negotiation, mediation, adjudication and arbitration methods in a single model of ADR have yet to be discovered. The findings are essentially required in order to fill the gaps which may indirectly encourage the preference on ADR as disputes settlement in construction industry specifically in Malaysia. On the other hand, the development of framework of guideline is intended to provide better insight and clearer understanding of the Malaysian construction industry players on all available ADR's methods in construction industry.

#### **1.4 Research Questions**

There are three (3) research questions for this study which were identified from the statement of problems and background of the study. These questions are directed to address the issue related with Alternative Disputes Resolution (ADR) as the method for dispute settlement in Malaysian Construction Industry by exploring and revealing the feasible resolution offered via ADR implementation as well as the perspective of CIDB G7 Contractors towards ADR to encourage further preference on ADR. This research seeks to answer the following questions:

- i. What are the main pertinent features of ADR that could manifest the method as the feasible resolution for construction disputes?
- ii. What are the current perceptions of CIDB G7 contractors towards ADR as the mechanism for dispute settlement?
- iii. How to enhance the effectiveness of ADR as the feasible resolution for construction dispute in Malaysian Construction Industry?

#### **1.5 Research Objectives**

The aims of this study are to explore and reveal the feasible resolution offered via Alternative Disputes Resolution (ADR) implementation as well as the perspective of CIDB G7 Contractors towards ADR. In order to achieve the targeted aims, the following specific objectives have been identified:

- i. To determine and rank the main pertinent features of ADR as the feasible resolution for construction disputes.
- ii. To investigate and examine the perceptions of CIDB G7 contractors towards ADR in addressing construction disputes issues.
- iii. To develop a framework of guideline via illustration which combines all available ADR in Malaysian Construction Industry that can enhance the effectiveness of ADR as the feasible method.

#### **1.6 Significance of the Study**

Alternative Dispute Resolution (ADR) is a strategy to bring the dispute parties to an amicable agreement outside the courthouse setting (Sharpless, 2008); (Aggarwal, 2017); (Raes, 2019). In addition, ADR has a great potential to be used by all major stakeholders involved in construction sector due to its distinctive attribute which has a more friendly approach than traditional litigation. Therefore, the final outcome from this study could encourage the parties in dispute to resolve their dispute harmoniously by opting to ADR without having to encounter a complex, costly and lengthy litigation process.

Previous studies reported that dispute in construction sector has become a typical event (Chan & Suen, 2005); (Jannadia, Assaf, Bubshait & Naji, 2000). In present, Ratna (2018) has reported that the situation is rather no different in Malaysia due the disputes in Malaysian construction sector are increased with the total value of disputed claims at almost RM1.4 billion thus, this study has its significance and is timely discussed. Variety of technical issues are being recognized as the dominant factors in construction disputes that limit the capacity of litigation to resolve these types of disputes (Cheung, 2006). Hence, ADR is considered to be the most felicitous method in resolving construction disputes as its existence is constantly expanding, evolving and offering less limitations to the types of dispute resolution processes (Zuhairah, Azlinor & Rozina, 2010).

This study is intended to reveal that ADR has features that could offer the feasible resolution to incurring disputes particularly for Malaysian construction industry besides serve as further reference and comprehensive guidance prior to the adoption of ADR. At the end of the research, the results are expected to improve the preference on ADR as the method of choice to resolve disputes in Malaysian construction and benefit all the stakeholders of construction industry especially for this context of this study, the CIDB G7 Contractors who found to be the most affected group in construction disputes as per listed in current Malaysian Construction Law Report (CIDB, 2018). According to Yusof & Misnan (2019), CIDB G7 contractors is the large grade contractors that hold a Grade G7 licence obtained from the Construction Industry Development Board (CIDB) Malaysia which allows them to undertake any construction projects for an unlimited value.

## **1.7 Scope of the Study**

This thesis is primarily concerned with an investigation on the main pertinent features of Alternative Disputes Resolution (ADR) that promotes the feasible resolution for construction disputes. The pertinent features of ADR that contribute to the method for being as the feasible dispute settlement were investigated and analyzed to know which of those features has the most influence to increase the preference on ADR as the method of choice for dispute settlement. The data for this study were obtained from literature reviews and interview session with the lawyers, arbitrators, adjudicators and/or mediators within Selangor and Klang Valley, Malaysia who are experts and have knowledge on construction disputes settlement. This thesis also investigated the CIDB G7 contractors' perspective towards ADR as the mechanism of construction disputes settlement within Malaysia. Hence, the data for this study were obtained from the literature reviews and answered questionnaires from construction company contractors within Selangor and Klang Valley, Malaysia with Grade G7 which the license issued from Construction Industry Development Board (CIDB). The results from the investigation were interpreted to enhance the effectiveness of ADR through the development of a framework of guideline which could be used as reference to improve the understanding on all available ADR in Malaysia and notify the stakeholders in construction industry on the existence of feasible settlement for disputes. Indirectly, this could encourage the preference on ADR as the method for dispute settlement in Malaysian Construction Industry.

## 1.8 Content of the Thesis

The current research study is organized into five (5) chapters as shown in the table below:

**Table 1.1 : Content of the Chapter**

<b>Chapter</b>	<b>Content</b>
Chapter 1	An introductory Chapter which introduces and outlines the background and approach to the research questions that leads to overall objectives of the thesis.
Chapter 2	The relevant literature review is performed in this Chapter which presents the theoretical framework of this research. In this Chapter, the researcher discussed the information known prior to research and narrows it down to pinpoint the main focus areas of this study.
Chapter 3	Methodological framework identifying the most appropriate research methodology, detailing its design and strategy for data collection and also method of data analysis. The research will make use of it to answer the research questions.
Chapter 4	The discussion, illustration of data collected, analysis and findings, themes that emerged from each of the interview and also the illustration of how the findings are relevant to answer the research questions.
Chapter 5	The conclusion from the findings of the research study and recommendations for further research.

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