

## THE POTENTIAL OF DAOS IN DISPUTE RESOLUTION AND ARBITRATION

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Sakshi Agarwal\*

### ABSTRACT

Nowadays blockchain assistant technology is trendier in use due to its reliability and trust worthless. It is the most significant development in the tech industry and many are of the view that blockchain has an unlimited potential in its development which is True to an extent. Despite turbulence in the crypto world tech development is always on the search to develop a more profitable segment using the blockchain process.<sup>1</sup> One relatively new blockchain application is an emerging form of alternative Dispute Resolution(ADR) which is commonly known as Decentralised Dispute Resolution (DDR). DDR is a method where the dispute between parties is resolved using blockchain assistant technology and a decentralised decision maker, which is exactly opposite to a centralised dispute resolution system. This innovation will help the private parties to resolve the dispute using smart contracts.<sup>2</sup> Broadly, some view that DRR will provide an attractive substitute for typical types of dispute resolution which include private arbitration, traditional court litigation cases, etc.<sup>3</sup>

**Keywords:** Decentralised Autonomous Organisation (DAO), Arbitration, Dispute Resolution.

### INTRODUCTION

Blockchain, Cryptocurrency, Smart Contracts, and DAOs these all terminologies that are trendier in the news and that too for good reason.<sup>4</sup> These technologies have a very high potential to change the society for transacting business.<sup>5</sup>

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\*LLM, SECOND YEAR, MUMBAI UNIVERSITY.

<sup>1</sup>(Mark Cianci, n.d.)

Mark Cianci, A. J. L. V. W. a. J. I. R. & G., n.d. *bloomberglaw.com*. [Online]

Available at: <https://www.bloomberglaw.com/external/document/XA9GE5VS000000/litigation-professional-perspective-benefits-risks-of-decentrali>  
[Accessed 16 May 2023].

<sup>2</sup>*Ibid*

<sup>3</sup>*Ibid*

<sup>4</sup>(Minn, 2020)

Minn, K. T., 2020. *jipel.law.nyu.edu*. [Online] Available at: <https://jipel.law.nyu.edu/vol-9-no-1-5-minn/>  
[Accessed 16 May 2023].

<sup>5</sup>*Ibid*

## Blockchains

The Blockchain in Layman's Terms is a ledger that is kept updated in case any transaction in the process changes or takes place. In technical term, we can say that it is an online ledger that authenticates and keep all the records of a particular transaction intact. All the ledgers which are attached in the process get updated and are aware of any transaction that takes place in the chain. The ledger is placed in a chain so the transaction is in the form of a blockchain. But instead of having a server or one point of recording the transaction is distributed between various machines or blocks which are there with every party that are part of the transaction. The network storing the data is distributed and each point in the network is known as a 'node'.

## DAOs

A Blockchain can be used to record each transaction or instance that changes the digital assets changing hands. This is used to keep track of the chain of ownership of the unique assets which are used as a non-fungible token. It is also used to track digital assets movement and its ownership which in real can be fungible currency but can be kept in digital currency as well. The same Blockchain system can be used to record the vote of the individual for the business transaction. When such an entity is made where the owner is unknown to each other but each is known about every single transaction that affects the chain in the system is known as a decentralised Autonomous Organisation.<sup>6</sup>

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## Smart Contracts

Smart Contracts are computer programs that are so programmed that they automatically executed many functions as instructed in the programs. There are also instructions for the occurrence of a function as per pre-defined specific conditions.<sup>7</sup> Smart Contracts enable the business to carry out many legal agreements just with a click that too without relying on human and without any human intervention which eliminate the risks that are associated with trusting people on human for mistake or fraud or misrepresentation caused by them in a

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<sup>6</sup>(Mark Cianci, n.d.)

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[Accessed 16 May 2023].

<sup>7</sup>*Ibid*

particular contract or agreement.<sup>8</sup>Due to this quality of Smart Contract, there are also known as “Trustless Systems.”<sup>9</sup>

### **The Need for Dispute Resolution by Neutral Third Parties in DAOs**

Economic Literature predicts that the DAO’s self-governance would be broken down even if they are well equipped with superior code and are free from any type of flock. There would be situations where the DAOs will also end up with disputes in the process between the parties in the chain even though they don’t know each other. To resolve the dispute that is caused in the DAOs would be easily and practically should be solved by a third Neutral Person. So, there would arise the need for a neutral third party to solve the dispute in such DAOs. But such Dispute resolution should also be another set of ledgers or Blockchains that will help them solve the Dispute without any human interference or influence by any parties to dispute to the neutral person.<sup>10</sup>

### **Advantages of DDR**

The advantages of Decentralised Dispute Resolution may vary as the advantages will depend upon how robust or superior codes are used to design the structure that is used in DDR. There would be a first approach that is just another way to resolve disputes instead of using the traditional forms of dispute resolution. The model will involve the structure for forming a panel of arbitrators or mediators and selecting the arbitrator according to their knowledge of relevance for the case based on their experiences through a secured digital token without any involvement of humans in it. After both the parties to the dispute are given proper opportunities to be heard on their part of the case without any misguidance or influence of any person on the arbitrator. After all this, the decision also known as an arbitration award to be reached to each party with a secured digital platform without any human intervention in between.<sup>11</sup>

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<sup>8</sup>*Ibid*

<sup>9</sup>*Ibid*

<sup>10</sup>(Minn, 2020)Minn, K. T., 2020. *jipel.law.nyu.edu*. [Online] Available at: <https://jipel.law.nyu.edu/vol-9-no-1-5-minn/>[Accessed 16 May 2023].

<sup>11</sup>(Mark Cianci, n.d.)

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The Code is to be designed so that the decision is executed in a very proper manner and no loophole in the program can be misled by any of the parties to the dispute. For the above process, a proper smart contract needs to be executed which will help the DDR to work effectively as the success of DDR would result in advantages to many of the Dispute resolution methods.<sup>12</sup>The implication of DDR would also result in quick resolution of the matters that are pending for years and even arbitrator is adopted then too the matters are pending for months to go which can be solved within weeks with the help of DDR.<sup>13</sup>

Another approach suggested that the DDR would be formulated into altogether a new method for the dispute resolution process with the new guideline, which will have the basis of the traditional dispute resolution structure as a base. Because the ultimate goal of every dispute resolution method is that the dispute should be resolved at the earliest.<sup>14</sup>The Decentralised method helps to gather large numbers of users all at once for collective decision-making of the matters or collection of matters which can be done simultaneously without any human intervention.<sup>15</sup>The method will be very useful in the case of DAOs as they have a very large number of users and the involvement of all is necessary in the matter if any dispute arises in a DAOs.<sup>16</sup>Some of the DAOs and people are of the view that systems like DDR would be an alternative dispute resolution method and would enable the user to solve the dispute more informally and comfortably with the ease of the parties involved in the dispute.<sup>17</sup>As it would be widely distributed as compared to the traditional Jury method and normal arbitration method also.<sup>18</sup>These so-called “trustless” systems—i.e., systems that do not rely on trust in humans or their judgment—are enjoying considerable popularity in certain circles within the tech community.<sup>19</sup>

### **Disadvantages of DDR**

There can arise several challenges in the implementation of a DDR. As the idea provides a very wide range of benefits which if implemented will result in a very easy and quick resolution method but the method is still imaginary and many issues can arise while

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<sup>12</sup>*Ibid*

<sup>13</sup>*Ibid*

<sup>14</sup>*Ibid*

<sup>15</sup>*Ibid*

<sup>16</sup>*Ibid*

<sup>17</sup>*Ibid*

<sup>18</sup>*Ibid*

<sup>19</sup>*Ibid*

implementing the same.<sup>20</sup> There should be programs that need to be constantly in touch with people who are well equipped with the dispute resolution technique and shall update all the shortcomings of the DDR on a go basis. The development of an infirm method will take many rounds of iterations for proper implementation and design to work the system as per the design or as imagined.<sup>21</sup> Some of the challenges that would involve would be that the award if passed as per the programmed smart contract would not be suitable in cases where private ordering needs to be done after analysis of the needs of the parties to the dispute.<sup>22</sup> For example, parties would involve a clause in the agreement that in case of dispute the dispute would be resolved by taking into account the national and international or state laws governing the contract and proper judgment would be passed accordingly for which we need to program the above all the provision relating to a contract into the DDR which at the time will become impracticable.<sup>23</sup>

Other issues would involve the technology and behavioural hurdles that are yet to be overcome by many of the programs designed with new technologies.<sup>24</sup> The process of forming such a type of DDR would involve a large amount of funds to be invested but the result of the same is still uncertain and the percentage of people using such a method or relying for resolution on such a system is also less at present which will involve a huge loss to its formulated without any insight of future and blocking a huge amount of funds in the system.<sup>25</sup>

### **Voter Selection**

The major issue will also involve knowing that the decision maker in the process is qualified for the resolution and are also interested in the empanelment. A DDR should formulate a system that empanels the interested and qualified arbitrator or mediator into the system and should select the poll or method that will ensure the voter selects the arbitrator for their matter without any human interference.<sup>26</sup> The voter should be handpicked from a large population that should be a random person having a piece of expertise and knowledge in the given field but should not be related to parties to the dispute. The selection of the arbitrator

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<sup>20</sup>*Ibid*

<sup>21</sup>*Ibid*

<sup>22</sup>*Ibid*

<sup>23</sup>*Ibid*

<sup>24</sup>*Ibid*

<sup>25</sup>*Ibid*

<sup>26</sup>*Ibid*

should be from the such voter for a said matter as it will ensure the correct person is handing over the case for resolution and the decision would be as per the notified law in force.<sup>27</sup>

### **Enforcement**

The biggest question is the enforcement of the DDR Decision. How one can be sure that the parties to the dispute abide by the decision given by a DDR? For this, a well-defined system should be made as the decision are taken by a smart contract. For example, if the award is passed for a particular sum to be given by one party to the dispute to another then such an amount should automatically be deducted from the account linked with a such smart contract before the case registration on the portal of such resolution system and should be transferred to an escrow account and should be finally awarded to the person as per the award passed by the DDR.<sup>28</sup>

### **Voter Reliability**

The most haunting challenge in the system is that the decision and the whole of the system are based on the reliability of the voter decision. But one can ask what is a percentage of guarantee that the person selected by the voter is proper for a said dispute resolution?? The answer relies on the reliability that one can put forth on the voter.<sup>29</sup> They need to ensure that the person taking part in the process should be impartial and indifferent and have a piece of expertise and knowledge in the relevant field for the selection of the neutral person.<sup>30</sup>

### **Security**

The DDR should provide the voter with anonymity status as the parties to the dispute are unaware as to whom has chosen the neutral person for their dispute. Even after such a system the Decentralised system will lack security to some extent and would also lack the incorporation of all the provisions of laws for the proper functioning of the system and decisions to be taken.<sup>31</sup>

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<sup>27</sup>*Ibid*

<sup>28</sup>*Ibid*

<sup>29</sup>*Ibid*

<sup>30</sup>*Ibid*

<sup>31</sup>*Ibid*

## Trustless Technology

Even though the system is said to be trustless technology for dispute resolution it cannot remove human interference entirely. The selection of a neutral person and to decision taken by the neutral person all involve the involvement of a human. So there would be some extent of human interference in the system and there would be so trustless technology as used in DAos.<sup>32</sup>

## CONCLUSION

From the discussion, we can conclude that the DAOs need a Dispute resolution system. It would be a very great contribution to the technology of the people if such DDR is developed. But the incorporation of the system will require a huge amount of funds and will face many challenges for its implementation. But once implemented and used by the person then it would be easy, and quick for any person to get their dispute resolved within weeks which needs years in today's world to get resolved.



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<sup>32</sup>*Ibid*