

**PART TWO**  
**Use of Information Technology Tools in the**  
**Administration of Justice of Selected Countries**



# Brazil

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## 1. *Introduction*

A constitutionally adequate analysis of the development and use of new technologies in the legal field is not limited to the verification of the results achieved, which should always be in line with the objectives established by art. 3 of the Brazilian Constitution of 1988 (CB/88, from its acronym in Portuguese), which point to the construction of a social State. It should also observe the respect for all the principles and rules that make up and structure the democratic State of law, among which are the fundamental rights and guarantees, norms of first magnitude.

According to the norm that is extracted from the statement of the caput and subsection XLI of art. 5 of CB/88, all are equal before the law, without distinction of any nature, and the law must punish any discrimination that violates fundamental rights and liberties. Furthermore, subsection X of the same article, also with fundamental rights status, establishes that people's privacy, private life, honor, and image are inviolable. Constitutional Amendment No. 45/2004 introduced into the list of fundamental rights set forth in the aforementioned art. 5 the right to speedy proceedings which, under the terms of subsection LXXXVIII, assures everyone, in the judicial and administrative spheres, that the proceedings will last a reasonable length of time and that means will be provided to guarantee the speed of the proceedings.

In a society that maximizes connections between people, the number of disputes that will require the intervention of lawyers and the Judiciary to solve them is also increasing. In this context, the tools made available by information technology cannot be ignored in order to speed up and make the resolution of disputes more efficient. However, procedural expeditiousness cannot be achieved at any cost, being limited to the necessary respect for all elements of the fundamental rights system, such as the right to equal treatment and the right to privacy.

In addition to this, some figures of the Brazilian reality need to be considered. At the end of 2019 there were 77.1 million lawsuits in progress in

the Brazilian Judiciary<sup>1</sup>. During that year, 35.3 million cases were closed, which means that each of the Brazilian judges decided an average of 2107 cases in that period, that is, approximately 8.4 cases sentenced by each judge every working day<sup>2</sup>. During the same year, the Judiciary's spending on information technology (IT) was approximately 480 million Euros<sup>3</sup>. According to data from 2018, the courts of the Judiciary had approximately 6,000 IT professionals, a third of whom were software developers<sup>4</sup>.

It is under this perspective that the present work proposes to expose, without claiming to be exhaustive, the main normative instruments concerning the current stage of use and regulation of legaltech tools in Brazil, in order to allow some critical considerations for the future. To this end, the study made use of research in normative texts from official databases, analysis of reports with quantitative and qualitative data on the theme, as well as analysis of juridical bibliography.

## 2. Legaltech in Brazil

Technological innovation has shown itself capable of producing standardized solutions in the delivery of services in various areas of legal activity, allowing the overload of administrative tasks to be eliminated and freeing up human capital to provide better quality service to the end user.

Thus, in addition to the activities directly developed by public services, one can notice the emergence of legaltechs in the private sector, i.e., companies especially dedicated to offering innovative products or services through the use of technological resources for the legal area. A good indicator of this is the fact that the Brazilian Association of Lawtechs and Legaltechs (AB2L), a private entity created in 2017 with the aim of, among others, contributing to the development of a technology and innovation environment in legal practice, has already 388 member companies.

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1 Conselho Nacional de Justiça, 'Justiça Em Números 2020' (Conselho Nacional de Justiça 2020) 93 <<https://www.cnj.jus.br/wp-content/uploads/2020/08/WEB-V3-Justica-em-Numeros-2020-atualizado-em-25-08-2020.pdf>> accessed 9 February 2021.

2 *ibid* 105.

3 2.18 billion Brazilian Reais. *ibid* 77.

4 Conselho Nacional de Justiça, 'Inteligência Artificial No Poder Judiciário Brasileiro' (Conselho Nacional de Justiça 2019) 37 <[https://www.cnj.jus.br/wp-content/uploads/2020/05/Inteligencia\\_artificial\\_no\\_poder\\_judiciario\\_brasileiro\\_2019-11-22.pdf](https://www.cnj.jus.br/wp-content/uploads/2020/05/Inteligencia_artificial_no_poder_judiciario_brasileiro_2019-11-22.pdf)> accessed 7 February 2021.

As reported by AB2L, its associates are organized into 13 service categories: a) analytics and jurimetrics - platforms for data analysis and compilation and jurimetrics; b) automation and document management - software for the automation of legal documents and management of the life cycle of contracts and processes; c) compliance - companies that offer the set of disciplines to enforce the legal norms and policies established for the institution's activities; d) legal content, education and consulting - portals of information, legislation, news and other consulting companies with services ranging from information security to tax advice; e) extraction and monitoring of public data - monitoring and management of public information such as publications, court proceedings, legislation and notary documents; f) management of offices and legal departments - information management solutions for offices and legal departments g) Artificial Intelligence (AI) in the public sector - AI solutions for courts and public authorities; h) networks of professionals - networks connecting legal professionals, enabling people and companies to find lawyers throughout Brazil; i) Regtech - technological solutions to solve problems generated by regulatory requirements; j) online conflict resolution - companies dedicated to online conflict resolution by alternative means to the judicial process such as mediation, arbitration and negotiation of agreements k) Taxtech - platforms that offer technology and solutions for all your tax challenges; l) Civic Tech - technology to improve the relationship between people and institutions, giving more voice to participate in decisions or improve service delivery; and m) Real Estate Tech - application of information technology through platforms focused on the real estate and notary market<sup>5</sup>.

### *3. Blockchain and DLT in Government Systems*

In September 2020, based on Judgment 1,613/2020 of its plenary session, the Federal Audit Court (TCU), a body that assists the National Congress in exercising the constitutional function of external control of the Federal Government, published a guide for public administration in order to understand what are the blockchain technologies and Distributed Ledger

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<sup>5</sup> AB2L, 'Radar de Lawtechs e Legaltechs' (ab2l.org.br) <<https://ab2l.org.br/radar-lawtechs/>> accessed 10 February 2021.

Technology (DLT), as well as analyze the potential and uncertainties of these technologies for digital government services<sup>6</sup>.

Always keeping in mind the goal of avoiding waste of public resources, to help deciding whether or not a blockchain/DLT solution is applicable to an institution's use case, this guide presents a needs assessment model, which consists of direct questions about the characteristics of the organization's business process<sup>7</sup>.

Also according to the TCU guide, the benefits of blockchain/DLT technology for the public sector are the government's ability to deliver services with greater efficiency and security, enhanced automation, transparency and auditability, thus benefiting society. The guide also sets out the main critical factors in implementing a project, and a risk matrix, including suggestions for controls to mitigate them. Moreover, among the various areas in which this technology can be applied to expand and improve government services are the tax process, the universalization of health services, the creation of self-sovereign digital identities, the management of agreements, the digital inclusion of the unbanked, the monitoring of financial transfers, the disintermediation of notary services, the implementation of a more robust electoral process and the prevention of fraud and money laundering<sup>8</sup>.

Appendix I of that guide provides information on 15 cases of application of blockchain/DLT by Brazilian public entities, in projects that are in various stages of development and use. By way of example, mention should be made of the "Brazilian Powers System", which consists of a blockchain network created in partnership by Banco do Brasil and Petrobras, with the aim of digitizing the powers registration process, replacing the manual paper-based processes that define, for example, who has powers to operate an institution's accounts. The system is being accelerated into production and, among the cases listed in Appendix I, is the only one involving a branch of the Judiciary, the Superior Electoral Court, which, in the system, has the prerogative of granting powers to newly elected mayors<sup>9</sup>.

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<sup>6</sup> Tribunal de Contas da União, 'Levantamento Da Tecnologia Blockchain' (TCU 2020) <<https://portal.tcu.gov.br/levantamento-da-tecnologia-blockchain.htm>> accessed 9 February 2021.

<sup>7</sup> *ibid* 22–23.

<sup>8</sup> *ibid*.

<sup>9</sup> Tribunal de Contas da União, 'Apêndice 1 -Aplicações Blockchain No Setor Público Do Brasil', (TCU 2020) <<https://portal.tcu.gov.br/levantamento-da-tecnologia-blockchain.htm>> accessed 9 February 2021.

#### 4. *Online Court Proceedings*

The computerization experience of the Brazilian courts can be traced back to Law No. 11,419/2006, which amended the Code of Civil Procedure (CPC) and introduced other normative measures for the computerization of the judicial process, regulating the use of electronic means in the processing of judicial proceedings, communication of acts and transmission of procedural documents. As of this law, it became acceptable to send petitions, appeals and the practice of procedural acts in general by electronic means, upon the use of an electronic signature and prior registration with the Judiciary, as regulated by the respective bodies (art. 2). The electronic signature is admitted both by means of a digital signature based on a digital certificate issued by an accredited Certification Authority, and by means of user registration with the Judiciary, as regulated by the respective bodies (art. 1, § 2).

It is important to note that, since 2020, the use of electronic signatures in interactions with public entities is regulated by Law No. 14,063, a result of the conversion of Provisional Measure No. 983/2020. However, this law does not apply to judicial proceedings, as expressly stated in subsection I of the sole paragraph of its article 2, so that the digital signature in such proceedings is regulated by the provisions of Law No. 11.419/2006.

It should be noted that the electronic signature is not to be confused with the digitized signature, which is usually done by means of a scanning process. Unlike the former, which guarantees the authenticity of the act, the latter, as already decided by the Federal Supreme Court (STF), is a mere electronic stamp without any regulation and whose originality cannot be asserted without the aid of technical expertise<sup>10</sup>.

With regard to the communication of procedural acts, Law No. 11.419/2006 allowed the courts to create its electronic Justice Daily (DJe), available on the internet, for publication of their own judicial and administrative acts and those of their subordinate bodies, as well as communications in general (art. 4, caput). The site and the content of such publications must be digitally signed based on a certificate issued by a Certification Authority (art. 4º, § 1º), and the electronic publication replaces any other means and official publication, for any legal effects, except in cases that, by law, require personal summons or examination (art. 4º, § 2º). If users are registered in the system, the subpoenas, except in a few exceptional cases, will be served electronically, dispensing with publication in the official or-

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10 STF. First Panel. AI 564.765-RJ, DJ 17/3/2006.

gan, including electronically (art. 5). In addition to providing that in the electronic process all citations, summonses and notifications will be made by electronic means (art. 9, caput), it established that the citations, summonses, notifications and remittances that allow access to the full text of the corresponding process will be considered personal view of the interested party for all legal purposes (art. 9, caput and § 1º).

Regarding the electronic process, Law No. 11,419/2006 authorized the Judiciary to develop electronic systems for processing lawsuits by means of totally or partially digital records, preferably using the world computer network and access through internal and external networks, with all acts signed electronically (art. 8, caput and sole paragraph).

Thus, once the system for the electronic process was created, the distribution of the initial petition and the filing of the defense, appeals and petitions in general, all in digital format, may now be made directly by the public and private lawyers, without the need for the intervention of the registry or the court clerk's office, a situation in which the filing is done automatically, providing an electronic receipt of protocol (art. 10). However, it is the Judiciary's duty to keep scanning equipment and access to the worldwide computer network available to interested parties for distribution of pleadings (art. 10, § 3º).

Regarding the conservation of the records of the electronic process, the law provides that it may be done totally or partially by electronic means and, in the latter case, the records must be protected by means of access security systems and stored in a medium that ensures the preservation and integrity of the data, being dispensed the formation of supplementary records (art. 12, § 1º). The law also provides that the systems must use, preferably, open-source programs, accessible uninterruptedly through the internet, prioritizing their standardization, and will seek to identify the occurrence of prevention, *lis pendens* and *res judicata* (art. 14).

Since both individuals and legal entities can be parties, as a general rule, the plaintiff must, as soon as it files the initial petition, inform the number in the registry of individuals or legal entities, as the case may be, with the Federal Revenue Service (art. 15).

With the publication of the new CPC (Law No. 13.105/2015), the practices introduced by Law No. 11,419/2006 were incorporated into it and, to a large extent, improved. Its art. 194, for example, states that the procedural automation systems shall respect the publicity of the acts, the access and participation of the parties and their attorneys, including in hearings and trial sessions, subject to the guarantees of availability, independence of the computing platform, accessibility and interoperability of the systems,

services, data and information that the Judiciary administers in the exercise of its functions.

When dealing with the registration of electronic procedural acts, article 195 states that it must be done in open standards, which will meet the requirements of authenticity, integrity, temporality, non-repudiation, preservation, and, in cases of judicial secrecy, confidentiality, observing the nationally unified public key infrastructure, under the terms of the law.

Art. 196 on the other hand, attributes to the National Council of Justice (CNJ)<sup>11</sup>, and, suppletively, to the courts, the competence to regulate the practice and official communication of procedural acts by electronic means and to watch over the compatibility of the systems, disciplining the progressive incorporation of new technological advances.

It is important to note that the new CPC also dealt with the duty of the Judiciary to ensure to people with disabilities accessibility to its websites, to the electronic means of practice of judicial acts, electronic communication of procedural acts and electronic signature (art. 199). In this same sense, Resolution No. 185/2013, as amended by Resolution No. 245/2016, both of the CNJ, establishes that the Judiciary shall provide in-person technical assistance not only to people with disabilities, but also to those over sixty years of age (art. 18, § 2º).

Also according to the new CPC, the use of electronic documents in conventional proceedings, that is, in proceedings in printed matter, will depend on its conversion to printed form and verification of its authenticity (art. 439), being the judge's duty to assess the probative value of the electronic document not converted, ensuring to the parties access to its content (art. 440). Even in conventional processes, electronic documents produced and preserved in accordance with specific legislation are admitted (art. 441). Moreover, the signature of the judges, in any of their acts in the process and in all levels of jurisdiction, will be done electronically (art. 205, § 2º).

In 2013, through Resolution No. 185, considering the need to regulate the implementation of the use of electronic tools for the judicial process, in order to confer uniformity to the practices of the various bodies of the Judiciary, the CNJ instituted and established the parameters for the

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11 The CNJ is the body of the Brazilian Judiciary in charge of developing judicial policies that promote the effectiveness and unity of the Judiciary, oriented to the values of justice and social peace, created by Constitutional Amendment No. 45 of 2004, that introduced article 103-B in CB/88, and installed on June 14, 2005.

implementation and operation of the Electronic Judicial Process System (PJe), an information processing system and practice of procedural acts.

According to art. 2 of Resolution No. 185/2013, the PJe is responsible for the control of the proceedings, the standardization of all data and information comprised by the judicial process, the production, registration and publicity of procedural acts, and the provision of essential data for the management of the information required by the various supervisory bodies, control and use of the judicial system.

In turn, article 4 of Resolution No. 185/2013 deals with important elements for the verification of authenticity of electronic documents, by determining that the procedural acts will be registered, visualized, processed and controlled exclusively in electronic means and will be digitally signed, containing elements that allow the identification of the user responsible for its practice. According to paragraph 1 of the same article, the reproduction of a document from the digital records must contain elements that allow verification of its authenticity in an electronic address made available for this purpose on the websites of the CNJ and of each of the PJe's user courts. Furthermore, the user is responsible for the accuracy of the information provided during the registration process, as well as for the safe-keeping, confidentiality, and use of the digital signature, and, in any case, no allegation of improper use can be made (§ 2º).

PJe allows digital signatures of individuals and legal entities with the use of A1 and A3 digital certificates, in accordance with ICP-Brasil regulations (art. 4, § 3º of Resolution No. 185/2013, as amended by Resolution 281/2019). Moreover, the signature and the registration of the procedural act may be split, in order to allow the signature of digital documents to use secure authentication standards and the registration of the procedural act to be promoted by an A1 certificate, institutional, in accordance with the ICP-BR standard. In such cases, the secure authentication model will use a two-factor authentication standard, by means of a disposable password (token), with prior registration (pairing) of the user's mobile device in the PJe system (art. 4-A, caput and § 1º, of Resolution No. 185/2013, as amended by Resolution No. 281/2019).

As measures to ensure access to the system, the PJe websites of the Councils and the Courts should only be accessible through a secure HTTPS connection (art. 6, § 2º, of Resolution No. 185/2013, as amended by Resolution No. 281/2019). In the same sense, for the respondents of a judicial proceeding, access codes to the proceeding must be generated, with limited validity period, allowing them to access the entire content of the electronic records, in order to enable the exercise of the adversary and full defense (art. 6, § 3º, of Resolution No. 185/2013).

It is up to the user to acquire, by himself or by the institution to which he is linked, the digital certificate, ICP-Brasil standard, issued by an accredited Certificate Authority, and the respective portable cryptographic device (art. 9, § 2º, III, of Resolution No. 185/2013).

### 5. Artificial Intelligence in the Justice System

In February 2019, through Ordinance No. 25, the CNJ established the Innovation Laboratory for Electronic Judicial Process (Inova PJe), with the goal of creating a primarily virtual environment for PJe, which acquires the characteristic of a microservices platform with extensive use of Application Programming Interfaces (APIs).

The central idea of the implementation of Inova PJe is the development of research in AI that allows solutions to give more speed and effectiveness to the judicial process. The environment created by this laboratory permits collaboration between several courts, building an ecosystem of AI services, aimed at optimizing the work in the PJe system and saving human and financial resources, in addition to contributing to the procedural speed. Among the premises of Inova PJe is that the AI models used in decision making or production of artifacts should be auditable, through a process defined by the CNJ, to analyze the results based on ethical and legal criteria<sup>12</sup>.

In this environment, the Sinapses Project is made available to the PJe. Sinapses is a technological solution originally conceived by the Court of Justice of the State of Rondônia which, acting as an AI model factory, allows the research and production of intelligent services to assist in the construction of modules for the PJe and in its improvement.

In Sinapses, to train the model, the document base is fed by the client systems with new examples based on use. If a divergence is observed between the suggestion offered by the AI and the user's choice, the document object of the divergence is stored in a "reinforcement" area, recording the deadlock so that it can be resolved by a third party (human). Once it is defined who was right, the new example becomes part of the new training base<sup>13</sup>.

According to the 2019 report, the CNJ describes 14 use cases of Sinapses, among which are, for example: a) large mass triage, which classifies

12 Conselho Nacional de Justiça (n 4) 16–18.

13 *ibid* 28.

cases so that they can be grouped into previously defined classes; b) intelligent procedural movement, which performs predictions about decisions, suggesting to the user the best option applicable to the case; c) prevention analysis, which searches the procedural bases and identifies possible cases of similarity of procedural elements that may impact the competence to judge the cause; and d) Victor, the artificial intelligence platform of the STF<sup>14</sup>.

Taking into account the absence of specific rules in Brazil regarding governance and ethical parameters for the development and use of AI, as well as the need to respect fundamental rights by courts in the development and implementation of tools that use AI, the CNJ published Resolution No. 332 in August 2020. This resolution is influenced by the "White Paper on Artificial Intelligence: a European approach to excellence and trust", published by the European Commission in February 2020, and expressly considers the "European Ethical Charter on the use of AI in judicial systems and their environment".

Resolution No. 332/2020 applies not only to new projects, but also to those that at the date of its publication were already being developed or implemented in the courts, except for those acts that had already taken full effect (art. 30), and the courts must immediately notify the CNJ as soon as research, development or implementation of AI models begins. However, in the case of the use of AI for facial recognition techniques, these may only be initiated after authorization from the CNJ for implementation (art. 22).

To make clear the scope of its application, the Resolution considers as an AI model the set of data and computational algorithms, conceived from mathematical models, whose purpose is to offer intelligent results, associated or comparable to certain aspects of thought, knowledge or human activity (art. 3, II).

Such Resolution demonstrates the concern with the respect for the principle of isonomy, determining that the use of AI models should seek to ensure legal certainty and collaborate so that the Judiciary respects the equal treatment of absolutely equal cases (art. 5). Thus, although the suggestions of AI tools are not binding, the judicial decisions supported by them must preserve equality, non-discrimination, plurality, and solidarity, assisting in the fair trial, with the creation of conditions that aim to eliminate or minimize oppression, the marginalization of human beings, and errors of judgment resulting from prejudice (art. 7). To this end, before being put into

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14 *ibid* 29–36.

production, the AI model must be approved in order to identify whether its development was influenced by prejudices or generalizations, resulting in discriminatory biases in its operation (art. 7, § 1) and, if any discriminatory bias of any nature or incompatibility with the principles provided in the Resolution is identified, corrective measures must be adopted (art. 7, § 2). If it is impossible to eliminate the discriminatory bias of the Artificial Intelligence model, it must be discontinued (art. 7, § 3).

As a measure to prevent the development of discriminatory biases, the Resolution determines that the composition of teams for research, development, and implementation of computer solutions that use AI will be guided, at all stages of the process, by the search for diversity in its broad spectrum, including gender, race, ethnicity, color, sexual orientation, people with disabilities, generation, and other individual characteristics (art. 20).

Another element present in Resolution No. 332/2020 is transparency, which supposes the provision of a satisfactory and auditable explanation by a human authority regarding any proposed decision presented by the AI model, especially when it is of a judicial nature (art. 8, VI). Therefore, the bodies of the Judiciary involved in an AI project must inform the CNJ of the research, development, implementation or use of AI, as well as the respective objectives and the results intended to be achieved, in addition to promoting efforts to act in a community model. The deposit of the model in Sinapses is mandatory, and parallel development is forbidden when the initiative has objectives and results achieved that are identical to an existing AI model or an ongoing project (art. 10).

Furthermore, computer systems that use AI models as an auxiliary tool for the preparation of judicial decisions will observe, as a preponderant criterion for defining the technique used, the explanation of the steps that led to the result, in addition to allowing the supervision of the competent judge (art. 19). The intelligent system must ensure the autonomy of the internal users, using models that enable the review of the decision proposal and the data used for its elaboration, without any kind of binding to the solution presented by the AI (art. 17, II).

The use of AI models in criminal matters is something especially sensitive, so that art. 23 of Resolution No. 332/2020 determines that it should not be encouraged, especially in relation to the suggestion of predictive decision models, except when it comes to the use of computer solutions intended to automate and provide subsidies for the calculation of sentences, prescription, verification of recidivism, mappings, classifications and sorting of records for collection management purposes. Especially in what concerns the verification of criminal recidivism, AI models should not

indicate a conclusion more prejudicial to the defendant than the one the judge would reach without its use.

In line with Resolution No. 332, in December 2020, the CNJ published Ordinance No. 271, which regulates the use of AI in the Judiciary. In addition to reaffirming and addressing some operational aspects of the aforementioned Resolution, the Ordinance establishes measures such as determining that Sinapses will be the common platform on which the AI initiatives of the Judiciary will be centralized (art. 4).

It is noteworthy that the Ordinance No. 271 also provides that the development and registration of models in the platform will be preceded by the installation of the extractor module to ensure that the data on which they are based are included in the central repository, including the cover of the judicial process (metadata), its procedural movements, and the documents duly converted to plain text format (art. 11). The AI models used to assist the Judiciary in the presentation of analyses, suggestions or content must adopt measures that enable the tracking and auditing of the predictions made in the flow of their application (art. 12) and return to the API registered in the platform the information of any disagreement as to the use of the predictions, so as to ensure the auditing and improvement of the artificial intelligence models (art. 13).

Beyond the normative framework, it is interesting to consider the data of reality. In 2019, the CNJ conducted a detailed study on the use of AI in the Brazilian Judiciary, in which it emphasizes that what is expected of AI in such scope is that it can contribute to the resolution of the huge number of cases pending solution, as well as give greater speed to their processing<sup>15</sup>.

As CNJ data indicates, only 10 % of all new cases initiated during 2019 were by physical means. That is, 90 % of the proceedings initiated in 2019 were digital, which is equivalent to 23 million new electronic cases. It should be noted that not all are through the PJe, since Resolution No. 185/2013 allows the use of other systems, provided they are integrated with the National Interoperability Model (MNI). In the 11 years of the historical series analyzed by CNJ, 131.5 million new cases were filed in electronic format<sup>16</sup>.

Of the 90 courts that, along with the CNJ, make up the Brazilian judicial structure, formed based on article 92 of the CB/88, 11 have already achieved 100 % of digital proceedings. Moreover, in a specific survey con-

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15 *ibid* 10.

16 Conselho Nacional de Justiça (n 1) 112.

ducted in May 2020 with 62 courts, it was found that only 13 of them have less than 90 % of their collections digitized<sup>17</sup>.

More recently, the Center for Innovation, Administration and Research in the Judiciary of the Getúlio Vargas Foundation conducted, from February to August 2020, the first phase of a survey that aims to identify, understand, systematize, develop and improve technological solutions, with an emphasis on AI, aimed at improving the justice system. After researching a sample of 59 courts and the CNJ, a report published in December presents the data collected from each court, indicating the name of the system, its origin, current situation, functionalities and the problems it proposes to solve, as well as the results achieved<sup>18</sup>.

Besides the CNJ's Project Sinapses, the research indicated that there were 64 other artificial intelligence projects within the Judiciary, either already implemented, in the pilot project phase or under development. Of these projects, 47 were developed by the courts' internal staff, 13 in partnership with private companies, 3 through partnerships with universities, and one by other bodies<sup>19</sup>.

According to this research, the AI projects in Brazilian courts involve functionalities such as verification of the legal hypotheses of dismissal, suggestion of draft, grouping by similarity, realization of the judgment of admissibility of appeals, classification of cases by subject, treatment of mass claims, online attachment, extraction of data from judgments, facial recognition, chatbot, calculation of probability of reversal of decisions, classification of petitions, indication of statute of limitations, standardization of documents, transcription of hearings, automated distribution and classification of sentences<sup>20</sup>.

## 6. *Plans for the Future*

In the scope of the agencies and entities of the federal public administration, Decree No. 10,332/2020 establishes the Digital Government Strategy for the period 2020 to 2022, in which the goal of implementing AI resour-

17 *ibid* 113.

18 Luis Felipe Salomão (ed) *Tecnologia Aplicada à Gestão Dos Conflitos No Âmbito Do Poder Judiciário Brasileiro* (FGV Conhecimento 2020) <<https://ciapj.fgv.br/publicacoes>> accessed 5 February 2021.

19 *ibid* 26 and 69.

20 *ibid* 69.

ces in at least twelve federal public services by 2022 stands out (initiative 8.2.).

Regarding the Judiciary, one cannot talk about the plans for the near future without referring to the National Strategy for Information Technology and Communication of the Judiciary (ENTIC-JUD) for the period 2021 to 2026, established in January 2021 by Resolution No. 370 of the CNJ, which is the main instrument for promoting agile governance and digital transformation of the Judiciary through innovative digital services and solutions that drive the technological evolution of the Judiciary. The ENTIC-JUD aims to reach at least 75 % of the Judiciary bodies with a satisfactory maturity level in the Information Technology and Communication Governance index (iGovTIC-JUD) by December 2026 (art. 2, II). To achieve the objectives of the Strategy, each body must prepare a Digital Transformation Plan that will contain, at a minimum, digital transformation of services, integration of digital channels, interoperability of systems and monitoring strategy (art. 15).

Still in the scope of the Judiciary, it must be taken into account Resolution No. 363, of January 2021, in which the CNJ establishes measures to be adopted by the courts for the process of adaptation to the General Law of Personal Data Protection (Law No. 13.709/2018).

With regard to private legaltech companies, there is great expectation with the approval of the Legal Framework for Startups. The topic is the subject of the Draft of Complementary Law No. 146/2019, already approved in the Chamber of Deputies in December 2020 and pending approval in the Federal Senate, which provides for startups and presents measures to encourage the creation of these companies and establishes incentives for investments by improving the business environment in the country.

About the initiatives that may impact the regulation of blockchain, it is worth mentioning the Draft Law No. 2876/2020, which is currently in progress in the Federal Senate and proposes to alter the Public Registries Law in order to establish that all registrations made by Real Estate Records and Registry of Deeds and Documents are also inserted in the National Electronic System of "Blockchain" to be made available by the CNJ. Draft Law n. 2303/2015, which is currently pending in the Chamber of Deputies, provides for the inclusion of virtual currencies and airline mileage programs in the definition of "payment arrangements" under the supervision of the Central Bank. Also worthy of mention is Draft Law n. 5051 of 2019, currently in progress in the Federal Senate, which, in very general terms, proposes to establish the principles for the use of AI in Brazil.

## 7. Final Considerations

Legaltech solutions can serve, in many cases, as a means to ensure fundamental rights in the Brazilian legal system, especially the right to speedy proceedings. However, although they are quite useful in the execution of administrative activities, such tools cannot be treated as a panacea for all the ills that afflict legal activities.

As Lênio Streck rightly points out, even when trying to rule out the problem that discretionary powers represent for legal activities, especially those related to judicial ones, elements of discretionary powers may remain in the definition of the data that feeds the robot algorithms, when differentiating what is and what is not relevant. Thus, it cannot be said that there is a true solution when the proposal presented shares the bases of the problem it intends to solve. Furthermore, considering that legal activities are interpretative, the Law cannot be seen as a mere matter of fact. Otherwise, under the argument of the standardization of decisions, the reproduction of standards previously adopted by courts would lead to a new form of legal realism<sup>21</sup>.

Moreover, even if the data used to inform the algorithmic decision is reliable, the operation of machine learning can generate discriminatory situations, harmful to the right to equality, which can result in many pernicious consequences until it is noticed that there is a flaw or bias. Thus, as a transparency measure, the algorithms used in public decisions need to be audited. In addition, a policy of accountability of algorithms needs to be taken seriously so that personal responsibility for the decisions they make can be established<sup>22</sup>.

Furthermore, the fundamental right to privacy presupposes the appropriate management of personal data by the public and private entities that hold them, making it necessary to prevent incidents such as the one that recently occurred at the Supreme Court of Justice, when the Court's activities were paralyzed after its servers were hijacked by ransomware, the

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21 Lenio Luiz Streck, 'Um robô pode julgar? Quem programa o robô?' (Consultor Jurídico, 3 September 2020) <<https://www.conjur.com.br/2020-set-03/senso-incom-um-robo-julgar-quem-programa-robo>> accessed 10 February 2021.

22 Isabela Ferrari and Daniel Becker, 'Algoritmo e Preconceito' (JOTA Info, 12 December 2017) <<http://www.jota.info/opiniao-e-analise/artigos/algoritmo-e-preconceito-12122017>> accessed 10 February 2021.

worst cyber-attack ever against the information technology network of a Brazilian public institution<sup>23</sup>.

According to the foregoing, one cannot deny the normative advance concerning legaltech activities in Brazil, especially those within the justice system. However, there are still several points that require a normative framework at the legislative level, in order to give greater protection to the system of fundamental rights and bring legal security to all those involved in legaltech activities. The technological sciences are very dynamic, and the legal sciences must be prepared for this.

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23 According to an official announcement from the Presidency of the STJ: Ministro Humberto Martins Presidente de STJ/CJF, 'Comunicado da Presidencia do STJ' (STJ, 18 November 2020) <<https://www.stj.jus.br/sites/portalp/Paginas/Comunicacao/Noticias/18112020-Comunicado-da-Presidencia-do-STJ.aspx>> accessed on February 10, 2021.