



**ARTIFICIAL INTELLIGENCE AND REDUCTION IN LITIGATION: evolution of the extrajudicial solution for conflicts**

*INTELIGÊNCIA ARTIFICIAL E REDUÇÃO DE LITIGIOSIDADE: implementação em meios extrajudiciais de resolução de controvérsia*

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## ABSTRACT

Artificial intelligence brings several solutions and new perspectives to diverse sciences and professions. It is obvious that debates regarding possible applications on Courts and legal science should gather much attention. This is not as much a matter of “if” it will happen – it is an issue of “when”, “how” and the “intensity” it will affect legal science. Nevertheless, its applications should not be first considered as a way of increasing the speed and number of rulings in systems that experience an overburden of the Judicial Branch represented in a prohibitive number of cases, like Brazil, where the newer legislation in civil procedure shows more focus on repetitive lawsuits than complex legal debates. It seems artificial intelligence can offer excellent possibilities for conflict resolutions, mainly those that follow repetitive patterns. Through the deductive reasoning and the Cartesian analysis, this study conducts a quantitative and qualitative examination of official reports and legal literature. The objective of the research is to evaluate the benefits of using artificial intelligence on those conflicts before the beginning of a judicial dispute. The conclusion is that, in avoiding a new lawsuit all together can have a positive impact in the excessive litigiousness in Brazil.

**Keywords:** Artificial Intelligence. Excessive litigiousness. Alternative dispute resolution. Civil procedure. Technological evolution.

## RESUMO

Com a chegada de soluções de inteligência artificial nas mais diversas áreas do conhecimento e profissões, é inevitável que ela passe a ocupar um espaço de destaque em algum momento. Não é uma dúvida sobre “se” isso ocorrerá, mas de “quando”, “como” e em qual intensidade ela ocorrerá. O grande problema, contudo, é que a ferramenta está sendo pensada especialmente em um contexto que poderia receber melhor reflexão. O Poder Judiciário encontra sobrecarregado por um volume impróprio de ações e sucessivas evoluções legislativas ajustam o processo civil, prioritariamente, a dar vazão e velocidade a demandas repetitivas, com as questões de maior indagação sem grande destaque. A inteligência artificial traz possibilidades excelentes para a resolução de litígios, especialmente os repetitivos, que sigam padrões identificáveis. Através do método dedutivo e tratamento cartesiano dos dados, com análise quantitativa e qualitativa dos dados oficiais e da literatura disponível, o objetivo deste estudo é verificar os ganhos de aplicar a inteligência artificial nos conflitos repetitivos antes que eles cheguem ao Poder Judiciário. Com isso, é possível concluir que esses litígios sequer chegam a se tornar um processo, com consequente redução de litigiosidade.

**Palavras-Chave:** Inteligência artificial. Judicialização excessiva. Meios alternativos de resolução de conflitos. Processo civil. Evolução tecnológica.

## INTRODUCTION

Artificial intelligence is a topic that, interestingly enough, is still not very common in debates among legal professionals and is rarely addressed in their scientific production. Both academia and the courts are still moving timidly towards definitively incorporating it into the legal world.

The fact is particularly curious because the topic is not so new in other spheres, which adopt the terms 4.0 or fourth industrial revolution (ASSAD NETO, 2018), with the implementation of artificial intelligence in the productive sphere and in procedures in general. Since 2010, Germany, through its agency German Trade & Invest, has adopted “industrie 4.0” as a strategic concept to modernize its industry and production (GERMAN TRADE & INVEST, 2014).

When referring to the concept of industry 4.0, it becomes simpler to explain the distinction between artificial intelligence and computerization. Many initiatives that bring commendable technological developments, in fact, bring very little artificial intelligence. This can be understood as the use of technology to automate activities that would normally require human intelligence (SURDEN, 2019).

The reserve as artificial intelligence is still seen by most legal operators demonstrates, in particular, two things: (i) there is theoretical and political resistance (market reserve) and fear (of the unknown) in relation to this technological advance in law ; (ii) the way in which, despite this scenario, artificial intelligence advances, proves that such evolution is inevitable.

History shows, based on other industrial revolutions, that resisting progress does not usually produce effective results. The question is not whether artificial intelligence will reach legal operators. In fact, it's more productive to ask when, how, and how much they will be affected.

Here we come to the heart of this study. It is absolutely illogical to disregard the gains brought by artificial intelligence in resolving conflicts, in speed, equality, quality and reduction of human work. The discussion about the best and most effective time to apply it is much more relevant.

Since the redemocratization process that took place in Brazil at the end of the last century and the resulting Federal Constitution (among other factors), the numbers demonstrate a very serious and disproportionate increase in the number of legal proceedings. There is a phenomenon of excessive judicialization and a resulting sustainability crisis in the provision of judicial protection (DIAS, 2017).



The answer found by the Judiciary was to adopt techniques to increase its productivity to equally astonishing levels, in particular through mechanisms for standardizing decisions and uniform analysis of repetitive demands. This has changed the functioning and function of the magistrate and the Judiciary in the last two decades. Much of the judicial provision ceased to be an in-depth analysis of facts and norms and became a bureaucratic activity. Therefore, one cannot fail to analyze the alternative to this procedure of increasing trials by the Judiciary: their transfer to other extrajudicial means to resolve disputes.

Analysis of the nature of the causes and the parties involved makes it clear that the majority of conflicts correspond to administrative decisions or private relationships subject to the control of regulatory agencies. Other matters have a technical, not legal, complexity that could receive a more precise response in other spheres.

Therefore, the analysis proposed in this study is to consider the possible gains to be obtained in the implementation of artificial intelligence to assist in resolving conflicts before they reach the Judiciary, replacing the currently privileged practice of standardizing block trials in the Judiciary, with the use of artificial intelligence. The problem addressed is whether increasing the efficiency of dispute resolution can be an important factor in reducing litigation.

Through the predominantly deductive method, as well as Cartesian in data processing, with the quantitative and qualitative study of analysis of official data and doctrine, the hypothesis presented is that the application of artificial intelligence to conflicts before judicialization can be essential for reducing of litigation.

## **2 EXCESSIVE LEVELS OF LITIGATION AND THE POLICY OF RELIEF TO REPETITIVE DEMANDS**

When analyzing the numbers of the Judiciary in the last three decades, the absurd increase in legal proceedings is evident, corresponding to the transfer of countless disputes that previously did not exist or were resolved in different ways. Even though not all professionals have global knowledge of the numbers raised about this serious problem, the reality is that the workload of legal operators was revolutionized during this period.

There are many causes for this phenomenon, among which stands out, between the end of the 80s and the beginning of the 90s, (I) the process of redemocratization; (II) the Citizen Constitution of 1988; (III) the economic opening policy; (IV) the development of inclusive social policies; (V) the policy of valuing the institute of access to justice. To this factor, technological

evolution was added, with the development of information technology, the internet, the digitalization of procedures and, more recently, artificial intelligence.

It is important to clarify that the objective of this chapter is not to provide an in-depth analysis of the phenomenon of judicialization, its causes and consequences. This topic is too extensive for this space. This matter was extensively discussed on another occasion (DIAS, 2017). However, it is essential to briefly explain the numbers found and the approach that has been given to the serious problem by the Judiciary and the legal system.

Initially, it is possible to make a comparison of the increase in legal proceedings since 1988 in Santa Catarina. Unfortunately, before the creation of the National Council of Justice, the numbers of the Judiciary as a whole were more difficult to access. From the Court of Justice of Santa Catarina alone (SANTA CATARINA 1989, 1994, 2003), in 1988, 5,694 new cases were received. This number rose to 10,187 in 1994, 30,658 in 2002 and 78,323 in 2013. In other words, increases of 78.9% in the first six years, 438% in fourteen years and 1,275% in twenty-five years. An average growth of 51.02% per year. At a national level, according to CNJ figures, the total number of new cases per year in the 1st and 2nd degree courts increased from 20,012,222 to 27,742,054 between 2004 (BRASIL, 2005) and 2013 (BRASIL 2014).

Faced with this impressive growth in the number of legal demands, the answer found is easily identified: increase the number of trials. A series of measures were put into practice: an increase in the number of judges, growth in advisory services, use of technology and, especially, investment in the policy of standardizing decisions for so-called repetitive demands.

Within the scope of the CPC (BRASIL, 1973), articles 557 and its first paragraph sought to dispense with collegiate judgment on issues with consolidated jurisprudence. In the first instance, the most representative initiative of this trend was article 285-A, in 2006, which allowed the direct judgment of the unfoundedness of questions solely of law that already had decisions in similar cases of the same court.

The Federal Constitution was amended by Constitutional Amendment no. 45/04 to include the requirement of general repercussion to the extraordinary appeal, used to standardize decisions, and the binding summary, which served the same purpose.

From the same perspective, articles 543-A, 543-B and 543-C of CPC/73 were followed between 2006 and 2008, which defined the procedures for extraordinary and special appeals, respectively, with the same legal basis. Law no. 11,417, which implemented the binding summary procedure (BRASIL 2006).

The strategy was reinforced by the 2015 Civil Procedure Code (BRASIL, 2015), with institutes with the incident of repetitive demand resolution (IRDR – articles 976 to 987), incident of assumption of competence (IAC – articles 947) and the creation of a concept of official jurisprudence (articles 926 and 927). The new procedural diploma is seen as a great approximation of the common law precedent system, in which judicial decisions can bind future actions.

The option for a solution within the judicial system itself – and not outside it, through extrajudicial means – is reinforced by the strengthening of the conciliation procedure at the beginning of the process. According to article 334, §4º, I, of the CPC, the conciliation hearing at the beginning of the process is only waived if both parties refuse. The legislator missed a great opportunity to require the parties to demonstrate an attempt at conciliation before generating a legal demand.

The Judiciary obviously has a serious problem on its hands. It has a prohibitive number of disputes to judge and clear difficulty in doing so with quality. The solution adopted almost two decades ago is also explicit: increase, at all costs, the capacity for judgment. Adopting the same studies mentioned above, at the Court of Justice of Santa Catarina, the number of cases judged went from 4,868 in 1988 to 9,580 in 1994, 29,292 in 2002 and 107,422 in 2013 (SANTA CATARINA 1989, 1994, 2003). In the 1st and 2nd degree courts across the country, there was an increase in the number of end-of-process decisions from 16,024,845 to 25,180,332 between 2004 and 2013 (BRASIL, 2014).

To have an external parameter of what this growth means, Eduardo Jobim (JOBIM, 2008) published an interesting comparison between the volume of judgments of the STF and the American Supreme Court. In the same period, the American Court judged, in total, an annual average of 120 cases and reduced the number to 80 cases. In the Brazilian Court, individual decisions alone totaled 4,133 per Minister in one semester. The author concludes:

Taking these numbers, and comparing the two countries, we will see that the number of decisions, per year, of the American Supreme Court is close to the number of decisions that each Minister makes, individually, in the STF, per week (JOBIM, 2008).

The result, despite everything, cannot be considered satisfactory. In fact, the volume of trials has increased at an impressive rate. There is also an impression that it is possible to meet the volume of demands received. But at what cost is this volume of judgments achieved?

Garth and Capelletti, internationally recognized for their work on access to justice, warned that the growth of justice to be able to accommodate a greater number of disputes could not come at the expense of quality:

This beautiful system is often a luxury; it tends to provide a high quality of justice only when, for one reason or another, the parties can overcome the substantial barriers it erects for most people and many types of causes. The access to justice approach attempts to attack these barriers in a comprehensive way, questioning the set of institutions, procedures and people that characterize our judicial systems. The risk, however, is that the use of quick procedures and lower paid staff results in a cheap and poor quality product. This risk can never be forgotten.

[...] The aim is not to provide “poorer” justice, but to make it accessible to everyone, including the poor (CAPPELETTI; GARTH, 1988, p. 165).

The growth of the Judiciary certainly stems from the desire to expand access to justice to an unlimited level. Since the beginning of the new constitutional order, surrounded by guarantees and rights, the intention was that any and all claims could be taken to the Judiciary. This, however, is sterile if the judicial provision does not occur with quality and respect for all constitutional guarantees:

In view of the principles discussed above, as relevant as access to Justice itself, it is not enough to allow those under jurisdiction to take their complaints to the Judiciary. It is also necessary that:

- \* receive a quick and timely response from the State Judge;
- \* jurisdiction is effectively provided by its natural judge, a person invested in this role, who must have full knowledge of all aspects of the dispute;
- \* the right of defense of the defendant and the author is respected, with the possibility of producing relevant evidence, presenting and analyzing their legal arguments and handling appropriate resources;
- \* the parties may contradict the allegations, theses and evidence brought by the opposing party, without granting an unprecedented measure (except in very exceptional situations) *alter pars*;
- \* the judicial process respects all legally established procedural rules, without opening questionable debates about the usefulness of these rules;
- \* the analysis of the case and the resolution of the dispute must deserve a careful and careful examination by the State-Judge and this must do so with the highest quality and dedication possible, the only situation compatible with the respect deserved by the jurisdiction that, frequently, sees the most important definitions of your life are resolved by the Judiciary (DIAS, 2017, p. 60-61).

There is also an overload on magistrates. The incredible increase in productivity certainly had its consequences. Magistrates, often taking responsibility for judicial units and under constant demands for trial targets, have a considerable rate of absence due to work-related illnesses.

Census carried out by the National Council of Justice in 2013 leads to impressive conclusions. 84.3% of judges considered that their workload is not compatible with their regular working hours. A total of 13.1% took leave due to illness or accident in the last year, practically half of which were due to work-related issues (BRASIL, 2013). That's just in one year. In other words, 6.27% of the total left in the period of one year. With this doctor maintained, without repeating magistrates per license, there would be an average of almost one license per magistrate in fifteen years.

In addition to the risks to the health of magistrates (and, obviously, their assistants), there is damage resulting from fatigue due to excessive work:

Likewise, fatigue makes a difference. Waking up early and having a long day of activities in the jurisdictional unit means that the cognitive capacity, by the fifth hearing in the afternoon, is exhausted. The order of the hearings and the effects that the previous ones cause can change the attitude at the hearing. Maintaining attention after exhausting shifts is difficult. Attention and effort slip into comfort trend (ROSA, 2014).

Finally, investment in the judicial structure is not cheap. According to a survey by the National Council of Justice with data from 2008 (BRASIL, 2011a), Brazil allocated much more than the thirty-eight European countries analyzed. The average allocation was 0.18% of GDP, while Brazil reached 1.46% of GDP. Latin American countries, such as Argentina and Mexico, allocated 0.18% and 0.03% of their GDP to the Judiciary.

All paths, unfortunately, point to the mistake of the decision chosen for the crisis of the Judiciary: increasingly increasing the volume of trials and productivity. The duty to resolve conflicts between jurisdictions is not a simple task and requires considerable dedication.

However, it is observed that the insistence on the model only increases, now with the implementation of artificial intelligence to allow the analysis of requests or resources in bulk in a few seconds or minutes. In other words, the level of simplification already attributed to ongoing processes such as repetitive demands is not enough. The aim is for the robot to carry out its analysis and suggest a referral, to be taken to the magistrate to reduce processing time. In other words: so that it can decide as a group, with little or no conference. Although there are several initiatives, three of them will be highlighted in this space, just as an example of how artificial intelligence has been used precisely with the aim of accelerating the outcome of repetitive processes.

It begins with Victor, the robot from the Federal Supreme Court. Despite its undeniable relevance and impact, it is not possible to locate its regulations and small details about its operation are basically obtained from the news published:



Through the electronic judicial process (PJe), the extraordinary appeal goes to the Supreme Court and a server needed to separate and identify its parts, a task that required an average of 30 minutes of service. VICTOR performs this task in just five seconds. Toledo clarified that artificial intelligence mechanisms will not replace Judiciary employees, but will only allow them to perform more complex functions.

The system identifies the topic of general repercussion conveyed in each process and indicates it to the president of the STF, for the purpose of returning the appeal to the origin or rejecting the process. The idea is that VICTOR will be used by other bodies, such as the courts of second instance, and that it will be expanded to perform other tasks to assist the work of STF ministers, such as identifying case law, for example (BRASIL, 2018).

Also noteworthy is the initiative of the National Council of Justice to create the Innovation Laboratory for the Judicial Process in Electronic Means, through Ordinance 25 of 2019. The measure, inspired by the Sinapses of the Court of Justice of Rondônia, seeks to implement new initiatives to the PJe with the aim of achieving greater procedural speed.

Finally, Radar stands out, a robot from the Court of Justice of Minas Gerais, which aims to present minutes for repetitive processes and, therefore, obtain repetitive judgments in a few seconds.:

An unprecedented session of the 8th Civil Chamber of the Court of Justice of Minas Gerais (TJMG) judged, with just one click on the computer, a total of 280 cases. In less than a second, all cases were judged. The session was chaired by judge Ângela Rodrigues, who activated the digital platform that contained the votes of the Chamber members. “Belo Horizonte was the stage for one of the most important sessions of the Judiciary of all time. This is a big leap towards the future”, said the 1st vice-president of the Court of Justice of Minas Gerais (TJMG), judge Afrânio Vilela, this morning, November 7th.

This trial was only concluded quickly due to the Radar tool that identified and separated resources with identical requests. The rapporteurs prepare the standard vote based on theses established by the Superior Courts and by the Minas Gerais Court of Justice itself. For the president of the TJMG, judge Nelson Missias de Moraes, advances in information technology, such as the one inaugurated today, are part of the Court's strategic planning and are a priority for the current management, with the aim of making trials faster, benefiting the citizen. “By the middle of next year, all processes in Minas will already be processed electronically, making decisions faster and providing enormous savings in resources for the Court”, he added (MINAS GERAIS, 2018).

The initiative, much celebrated by the Court, is a complete change in the role of the Judiciary. While the resolution of conflicts in a short time must be concluded – especially in an agreement or extrajudicial mechanism – a judicial demand is seen by the citizen as an opportunity to obtain a manifestation of justice regarding a relevant problem in their life. Knowing that this “decision” is made in a fraction of seconds, without any individual analysis and human action is, to say the least, worrying.

Situations like these only show the Court's dedication to bureaucratic, repetitive and, in most cases, minimally complex activities. They help to raise again the doubt about the correctness of the path adopted. The existence of a prohibitive volume of cases, which prevents the minimally reasonable functioning of Justice, is a problem that needs to be faced. The issue, in a way, is similar to a high consumption of oil, not met by current production. There is the possibility of increasing production until it is possible to meet demand or encourage the latter to be reduced as much as possible. In the example, the likely path to the first solution is exhaustion of the finite resource. In the case examined, the trend towards the currently chosen path is the increasing deterioration of judicial provision, with the trampling of constitutional guarantees.

There is, however, another possibility: the drastic reduction of legal proceedings, directing them to other means of resolving conflicts. It is clear that the current option has failed in its objective. Artificial intelligence can provide a semblance of problem solving. But creating a production line for judicial trials does not seem compatible with the noble mission that the Judiciary received from the constituents. Nor is it easy to adopt it to save time and fully respect constitutional guarantees, such as a natural judge, due process and full defense. This leads to the second question: the perfect application in extrajudicial conflict resolution.

### **3 EXTRAJUDICIAL ALTERNATIVES FOR DISPUTE RESOLUTION ACCORDING TO THE NATURE OF THE DISPUTE**

To be able to analyze effective alternatives to judicial provision, with a reduction in the majority of legal proceedings, it is necessary to understand judicial liabilities a little better. To this end, two pieces of information are essential: what is the nature of the processes and who are the parties involved. Unfortunately, localized studies have not been updated and may have undergone some change, either to increase the massification of conflicts or to reverse it in the direction of greater differentiation. However, as the purpose of this survey is only to indicate possibilities that meet a good number of demands, mathematical precision of these numbers is not essential. Approximate information is enough. Another addendum is essential. Due to the natural limitation of the extension of this research, the tables adopted were taken from a previous study (DIAS, 2017), which carried out a similar survey.

Initially, the Panorama Report on Access to Justice in Brazil (2004-2009) by the National Justice Council (BRASIL, 2011b) points out the proportion of conflicts in society and the percentage taken to the Judiciary. The report is based on an IBGE census survey, completed in 2009:

<b>CONFLICT AREA</b>	<b>PROPORTION</b>	<b>PERCENTAGE JUDICIALIZED</b>
Labor	23,3%	87,4%
Family	22,0%	81%
Criminal	12,6%	52,4%
Public services (with or without concession)	9,7%	37,7%
INSS/Security	8,7%	76,2%
Banks	7,4%	58,1%
Housing	4,8%	76,9%
Tax	1,2%	57,4%
Others	10,3%	62,9%

The analysis is interesting and allows a general identification of conflicts that need to be addressed. Although the CNJ seeks to group the processes annually in its Justice in Numbers Report, the classifications tend to be quite generic, which makes it difficult to use them for the purpose of this study.

Given this, it is more effective to analyze the report “100 biggest litigants in the Judiciary”, also from the CNJ, released in 2011, by crossing the total number of cases initiated in the first instance and special courts between 01/01/2011 and 10/31/2011 with the number of cases that contained the 100 largest litigants in any of the litigation poles in the case. The numbers are compiled below, relating to the Federal, State and Labor Courts (BRASIL, 2011c):

SECTOR	PERCENTAGE
Federal public sector	12,14%
Banks	10,88%
Municipal public sector	6,88%
State public sector	3,75%
Telephony	1,84%
Business	0,81%
Security	0,74%
Industry	0,63%
Services	0,53%
Professional advice	0,32%
TOTAL	38,52%

An even greater concentration is considered in special state courts:

When only Special Courts are observed, banks and the telephone sector appear as the most litigious sectors of State Justice, with, respectively, 14.7% and 8.3% of the total number of cases filed in the period, as shown in graph 4. Furthermore, 99.89% of the total number of new cases from the 100 biggest litigants in this Court are listed as defendants in the Special Courts (BRASIL, 2011c, p. 11).

In other words, even without an official survey carried out by the Court itself with the aim of seeking extrajudicial alternatives, as proposed in this study – which, it is assumed, would lead to even better results – it is possible to find very promising foci of reducing litigation through means extrajudicial.

In the study referred to above (DIAS, 2017), some extrajudicial solutions for conflicts are considered according to their nature or area of law:

<b>NATURE OF THE DISPUTE/POSSIBLE AREA(S) SOLUTION(S)</b>	<b>NATURE OF THE DISPUTE/POSSIBLE AREA(S) SOLUTION(S)</b>
Public services Regulatory agencies	Public services Regulatory agencies
Physical and virtual Procon consumers	Physical and virtual Procon consumers
Tax Administrative tax courts	Tax Administrative tax courts
Administrative Chambers/Administrative Courts	Administrative Chambers/Administrative Courts
Banking Central bank	Banking Central bank
Labor Joint Conciliation Commissions	Labor Joint Conciliation Commissions
Family Interdisciplinary mediations	Family Interdisciplinary mediations
Environmental Administrative bodies / technical chambers	Environmental Administrative bodies / technical chambers
Controversies of non-legal technical complexities Class councils / Technical chambers	Controversies of non-legal technical complexities Class councils / Technical chambers
Others Mandatory attempt at conciliation / encouragement of arbitration	Others Mandatory attempt at conciliation / encouragement of arbitration

Many of these mechanisms already exist, although they need to be improved. Regulatory agencies, for example, have channels for complaints, which can even lead to punishment of the regulated company, which encourages a consensual solution. The same can be said about procedures with Procon.

When the aforementioned study was carried out, the federal government's Consumer Portal initiative ([consumidor.gov](http://consumidor.gov)) was still in its infancy, in which it is possible to file complaints against companies, with the aim of building a friendly solution. The body does not have decision-making or supervisory powers. However, it is observed that there is a growing appreciation of the Judiciary, which has already admitted the suspension of the process by the magistrate so that this mechanism can be sought:

INTERNAL APPEAL (ART. 1,021 OF THE CPC) IN INSTRUMENTAL APPEAL. CONTRACT REVIEW ACTION. ORIGIN DECISION THAT CONDITIONED THE APPOINTMENT OF A CONCILIATION HEARING ON THE REGISTRATION OF THEIR COMPLAINTS AGAINST THE DEFENDANT INSTITUTION ON THE “CONSUMIDOR.GOV” PORTAL AND SUSPENDED THE FIRST INSTANCE PROCEEDINGS FOR A PERIOD OF 30 (THIRTY) DAYS. INJUNCTION REJECTED DUE TO THE NON-EXISTENCE OF DANGER IN DELAY. NO RISK OF SERIOUS DAMAGE, DIFFICULT OR IMPOSSIBLE REPAIR. MONOCRATIC DECISION MAINTAINED. KNOWN AND UNPROVIDED RESOURCE (SANTA CATARINA, 2018).

Even though a merely conciliatory means cannot fully replace the actions of the Judiciary, even if it reduces it when successful, it is an important step towards an even more effective action in the future. A federal government system, fed with security, can begin to resolve conflicts not resolved consensually. In addition to the possibility of these mechanisms evolving into true administrative chambers, it is possible to consider resolving disputes with financial institutions through the Central Bank, for example.

An important addition must be made. The solution through extrajudicial means, with artificial intelligence, makes it practically mandatory that the processed data be fed digitally. Although this does not prevent its use in mixed systems (physical, in-person and virtual), the use of tools on the internet is the most favorable space. With this, the concept of Online Dispute Resolution (ODR), originating from the term Alternative Dispute Resolution (ADR), gains strength. This term, attributed to Ethan Katsh (2014), corresponds to a type of alternative means of conflict resolution that uses a virtual medium (KATSH, RULE, 2016).

There are countless possibilities, existing, but in need of expanding their operations, or to be created, with great potential for resolving conflicts outside the Judiciary, especially if they are equipped with artificial intelligence tools.

#### **4 BENEFITS OF APPLYING ARTIFICIAL INTELLIGENCE BEFORE THE START OF ACTIONS, FOR EXTRAJUDICIAL SOLUTIONS**

The use of technology to resolve conflicts appears to be a path of no return. The initiatives for its use in court within the idea of Justice or judiciary 4.0 (ROSA, 2018) can already be observed in some experiences. Among these possibilities, it is natural to consider the use of artificial intelligence, given the almost unlimited universe of perspectives it can open up. The concept of artificial intelligence is extracted from Iria Giuffrida (2019), as the ability of a machine

to perform cognitive functions considered to be human intelligence. Among them, it is possible to consider: perception, learning, reasoning, interaction, problem solving and creativity.

Its application in law can occur in different ways. To resolve repetitive conflicts, to help in the search for legal theses and jurisprudence and even to assist in evidentiary analysis, when there is robust evidentiary material. At this point, moreover, the practice is considered promising in civil proceedings in the United States, where the production of evidence is carried out by lawyers outside of court records and may involve the analysis of gigabytes or terabytes of documents (NEWELL, 2014).

The argument brought up in this topic is not that the use of artificial intelligence in managing repetitive demands in the course of legal processes is bad for the Judiciary. The issue to be examined is the clear gain in using artificial intelligence to avoid legal proceedings. As a result, a dispute is resolved in a simpler, cheaper and faster way and the Judiciary begins to focus on non-repetitive demands and more complex issues.

According to the logic followed up to this point, with the implementation of artificial intelligence to assist magistrates in resolving repetitive disputes, the tendency is for the robot to suggest a referral to a case to magistrates. After this measure, the judge receives a considerable batch (hundreds or even thousands, depending on the case) of decision suggestions. If the aim of technology is to speed up the procedure and reduce human work, the tendency is for the magistrate to dedicate a minimal amount of time to checking the proposed processes or referrals, until they are confirmed en masse. It is important to ask whether this is really an activity for the Judiciary.

On the other hand, given the scenarios speculated in the previous topic, which can be greatly improved with the help of data from the Courts and the National Council of Justice, the vast majority of conflicts present promising possibilities for extrajudicial conflict resolution, which may have a fast, efficient, simple and isonomic, through the implementation of artificial intelligence.

Firstly, consider administrative justice on an exclusively digital basis, without requiring lawyers, with a proposal for forms, for those who wish to simplify the identification of these actions. In addition, the adoption, through a structure built from public law, of an already consolidated jurisprudence base. This system, with impartial judges highlighted within the public sphere itself and decisive assistance from artificial intelligence, could resolve the majority of disputes involving public administration, which today is one of the centers of 22.77% of judicial processes (BRAZIL, 2011c).

The same can be thought of actions involving issues subject to the control of regulatory agencies, such as telephony, electricity, health plans, aviation, port activities, among others. All of these bodies could evolve their administrative process, which currently does not provide direct individual solutions to conflicts, into a dispute resolution mechanism. The use of artificial intelligence would allow this without too many judges. The Central Bank itself could be tasked with resolving all contract conflicts between financial institutions, which also represent a considerable portion of legal proceedings, corresponding to 10.88% (BRASIL, 2011c).

Even consumerist causes could be resolved by digital Procons using robots, or by an evolution of the “Consumer Portal” platform, with an initial focus still on mediation, but, once unsuccessful, with a final decision on the existence or not damage to a right.

This not only results in a reduction in judicial litigation. There is a reduction in animosity between the parties. It is possible to reduce tensions and conflicts in society. Neil Andrews (ANDREWS, 2009, p. 261), when praising the reduction in conflicts in England, recalls that prolonged legal conflicts tend to increase or consolidate the dissatisfaction of one party with the other. In the United States, although the overall number of legal cases remains high, the percentage of cases that actually reach trial is very low, oscillating between 5 and 10% only, considering the State Courts that share their data and the compilation of the Federal Court (ESTADOS UNIDOS DA AMÉRICA, 2022; *COURT STATISTICS PROJECT*, 2022).

A faster extrajudicial solution – and often consensual – allows this tremor to be overcome more easily. Perhaps the biggest obstacle or disincentive to these solutions in Brazil is the absence of a clear position from the Judiciary that extrajudicial decisions will not be revisited in any situation through legal proceedings (DIAS, 2017).

The construction of dispute resolution tools of this size, even with the help of artificial intelligence, will bring costs and direct labor to the Public Authorities. Investment is not stimulating in a scenario where all decisions are fully reviewed, not just where there are signs of bad faith or collusion, for example. As a possible parameter, American law uses the Chevron case as one of the greatest administrative law precedents (FREEMAN, 2005). On that occasion, the Supreme Court ruled that discussion of a decision by an administrative agency in court would only be permitted if it contradicted the specific understanding of the Legislative Branch (out of respect for the separation of Powers) or was unreasonable (FREEMAN, 2005, p. 172 ). There is no talk here about a right or wrong decision. Precise or inaccurate. It doesn't even need to be the same conclusion that the judge would reach. If the decision is reasonable, judicial review is not even open. Only with similar initiatives would there be sufficient stimulus to put into practice solid and rapid alternatives for extrajudicial conflict resolution.

What benefit, however, would be presented to the Judiciary? Why would it be justified or more advisable to adopt this path instead of standardizing repetitive judgments using artificial intelligence? Firstly, the costs of legal proceedings are avoided. The structure of the Judiciary is not cheap. From the magistrates and their assistants to the investment in the structure of Power, there is a financial allocation to place professionals prepared to deal with complex disputes (BRASIL, 2011a). A court case is not the appropriate venue for mass decisions.

If the Judiciary actually decides to maintain its quasi-administrative activity of repeating standardized solutions, the question that would follow is the reduction of costs with this activity. Professionals to perform this activity would not need to receive high remuneration, as their activity would not be complex. This solution seems to be less simple and logical.

Secondly, there are savings on lawyer costs. For most legal proceedings, the presence of a lawyer is required to ensure technical defense. It is assumed that the party would be in an unequal situation if it entered the conflict without a defender with technical knowledge. In less complex and standardized or block issues, this logic is called into question. The party could pursue an out-of-court solution without spending money on a lawyer and, only if they suspected that a serious error had occurred in this analysis, would they need to seek out a professional. And, even if you chose to be represented, the cost of legal assistance would tend to be much lower in a faster and simpler procedure.

Reducing legal discussions would also help to build a less litigious culture. In addition to the shorter time it takes to resolve a conflict, the judicial environment itself gives the conflict a more serious context. This is logical: Justice is structured to resolve complex conflicts. By directing the resolution of conflicts to simpler and faster mechanisms, whenever possible with an attempt at an amicable solution constructed by the parties themselves, we help to develop a less belligerent culture in society.

There is also the gain of technical specialization. The Judiciary and its members are formed/chosen to decide conflicts on the most diverse matters – from criminal law (which, in itself, is already quite broad) to administrative, family, social security and commercial law. And this list is just an example. With the dissemination of knowledge, increasing specialization of professionals and the complexity of the disputes that arise, it must be recognized that it is difficult to maintain a Judiciary with all its professionals with ideal qualifications for specialized conflicts.

The extrajudicial solution through mechanisms created precisely according to the nature of the conflict facilitates the development of increasing knowledge of the matter and solutions that come closer to the technical details of the problems and the daily lives of those involved.

The Judiciary, in turn, would begin to perform a function more suited to its purpose. With the removal of repetitive demands or those that can be easily resolved in other spheres, he is left with the analysis of more complex issues or with the review of situations in which serious errors occur in the functioning of other systems, such as bad faith decisions or by collusion.

With this, the Judiciary would give up repetitive and simple tasks – which it is currently trying to pass on to its robots – to carry out judicial provision with true access to justice. It is explained: the mere right to take a case to the Judiciary is useless if the other guarantees are not respected, such as the principle of natural justice, full defense and contradictory, speed and efficiency. Material access to justice, without these elements, is denied (DIAS, 2017).

When the Court chooses to receive all the demands presented, even when the filing is completely unnecessary, and shapes its structure and procedure to absorb them, it creates a different form of judicial provision, guided by savings in institutional costs, time of the agents involved and reduction of procedural moments, the error predicted by Garth and Cappelletti (CAPPELLETTI; GARTH, 1988, p. 164), and Barbosa Moreira (MOREIRA, 2004, p. 5) is incurred: the search for Justice with greater scope or more quickly could not result in cheap and second-quality justice.

## FINAL CONSIDERATIONS

We then return to the problem initially posed: whether increasing the efficiency of dispute resolution through the use of artificial intelligence can be an important factor in reducing litigation.

Now, the use of artificial intelligence in resolving repetitive disputes, both judicially and extrajudicially, will bring undeniable gains for everyone, in terms of speed, legal certainty, equality and cost reduction. Nevertheless, the initial hypothesis is reiterated: its use after the initiation of a judicial process is less advantageous than its application in previous extrajudicial solutions.

Firstly, it appears that it is possible to identify an administrative structure, agency or body with legitimacy and capacity to absorb the solution of the most frequent conflicts in the Judiciary.

Given this premise, the solution through mechanisms external to the Judiciary, with the help of artificial intelligence, could bring even greater benefits. With them: the cost of the judicial process is avoided, the expense of lawyers is eliminated or reduced, a less litigious culture

is built, it becomes easier to obtain greater specialization in resolving conflicts and the Judiciary can concentrate on solving more complex conflicts.

The Judiciary and the Brazilian legal system have a judicial policy currently focused on the massification of judicial processes and the adoption of mechanisms to increase the volume of trials to insane levels. This path is extremely dangerous, as it molds judicial provision into an almost administrative/bureaucratic vocation, which results in cheap and second-quality justice.

This concern, quite harsh, must permeate the debates on the revolution that the judicial procedure is going through, as well as on a serious policy of transferring disputes from the Judiciary to other spheres, subject to its control in extreme circumstances.

Artificial intelligence offers tools that allow the resolution of repetitive and/or low-complexity conflicts, with reduced costs and greater speed. Its implementation by extrajudicial means of resolving conflicts, without judicialization, is much more beneficial than the same practice in court, as the former leads to a reduction in litigation.

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