Blind Arbitration

Proposal for Anonymous Crowdsourced Online Arbitration

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Abstract .

Shifting the academic discourse from general term of ODR to more specific modalities like online arbitration is a clear sign of research advancements in the area of online dispute resolution. In this paper we explore the online arbitration in relation to crowdsourcing trends. The goal of this paper is to present new approach to online arbitration, based on several different priniciples and technologies. The proposal of anonymous/ privacy preserving online arbitration or "blind arbitration" is built upon technologies for online arbitration, crowdsourcing, blind bidding negotiation and founded upon privacy-by-design principles. We aim to propose higher-level of confidentiality, secrecy and privacy preservation along with leveraging "the wisdom of the crowds".

Keywords: Online dispute resolution, ODR, online arbitration, privacy-by-desing, crowdsourced arbitraton, anonymous arbitration, privacy preserving arbitration, blind arbitration, confindentiality,

1 Introduction.

While arbitration, in traditional ADR[1] terms, has been long developed and accepted as a suitable means to resolves conflicts, especially in international business arena, online arbitration[15] has merely embraced online communication as extension of its long established practices with appropriated case management systems and scheduling tools for automation and ease of processes. Full potential of online arbitration, through bigger role of technology still remains to be attained.

Online arbitration compared to traditional ADR approach bears promise of cheaper and efficient proceeding. However, technology also brings new risks to the protection

[1] Alternative dispute resolution

of integrity, confidentiality and security of e-proceedings[15][16]. Almost every arbitration institution guarantees communication security, confidentiality (if agreed), authenticity, and procedural integrity[3]. But even with all safeguards in place, some parties could feel reserved and seek for higher level of confidentiality, privacy or even anonymity.

At the same time we are witnessing the development of new online applications using "crowds" to facilitate faster, cheaper, collective work to respond to the demands of the markets or address some public or private need. Utility of "crowdsourcing"[14] in the field of dispute resolution has only been recently discussed and few initiatives have already emerged. This paper aims to further the discussion by proposing new approach to crowdsourced arbitration which provides with more private or anonymous model of adjudicative dispute resolution.

2 Crowdsourcing in online dispute resolution

The idea of using crowdsourcing for online dispute resolution has started with online juries. Cyberjuries appeared as online version or imitation of traditional juries, where they have similar role in representing values of a community. Marder points to their evolution from opinion polls to online mock juries[9]. Opinion polls model[2] may allow parties to express feeling about dispute without using legal language, anonymously and for free. Anonymity is achieved by representing parties with codes or numbers. Online mock trials are more specialized ODR tools design to give evaluation of the cases, usually used by lawyer for testing their argumentation and strategies before court.

Building on Marder's work, van der Herik and Dimov give more comprehensive overview of crowdsourced online dispute resolution [2] by offering three types: online opinion polls, online mock trials and crowdsourced ODR procedures rendering decisions that are enforced by private authorities. Adapting the ideas of Malone and Dellarocas[8], they also offer four building blocks for crowdsourced online dispute resolution (CODR): The crowd, incentives for motivating the crowd to participate in CODR, types of disputes which can be solved through CODR and CODR procedure.

Van der Herik and Dimov, display EBay's Community Court as most prominent example (up to now) of crowdsourced ODR procedures rendering decisions that are enforced by private authorities. It has been built to deal with negative review disputes between buyers and sellers on EBay. EBay's Community Court[13] had fairly straightforward procedure: after submissions from buyer and seller, a case is put before randomly selected panel of jurors. Jurors were experienced EBay community members fulfilling certain criteria. Upon reviewing submission, a juror needs to decide with

[2] Examples: iCourthouse (www.i-courthouse.com) SideTaker (www.sidetaker.com), People'sCourtRaw(www.peoplescourtraw.com), Truveli (www.truveli.org).

which party he/she agrees or feels that cannot make decision. Each case is reviewed by 21 jurors, on a voluntary basis. Rule and Nagarajan explained the motivation of jurors as a sense of service to the community. This system allowed fast resolution and private enforcement within EBay market.

3 Do we need privacy in online conflict resolution?

Since data about disputes could be sensitive, informational privacy[12] is of highest importance to the ODR system designers. However, as opposed to face-to-face ADR where we can trust that no information is being recorded, online interaction always leaves a trail. It is even more difficult to control or enforce professional and ethical standards of arbitrators in online arbitration. What the online arbitrator is doing with sensitive data and who can physically access his computer are just some of the issues that make parties question the integrity and security of online arbitration.

On the other hand, since dispute involve more than one party, sociologists[1] have identified three phases in the dispute: "naming" (internally recognizing that one has been harmed), "blaming" (confronting the wrongdoer) and "claiming" (pursuing legal remedies). Blaming and claiming are in front of the third party or public. Orna Rabinovich-Einy suggests that the more public a dispute, the less control over the information regarding the dispute the parties have, and, accordingly, the less room there is for secrecy and anonymity[12].

EBay's Community Court was not designed to maintain secrecy, but to effectively engage crowd in scrutinizing inappropriate reviews. Some providers, like iCourthouse, offer anonymity but disclose the facts and submissions of the case, which in the age of Google search could lead to easy discovery of identity. Jurors are also aware of the result of the dispute. In some cases, even the knowledge that dispute exists can lead to bad reputation to a party or a business. Spreading the information about disputes and their trail online can have counter-effect to attracting parties to crowdsourced online dispute resolution.

Hence the question: how can we leverage the wisdom of the crowds, but keep the high level of anonymity of parties and secrecy of the case?

4 "Blind" proposal

We propose "blind arbitration" or privacy preserving arbitration which could be simplified with following formula of principles and technologies that were combined in proposal for the conceptual model:

Blind arbitration = crowdsourced arbitration + arbitration management software + privacy by design[4] + (blind bidding negotiation).

The method for this anonymous crowdsourced arbitration can be described as dividing the integral, bigger text submissions of parties to small questions for arbitrators to answer. The principle idea that is being proposed is anonymous crowdsourced arbitration, through obfuscation of the general picture of dispute by focusing on small tasks or questions. In a way it is putting into practice famous big picture phrase "you can't see the forest for the trees".

In the following figure we illustrate broadly the model:

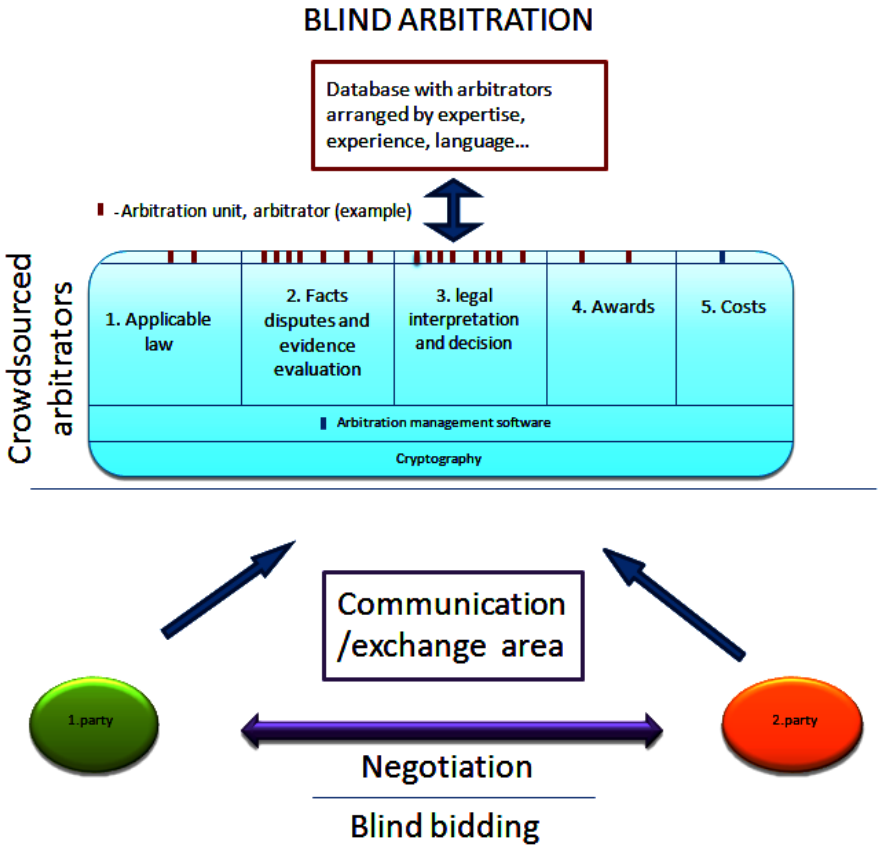

Fig. 1. Illustration of the model of blind arbitration

This proposal assumes that both parties agree to maintain the confidentiality/secrecy of the dispute and that it is in their best interest to keep it private, with as little information to give away about the dispute or about facts related or connected to the parties. Having in mind van der Herik and Dimov's four building blocks for crowdsourced

online dispute resolution[2], we will mostly focus on the fourth block- the CODR procedure. We will give only brief proposals for previous three building blocks.

5 Crowd, incentives and types of disputes in blind arbitration

Arbitrators will be selected by parties or software automatically (if decided by parties or consensus could not be reached) by certain criteria that are most relevant to the dispute, i.e. expertise in certain matter. Preferably, database of arbitrators on a global level should be in place as arbitration will be held online and the location of persons is not relevant.

Most importantly, arbitrators will be informed on need-to-know basis. They will not know who are the parties, what the dispute is about (except the question at their hand), what is the result of the process, are there any other dispute questions posed and the result of those issues. Arbitrators will be chosen to answer only one question and will not be connected to any other issue in the arbitration. This means that the person who deals with question of facts do not know what the dispute is about or what are the legal issues within case, as well as who are other arbitrators. They are all communicating only by online platform ignorant to who are other arbitrators in the database.

We propose incentives to be similar to the model of incentive/payment for microtasks offered at Amazon's Mechanical Turk[3], especially for answering simple questions with right-wrong answers. For more complicated answers with written explanations and reasoning, the payment would correspond to a price previously set by arbitrator (per question).

The range of types of disputes that theoretically could be solved by this method is wide, but for the moment (until fully tested) we would suggest focusing the disputes around single issue. It seems that the most appropriate would be e-commerce disputes or labor/contract disputes about the quality of produced work[4]. However, the model is flexible enough to be extended to more complicated disputes with several issues which could be handled simultaneously or subsequently.

6 The procedure

We will present the concept through three separated phases: confidentially agreement, submission and resolution. The third phase consists of four stages.

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[3] https://www.mturk.com/mturk/

[4] i.e. disputes about the quality of outsourced work/results from the contract concluded on sites like Elance.com, Guru.com, Odesk.com. One party would claim that the work is not done according to the specifications and the other party disagrees

6.1 Phase 1 – confidentiality agreement.

From the beginning we need parties' agreement to this kind of arbitration, specifying it in more formal way, by arbitration agreement that clearly states the will of parties to be the part of the blind arbitration and the commitment to confidentiality agreement among themselves, with specific terms and high penalties in case of breach. If parties do not agree on these terms, the use of this model of arbitration would be rendered pointless since the other party would not care to keep the opposing party's privacy in check.

6.2 Phase 2 – submission of claims.

After registering for the platform, parties will be faced against each other during dispute with open communication channel through any messaging technology. This way they could directly negotiate and in any moment stop or stay the dispute proceeding, in order to have an agreement putting stop to a dispute.

For the same reason, but less revealing, we suggest simultaneous use of blind bidding technology[7][5][6], especially for the possible monetary disputes or about potential award issues. Blind bidding allows parties to hide their willingness to compromise, but to actively engage in blind offering with hope that the opposing party will be willing to compromise close to their offer. If at any moment offers overlap, the arbitration should halt automatically by software intervention.

The communication area should be also open to exchange of arguments of parties, submission of queries and for discovery purposes, but also to post question and submit issues and questions to arbitrators and to receive and respond on communications from arbitrators. However the communication area should not be revealed to arbitrators.

The conceptual model is founded upon idea that every dispute could be dissolved to its parts and disputed issues. We divide possible disputes in 4 general types: applicable law, disputes about facts (and connected to it-evidence evaluation procedure), interpretation of law disputes (about the rights and duties, interpretation of contract…), dispute about (appropriate) awards.

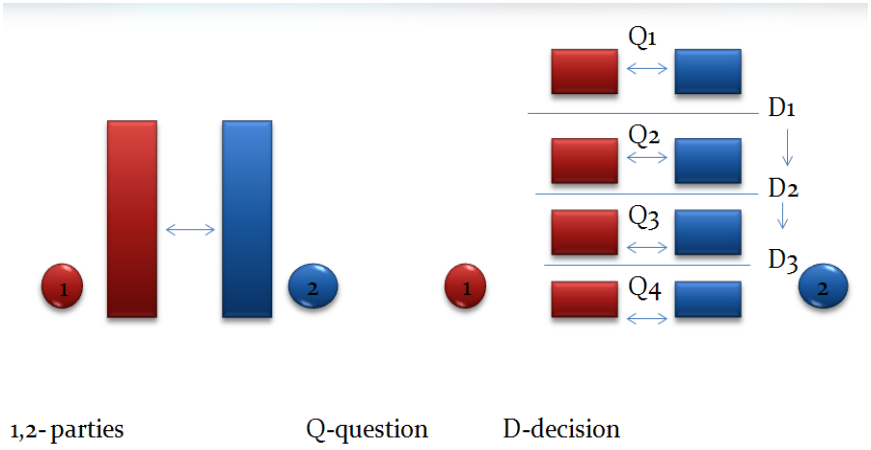

Fig. 2. Dissolution of submissions and argumentation

The electronic (fill-in) form, for posing disputed questions to arbitrators, corresponds to this division and organized in different brackets. When certain aspect is not disputed, it is stated in the bracket for that part of general dispute areas. For example, if applicable law is specified and not disputed by any party, it will be placed in the first bracket and clarified if any other regulation should be consulted.

If facts are not disputed, the recount of relevant facts has to be filled and confirmed by both parties (or just one party gives factual information and other agrees). If one party disputes any part then they are not in agreement and it should be decided by arbitrage. If facts are disputed, the parties will be given opportunity to submit evidence that should be properly anonymised when containing certain information connecting parties to it (if this is not possible because of the nature of the facts, evidence or question we will offer possible solution in later phase). Pictures of persons or any image or information that could identify parties should be scrambled or obfuscated at least.

If a dispute is about legal issues parties should support arguments citing legal references. Parties should be clear about their interpretations and about the legal question that they are submitting to the arbitrage. Arbitrators will not be giving decisions on the whole case at once but on each question separately. The questions, therefore, should be about essential issues and questions should be clear enough.

An award proposal should be clearly stated as well. If rules of procedure (and applicable law considers this lawful) insist that the award can be granted only based on claims of parties, software could by itself recognize and grant an award to a party who wins in dispute, so human involvement could be minimized in this aspect (in last phase).

This phase should be open so both parties can see final statements, claims, arguments of other party as it will be presented to the arbitrators. If they insist on their side of the

story and after at least one party finalizes its claim by pressing the submit option, the software will react by giving reasonable timeframe for other party to finish its argumentation, after which whatever is written in the form will be submitted.

The most important factor of their cooperation will be formulation of their submissions that do not reveal personal information, as previously agreed by their confidentiality agreement. Both parties will clearly state their arguments and ask appropriate question (legal or factual) to arbitrators to resolve a dispute. The whole phase will be structured so the argumentation of the parties could be separated in different brackets, and each bracket will end with specific question for arbitrators (about which there is a misunderstanding). The parties will be advised to formulate (collaboratively) single question for one issue. However, if they disagree on the question, the default question should be posed, appropriate to the stage of dispute. It would be also possible to ask the question in simplest manner: which party is right? If they do not reach consent about questions the default option should be viable so arbitrators could always choose one option. Possibilities of these questions will soon be further explained.

This phase is characterized also by collaboration in discovery phase and in anonymisation of data while submitting claims and questions. Not achieving any of these elements would lead to breach of agreement and parties should resort to some other form of dispute resolution like regular arbitration or judicial process. The agreement will clearly state that in case of an obstruction of any party, or simply by the will of one party, blind arbitration will seize and parties can resort to some other form of dispute resolution.

Submissions of claims and question will be handled by software built upon PET principles and cryptography for assigning either false name to parties or code name or any other type of hiding proper names of parties involved. Parties themselves will control submissions to prevent indirect discovery of their identities or any confidential information.

6.3 Phase 3 – answering questions.

The answering of individual question will be sequenced in stages:

Fig. 3. Sequence of answering questions.

6.3.1. Applicable law.

Applicable law is usually specified in contracts. Nevertheless, the issues sometimes occur and there is a need for clarification, especially in some predispute agreements. It would also be the first question raised in a proceeding both before an arbitration or in a judicial proceeding, therefore it is only natural to be the first answered. Depending on the answer, the following stages will be decided upon. Even for the factual dispute or even more likely in the case of evaluation of evidence, the applicable law could be sometimes essential precondition, especially if some evidences are to be evaluated in connection with certain standards set by specific law. Default question could be: what law should apply to the dispute?

6.3.2. Facts and evaluation of disputed evidence.

A dispute about facts and evidence evaluations is the most problematic since the general idea is to preserve confidentiality/privacy by withholding information about identity or any indirect information that could reveal the same. Arbitrators should give answer to which facts have occurred based on provided evidence or recounts by parties. The difficult question is how to keep an evaluator of facts and evidence in dark about the parties if they are pointing to parties and indicating them clearly.

At any moment at this phase, an arbitrator could pose questions to the parties, which they will answer, always having in mind not to breach confidentiality agreement. However, if there is more than one arbitrator answering the same question, answers of parties should be available to all of them, as it will serve as a basis for their decision.

If it is necessary to have someone's expertise or to attest that certain disputed facts have happened, an arbitrator would be limited to that aspect, not knowing a reason of one's testimony or deciding upon credibility. Arbitrator would not know the context of one's testimony or significance of his/hers decision for the rest of the process.

If facts are particularly revealing of some elements that parties would want to keep hidden there would still be options: the question could be broken down in several different aspects, the question could be misleading to the nature and answer that is sought, there could be possibility to hide certain elements of facts or to replace them with interchangeable things, at the same time together with these facts there could be offered additional false facts… We can imagine that parties offer 4 different set of supporting facts or stories, but only parties and software know accurate version. It would mean that arbitrators should decide on all of them and maybe their involvement would be 4 times higher, but that is again tradeoff between ultimate goal of confidentiality and costs of the process.

We could also imagine the situation where both parties have previously hired their expert to validate their claims. An arbitrator would give opinion based on their expert reports having in mind the reliability of their methods

In the end arbitrator(s) of facts would give the opinion/ answer to a question which would be taken as a ground on which the later phases would be decided, just as the facts were not disputed at all. If in his answer there would be some revealing element for the identity, it would be removed by parties before transitioning into the next stage. If a dispute involves larger number of facts to be verified, it is even easier to imagine involving bigger number of arbitrators to deal with this task simultaneously.

Default question in case of disagreement about question would be: which party's interpretation of facts is correct?

6.3.3. Legal expertise.

Many times facts will be undisputed and the only issues that parties will have is a legal interpretation of some situation. In the stage where different legal interpretations are resolved (if there are any), we emphasize two possibilities in previous phases: first, that there were no disagreements on facts of the case or they have been negotiated and settled upon; second, the disputed facts have been settled by the previous arbitrators and we can proceed with third stage.

The problem here is of similar nature to the previous stage: if the question is too revealing we must find a way for maintain the anonymity. One way would be for parties to ask general legal question based on false facts. Second way would be to break down legal question to the smallest possible unit, where answers could later be assembled into plausible complete legal answer (by award arbitrator). Third way would be, in addition to masking of names and identifiable information, to offer 4 different set of facts of similar but slightly different nature that would make it impossible to know the real facts of the case. Arbitrator would be required to give decision and reasoning on all 4 set of facts, not knowing which could be true.

Default question in case of disagreement would be: whose legal interpretation is correct?

Finally, if many arbitrators are used and give different decisions about same question, they could be compiled into one decision in favor of one party by majority. The party with decisions that have more than 50 percent of votes wins that question/mini case.

6.3.4. Awards.

The parties could specify the key question in one of the phases, where by answering in favor of one party, that party wins automatically the case. If there is more than one key question, they could set odd number of keys questions and agree that the party, whose interpretation is correct in more answers, wins. Previous questions would establish facts and build arguments for answering key question. However, if the parties do not agree about the key question(s), it remains for arbitrators in the last stage to decide

who has won based on question and accepted argumentation of wining parties in previous stage.

If parties agree, they could state that according to the final decision in a case an award is made in accordance with the claim of the winning party(automatically), or they can pose question about which award is appropriate for the dispute.

7 Future research

The aim of the paper is the initial presentation of the idea, with the hopes of stirring further discussion. Even though we tried to answer some question, inevitably there will be a lot more, relating to the legal, technical and economic aspects of such proposal. All of them will be subject of the future research. Some of the questions that instantly come in mind are: what would be the quality of justice offered by this model, what is the quality vs. secrecy relation, what are the average costs of the arbitration… As regard to some concerns about fair trial/hearing or ethical issues, we do not propose this model to be part of predispute mandatory arbitration clause, which could lead to abuse, but merely to serve as a possible tool if need ever occurs. We would argue that it is appropriate for certain disputes[10] therefore the need might occur in some cases.

8 Conclusion

In this paper we state our belief that it is possible to leverage the wisdom of the crowds for more efficient and cheaper dispute resolution but at the same time to keep the dispute a secret. For these reasons we proposed a counterintuitive idea to solve hidden disputes by opening the issues to unknown persons to decide about, but keeping them in "dark" as much as possible.

We have presented initial idea for the conceptual model that provides with certain confidentiality/privacy improvements in crowdsourced arbitration proceedings. Parties themselves will be bind by confidentiality set in the agreement on the start of the process, specifying their commitment to guard privacy of opposing party. To prevent arbitrators in online arbitration to know the parties or the subject of the dispute, we have proposed the way to break the dispute in smaller bits in order to distribute those bits to wider group on individual arbitrators (the crowd arbitrators), who work independently only on one bit. Thus, we achieve the effect that one single arbitrator cannot grasp the whole picture. We could say it puts into effect famous saying: "you cannot see the forest for the trees".

Our proposal is focused on enhancing impartiality of arbitrators, crowd engagement in dispute resolution and developing cheaper and more pleasant adjudicative form of ODR. Significant potential of blind arbitration could also lay on developing such model for mobile platforms[11], extending the possibility of massive, anonymous dispute resolution based on microworks. It could be one more tool in ODR arsenal giving a new

option to disputants who wish to remain anonymous, don't want to be subject of prejudice or receive bad reputation.

After all, lady Justice (Iustitia) is blindfolded for a reason.

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