

**HANDLING NEGOTIATION DEADLOCKS
IN SRI LANKAN CONSTRUCTION INDUSTRY**

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Sri Lanka

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

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DEDICATION

*Dedicated to ever loving
Hemali & Hansamali...*

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ABSTRACT

Negotiation is identified as first to be used among alternative dispute resolution mechanisms to resolve construction disputes. Further negotiation is identified as most preferred by construction parties. However, it is found parties continuously fail in achieving settlement through negotiation. In every negotiation deadlocks occur where both parties stand still on their stance which stuck negotiations from moving forward. Deadlocks are inevitable but can handle effectively. Existing knowledge identified several techniques used worldwide in handling negotiation deadlocks. This research is targeted to find the applicability of identified negotiation deadlock handling techniques in the Sri Lankan construction industry.

A questionnaire survey was carried out among fifty (50) experts in the construction industry. Questionnaire was based on thirty-three (33) identified deadlock handling techniques and respondents were asked to mark their responses on a Likert scale which contained five options. Feedback of the survey was analysed using Relative Importance Index (RII) and found that all the identified techniques are applicable to the Sri Lankan construction industry and found that the industry well recognized them. Further, producing additional information to negotiation table is the key deadlocks handling mechanism using rate negotiation in variation management in construction projects.

Key words: Negotiation; Variation; Handling deadlocks; Construction projects;
Sri Lanka

TABLE OF CONTENTS

DECLARATION, COPYRIGHT STATEMENT AND THE STATEMENT OF THE SUPERVISOR	i
DEDICATION.....	ii
ACKNOWLEDGEMENTS.....	iii
ABSTRACT	iv
TABLE OF CONTENTS.....	v
LIST OF FIGURES	ix
LIST OF TABLES	x
LIST OF ABBREVIATIONS	xi
1. INTRODUCTION TO THE RESEARCH.....	1
1.1 Background.....	1
1.2 Problem Statement.....	3
1.3 Aim	3
1.4 Objectives	4
1.5 Research Methodology	4
1.6 Scope and Limitations	4
1.7 Chapter Breakdown	5
2. NEGOTIATION AND HANDLING DEADLOCKS.....	6
2.1 Negotiation.....	6
2.2 Why Negotiate?	7
2.3 Negotiation Elements.....	7
2.4 Negotiation Strategies.....	8
2.4.1 Distributive negotiation.....	8
2.4.2 Integrative negotiation	9
2.5 Negotiation Tactics	9
2.5.1 Auction.....	10
2.5.2 Brinksmanship	10
2.5.3 Bogey	10

2.5.4	Defence in depth	11
2.5.5	Flinch	11
2.5.6	Good guy or bad guy	11
2.5.7	Highball or lowball	11
2.5.8	The nibble.....	12
2.5.9	Snow job	12
2.6	Negotiation Styles.....	12
2.6.1	Accommodating	13
2.6.2	Avoiding.....	13
2.6.3	Collaborating.....	13
2.6.4	Competing.....	13
2.6.5	Compromising.....	14
2.7	Types of Negotiators.....	14
2.7.1	Soft negotiators	14
2.7.2	Hard negotiators	14
2.7.3	Principled negotiators.....	15
2.8	Team Negotiations	17
2.9	Deadlocks in Negotiation.....	17
2.10	Handling Negotiation Deadlocks.....	19
2.10.1	Change the setting	19
2.10.2	Change the negotiator(s)	19
2.10.3	Change levels in the organization	20
2.10.4	Provide additional information	20
2.10.5	Go “off the record”	20
2.10.6	Say “let’s shift into the both win mode”	21
2.10.7	Take a break	21
2.10.8	Revisit priorities	21
2.10.9	Look at all the options.....	22
2.10.10	Give a little.....	22
2.10.11	Bag the smaller goals	22
2.10.12	Call a time-out.....	22

2.10.13	Set aside quiet time	23
2.10.14	Impose a deadline.....	23
2.10.15	Please say “yes”	23
2.10.16	Bring in an impartial third party.....	23
2.10.17	Let it go	24
2.10.18	Set aside anger.....	24
2.10.19	Agree in principle.....	24
2.10.20	Regroup and refocus	25
2.10.21	Keep communication flowing	25
2.10.22	Give negotiator power.....	25
2.10.23	Present party’s reasoning	25
2.10.24	Dynamics of the negotiation	26
2.10.25	Time of negotiation	26
2.10.26	Mitigate other side’s pressure	26
2.10.27	Motivate	26
2.10.28	Share the risk.....	27
2.10.29	Change the environment	27
2.10.30	Making concessions	27
2.10.31	Seeking similarity from differences	28
2.10.32	Advantages and disadvantages analyses	28
2.10.33	Humouring the embarrassment	28
2.11	Summary.....	28
3.	VARIATIONS AND RATES NEGOTIATION.....	31
3.1	Variations in Construction Projects	31
3.2	Variation Management Process	32
3.3	Negotiation as an Conflict Management Mechanism and ADR Mechanism	33
3.4	Characteristics of Rate Negotiation in Variation Management.....	36
3.4.1	Complexity.....	36
3.4.2	Based on Conditions of Contract	36
3.4.3	Interest and position based negotiation	37

3.4.4	Negotiators and their authority level.....	37
3.5	Summary.....	38
4.	RESEARCH METHODOLOGY.....	39
4.1	Research Approach.....	39
4.2	Research Strategy.....	39
4.3	Research Techniques.....	40
4.4	Data Collection.....	40
4.5	Data Analysis Technique.....	46
4.6	Summary.....	46
5.	DATA ANALYSES AND RESEARCH FINDINGS.....	47
5.1	Data Analysis.....	47
5.2	Research Findings.....	50
5.3	Research Findings versus Theory.....	53
5.4	Summary.....	55
6.	CONCLUSIONS AND RECOMMENDATIONS.....	56
6.1	Summary of the Study.....	56
6.2	Conclusions.....	57
6.3	Recommendations.....	60
6.4	Research limitations.....	60
6.5	Further Research Directions.....	60
	REFERENCES.....	62
	APPENDIECES	
	APPENDIX A: QUESTIONER USED FOR DATA COLLECTION.....	66

LIST OF FIGURES

Figure 4.1: Sample size by profession	41
Figure 4.2: Sample size by designation	42
Figure 4.3: Sample size by work organization	43
Figure 5.1: Preference of all respondents to each technique (after ranking)	49
Figure 5.2: RII distribution of each technique (after ranking)	50

LIST OF TABLES

Table 2.1: Principled negotiation vs. soft and hard negotiation	15
Table 2.2: Reviewed deadlock handling techniques	28
Table 4.1: Details of sample size	40
Table 4.2: Details of sample size by profession	42
Table 4.3: Details of sample size by designation	43
Table 4.4: Details of sample size by work organization	44
Table 5.1: RII values of the deadlock handling techniques	45
Table 5.2: Ranked RII values of the deadlock handling techniques	46
Table 5.3: Ranked deadlock handling techniques	47

LIST OF ABBREVIATIONS

ADR	-	Alternative Dispute Resolution
FIDIC	-	Federation Internationale Des Ingenieurs Cons
ICTAD	-	Institute for Construction Training and Development
RII	-	Relative Importance Index
UNCITRAL	-	United Nations Commission on International Trade Law

1. INTRODUCTION TO THE REASEARCH

The chapter one provides an overview to the study including the background and rationale behind the research. Further, the chapter explains the aim, objectives, scope of the study and the methodology that the study carried out.

1.1 Background

Organizational and technological complexities in construction projects generate enormous changes to the as-planned work (Zou, Zhang & Wang, 2007). Variations can be additional works, omissions from agreed scope of work, quality changes, levels or positions changes and changes to the sequence or timing of the execution of the work (FIDIC, 2006). Thus variations in construction projects cannot be eliminated and in fact necessary to successful completion of a project (Murdoch & Hughes, 2008). At the post contract stage negotiation plays major role in reaching agreement between the parties in respect of rates of variations. Unsettled conflicts or disagreements can lead parties to disputes in construction projects since a single variation can be create a multimillion impact on project cost.

There are many methods available for solving conflicts between the parties. Alternative Dispute Resolution (ADR) methods are becoming more popular for resolution of disputes between parties due to its merits over litigation. ADR hearings conduct in private and it protects the privacy (Steve, 2011). Parties to contract use various ADR mechanisms such as negotiation, mediation, conciliation, adjudication and arbitration in construction projects. De Zylva (2007) recognised that negotiation as most appropriate method to resolve construction disputes as a result of numerous advantages involved that is cost effectiveness, informality, speediness, simplicity, confidentiality, party autonomy and preservation of business relationship (Jayasena & Kavinda, 2012; Ren, Shen, Xue & Hu, 2011). Further Jayasena and Kavinda (2012) identified that the parties in

construction projects in Sri Lanka preferred to use negotiation among other ADR methods to resolve their disputes. Therefore negotiation can be used as both conflict management mechanism and ADR mechanism in respect of managing variations.

Fisher, Ury and Patton (1991) stated that the negotiation “is a back-and-forth communication designed to reach an agreement” (p.6). Negotiation drives a momentous role in both dispute prevention and dispute resolution (Ren, 2002). Thus negotiation can be used in conflicting stage and after emerging dispute between parties. It is a non-adversarial process parties voluntarily involved in.

However, process of negotiations can be disturbed and stop moving forward or when negotiation parties run into a deadlock (Fells, 1989). It comes to an impasse which seems to be the end of difficult discussions and both parties do not wish to do further compromise (Meek, 1996). Deadlock is a state where an unresolved conflict come to a standstill state which requiring a key to open it. Thus, if it is successfully handled or find a key to open it, parties will be able to lead the negotiation to a successful conclusion (Lax & Sebenius, 1992). There are various ways identified in literature which is used to breaking deadlocks for an effective negotiation. However, these techniques of breaking deadlocks not tested for construction dispute negotiation.

Ren et al., (2011) stated that construction projects and disputes arise between parties to contract has specialised characteristics which is different to other business negotiations. In construction parties are bound by sophisticatedly prepared contract (Ren, et al., 2011). Negotiation of rates in a variation is highly influenced by the terms in the agreed contract. Finalizing rates of variations is identified as complex situation which both parties try to address their own (Sutrisna, Buckley, & Potts, at el, 2016).

Thus it is identified that finding applicable methods used to overcome deadlocks in rate negotiations in Sri Lankan construction industry is necessary to develop negotiation practices.

1.2 Problem Statement

Construction is an amalgamated process which includes many stakeholders. Contractor, employer and the engineer are the main parties. They are contractually bound by agreements. In the process itself, parties come across with variations to the agreed work and those variations shall be agreed upon by both contractor and the employer upon the assistance of the engineer.

Negotiation is the most commonly and frequently used method in finalizing any variations to the contract. In the process of negotiation, parties may come to situations where both stands still on their stance where no progress in the negotiation or making deadlocks in the process. There exist many identified and tested techniques in handling negotiation deadlocks.

But there are no evidence in applying those deadlock handling techniques in the Sri Lankan construction industry in variation negotiations. Hence the study was focused on identifying what are the most applied deadlock handling techniques in rates negotiations in variations management in the Sri Lankan construction industry.

1.3 Aim

The aim of this research is to investigate applicability of the methods used to overcome negotiation deadlocks, in the variation negotiations in Sri Lankan construction industry.

1.4 Objectives

The study followed forward through following objectives:

1. To review negotiation strategies, tactics, styles and types of negotiators
2. To review deadlock handling techniques used in negotiation
3. To investigate the practical usage of identified techniques to overcome negotiation deadlocks in the variation negotiations in Sri Lankan construction industry

1.5 Research Methodology

First two objectives had been achieved through reviewing and synthesizing existing literature. In fulfilling the third objective, listed out and categorized the identified methods in handling negotiation deadlocks and questionnaire based on likert response scale had been developed. A questionnaire survey had been carried out among the identified experts in the Construction Industry. Identified experts are the project managers, engineers, quantity surveyors, representing clients, consultants and contractors who directly involve in post contract administration especially in finalizing rates for variations.

All the identified experts were personally met and got the questionnaire filled by explaining them the identified methods. Personal delivery of the questionnaire helped to keep all the experts in equal platform in getting their feedback and it helped to fulfil the target of the sample size.

1.6 Scope and Limitations

In order to avoid complexities and to keep the research on an unbiased base, is the study was limited to deadlock handling in post contract negotiations carried out in order to finalizing rates for variations in building and civil engineering projects.

1.7 Chapter Breakdown

Chapter One	Provides an overview to the research study which includes the background and the rationale behind the research. Further it provides the aim, objectives, scope of the research and the methodology that the research had been carried out.
Chapter Two	Describes the theoretical explanation using existing knowledge, Negotiation, negotiation strategies, negotiation elements, negotiation tactics, negotiation styles and types of negotiators. Further explains the negotiation deadlocks, how deadlocks are formed and the listed ways to overcome the negotiation deadlocks.
Chapter Three	Analyses and synthesizes literature on variation management in construction projects while addressing special characteristics of it which influence the success of negotiations.
Chapter Four	Describes the methodology adopted to carry out the research which includes data collection methods and techniques of data analysis.
Chapter Five	Analysis of collected data and summarised the research findings.
Chapter Six	Conclude the research findings including recommendations and suggestions for further research studies.

2. NEGOTIATION AND HANDLING DEADLOCKS

Chapter two describes the theoretical explanation using existing knowledge, negotiation, negotiation strategies, negotiation elements, negotiation tactics, negotiation styles and types of negotiators. Further this chapter explains the negotiation deadlocks, how deadlocks are formed and the listed ways to overcome the negotiation deadlocks.

2.1 Negotiation

David and Ratty (2011) explained, negotiation as a discussion between two or more people or parties, who are willing to come to an understanding, solve point of inequity, or earn an advantage as the result of the process, to come to an agreement upon series of actions, to deal for individual or collective advantage, to gain a positive end result to satisfy various interests or thoughts of the parties who participated in negotiation process. Negotiation is a procedure where each party entered to the process of negotiation bears the target of earning an advantage for themselves at the end of the negotiation and it is hoped to target in an amicable manner.

Another explanation for negotiation is that it is a procedure through which people clear up differences or unbalanced situations. It is a course of action by which all accepted decisions or new revised agreement is gained while avoiding disagreements and misunderstandings. In any argument or dispute, usually individuals representing each party, try their best to gain or grab the most profitable outcome for their representing side. But, all accepted truth of justice, looking mutual benefit and eager to maintain a genuine relationship are the main blood to a happy end result (Anonymous, 2013).

Clay and Hammer defined the term negotiation as it is the “communication that happens when two or more parties try to come to a compromise on a mutually acceptable

decision in a situation where their interests or choices for possible outcomes are linked negatively” (Ren, 2002).

2.2 Why Negotiate?

It is unavoidable that, by the time, arguments and differences will come up as the various needs, wants, egos, aims and beliefs of mankind are brought together. Devoid of negotiation, such differences or misunderstandings may lead to vehement and resentment as the result in most of the parties may suffer feeling dissatisfied. The target of deviate to negotiation is to seek to reach compromise without resulting barriers in future interactions (Atkinson, 1975).

All mankind play negotiation everywhere and always in the real life; varying personnel problems to official business deals. As a result of vital nature of the negotiation process in day today activities, it is developed as a study making the interested parties to find out negotiation theories and it made professional negotiators and more negotiating bodies than earlier (Sebenius, 2016).

2.3 Negotiation Elements

Many different ways and views are there to classify the important elements of the negotiation process (Thompson, 2012). One view of negotiation is that it includes three basic elements: they are listed as process, behavior and substance. The process describes to how the people to the negotiation, negotiate: the background of the negotiations, the need parties to the negotiations, the negotiation tactics used by those, and the order of the flow of the negotiation and time or stages in which all of these play out. On the other way, behavior refers to the interaction among these parties, the transactions between them and the styles they adhere to. The substance means to what is the matter or the conflict to be negotiated over, the schedule, the issues or interests, the selections

available, and the agreement or agreements reached at the finishing point of the negotiation process (Churchman, 1993).

A different view of negotiation says that negotiation is a combination of four elements: They are named as strategy, process, tools, and tactics. Strategy refers to the top level goals in a negotiation and more or less this includes the correlation and the final output. Processes and tools are the activities that include the steps that shall be adhered and the roles to be played in both making for and negotiating with other parties. Tactics refer to more detailed and described statements and responses and actions to the statements of other party to the negotiation. Negotiators who are willing to adhere this phenomenon influence, adding that these have already become part and parcel to prevailing negotiation a success, and so shall not be misplaced (Lickson, 2016).

2.4 Negotiation Strategies

Negotiation theorists usually differentiate between two types of negotiation strategies. Various theorists use different names for the two accepted and general types and identify them in many faces. More frequently termed strategies are distributive negotiation and integrative negotiation (Barbara, 2007). These two are further described in the following two sub sections respectively.

2.4.1 Distributive negotiation

Distributive negotiation is identified or classified as positional or hard-bargaining negotiation and also frequently called win-lose due to the assumption that one party's winning stance results in the other party's loss. Every party to the negotiation always try to adhere to an extreme stance, knowing that it is not in the accepting range to the other party and then introduces a combination of bluffing, brinkmanship and guile believing

that in order to give up a little as accommodating before come to a compromise (Gridlock, 2009).

2.4.2 Integrative negotiation

Sometimes this method is called as interest-based or some instances principled negotiation. Principled negotiation method is usually trying to make a value in the process of the negotiation itself. It looks or overviews the negotiation as a shared and distributed problem rather than a personalized argument, and forces upon to fit into the objective, based or principled criteria as the foundation to come to an agreement (Gridlock, 2009).

The real meaning of the word integrative is the cooperation of one another in the negotiation process. This negotiation more involves a higher level of belief and the creating of a friendly relationship among the parties. Mutual gains are the finally expected out come and the total process is very creative. Hence some scholars term this method as win-win negotiation (Fisher & Shapiro, 2006).

2.5 Negotiation Tactics

Negotiation tactics always play an essential part of the negotiating process. Frequently they are slight, hard to distinguish and used for various purposes. Tactics are most commonly used in distributive negotiations and it applies much when the target is on getting as more value off the process as possible (Steve, 2011).

Researchers suggest that there are many negotiation tactics and some most commonly practicing types are summarized below:

2.5.1 Auction

This comes in most bidding processes as the bidding itself makes real contest situation. When several parties need the one same thing, put them against one another. When people get to understand that they might lose out on something, usually they need it even more and more. Not only because do they need the thing that is being try to be won, they also like to get it, just to win. Getting favor over advantage of someone's opposing nature can make the price or value goes up (Steve, 2011).

2.5.2 Brinksmanship

In brinksmanship, one party forcefully pursues a series of conditions to the point at which the other negotiating party shall either accept or quit from the negotiation. Brinkmanship is a method of "hard nut" way to bidding in which one party pulls the other party into the "brink" or to the edge of what that party is able or capable to accept. Victorious brinksmanship simply makes the opponent that they have no more option but to agree the offer and there seems to be no accommodating any other alternative to the suggested proposal (Alvin, 1991).

2.5.3 Bogey

Negotiators use the bogey or making frighten tactic to imagine that an issue of subtle or which bears no consequence to him or her is very essential or important. Then, in the later stage of the negotiation, that subtle issue is used to bargain for a massive concession of real importance (Lewicki, Saunders, & Minton, 2001).

2.5.4 Defence in depth

This tactic comes when several layers of decision-making power that try to allocate more concessions every time the consensus goes via a various level of authority. In simple terms, every time the offer reaches the decision maker, that person is not hesitant to demand to add more or another concession in return finishes the transaction (Steve, 2011).

2.5.5 Flinch

Flinching tactic is that convincing a huge negative physical or bodily response to a suggestion by the other party. Frequently using tactics flinching are gasping for air, yawning, or visible feelings of astonishment of shock (Steve, 2011).

2.5.6 Good guy or bad guy

This is usually used in team negotiations. In this way one member of the team suggest hard or unrealistic demands, and the other member offers a more reasonable proposal. The "good guy" will appear more, realistic and reasonable and understanding, and make easier to deal with. In nut shell, it is applying the law of relativity to absorb cooperation. Good guy presents more acceptable compare to the "bad guy." This tactic uses frequently (Lewicki, Saunders, & Minton, 2001).

2.5.7 Highball or lowball

These tactic users show an incredibly high, or ridiculously low starting offer that will never be accepted by the other party. The truth behind that is that the unrealistic high or low offer will cause the other party to re-think or re-assess his or her own starting offer and come closer to the resistance point. Another value of this stance is that the party

giving the unrealistic offer appears more flexible and that party makes concessions toward a more amicable end. There exists a danger of this tactic. That is the opposite one may think that the total negotiating process is a waste of time (Lewicki, Saunders, & Minton, 2001).

2.5.8 The nibble

In this tactic one party demands comparatively small concessions that have not been addressed earlier before finishing the negotiation. This method enjoys advantage of the other party's willingness to finish by saying "just one more thing" (Lewicki, Saunders, & Minton, 2001).

2.5.9 Snow job

Snow job tactic using negotiators try to pressure the other party using as much as information. And the other party faces the difficulty in determining which information is relevant and important, and which facts are not important to the issue. Negotiators might also use high technical language and jargon to hide a quite simple answer to a query raised by a non-expert (Lewicki, Saunders, & Minton, 2001).

2.6 Negotiation Styles

(Shell R. G., 2001), introduced five styles of negotiation. People can usually have strong dislike towards numerous styles; the style adhered in a negotiation may vary upon the circumstance and the desires of the opposing party, amidst other factors. Furthermore, styles can differ over the time. Those negotiation styles are described further in following sub sections.

2.6.1 Accommodating

Accommodating style users enjoy by attending to other party's hardships and eager to preserve personal goodwill. Accommodators are responsive to the arousing states, body language, and verbal signals of the other parties. They try to get advantages in negotiations where the other party concentrates little or no emphasis on the relationship (Batista, Conflict Modes and Managerial Styles, 2014)

2.6.2 Avoiding

As per the meaning of the style, negotiators do not willing to negotiate and do not do it unless it is compulsory for them to do. When negotiating, avoiders like to avoid and run away from the challenging situations of negotiating; anyway, avoiders might be supposed as tactful and sensitive (Shell R. G., 2006)

2.6.3 Collaborating

Collaborating negotiators like to solve hard dilemmas in creative methods. They are good at applying negotiations to understand the thinking and interests of the other parties. They sometimes create arguments by transferring simple issues into more complex situations (Thompson, 2012).

2.6.4 Competing

Competing style negotiations like to gain something. These negotiators use strong mindset for all activities of negotiating and are often systematic. Because their style can govern the discussing process, competitive negotiators usually not concern about the value of relationships, whether business or private (Shell R. G., 2001).

2.6.5 Compromising

Negotiators are eager to finish the process by doing what is reasonable and acceptable for all parties engaged in the negotiation. Compromisers are more suitable when time is limited as they tend to finish the process sooner. Usually compromisers always rush the negotiation process and make concessions too quickly (Thomas, 2001).

2.7 Types of Negotiators

Fisher et al., (1991); Galloway, (2013); Ren et al., (2011) identified three basic kinds of negotiators. These types of negotiators are: Soft bargainers, hard bargainers, and principled bargainers as described below:

2.7.1 Soft negotiators

These negotiators treat negotiation as too close to a game, so they tend to select a smooth style of bargaining. The offers they suggest are not their last values, they consider others' ideas and wants, like to avoid hot arguments, and they keen to have good relations with colleagues. Their opinion of others is one of friendliness, and their aim is settlement or come to a compromised situation. They do not differentiate people from the dispute, but are sensitive on both. They avoid arguments of wills and will insist on compromise, suggesting remedies and easily trusting others and do not hesitate to change their thinking accordingly Fisher et al., (1991); Ren et al., (2011).

2.7.2 Hard negotiators

These negotiators use debatable strategies to make others agree, do not hesitate to forward phrases such as "this is my final offer" and "take it or leave it." They make

pressure, do not believe in others, force on their stance, and apply stress to negotiate. They see others as enemies and their final target is winning. Further, they will look for one single feedback, and force the other party to accept it. Like the soft negotiators they do not separate the people from the problem, but they do much worry and concern on both the people to the negotiation and the dispute (Fisher et al., 1991; Batista 2007; Ren et al., 2011; Galloway, 2013)

2.7.3 Principled negotiators

These negotiators seek collective outcomes, and do so by side stepping obligation to relevant positions. They target on the dispute rather than the characteristics or feelings of the people involved. They distinguish people from the problem, look for interests, get rid of bottom lines, and try to come to target oriented outcomes which based on standards. A simple truth behind the negotiation is it is not just business representatives of each party sat in the negotiation table but human beings with “emotions, deeply held values, and different backgrounds and viewpoints” (Fisher et al., 1991, p.14). Fisher et al. (1991) further states that this characteristic of negotiators makes negotiations difficult.

Fisher et al., (1991) compared the three types of negotiators and analysed them as follows;

Table 2.1: Principled negotiation vs. soft and hard negotiation

Problem		Solution
Positional Bargaining: Which Game Should You Play?		Change the Game - Negotiate on the Merits
Soft	Hard	Principled
Participants are friends.	Participants are adversaries.	Participants are problem-solvers.

The goal is agreement.	The goal is victory.	The goal is a wise outcome reached efficiently and amicably.
Make concessions to cultivate the relationship.	Demand concessions as a condition of the relationship.	Separate the people from the problem.
Be soft on the people and the problem.	Be hard on the problem and the people.	Be soft on the people, hard on the problem.
Trust others.	Distrust others.	Proceed independent of trust.
Change your position easily.	Dig in to your position.	Focus on interests, not positions.
Make offers.	Make threats.	Explore interests.
Disclose your bottom line.	Mislead as to your bottom line.	Avoid having a bottom line.
Accept one-sided losses to reach agreement.	Demand one-sided gains as the price of agreement.	Invent options for mutual gain.
Search for the single answer: the one they will accept.	Search for the single answer: the one you will accept.	Develop multiple options to choose from; decide later.
Insist on agreement.	Insist on your position.	Insist on using objective criteria.
Try to avoid a contest of will.	Try to win a contest of will.	Try to reach a result based on standards independent of will.
Yield to pressure.	Apply pressure.	Reason and be open to reasons; yield to principle, not pressure.

Source: Fisher et al. 1991

2.8 Team Negotiations

Due to the growth of economies and developing business trends, negotiation in the form of teams is becoming more popular and widely adhered. Teams can efficiently contribute to break down a complex negotiation to a success. There is more awareness and intelligence dispersed in a team than in a single mind. Team members must satisfy effective communication skills. The overall degree of the capacity of a team reduces the disagreements and increases familiarity in a negotiation to reach a consensus (Sparks, 1993).

2.9 Deadlocks in Negotiation

A deadlock can be defined as a situation where there is no flow of the progress towards a compromise. This is less dangerous than a total breakdown, when there is no communication between the parties and usually some form of industrial action as well (Fells, 1989).

Another explanation by Goldwich (2010) says that deadlock or impasse can emerge due to many reasons, including both parties have their own different scattered objectives. One party purposely mistakes fairness for rigidity and is not willing to make concessions even for the sake of keeping the negotiation "alive".

It is a purposeful tactic during a negotiation to force the other party to re-think or re-consider his position and there has got to be a better way of breaking deadlocks (Raiffa, 2016).

A business deadlock occurs when both parties are not like to sacrifice anything for each other and become standstill on their thinking. Deadlocks in business affairs can prove to

be valuable for both sides as each passing day means the opportunity cost of the blocked or stagnated issue. Managers should be keen on breaking deadlocks and let flow the negotiation towards an end. However, it is essential that the deadlock is handled at fair and reasonable terms and not by losing own company interests (Mahmoodi, 2016).

Usually in many negotiations it is the final stage that more movement takes place. By understanding that deadlocks are common, and it does not mean that a compromise is hard to achieve. By using the deadlock handling methods, parties can improve their stances of avoiding any type of deadlocks and able to come to a well-established and acceptable compromised situations (Ren, 2002).

Negotiation is really a series of handling a set of short-term deadlocks. It can be termed as a negotiation "deadlocked", however, when it sees that there is no accepted willing for further flow of the negotiation on either side to fill the remaining gap between the parties (Mahmoodi, 2016).

Pruitt(1981) suggests that negotiators have the tendency to finish up in a deadlock before creating transparency into the agenda of the negotiation. Only by finding themselves in a deadlock do negotiators perceive that some form of co-operation with the other side is preferable to having no agreement at all.

A deadlock is not simply the last option for a negotiator of whether to accept the other side offer or finish the negotiations off without an agreement. It is part of the full procedure of come to a compromise, but it is not simply a time to take stock and gather strength. The negotiators will be challenged to develop their thinking pattern on what can, and cannot, be agreed on the matter of disagreement. They will also have to re-shape their tactics in achieving their ultimate goals. Dealing or handling the deadlocks successfully in any negotiation means that it is also a technique of changing the thinking pattern of the negotiators (Carlisle & Leary, 1981).

2.10 Handling Negotiation Deadlocks

Many researches carryout their studies on negotiation deadlocks (David, 1998; Seuss 2004; Chitwood & Takemoto, 2008; Goldwich, 2010; Isoor & Marshland, 2010; Anderson, 2011; Lindquist, 2012; Alexis, 2013). Different authors have identified deadlock handling techniques in deferent ways according to their research areas under different field of studies such as social science (Chitwood & Takemoto, 2008; Alexis, 2013), business studies (David, 1998; Isoor & Marshland, 2010; Anderson, 2011; Lindquist, 2012) and politics (Seuss, 2004; Goldwich, 2010). However no study was on handling deadlocks on rates negotiations in construction projects. Therefore, all deadlock handling techniques identified by different authors in different field of studies take into account to analyses and synthesis to identify existing knowledge gap.

2.10.1 Change the setting

This technique suggests about the place of negotiation. If the setting of the place of negotiation changed, then all of a sudden both sides usually feel that they feel like that they are again starting a new series of negotiations. This new set up means that all of the former beliefs about what would or would not drive are put away. This new thinking may be what both parties need to go back and re-visit the pros and cons of the matter that made the impasse (Chitwood & Takemoto, 2008; Anderson, 2011).

2.10.2 Change the negotiator(s)

Chitwood & Takemoto, (2008) and Anderson, (2011) identified changing negotiators as a powerful tool of handling any deadlock. Sometimes go into an impasse as a result of one or more of the negotiators who involve in the discussions is not in a position to find another way to look at the process. This is frequently happening when negotiations have

gone on for a long time. If the negotiator or the negotiators have been changed, then parties may feel like that the negotiations have gone a step back as the newly introduced negotiator tries to develop a correlation with the opponents of the negotiation, but this may be just what is necessary to make the process moving forward.

2.10.3 Change levels in the organization

Most of the time deadlocks come up as a result of the lack of authority vested to the negotiators to suggest a different solution. In these situations, it is the best option to transfer it up to the people who have higher powers. They may in a quite comfortable stance to suggest or come up with more solutions in which they can bend and that could get the whole negotiation process again to the former moving stance quickly (Chitwood & Takemoto, 2008; Anderson, 2011).

2.10.4 Provide additional information

Each side of the negotiation process have many of their excuses and reasoning for not being willing to move on the issue of the deadlock. They act making the deadlock as per the information that they currently with them. But there may be some other information regarding the issue of the dispute that is not revealed to all the parties and if both parties are willing to investigate and table them, then the process can be moved again considering new information. Both parties must understand the issue and genuine effort to collect the relevant information is very important towards an amicable settlement (Chitwood & Takemoto, 2008).

2.10.5 Go “off the record”

As Anderson, (2011) says this deals with the level of rapport that one party has been able to build with the other side and this is what really needed. When one party is

willing to go off the record, it implies to the other side that all are going to have a discussion with them about negotiating strategy that once completed will not be discussed repeatedly. This shows the trust developed among the parties and if perhaps both sides of the table are trying to decide the same end point and are just trying to trip up by a small issue.

2.10.6 Say “let’s shift into the both win mode”

According to Chitwood & Takemoto, (2008), this is more meaningful way to communicate. One party thinks and worries about the other side and try to find ways and means to make solutions that works for both sides. Then all of a sudden the other party may start to think more possible options to break the deadlock successfully

2.10.7 Take a break

Though it sounds so simple it works wonders. Warm discussions and hot arguments and the developed deadlock position perhaps make the people tired and that minds are not in a possible stance to think positively towards breaking any impasses. Here both parties take a break and step away from the negotiation table. Taking a break may be just what the doctor advice in order to get parties creative juices flowing again (Chitwood & Takemoto, 2008; Anderson, 2011; Alexis, 2013).

2.10.8 Revisit priorities

Usually in a middle of a negotiation and when there is a deadlock beneath, both the parties may not in a position to revisit their priorities. One party concentrates on their priorities and they help the other party in the same way. Refocusing one’s interests and priorities can help to get the negotiation back on track (Goldwich, 2010; Isoor & Marshland, 2010)

2.10.9 Look at all the options

Look for new and creative ways to add value. Need to investigate options that have been finished or thrown away. As the negotiation proceeds, try to find new information and obtain new insights that may suggest new possible solutions that had not been apparent earlier (Goldwich, 2010; Isoor & Marshland, 2010)

2.10.10 Give a little

Goldwich, (2010) suggested that offer to grant a small concession, which should be contingent on the other party making a concession in return is an effective deadlock handling technique. For example, “We would be willing to do X if you could do Y.” A small move can provide momentum and lead to further progress.

2.10.11 Bag the smaller goals

Focus the negotiation on smaller or easier items of the agenda. As one party reach an agreement on some minor points, that party build momentum that can carry forward and make it easier to agree on larger issues (Goldwich, 2010; Alexis 2013).

2.10.12 Call a time-out

As David, (1998) and Goldwich, (2010), here each party review the strategy with the members of the team. Give time for emotions to cool down. Taking a break to relax and clear head can work wonders.

2.10.13 Set aside quiet time

Agree to impose a fixed period of silence. This is not the same as taking a time-out where people go out of the room and forget about the issues. Everyone stays in the room, without saying a word for five to ten minutes (Goldwich, 2010; Alexis 2013).

During this time all kinds of thoughts creep into people's minds, causing both sides to moderate their expectations. This strategy is especially useful for husbands and wives trying to resolve a disagreement. It too works for those who have a close personal relationship with the other party.

2.10.14 Impose a deadline

In many negotiations, most of the progress is made in the final stages, as the deadline approaches. Deliberately adding time pressure may be just the motivation people need to get things moving again (Seuss 2004; Goldwich, 2010).

2.10.15 Please say "yes"

Goldwich, (2010) suggests to ask the counterpart for his agreement. Sometimes it is just as simple as asking. If he says "yes", that's great! If he says no, ask why not? Listen carefully to his answer, address his concerns and set forth the remaining steps needed to conclude an agreement.

2.10.16 Bring in an impartial third party

A good mediator can recognize communication bottlenecks and help the parties to overcome them. A third party can also help both sides to see things from other perspectives and bridge the gulf created by a lack of trust. Even after a lawsuit has been

filed, a mediator can help the parties reach an agreement in the majority of cases (Seuss 2004; Goldwich, 2010).

2.10.17 Let it go

Be prepared to walk away from a business negotiation. Sometimes the best deal is no deal at all. Other times, one's counterpart will call him back with a better offer. Just be sure not bluffing when threatened to leave and actually have some place to walk away to. In any event, end the negotiation on good terms, one may find dealing with this person or organization again in future (Goldwich, 2010).

2.10.18 Set aside anger

David, (1998) and Lindquist, (2012) suggested that threats made or received should absolutely not be tolerated. Playing by the rules requires that one respects his opponents' opinions. Anger may stop meaningful progress. When that happens it shall be set aside. Mostly, recognize that the anger is a sign that the issue at hand is important. Set the issue and the anger aside temporarily and if there are other issues they shall be dealt with.

2.10.19 Agree in principle

Issue causing the impasse, shall be tried to agree in principle. Then both parties can agree with the objectives. Chances for a successful conclusion are greatly enhanced in this manner (David, 1998; Lindquist, 2012).

2.10.20 Regroup and refocus

Team shall be reassembled and what have accomplished shall be discussed carefully to get back into a positive mind set. Objectives shall be re-shaped and re-prioritized. This will re-dedicate the efforts and refocus one's attention on the real objective. Issues that are causing problems may be innocuous. When return to negotiations, both shall refocus on their purposes (Lindquist, 2012; Alexis, 2013).

2.10.21 Keep communication flowing

Even one party has reached a complete deadlock, keep a formal communication channel open so that party can find ways out mutually. It is important to keep away personal egos from business deals so that a rational decision is made (Seuss, 2004; Lindquist, 2012).

2.10.22 Give negotiator power

In the second round of negotiations, give the representative of the company greater decision making power. He should be an authority on the deal and the relevant party should trust him with the decision he is going to make after evaluating all the points (Isoor & Marshland, 2010; Lindquist, 2012).

2.10.23 Present party's reasoning

There is a reason why the deal reached a deadlock. Both parties should openly discuss their reservations with each other so that everything is in the open now. Perhaps with a greater level of understanding and empathy, one party can carve out an option that is a win-win for both to the negotiation. Of course both of the parties might have to let go of a few optimal options (Lindquist, 2012).

2.10.24 Dynamics of the negotiation

Change the member of party's delegation. Most willingly the lawyers would like to say: "I must appear in court this afternoon, so my partner will take my place to continue the negotiation. "The "court" may possibly be a tennis court. However, this is one of the ways to change the member of a delegation (Lindquist, 2012; Alexis, 2013).

A change in players and personalities can jumpstart a stalled negotiation. Parties might also change the physical environment. Different surroundings can change the atmosphere and put all back on track to a successful agreement.

2.10.25 Time of negotiation

Lindquist, (2012) says to change the time of negotiation. Further suggests that go on negotiation after having lunch or dinner together. A period of time for a stoppage can help both sides to re-adjust part of their subordinate principles

2.10.26 Mitigate other side's pressure

To mitigate the pressure of the opponents' and show compromise, one can let the member who would provoke the other side leave. Talk about opponents' custom, a tidbit, or an interesting story to ameliorate the tense atmosphere (Lindquist, 2012; Alexis, 2013).

2.10.27 Motivate

Find out the possibility to changes on financial affairs. For example, enlarge loans, reduce earnest money of order; or adjust the condition of payment; all of these are

enough to change the motive power (David, 1998; Isoor & Marshland, 2010; Lindquist, 2012).

2.10.28 Share the risk

Discuss ways of risk-sharing with other side. If one party accepts the obligation which may become unpleasant will cause their attention (Seuss, 2004; Lindquist, 2012).

2.10.29 Change the environment

Try to change the atmosphere in the conference room. If the focal point which can benefit both sides is sank to low key, trying to make it be more competitive. If the negotiation is hard to control, trying to open more channels to reach two-sides winning (David, 1998; Lindquist, 2012).

2.10.30 Making concessions

According to David (1998) and Lindquist (2012), if the benefit brought by the implement of the success of cooperation is larger than the break of a negotiation caused by insist on original principles, then give suitable concession is the right tactic that one party should take.

Lindquist (2012) further explains that both parties need to concede in the society in order to live, let alone when it is concerned with negotiating in business. In other words, in the case of deadlocks, both are supposed to adjust their respective objections and make concessions rationally to make the negotiation continue.

2.10.31 Seeking similarity from differences

When parties are involved in the deadlocks, they can try every possible means to find similarities while committing small differences (Lindquist, 2012).

2.10.32 Advantages and disadvantages analyses

Analyse why there are deadlocks, especially the reasons that block smooth negotiation, which will cause losses to both parts. Actually, before the deadlocks, the two must have had harmonious communications, and maybe both have compromised for the success of the deal. Then both can retrospect the achievement that both have had and expect for the future to remind the counterpart that the success is around the corner as long as the both compromise and take more pains (David, 1998; Lindquist, 2012).

2.10.33 Humouring the embarrassment

Humorous expressions do work when dealing with embarrassment during the negotiations (Lindquist, 2012).

2.11 Summary

Negotiation is a commonly used ADR method and it has many sub divisions like negotiation strategies, negotiation elements, negotiation tactics, negotiation styles and types of negotiators. Deadlocks are the situation where there is no any progress in the process being stagnated and there are many techniques that can be used to overcome deadlocks. Thirty-three (33) number of deadlock handling techniques have reviewed.

Table 2.2: Reviewed deadlock handling techniques

Number	Deadlock handling technique
1	Change the setting
2	Change the negotiator(s)
3	Change the levels in the organization
4	Provide additional information
5	Go “off the record”
6	Say “let’s ship into both win-win mode”
7	Take a break
8	Revisit priorities
9	Look at all the options
10	Give a little
11	Bag the smaller goals
12	Call a time-out
13	Set aside quite time
14	Impose a deadline
15	Please say “YES”
16	Bringing an impartial 3 rd party
17	Let it go
18	Set aside anger
19	Agree in principle
20	Regroup and refocus
21	Keep communication flowing
22	Give negotiation power
23	Present party’s reasoning
24	Dynamics of the negotiation
25	Time of negotiation
26	Mitigate other side’s pressure
27	Motivate
28	Share the risk

Number	Deadlock handling technique
29	Change the environment
30	Making concessions
31	Seeking similarities from differences
32	Advantage and disadvantage analysis
33	Humouring the embarrassment

3. VARIATIONS AND RATES NEGOTIATION

This chapter is focused on identifying nature of variations in construction projects and special characteristics of conflicts occur between parties which influence in rate negotiation in managing variations.

3.1 Variations in Construction Projects

A contract forms when an offer made by a party is accepted by the other party. In general, scope of contract which was agreed to perform cannot be changed afterwards the formation of the contract (Cartlidge, 2009). If parties to contract willing to incorporate changes to the contract they have to go for supplementary agreements (Murdoch & Hughes, 2008). Otherwise it will not be lawful and contractual.

Construction projects are unique and complex by its nature. Therefore, enormous changes required to as-planned work in order to successfully complete the project (Zou, Zhang & Wang, 2007). Hence construction projects cannot be performed under simple contracts which required supplementary agreements to be signed between the parties for each and every change to be legal. Therefore, construction projects generally regulated by very sophisticatedly prepared conditions of contract that gives room to incorporate changes which are necessary to complete the agreed scope of work successfully (Cartlidge, 2009; Murdoch & Hughes, 2008). Thus standard forms of contracts which are used widely in construction industry included provisions for variations (Cartlidge, 2009). ICTAD (2007) and FIDIC (1999) states that each variation may include,

- a) changes to the quality and other characteristics of any item of work,
- b) changes to the levels, positions and/or dimensions of any part of the Works,
- c) omission of any work unless it is to be carried out by others,
- d) any additional work, Plant, Materials or services necessary for the Permanent

Works, including any associated Tests on Completion, boreholes and other testing and exploratory work, or

- e) changes to the sequence or timing of the execution of the Works.

Murdoch and Hughes (2008) identified that a variation can be occur three ways. That are;

1. The changes made by the client in between start and finish of the contract (this means the changes made in the post contract stage).
2. The changes made by the designers in the post contract stage (in the pre-construction stage, designers may left some work due to the urgency of the work to be started or awarded the contract).
3. The changes in legislation and other external factors which may directly affect the cost, quality or the time taken for the project.

Variations may lead to additional cost and more time than envisaged to the project. Therefore, variations should be managed properly in contract administration.

3.2 Variation Management Process

According to conditions of contracts generally the Contractor is bound to perform variations instructed. Further the Contractor shall not delay any work whilst awaiting a response of the Engineer (ICTAD, 2007; FIDIC, 1999). Therefore, the Contractor has no option other than negotiating and reach to an agreement with the Engineer and/or Employer in respect of variations instructed.

When a variation is instructed, the Engineer shall, as soon as practicable after receiving such proposal, respond with approval, disapproval or comments. Each variation shall be evaluated in accordance with conditions of contract. When considering evaluation of rates for such variations general conditions of contract in ICTAD (2007) and FIDIC (1999) stated rates for each item of work shall be;

- the appropriate rate or price for the item shall be the rate or price specified for such similar work item in the Contract
- new rate or price shall be derived from any relevant rates or prices in the Contract, with reasonable adjustments to take account of relevant matters
- If no rates or prices are relevant for the derivation of a new rate or price, it shall be derived from the reasonable cost of executing the work, together with profit, taking account of any other relevant matters.

Further in case of work item fulfilled given conditions under conditions of contract the Contractor will entitled for new rates for such items. According to Sub-Clause 12.3 [Evaluation] of FIDIC (1999) conditions to be fulfilled is as follows,

- i. the measured quantity of the item is changed by more than 10% from the quantity of this item in the Bill of Quantities or another Schedule,
- ii. this change in quantity multiplied by such specified rate for this item exceeds 0.01% of the Accepted Contract Amount, and
- iii. this change in quantity directly changes the Cost per unit quantity of this item by more than 1%,

Thus, evaluating rates for a varied work is complex and controlled by contractual terms agreed between the parties. Therefore, this may have more possibility to create conflict between parties.

3.3 Negotiation as a Conflict Management Mechanism and ADR Mechanism

Negotiation is “defined as a process for resolving conflict between two or more parties whereby both or all modify their demands to achieve a mutually acceptable compromise” (Sutrisna & Potts, n.d.). The process of negotiating the variations has been identified as the major source of creating conflicts in construction administration. Most

of the dispute arises in finalizing and agreeing the rates of such variations (Sutrisna, Buckley, Potts & Proverbs, 2005).

There are various types of ADR methods practicing and negotiation is the most suitable (De Zylva, 2007) and the most favourite (Jayasena & Kavinda, 2012) dispute resolution method adopted in reaching amicable settlements between parties to the construction contracts. De Zylva (2007) stated that almost all other types of conflict resolution methods bear more tendencies in creating unpleasant status compared to negotiation. Further Jayasena and Kavinda (2012) pointed out many advantages in negotiation like privacy, early settlements, simplicity, protecting and assurance of business relationships, flexibility, informality etc. and those characteristics make it most preferred. These features made the “negotiation” as the first attempt to be tried in resolving any dispute (Cheung et al., 2006).

FIDIC (1999) and FIDIC (2006) standard forms of contracts encourage and provide clear guidance to amicable settlement in the set three-tiered dispute resolution process. Sub-Clause 20.5 [*Amicable Settlement*] of general conditions accommodates room for the settlements between adjudication and arbitration as,

“Where notice of dissatisfaction has been given under Sub-Clause 20.4 above, both Parties shall attempt to settle the dispute amicably before the commencement of arbitration”.

Further United Nations (1994) clearly stated in the article 30 [*Settlement*] of UNCITRAL model law, as;

“(1) If, during arbitral proceedings, the parties settle the dispute, the arbitral tribunal shall terminate the proceedings and, if requested by the parties and not objected to by the arbitral tribunal, record the settlement in the form of an arbitral award on agreed terms”.

UNCITRAL model law encourages the parties to settle disputes amicably even amidst the arbitration and reinforces more by allowing to record the reached settlement in the form of an arbitral award on agreed terms.

In addition, Sri Lanka arbitration act no 11 of 1995, Section 14, facilitates to go for any amicable settlements even though the parties are in the process of arbitration.

Sri Lanka arbitration act no 11 of 1995, Sub Section 14 (1) reads as,

“It shall not be incompatible with arbitration proceedings for an arbitral tribunal to encourage settlement of the dispute and, with the agreement of the parties, the arbitral tribunal may use mediation, conciliation or any other procedure at any time during the arbitral proceedings to encourage settlement”.

Sub Section 14 (2) provides guidance to incorporate legal status to the reached settlement.

“If, during arbitral proceedings the parties settle the dispute, the arbitral tribunal shall if requested by the parties, record the settlement in the form of an arbitral award on agreed terms”.

There are many methods of ADR and they are non-adversarial in nature. Negotiation, mediation and conciliation are methods that parties should willingly accept the settlement. Being the simplest, negotiation allows the parties to come to a settlement without intervention of any third party. (Marzouk & Moamen, 2007).

3.4 Characteristics of Rate Negotiation in Variation Management

Even though the variation has been agreed in principle, many difficulties may arise in negotiating the rates (Sutrisna, Buckley, Potts & Proverbs, 2005). Many researchers have identified various characteristics of construction which cause difficulties in conducting negotiations successfully (Sutrisna & Potts, n.d; Ren, et al., 2011; Baduge & Jayasena, 2016).

3.4.1 Complexity

Finalizing rates of variations has been identified as the main reason for construction conflicts and disputes (McGowan et al 1992; Potts, 1995; Seely & Murray 2001; Winter 2002). This is basically because each party perceives the event for their own benefits (CEIM, 2011). From the Contractor's point of view, when pricing a tender, he has to use the profit and overhead in marginal status in order to maintain competitiveness (Sutrisna & Potts, n.d.). Further the Contractor may carry out similar nature work together to reduce the cost by optimising the use of resources like machinery (Sutrisna & Potts, n.d.). Therefore, asking variation to be executed under same tender rates considered as unfair in point of the Contractor. In the other hand from the Employer's view point, a variation, which is essential to complete the overall works should be agreed or priced similarly to the original scope of works (Sutrisna & Potts, n.d.). Thus agree on rates of a variation is a complex scenario.

3.4.2 Based on Conditions of Contract

In generally parties to construction projects are bound by sophisticatedly prepared contractual terms which define rights and obligations of the parties. Thus negotiation of rates in a variation is highly influenced by the terms in the contract (Ren, et al., 2011; Sutrisna & Potts, n.d.). When to use tender rates, when to derive new rates using tender

rates and when to develop new rates based on accrual cost is given in conditions of contract (ICTAD, 2007; FIDIC, 1999) as explained under sub section 3.2. Therefore, rate negotiation requires illustrating their entitlement for the demand (Ren et al., 2011).

3.4.3 Interest and position based negotiation

Positions mean what parties really want, on the other hand interests are what anyone really need. Frequently positions and interests are not the same (Ren et al., 2011). Fisher et al. (1991) and Ren et al. (2011) stated that parties should not bargain over position but need to focus on real interests behind the matter. However recent study pointed out in construction disputes “the parties shall have intention to negotiate based on both position and interests in order to reach a settlement” (Baduge & Jayasena, 2016)

3.4.4 Negotiators and their authority level

In the process of valuing variations, negotiators stand on two different sides. One represents the contractor who tries to negotiate the price or rate previously quoted or claimed. Other side of the table the negotiators from the engineer to the contract who negotiates mostly on behalf of the project owner. All applicable contract conditions require that the engineer should act as a neutral party, looking after the rights of both sides. But the engineer is paid by the employer and in many cases, it has been presumed to slightly shift the engineer’s subjectivity onto the employer’s side (Sutrisna, Buckley, & Potts, at el, 2016).

The negotiator personality identifies the basic tendency towards the ‘opponent’ and motives for future actions and responses. Personality factors are likely to influence the toughness or softness of positions that are taken, the strength of commitment to these positions, the choice of strategy and opening tactics, the potential for compromise and concession, and the personal need for goal maximization. Personal dispositions and

motives have long been acknowledged as the major driving forces in the bargaining process (Nicolson, 1964; Douglas, 1957; Cooper, 1975) (Sutrisna, Buckley, & Potts, et al, 2016).

Further, each party should disclose their participant's vested authority which will be helpful in reaching fruitful conclusions in any negotiation (Baduge & Jayasena, 2016)

3.5 Summary

Parties to a construction project are bounded by legal and sophisticated contracts. Due to nature of the construction projects, scope of original work agreed by the parties changes frequently. It is termed as variations. In order to make payments for such varied works rates or amounts of the variation shall be agreed by the parties to the contract. Most frequently using technique in agreeing rates for variations is negotiation. Due to multimillion money involved with the variations it is very difficult to achieve successful conclusion via negotiation other than stuck in a deadlock.

4. RESEARCH METHODOLOGY

The intention of chapter four, research methodology, is to form the logical framework which is used to achieve the aims and objectives of the research. The discussion of research methodology continues with explaining the research process, the way the research had been carried out. Questionnaire based on likert scale has been developed and further this chapter details data collection and data analysis process carried out in respect of answered questionnaire.

4.1 Research Approach

The basic approaches to any research can be identified as the quantitative approach, the qualitative approach and the mixed approach (Creswell, 2013). Panneerselvam (2006) said, the quantitative approach is used when the research question requires numerical data, the qualitative approach is used when the research requires textural data and the mixed approach is used when both numeric data and textural data are required. Furthermore, Kothari (2004), states that, quantitative approach is more suitable when a research aims to have a narrow investigation and the number of respondents involved is large.

This study was conducted based on quantitative research approach which allows using statistics to generalise the findings. All above quantitative approach helps to reduce a complex scenario in to limited number of variables to study relationship between them (Saunders, Lewis, & thornhill, 2009)

4.2 Research Strategy

“The choice of research strategy will be guided by research question, objectives, the extent of existing knowledge, the available time and other resources” (Saunders, Lewis,

& thornhill, 2009). Further says it will subsequently inform choices of collection techniques and analysis procedures which are to be adopted in the research project (Saunders, Lewis, & thornhill, 2009).

According to Saunders, Lewis and Thornhill (2009) most of the strategies generally used in research studies are experiments, surveys, case studies, action researches, grounded theories, ethnographies and archival researches.

Out of the identified strategies, questionnaire survey had been selected to carry out for the research since the study is explanatory research which uses opinion of industry practitioners (Saunders, Lewis, & thornhill, 2009) regarding deadlock handling in variations rate negotiation. Further questionnaire survey helped to access significant number of respondents in order to generalise the findings into population. In order to ensure all respondents interpreted the questions same way data collection done through physically meeting each respondent, briefing what is the study is about and asking to answer the questions.

Thus data collection for the study was carried out via questionnaire survey, to explain the applicability of theoretical knowledge to achieve successful outcome in handling negotiation deadlocks.

4.3 Research Techniques

Data collection process and data analysis process are discussed under research techniques. Used techniques are detailed as follows;

4.4 Data Collection

Data collection techniques should be selected based on the research approach applicable for the research (MacDonald & Headlam, 2011). Existing and available or published knowledge of ways and techniques of handling negotiation deadlocks were discussed in

the Chapter Three. Information collected was referred in preparing the questionnaire. Thirty-three (33) techniques were identified in handling negotiation deadlocks (refer section 2.10) and these were listed out in the likert response scale.

Likert scale was introduced by Likert in 1932. There uses a series of questions with response options (more frequently five) and the method accommodates transferring data into a quantitative measure. In this research a five scale likert scale was used as,

1. Very low
2. Low
3. Moderate
4. High
5. Very high

The research is focused to generalize sample data to whole population. Being the least biased of all sampling methods and short method for investigating the whole population, purposive sampling had been used as the sampling method.

Sample size is limited to fifty (50) as time taken to survey and the related cost for the survey and the surveyed group consisted of the professionals who works actively in the Sri Lankan construction industry, representing employer, consultant and the contractor. Further, limited the group as who works in post contract activities for more than ten (10) years. Sample fifty (50) was selected as shown in table 4.1;

Table 4.1: Details of sample size

Profession	Number	Representation	Remarks
Project managers	10	Contractor	5 Project Managers 5 Deputy Project Managers
Engineers	20	Contractor 4 Consultant 8 Employer 8	4 Senior Positions 2 Chief Resident Engineers 2 Resident Engineers 4 Assistant Resident Engineers 3 Project Directors 5 Deputy Project Directors
Quantity Surveyors	20	Contractor 8 Consultant 8 Employer 4	2 Chief Quantity Surveyors 4 Project Quantity Surveyors 2 Site Quantity Surveyors 2 Chief Quantity Surveyors 4 Project Quantity Surveyors 2 Assistant Quantity Surveyors 4 Project Quantity Surveyors

Table 4.2: Details of sample size by profession

Profession	number	% of the sample size (50)
Project manager	10	20%
Engineer	20	40%
Quantity Surveyor	20	40%
Total	50	100%

Sample size represents 20% of project managers, 40% of engineers and 40% of quantity surveyors. Project managers, Engineers and Quantity Surveyors are the professionals

who deal in negotiating of varied work rate analyses. Figure 4.1 displays the Sample size by profession.

Sample Size by Profession

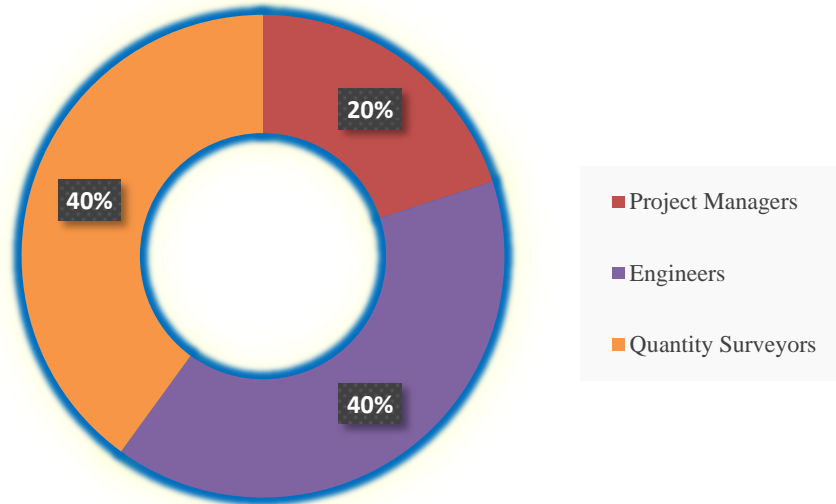


Figure 4.1 – Sample size by profession

Table 4.3: Details of sample size by Designation

Designation	number	% of the sample size (50)
Management	18	36%
Chief level	06	12%
Senior level	06	12%
Project level	12	24%
Assistant level	08	16%
Total	50	100%

Sample size by Designation represents management 36%, chief level 12%, senior level 12%, project level 24% and assistant level 16%.

The varied work rate analyses negotiation starts at the assistant level. Then it goes up to the management level and the negotiation process accommodates the participation of professional of all levels. Figure 4.2 illustrates the sample size by designation.

Sample Size by Designations

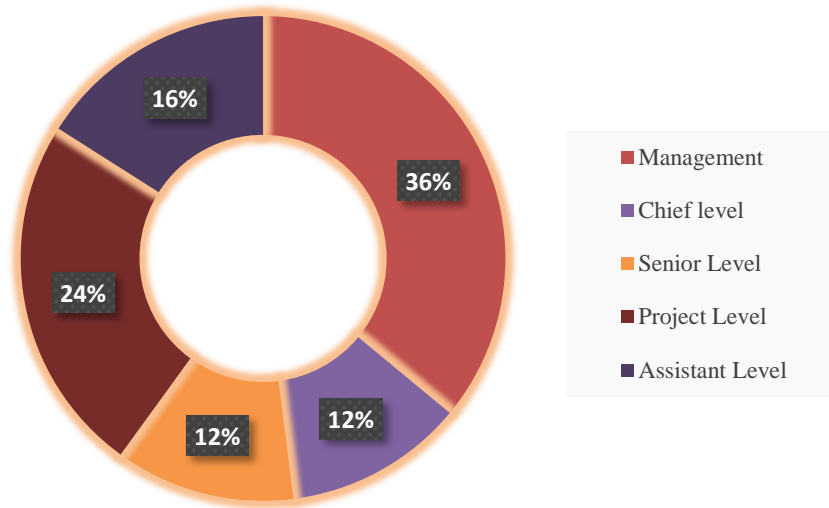


Figure 4.2 – Sample size by designations

Table 4.4: Details of sample size by work organization

Work organization	number	% of the sample size (50)
Employer	12	24%
Consultant	16	32%
Contractor	22	44%
Total	50	100%

Details of sample size by work organization represents 24% of the employer, 32% of consultant and 44% of the contractor.

In the negotiation process of varied work rate finalization, parties to the negotiation are the employer and the contractor. As per the contractual provisions, most of the time consultant represents the employer. Figure 4.3 illustrates the sample size by work organizations.

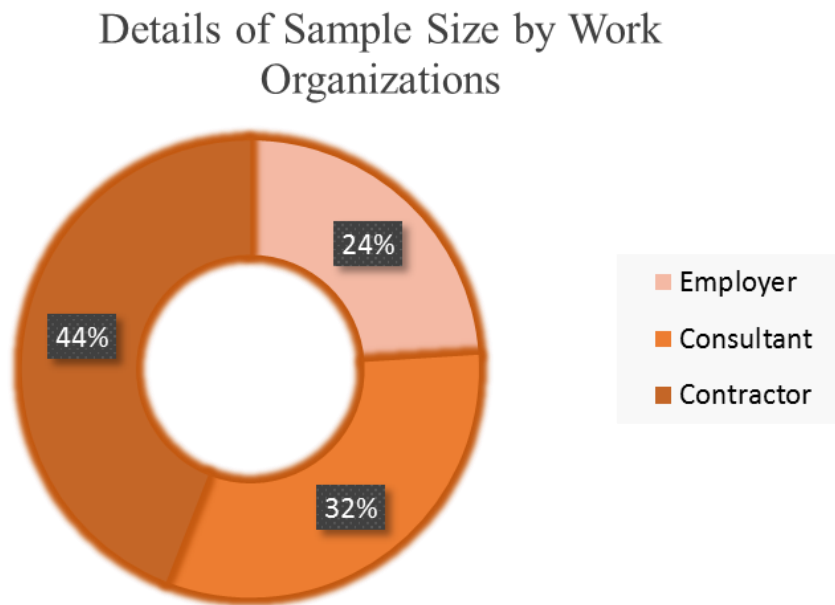


Figure 4.3 – Sample size by work organizations

All the professionals were provided with the questionnaire and all the questionnaires were received filled.

4.5 Data Analysis Technique

The data collected from questionnaire survey were ranked using Relative Importance Index (RII) according to the importance levels given to each factor by the respondents. Lim and Ting (2013), explained that RII as the best approach to aggregate the scores of the factors rated on a likert scale by respondents. The RII values of the techniques used in handling negotiation deadlocks were calculated by using the following formula.

$$RII = \frac{\sum w}{A * N} * 100\%$$

Where,

- W : Weight given to each factor by respondent,
- A : The highest weight,
- N : Total number of respondents.

The factors were arranged in descending order based on RII values. The importance level of the factors was to be directly correlated with their respective RII values, i.e. higher the level of importance, higher the RII value.

4.6 Summary

Quantitative technique was used as the research approach and thirty-three numbers of deadlock handling techniques were identified and the questionnaire prepared based on those were get filled by fifty number of respondents. Relative importance index was used in data analysis.

5. DATA ANALYSIS AND RESEARCH FINDINGS

The chapter five presented and explained the research findings of the data collected via questionnaire survey. (Questionnaire – please refer Appendix A)

5.1 Data Analysis

Data analysis technique used was RII as described in section 4.5 of Chapter 4. Each techniques' likert scale votes were grouped as voted (1-very low, 2-low, 3-moderate, 4-high and 5-very high) by the 50 respondents. Then the percentage of each group was calculated and the RII of each technique was calculated.

RII values for each technique and all the values for all the techniques are tabulated as given in Table 5.1

Table 5.1: RII values of the deadlock handling techniques

Technique nu. as table 2.2	Likert scale votes					total votes	Percentages					RII
	1	2	3	4	5		1	2	3	4	5	
1	7	4	9	30	0	50	14.00%	8.00%	18.00%	60.00%	0.00%	0.648
2	0	6	5	22	17	50	0.00%	12.00%	10.00%	44.00%	34.00%	0.800
3	0	0	0	19	31	50	0.00%	0.00%	0.00%	38.00%	62.00%	0.924
4	0	0	0	6	44	50	0.00%	0.00%	0.00%	12.00%	88.00%	0.976
5	0	0	11	29	10	50	0.00%	0.00%	22.00%	58.00%	20.00%	0.796
6	0	0	16	34	0	50	0.00%	0.00%	32.00%	68.00%	0.00%	0.736
7	0	0	10	35	5	50	0.00%	0.00%	20.00%	70.00%	10.00%	0.780
8	0	5	0	27	18	50	0.00%	10.00%	0.00%	54.00%	36.00%	0.832
9	0	0	7	31	12	50	0.00%	0.00%	14.00%	62.00%	24.00%	0.820
10	0	0	7	35	8	50	0.00%	0.00%	14.00%	70.00%	16.00%	0.804
11	0	1	6	16	27	50	0.00%	2.00%	12.00%	32.00%	54.00%	0.876
12	0	0	27	13	10	50	0.00%	0.00%	54.00%	26.00%	20.00%	0.732
13	0	1	17	17	15	50	0.00%	2.00%	34.00%	34.00%	30.00%	0.784
14	0	0	0	12	38	50	0.00%	0.00%	0.00%	24.00%	76.00%	0.952
15	0	0	5	24	21	50	0.00%	0.00%	10.00%	48.00%	42.00%	0.864
16	11	15	24	0	0	50	22.00%	30.00%	48.00%	0.00%	0.00%	0.452
17	0	0	28	17	5	50	0.00%	0.00%	56.00%	34.00%	10.00%	0.708

18	0	5	10	7	28	50	0.00%	10.00%	20.00%	14.00%	56.00%	0.832
19	0	5	6	20	19	50	0.00%	10.00%	12.00%	40.00%	38.00%	0.812
20	10	0	16	9	15	50	20.00%	0.00%	32.00%	18.00%	30.00%	0.676
21	0	4	0	34	12	50	0.00%	8.00%	0.00%	68.00%	24.00%	0.816
22	0	0	0	16	34	50	0.00%	0.00%	0.00%	32.00%	68.00%	0.936
23	0	0	4	43	3	50	0.00%	0.00%	8.00%	86.00%	6.00%	0.796
24	0	0	22	12	16	50	0.00%	0.00%	44.00%	24.00%	32.00%	0.776
25	0	0	8	21	21	50	0.00%	0.00%	16.00%	42.00%	42.00%	0.852
26	0	0	4	34	12	50	0.00%	0.00%	8.00%	68.00%	24.00%	0.832
27	0	0	0	15	35	50	0.00%	0.00%	0.00%	30.00%	70.00%	0.940
28	0	4	13	33	0	50	0.00%	8.00%	26.00%	66.00%	0.00%	0.716
29	0	7	6	37	0	50	0.00%	14.00%	12.00%	74.00%	0.00%	0.720
30	0	0	5	10	35	50	0.00%	0.00%	10.00%	20.00%	70.00%	0.920
31	0	0	16	20	14	50	0.00%	0.00%	32.00%	40.00%	28.00%	0.792
32	0	16	17	7	10	50	0.00%	32.00%	34.00%	14.00%	20.00%	0.644
33	0	0	17	33	0	50	0.00%	0.00%	34.00%	66.00%	0.00%	0.732

Techniques are arranged in descending order as per the related RII value of each technique as follows:

Table 5.2: Ranked RII values of the deadlock handling techniques

Technique	Likert scale votes					total votes	Percentages					RII	Rank
	1	2	3	4	5		1	2	3	4	5		
4	0	0	0	6	44	50	0.00%	0.00%	0.00%	12.00%	88.00%	0.976	1
14	0	0	0	12	38	50	0.00%	0.00%	0.00%	24.00%	76.00%	0.952	2
27	0	0	0	15	35	50	0.00%	0.00%	0.00%	30.00%	70.00%	0.940	3
22	0	0	0	16	34	50	0.00%	0.00%	0.00%	32.00%	68.00%	0.936	4
3	0	0	0	19	31	50	0.00%	0.00%	0.00%	38.00%	62.00%	0.924	5
30	0	0	5	10	35	50	0.00%	0.00%	10.00%	20.00%	70.00%	0.920	6
11	0	1	6	16	27	50	0.00%	2.00%	12.00%	32.00%	54.00%	0.876	7
15	0	0	5	24	21	50	0.00%	0.00%	10.00%	48.00%	42.00%	0.864	8
25	0	0	8	21	21	50	0.00%	0.00%	16.00%	42.00%	42.00%	0.852	9
8	0	5	0	27	18	50	0.00%	10.00%	0.00%	54.00%	36.00%	0.832	10
18	0	5	10	7	28	50	0.00%	10.00%	20.00%	14.00%	56.00%	0.832	11
26	0	0	4	34	12	50	0.00%	0.00%	8.00%	68.00%	24.00%	0.832	12
9	0	0	7	31	12	50	0.00%	0.00%	14.00%	62.00%	24.00%	0.820	13
21	0	4	0	34	12	50	0.00%	8.00%	0.00%	68.00%	24.00%	0.816	14
19	0	5	6	20	19	50	0.00%	10.00%	12.00%	40.00%	38.00%	0.812	15
10	0	0	7	35	8	50	0.00%	0.00%	14.00%	70.00%	16.00%	0.804	16
2	0	6	5	22	17	50	0.00%	12.00%	10.00%	44.00%	34.00%	0.800	17

5	0	0	11	29	10	50	0.00%	0.00%	22.00%	58.00%	20.00%	0.796	18
23	0	0	4	43	3	50	0.00%	0.00%	8.00%	86.00%	6.00%	0.796	19
31	0	0	16	20	14	50	0.00%	0.00%	32.00%	40.00%	28.00%	0.792	20
13	0	1	17	17	15	50	0.00%	2.00%	34.00%	34.00%	30.00%	0.784	21
7	0	0	10	35	5	50	0.00%	0.00%	20.00%	70.00%	10.00%	0.780	22
24	0	0	22	12	16	50	0.00%	0.00%	44.00%	24.00%	32.00%	0.776	23
6	0	0	16	34	0	50	0.00%	0.00%	32.00%	68.00%	0.00%	0.736	24
12	0	0	27	13	10	50	0.00%	0.00%	54.00%	26.00%	20.00%	0.732	25
33	0	0	17	33	0	50	0.00%	0.00%	34.00%	66.00%	0.00%	0.732	26
29	0	7	6	37	0	50	0.00%	14.00%	12.00%	74.00%	0.00%	0.720	27
28	0	4	13	33	0	50	0.00%	8.00%	26.00%	66.00%	0.00%	0.716	28
17	0	0	28	17	5	50	0.00%	0.00%	56.00%	34.00%	10.00%	0.708	29
20	10	0	16	9	15	50	20.00%	0.00%	32.00%	18.00%	30.00%	0.676	30
1	7	4	9	30	0	50	14.00%	8.00%	18.00%	60.00%	0.00%	0.648	31
32	0	16	17	7	10	50	0.00%	32.00%	34.00%	14.00%	20.00%	0.644	32
16	11	15	24	0	0	50	22.00%	30.00%	48.00%	0.00%	0.00%	0.452	33

As summarized and tabulated in table 5.2 (Ranked RII values of deadlock handling techniques), technique 4 – provide additional information (refer section 2.10.4), technique 14 – impose a deadline (refer section 2.10.14), technique 27 – motivate (refer section 2.10.27), technique 22 – give negotiation power (refer section 2.10.22) and technique 3 – change the levels in the organization (refer section 2.10.3) are in the preference range “high” and “very high” as deadlock handling strategy. Further, those techniques scored RII values ranging from 0.924 to 0.976.

Technique 16 – bring in an impartial 3rd party (refer section 2.10.16) scored the lowest RII value (0.452) and it has the highest preference (22%) as “very low” and no any preference as “high” or “very high”. In addition techniques 20 – regroup and refocus (refer section 2.10.20) and technique 1 – change the setting (refer section 2.10.1) received preferences as “very low”.

Almost all the deadlock handling techniques (refer section 2.10) are in the range of “moderate – high and very high” except technique 16 – bring in an impartial 3rd party.

5.2 Research Findings

The final outcome of the research study can be summarized as in table 5.3: ranked deadlock handling techniques.

Table 5.3: Ranked deadlock handling techniques

Rank	Technique of handling negotiation deadlock
1	Provide additional information
2	Impose a deadline
3	Motivate
4	Give negotiation power
5	Change the levels in the organization
6	Making concessions
7	Bag the smaller goals
8	Please say “yes”
9	Time of negotiation
10	Revisit priorities
11	Set aside anger
12	Mitigate other side’s pressure
13	Look at all the options
14	Keep communication flowing
15	Agree in principle
16	Give a little
17	Change the negotiator(s)
18	Go “off the record”
19	Present party’s reasoning
20	Seeking similarities from differences
21	Set aside quite time
22	Take a break
23	Dynamics of the negotiation
24	Say “let’s ship into both win-win mode”
25	Call a time-out
26	Humouring the embarrassment
27	Environment
28	Share the risk
29	Let it go
30	Regroup and refocus

Rank	Technique of handling negotiation deadlock
31	Change the setting
32	Advantage and disadvantage analysis
33	Bringing an impartial 3 rd party

The table 5.3 Ranked deadlock handling techniques, tabulated as per the descending order of the RII value received by each technique. Ranked number 1 – provide additional information (refer section 2.10.4) scored the highest RII – 0.976. Impose a dead line, motivate, give negotiation power, change the levels in the organization, making concessions, bag the smaller goals, please say “yes”, time of negotiation and revisit priorities are the first ten ranked deadlock handling techniques scored RII values ranging from 0.952 to 0.832.

Bring in an impartial 3rd party (refer section 2.10.16) is the lowest preferred as a deadlock handling technique in variation finalizing negotiations scoring 0.452 of RII value. Advantage and disadvantage analysis, change the setting, regroup and refocussing and let it go are the lowest five techniques which score RII values range from 0.644 to 0.708.

Preferences of all the respondents (50) to each technique (total 33) are illustrated in figure 5.1

Almost all 50 respondents voted either 4 or 5 of the likert scale for the techniques – “provide additional information, impose a deadline, motivate, give negotiation power and change the levels of the organization”. The deadlock handling techniques in the middle ranks show similar preference pattern. When it goes to the lower ranked techniques like “regroup and refocus, change the setting, advantage and disadvantage analysis and bringing an impartial 3rd part” – voting preference ranges 1 and 2 of the

Figure 5.2 illustrates the RII distribution of each technique (after ranking).

As per the Figure 5.2, 6 numbers of techniques (18% of the reviewed techniques) received more than 0.90 of RII value. 12 numbers of techniques (36% of the reviewed techniques) were in the range of 0.80 to 0.90 of RII value. Next 14 numbers of techniques (42% of the reviewed techniques) were in the range 0.60 to 0.80 of RII and only one technique (3% of the reviewed techniques) that is bring in an impartial third party received 0.45 RII value.

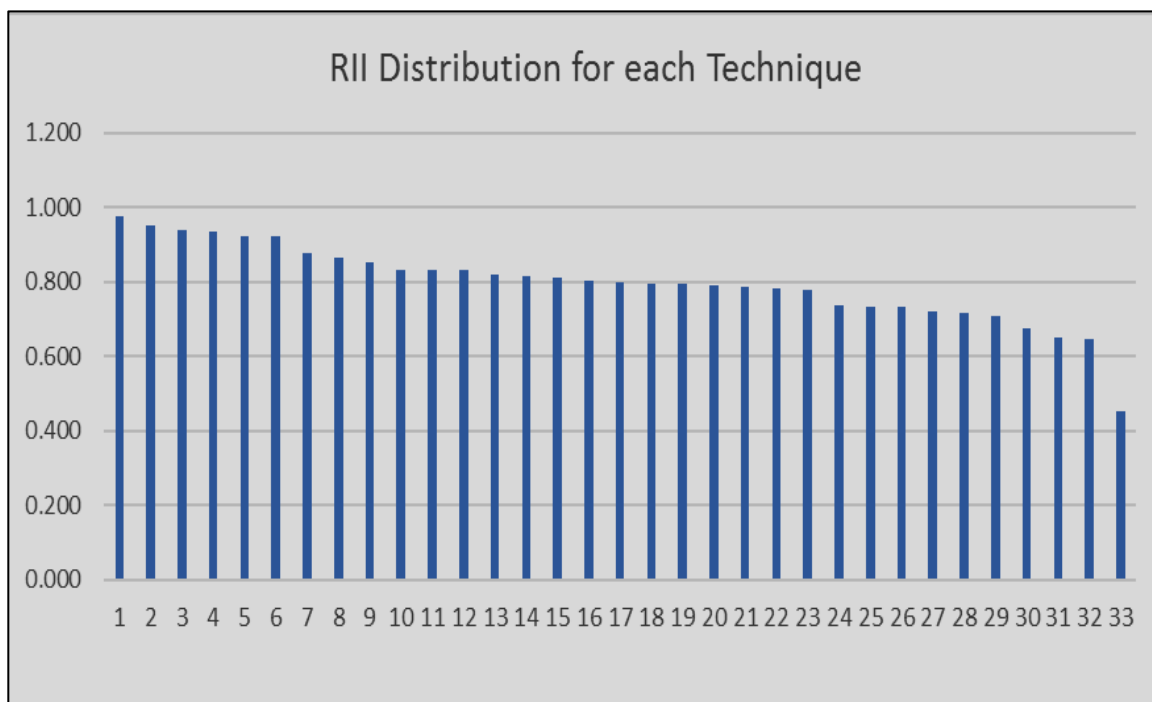


Figure 5.2: RII distribution of each technique (after ranking)

5.3 Discussion of Research Findings

As per the research findings there are six techniques which received more than 0.90 RII values. They are, (i) provide additional information, (ii) impose a deadline, (iii)

motivate, (iv) give negotiation power, (v) change the levels in the organization and (vi) making concessions.

Provide additional information (refer section 2.10.4) is the highest used compared to all identified techniques when it comes to handling deadlocks in rate negotiation in variations management. According to theory existing knowledge on variations in construction projects shows that new rates has to be derived from the reasonable cost of executing the work, together with profit, taking account of any other relevant matters. In this case relevant matters are open ended in the contract and such issues to be address in the negotiation table with supporting documents. Further theory shows that rate negotiation is complex therefore in order to handle the situation with accountable and transparent way additional information required to substantiate the claimed rates. Hence producing additional information to negotiation table is the key deadlocks handling mechanism using rate negotiation in variation management in construction. Thus research findings explain the theory.

Technique of impose a deadline (refer section 2.10.14), got the second highest RII value. Construction projects highly controlled by contractual terms agreed between parties. Therefore, time is important in construction projects both terms of project completion and timely payments. Therefore, impose a deadline address real interests of the parties to resolve their conflict timely to receive payment timely while keeping good relationship between parties.

Motivation (refer section 2.10.27) is identified as next mostly used deadlock handling technique. Principled negotiation identified that people should separate from the issue and human feature of the negotiators creates negotiations difficult. Thus motivation is a technique address such human aspect in negotiators which is explains the theory in principled negotiation.

Give negotiation power (refer section 2.10.22) and change the levels in the negotiation (refer section 2.10.22) are the next ranked techniques. The negotiator in the negotiation process shall be vested the power to take decisions himself at the negotiation table. If he needs approval of any superior or outsider, deadlock stands still and developed while negotiation continues. In addition, as per the next ranked technique, any party shall be willing to change the negotiator to a higher responsible person confirming the assurance of taking decisions in the negotiation process to overcome any deadlock. Thus these two techniques explain the theory.

Making concessions (refer section 2.10.30) until achieving settlement is basis of negotiation. Therefore, it is generally applicable to any negotiation conducted under any field such as business, social or political.

5.4 Summary

Collected data via questionnaire survey using five scale likert format is analysed using RII. As per the RII values of each technique, the reviewed thirty-three techniques were ranked. Table 5.3 shows the ranking list of the techniques. Findings shows 6 numbers of techniques received more than 0.90 of RII value and 26 numbers of techniques received 0.60 to 0.90 of RII value. Only one technique that is bringing an impartial third party, received 0.45 RII value.

Six numbers of techniques identified in different field of studies scored more than 0.90 RII values as most applied techniques in rate negotiations in construction projects. Those techniques are providing additional information, impose a deadline, motivate, give negotiation power, change the levels in the organization, and making concessions. With compared to research findings with literature, it explains the theory.

6. CONCLUSIONS AND RECOMMENDATIONS

Chapter six expects to summarise and conclude the study carried out. Further the chapter explains recommendations of this study and suggestions for future researches which will expand the body of knowledge.

6.1 Summary of the Study

Complexities inherited in construction projects generate enormous changes to the as-planned work (Zou, Zhang & Wang, 2007). Thus variations in construction projects cannot be eliminated and in fact necessary to successful completion of a project (Murdoch & Hughes, 2008). Negotiation of rates in a variation is highly influenced by the terms in the agreed contract. Finalizing rates of variations is identified as complex situation which both parties try to address their own concerns (Sutrisna & Potts, n.d.). Therefore, negotiation is generally using as a conflict management technique in reaching agreements on rates for variations. However in almost all negotiations face deadlocks where both parties stand still on their stance which stuck negotiations from moving forward (Fells, 1989). Thus it is identified that finding applicable methods used to overcome deadlocks are in rate negotiations in Sri Lankan construction industry is necessary to develop negotiation practices.

Study was followed through four objectives. First objective was to review negotiation strategies, tactics, styles and types of negotiators which were achieved via comprehensive literature review.

Second objective was to review the techniques use in handling negotiation deadlocks. Although many researches carryout their studies on negotiation deadlocks, those studies were carried out in deferent ways according to their research areas under different field

of studies such as social science (Chitwood & Takemoto, 2008; Alexis, 2013), business studies (David, 1998; Isoor & Marshland, 2010; Anderson, 2011; Lindquist, 2012) and politics (Seuss, 2004; Goldwich, 2010). 33 numbers of different deadlocks handling techniques used in such negotiations were identified under second objective of the study.

Third objective was to investigate the practical usage of identified techniques to overcome negotiation deadlocks in the Sri Lankan construction industry in rate negotiations in variations. A questionnaire survey had been carried out among the identified fifty (50) experts in the construction industry. Questionnaire was based on thirty-three (33) identified deadlock handling techniques and respondents were asked to mark likert scale which contained five options. Feedback of the survey was analysed using Relative Importance Index (RII).

6.2 Conclusions

There were three objectives of the research study as:

1. To review negotiation strategies, tactics, styles and types of negotiators,
2. To review deadlock handling techniques used in negotiation,
3. To investigate the practical usage of identified techniques to overcome negotiation deadlocks in the variation negotiations in Sri Lankan construction industry.

Those objectives were fulfilled as following;

Fist objective: to review negotiation strategies, tactics, styles and types of negotiators.

This objective was reviewed in the literature survey.

Negotiation strategies are distributive and integrative. In distributive negotiation the process seem to be positional or hard bargaining. Win-lose

situation occur in this strategy. Use techniques like bluffing, brinksmanship and guile. Integrative strategy is interest based. Share the problem and try to distribute the problem than a personalized argument.

There exist many negotiation tactics. In any negotiation process combination of tactics use. Auction, brinksmanship, bogey, defense in depth, flinch, good guy or bad guy and nibble are some of commonly used tactics.

Accommodating, avoiding, collaborating, competing and compromising are some styles use in negotiation. As per the gravity of the issue, people use any style or combination to come to an amicable settlement.

Types of negotiators are reviewed as soft, hard and principled. As per the meaning itself, soft negotiators like to bargain in a friendly manner and consider others arguments reasonably. Other way, hard negotiators do it in the total opposite way and apply stress, hot arguments and their ambition is to gain over the other party. Both soft and hard bargainers do not separate people from the dispute. Principled negotiators try to find collective outcomes. Their main target is the dispute rather than the people involved in the negotiation process.

People involve in the negotiation process use elements, strategies, tactics and styles in different ways. In addition their stance may vary as soft, hard or principled. These combinations perhaps lead the negotiation to a deadlock or series of deadlocks.

Second objective; to review deadlock handling techniques use in negotiations.

This objective was reviewed in the literature survey.

Thirty three (33) techniques were identified. They are namely, change the setting, change the negotiator(s), change the levels in the organization, provide additional information, go “off the record”, say “let’s ship into win-win mode”, take a break, revisit priorities, look at all the options, give a little, bag the smaller goals, call a time out, set aside quite time, impose a deadline, please say “yes”, bringing an impartial 3rd party, let it go, set aside anger, agree in principle, regroup and re-focus, keep communication flowing, give negotiation power, present party’s reasoning, dynamics of the negotiation, time of negotiation, mitigate other side’s pressure, motivate, share the risk, environment of the negotiation, making concessions, seeking similarities from differences, advantage and dis-advantage analysis and finally humouring the embarrassment.

Third objective: to investigate the practical usage of identified techniques to overcome negotiation deadlocks in the variation negotiations in Sri Lankan construction industry.

This was achieved through the questionnaire survey and the data analysis system.

According to findings of the study, it can be concluded that all the identified techniques are applicable to the Sri Lankan construction industry and found that the industry well recognized them. Producing additional information to negotiation table is the key deadlocks handling mechanism using rate negotiation in variation management in construction projects. Impose a dead line, motivate, give negotiation power, change the levels in the organization, making concessions, bag the smaller goals, please say “yes”, time of negotiation and revisit priorities are the more popular techniques. Share the risk, let it go, regroup and refocus, change the settings, advantage and disadvantage analysis and bringing an impartial 3rd party received least priority of the identified techniques.

6.3 Recommendations

Research proved that the Sri Lankan construction industry practitioners are familiar and well aware of the deadlock breaking techniques and they do practice as well. It is recommended that the professional bodies of Sri Lankan construction industry to arrange awareness programs and comprehensive professional development programs to enhance the negotiation skills including deadlock handling techniques in order to improve negotiation as a conflict management and ADR mechanism in the Sri Lankan construction industry.

Professionals of the Sri Lankan construction industry, engineers, project managers and quantity surveyors can improve themselves in negotiation and specially in handling negotiation deadlocks as time and cost are the key factors of any construction.

6.4 Research limitations

According to the research study there were some limitations in generalizing the findings.

The study was limited to;

- Rate negotiations in variation management
- Based on literature findings it was assumed that deadlocks can be break only through 33 identified techniques

6.5 Further Research Directions

According to the findings and the limitations of the study, further research directions were identified as follows;

- Handling negotiation deadlocks in the pre-contract stage of Sri Lankan construction industry.

- Handling negotiation deadlocks in the claims based dispute negotiations in post contract stage of Sri Lankan construction industry.
- Study on how deadlocks handling done in negotiation by case studies or grounded theories.

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APPENDIX A: QUESTIONNAIRE USED FOR DATA COLLECTION

Topic: Handling negotiation deadlocks in Sri Lankan construction industry

1.0 General Overview

1.1 Organization :

1.2 Designation :

1.3 Years of Experience:

1.4 Job description briefly:

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2.0 A deadlock can be defined as a situation where no evident progress towards a settlement is being made in the negotiations. This is less drastic than a total breakdown, when there is no communication between parties and usually some form of industrial action as well (Fells, 1986).

Following questionnaire is focused to the techniques applicable in handling deadlocks arising in negotiating rates in variations.

Please tick your suggestion as you experienced in such deadlock situations.

1	2	3	4	5
Very Low	Low	Moderate	High	Very High

No	Technique	Explanation	1	2	3	4	5
1	Change the setting	Location, place of negotiation.					
2	Change the negotiator(s)	Parties may find negotiation have taken a step back. New participants may look at the situation in different ways.					
3	Change the levels in the organization	To ensure the authority to take decisions.					
4	Provide additional information	One or both table information that they base to the decision so far.					
5	Go “off the record”	Show how much one party trusts the other party.					
6	Say “let’s shift into both win-win mode”	To find a way to create a solution that works for both sides.					
7	Take a break	Stepping away from the table					
8	Revisit priorities	Focus on one party’s interests, help to focus on it, what is most important than minor issues.					
9	Look at all the options	Suggest other possible solutions that had not been apparent earlier.					
10	Give a little	Offer to grant small concessions, we do “X” if you do “Y”, momentum to lead into further progress.					
11	Bag the smaller goals	Focus on smaller or easier items of the agenda.					
12	Call a time out	Review the strategy with other members of the team. Relaxing.					

No	Technique	Explanation	1	2	3	4	5
13	Set aside quite time	Impose a fixed period of silence. Everyone stays in the room without saying a word.					
14	Impose a deadline	Many negotiations, most of the progress made in final stage. Deliberately adding time pressure to motivate parties, need to get things moving again.					
15	Please say "YES"	Ask the counter part for his/her agreement. If says "yes" great. If "no", ask why not. Listen carefully.					
16	Bringing an impartial 3 rd party	Good mediator can recognize communication bottlenecks and help the parties to overcome.					
17	Let it go	Be prepared to walk away from the negotiation, counterpart will call back with a better offer. Sometimes the best is no deal at all.					
18	Set aside anger	One shall respect opponent's opinions. Anger may stop.					
19	Agree in principle	Try to agree in principle.					
20	Regroup and refocus	Tem shall be re-assembled and objectives shall be re-shaped.					
21	Keep communication flowing	Keep away personal egos from business deals.					

No	Technique	Explanation	1	2	3	4	5
22	Give negotiation power	In the 2 nd round of the negotiation, give the representative greater decision making power.					
23	Present party's reasoning	Both should openly discuss their reservations. Everything is "open" now.					
24	Dynamics of the negotiation	Change the member of the party's delegation.					
25	Time of negotiation	Change the time of negotiation.					
26	Mitigate other side's pressure	Mitigate the pressure of opponent's and show compromise.					
27	Motivate	Motivate, find out possibility to change the financial affairs – early loans, adjustments of payments...etc.					
28	Share the risk	Ways of risk sharing with the other side.					
29	Environment	Try to change the atmosphere in the conference room, if the focal point which can benefit both parties.					
30	Making concessions	Give suitable concessions, both are supposed to adjust their respective objectives and make concessions rationally.					

No	Technique	Explanation	1	2	3	4	5
31	Seeking similarities from differences	Try every possible means to find similarities while committing small differences.					
32	Advantage and disadvantage analysis	Analyse why there are deadlocks, reasons that block smooth negotiation, which will cause losses to both parties.					
33	Humouring the embarrassments	Humour expressions to work.					