

Disputes in Construction Contracts: Commonly experienced but not fully understood?^{1, 2}

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ABSTRACT

This paper aims at understanding the most common disputes in construction contracts and especially know the alternatives dispute resolution to consider when a dispute arises. A dispute is common and not always well managed. Do causes of disputes in construction contracts make the project reaching a dead-end? To answer this general question, we focused, all along this paper, on assessing and analyzing the concerned alternative dispute resolution. To deeply analyze them, we used a Root cause analysis to understand the leading cause. Then, we used specific tools such as non-compensatory model, a multi-attribute decision-making grid, a matrix analysis and, an additive weighting technique model. We used them to assess each scoring attributes, each alternative, and finally the best alternative dispute resolution. Then, we have made a Pareto analysis to highlight the impact of disputes with Mediation and without it.

Finally, we discovered that Mediation was the best alternative dispute resolution thanks to many aspects explained in the following paper. Even if, Mediation seems to be the best, other alternatives are necessary to be understood and taken into account. Conciliation, almost the same process, and method as Mediation is slightly less relevant than Mediation but offers an efficient solution to resolve disputes.

Keywords: Construction industry, Disputes, Errors, Alternative, Projects, Obligations, Claims

INTRODUCTION

Construction is a complex but still booming industry which "expenditures have reached over 1,231 billion U.S. dollars"³ in 2017 in the United States of America. Indeed, this sector is driven by China, India, and the USA and according to the Global Construction 2030, it will reach the

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³ Statista (n.d). *U.S. Construction Industry - Statistics & Fact*. Retrieved from <https://www.statista.com/topics/974/construction/>

historic number of 15.5 billion⁴ of dollars by 2030. Construction involves many people, from owners to subcontractors and a certain complexity in terms of cost and time. Indeed, this complexity is also present in construction contracts and can lead to conflicts between the different parties involved. Nevertheless, conflicts are highly common in this industry because of the number of participants, self-interest, huge project, and tremendous costs. Hopefully, conflicts can be managed through negotiation. In fact, the project's fulfilment is not impossible if conflicts are well and quickly handled. If not, the contract could reach a turning point in its realization.

“Projects, by their definition, have a defined start and end date. (...) Projects also include a defined scope, finite budget, and assigned resources. Another characteristic of a project is that they always build something”⁵. The construction contract is a mutual agreement encountered between two parties. Requirements, the length of the project and the cost are recorded into the contract. Indeed, the project manager is the “person responsible for leading, directing and managing the project and project team to deliver the project deliverables to an agree time, cost and quality/performance.”⁶ Thus, construction makes entirely part of project management, as time, budget and resources need to be managed.

Moreover, “Disputes are one of the main factors which prevent the successfully completion of the construction project.”⁷ A dispute is a disagreement regarding the said contract terms. It could also occur if a party doesn't meet its obligation. According to this definition, disputes are not constructive conflicts but destructive ones. As disputes are also common in the construction industry and difficult to get out of it, one of the main objectives of a construction project is to avoid any mistakes. Disputes can be caused for many reasons and globally, like Matthew Devries said it is often about three specific variables such as “problems with the contract, problems with the people, and problems with the unknown”.⁸

⁴ Graham Robinson. (n.d.). *Global construction market to grow \$8 trillion by 2030: driven by China, US, and India*. Retrieved from <https://www.ice.org.uk/ICEDevelopmentWebPortal/media/Documents/News/ICE%20News/Global-Construction-press-release.pdf>

⁵ John Brasuell. (2014, April). *The Difference Between Projects, Programs, and Portfolios*. Retrieved from <https://www.ims-web.com/blog/the-difference-between-projects-programs-and-portfolios>

⁶ Harpham, A. (n.d.). *Wideman Comparative Glossary of Project Management Terms* v5.5. Retrieved from http://www.maxwideman.com/pmglossary/PMG_P16.htm - Project Manager

⁷ Emre Cakmak and Pinar Irlayici Cakmak, An analysis of causes of disputes in the construction industry using analytical network process. Retrieved from <https://www.sciencedirect.com/science/article/pii/S1877042813050738>

⁸ Matthew Devries, The Top Three Causes of Disputes On A Construction Project. Retrieved from <https://www.bestpracticesconstructionlaw.com/2010/05/articles/project-management/the-top-three-causes-of-disputes-on-a-construction-project/>

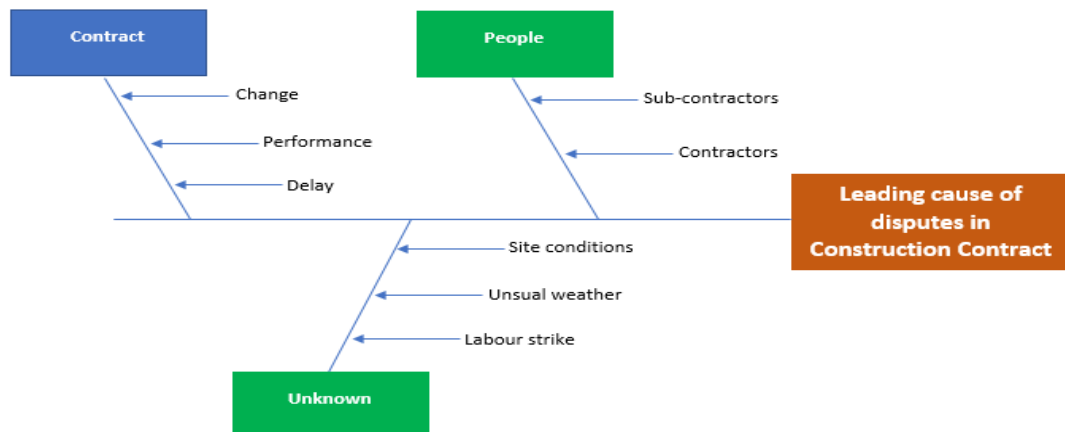


Figure 1: Root cause analysis for leading cause of disputes in construction contract⁹

The causes of disputes in construction contracts are numerous and it makes difficult to avoid. The change order, delay, severe weather conditions or even mistakes made by a sub-contractors could be reasons of disputes, but these are a few examples of many other disputes possible. The most common solution to avoid dispute comes to the project manager's role. Indeed, he has to know exactly the requirement of the customer by discussing and understanding clearly. Each party needs to know "their work" and obligations. Then, solutions are complex and, to some extent, specific to each dispute. If it arises, there are several resolution methods such as negotiation, mediation, arbitration or even litigation. Resolutions depend on the type of dispute and its state. This paper mainly aims at understanding the disputes a project manager can face in a construction project and a concrete solution to avoid or resolve disputes.

By the end of this paper, we would be able to understand the different reasons for disputes in construction contracts and more precisely the most common ones. This paper will focus on potential resolutions of disputes or even how to anticipate them to prevent from loss of time, money and productivity.

METHODOLOGY

STEP 1

"The construction industry is regarded as one of the most conflict and dispute-ridden industries, which has resulted in it being one of the most claim oriented sectors"¹⁰.

⁹ By the author

¹⁰ Nick Cook. (2016, April). *Different methods of dispute resolution in construction disputes*. Retrieved from <https://www.gdlaw.co.uk/site/blog/sectors-blog/construction-blog/different-methods-of-dispute-resolution-in-construction-disputes>

Dispute potential resolutions should be known by contractors. It gives the best answer in a specific context. Indeed, what are these alternative disputes resolutions (ADR),¹¹ as Nick Cook said, that prevents from lengthy and expensive litigation?

STEP 2

There are several alternative disputes resolutions that can allow one contractor to manage disputes such as change, orders, lack of quality, performance or even due to subcontractors, in order to prevent from loss of time, money and productivity.

1) Adjudication¹² is the process of inviting a neutral third party to give a decision on the said dispute. This neutral party is not involved in the construction project. The principle is to give importance to a person that doesn't know the day to day running of the project and wait for his opinion. Court proceedings can even be required if the party who's "at fault" don't want to pay.

2) Expert Determination¹³ is a common means for resolving disputes. It consists of involving an expert (in this case, a construction expert) that will assess the dispute and give his decision. For making this decision valuable, parties need to agree by contracting. Thus, the expert decision will be binding. This resolution is the less formal one.

3) Litigation¹⁴ which is the most common form of dispute resolution is the process of letting the dispute managed by a judge through court proceedings. "This resolution involves only claims which are over the value of \$ 250 000"¹⁵.

4) Mediation¹⁶ is the process of meeting and finding a more appropriate resolution for the said dispute. It is used to prevent from using litigation whereas each dispute can be resolved specifically. The resolution depends on the type of dispute, its state and the parties involved. In

¹¹ Nick Cook. (2016, April). *Different methods of dispute resolution in construction disputes*. Retrieved from <https://www.gdlaw.co.uk/site/blog/sectors-blog/construction-blog/different-methods-of-dispute-resolution-in-construction-disputes>

¹² Designing Buildings Wiki. (2018, August). *Adjudication in construction contracts*. Retrieved from https://www.designingbuildings.co.uk/wiki/Adjudication_in_construction_contracts

¹³ Resolution Institute. (n.d.). *What is Expert Determination?* Retrieved from <https://www.resolution.institute/dispute-resolution/expert-determination>

¹⁴ Hannah Langworth. (n.d.). *Litigation and dispute resolution law*. Retrieved from <http://thegatewayonline.com/law/types-of-work/slaughter-and-may-litigation-and-dispute-resolution-law>

¹⁵ Nick Cook. (2016, April). *Different methods of dispute resolution in construction disputes*. Retrieved from <https://www.gdlaw.co.uk/site/blog/sectors-blog/construction-blog/different-methods-of-dispute-resolution-in-construction-disputes>

¹⁶ Leonard M. Kessler. (2017, September). *Using Mediation to Resolve Construction Disputes*. Retrieved from <https://www.lexisnexis.com/lexis-practice-advisor/the-journal/b/lpa/archive/2017/09/27/using-mediation-to-resolve-construction-disputes.aspx>

this process, the mediator will only facilitate discussions between parties and won't give an opinion. Mediators are commonly expert in disputes.

5) Arbitration¹⁷ is a confidential process, like mediation, and involves a third party, the arbitrator. His role is to resolve the dispute “on the basis of materials facts, documents and relevant principles of law”.¹⁸

6) Conciliation “is an alternative out-of-court dispute resolution instrument.”¹⁹ It is almost the same process as mediation but the third party has a more important role by advising.

We will have a look at specific attributes that will allow us to assess each of the alternative resolution dispute in order to analyze them quantitatively. We have chosen the most relevant attributes regarding our topic and our attributes. The said attributes are the following.

Enforceability²⁰: This attribute aims at assessing the final result of the alternative resolution. A powerful decision made thanks to an alternative won't need to have a cumulative recourse.

Time duration²¹: This attribute has been chosen to assess the duration of the resolution. Whether a resolution has a low duration, the contractors won't lose more time on the project.

Confidentiality²²: Confidentiality aims at evaluating whether the resolution is made secretly between the two contractors (and maybe with a third party) or the dispute is disclosed.

¹⁷ Jason T.Strickland. (2018, August). *Construction Arbitration: The Pros and Cons*. Retrieved from <http://www.wardandsmith.com/articles/construction-arbitration-vs-lawsuits>

¹⁸ Nick Cook. (2016, April). *Different methods of dispute resolution in construction disputes*. Retrieved from <https://www.gdlaw.co.uk/site/blog/sectors-blog/construction-blog/different-methods-of-dispute-resolution-in-construction-disputes>

¹⁹ Dispute Resoution Hamburg.com. (n.d.). *What is conciliation?* Retrieved from <http://www.dispute-resolution-hamburg.com/conciliation/what-is-conciliation/>

²⁰ Abigail Mc.Gregor. (2009, September). *Enforceability of dispute resolution clauses – agreements to negotiate in good faith*. Retrieved from <https://www.lexology.com/library/detail.aspx?g=377e958a-d70d-43f6-a038-23c0b1aa1af6>

²¹ The University of Melbourne, RMIT University. (n.d.). *Factors which impact upon the selection of Dispute Resolution methods for commercial construction in the Melbourne industry: Comparison of the Dispute Review Board with other Alternative Dispute Resolution methods*. Retrieved from http://www.irbnet.de/daten/iconda/CIB_DC24501.pdf

²² Justice Duncan Kerr. (2014, April). *Confidentiality in ADR Processes*. Retrieved from <http://www.aat.gov.au/steps-in-a-review/alternative-dispute-resolution/confidentiality-in-adr-processes>

Preservation of relationships²³: This attribute will help to know whether the ADR (alternative dispute resolution) would allow contractors to contract together again through or whether it would be impossible for constructors to trust each other.

Cost²⁴: Finally, this last attribute has been chosen to understand whether the ADR will demand a high amount of money to resolve the dispute or not.

Flexibility: “The dispute process is handled and resolved through an ADR agreement in which the parties choose the ADR method, agree on the degree of confidentiality in the process, outline the specific steps of the process, and establish time periods for each step.”²⁵

Degree of control: “When parties feel in control of the outcome and processes involved to reach an agreement, it will also mitigate the adversarial climate between disputing parties”.²⁶

Outcome: It refers to the final situation between parties after the use of the ADR implemented. “The outcome of a construction dispute is usually related to the costs liability. The party which initiates the dispute feels that the other party owe costs for reasons such as variation of payments, quality of workmanship, and final payments or owes compensation costs due to factors such as delay of works, payment for the extension of time and liquidated damages.”²⁷

Complexity²⁸: This attribute refers to the ease or the complexity of the ADR’s implementation.

²³ The University of Melbourne, RMIT University. (n.d.). *Factors which impact upon the selection of Dispute Resolution methods for commercial construction in the Melbourne industry: Comparison of the Dispute Review Board with other Alternative Dispute Resolution methods*. Retrieved from http://www.irbnet.de/daten/iconda/CIB_DC24501.pdf

²⁴ B. Deffains, D. Demougin and C. Desrieux. (2015, September). ADR versus Litigation: A Cost Paradox. Retrieved from <https://www.uvic.ca/socialsciences/economics/assets/docs/seminars/Demougin%20paper.pdf>

²⁵ Agency for dispute resolution (n.d.). *WHAT ARE THE UNIQUE CHARACTERISTICS OF ADR PROCESSES?* Retrieved from <http://www.agencydr.com/faq/alternative-dispute-resolution-qa/what-are-the-unique-characteristics-of-adr-processes.html>

²⁶ The University of Melbourne, RMIT University. (n.d.). *Factors which impact upon the selection of Dispute Resolution methods for commercial construction in the Melbourne industry: Comparison of the Dispute Review Board with other Alternative Dispute Resolution methods*. Retrieved from http://www.irbnet.de/daten/iconda/CIB_DC24501.pdf

²⁷ Idem

²⁸ Denis Ilter and Attila Dikbas. (n.d.). *THE USE OF KEY ATTRIBUTES IN ALTERNATIVE DISPUTE RESOLUTION (ADR) PROCESS DESIGN*. Retrieved from http://www.arcom.ac.uk/-docs/proceedings/ar2008-455-464_Ilter_and_Dikbas.pdf

Voluntariness²⁹: It suggests whether both parties agreed on the chosen ADR or not. Voluntariness involves parties to find a resolution and not staying in a dead-end situation.

STEP 3

Each resolution has its own advantage and disadvantage. During the following analyze, every method will be compared to one another. To evaluate and rank these 5 attributes we are going to use a non-compensatory model based on a disjunctive reasoning. This method allows us to understand which attributes are the most important. "...give a score of 1 to the winning option and a score of 0 to the losing option".³⁰

Non-compensatory model										
Attributes	Voluntariness	Complexity	Outcome	Degree of control	Flexibility	Cost	Preservation of relationships	Confidentiality	Time duration	Enforceability
Enforceability	1	0	0	1	1	0	1	1	0	1
Time duration	1	1	1	1	1	0	1	1	1	1
Confidentiality	1	1	0	1	1	0	1	1	0	0
Preservation of relationships	0	0	0	0	1	0	1	0	0	0
Cost	1	1	1	1	1	1	1	1	1	1
Flexibility	0	0	0	0	1	0	0	0	0	0
Degree of control	1	0	0	1	1	0	1	0	0	0
Outcome	1	1	1	1	1	0	1	1	0	1
Complexity	1	1	0	1	1	0	1	0	0	1
Voluntariness	1	0	0	0	1	0	1	0	0	0

Figure 2: Non-compensatory model³¹

With this assessment method, we can notice that the most important attributes are the **cost** of the alternative dispute resolution used. Then, the second most important one is the time duration. Moreover, it continues with the outcome, the confidentiality, and enforceability. Finally, the less important attributes are the preservation of relationships and flexibility even if it seems to be really important in such an industry.

STEP 4

Now, we are going to make a multi-attribute decision-making model based on a qualitative analysis. This model will compare our attributes to the alternative dispute resolution found in

²⁹ Idem

³⁰ Sullivan, Wickes & Kroelling (2014) [Engineering Economics](http://www.planningplanet.com/guild/gpccar/managing-change-the-owners-perspective) 15th Edition Using the approach. Retrieved from: <http://www.planningplanet.com/guild/gpccar/managing-change-the-owners-perspective>

³¹ Made by the author based on the work of Sullivan, Wickes, and Kroelling.

step 1. It will emphasize the best alternative. The model is made thanks to 3 distinct colors.

The green means good, yellow means medium and finally, red means bad.

Multi-attribute decision making						
Attributes / ADR	Adjudication	Expert Determination	Mediation	Arbitration	Litigation	Conciliation
Enforceability	Strong	Weak	Weak		Strong	Weak
Time duration	Quick	Quick	Quick	Quick	Slow	Quick
Confidentiality	Medium	Medium	High	High	Low	High
Preservation of relationships	Medium	Medium	Strong	Medium	Weak	Strong
Cost	Medium	Low	Low	Expensive	Expensive	Low
Flexibility	Medium	Medium	High	Low	Low	High
Degree of control	Low	High	High	Medium	Low	High
Outcome	Medium	High	High	Medium	Low	High
Complexity	Low	Low	Low	Low	High	Low
Voluntariness	High	High	High	High	Low	High

Figure 3: Multi-attribute decision-making model³²

Now, we are going to assess the weight of each attribute.

Matrix Analysis						
Attributes / ADR	Adjudication	Expert Determination	Mediation	Arbitration	Litigation	Conciliation
Enforceability	1	0	0	0,5	1	0
Time duration	1	1	1	1	0	1
Confidentiality	0,5	0,5	1	1	0	1
Preservation of relationships	0,2	0,3	1	0,5	0	1
Cost	0,5	1	1	0	0	1
Flexibility	0,5	0,5	1	0	0	1
Degree of control	0	1	1	0,5	0	1
Outcome	0,5	1	1	0,5	0	1
Complexity	1	1	1	1	0	1
Voluntariness	1	1	1	1	0	1
Totals	6,2	7,3	9	6	1	9

Figure 4: Matrix analysis and ordinal ranking³³

³² By the author

³³ By the author

Looking at the Matrix analysis, we can notice that a ranking order starts to be highlighted. The minimum acceptable level is ADR with maximum one red attributes and at least three green one in our matrix. The preferred resolution seems to be the Mediation and Conciliation, which are at the same level, and then the Expert determination. Arbitration and Adjudication are also resolutions that are necessary to be taken into account according to our matrix analysis. The less efficient resolution, in our case, seems to be the Litigation resolution as it has more red than green and with its total of only 1 point. Indeed, this alternative can be excluded from our analysis as the minimum acceptable level is not respected.

FINDINGS

STEP 5

In step 3 and 4 we have put into practice a decision-making process. For summarizing this process we are going to use an additive weighting technique³⁴ that will allow us to rank the alternatives dispute resolution. For ranking them, the weight of our alternatives will be compared to the weight of the specific attributes. Each attribute will be taken into account except for the Litigation alternative that wasn't relevant enough according to the former's assessment we have done so far.

	STEP 1	STEP 2	Adjudication		Expert Determination		Mediation		Arbitration		Conciliation	
	Relative ranking	Normalized weight A	B	A*B	C	A*C	D	A*D	E	A*E	F	A*F
Enforceability	5	0,5	1	0,5	0	0	0	0	0,5	0,25	0	0
Time duration	8	0,8	1	0,8	1	0,8	1	0,8	1	0,8	1	0,8
Confidentiality	5	0,5	0,5	0,25	0,5	0,25	1	0,5	1	0,5	1	0,5
Preservation of relationships	1	0,1	0,2	0,02	0,3	0,03	1	0,1	0,5	0,05	1	0,1
Cost	9	0,9	0,5	0,45	1	0,9	1	0,9	0	0	1	0,9
Flexibility	0	0	0,5	0	1	0	1	0	0	0	1	0
Degree of control	3	0,3	0	0	1	0,3	1	0,3	0,5	0,15	1	0,3
Outcome	7	0,7	0,5	0,35	1	0,7	1	0,7	0,5	0,35	1	0,7
Complexity	5	0,5	1	0,5	1	0,5	1	0,5	1	0,5	1	0,5
Voluntariness	2	0,2	1	0,2	1	0,2	1	0,2	1	0,2	1	0,2
Total	45	4,5		3,07		3,68		4		2,8		4

Figure 5: Additive weighting technique model³⁵

Thus, this method confirms that Mediation and Conciliation are the first ranked alternative dispute resolution as we saw it in step 4. They have an equal score of 4. Moreover, with the additive weighting technique Adjudication has still more points than Arbitration. Thus, Expert determination reached a score of 3,68 points and is the second-ranked alternative preceded by Mediation and Conciliation. Finally, Arbitration's score is quite low compared to the other alternatives dispute resolution (2,8).

³⁴ Sullivan, Wickes & Kroelling (2014) [Engineering Economics](http://www.planningplanet.com/guild/gpccar/managing-change-the-owners-perspective) 15th. Adaptation from planning planet. Retrieved from: <http://www.planningplanet.com/guild/gpccar/managing-change-the-owners-perspective>

³⁵ By the author

STEP 6

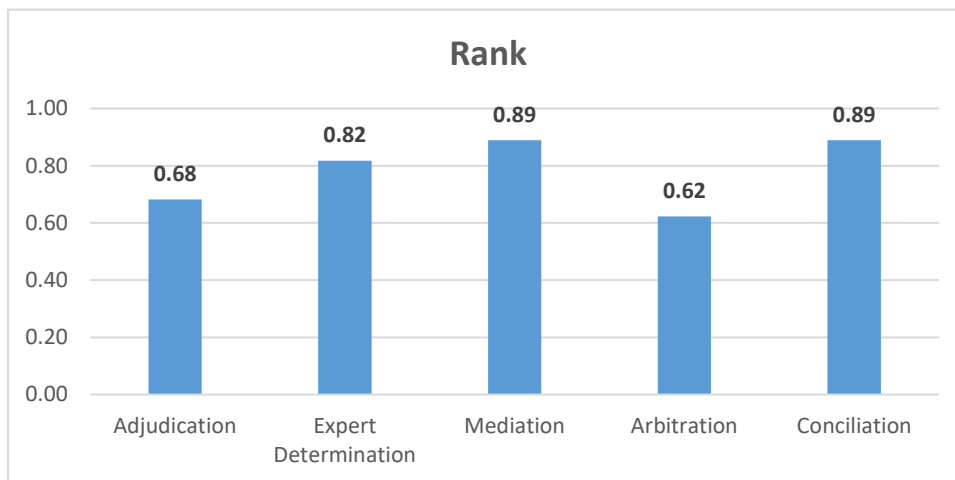


Figure 6: Alternatives rank graph³⁶

By using this alternative rank graph and the whole study made in step 5 we have decided to consider every alternative even if the Arbitration's score is quite low because this alternative “like mediation is a confidential process, a quick process compared to court proceedings and highly flexible.”³⁷ It is obviously an alternative to consider when discussing ADR.

Thus, the best alternatives dispute resolutions are Mediation and Conciliation because it is globally the same process. Then, Expert determination will be considered a really important and efficient alternative dispute resolution. Finally, Adjudication and Arbitration are respectively the less efficient ones.

The Mediation alternative is a better choice by 130,29% compared to Adjudication ($4/3,07 \times 100$), by 108,7% compared to Expert determination ($4/3,68 \times 100$), and finally by 142,86% compared to Arbitration ($4/2,8 \times 100$). Conciliation will be a better choice at the same level as Mediation as they both obtained a score of 4 points.

Thus, Mediation in which “the parties to a lawsuit meet with a neutral third-party in an effort to settle the case”³⁸ and Conciliation which “tries to individualize the optimal solution and direct

³⁶ By the author

³⁷ Nick Cook. (2016, April). *Different methods of dispute resolution in construction disputes*. Retrieved from <https://www.gdlaw.co.uk/site/blog/sectors-blog/construction-blog/different-methods-of-dispute-resolution-in-construction-disputes>

³⁸ HG.org. (n.d.). What is Mediation Law? Retrieved from <https://www.hg.org/mediation-definition.html>

parties towards a satisfactory common agreement”³⁹ are the best alternatives dispute resolution thanks to many aspects. Indeed, they suggest saving money because these processes are totally free, saving time because it “usually lasts 1 or 2 days”⁴⁰ and also saving relationships between parties thanks to neutral third parties that will only facilitate discussions, and also the good faith of parties that want to commonly resolve the dispute. The difference between these two best solutions is that “In conciliation, the conciliator plays a relatively direct role in the actual resolution of a dispute and even advises the parties on certain solutions by making proposals for settlement.”⁴¹ Whether we focused deeply in these two best alternatives we could discover that Mediation seems to offer more freedom to parties but in Conciliation, the third party, even if he's considered as neutral, proposes the term of the settlement of the solution. Which alternative could be more relevant to construction contract? “Conciliation is a method employed in civil law countries, like Italy, and is a more common concept there than is mediation.”⁴² According to this quotation, we will consider Mediation as more relevant and more common in the construction industry as many projects in this industry are huge and complex, parties are expert and highly skilled. Thus, they don't necessarily need an expert that will set the term of settlement. Even if, Mediation and Conciliation are both the best solution to resolve a dispute, Mediation will be considered as the best on considering disputes in construction contracts.

STEP 7

After this sixth step and the fact that we finally know the best alternatives dispute resolution which is Mediation, we can now make a Pareto analysis to explain and highlight the effect of Mediation on the impacts of disputes resulting from a dispute in construction contracts. “A Pareto analysis helps prioritize decisions so leaders know which ones will have the greatest influence on their overall goals and which ones will have the least amount of impact.”⁴³

³⁹ Alessandra Sgubini, Mara Prieditis, and Andrea Marighetto. (2004, August). Arbitration, Mediation, and Conciliation: differences and similarities from an International and Italian business perspective. Retrieved from <https://www.mediate.com/articles/sgubinia2.cfm>

⁴⁰ Nick Cook. (2016, April). *Different methods of dispute resolution in construction disputes*. Retrieved from <https://www.gdlaw.co.uk/site/blog/sectors-blog/construction-blog/different-methods-of-dispute-resolution-in-construction-disputes>

⁴¹ Alessandra Sgubini, Mara Prieditis, and Andrea Marighetto. (2004, August). Arbitration, Mediation, and Conciliation: differences and similarities from an International and Italian business perspective. Retrieved from <https://www.mediate.com/articles/sgubinia2.cfm>

⁴² Idem

⁴³ Chad Brooks (2014, March). What Is a Pareto Analysis? Retrieved from <https://www.businessnewsdaily.com/6154-pareto-analysis.html>

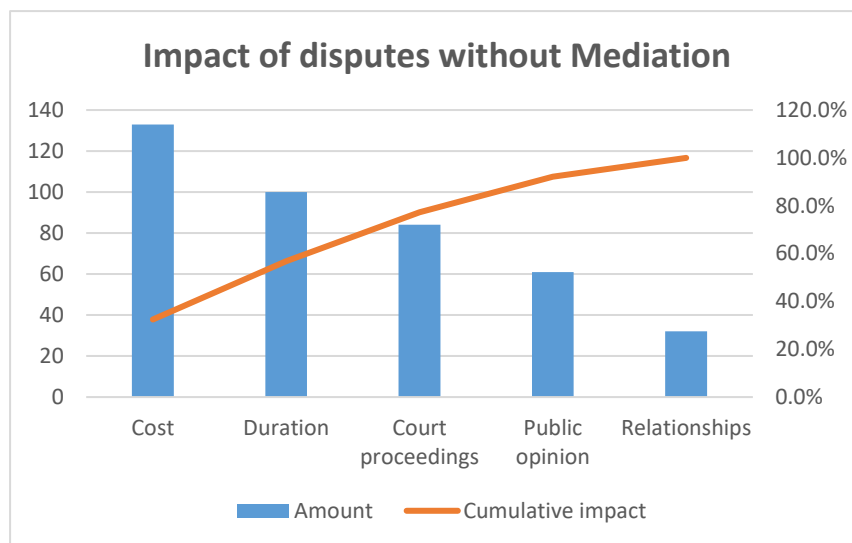


Figure 7: Graph of Impact of disputes without Mediation⁴⁴

Thanks to this graph we can notice that the cost and time duration are highly impacted when Mediation isn't considered concerning dispute resolution in construction contracts. Then, the implementation of court proceedings is also impacted into lesser proportions.

We can, now, ask ourselves, how will disputes be impacted with Mediation?

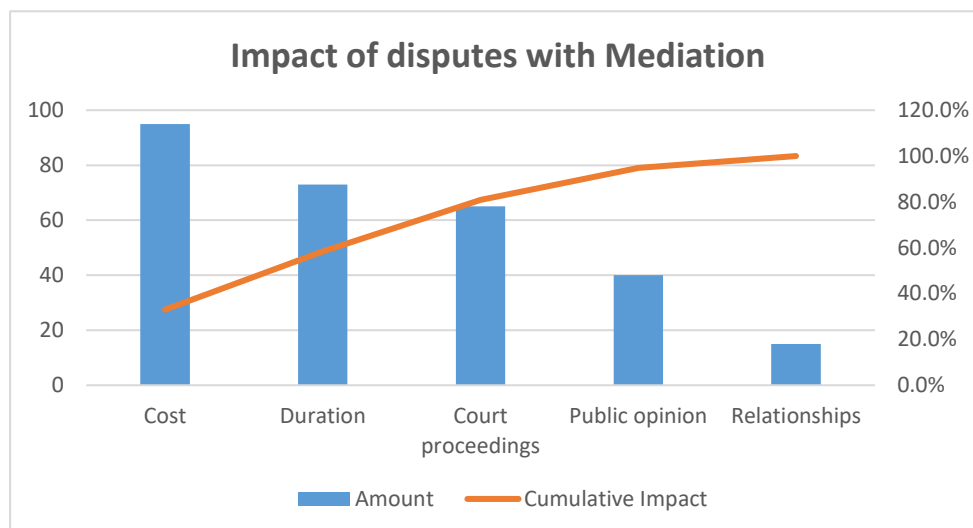


Figure 8: Graph of Impact of disputes with Mediation⁴⁵

We can finally notice that the impact of disputes on cost, duration and the implementation of

⁴⁴ By the author

⁴⁵ By the author

court proceedings are much less significant. Entering in constructive discussions thanks to the Mediator improve and facilitate the resolution of a dispute concerning construction contract.

CONCLUSION

This paper initially aimed at understanding the different reasons for disputes in construction contracts and more precisely the most common ones. Moreover, we focused on potential resolutions of disputes (ADR).

All along this paper, we have emphasized, explained and assessed alternative disputes resolution (ADR). Those current alternatives are Mediation, Conciliation, Arbitration, Litigation, Expert determination, and Adjudication. We discovered, after specific assessment and studies that Litigation was not efficient enough to be considered during the entire analysis. Then, we decided to delete this alternative from our study to keep and analyze the best alternatives disputes resolution. Nevertheless, the choice of each alternative depends on the type of dispute, its cause, its state and also the will of resolving the dispute efficiently. As the result of our whole analysis, we can suggest Mediation and Conciliation as the best alternatives resolution dispute thanks to their preservation of relationship, their confidentiality, their time and money saving aspect and their outcome. We finally decided that Mediation was more relevant regarding our focused industry, construction. Conciliation is, nevertheless, an alternative to know, understand, consider and to set if parties want a third party that will propose terms and not only guides parties to make them find their own solution. However, in some cases, parties can't enter in Mediation because of the involvement state of each party but also the current relationship between them. "Contracts as a whole are combative in nature between client and main contractor, main contractor and subcontractor, main contractor and supplier etc with everyone using clauses against each other to try and avoid payment in 1000's of different scenarios. There are very few cooperation clauses, mutual benefit, performance bonus clauses etc in any contract which would make life much easier for construction people as then we might be able to work together for the good of a project."⁴⁶

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Quentin Duchaussoy is a PGE Student at SKEMA Business School currently in Msc Project Management and Program Management and Business Development in Lille, France. He has a strong background in Business development and in Project Management. In 2016, with four partners, they created and launched a website and a smartphone application which localize all places that would interest students from Amiens (France). This project was launched during his two-year degree in Sales Technic at the University of Picardie Jules Verne in Amiens. He integrated SKEMA Business School in September 2016 and will start an internship in January 2019 at Telys as an Internal Project Manager. He is deeply interested by Project Management since he launched *Guid'Am* and fulfilled numerous projects. He is currently working on the PRINCE 2 and AGILE PM certifications for this semester.

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