Chapter 6
Quality of Judgment Assessment

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ABSTRACT

The intersection of Artificial Intelligence and The Law stands for a multifaceted matter, and its effects set the advances on culture, organization, as well as the social matters, when the emergent information technologies are taken into consideration. From this point of view, the weight of formal and informal Conflict Resolution settings should be highlighted, and the use of defective data, information or knowledge must be emphasized. Indeed, it is hard to do it with traditional problem solving methodologies. Therefore, in this work the focus is on the development of decision support systems, in terms of its knowledge representation and reasoning procedures, under a formal framework based on Logic Programming, complemented with an approach to computing centered on Artificial Neural Networks. It is intended to evaluate the Quality-of-Judgments and the respective Degree-of-Confidence that one has on such happenings.

INTRODUCTION

While identifying the abstract perceptions for a multi-domain Online Dispute Resolution (ODR), there is the need to determine which information would be useful, namely if a party should ask if he/she will reach a better outcome using an alternative dispute resolution process instead of litigation.

The concept can be defined in terms of the BATNA – Best Alternative to a Negotiated Agreement, or the possible best outcome along a particular path if he/she tries to get his/her interests satisfied in a way that does not require negotiation with the counterpart (Klaming, Van Veenen, & Leenes, 2008; Lodder

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& Zeleznikow, 2010; Notini, 2005). In fact, by knowing their BATNA, parties would, on the one hand, become better protected against agreements that should be rejected and, on the other hand, in a better condition to reach an agreement that better satisfy their interests (De Vries, Leenes, & Zeleznikow, 2005).

On the opposite side one should also consider the notion of a WATNA, or the Worst Alternative to a Negotiated Agreement (Steenbergen, 2005). The WATNA aims to estimate the worst possible outcome along a litigation path. It can be quite relevant in the calculation of the real risks that parties will face in a judicially determined litigation, envisioning the worst possible outcome for a party.

With these two immaterial figures, a party is aware of the best and worst scenario if the dispute is to be solved in a court.

It is also interesting for a party to analyze the space between the BATNA and the WATNA as a useful element to be taken into account for decision making. Of course, the less space there is between BATNA and WATNA, the less dangerous it becomes for a party not to accept the agreement (unless, their BATNA is really disadvantageous). A wider space between BATNA and WATNA would usually mean that it could become rather dangerous for a party not to accept the ODR agreement (except in situations when the WATNA is really not inconvenient at all for a party).

On the one hand, it may be argued that knowledge about the space between the BATNA and the WATNA is quite central, independent of the problem domain. It is close to the Zone of Possible Agreement (ZOPA) proposed by Raiffa (1982). It is the zone where an agreement can be met that is acceptable for both parties.

On the other hand, if the parties are to solve the dispute through litigation, what is the most likely outcome? In fact, sticking only with the BATNA and the WATNA may not be realistic, once these are usually not the most likely outcomes, but merely informative values that establish boundaries. Thus, an informed party should also consider the concept of MLATNA – Most Likely Alternative to a Negotiated Agreement (Steenbergen 2005).

Using the same arguments, it can also be argued that the existence of metrics that measure one’s confidence on each possible outcome could also be extremely useful for any party. Thus, it is also considered the figure of possible case, i.e., a conceivable outcome with an associated value of confidence.

Concluding, different conceptions that are significant for any party may be considered in the development of an ODR tool, namely: (1) the BATNA; (2) the WATNA; (3) the ZOPA; (4) the MLATNA and (5) the Possible Cases. These terms establish what is identified in this work as the minimum set of information that a party should consider prior to getting involved in a litigation or alternative conflict resolution process. Another interesting concept that should be taken into account in this context is the legal precedent one (Landes & Posner, 1976). The concept of legal precedence defines a case that establishes a rule (or principle) that could/should be used by practitioners when deciding on subsequent similar cases. There are legal domains in which precedents are divided into binding and persuasive precedents. The former type is generally the result of a process in a higher court and means that all lower courts must honor it. The persuasive precedent, in turn, arises from cases that are decided in lower courts and does not denote an obligation (Carneiro, Novais, Andrade, Zeleznikow, & Neves, 2009; Carneiro, Novais, & Neves 2014).

Devising a valid, fair and appealing solution for a conflict resolution process may be a challenge, mostly when the concept of fairness may be subjective. In that sense, there is the need not only to generate a solution that is valid, but also to detail why such solution is fair, given the circumstances. For discussions of fairness in ADR and ODR, see Zeleznikow and Bellucci (2012).