

Chapter 16

The Effective Use of ADR Processes in Construction

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Abstract The formality of litigation and arbitration, with its concomitant escalation in costs, delays and adversarial relationship, have encouraged the rapid growth of alternative dispute resolution (ADR) processes, namely conciliation, mediation, adjudication and other hybrid processes (Brown and Marriott 1999; Fenn and Gameson 1992; Kaplan et al. 1991). These processes have been widely used and well received. For example, mediation is an integral part of dispute settlement clause in all conditions of contract for Hong Kong Government construction projects. Moreover, use of multiple-tier of ADR renders it impossible to obtain speedy and economic resolution. Overtly complicated ADR based resolution procedures destroy the original intents of having flexible and direct dispute resolution. In this study, a hierarchical model is developed to organise the different attributes of an ADR process. This arrangement fits neatly with the Analytical Hierarchy Process (AHP) methodology. AHP can be used to prioritise the attributes. The top ten ranked attributes are identified as critical attributes. These include, among others, preservation of relationship, enforceability, neutrality and consensus. This study also reports suggestions by experts on the means to enshrine these attributes. It is recommended that by focusing on these critical attributes, the dispute resolution process can be kept simple and effective.

16.1 Introduction

Reviews of the construction industry (CIRC 2001; Egan 1998; Latham 1994; Merna and Bower 1997) have pointed to some fundamental causes of project failure, one of which is the proliferation of disputes. If disputes are not resolved

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promptly, they can cause further project delays, lead to claims, may require litigation proceedings for resolution and, ultimately, destroy business relationships. Kumaraswamy (1997) has summarised twenty common causes of construction disputes, including the speed of construction, cost and quality control, technological advances, stringent building regulations, and economic difficulties. All are common features of the construction industry in Hong Kong. These, together with the increasingly complex construction activities and intense competition among contractors, have aggravated the problem. Thus, it is not surprising that the number of construction disputes has increased dramatically. This is consistent with the report by the Hong Kong International Arbitration Centre (HKIAC), which revealed that the number of disputes referred to the center has tripled in the last decade. In 2012, a total of 71 cases of construction dispute arbitration were handled by the HKIAC (2012). Hence, the skill of dispute resolution should be part of the tool kit for practitioners, especially for those in managerial capacity or senior position. This study aims to unveil the critical attributes of alternative dispute resolution (ADR).

16.2 The Study

The study has four stages:

1. Identification of ADR process attributes:
2. Development of a hierarchical model of ADR process attributes:
3. Identification of critical attributes through prioritisation: and
4. Collecting suggestions on means to enshrine the critical attributes.

16.2.1 Stage One: Identification of ADR Process Attributes

The research on dispute resolution has attracted the interest of many researchers and practitioners. Goldberg et al. (1992) offered a comprehensive list of attributes of dispute resolution, including voluntary, third party, degree of formality, nature of proceeding, outcome, and privacy. York (1996) is more concerned with the practical issues. The attributes that he identified are time, cost, preservation of relationship, binding decision, degree of control by parties, flexibility in procedure and confidentiality. In contrast, David (1988) focuses on social and human issues such as impartiality, consensus and continuing business relationship. Together with the works of Hibberd and Newman (1999), Cheung (1999), and Brown and Marriott (1999), a summary of the critical attributes is derived and summarised in Table 16.1.

Table 16.1 Summary of attributes of ADR processes

Attributes	a	b	c	d	e	f
1. Cost		✓	✓	✓	✓	✓
2. Confidentiality		✓	✓	✓	✓	✓
3. Consensus				✓		✓
4. Control by parties		✓	✓	✓	✓	✓
5. Creative agreement		✓	✓		✓	
6. Enforceability	✓		✓	✓		✓
7. Fairness		✓	✓	✓		
8. Flexibility		✓	✓	✓	✓	
9. Formality	✓			✓		
10. Knowledge in construction		✓				
11. Liabilities to opponent's cost					✓	
12. Neutrality	✓			✓	✓	
13. Power to compel consolidation				✓		
14. Preservation of relationship		✓	✓	✓	✓	✓
15. Privacy	✓	✓	✓	✓		
16. Speed		✓	✓	✓	✓	✓
17. Range of issue				✓	✓	
18. Width of remedy		✓	✓	✓	✓	✓
19. Willingness	✓			✓		

*Keys**a* Goldberg et al. (1992)*b* Hibberd & Newman (1999)*c* Cheung (1999)*d* Brown and Marriott (1999)*e* York (1996)*f* David (1988)

16.2.2 Stage Two: Development of a Hierarchical Model of ADR Process Attributes

In Stage One, a total of nineteen attributes were identified from previous research works, ranging from intangibles such as consensus, control by parties, preservation of relationship and voluntariness, to tangibles such as cost, time, and speed. Due to the relatively large number of attributes involved, it would be difficult to compare the relative standings of these attributes with the same level of focus. This nature of the problem fits nicely with the functions of the Analytical Hierarchy Process (AHP). The successful use of AHP to assess priorities within a given set of attributes has been reported in the selection of design/build proposals (Alhazmi and McCaffer 2000), the prioritisation of maintenance schedule (Shen et al. 1998), the selection of contractors (Fong and Choi 2000) and the selection of procurement

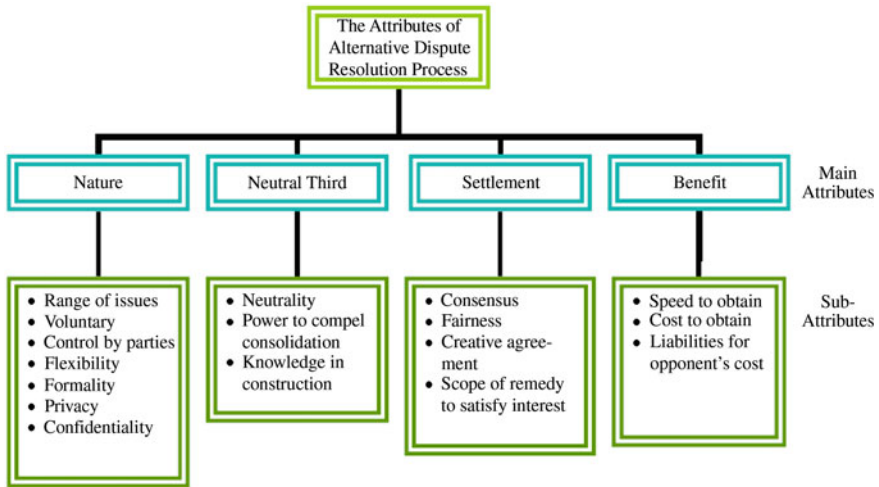
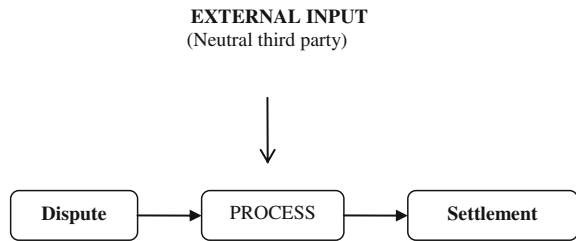


Fig. 16.1 Hierarchical structure of ADR attributes

Fig. 16.2 Phases of a resolution process



approaches (Cheung et al. 2001). The AHP employs pair-wise comparison between attributes by the decision maker and is used in this study to prioritise the set of alternative dispute resolution process attributes obtained in Stage One. The hierarchical model of dispute resolution process attributes is shown in Fig. 16.1.

The nineteen attributes are arranged under four main headings: *Nature*; *Neutral third party*; *Settlement*, and *Benefit*. The rationale for such categorisation is based on Walker’s (1996) system view of a process. A typical alternative dispute resolution process consists of input (dispute), process (assisted negotiation) and output (settlement). Figure 16.2 shows a typical dispute resolution process with the input of a neutral third party.

The process begins once the parties agree to adopt a resolution strategy to resolve their dispute. It is an inherent nature of dispute resolution that human factors play an important role in the process. In ADR processes in particular, parties have control over the content and procedure of the process, which are not possible in litigation and arbitration. Therefore, attributes including range of issues; voluntariness; control by parties; flexibility; informality; privacy; and confidentiality naturally fall under the *Nature* category. The involvement of a

neutral third party to assist the parties in reaching a settlement is another main attribute of dispute resolution. In mediation, the impartial third party takes a facilitative role to ensure that the process is fair and that the mediated settlement is satisfactory to both parties. The effectiveness of the process depends heavily on the competence and experience of the facilitator (Brown and Marriott 1999; Goldberg et al. 1992). Hence, attributes such as neutrality; power to compel consolidation; and knowledge in construction are grouped under the *Neutral third party* category. In reality, a mutually agreed settlement is what the parties would want to achieve at the end of the process. A settlement is the result of the collaborative efforts of the parties and the 3rd party neutral. Therefore, consensus, fairness, creative agreement, scope of remedy to satisfy interest, and enforceability all fall into the *Settlement* category. As for the remaining factors, namely speed, cost, liabilities for opponent's cost, and preservation of business relationship, they are arranged under the *Benefit* category.

16.2.3 Stage Three: Identification of Critical Attributes Through Prioritisation

The ExpertChoice software (ExpertChoice 1998) featuring the Analytical Hierarchy Process (AHP) methodology is employed to prioritise the different attributes identified so far. The top ten ranked attributes are then classified as the critical attributes of the alternative dispute resolution process. The AHP employs a pair-wise comparison between attributes, thus enabling the checking of consistency in scale assignments. The section below explains the working procedure of the prioritisation, followed by an illustration.

Figure 16.1 presents the hierarchical arrangement of the 19 attributes. Level 1 (top level) is entitled 'The Attributes of ADR Processes'. The main attributes at Level 2 are: *Nature*, *Neutral third party*, *Settlement*, and *Benefit*. Level 3 consists of sub-attributes to each of the main attributes at Level 2. These sub-attributes are the nineteen attributes as listed in Fig. 16.1. Such arrangement allows pair-wise comparison to be performed between sub-attributes of the same main attribute group at first. Using Fig. 16.1 as an example, under the *Neutral third party* group, the expert is required to make judgments on the relative importance weightings of the sub-attributes. Hence, *neutrality* is compared with *power to compel consolidation*, and then with *knowledge in construction*, followed by a comparison between *power to compel consolidation* and *knowledge in construction*. The pair-wise comparison matrix for *Neutral third party* is shown in Fig. 16.3 below.

Pair-wise comparison has the advantage of focusing exclusively on two sub-attributes at a time. Another advantage of using AHP is its ability to check the consistency of scale assessments. An Inconsistency Index (II) is calculated automatically by ExpertChoice for each matrix by the software. A scale assessment can be accepted if its Inconsistency Index is 0.1 or less (Saaty 1980). The measure of inconsistency is useful in identifying possible errors in judgments, as well as the

Fig. 16.3 Pair-wise comparison of sub-attributes

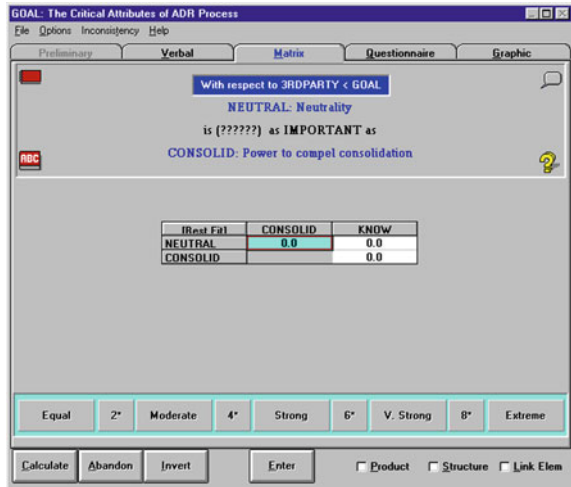


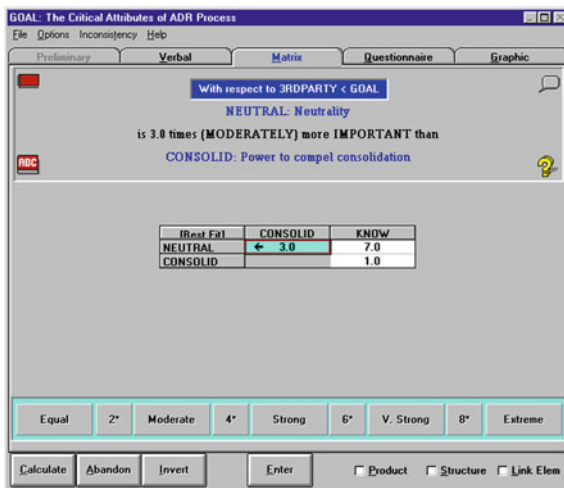
Table 16.2 9-point pair-wise comparison scale

Numerical scale	Verbal meaning
1	Equal importance of both elements
3	Moderate importance of one element over the other
5	Strong importance of one element over the other
7	Very strong importance of one element over the other
9	Extreme importance of one element over the other
2, 4, 6, 8	Intermediate values between the above adjacent values

extent of inconsistencies in the judgment themselves. This distinctive feature of AHP makes it an appealing tool when compared with other approaches dealing with subjective ranking (Chua et al. 1999). This approach to solicit an expert’s judgment has made it a reliable tool to determine the priorities of a set of factors (Chua et al. 1999). The pair-wise comparisons are guided by a nine-point scale as shown in Table 16.2. The experts formulate their assessments based on this scale (Saaty 1980). There are therefore five matrices to be completed by each expert—four for the four main attribute groups, and one for the comparison of the four main attributes themselves.

The following serves to illustrate how the experts would perform the prioritisation of the nineteen attributes. In the *Neutral third party* group, if the sub-attribute *NEUTRAL* is considered to be moderately important compared with the sub-attribute *CONSOLID*, a “3” is inserted into the matrix table. If the sub-attribute *NEUTRAL* is considered to be extremely important compared with the sub-attribute *KNOW*, a “7” would be inserted. If the sub-attribute *CONSOLID* is considered to be equally important compared with the sub-attribute *KNOW*, a “1”

Fig. 16.4 Pair-wise comparison matrix



is inserted. The shaded portion of the comparison matrix need not be completed because these cells should be the reciprocals of the corresponding cells in the non-shaded portion. Figure 16.4 shows the pair-wise comparison matrix for *Neutral* with scale assignments inserted.

The same scale assignment applies to the other three main attribute groups as well as the matrix involving the four main attributes. The ExpertChoice (1998) provides a summary analysis of the results automatically. Figure 16.5 shows the distributive summary of the results. It clearly shows that the relative standings of the nineteen attributes in descending order upon the completion of the five matrices.

The mathematics underlying the use of the AHP techniques to generate the relative importance weightings for the critical attributes are based on linear algebra and graph theory. It is beyond the scope of this study to discuss the mathematical theory in depth. Details of the mathematical treatment and proof can be found in the works of Saaty (1980, 1988), Saaty and Vargas (1991). Having explained the procedures involved in the prioritisation of the nineteen attributes and the rationale for the hierarchical structure, the following explains the procedures involved in the collection of data, and the results so obtained.

16.3 Pilot Study and Main Survey

A pilot study was conducted with a panel of experienced experts in alternative dispute resolution. The pilot study seeks to test the running of the prioritisation exercise and to identify system deficiencies, so as to ensure the efficient running of the formal exercise with the experts.

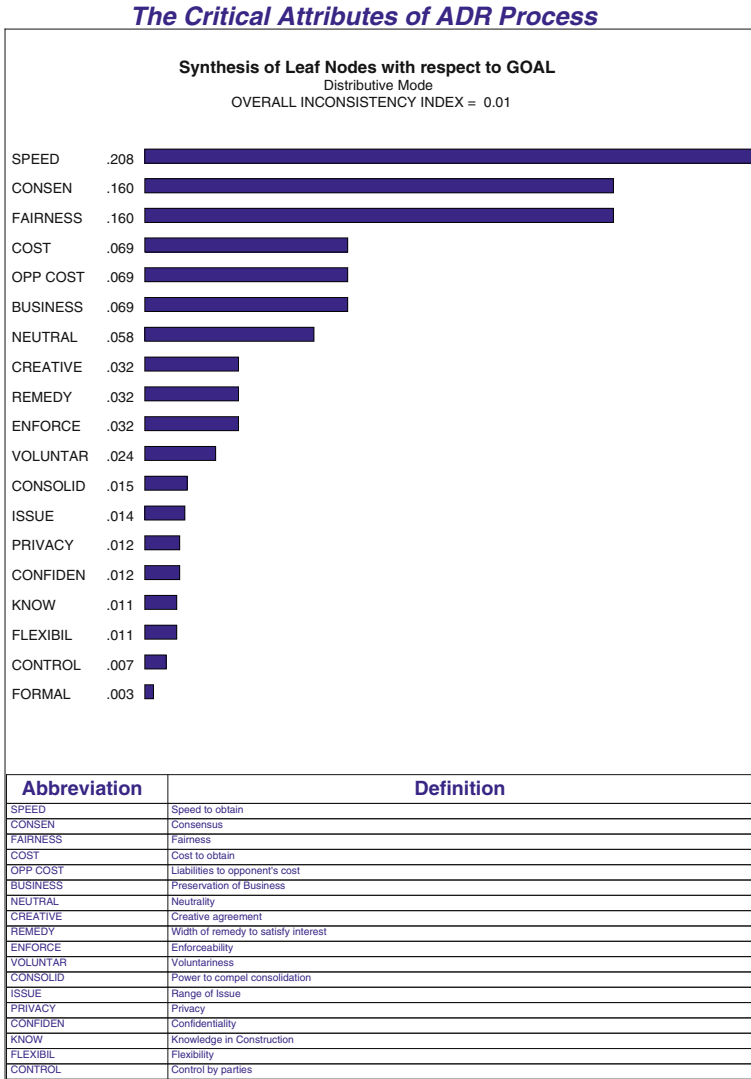
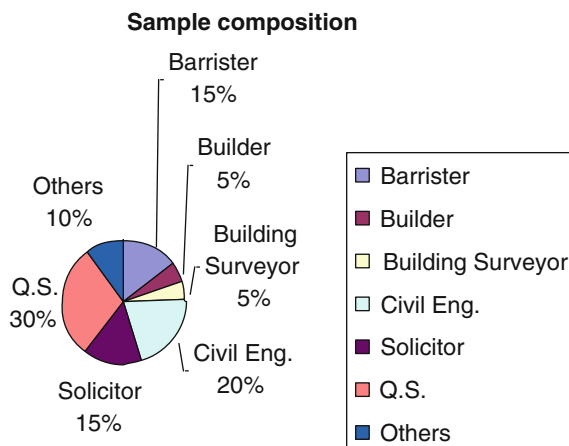


Fig. 16.5 Distributive summary of the results

The pilot study brought out several improvements. One of them was to put the largest matrix towards the end of the exercise. By going through the smaller matrices first, the experts can acquire more experience with the scale assignment, before dealing with the more complicated ones. This improvement was proved valuable, as it prevents frustration from building up at the early stage as a result of any failure to achieve an II of 0.1 or below. Also, as the experts get more familiar with the scale assignment, naturally it becomes less difficult to achieve the required IR even for the larger matrices.

Fig. 16.6 Composition of experts by profession



The prioritisation of attributes was then performed face to face with each of the participating experts. The experts were selected according to the following criteria:

- Practitioners who have extensive working knowledge of the construction industry in Hong Kong; and
- Practitioners who have profound knowledge of and experience with the various ADR processes; must be a member of the HKIAC; having at least 2 years ADR experience;

A sample of forty-nine accredited mediators and arbitrators were approached. The panel of experts consisted of arbitrators and mediators from the HKIAC who are also practicing barristers, solicitors, quantity surveyors, civil engineers and construction related professionals. A total of twenty experts agreed to participate in the research. This translates to a response rate of 40 %. The aggregated sample composition by professions is given in Fig. 16.6.

All respondents are in senior management positions of leading private construction companies or consultant firms in Hong Kong. Some are serving in governmental departments, and some are barristers in chambers or solicitors in law firms. They are well-recognised experts in construction dispute resolution in Hong Kong. 70 % of the respondents have more than 10 years of experience with dispute resolution; 15 % of them have between 5 and 10 years of experience; and the remaining 15 % between 1 and 5 years. Although the size of the sample is relatively small, the accumulated knowledge of the respondents in construction dispute resolution is beyond doubt. In fact, some of the experts are founders and major proponents of the ADR process in Hong Kong. Therefore, their views should be reliable and are reflective of the current situations of the industry. To ensure good, truthful replies and good quality data, a brief introduction was made to each respondent to explain the objectives of the study and the methodology adopted. It was made clear at the beginning of the interviews that the study is focused on the group of alternative dispute resolution processes. Litigation and

Table 16.3 RIW of SA assessed by participant no. 1

Order	SA	RIW	Order	SA	RIW
Under <i>NATURE</i> Group			Under <i>SETTLEMENT</i> Group		
1.	VOLUNTAR	0.398	1.	CONSEN	0.330
2.	FLEXIBIL	0.159	2.	REMEDY	0.222
3.	ISSUE	0.149	3.	ENFORCE	0.222
4.	CONTROL	0.100	4.	FAIRNESS	0.174
5.	PRIVACY	0.080	5.	CREATIVE	0.052
6.	CONFIDEN	0.080	Under <i>BENEFITS</i> Group		
7.	FORMAL	0.035	1.	BUSINESS	0.696
Under <i>NEUTRAL 3rd PARTY</i> Group			2.	COST	0.140
1.	NEUTRAL	0.735	3.	SPEED	0.082
2.	KNOW	0.207	4.	OPP COST	0.082
3.	CONSOLID	0.058	–	–	–

Keys Sub-attributes (SA), Relative Importance Weightings (RIW)

Table 16.4 Relative weightings of main attributes

Order	Attributes	Relative importance weightings
1.	<i>SETTLE</i>	0.354
2.	<i>BENEFITS</i>	0.354
3.	<i>NEUTRAL 3rd PARTY</i>	0.161
4.	<i>NATURE</i>	0.131

arbitration are regulated by existing laws and therefore fall outside the scope of this study. The twenty practitioners were asked to prioritise the nineteen attributes listed in Table 16.3 using the Expert Choice software. The top ten ranked attributes were identified as the critical attributes.

16.4 Stage Four: Collecting Suggestions on Means to Enshrine the Critical Attributes

Suggestions on the means to enshrine the top ten ranked attributes were collected from each of the experts. These suggestions are summarised and discussed in the later sections of this chapter.

16.4.1 Result of Prioritisation

The following presents the results from one of the experts. Table 16.3 gives the relative weightings of the sub-attributes under each of the main attributes. Table 16.4 presents the relative weightings between the four main attributes themselves. Table 16.5 gives the overall weightings of the nineteen attributes.

Table 16.5 Overall relative standings of attributes

Order	Attributes	RIW	Order	Attributes	RIW
1.	BUSINESS	0.246	10.	SPEED	0.029
2.	NEUTRAL	0.118	11.	OPP. COST	0.029
3.	CONSEN	0.117	12.	FLEXIBIL	0.021
4.	REMEDY	0.079	13.	ISSUE	0.020
5.	ENFORCE	0.079	14.	CREATIVE	0.019
6.	FAIRNESS	0.061	15.	CONTROL	0.013
7.	VOLUNTAR	0.052	16.	PRIVACY	0.010
8.	COST	0.050	17.	CONFIDEN	0.010
9.	KNOW	0.033	18.	CONSOLID	0.009
–	–	–	19.	FORMAL	0.005

Table 16.6 Relative standings of the nineteen attributes

Order	Attributes	Main attributes	RIW
1.	Preservation of business relationship	Benefits	0.119
2.	Enforceability	Settlement	0.101
3.	Neutrality	Neutral	0.097
4.	Consensus	Settlement	0.091
5.	Cost to obtain	Benefits	0.083
6.	Speed to obtain	Benefits	0.071
7.	Fairness	Nature	0.059
8.	Scope of remedy to satisfy interest	Nature	0.050
9.	Creative agreement	Nature	0.041
10.	Confidentiality	Nature	0.039
11.	Voluntariness	Nature	0.036
12.	Knowledge in construction	Neutral	0.035
13.	Privacy	Nature	0.034
14.	Liabilities to opponent's cost	Benefits	0.033
15.	Power to compel consolidation	Neutral	0.031
16.	Flexibility	Nature	0.027
17.	Control by parties	Nature	0.025
18.	Range of issue	Nature	0.013
19.	Formality	Nature	0.009

A total of twenty prioritisation exercises were conducted. The relative standings of the nineteen attributes, based on the average of the relative weightings obtained in the twenty exercises, are presented in Table 16.6.

16.4.2 Suggestions on Means to Enshrine the Critical Attributes

Upon completion of the prioritisation exercise, each expert was asked to suggest means to enshrine the top ten attributes ranked by him/her. Some experts

suggested that some means are common to more than one attributes. These include: neutrality and fairness, scope of remedy to satisfy interest and creative agreement. Taking into account of these comments, the final ten most important critical attributes were: voluntariness, confidentiality, neutrality/fairness, knowledge in construction, consensus agreement, creative agreement, enforceability, speed, cost, and preservation of relationship. These are found to be consistent with the data from similar studies in the UK (Brooker and Lavers 2000a). In that study, it was found that where on-going relationship, privacy, speed or economy of resolution were desired, mediation and mini-trial were considered to be suitable strategies to be adopted. Table 16.7 presents a summary of the means to enshrine the critical attributes as suggested by the panel of experts. These are discussed seriatim in ascending order of criticality, as ranked in this study.

16.4.2.1 Voluntariness

In a purely consensual ADR process, nothing is binding on the parties until the parties sign an enforceable settlement agreement. In other words, the parties can walk out at any time during the process without interfering with their legal rights. Therefore, the use of ADR process will not be successful unless there is a basic willingness to take part and attempt a settlement (Bevan 1992; Cheung 1999; Pengilley 1990).

To foster voluntariness, the disputants need to be educated on the benefits of the process, as compared with arbitration and litigation. The 3rd party neutral should make the parties fully aware of the consequences and costs involved if the dispute is to be settled by arbitration or litigation. The best time to advise the parties about costs is before the process begins, rather than during the often emotionally-charged process. During a heated argument, parties tend to forget about the real issues, and focus instead on personal issues. It is also part of the neutrals' responsibilities to educate their clients on the perceived benefits of ADR, such as being less expensive, confidential, voluntary, capable of more remedies, and maintenance of relationship etc.

16.4.2.2 Confidentiality

Confidentiality is one of the essential terms governing the conduct of the parties in a purely consensual ADR process (York 1996). It is an implied and inherent feature of ADR processes that parties to a dispute are not allowed to disclose any information or materials to the public unless by mutual consent of the parties. This is normally achieved by establishing 'house rules' in the form of a written agreement between the parties to that effect. House rules should be laid out at the very beginning, requiring communications between the parties and the 3rd party neutral to be made in confidence. Rules can be stipulated into an agreement that

Table 16.7 Summary of means to enshrine the critical attributes

Critical attributes/means suggested by experts	Critical attributes/means suggested by experts
<p>Voluntariness</p> <ul style="list-style-type: none"> • Parties’ willingness to settle • Use ADR process instead of litigation • Neutrals make parties fully aware of the consequences if the dispute was to be resolved by traditional court process • Neutrals explain to the parties the benefits of using ADR process 	<p>Creative agreement</p> <ul style="list-style-type: none"> • Neutrals should explore alternative settlement options • Careful selection of the neutrals, those with good all-round experience in the various dispute resolution strategies, and the ability to critically analyse disputes and come up with creative answer that can satisfy the parties
<p>Confidentiality</p> <ul style="list-style-type: none"> • Written agreement between parties • Keep the process and related materials strictly confidential • Allow only the parties involved in a dispute to participate the process 	<p>Enforceability</p> <ul style="list-style-type: none"> • Selecting neutrals with the competence in drawing up agreement/award • Signed agreement between parties • Parties are committed to settle
<p>Neutrality/Fairness</p> <ul style="list-style-type: none"> • Improve competence and judicial quality of neutrals; continuing profession development • Maintain a pool of experienced mediators and arbitrators • Neutrals to make mandate statement declaring any conflict of interest • Careful selection of neutrals by parties, study neutral’s track records 	<p>Speed</p> <ul style="list-style-type: none"> • Neutrals keep close eye on the process • Parties’ willingness to co-operate • Documents-only process. Avoid unnecessary procedures • Use ADR as oppose to arbitration and litigation • Make sure parties are thoroughly briefed about all the facts • Focus on key issues • Good time management. Don’t waste time on things that do not matter
<p>Consensus agreement</p> <ul style="list-style-type: none"> • Neutrals help to consolidate differences • Parties’ willingness to adopt dispute resolution • Neutrals advise the most appropriate contract provision • Neutrals make sure the parties understand the critical issues of dispute • Neutrals ensure the process is conducted in a non-adversarial manner 	<p>Cost</p> <ul style="list-style-type: none"> • If the nature of dispute allows, avoid the involvement of lawyer • Limiting discoveries • Good time management. Set time limit in hearing • Neutrals explain to parties the importance of time, and the implications if the dispute drags on without resolution • Documents-only process • Proactive neutrals. Neutrals are given authority/teeth to control the process • Less legal input and more parties involvement • Focus on major issues and not to be caught up by minor details
<p>Knowledge in construction</p> <ul style="list-style-type: none"> • Continuing profession development • Promotion of ADR workshops 	<p>Preservation of business relationship</p> <ul style="list-style-type: none"> • Parties’ willingness to adopt dispute resolution scheme • Parties are willing to accommodate differences • Emphasis on consensus through ADR, avoid going to arbitration and litigation • Parties show respect to each other • Avoid heated confrontation. Emphasise win/win solution • Don’t take issues personal • Neutrals encourage open and honest discussion

should be signed by the parties before the commencement of the process. The neutrals also have a duty to remind the parties to follow the house rules strictly during the process.

16.4.2.3 Neutrality/Fairness

Neutrality and fairness depend heavily on the competence, training and integrity of the 3rd party neutrals. During the resolution process, a 3rd party neutral owes a duty of care to his/her clients to remain impartial. He/she facilitates the parties to reach a settlement. In addition, he/she must make conscientious effort to avoid personal biases creeping in.

The possible means to achieve a fair process include:

- (a) Maintenance of a panel of experienced 3rd party neutrals: Since the skills, knowledge and experience of a 3rd party can be the determinant of the success or failure of a resolution process, the choice of the 3rd party neutral is therefore of paramount importance. For example, the HKIAC has developed a code of conduct to monitor the standard of professional mediators. The Centre also maintains two panels of mediators and a roster of arbitrators. Only those who have successfully fulfilled the qualifications or requirements set out by the Centre can apply to be an accredited member.
- (b) Choice of the 3rd party neutral: A 3rd party neutral is often appointed through mutual agreement by the parties. The selection criteria may include past track record, experience, knowledge, and professional/academic background. The parties should only appoint a person whom they can trust and feel comfortable with. In this regard, a mandate statement by the appointee to declare his interests is recommended.

16.4.2.4 Knowledge in Construction

The expertise of a 3rd party neutral can be a major advantage of the ADR process. If the dispute involves issues of a very technical nature, it is desirable to have a 3rd party neutral who have at least some related background knowledge. Suggested means to assist the 3rd party neutral include the use of continuing professional programme to keep facilitators updated with both skills and technical matters. For example, the Hong Kong Mediation Centre, in collaboration with the Law Society of Hong Kong, runs introductory mediation training courses for the training of general and commercial mediators (Wall 2000).

16.4.2.5 Consensus Agreement

Without the parties' commitment to the process, it is often difficult, if not impossible, to reach an agreement. A 3rd party neutral should ensure that the

process itself is conducted in a non-adversarial manner. He/she should make sure that the parties are aware of each other's needs. He/She should act as a facilitator rather than an adjudicator, leaving all major decisions to the parties. It is part of his/her responsibility to help identify common grounds, so that the parties can begin negotiation more easily, and to advise on the relevant procedures.

16.4.2.6 Creative Agreement

Depending on the nature and the requirements of parties, the 3rd party neutral should try to come up with a solution that can satisfy both parties' needs. ADR process can offer a greater range of settlement options than in litigation or arbitration. Settlements may include face-saving concessions, in which case human factors such as business relationships will be considered. Lateral thinking is vital given the number and variety of factors that must be taken into consideration before a settlement can be reached. Possible means to achieve a creative agreement are:

- (a) *Reality testing*: The 3rd party neutrals can help by writing down all the possible solutions and testing them against one another. Some solutions may be more preferable in certain situations and it is very much up to the parties to decide after weighing the pros and cons.
- (b) *Training of neutrals*: The more imaginative the facilitator is, the more likely that he will put forward creative settlement suggestions.

16.4.2.7 Enforceability

In practice, a facilitated settlement cannot be enforced unless an agreement has been concluded. The settlement agreement should always reflect the true intention of both parties. How capable the facilitator is in producing a draft to that effect will therefore be crucial. As each dispute is unique, the facilitator should be prepared to come up with solutions that the parties would be willing to agree upon.

16.4.2.8 Speed

In Hong Kong in particular, people favour speedy settlement because they are often under time constraints and have busy schedules. It is difficult to tell how long a settlement typically takes as each dispute is unique. The duration of an ADR process can be measured in days or weeks, rather than months or years, as can be the case in litigations or arbitrations. To a large extent, it depends on the complexity and nature of the dispute, together with the number of parties involved. Other external factors, such as political, financial and human factors, may also cause delays in resolution. Hence, it lies heavily on the skills of the 3rd party

neutrals to control the pace of proceeding. It was suggested that a speedy resolution could be achieved through:

- (a) Documents-only-process: A documents-only process can greatly reduce the overall time to reach a decision. Time is saved from not having to involve discovery and expert witnesses, which could take up months before the commencement of process. However, in cases where technical issues predominate, discovery or expert witnesses are inevitable.
- (b) Time management: Unnecessary procedures should be avoided. The 3rd party neutral should make sure that the parties are thoroughly briefed about all the facts and procedures before actually dealing with the issue. He/She should keep a close eye on the process, set time limits if necessary, and constantly remind the parties to focus on the most important issues and not being carried away by the minor ones.
- (c) Early settlement: As soon as disputes arise, do not wait until they turn into full-blown problems. The parties should seek third-party assistance when they find that it is not possible to resolve the dispute between them.

16.4.2.9 Cost

Cost and time are twin attributes. A speedy resolution means lower costs. Sources of costs involved in reaching a settlement include: expense related to venue, the hiring of the 3rd party neutral, documentation, and settlement costs. Some of the suggested means to curb costs are:

- (a) Use of Partnering: The central idea of using Partnering is to reduce the adversarial relationship between two parties and to encourage the parties to work in a cooperative manner. By being open and honest to each other, it is anticipated that the chance of conflict will be greatly reduced, resulting in fewer disputes ultimately. Partnering also helps the parties to establish long-term working relationship.
- (b) Competent 3rd party neutral: The 3rd party neutral can help to reduce overall cost by ensuring that parties are working towards the same common goal.
- (c) Less legal input and greater involvement of the disputants: Where the nature of dispute allows, especially in cases where no point of law is involved, the disputants should have a substantial involvement in the resolution process instead of leaving it to the lawyers.
- (d) Cost-benefit analysis: In assessing the suitability of a case for ADR, a cost-benefit analysis must be undertaken. Cost-benefit analysis enables the parties to have better understanding of the key critical issues and the likely expense should the dispute continues. “Reality testing” can also be performed (Brooker and Lavers 2000b).

16.4.2.10 Preservation of Relationship

Continuing relationship with business partners is one of the key objectives of using ADR. An enduring relationship is always founded on common interests, mutual trust and respect. It requires the efforts and commitments from both parties to maintain the relationship. The means suggested to preserve a relationship are:

- (a) Avoidance of arbitration and litigation: Many cases have demonstrated that relationship fractures when a dispute is resolved by means of arbitration and litigation.
- (b) Avoidance of confrontation: There is no point in continuing a discussion if the parties are not willing to compromise, or when they are emotionally charged. In order to achieve a win/win situation, both parties must learn to focus on the real issue and not be caught by emotional desires.
- (c) Be reasonable: It is easier to remain reasonable with the assistance of a 3rd party neutral, who should always try to prevent confrontations during the resolution process.

In sum, it can be seen that ADR processes need not be complex. The success of such a process depends very much on the attitude of the disputants. If they have no desire to settle, or are unwilling to make compromises at all, no matter how detailed the process is planned, there will be little hope for success. The 3rd party neutral can be extremely instrumental. He/she must have the confidence of the parties. With his/her skills and knowledge, amicable outcomes can be achieved out of the resolution process.

16.5 Chapter Summary

Resolving construction dispute is no easy task, especially when the available resources are limited or when the dispute is complex. The use of ADR processes in construction is an attempt to overcome the shortcomings of litigation and arbitration. However, overtly complex resolution procedures, which involve the sequential use of a range of ADR techniques and arbitration, destroy the intended positive effects, especially in terms of time and cost savings. By focusing on the critical attributes, ADR processes can be kept simple and effective. To achieve this objective, a hierarchical model is used to structure the nineteen attributes identified in literature reviews. With the use of AHP methodology and the profound knowledge of a panel of experts in the field of construction dispute resolution, the nineteen attributes are prioritised. The top ten ranked attributes are: voluntariness, enforceability, creative agreement, knowledge in construction, consensus agreement, confidentiality, neutrality/fairness, speed, cost, and preservation of relationship. The panel of experts also suggested means to enshrine these critical

attributes. It is suggested that the 3rd party neutral can be extremely instrumental to facilitate a settlement. Nonetheless, a settlement can hardly be reached if the disputing parties are not committed to the process.

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