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Crowdsourced online dispute resolution

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Citation

Dimov, D. V. (2017, June 27). *Crowdsourced online dispute resolution*. Meijers-reeks.
Retrieved from <https://hdl.handle.net/1887/50156>

Version: Not Applicable (or Unknown)

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Note: To cite this publication please use the final published version (if applicable).

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Title: Crowdsourced online dispute resolution

Issue Date: 2017-06-27

In this chapter, we design and construct a model of a CODR procedure that complies with our interpretation of procedural fairness. Thus, we answer the PS (To what extent is it possible for CODR procedures to resolve disputes in a way that complies with the requirements of procedural fairness) and accomplish our research goal (proposing a model of a CODR procedure that would guarantee a fair dispute resolution).

In Section 7.1, we describe our model of a fair CODR procedure. It constitutes a plethora of ideas for making CODR compliant with our interpretation of procedural fairness. The actual implementation of the ideas may vary depending on the characteristics of the respective CODR procedure. The model should not be accepted as an exhaustive list of ideas for ensuring compliance of CODR with our interpretation of procedural fairness. The model is designed as a starting point for academic debate in the fields of procedural fairness of CODR procedures. In Section 7.2, we summarize the model, i.e., we highlight the fifteen elements without giving the underlying role of the ideas.

7.1 THE COMPOSITION OF THE MODEL

The model consists of fifteen elements, each of which corresponds to one of the elements of our interpretation of procedural fairness. The fifteen elements of our model of a fair CODR procedure are expertise (7.1.1), independence (7.1.2), impartiality (7.1.3), transparency (7.1.4), fair hearing (7.1.5), counterpoise (7.1.6), ensuring a reasonable length of procedure (7.1.7), providing reasons (7.1.8), voluntary participation (7.1.9), process control (7.1.10), decision control (7.1.11), consistency (7.1.12), accuracy (7.1.13), correctability (7.1.14), and ethicality (7.1.15). Each of these elements is examined in more detail below.

7.1.1 Expertise

A CODR procedure should ensure that the members of the crowd meet the expertise requirements vested in Article 6(1)(a) of the Directive on consumer ADR (i.e., the necessary knowledge and skills in the field of alternative judicial resolution of consumer disputes and a general understanding of law) by allowing only members of the crowd meeting those requirements to participate in the procedure.

The screening process as to whether a member of the crowd complies with the requirements of Article 6(1)(a) may consist of three steps, namely, (1) completion of an online application, (2) taking a short subject matter test, and (3) crowd verification of credentials proving that the requirements of Article 6(1)(a) are met. In the first step, the members of the crowd will need add information about their knowledge and skills in the field of alternative judicial resolution of consumer disputes and a general understanding of law. In the second step, they will need to take an online test, which aims to find out whether the information in the online application corresponds to their actual knowledge and skills. In the third step, the knowledge and the skills of the members of the crowd will be verified by using crowd verification.

Crowd verification is a process in which the crowd has the task to verify information (cf. Wintterlin and Blöbaum, p. 86, 2016). At present, crowd verification is used for various purposes, including, without any limitation so far, verifying biological network models¹ and software verification (cf. Logas, Kirchner, Murray, Schäfer, Whitehead Jr., 2014). Furthermore, there are proposals for using crowdsourcing for verification of international treaties and verification of disaster signals published in social media (see Meier, 2013; Aftergood, 2015). In order to conduct crowd verification of credentials proving that the requirements of Article 6(1)(a) are met, the members of the crowd should contact organisations or individuals, which can verify the credentials.

7.1.2 Independence

To ensure the independence of the members of the crowd, a CODR procedure should not allow persons that have actual relationship with the disputants to be a member of the crowd. This can be achieved by adopting rules for independence and incorporating them in the CODR procedure. It means that the CODR procedure should automatically find any relationship between the crowd and the disputants that can question the independence of the crowd. The CODR procedure should not allocate to a case members of the crowd who are not independent. For instance, in the online auctions, members of the crowd should not be allocated to cases if they have ever had a sale transaction with some of the parties. Using modern technologies, a CODR procedure can be designed in such a way that it will automatically: (1) detect relationships between members of the crowd; and (2) disallow members of the crowd who lack independence from participating in CODR cases.²

1 See the website “sbv improver” available at <https://sbvimprover.com/challenge-3/videos-and-seminars/tutorials/online-crowd-verification> (last visited Jan. 3, 2017).

2 For instance, the ECRF automatically finds relations between the members of the crowd and the seller. When the ECRF finds such a relation it does not allocate the member of the crowd to the case.

7.1.3 Impartiality

The best way for ensuring impartiality in a CODR procedure is to restrict the members of the crowd from identifying cases in which they have interest. This will prevent the crowd from basing its decision on internal prejudices, prejudgements, or predispositions towards one of the parties. We propose four ways for restricting the members of the crowd to identify the case in which they have interest.

First, the members of the crowd that wish to participate in CODR should be able to do that without having an opportunity to choose the case, which they will solve. It means that if they express their willingness to participate in the CODR procedure, they will have to solve a randomly selected case.³ This will prevent the members of the crowd from choosing cases in which they have interest. So, a random procedure is recommended.

Second, in order to decrease the chance of “searching for the right case” through “solving other cases”, the members of the crowd can have the right to participate only a limited number of times in the CODR procedure. The ECRF allows the eBay members to vote as much as they can but if the CODR procedure has to resolve a small amount of cases, a requirement for a maximum number of votes per month or per day can be helpful. However, restricting the crowd from participating multiple times in the dispute resolution process will perhaps decrease the amount of the members of the crowd. In turn, less members of the crowd can lead to a delayed decision or even a decision that is never rendered. Therefore, the balance between ensuring impartiality by restricting the members of the crowd to vote several times and ensuring the operability of the procedure by providing a sufficient number of members of the crowd is necessary and recommended.

Third, a problem arises, if only a few cases that need to be resolved are in the CODR platform. In this case, the members of the crowd will be able to pick the case in which they have interest after participating in all other cases if any. Even if they have the right to participate in the CODR procedure only one or a few times, they can motivate other members of the crowd to participate in the procedure in order to render an unfair decision or register several times with different accounts in order to manipulate the outcome of the decision. A solution of this problem can be the creation of a large number of “fake cases”, which aim will be to prevent members of the crowd from picking cases in which they have interest. The amount of the “fake cases” should be sufficient in order to guarantee that the members of the crowd will not be able to identify and participate in a case in which they have interest. The “fake cases” can be also used for analysing the fairness of the procedures and taking measures for ensuring it. For instance, a case which decision is

3 Randomly allocation of the members of the crowd to the case is one of the safeguards used by the ECRF. See Community Court FAQs, <http://www.ebaycourt.com/cc/FAQ.jsf>. The archived webpage is available at <https://web.archive.org/web/20111213132628/http://www.ebaycourt.com/cc/FAQ.jsf> (last visited Jan. 3, 2017).

obvious can be given to the crowd for a solution and, subsequently, can be used not only to show how fair the process of dispute resolution is but also to restrict access to the CODR procedure to members of the crowd that make a certain number of unfair decisions. So, we recommend the use of “fake” cases when the number of cases is quite low.

Fourth, all personal information that can lead to identification of the disputants and the members of the crowd should be removed.⁴ This is necessary to ensure that the members of the crowd will not contact the parties in order “to sell” their votes and the disputants will not contact the members of the crowd in order to push them to render a certain decision.⁵ For instance, among others, the following information should be removed: the names and the addresses of the disputants; the names and the addresses of the members of the crowd; and the nationality of the the disputants and the members of the crowd. However, removing all information that can lead to identification of the disputants can also lead to removal of information that can influence the outcome of the dispute. It will decrease the fairness of the procedure because the right of the disputants to present their cases will be restricted. This is a complex problem. Our recommendation is that the CODR procedure should be designed in such a way that it will remove any information that can lead to identification of the disputants, while it should not remove any information that can influence the outcome of the dispute resolution process.⁶

7.1.4 Transparency

To make their CODR procedures understandable and possible to replicate, such procedures should be clearly explained. Whether such an explanation is to be laid out in documents called “Rules of Procedure”, “Frequently Asked Questions”, or “Terms and Conditions” is of little importance. What matters is that such an explanation is sufficiently precise and detailed. If the explanation is too sketchy, the CODR procedure will lack transparency and may render arbitrary decisions. With a particular regard to arbitration tribunals rendering self-enforceable decisions, the designers of such tribu-

4 The eBay’s Community court maintains the members of the crowd anonymous. See Community Court FAQs, <http://www.ebaycourt.com/cc/FAQ.jsf>. The archived webpage is available at <https://web.archive.org/web/20111213132628/http://www.ebay-court.com/cc/FAQ.jsf> (last visited Jan. 3, 2017).

5 The removal of personal information can also protect disputants from spam. Such a protection is particularly needed in case of online opinion polls which usually allow anyone to participate in them (see Subsection 3.1.D). Spammers can use the free access to such CODR procedures in order to collect personal information and exploit it for sending spam.

6 Colin Rule, an expert in ODR, noted, in an email sent to us on 5th of January 2017, that the anonymisation of information can be difficult to achieve because the disputants are usually not good at self-censoring their submissions. One solution to this problem is to assign the task of anonymising contributions to crowdsourced workers who have proven skills in data anonymization.

nals must provide clear explanations of the enforcement processes. No such explanations are needed for online opinion polls and online mock jury systems as the decisions rendered by such procedures are not enforced by their operators.

7.1.5 Fair hearing

In this subsection, we will propose ideas for ensuring compliance of CODR with the two sub-elements of the element of fair hearing, namely, (A) ensuring that each party participates in the dispute resolution process and (B) ensuring that each party can present its case and rebut the case of the opponent.

A: Ensuring that each party participates in the dispute resolution process

If a CODR procedure serves a particular online community, a notice informing the disputants about the commencement of the dispute resolution process can be sent through an internal system for sending messages. If the CODR procedure does not serve an online community, one way to send a notice to the defendant is to send a notice to the contact address provided by the disputants. However, the claimant can provide an incorrect address in order to prevent the defendant from participating in the procedure or in order to prevent rendering a decision. He can also provide an incorrect address because of a mistake or because he is not able to search for new contact details or for some other reason. Providing the crowd with an opportunity to make a research and find any possible contact address of the defendant will increase the chance of finding the correct contact address of the defendant.⁷

For example, if the dispute relates to a domain name, the crowd can be entitled to search for the contact information of the defendant on the website associated with the disputed domain name. Under Uniform Domain-Name Dispute-Resolution Policy (UDRP), such searches are conducted by the provider of UDRP services.⁸

7 In an email dated 5th of January 2017, Colin Rule, expert in ODR, informed us about two drawbacks related to providing the crowd with the opportunity to search for the contact details of the defendants. The first drawback is the defendants may not like the fact that unknown people are searching for their contact details. The second drawback is that the crowd may find wrong contact details. These two drawbacks can be mitigated by requiring members of the crowd responsible for searching contact details of the defendants to successfully pass (1) identity checks and (2) exams showing that their research skills are at a satisfactory level.

8 Article 2(a)(c) of the UDRP of the Rules for Uniform Domain Name Dispute Resolution Policy states that achieving notice requires the submission of a notice to email addresses or email links shown on a webpage associated with the disputed domain name. See <https://www.icann.org/resources/pages/udrp-rules-2015-03-11-en> (last visited Jan. 3, 2017).

By using crowd searching, the designers of CODR procedures can easily assign the task of finding the contact details of the defendant to the crowd. It should be noted that crowd searching is used for far more complex legal tasks than searching for contact details. CaseText, for instance, allows the crowd to identify the relationship between two cases. In order to do so, the crowd needs to find the relevant paragraphs of the examined cases, which reveal the interrelationship between them. Afterwards, the crowd should select one of four options, namely, (1) “positive”, (2) “referencing”, (3) “distinguishing”, and (4) “negative”. The option “positive” means that the citing case explicitly approves the reasoning of the earlier case. The option “referencing” means that the citing case simply relies on an earlier case without further argument. The option “negative” means that the citing case overrules, narrows, calls into question the earlier cases or does not find the reasoning of the earlier cases to be persuasive. The crowd may not only choose one of the four options, but also add a brief explanation describing the relationship between the two examined cases. A screenshot of CaseText is provided in Figure 20. The screenshot shows an excerpt from the case *MASS. v. E.P.A.*⁹ The task of the crowd is to identify the relationship between *MASS. v. E.P.A.* and an earlier case, namely, *Sierra Club v. Thomas*.¹⁰ The crowd needs to choose in between one of the aforementioned four options.

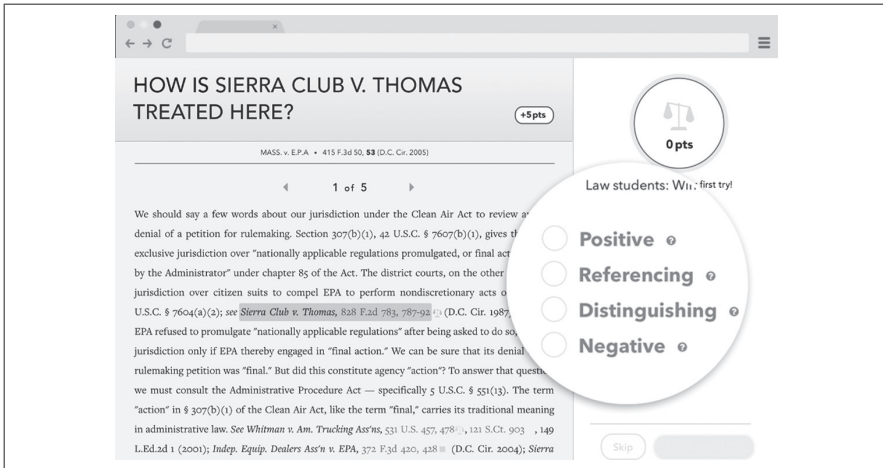


Figure 20. A screenshot of casetext.com

It should be noted, if the crowd can search for the contact details of the defendant, the crowd may contact the defendant to the identified contact details without the knowledge of the claimant. This will threaten the impartiality and the independence of the members of the crowd. Therefore, the crowd, which searches for the contact details of the defendant should not be

9 *Massachusetts v. Environmental Protection Agency*, 549 U.S. 497 (2007).

10 *Sierra Club v. Thomas*, 828 F. 2d 783 (1987).

the same as the crowd which resolves the dispute between the claimant and the defendant.

B: Ensuring that each party can present its case and rebut the case of the opponent
A fair CODR procedure should have rules, which ensure that the disputants are entitled to present their case in front of the crowd and rebut the case of the opponent. However, a problem can arise if some part of the CODR procedure is completed with the participation of certain members of the crowd, but the other part of the procedure is completed with the participation of other members of the crowd. This can infringe the right of each disputant to present their side of the case because a part of the case is presented before another crowd, which will not take the decision. Consequently, the CODR procedure should be organised in such a way as to ensure that either the same crowd participates in the whole process or if there are changes in the composition of the crowd, the crowd that renders the decision will be familiar with all the information presented by the disputants.

7.1.6 Counterpoise

To comply with the element of counterpoise, which is embedded in the Directive on Consumer ADR, CODR procedure should neutralise (A) the existing imbalances in the financial status of the disputants and (B) the computer skills of the disputants.

A: Neutralising the existing imbalances in the financial status of the disputants
To neutralise the existing imbalances in the financial status of the disputants, a CODR procedure should be governed by rules which ensure that: (1) the disputants are not required to hire legal professionals; (2) the disputants are not required to pay more than nominal fees for participating in the procedure; and (3) the disputants are not required to make phone calls if the fees for such calls are more than nominal. It is worth mentioning that no one of the past and existing CODR procedures requires the disputants to hire a lawyer or pay any fees.

B: Neutralising the existing imbalances in the computer skills of the disputants
To neutralise the existing imbalances in the computer skills of the disputants, CODR procedures should be easily accessible online and offline. Thus, disputants having weak or no computer skills will be able to use them.

Designers of CODR procedures can ensure that their procedures are easily accessible online by allowing the disputants to use user-friendly interfaces. A user-friendly interface needs to meet the following seven conditions: (1) be intuitive; (2) allow the disputants to change the settings in accordance with their personal preferences and save them for future use; (3) be predictable and allow the disputants to control their online accounts; (4) appear as a single application rather than a random combination of different applications; (5) allow the disputants to correct mistakes; (6) automatically save the

input of the disputants; (7) allow the disputants to select the desired level of difficulty of interaction (e.g., novice, intermediate, expert) with the interface (cf. Bessonova, Oboznov, Bakanov, 2012, p. 98).

To make CODR procedures easily accessible offline, disputants should be able to interact with each other and with the third neutral party by post. The quick and low-cost processing of a large number of regular mails can be achieved through the use of an automated mail processing (AMP) system. For example, such a system may: (1) read a bar code included in the incoming correspondence; (2) scan the incoming correspondence; and (3) automatically upload the incoming correspondence in a folder which contains all files appertaining to the dispute to which the correspondence relates. An AMP system may allow the operator of the CODR procedure to process thousands of letters per hour. By way of illustration, India Post installed an AMP system, which processes about 40,000 letters every hour (Pandya, 2013, p. 2).¹¹

7.1.7 Ensuring a reasonable length of procedure

A reasonable length of a CODR procedure can be ensured by adopting rules which oblige the third neutral party to deliver a solution or a decision within a fixed time period, which can be extended only in exceptional circumstances. A CODR procedure can enhance the compliance of the third neutral party with this obligation by: (1) sending automatic reminders to the third neutral parties about the approaching procedural deadlines; (2) automatically replacing unresponsive members of the crowd with responsive members of the crowd; (3) imposing sanctions on third neutral parties who do not meet the procedural deadlines; and (4) appointing only one juror to a case if there are not enough members of the crowd.¹² The sanctions may include, for example, temporary prohibitions to participate as a third neutral party in the CODR procedure.

7.1.8 Providing reasons

To provide disputants with reasons about the decisions rendered through CODR procedures, the rules governing such procedures should oblige each member of the crowd to support his vote with reasons.

If the decision in a CODR procedure is made by a large crowd, the CODR procedure can be designed in such a way as to provide the disputants not only with the reasons of individual members of the crowd, but also with a brief summary of all reasons used by the members of the crowd.

11 Colin Rule, an expert in ODR, noted, in an email sent to us on 5th of January 2017, that AMP may be cost efficient only for large scale organizations, such as India Post.

12 In an email sent to us on 21st of December 2016, Pablo Cortés, an expert in ODR, implied that a single panelist with a certified reputation may be able to offer a sustainable CODR procedure.

Such a summary will provide the crowd with a comprehensive picture of the reasons for the decision and, therefore, enhance disputants' perceptions of transparency of the procedure.

A summary of all reasons used by the members of the crowd can be created in at least two ways. First, the summary can use a computer algorithm, which analyses the reasons for the decisions and creates an automatic summary.¹³ In this regard, it should be noted that algorithms for summarising crowdsourcing content already exist. For instance, researchers succeeded to create an algorithm which creates summaries of sport events by using content from Twitter, a crowdsourcing application which allows the members of the crowd to post short messages (cf. Lee, Lee, Jung, Song, 2016, p. 432). Second, the members of the crowd can be required to provide a short summary of the reasons for their decisions. A compilation of all such summaries can be presented to the disputants.

7.1.9 Voluntary participation

For this element to be met, the disputants should not be obliged to participate in the CODR procedure (e.g., on the basis of contractual agreements or legislative acts). This means that the rules governing CODR procedures should not include requirements of attendance and legal sanctions for non-participation. Furthermore, in order to avoid any confusion, the rules should clearly state that the disputants have the right of voluntary participation.

7.1.10 Process control

In order to provide the disputants with the maximum possible process control, the designers of CODR procedures should ensure that the disputants are allowed to present any kind of information. Any limits to the types of information, which can be presented may decrease the perceptions of fairness of the CODR procedure. For example, the ECRF may be perceived as unfair CODR procedure because it does not allow the disputants to upload videos. Video evidence can be a compelling type of evidence in disputes related to modern technologies. This is because it allows the disputants to show to the third parties the process of operation of software, hardware, and websites.

Furthermore, in order to provide the disputants with the maximum possible process control, a CODR procedure may provide the parties with a list of tools which can be used for taking digital evidence and with the opportu-

13 In an email dated 5th of January 2017, Colin Rule, an expert in ODR, explained to us that it is not currently feasible to use algorithms to summarise free-text supplied reasons. He suggests collection of reasons through structured forms, thus allowing the data to be easily used in algorithms.

nity to decide whether to continue with each procedural stage.¹⁴ Such tools may include, for example, a list of freely available digital forensic tools, e.g., tools for digital media acquisition and backup.

7.1.11 Decision control

In the context of negotiation and mediation-based CODR procedures, a high degree of decision control can be ensured by providing the disputants with the opportunity to accept and reject the decisions rendered by those procedures. The disputants in adjudication-based CODR procedures have no decision control because the decision control is transferred to the third neutral party.

Since empirical studies show that outcomes reached by disputants (e.g., mediation settlement) are perceived as more fair than outcomes imposed by a third party, designers of CODR procedures can enhance the perceptions of fairness of their procedures by including mediation procedures in adjudication-based CODR procedures (cf. Conlon, Moon, and Ng, 2002). The combination of mediation and arbitration processes (also known as Med-arb) is not a new phenomenon. Various providers of dispute resolution services, including the International Centre for Dispute Resolution (ICDR), the International Chamber of Commerce (ICC) and the Hong Kong International Arbitration Centre (HKIAC) recognise and support the use of Med-arb (cf. Chua, 2015). In this regard, it is interesting to note that an empirical study found that disputants prefer Med-arb proceedings in which the mediation and arbitration is conducted by the same person than *vice versa* (Condliffe, 2012, p. 154). Condliffe (2012, p. 154) notes that there is no clear explanation on the reason of this preference and points out the need for further research in this area.

In the light of the aforementioned observations, we can presume that adjudication-based CODR procedures, which may include online opinion polls, online mock jurors, and arbitration tribunals rendering self-enforceable decisions, will provide more decision control to the disputants if they include mediation prior to adjudication. To further enhance subjective procedural fairness, designers of Med-arb CODR procedures may require the same members of the crowd to conduct both the mediation and arbitration parts of the procedures.

7.1.12 Consistency

To ensure the consistent application of a CODR procedure, the designers of the CODR procedure should (1) require the crowd to take into account previously decided CODR cases, (2) provide the crowd with access to previ-

14 In an email sent to us on 5th of January 2017, Colin Rule, an expert in ODR, noted that the element of process control is not only about collecting evidence, but also about making “the disputants always feel that they are in the drivers’ seat as the dispute moves from step to step.”

ously decided CODR cases, and (3) implement tools for trend analysis and generation of statistical reports.

In order to take into account relevant previously decided CODR cases, the crowd should be able to search in the case archive according to various criteria, e.g., subject, date, and keywords included in the decisions. If the CODR procedure does not provide the crowd with a comprehensive case search function, the crowd may find it difficult to find the relevant cases. This, in turn, may lead to an inconsistent application of the CODR procedure.

iCourthouse is an example of a CODR procedure which does not provide the crowd with a comprehensive search function. The case search interface of iCourthouse contains a list of pages with summaries of cases. Figure 21 is a screenshot of the case search interface of iCourthouse. Figure 21 shows links to 123 pages with summaries of cases. Figure 21 also shows four cases which appear on page 33, namely, Case Number 2006-11374, Case Number 2006-11373, Case Number 2006-11372, and Case Number 2006-11371. If a member of the crowd would like to search for a case within certain legal domain (e.g., a contract law), the member of the crowd should browse through all 123 pages in order to find the relevant case.

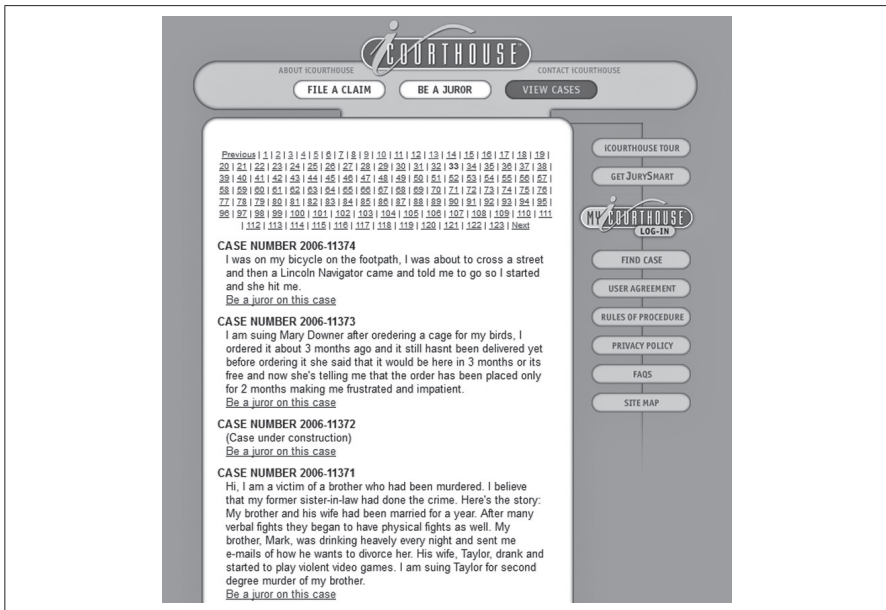


Figure 21. A screenshot of the case search interface of iCourthouse

The Arbitration center for Internet disputes of the Czech Arbitration Court is an example of an ODR platform, which provides its users with a comprehensive search function. More specifically, the ODR platform allows the users to search through various categories of cases. Figure 22 is a screenshot of the case search interface of the Arbitration center for Internet disputes of

the Czech Arbitration Court. Figure 22 shows seventeen boxes, which relate to different categories of cases. There are five main categories. The first one is subdivided into seven classes. The fourth category is subdivided into four classes. The other three categories are not further subdivided.

When the user of the case search interface clicks on one or more of those boxes and, then on a search button, the user will access a list of cases in the selected category.

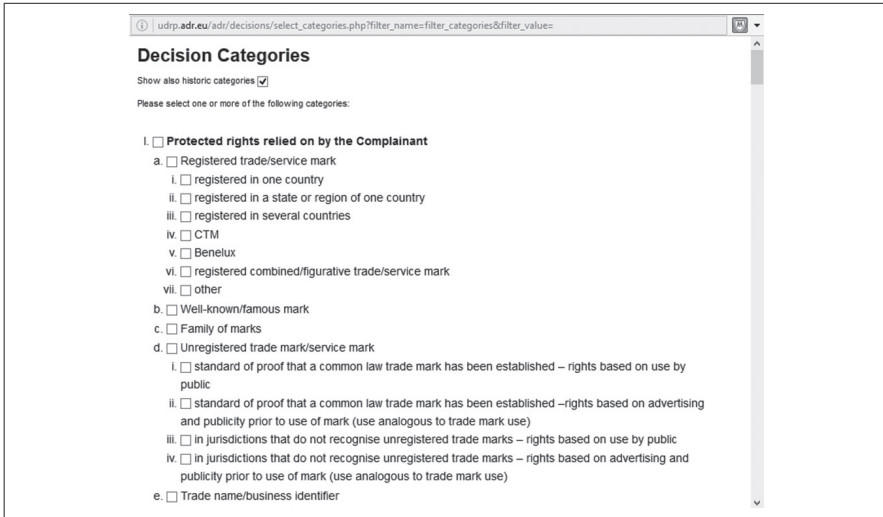


Figure 22. A screenshot of the case search interface of the Arbitration center for Internet disputes of the Czech Arbitration Court

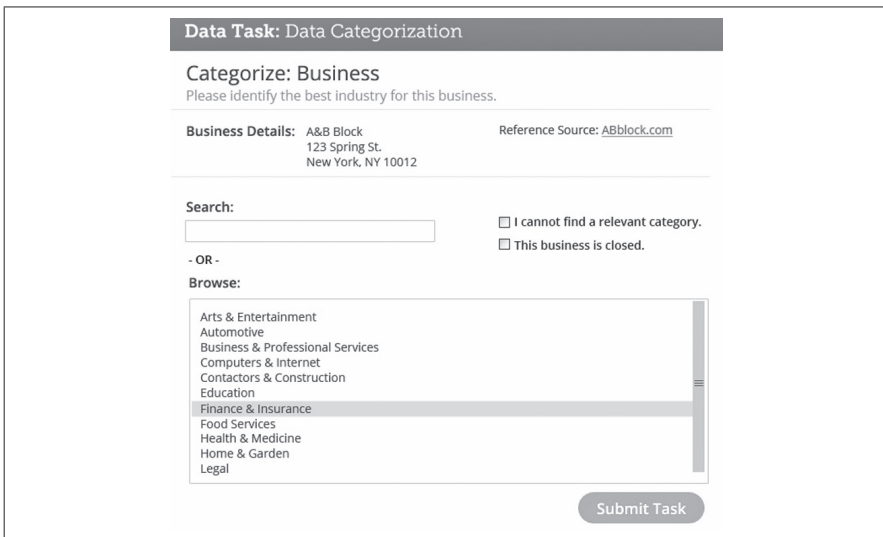


Figure 23. A screenshot of an interface window of the platform “CrowdSource”

The categorisation of CODR decisions can be done by using crowdsourcing. For example, the members of the crowd can categorise CODR decisions by clicking through a category tree, such as the tree used by the Czech Arbitration Court. It is worth mentioning that at least two websites provide crowdsourcing data categorisation services.¹⁵ Figure 23 shows a screenshot of an interface window of the platform “CrowdSource” allowing the crowd to categorise businesses. The interface window on Figure 23 provides the crowd with information about a business, i.e., the name of the business, the address of the business, and a link to the website of the business. The crowd needs to choose one out of eleven categories describing the activities of the business. If the crowd cannot find the relevant category or the business is closed, the members of the crowd must tick an appropriate box.

If, due to a large volume of data, the categorization of data as proposed above is not sufficient for providing the crowd with the opportunity to identify relevant cases, the designers of the CODR platform may attempt to ensure the consistency of the decisions rendered by the CODR platform by implementing tools for (1) trend analysis and (2) generation of statistical reports.¹⁶ These two types of tools will be briefly examined below.

The tools for trend analysis collect information and identify patterns or trends in the information (cf. Zikmund, 2016). For example, such tools can provide the crowd with a description of case law trends related to the dispute at stake. It should be noted that there are existing tools that are used for analysis of large volume of data.¹⁷ By way of illustration, TwitterMonitor (1) detects topic trends published on the micro-blogging website Twitter, (2) identifies and clusters words that appear in high rate, (3) extracts contextual knowledge related to the identified word, and (4) provides descriptions of the identified trends (Vishal, 2013, p. 133).

The tools for generation of statistical reports on the basis of crowdsourcing contributions can be divided in two categories, namely, non-iterative and iterative (cf. Hung, Tam, Tran, Aberer, 2013, p. 2). Non-iterative tools use heuristics to compute a single aggregated value of the contributions of the crowd (cf. Hung, Tam, Tran, Aberer, 2013, p. 2). For example, if the mem-

15 Amazon Mechanical Turk (AMT) and the platform “CrowdSource” allow their users to assign data categorization tasks to the crowd. See the article “How to Create a Categorization Project” published by AMT on <http://docs.aws.amazon.com/AWSMechTurk/latest/RequesterUI/Create-Categorization-Project.html> (last visited Jan. 3, 2017) and the article “Data Categorization” published by CrowdSource on <http://www.crowdsourcing.com/solutions/data-solutions/data-categorization/> (last visited Jan. 3, 2017).

16 Colin Rule, an expert in ODR, stated in an email sent to us on 5th of January 2017, that it is unrealistic to expect the members of the crowd to rely on previous case law for their decisions because the examination of case law may require a lot of time. Guidelines created on the basis of trend analysis and statistical reports can be a solution to this issue.

17 Google Trends (www.google.com/trends, last visited Jan. 3, 2017) and Trendistic (www.trendistic.com, last visited Jan. 3, 2017) are two notable tools for identifying trends. Google Trends identifies trends on the basis of data from the web, whereas Trendistic identifies trends on the basis of data from the micro-blogging service Twitter (www.twitter.com, last visited Jan. 3, 2017).

bers of the crowd resolve identical cases, the solution proposed in the majority of the cases will be selected as the single aggregated value of all solutions to those cases. Iterative tools aggregate crowdsourcing contributions by (1) taking into account the expertise of the members of the crowd who answer that question (2) adjusting the expertise of each member of the crowd depending on the answers given by him (cf. Hung, Tam, Tran, Aberer, 2013, p. 2). By using iterative tools to generate statistics of CODR decisions, the designers of a CODR procedure may ensure that the opinion of members of the crowd having relevant expertise will have more weight on the statistics than the opinion of members who lack such expertise. The tools for trend analysis and generation of statistical reports can benefit online opinion polls and arbitration tribunals rendering self-enforceable decisions by increasing the consistency of their decision-making processes. The tools mentioned in the preceding sentence can benefit online mock jury systems by providing the lawyers who want to test their cases with (1) information about latest trends in the case law related to their cases as well as (2) statistical reports about the outcome of similar mock cases.

7.1.13 Accuracy

In order to ensure that the information provided by the disputants is correct, a CODR procedure can enable the members of the crowd to verify the accuracy of the information presented by the disputants.¹⁸ More particularly, the crowd can be allowed to verify alleged facts presented by the disputants.¹⁹ Below, we discuss three situations in which the crowd can be used for verifications of facts. First, by using Google Maps (a desktop web mapping service developed by Google), the crowd can verify whether a claimant who was allegedly bitten by a dog in claimant's backyard has a backyard. Second, by using web.archive.org (a database of archived webpages), the crowd can verify whether the defendant has published on his website fraudulent pre-contractual misrepresentations before the conclusion of a contract with the claimant. If the crowd finds that the fraudulent pre-contractual misrepresentations were published on the website of the defendant before the conclusion of the contract, the claimant may be entitled to damages (depending on the jurisdiction).²⁰ Third, by using publicly available online forensic tools, the crowd can verify the authenticity of photos published by the disputants. For example, in order to verify the authenticity of photos, the crowd can use

18 The concept of crowd verification has been discussed in Subsection 7.1.1.

19 In an email dated 5th of January 2017, Colin Rule, an expert in ODR, explained to us that jurors may not have the skills necessary for such a verification. To address this drawback, CODR should be designed in such a way as to ensure that only members of the crowd having good information verification skills should be responsible for verifying alleged facts presented by the disputants.

20 For example, in Australia, an action for damages for fraud (the tort of deceit) lies against the author of pre-contractual fraudulent misrepresentations (Barton, 2013).

the publicly available tool “Izitrū”.²¹ After uploading a photo on “Izitrū”, the tool will use six different forensic tests to analyse the authenticity of the photo. If the photo passes all six tests, “Izitrū” will issue a certificate indicating that the photo has not been edited.

7.1.14 Correctability

Correctability of CODR decisions can be guaranteed by allowing the disputants to appeal the decisions. The appeal procedure can be either a CODR procedure or an ODR procedure.²² If the appeal procedure is a CODR procedure, it should be designed in such a way as to prevent the members of the crowd who participated in making the appealed decision from making an appeal decision. This will ensure that, if some or all of the members of the crowd who made the first decision are not impartial or independent, those members of the crowd would not be able to make the appeal decision. This principle is used in various courts, including the International Criminal Court (ICC).²³

In order to ensure that the members of the crowd in the first instance are not the same as the members of the crowd in the appeal, the designers of the CODR procedure may implement automatic checks, similar to the checks conducted by the ECRF. As it has been mentioned before, the ECRF would automatically prevent a juror from being allocated to a case if (1) he had had a transaction with either the buyer or the seller or (2) if he had once voted on a case in which the buyer or the seller was/were already involved.

It should be noted that only adjudication-based CODR procedures, which may include online opinion polls, online mock jury systems, and arbitration tribunals rendering self-enforceable decisions, can ensure the correctability of their decisions. In contrast, negotiation and mediation-based CODR procedures, which may include certain online opinion polls (e.g., PeopleClaim), do not need to ensure the correctability of their decisions as they do not render decisions.

21 See www.izitrū.com (last visited Jan. 3, 2017).

22 Irrespective of the type of the chosen appeal procedure, it is preferable if the procedure is specially designed as an appeal procedure. This is because the idea of appealing a decision by using the procedure used for rendering that decision is not common in the field of dispute resolution. For instance, in the U.S., challenges to district court decisions should be addressed to appellate courts, whereas the U.S. Supreme court hears challenges to appellate court decisions. See article “Court Role and Structure” published by the Administrative Office of the U.S. Courts on behalf of the Federal Judiciary on <http://www.uscourts.gov/about-federal-courts/court-role-and-structure> (last visited Jan. 3, 2017).

23 See the official website of the International Criminal Court available at <https://www.icc-cpi.int/Pages/Appeal.aspx> (last visited Jan. 3, 2017). See also Article 22(1)(5) of the Bulgarian civil procedure code (ГРАЖДАНСКИ ПРОЦЕСУАЛЕН КОДЕКС) which states that a judge cannot decide a case if he/she participated in deciding the case in another judicial instance. Article 341(5) of the French Code of Civil Procedure (code de procédure civile français) states that the disputants may request the recusal of a judge if he/she, previously, heard and determined the matter as a judge or an arbitrator.

7.1.15 Ethicality

The designers of a CODR procedure can ensure the maximum extent of ethicality of a procedure by (1) conducting empirical studies aiming to investigate the personal ethical standards of the members of the crowd and (2) implementing the personal ethical standards of the majority of the members of the crowd in the CODR procedure. The personal ethical standards of the majority of the members of the crowd can be implemented in CODR in two ways.

First, they can be implemented in the rules of the procedure. For example, in order to ensure ethicality of the procedure from the point of view of disputants and members of the crowd in the Middle East, the rules may state that the case should be decided on the basis of sharia, i.e., Muslim ethical principles (cf. Selby, 2012, p. 14).

Second, the personal ethical standards of the majority of the crowd can be implemented in formal codes of ethics which state the values and ethical principles the members of the crowd are expected to display. Ethical codes can get specific to the point of offering guidelines on how the crowd should behave in situations susceptible to ethical dilemmas, such as whether or not the crowd should follow the rules of the procedure which the crowd considers to be unjust.

It should be noted that ethical codes are used by many organisations, including private companies (cf. Schermerhorn, Jr, 2009, p. 60). For example, Gap Inc., an American worldwide clothing and accessories retailer, has adopted a formal Code of Vendor Conduct which sets out ethical standards to which the factories supplying clothes for Gap Inc. should comply. By way of illustration, the Code of Vendor Conduct obliges the factories to provide the workers in the factories with “a safe and healthy environment” and hire them “on the basis of their ability to do the job, not on the basis of their personal characteristics or beliefs” (see Schermerhorn, Jr, 2009, p. 60).

7.2 CHAPTER SUMMARY

In this section, we provided a brief summary of our model of a fair CODR procedure, which consists of fifteen elements. Below, we summarise each of those fifteen elements (A-O) for a brief overview of the essence of the elements.

A: Expertise

To comply with this element, CODR procedures should include (1) rules which allow only members of the crowd having the required expertise to participate in CODR and (2) screening processes aiming to find out whether the members of the crowd comply with those rules. The screening processes may consist of the following three steps: (1) completion of an online application; (2) taking a short subject matter test; and (3) crowd verification of credentials.

B: Independence

The independence of the members of the crowd can be achieved by designing CODR procedures which automatically: (1) find any relationship between the members of the crowd and the disputants; and (2) make sure that a member of the crowd who has a relationship with either disputant will not be allocated as an adjudicator or a mediator.

C: Impartiality

We propose four solutions to safeguard the impartiality of the members of the crowd, namely, (1) restricting the members of the crowd from the opportunity to choose the cases which they will solve, (2) providing the members of the crowd with the right to participate only limited times in the CODR procedure, (3) creation of a large number of “fake cases”, which aim to prevent members of the crowd from picking cases in which they have interest, and (4) removing all personal information that can lead to identification of the parties.

D: Transparency

Disputants should be provided with a clear, sufficiently precise, and detailed explanation of the CODR procedure.

E: Fair hearing

To secure the right of each party to participate in the dispute resolution process, the members of the crowd should have the opportunity to conduct a research and find any possible contact details of the defendant. To make sure that each party can present its case and rebut the case of the opponent, either the same crowd should participate in the whole CODR process or, if there are changes in the composition of the crowd, the crowd that renders the decision should be familiar with all the information presented by the disputants.

F: Counterpoise

To neutralise financial inequalities, a CODR procedure should not oblige the disputants to hire legal professionals and/or pay more than nominal legal fees. To neutralise computer skills inequalities, a CODR procedure should have a user-friendly interface and be accessible offline.

G: Ensuring a reasonable length of procedure

The outcome of a CODR procedure should be announced within a pre-defined fixed time period, which can be extended only in exceptional circumstances. To safeguard the timely delivery of the outcome, the CODR procedure should (1) send automatic reminders to the third neutral parties about the approaching procedural deadlines and (2) impose sanctions on third neutral parties who do not meet the procedural deadlines.

H: Providing reasons

A CODR procedure should provide the disputants with reasons supporting each vote of the members of the crowd and, if the decision is rendered by a large number of members of the crowd, with a brief summary of all reasons used by the members of the crowd.

I: Voluntary participation

The disputants should not be subject to any mandatory participation requirements.

J: Process control

A high degree of process control requires that the disputants are (1) allowed to present any kind of information and (2) provided with a list of tools which can be used for taking digital evidence.

K: Decision control

A high degree of decision control requires that the disputants are provided with the opportunity to accept and reject the decisions rendered by negotiation and mediation-based CODR procedures. The inclusion of mediation procedures in adjudication-based CODR procedures will provide the disputants using such procedures with a degree of decision control which, in turn, will enhance disputants' perceptions of fairness of the procedures.

L: Consistency

Consistency in a CODR procedure can be ensured by (1) requiring the crowd to take into account previously decided CODR cases and (2) providing the crowd with access to such cases.

M: Accuracy

The accuracy of the information provided by the disputants can be ensured by providing the members of the crowd with the opportunity to verify the information presented by the disputants.

N: Correctability

Correctability of CODR decisions can be guaranteed by the allowing the disputants to appeal the decisions.

O: Ethicality

The compliance of a CODR procedure with the component of ethicality requires (1) conducting empirical studies aiming to investigate the personal ethical standards of the member of the crowd and (2) implementing the personal ethical standards of the majority of the members of the crowd in the CODR procedure.