COMMON CRITERIA ADOPTED FOR SELECTING THE DISPUTE RESOLUTION METHOD IN CONSTRUCTION PROJECTS OF PAKISTAN

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ABSTRACT

Objective: This study assessed various criteria affecting the selection of dispute resolution methods adopted in the construction industry of Pakistan

Research Method: This was assessed based on the perception of the construction practitioners. Data was collected with the help of the questionnaire forms. Total 52 responses from the practitioners were collected and analyzed statistically.

Findings: The findings of the study showed that cost is the most common criterion considered by the practitioners for selecting the dispute resolution method while degree of formality is the least adopted criterion.

Originality: This study will help the practitioners for selecting the appropriate dispute resolution technique in the construction projects

Keywords: dispute resolution method, selection criteria, Construction project, Pakistan

1. INTRODUCTION

Construction is a project-based activity but it is highly fragmented (Dulaimi et al. 2003). Due to this fragmentation as well as complexity, it is always prone to conflicts and disputes due (Pétursson, 2015; Yiu and Cheung, 2006). These conflicts are caused by a variety of factors, including ambiguous contract terms, late material and equipment deliveries, changed conditions, poor communication, labour disputes, insufficient resources, poor design, and force majeure situations (Harmon, 2003). Hence, it is essential to adopt strategies for controlling disputes and conflicts. The project's success will be jeopardized by ineffective dispute resolution (Saeb & Mohamed, 2018). Inadequate dispute resolution in construction projects not only stymies the efficient use of project funds, but also reduces productivity. It cause delay in completing the projects, resulting in strained relationships among project stakeholders and a tarnished reputation for those involved (Saeb & Mohamed, 2018; Crushman et al. 2001). Construction activities are related to the establishment of physical infrastructure (Imtiaz et al. 2021) and it is the fundamental criteria of all the stakeholders to complete the construction projects successfully without any dispute as the economy of many counties is highly dependent on the construction industry (Khaskheli et al. 2020). There are several considerations, which assist in selecting proper dispute resolution method. Thus, this paper has identified common factors, which affect the selection of the dispute resolution method for construction industry of Pakistan.

2. LITERATURE REVIEW

Dispute reflects the difference between various parties who identify conflicting goals, scarce resources, and involvement from others (Wilmot & Hocker, 2017). Dispute is the disagreement, which needs to be resolved outside of jobsite management (Diekmann & Girard, 1995). During the resolution process, third-party

intervention may be required (Alaloul et al. 2017). There are several approaches adopted resolving disputes. Common techniques of dispute resolution are negotiation, arbitration, mediation, mediation-arbitration, mini-trial, dispute review board, adjudication, and litigation. Various criteria lead to select appropriate technique for dispute resolution as:

2.1 Cost

Cost is the most important factor while considering any dispute resolution method to settle the disputes in construction industry. The cost, which covers the negotiating settlements, includes revenue-related expenses, the neutral third party fee, documentation, and settlement costs, are all costs associated with dispute resolution (Posun, 2021). These cost can affect the profitability in the construction projects. Profitability play very important role in the success of the construction project (Memon et al. 2018).

2.2 Duration

In the construction industry, time or duration is a critical aspect in project success (Memon et al. 2015). Delay in settling a dispute will slow down project progress, resulting in increased costs and the possibility of penalties (Posun, 2021).

2.3 Consensus

Without the parties' dedication to the process, establishing an agreement might be difficult, if not impossible. According to a third-party impartial, the procedure should operate in a non-adversarial manner. He or she must make sure that both parties are aware of one another's needs. Instead of acting as an adjudicator, he or she should act as a facilitator, allowing the parties to make all major choices. It is his/her responsibility to aid in the identification of common ground so that the parties can more easily begin negotiating, as well as to offer guidance on proper procedures (Cheung & Yiu, 2014)

2.4 Fairness

The experience, training, and integrity of unbiased third parties are crucial to fairness. A third-party neutral owes it to his or her clients to remain impartial during the resolution process. If there is any affiliation of the third party neutral with any stakeholder, it must be shared to raise the level of trust and comfort between the parties in order for them to voluntarily come to an agreement (Jagannathan & Delhi, 2021).

2.5 Effectiveness

The effectiveness of a conflict resolution method is an important component to consider when choosing one, the quality of the dispute resolution outcome is the primary goal (Posun, 2021).

2.6 Expertise/ Qualified Neutrals

The person authorized for solving the dispute or arbitrator is an independent party. Arbitrator must be a qualified neutral having vast knowledge in the field of dispute in which he or she assigned to resolve the dispute (Oluleye et al. 2020).

2.7 Enforceability

Because ADR is a non-binding technique of conflict settlement, it cannot be enforced by the courts until a written agreement is reached. The use of a professional neutral facilitator with strong negotiating abilities, on the other hand, might encourage the parties to reach an agreement (She, 2011).

2.8 Confidentiality

The information gathered during the dispute resolution method is kept private and only shared with those who are directly involved. The parties are warned about this, and at the conclusion of the mediation, the mediator deletes all saved records created throughout the session. The transfer of data received from one party to the other takes place only with the consent of the party (Asal, 2022).

2.9 Authority of person solving the dispute

The expertise, training, and integrity of neutral third parties are critical to neutrality and fairness. Both parties must agree on the neutral third party. Since the choice of the neutral third party is of great importance there must be a code of conduct to oversee the level of professional mediators, conciliators and arbitrators (She, 2011).

2.10 Procedural Flexibility

Dispute resolution methods like Mini-trials, Mediation etc are very flexible for parties. It does not apply any formal legal standards to reach the decision and the contents of procedures can be tailored to satisfy the parties' demands. In case of litigation and arbitration the contents and techniques involved in arbitration and litigation are heavily regulated by the law, and hence the flexibility is somehow compromised (Cheung & Suen, 2002).

2.11 Possibility to Appeal

Arbitration decisions can be challenged in court. Therefore, it is the second most effective ADR technique. In ADR Methods there is always an space to appeal which makes it more convenient to adopt (Illankoon et al. 2019).

2.12 Preservation of relationships

A long-term partnership is one of the most important goals for any company. A healthy relationship is built on trust, shared interests, and mutual respect, and it takes effort and dedication from both people to keep it going (Sprague, 2006).

2.13 Reputation of parties

Relationships are usually a source of contention in every disagreement. To sustain a relationship (whether social or professional), disputants must exhibit patience and forgiveness toward one another as well as the contested case in the middle (Sayed-Gharib et al. 2011).

2.14 Degree of control by parties

Participants can exert process control over the speed of arbitration by making behavioural judgments. These behavioural judgments are divided into five areas: type of party representation, party conduct, tribunal's use of granted powers, scope of preaction procedure, and approach to evidence presentation (Abwunza et al. 2020).

2.15 Degree of control by the neutral

The mediator is autonomous during the ADR procedure, and the legislature has stated that interfering with the mediator's activities during the mediation procedure is unacceptable. Because the mediator should have no personal relationships with the parties and should be neutral, this notion is related to the principle of equality of arms (Asal, 2022).

2.16 Degree of formality

To have a particular level of procedural framework, binding online arbitration is preferable; enhanced formality allows predictability (Kaufmann-Kohler et al. 2004)

2.17 Satisfactory results / quality outcomes

Whether the parties achieve an agreement or not, negotiating around a problem will almost always result in a better bargain. "Mediation gives the opportunity for the complete narrative to be heard, since disputants will be able to listen to each other rather than face each other in court or arbitration (Richbell, 2008). The best agreement that can be struck throughout the lawsuit process is a (Win/Lose) scenario, while the most likely outcome is a (Lose/Lose) situation (Sayed-Gharib et. al. 2010).

2.18 Power imbalances

In order to reach a mutually acceptable solution to the conflict, the mediation method is carried out based on cooperation and equality between the parties. The mediator is in charge of ensuring that the parties have equal rights (Asal, 2022)

2.19 Liability for opponent's costs

The basic rule in litigation is that the losing party is responsible for the succeeding party's taxed party and party costs. Any legal fees (including profit costs, disbursements, VAT, and interest) that you must pay to the Opponent by court order or with previous written consent are referred to as liability to opponent's costs. These could include, for example, the procedural expenses associated with the dispute resolution procedure, the fees charged by the Opponent's solicitors, barristers, and/or experts (Austin, 2017). The basic rule in litigation is that the losing party is responsible for the succeeding party's taxed party and party costs (Austin, 2017).

2.20 Choice of neutral

No one can force opposing parties to engage in negotiation if they do not want to, adherence to this principle will aid in finding a solution for them. The parties must give consent to adopt in the mediation procedure, and the parties can choose their own mediator. In addition, unlike in court, the parties to a mediation session can leave the negotiations at any time. In addition, if one is dissatisfied with the recommended mediator can be replaced on the request of the parties in dispute (Asal, 2022).

S.No	Dispute Resolution Methods	Brown & Marriot (1999)	Posun (2021)	Chong et al , (2012)	David (1998)	Goldberg et al. (1992)	Harmon (2001)	Harmon (2002)	Hibberd et al. (1999)	Lu et al. (2015)	Cheung (1999)	York (1996)
01	Cost	\checkmark	\checkmark		\checkmark		\checkmark	\checkmark	\checkmark		~	\checkmark
02	Duration	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	\checkmark	~	~	\checkmark
03	Consensus	\checkmark			✓							
04	Fairness		\checkmark	\checkmark			\checkmark		\checkmark			
05	Effectiveness				\checkmark						\checkmark	\checkmark
06	Expertise/ Qualified neutrals	✓										~
07	Enforceability		\checkmark		\checkmark	\checkmark					\checkmark	\checkmark
08	Confidentiality	✓	\checkmark		✓	✓			\checkmark		✓	\checkmark
09	Authority of person solving the dispute	✓										~
10	Procedural Flexibility	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	\checkmark			\checkmark	\checkmark

Table 2.1 Mapping of Criteria for selecting dispute resolution methods

11	Possibility to appeal			~							
12	Preservation of relationships	~	~	~		~	✓	✓		✓	~
13	Reputation of parties								✓		
14	Degree of control by parties			~	~			~		~	
15	Degree of control by neutral	~		~	~					~	~
16	Degree of formality				\checkmark			✓			
17	Satisfactory results/ quality outcome		~						~		
18	Power imbalances	✓		\checkmark				✓			
19	Liability for opponent's costs										~
20	Choice of neutral	\checkmark		\checkmark							

3. RESEARCH METHODOLOGY

This study identified various criterias for selecting suitable dispute resolution methods through quantitative approach of data collection. Questionnaire was used as a mode collecting data from the construction practitioners handling construction projects in Pakistan. The questionnaire is a very effective tool for gathering knowledge and perception information from specific respondents (Almansoori et al. 2021). The level of occurrence for dispute resolution methods was studies based on five points Likert scale as 1 for never, 2 for rarely, 3 for sometimes, 4 for often and 5 for always. Collection of the data was done through Google forms and in person. Completed questionnaires were analyzed statistically using weighted average calculation using the formula adapted from (Kaliba et al., 2009):

$$WA = \frac{1}{5} \times \frac{\sum_{i=1}^{5} F_i R_i}{\sum_{i=1}^{5} F_i} \times 100$$

Where WA is the average weighted perceived significance level represented in terms of percentage; R_i is the response type on the Likert scale, i ranging from 1 to 5 on the Likert scale; F_i is the frequency or total number of respondents choosing response type i on the Likert scale, with i ranging from 1 to 5 as earlier described.

4. **RESULTS AND DISCUSSIONS**

The data was gathered from 52 respondents. To determine the ranking of criteria for selecting dispute resolution methods data was analyzed statistically. The respondents participating in the data collection process are working in different types of the organizations as summarized in Figure 1.



Figure 1: Respondent's Organization

Figure 1 shows that the majority of respondents (22 of 52, or 43.3 percent) are clients' representatives. Contractors account for a significant number of respondents (18 of 52), or 34.6 percent, and consultants account for 12 of 52, or 23.1 percent. The respondents are involved in handling various project types as summarized in Figure 2.



Roads Projectsmercialceingentsenitie

Figure 2: Project handled by the respondents

Figure 2 shows that majority of the respondents are involved in handling road work with frequency of 16 of 52, or 30.8 percent. This is followed by commercial projects (13 of 52, or 25.0 percent), social amenities projects (9 of 52, or 17.3 percent), residential projects (7 or 13.5 percent), and hydraulic projects (3 or 5.8 percent). While there are 2 respondents working on bridge projects and 1 participant is handling educational building project. The experience level of the respondents is presented in Figure 3.



Figure 3: Respondent's Experience

Figure 3 shows that a significant number of respondents, 29 of 52, have experience handling projects for less than 5 years, 12 have experience 6–10 years, 2 have experience 11–15 years, and 9 have experience above 15 years. Figure 4 shows the level of qualification of respondents



Figure 4: Qualification level

Figure 4 shows that the majority of the respondents, 35 of 52 (67.3%), have a bachelor's degree, and 17 of 52 (35.3%) have a master's degree. The adoption level of dispute resolution methods was evaluated by calculating weighted average value of each criterion for selecting dispute resolution method as presented in Table 2.

Selection Criteria		evel o	of Ad	opti	Total	WA	Rank	
		2	3	4	5	TUCAT	(%)	Nallk
Cost	4	4	11	8	25	52	77.69	1
Duration	3	3	12	14	20	52	77.31	2
Consensus	2	3	19	11	17	52	74.62	3
Fairness		8	18	16	10	52	70.77	4
Effectiveness	1	8	23	6	14	52	69.23	5
Expertise/ Qualified neutrals	4	12	17	12	7	52	62.31	6
Confidentiality	5	12	15	15	5	52	61.15	7
Authority of person solving the dispute	4	15	18	9	6	52	59.23	8
Satisfactory results/ quality outcome	7	11	17	11	6	52	59.23	8
Enforceability	7	10	17	15	3	52	58.85	9
Procedural Flexibility	7	10	21	7	7	52	58.85	9
Preservation of relationships	3	17	23	3	6	52	56.92	10
Reputation of parties	3	20	16	9	4	52	56.54	11
Possibility to appeal	5	16	19	8	4	52	56.15	12
Power imbalances	8	12	17	13	2	52	55.77	13
Degree of control by parties	8	15	18	8	3	52	53.46	14
Liability for opponent's costs	8	16	15	12	1	52	53.08	15
Degree of control by neutral	6	20	16	7	3	52	52.69	16
Choice of neutral	9	12	23	6	2	52	52.31	17

Table 2: Level of adoption of Criteria for Selecting Dispute Resolution Methods

Degree of formality	10	20	15	4	3	52	48.46	18	
Note: 1 = Never Adopted, 2 = Rarely A	dopt	ed, 3	3 = \$	Some	etime	s Adopt	ed, 4 =	often	
Adopted, 5= Always Adopted									

Above table shows that cost is the most commonly adopted criteria for selection of dispute resolution method, Cost is ranked 1st with Weighted Average value of 77.69%. Duration is ranked 2nd with WA value of 77.31%, Consensus is ranked 3rd with WA value of 74.62%, Fairness is ranked 4th with WA value of 70.77% and Effectiveness with WA value of 69.23 is ranked 5th. On the contrary, Degree of control by neutral, Choice of neutral and Degree of formality are reported as least adopted techniques ranked as 16th (WA value 52.69%), 17th (WA value of 52.31%) and 18th (WA value of 48.46%) respectively.

5. **CONCLUSIONS**

This paper focused on studying various criteria adopted for selecting the appropriate dispute resolution method in the construction projects of Pakistan. This assessment was carried out based on the data collected through questionnaire. The findings of the study revealed 20 various criteria adopted by the practitioners for selecting appropriate method of dispute resolution. Among these methods, cost is the most commonly adopted method. Degree of formality is reported as the least adopted criterion. These findings highlight current situation and considerations used by the practitioner for resolving dispute in construction projects.

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