

Chapter 2

Traditional and Alternative Ways to Solve Conflicts

Abstract The existence of conflicts is universal, old and indissoluble from our sense of civilized and evolved species. Since conflicts must be seen as natural and inevitable, focus should be placed on efficient ways to avoid and solve them. This chapter introduces the notion of conflict and its different shapes. It moves on to introduce the two main approaches to conflict resolution: litigation in the courtroom and alternative methods. The advantages and disadvantages of each one are presented, with the latter being detailed in its different forms. The chapter highlights the need for alternative approaches in face of the current disadvantages of litigation, namely in what concerns its inefficiency. However, its alternatives are also not without disadvantages. These are hence also analyzed in detail. Specifically, a first view on the drawbacks of current online alternatives is put forward in what concerns the lack of the contextual richness of face-to-face interaction. This lays the ground for the following chapters.

2.1 Introduction

Recently, Harvard evolutionary biologist Professor David Haig brought forward a controversial theory defending that conflicts in our life start while we are still in the womb (Haig 2010). According to the author, these parent-offspring or offspring-offspring conflicts may result in a wide range of behavioral and psychological disorders, including Tourette syndrome, autism or depression. Conflicts are present in our lives since our conception to our passing. Similarly to any other living organism, we live with and solve conflicts on a daily basis, frequently in a natural and unconscious way. However, whereas other living organisms face conflicts that are mostly related to their biologic imperatives, we Humans face far more complex ones, which can be organized into four categories (Kennedy 1998).

Intrapersonal conflicts constitute the simplest form of conflict in terms of the number of parts involved. These conflicts happen within ourselves, when we face situations in which contradictory values or convictions must be weighted and a decision or action, based on them, taken. Most of these conflicts are generated by:

- A contradiction between our preconceived notions and observed evidence or facts;
- Abstract social values that can be hard to define, understand and live by;
- Uncertainty when taking binding and important decisions; and
- A contradiction between inner values. Although these conflicts are not so “visible” as open conflicts or confrontation with other individuals, they happen frequently and have a constant effect in our daily living.

For a more in-depth analysis of intrapersonal conflicts please refer to (Lauterbach 1991), in which this type of conflicts is seen as one of the issues that affects life stress and emotions.

Interpersonal conflicts are the most “classical” type of conflict. They constitute a conflict between two or more individuals, and can be seen as a struggle between interdependent parties (Bergmann and Volkema 1994). It exists when parties acknowledge the existence of incompatible goals, scarce resources, and interference from others in achieving their objectives (Burton 1990). According to this definition it can also be concluded that a conflict only exists when the parties become aware of it. Consequently, one party may also perceive a conflict while the other does not. Interpersonal conflicts may emerge from many different scenarios, including conflicts of values, interests or relationship conflicts, and at different levels of affiliation (e.g. at work, among friends, within the family). Clearly, this will be the type of conflict in which this book focuses. For a better understanding of interpersonal conflicts and their relationship with stress, cognition, and behavioral responses, please see (Bergmann and Volkema 1994), who studied conflicts in the workplace or (Sillars and Parry 1982), who studied conflicts between roommates.

Two other types of conflict can be identified, more complex in the dynamics of their interactions. Intragroup conflicts take place between individuals that belong to a same group, i.e., those individuals often share interests, cultural aspects, objectives and other identifying characteristics. In such cases, the resolution of the conflict may be crucial for the maintenance of good group dynamics. Two of the most common types of conflict within a group are relationship conflicts (i.e. when two or more individuals have conflicting values or views) and task conflicts (i.e. when the tasks or objectives of the individuals within the organization clash). Jehn (1995) analyzes in detail this topic in the context of organizations, looking at both the advantages and disadvantages of conflict at the different levels of the organization.

Finally, intergroup conflicts emerge when two or more groups, with their own culture, objectives or beliefs, take actions that go against each other’s values. Such conflicts are socially complex since they involve an arbitrary large number of individuals, behaving under the frame of social groups. Some of the most visible examples include sports teams, ethnic groups, gangs or religious groups. These

conflicts may take place at a regional level or span entire countries or even wider regions. Bar-Tal (2011) examines intergroup conflicts, especially those conflicts involving very large groups in different parts of the globe, touching aspects such as the motivation behind the members of the group, the sense of solidarity and unity or the pressure exerted on leaders.

Conflicts can indeed be very heterogeneous in their form, characteristics, origin and outcome. We must therefore clearly define conflict the way it is seen in this book. Conflicts with the inner self will not be considered in this book, nor will conflicts involving large groups of people. The tools and approaches described rather focus on conflicts involving small relatively small groups of people, tendentiously two or three. In that sense, the following definition of conflict, as it is viewed in this book, can be put forward:

A conflict is a conscious, open and mutually perceived opposition of interests or positions between two or more individuals, concretized through actions or words, that represents a significant threat to at least one of the parties' needs, interests, beliefs or activities.

While conflicts involving humans are far more complex than the ones observed in any other species, our refined ways of solving them are what distinguish us from them. Gavin Kennedy goes as far as stating that conflict resolution mechanisms are one of the bases for civilization, and thus one of the key characteristics that distinguish us from any other animal (Kennedy 1998). In fact, faunae were not ever observed negotiating over food, territory or a mate. Instead, organisms use violence or the threat of violence to get what they want. We, as the creatures that we are, still have this basic way of solving conflicts that, in some situations, may try to emerge. However, a healthy and balanced individual is able to control such impulses and rely on more subtle approaches to resolve the conflict.

In fact, the art of solving conflicts is quite a classic and old one. Foremost, conflicts are natural and emerge as a consequence of our complex society, in which individuals focus on the maximization of their own gain, sometimes disregarding the others'. The concept of conflict and its resolution has traditionally been addressed by Social Sciences. However, in the last decades this field also started to be approached by Information Sciences. The intersection of these two fields is of large interest as it combines all the established theory about conflict resolution with computational power, new methodologies and support tools for problem solving.

Despite the negative connotation generally associated to conflicts, these should not be regarded as necessarily negative. In fact, they can even be positive for the group of individuals or the organization in which they take place.

Jehn (1995), after studying the structure of 105 work groups and management teams, shows that conflict can be positive in an organization, depending on the type of conflict and the structure of the group in terms of task type, task interdependence, and group norms. From a cognitive perspective, Baron (1991) adds other factors that influence how positive a conflict can be: the impact of strong negative emotions on cognition, stereotype-driven thinking, and attributional processes. Moreover, the author suggests techniques for modifying conflict situations so that they are more likely to result in positive effects. In more general terms, a positive outcome in a

conflict may result in the improvement of the quality of the decisions taken as the involved parties make an effort to search for solutions that might not have been visible at first sight. In the process, parties are stimulated to take part in the process, with an effort on being creative and imaginative. When this is conducted in a positive manner, the parties move closer towards their goals and together build a more energetic climate, with increased synergy and cohesion, and a more propitious environment for new ideas, alternatives and solutions. At a personal level a conflict and its resolution allows individuals to test their positions and beliefs and, ultimately, makes them define themselves, who they are, what they value and what they want. Evidently, a conflict that is poorly managed and becomes negative will have opposite effects.

Whatever the case, the fact is that conflicts are universal and, sooner or later, will have to be faced. In that sense, there is a need for conflict resolution processes that can minimize, manage and hopefully settle them.

The ideal conflict resolution process is one in which the parties are better at the end of the course of action than they were at the beginning, i.e., not only in terms of what they gained or loose, but also in terms of the quality of their interpersonal relationships. This should be the focus of any conflict resolution process.

Although the term conflict/dispute resolution is from time to time used to describe Alternative Dispute Resolution (ADR) (Brown and Marriott 2012) methods, in a broad sense it marks out a process in which two or more parties engage in order to situate their differences. Conflict resolution may be divided into two main tendencies, namely Judicial Dispute Resolution and Alternative Dispute Resolution.

The most common form of Judicial Dispute Resolution is litigation, opposing a plaintiff and a defendant. The legal system has the coercive power to enforce an outcome. This means that at the end of the process, the parties are bound to the decision of the court, although in some cases parties may appeal to other instances. Outcomes are decided either by a judge, a jury or a combination of both, taking into account the facts presented by the parties and the application of The Law. All these processes are very formal and are defined by rules established by a legislature.

Alternatively, extra-judicial dispute resolution methods aim to avoid going into a court. They are being adopted by many countries as a first attempt to solve a dispute before advancing to litigation. These methods include arbitration, collaborative law or mediation, and are generally managed by non-governmental institutions, whose powers may vary from simple advice to an active role on the achievement of the outcome. The steady development of this alternative trend on conflict resolution is due to a perception of greater flexibility, lower costs and faster outcome when compared to litigation (Brown and Marriott 2012).

This chapter briefly describes what does it means to solve a conflict in court, focusing afterwards on the current state of judicial systems. Then it moves on to describe thoroughly the alternatives to the courtroom.

2.2 Litigation in Courts

Litigation is the process that states the means by which a lawsuit is conducted through court. This process is more or less well-defined and generally includes a minimum number of participants. The plaintiff is the individual who brings the charge; and the defendant is the one against whom the charge is brought. The plaintiff claims to have incurred loss as a result of a defendant's actions, and thus demands a legal or equitable remedy. In litigation the defendant is mandatorily required to respond to the complaint and must therefore present himself to court and take the necessary steps in his defense. In this process the parties have the right to attorneys that may represent them, who are called litigators.

A litigation process takes place in a sequence of steps that are more or less general in common law judicial systems. It starts with the plaintiff presenting his claim and asking for damages or equitable relief from the defendant. In this phase, generally called pleading, it is important that the plaintiff:

- Selects the proper venue with the proper jurisdiction;
- Access basic legal and factual bases; and
- Correctly identifies the defendant. It is then the responsibility of the court to contact the defendant, informing him about the nature of the lawsuit, the identification of the plaintiff, the time limits and his rights to counterclaims.

Then, litigants are encouraged to clearly state what the lawsuit is about. This may include actions such as disclosure of evidence or exchange of information and facts in a structured manner. The main objective is to clarify the nature of the claim and its characteristics and avoid unexpected events later on the process.

Following this phase of exploration, the process advances to judgment. At this point, litigants may bring forth witnesses and evidence. At the end a judge or jury will render a decision, based on his interpretation of the evidence and the legal norms.

Later, once the process is finished, either litigant may have the right to appeal, which can be used when they feel that there has been some procedural error. These appeals follow similar processes as the ones being described. At the end, the court has the power to enforce the outcome, namely by making the defendant pay a monetary award if the judgment is for the plaintiff. If the defendant fails to pay, the court has the power to seize defendant's assets.

For a number of reasons, analyzed in detail in the following chapter, litigation in court is nowadays synonym to a number of significant disadvantages, which in part result in the increase use of alternative methods. These disadvantages essentially revolve around the inefficiency of courtrooms, at different instances or courts, and results in conflict resolution processes that take longer and cost more than they should, ultimately pushing disputants away.

2.3 Current State of Judicial Systems

Among other reasons, the increasing rights of defendants and the general improvement of the access to government services resulted in a significant increase in the number of claims filed in court. This results in a relative long time to solve each case, which in fact has also repercussions on its costs. This has been a reality for decades and many studies have been conducted to analyze the current efficiency of the judicial systems and how it could be improved. The general conclusion of these studies is that courts around the world are in a state of crisis, dealing with backlogs and inefficiencies caused mostly by an explosion in litigation (Fix-Fierro 2004), in some cases as severe as to rouse lawmakers, politicians, scholars, business leaders, and citizens to petition for substantial reformation of the judicial system (Farhang 2010).

Defining efficiency, particularly in the scope of conflict resolution institutions, is thus the first step. It can be outlined from different interpretations or assessments. However, all of them revolve around some key symptoms perceived by the society in general, including unnecessary delays within the process, unnecessary steps (e.g. procedures mandated by The Law, policy or tradition that are deemed counter-productive or constitute duplication), unproductive activities (e.g., unproductive court hearings, people turning up for a court case that does not take place), failed or aborted prosecutions or the exorbitant costs associated with certain types of trials or procedures (Dandurand 2009). Efficiency can also be described clearly from an economic standpoint, including the costs of providing justice, measured in terms of both the private expenditures (borne by the parties to the dispute) as well as any external price associated with providing a particular level of justice (borne by members of the society who are not parties to the dispute).

With respect to this matter, Héctor Fix-Fierro points out a few noteworthy ideas. Indeed, one must be aware that the concept of efficiency is not central or does not come first in conflict resolution, i.e., other more important values exist in legal decision-making, as it is subject to all kinds of constraints, local conditions and concrete negotiations with other values and interests (Fix-Fierro 2004). For instance, before being quick a courtroom must be fair, i.e., decision-making focuses on the nature of the decision, rather than the time spent making it. Nevertheless, the author agrees that the efficiency of courts should be improved as these general perceptions of overload, inefficiency, delay and the like, although relative and subjective, have repercussions on the societies' view about the judicial system, resulting in a sense of crisis in the administration of justice.

Inefficiency in judicial systems may stem from different causes. Djankov et al. (2003) point out three different principles, each one supported by different authors. The former one supports that efficiency in the courtroom as in other institutions, is directly affected by the level of richness and education of the population (Demsetz 1967). This belief states the fixed costs of setting up institutions only become socially worth paying when the demand for them – largely driven by the level of economic development – becomes high enough, i.e., while a

poor society may rely on informal dispute resolution, a richer one trusts on more complex contracts and needs more complex judicial systems to resolve disputes. A poor population will not use complex or advanced mechanisms, thus there will be no demand to make them viable. Similarly, a better-educated population both raises the efficiency of courts (more educated workers are able to work in more efficient ways and with more efficient tools), and the demand for them. According to this principle, judicial systems in richer and more educated countries tend to be more efficient.

The second principle considers the incentives of the stakeholders throughout the conflict resolution process to be one key factor for efficiency. Its main view on the problem is that judges, lawyers and litigants that have weak incentives (such as a low salary or lack of incentive plans for meeting performance objectives) or wrong ones (such as accepting bribes) will not care about delays since they gain nothing by working faster or better (Buscaglia and Dakolias 1999).

Djankov et al. (2003) propose a latest principal or belief stating that the performance of courts is determined by how the law regulates their operation (which the authors call procedural formalism). The authors begin by pointing out that legal systems heavily regulate dispute resolution, relying on lawyers and professional judges, regimenting the steps that the disputants must follow, regulating the collection and presentation of the evidence, insisting on legal justification of claims and judges' decisions or giving predominance to written submissions. In line with this view, one must enquire to what extent such formalisms matter with respect to the value of simple disputes resolution, i.e., should all cases, independently of their complexity, follow the same stages? To support this view the authors analyze the procedures used to solve two specific disputes in 109 countries and their estimated duration to achieve a conclusion. Indeed, abstract procedures are related to longer duration of dispute resolution, i.e., such formalisms lead to a poorer enforceability of contracts, higher corruption, as well as less honesty, consistency, and fairness of the system. Moreover, the authors found no evidence that procedural formalisms secures justice.

Following a similar view, Posner points out the effect of oral arguments on the delay of the process (Posner 1996). Oral arguments generally have a fixed duration. Judges must be present and eventually travel some distance to get to the proper location, which adds to the time expended. While oral arguments can play an important role in the decision process of judges, they are costly, and there are cases in which they are unnecessary (e.g. in cases that are frivolous, hinge on issues that have already been decided, or are adequately presented in a written record, such that oral arguments would not provide additional information). Thus, legal systems must have the flexibility to decide on the aspects of the procedural formalism that are indeed necessary and significant.

One of the biggest concerns is related with the often-poor collaboration and coordination between the several agencies involved, including police, prosecutors, judiciary or defense (Dandurand 2009). Each of these agencies may have different priorities, technological platforms, objectives (which may not be compatible), procedures or culture, which adds to the effort of coordination. As an example, the

police's primary function is not to support courtroom processes but to be "on the streets" promoting law and order. In fact, police forces even search for ways to prevent crime, thus decreasing the use of judicial systems. Moreover, each of these entities may have a different perception of what efficiency is.

There are also cases in which cooperation is hampered by poor data sharing mechanisms, which in some countries still rely heavily on inefficient paper transactions. This results in more costly processes and duplication of effort, as files are photocopied and couriered back and forth.

Christensena and Szmer (2012) refer to a relatively wide group of additional causes for courtroom inefficiency. The root cause, as expected, is the increasing workloads of courtrooms, often due to the reluctance to appoint more judges (Lindquist et al. 2007), which leads to bureaucratization. Bureaucratization, in turn, has an effect on factors like the use of support staff and judge collegiality, which are thought to influence process, outcomes (Lindquist et al. 2007) and costs. The diversity (e.g. ideological, tenure or law school quality) of a jury panel can lead to conflict (i.e. reduced collegiality) (Pelled et al. 1999) or to longer disposition times (Cauthen and Latzer 2008), which result in less efficient decision-making processes. The increasing number of cases, associated with the reluctance to appoint more judges, has an effect on the workload of judges. This increased request for throughput, often stressful, may lead to a burnout, which significantly decreases the performance indicators and the quality of the work (Bakker et al. 2004). Another factor that can be related to efficiency is the experience of the legal practitioners. Cohen (2002) goes as far as implying that efficiency is a function of the judge's expertise, since judges must learn a relatively comprehensive set of applicable rules and The Law and its application to the cases factual data. Thus, experienced judges may be in a better position to take better judgments and in time.

Concretely, we have analyzed the Portuguese reality in what concerns the efficiency of its judicial system, taking it as an example of what takes place in so many countries. Portugal is no exception to the above symptoms and litigation is generally seen by society as an inefficient process, in which key issues stand for the high costs and long wait for the way out of processes. Courts are currently clogged due to the amount of cases, most of which involving claims of relatively low value. Thus, the Portuguese legal system can be seen as an example of the current state of affairs.

Several performance indicators of the Portuguese judicial system are analyzed, once compiled from the Portuguese legal statistics consultation system, available online – SIEJ.¹ If we consider the average duration of the processes in first instances courts between 2001 and 2010, it is possible to conclude that there was a substantial rise, being the larger one in Civil Justice, from 20 months in 2001 to 29 months in 2010. This trend was continuous until 2007 (33 months), and then gradually

¹The web-site of the SIEJ is available online at <http://www.siej.dgpj.mj.pt> (Accessed on September 2013).

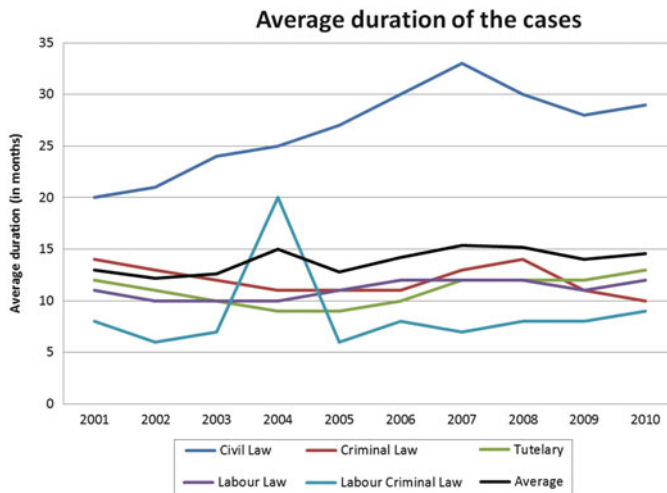


Fig. 2.1 Average duration of the litigation processes in Portuguese first instances courts between 2001 and 2010

reversed. In average, considering the different areas under analysis, each process takes 10–15 months until its end. Figure 2.1 depicts the data considered.

This relatively high duration time of the processes has as its main consequence an upsurge in the number of pending ones. In fact, the congestion rate for the Portuguese judicial courts in 2009 was of 253.3 %, i.e., for each process that was concluded, 235.3 were pending.² According to the same source, there are currently more than 1.7 million pending processes. This represents an increase of 2.2 % compared with the numbers of 2011, in which there were 1.666.348 pending processes. The trend is not recent: in 2007 and 2008 the number of pending processes grew from 1.541.239 to 1.504.553. Contradictorily enough, Portugal was in 2008 the third country in the European Union³ with the best judge/attorney-to-population ratio, only beaten by Poland and Germany (de L’Europe 2010). According to the same study, the current pending cases would take 430 days to conclude, assuming that there are no new processes in the meantime.

One could argue that processes are nowadays more complex and include much more information or that defendants have more rights and attorneys have a larger scope of intervention. However, the truth is that nowadays the most trivial act of our life is likely to end in a court, independently of the issue. Moreover, courtrooms are not the most efficient environments for conflict resolution by themselves, i.e., they are generally highly competitive milieus, in which parties and their representatives

² Source: Portuguese Directorate-General for Justice Policy – Ministry of Justice, PORDATA.

³ The following countries were considered in this study: Germany, Austria, Belgium, Denmark, Scotland, Spain, Finland, France, England and Wales, Italy, Norway, The Netherlands, Poland, Portugal, Sweden and Switzerland.

will blindly pursue the maximization of their own personal profit, without any regard for the others' interests. This constitutes an obstacle to the attainment of a mutually satisfactory outcome, increasing the dissatisfaction of the parties and consequently the number of appeals, contributing to a slower and more inefficient judicial system.

Some of the symptoms pointed out can be alleviated through the implementation of better coordination protocols or through the more efficient use of existing technological tools for communication and information exchange. However, others are far graver and call for structural reforms in the legal systems, thus being harder to implement. Mastro (1991) argues that we need to learn how to cope with this "*explosion*" in litigation and yet preserve the people's fundamental rights, i.e., closing the courtroom door is not a solution. He advocates increased investment in the judicial branch, i.e., more judges, more magistrates, and more courthouses; for indigent civil plaintiffs, more court-appointed counsel to assess in the first instance the merits of the claim and to provide proper representation.

On the one hand, this sentence is increasingly harder to accept in a time of financial crises in which government's actions have been looking the other way around, i.e., towards a decrease in the expenses in the services being provided. However, on the other hand, the same sentence points out an alternative that, given the current economic scenario, is potentially more sustainable and viable, i.e., "*more court-appointed counsel to assess in the first instance the merits of the claim*", which undoubtedly may include the appointment of alternative methods prior to litigation. Such potential alternatives are described next.

2.4 Alternative Dispute Resolution

Abraham Lincoln once stated the following: "Discourage litigation, persuade your neighbor to compromise where you can. Point out to them how the nominal winner is often the loser. . . in expenses and waste of time". This sentence sums up, in a few words, key factors that may lead one individual into engaging in an alternative conflict resolution process, i.e., in a courtroom, the outcome may not be all favorable, despite winning the case. Additional aspects must be considered in litigation that can have a significant impact, including the time spent and all the costs of the process. ADR methods for problem solving address exactly these issues (Brown and Marriott 2012).

Historically, the use of ADR methods has faced some resistance, which it still faces nowadays in some arenas. As Redfern (2011) points out, many parties and lawyers do not fully appreciate the working of these alternative methods, i.e., many of them have spent their whole professional lives within the realm of litigation and are now uncomfortable or opposed to the commerciality, informal nature and apparent lack of strict rules of ADR. There are also lawyers who are not comfortable with the empowering of their clients, i.e., they do not acknowledge that the point of view or the eventual strategy of the client may have interesting insights and

find it more comfortable to pursue the far more familiar and controlled path of the litigation process. Ultimately, a more competitive lawyer may also have as objective to retain the case for as long as possible rather than settling it in an early stage using an alternative method.

Notwithstanding, ADR methods have been used and adopted by both legal systems and parties as the first step to attempt to solve a dispute. There are even countries in which parties are encouraged or required to try some kind of mediation before advancing into court. Taking as an example the United States of America (USA), numerous law firms and companies have committed by themselves to use ADR prior to litigation. Mediation is also mandatory in a number of USA states, including California, Florida, Oregon, and Texas (Barbieri, Gina Lea 2011).

At a European level, the European Parliament and its Council recently approved measures towards the encouragement of the use of extra-judicial procedures (Directive 2008/52/EC of the European Parliament and of the Council on Certain Aspects of Mediation in Civil and Commercial Matters). This directive specifically states *“A court before which an action is brought may, when appropriate and having regard to all the circumstances of the case, invite the parties to use mediation in order to settle the dispute. The court may also invite the parties to attend an information session on the use of mediation if such sessions are held and are easily available.”* (art. 5, (1)). Moreover, article 9 states that *“Member States shall encourage, by any means which they consider appropriate, the availability to the general public, in particular on the Internet, of information on how to contact mediators and organizations providing mediation services”*. This directive places the responsibility to inform about extra-judicial approaches on the member states and their courts.

Prior to this European directive, the United Kingdom had already amended its civil procedure rules, introducing the use of alternative dispute resolution procedures where appropriate, and empowering the courts to order the stay of proceedings pending the use of ADR (Barbieri, Gina Lea 2011).

All these actions by part of the governments evidence the potential benefits of the use ADR methods, even from the standpoint of the judicial systems. These actions may even become mandatory considering the current phase of generalized crisis in the courtrooms due to the impracticable and increasing amount of pending cases. Following such methods, governments expect to decrease the number of cases that actually need to be solved by means of a traditional court.

Concerning the disputant parties, the main reason in the acceptance and use of ADR relies on the expectation of smaller times and costs for the conclusion of the processes. Parties also tend to choose ADR mechanisms as they are usually associated to less exposure than traditional ones. The last but not the least is that the mediator may be chosen by the parties and agreed upon, instead of being appointed by a courtroom, which increases the parties' confidence and satisfaction.

One may be faced with many different types of ADR procedures, classified according to their objectives, terms or duration. Some of the less frequent or known approaches include the so-called minor trials and fact-finding procedures. In a minor trial there is a session that usually lasts for a day or less, in which the lawyers

of each side present their cases to representatives of the parties who have authority to settle the dispute. In general, the parties hire a mediator to preside over the minor trial. The parties meet to try to negotiate a settlement. In a fact-finding procedure, the facts relevant to a controversy are determined. Other procedures exist, some of them far more used and common, particularly in civil law cases. These include negotiation, mediation, arbitration or conciliation, which will be analyzed in detail in the following sub-sections.

2.4.1 Negotiation

Negotiation (Raiffa 2002) is a collaborative and informal process by means of which the parties communicate and, without any external influence, try to achieve an outcome that can satisfy both. Negotiation is widely used in the most different arenas, such as legal proceedings, divorces, parental disputes or hostage situations. It is a non-binding process, which means that the parties are not legally obliged to comply with the outcome. There are many ways of organizing the several negotiation techniques. From the perspective of Walton and McKersie (1991), negotiation can be classified as distributive or integrative.

In the distributive approach, one looks at the items in dispute as something that can be divided and distributed by the parties in an attempt to maximize their satisfaction. A good example can be a divorce process in which the parties sit down to divide the assets. There are a fixed number of items, each one with a given value, and they will be divided applying understandings such as fairness and equality. Another well-known process of distributive negotiation is the one that goes on between unions and executives, where the resources are scarce and include wages, work hours and other working conditions. In this process, unions defend the interests of the workers, thus trying to maximize the income and optimize working conditions. On the other hand, managers try to maximize the profit of the company. The conjoint point is that the company needs the workers and the workers need the job, so it is around that matter that the negotiation will develop.

This type of negotiation is also characterized by the fact that what one party wins, the other loses, i.e., if the workers earn a higher wage, the company will lack the same value, thus decreasing the profit. In game theory, these scenarios are known as zero-sum games, depicting a situation in which a participant's gain (or loss) of utility is exactly balanced by the losses (or gains) of the utility of the other partaker. If the total gains of the contestants are added up, and the total losses are subtracted, they will sum to zero (Raghavan 1994). Two central perceptions here are the ones of utility and resistance (Zelevnikow and Bellucci 2004). Utility denotes the value that a given item being negotiated has to a party, while resistance denotes the willingness of a party to change its notion of utility. A good negotiator usually tries to convince the opponent that certain items do not really have the value that they are being given by the opponent. The negotiator will succeed if the opponent adopts a low profile concerning a given item, and if he does, it will be easier for the

negotiator to win or he will at least be in a better position for the rest of the negotiation process (Jennings et al. 2001). Accordingly, utility functions can be formalized that help to understand how each party values the items being distributed therefore predicting possible outcomes and the evolution of the negotiation process (Zelevnikow and Bellucci 2004).

In integrative negotiation, the problem is expected to have more solutions than the ones visible at a first sight. In this type of problems, the parties try to bring to the conciliation table as much interests as possible, so that there are even more valuable items to negotiate. When the parties are increasing the value of what they put on the table, they take into account their interests, which include their needs, fears, concerns, and desires. This type of negotiation is also known as interest-based as the parties try to combine their interests, and find topics in which they may meet. By doing so, more satisfactory outcomes are achieved. This makes integrative negotiation more desirable than the distributive one.

In order to illustrate the difference between these two types of negotiation let us consider the following situation: *“Two old ladies have a dispute because of an orange. They both want the last orange that is in the fruiter. If they resolve the dispute using the distributive approach they will split the orange in two equal parts and each one will get half of the orange. If, on the other hand, they use the integrative approach, each one will state what they want, listen to what the other part wants and try to reach an outcome that would satisfy both”*. In this example, one of the ladies wanted to eat the orange while the other just wanted the peel for making a tea. By following an integrative approach, each one gets what they wanted and the outcome is optimum. A dominant perception here is the one of Pareto efficiency (Fudenberg and Tirole 1983). In these problems, this discernment denotes a state of allocation of resources in which it is impossible to make any individual better off, without making at least one individual worse off. In the given example, the solution obtained with the integrative approach would have been a Pareto efficient one, as no better solution could have been achieved.

An important aspect, as may be seen from the example, relies on the identification and the justification of the interests of each party, so that each one can understand them. If there is good will and each one understands the position of the others, in terms of their interests, desires and fears, it will be easier to reach a better outcome. This process eventually leads to what is known in game theory as a win-win game, i.e., all the parties are better at the end of the negotiation process than when it started.

Although these two approaches when analyzed in this way may be seen as conflicting, they may be used conjointly as introduced by Lax and Sebenius (1986). In fact, even in an integrative approach the items have eventually to be split up. The joint use of these two approaches has the advantage of creating a relationship of trust between the parties when they are increasing the values of their items, so that when they get to the phase of splitting them, everyone knows the interests and fears of the opponents, which makes it easier to divide the items in a fair fashion and reach a common agreement.

In general, a negotiated procedure can be organized in four steps although, given the informal and flexible nature of negotiation, these may vary:

- Identification of interests – definition of the key issues in dispute, and separation of what is an interest and what is a position;
- Alternative scenarios – definition of alternative scenarios not considered by the parties that may yet meet their underlying interests;
- Refining – after the establishment of one or more baseline acceptable scenarios, the process moves forward to the combination or refining of scenarios in order to meet their interests as much as possible; and
- Outcome – final step in the negotiation process in which a final scenario is selected via consensus.

2.4.2 Mediation

Mediation (Brown and Marriott 2012) refers to a form of alternative dispute resolution in which the parties in dispute are guided by an independent mediator, also known as the third party, which tries to guide the process to an outcome that may satisfy both parties. In this approach, like in negotiation, the parties decide about the outcome instead of it being imposed by someone else, but with the added assistance of the mediator. This third party is chosen by both the parties and has no authority for deciding on the outcome of the dispute, but only to guide and assist them throughout it. This should be done by maintaining the parties focused on the subject of the dispute, and by facilitating all the interaction and communication between them. Mediators are hence key persons as their skills and aptitudes may represent the success or failure of the dispute resolution process.

In fact, the mediator is often in a difficult position, i.e., he lacks the power to impose a solution but must, nevertheless, lead disputants into an agreement. To achieve this, besides substantive expertise and a keen and analytical eye, certain communicational skills are fundamental in order to establish the necessary and fundamental rapport. The mediator must be able to win the parties' trust: only in this way may the parties be guided into accepting a solution that is probably not the best one possible nor the one hoped for. Moreover, a mediator should be able to listen, have problem-solving skills and be creative in it, separate personal feelings from the issues under consideration, maintaining an image of neutrality and be assertive while maintaining a strong physical presence, marked by honesty, dignified behavior and respect for the parties.

He should provide strategic advices in the correct time with the objective of easing the process without forgetting to maintain its neutrality. For this purpose it is imperative that the mediator will work under different angles and assessments, recognizes the expectations and frustrations of the parties, and react to them. It is also important that he shows the ability to calm down the parties when needed and, at the same time, support and encourage them to reach a satisfactory outcome. Thus

a mediator must have, above all, good communication skills so that his ideas are correctly transmitted to the parties. A mediator should not be a cold outsider that simply examines facts and decides upon them. In fact, being able of reading the parties feelings about the subjects under dispute, it is also very important for him to understand how significant each subject is for the parties (Langer 2005).

In all of this, the mediator's communication skills and an efficient communication medium are paramount. In fact, and as will be seen further ahead, communication is so important for conflict resolution that it is the lack of this efficient framework, observed in some of the current technology-supported conflict resolution approaches, that inspires the whole book.

From a mediator's perspective, the process is organized into a more or less stable sequence of steps, namely:

- Opening – the discussion is officially opened and the process is outlined. The mediator establishes contact with both parties and brings them into his laps. He introduces the parties to the event and pictures how the process will take place;
- Scope definition – the parties must agree on the scope of the process, as well as on each one's objectives and roles;
- Definition of an agenda – mediation usually consists of a series of meetings. Parties must agree and commit to their frequency, schedule and location;
- Rules – despite the informality, mediation follows some basic rules and principles. In this phase, the ground rules are established (e.g. one person speaks at a time, the mediator may interrupt a party);
- Breaking down the problem – in this phase all the parties present their viewpoints, perceptions of the issues, and reasons for the dispute. Here, the mediator must be able to identify the key issues in dispute, the claim and the expectations of each party. Then he must separate what is an interest from what is a position, pointing out when positions are unrealistic, unfair or simply an obstacle to the process. The mediator must also be proactive in helping people to express their concerns, ensuring that they go through all the issues;
- Identify common interests – after careful hearing of the parties, the mediator should identify any points of agreement;
- Potential outcomes – the mediator is responsible for devising potential outcomes and their alternatives or variations, in a constant attempt to bridge the gap among the parties; and
- Outcome – agreement and documentation of a solution concerning the dispute or other decisions agreed upon by the parties.

The clients often prefer approaches based on mediation to others (Sussman 2009). One of the most chief concerns is the fact that mediation, when conducted in a positive way, often reaches better results for the disputants. This happens because parties have an active role in the definition of the outcome, whereas in other approaches they may not have it. Unlike negotiation, when two parties seek mediation as a way to solve their dispute, they are often more willing to reach a solution. The simple fact of agreeing in a common mediator and granting him the authority for conducting the process is a sign of good will and determination in

achieving a solution for the problem. Disputants following this approach are usually more willing to work together than against each other. Moreover, the slightly more structured nature of mediation and the existence of the character of the mediator are often seen as positive by the parties, as they feel an increased sense of security and confidence on the whole process.

Likewise to negotiation, mediation is generally a non-binding process in the sense that the parties have no legal obligations between them at the end of the process. However, more recently, binding forms of mediation have been emerging. Their finality is similar to that of binding arbitration, with the added advantage of allowing the parties to work together, with the assistance of a mediator, to come to an acceptable agreement. At the end, the parties sign a legally binding contract establishing the terms agreed upon during the mediation and each one's obligations. This form of dispute resolution can be placed somewhat between traditional mediation and arbitration.

Mediation is a tool often used in a wide range of cases ranging from a mother trying to calm down two brothers that are fighting over a toy car to conflicts between countries (Zartman 2007). One of the most widely known examples is the one of the U.S. mediating the Israeli-Palestinian conflict in the Middle East, with the objective of achieving a long lasting armistice (Feste 1991).

2.4.3 Arbitration

As in mediation, in arbitration (Bennett 2002) the two parties also use a third independent and neutral entity for solving a dispute. However, this entity has generally no active role on assisting the parties throughout the process. In this approach, the mediator or arbitrator simply hears the parties and, based on the facts presented, takes a decision without influencing the parties during their presentations, i.e., it can be stated that the arbitrator acts as both judge and jury. The outcome of an arbitration process is also singular as it may be binding or non-binding.

In the binding forms of arbitration the conciliators' decision is final and cannot be disputed or appealed. At the end, an enforceable arbitration award is issued, with legal validity, expressing the decision of the settlement. Parties are thus bound to this decision whether they find it fair and acceptable or not. Such a contract does not exist in non-binding forms of mediation. In these forms, the arbitrator makes a determination of the rights of the parties to the dispute, but this willpower is not binding upon them. Thus, the award is actually an advisory and expert opinion of the arbitrator's view of the respective merits of the parties' cases, and is by no means enforceable, i.e., the role of the arbitrator becomes closer to the one of the mediator in mediation. The main difference is that, while a mediator assists the parties during the process in an attempt to reach a middle-ground compromise, the arbitrator will remain out from the settlement process, "*merely*" giving a determination of liability and, if appropriate, an indication of the damages to be matured.

As the decision of the third party may be definitive and binding, its role in the process is even more important than in mediation. In fact, the arbitrator's relevance can be compared to the one of a judge or a jury in a litigation process in court.

Disputants find a number of advantages in the use of arbitration. Like with other alternative approaches to conflict resolution, the time spent and the cost of these processes can be significantly smaller than in courts. Efficient conflict resolution processes are valued particularly by companies that see their efforts hindered by slow and costly litigation procedures (Buhring-Uhle and Kirchhof 2006). Another factor that definitively contributes to minimize the time being spent has to do with the growing number of arbitration service providers. Its confidentiality when compared to litigation is also seen as a positive factor.

Powered by these advantages, the use of arbitration has been growing steadily. One particular area of success is in the field of international commercial disputes (Varady et al. 2006), in which parties seek a solution for disputes arising from international commercial agreements and other international relationships (Buhring-Uhle and Kirchhof 2006). Here, in particular, parties desire to avoid the uncertainties and potential costs of the local practices associated with litigation in national courts, while relying on the commercial expertise of arbitrators. Another advantage of arbitration in this domain concerns the language of the proceedings. In arbitral proceedings the language of arbitration may be chosen, whereas in judicial proceedings the official language of the country of the competent court will be automatically used, which may result disadvantageous for some of the parties. Companies involved in international disputes also find it advantageous that there are limited avenues for appeal of an arbitral award. This can be advantageous in the sense that it limits the duration of the dispute and any associated liability.

However, at the same time, this can also be seen as a disadvantage in the sense that the parties waive their rights to access the courts and to have a judge or jury decide the case, even if they do not find the award fair, making it hard to overturn an eventual erroneous decision. Other disadvantages can still be pointed out. One of the most significant is that sometimes an individual, when entering into a contract, does not know that the only way of solving an eventual dispute is through a binding arbitration process, without the possibility to go into court (Moses 2008). This may represent a serious threat to the parties' rights. This is even worse in scenarios in which parties have to pay for the arbitration service they are "*forced*" to use. Contrary to courts, the right to an attorney is not always granted. Thus, sometimes, parties that cannot afford one end up without any legal representative.

The arbitration process may, from an abstract perspective, be organized in the following number of steps:

- Initialization – at the beginning of the process, the parties must provide their personal data as well as a preliminary statement of their claims, including their value. They may also have to, if applicable, pay some initial fee;
- Definition of rules – previously to begin the process, parties must agree on its terms, particularly on the arbitrator or arbitral tribunal. If no agreement can be

reached at this state, and arbitrator or arbitrator tribunal may be appointed by the arbitration institution or service;

- Proceedings – the actual proceedings take place before the arbitrator or arbitrator tribunal. At this stage each party has the opportunity to present its case; and
- Award – the arbitrator or the arbitrator tribunal issues an award, usually in the form of a document that should be signed by the parties. On the other hand, at the end of the process the parties may have to pay some kind of fee.

2.4.4 Conciliation

A process of conciliation is an approach on conflict resolution by means of which a conciliator meets the parties separately, and aims at the resolution of their differences. The conciliator should be an expert with skills that allow him to lower tensions between the parties as a first step for finding common ground. Then, he should communicate effectively with the parties in order to understand all the issues that generated the dispute. Subsequently, the conciliator should be able to provide technical assistance to the parties as needed, so that they should have access to reliable evidences in order to take the right decisions. Finally, the conciliator should explore all the potential paths for solutions and, at the end, achieve a mutually acceptable settlement.

When compared to the previously depicted methods, conciliation has some dissimilarities. It is different from arbitration in that conciliation is a non-binding process, and the conciliator has usually no legal authority, i.e., the conciliator cannot seek evidence or call witnesses, nor endorse an enforceable award. When compared to mediation, conciliation is also different. In fact, while in mediation the mediator tries to find ways to maximize the mutual gain by bringing as much interests to the table as possible, in conciliation the mediator will try to seek for concessions. Another major difference is that during conciliation parties seldom meet in person, i.e., conciliation is generally more suited for parties that have an already ruined personal relationship, and whose joint presence would constitute an obstacle to the resolution of the conflict.

2.5 Online Dispute Resolution

In the move to a global society based on computers, new needs emerged in the field of ADR. As disputes can now take place between virtually any two entities regardless of their location, it would be impracticable for them, despite all the good will, to use an ADR mechanism. In fact, despite the inexistence of a designated court in ADR, and despite the fact that the parties can choose the location for the dispute resolution to take place, there is still the need for a physical location, so that the parties can meet and carry on the proceedings.

With the integration of new communication technologies into our daily lives, ADR procedures began to change, giving birth to what is nowadays known as Online Dispute Resolution (ODR) (Lodder and Thiessen 2003; Katsh and Rifkin 2001). This new model for dispute resolution aims at being an online alternative to litigation. It can however expand the possibilities of already traditional ADR approaches, with the introduction of virtual entities with enhanced abilities and increased communication possibilities (Larson 2006). ODR became possible thanks to technologies such as Instant Messaging, Electronic Mail, videoconference, forums, mailing lists and, more recently, video presence. Using these technologies parties can communicate remotely, in a synchronous or asynchronously way, instead of communicating in the physical presence of each other.

However, every major technological shift raises questions and new issues that should always be analyzed with care. Technologies can, on the one hand, be used as a simple tool for ADR. In this approach ODR results much similar to ADR, except for the fact that the parties are not in the physical presence of one another, but are communicating through a telematics medium. The most common image is the one of two parties in different parts of the globe, an eventual third party with a mediator or arbitrator role in another location, all of them communicating via IM or video conference. Technologies, in this simpler approach, have no active role; they act only as a facilitator for the process.

In a different course of action, technologies can be seen as a fourth party that assists the mediator (Katsh 2002). Although not having here an active role, these tools can assist the mediator or arbitrator in taking the right decisions or planning the right strategy. In this field the most important technology is that of Expert Systems. They can provide the third party with knowledge about past cases and their outcomes, about the legal norms that apply or even about other issues. Technologies may entail the use of decision support systems that guide the parties through the course of action, or simple tools for storing and managing the information about the case.

On the other hand, technologies can be used as party representatives. In this approach parties do not have the main or the most active role on the process. Instead, they make use of software agents that represent them and act on their behalf. In this arena, the most common systems are automated systems and intelligent agents. These systems know the objectives of the part they are representing and have the ability to define a strategy that they will follow to achieve these objectives. They may be designed and configured to act like the party they represent or to act in an even better and efficient way. For a more in-depth discussion, Andrade et al. (2007) examine, in a general sense, the implications of software agents with legal personality and representation while Fasli looks at the specific field of e-Commerce and how software agents can be used to act on behalf of the user to sign commercial contracts.

We may even think of computer systems that are indeed the third party. In this more radical approach, there is no human deciding on the outcome or guiding the parties in their way to achieve it. There is, instead, a system that performs this major role. Li et al. (2013) describe an approach on automated negotiation as a way to take

optimal decisions in distributed systems, that can be seen as a recent example. This usually involves an electronic mediator or arbitrator, acting as the coordinator of the process. It should have skills for communicating with the parties and understanding their desires and fears, and have the ability to decide the best strategy to follow in each scenario. This is evidently the hardest approach to follow, since it is not easy to provide a computer system with the decision and planning abilities of a human expert as well as the ability to perceive the emotions and desires of the parties involved. It must also be acknowledged that humans are in general reluctant in relying in machines to take the binding decisions that power their lives as Davenport and Harris discuss (2005).

ODR is a relatively new approach to dispute resolution since the technologies it builds in are also recent. It has, however, known a fast growth in its use given its advantages (Krause 2007), which are further discussed in the following chapter.

2.5.1 Inside a Typical ODR Process

An ODR process may, in general, be organized according to a sequence of phases (Lodder and Zeleznikow 2005; Chiti and Peruginelli 2002). A first one where a party contacts an ODR provider with the intention of starting an online dispute resolution process. This party must, in this phase, provide information about the other parties. The system must then inform all the intervenient, put them into contact and determine if they are willing to participate on the dispute resolution process. If all the parties agree, the system moves into the next phase in which it tries to gather as much information about the problem as possible.

In this phase, the parties are asked about all the details of the dispute, including eventual monetary values involved, as well as documents or items that can act as evidence or facts that are essential to the case. It is therefore very important that the system understands the expectations of the parties and how they feel about each subject under discussion. This is probably the most challenging phase for a completely autonomous ODR system, i.e., without human intervention.

Then, the system may enter into the last phase, in which the data collected in the previous one is analyzed. This is the key phase in the ODR process. To conduct this analysis, the expert acting as the neutral may consider past known similar cases, legal norms and other information. In the last phase a decision or strategy is generated and the parties are informed. In this phase, the effectiveness of the algorithms and strategies used is reflected in terms of the success or failure of the process. This may later be used for improving the strategies and algorithms for future iterations.

2.5.2 *Classifying ODR Systems*

ODR systems can be categorized according to the way they assist the parties in a dispute resolution process (Thiessen and Zeleznikow 2004):

- **Information systems** – this type of ODR system simply provides information that can be useful for the parties when working out a solution for the dispute. This information may comprise the norms of a given country concerning the domain of the dispute, information about the parties, about the status of the process, among others. Examples of these systems are **Scenario Builder** that can automatically generate web pages with information relevant for assisting parties in an ODR process, and **Notgoodenough.org** that provides its customers with an online space for the share of experiences and information, along with information on its web page, radio spots, TV and print media;
- **Blind Bidding** – the systems included in this category aim at the automation of simple purely monetary questions. This may include cases like divorces without children, failed buy or sell operations. Parties make confidential bids and the system is responsible for deciding when a possible agreement point has been reached. An example of such systems is **CyberSettle**, which is a fast and simple way of solving small disputes. Its conception is based on the elimination of the personal and sentimental matters and the reduction of problems to purely economic ones. Besides that, this service includes facilitators that by phone will communicate with the parties to try to conduct the process to a successful outcome. The company claims to have handled over 200,000 transactions over the past 10 years, and facilitated over \$1.6 billion in settlements;
- **Document management** – these systems include facilitators working online or offline with parties, providing services for the creation and management of contracts and other structured documents. The clients of these systems are usually individuals with some difficulty in creating documents that need to meet a specific standard or structure. **Netdocuments** is an online service for document management that allows documents to be uploaded, accessed and shared with other persons from any part of the world. Another example is **Negoisst**, which is a project from the Electronic Negotiation Group, founded by the German Research Foundation. It is an electronic negotiation support system that covers semi-structured communication as well as document management and decision support. The key characteristic of the system is the integration of these components. This system was tested in the 3rd Annual International eNegotiation Tournament in November 2003, with a simulated case of a classic Union-Management dispute;
- **Automated Negotiation** – The systems under this category rely on advanced optimization algorithms that try to find the optimum solution for complex problems. These systems generally work by asking the user their preferences about the items in dispute, i.e., a quantification of how much they want each item. They can be used in a variety of different cases, ranging from divorces on which people need to agree on who gets what, to unions and managements trying

to agree on wages and working conditions for the workers of a given company. Examples are Zeleznikow's **Family_Winner**, which produces an outcome to divorce cases after the parties have provided as input how much they want each item in dispute. **Inspire** is a system for simple negotiations in which the preferences of the users are provided as satisfaction graphs. After an agreement is reached the system generates suggestions to improve the satisfaction of the parties, which may or may not be accepted by them. Another well-known example is **SmartSettle**, an online tool that empowers negotiators and allows for faster and less stressing negotiations to take place between parties from any point of the world;

- **Customized Systems** – these are custom systems built for specific purposes or requisites. Some scenarios have unique characteristics that are not fit by any existing system and specific ones have to be developed. A good example is the one of transactions in **eBay**. In this service, users can sell and buy goods directly between one another, and many disputes arise every day due to the most diverse cases, i.e., damaged objects, wrong objects, no delivery, delay, just to name a few. For dealing with cases that involve small amounts of money, **eBay** developed its own mediator that tries to put the two parties into contact and solve the dispute. For higher amounts, services like the ones once provided by **SquareTrade** can be used. This company was the first online dispute resolution service to address e-commerce disputes. Much of this process was automated but, in case the automation failed, the services of a human mediator were also provided. This company discontinued its dispute resolution services in early 2008, and now focus only on extended warranties for electronic devices;
- **Virtual Mediation Rooms** – these systems are very similar to traditional mediation, except that the meetings take place in virtual rooms using tools such as instant messaging, video conference or email. The mediator will try to work out a favourable outcome without meeting the parties, by means of these communication technologies. One of such environments is **ECODIR**, which stands for “*Electronic Consumer Dispute Resolution*” and helps consumers and businesses prevent or solve their complaints and disputes online. An important note is that this is a free service and it is funded by the European Union. It provides services for communication between the parties through the web site and, if requested, mediation services. Another example is the **Mediation Room**, which is a very flexible online space for the mediation of disputes;
- **Arbitration Systems** – these systems are equivalent to traditional arbitration services except for the fact that they are provided online. In this approach, human arbitrators work from any point of the world solving cases with the help of communication technologies like email, telephone or instant messaging. An example of an online arbitration services provider is the **American Arbitration Association** which offers these services globally. Although the association provides other dispute resolution means like mediation, arbitration may ultimately be the only solution. Another service provider is **Mediation Arbitration Resolution Services** which provides arbitration and other services based on technologies like videoconference with the objective of providing a service as

similar as possible to the traditional services, but with the advantages associated to online tools.

ODR systems can also be classified according to their degree of autonomy, as first or second generation. First generation ODR systems describe systems that nowadays are generally implemented. The main idea behind these systems is that the human beings remain the central pieces in the planning and decision making process. Because of that, human mediators are carefully chosen according to their skills, aptitudes and previous cases they participated in, since they will have a determinant role in the process. Electronic tools are evidently used, but are seen as no more than tools, without any autonomy or major role. Their only purpose is to assist the parties and make the management of the information and communications between them easier. In first generation ODR, the main technologies used are instant messaging, forums, video and phone calls, videoconference, mailing lists and more recently videopresence. Agent-based technologies may be used, but have no active role or autonomy. These systems are common nowadays and are usually supported by a web page. They represent a first necessary step before a more autonomous role of intelligent systems appears.

The second generation of ODR systems is essentially defined by a more active role of technology. It is no longer used for the mere role of putting the parties into contact and making access to information easier. It goes beyond that and is used for idea generation, planning, strategy definition and decision making processes. Humans have in this generation a secondary role, whether they are one of the parties in dispute or the mediator. They will be represented by intelligent agents that will have the autonomy for representing the intentions and desires of the humans. These agents try to behave and pursue the same objectives that the humans that they represent do. The technologies used in this new generation of ODR systems will comprise not only the communication technologies used nowadays, but also an umbrella of scientific fields such as Artificial Intelligence, Mathematics or Philosophy.

The evolution towards second-generation ODR systems has been slow. It is, on the one hand, difficult to emulate in software agents the complex cognitive processes that human expert use. On the other hand, there is always a sense of reluctance when software agents are to be empowered with the autonomy to take decisions on their own. This might even be the main barrier to this evolution, as one would be more prone to disagree with an unfavorable outcome if it was decided by a computer system instead of being decided by a human expert.

Although the path to this second generation of ODR is set and the technologies needed are already more or less known and explored, there is still a long way for reaching it, most likely because of our reluctance to be replaced by computer systems and the consequences of it. It is expected that ODR tools slowly move towards this new generation, giving small but solid paces, bringing it closer to reality.

2.6 Conclusion

According to the matters endorsed here, parties facing a conflict can use different resolution methods. The most traditional form of conflict resolution is litigation in court. It is a long-established process, controlled by the judicial system, i.e., it can be seen as a somehow safe approach. Parties generally have the notion that their rights are defended, i.e., courtrooms grant the right to a legal representative, even if the parties cannot afford one, and the right to several appeals that may be used when parties disagree with the outcome. However, presently, litigation in courts presents a considerable number of disadvantages.

Litigation in court is a very expensive and slow process. Even a minor case may take more than 1 year to meet a conclusion. Moreover, these processes are open to the general public and may be the subject to media coverage. This is not always desired by the parties, which would often rather choose privacy over public exposure. Another negative aspect is related with the social image of the courtroom itself. People see a courtroom as a place of conflict rather than a place to solve conflicts. In a courtroom parties take up opposite positions, they acquire the notion that what one wins the other loses. This does not promote a cooperative resolution of the differences, nor does it foster the interpersonal relationships, which are fundamental for the success of the process. All this results in a mentally and emotionally wearing process, connoted with negativity.

Propelled by these disadvantages, alternative methods for conflict resolution started to emerge. Approaches such as negotiation, mediation or arbitration became the most widely used. These approaches, despite their differences, have the same objective: to be a more efficient path to solve a conflict than the courtroom. Moreover, they share a considerable number of advantages. Alternative processes for conflict resolution are not dependent on the loads of the courtrooms or on the formality of their processes, i.e., they are more dependent on the availability of the parties, thus being more time-efficient. There is also the general notion that alternative methods are cheaper. They are also much more dynamic and flexible, allowing to adapt to the needs of the parties. Contrary to litigation, they tend to be private processes, taking place only in the presence of the third party who, besides being impartial, commits to maintain secrecy.

However, a still more significant advantage when compared to litigation is that the conflict resolution environment itself, the place where the parties meet, is far more favorable for conflict resolution. In fact, alternative methods focus on improving the communication and the relationships, on searching for mutually satisfactory solutions rather on maximizing individual gain. This is fundamental for the achievement of successful outcomes.

With the technological evolution, a natural step forward was the gradual involvement of technology in these processes. ADR methods gradually started to incorporate technology, whether for simply facilitating communication or information management or, later, to support the generation of solutions or the compilation

of useful information. This brought along some many new advantages but also some new issues and challenges, which will be analyzed in the following chapters.

Specifically, this book places a particular emphasis on the lack of contextual information of ODR tools. In fact, these tools can give origin to “cold” environments, where emotional response and other important aspects of our interaction mechanisms play a reduced role. One may, evidently, argue that such decisions should be taken objectively; and they should. However, emotions and other aspects have a very important weight in our decision-making mechanisms (Damásio 1994). Thus, these same mechanisms become impaired when they have to work without access to this information. At the time of making or accepting an offer, a party is unaware of how the other parties feel about the issue; i.e., are they stressed? Are they calm? Are they in the verge of abandoning the process? Questions like these are crucial in the moment of making decisions, and are very hard to answer using current mostly text-based ODR tools.

The lack of contextual information that would allow parties to take better decisions is due to the low richness of the media used to communicate, mostly text-based. In fact, it results difficult to convey emotions and other aspects of our rich communication processes using text only, something that we do intuitively and unconsciously when we are face-to-face. A significant part of this book will focus on how current communication mechanisms can be improved in order to convey this information to the parties and the mediator, so that better and more informed decisions may be taken.

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