

# ***Law and Technology: Rethinking Justice Administration from the Fourth Industry Revolution***

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## ***Abstract***

This paper aims an analysis about the impact of the technology implementation in the justice administration in Colombia from the changes introduced by the fourt industry revolution. although the use of TICs for a better development of justice isn't a legal mandate, with the emergency derived from COVID-19, it was necessary to use different shock strategies against the possibility of physical contact in the judicial services. The main objective is to determinate the impact caused by the changes presented in the use of technology generated by the COVID-19 in Colombian justice: the application of Information and communication technologies (TICs) to the Law. In this context, it been used an analytical documentary approach by the study of juridical texts, specialized web pages and other documents that allow to go deeper in the subject. As a main conclusion, are evidente new cultural patterns and new autonomous regulations forms of human behavior, juridical traffic, wich are linked to data ownership, intimacy rigths, strategic and politic advantages that may arise from its use among other.

**Keywords:** justice; technology; COVID-19; society; risk; Industrial Revolution.

## ***Ley y tecnología: repensando la administración de justicia desde la Cuarta Revolución Industrial***

### **Resumen**

Este documento tiene como objetivo un análisis sobre el impacto de la implementación de la tecnología en la administración de justicia en Colombia a partir de los cambios introducidos por la cuarta revolución industrial. Aunque el uso de las TIC para un mejor desarrollo de la justicia no es un mandato legal, con la emergencia derivada de COVID-19, fue necesario utilizar diferentes estrategias de shock contra la posibilidad de contacto físico en los servicios judiciales. El objetivo principal es determinar el impacto causado por los cambios presentados en el uso de la tecnología generados por COVID-19 en la justicia colombiana: la aplicación de tecnologías de la información y comunicación (TIC) en el derecho. En este contexto, se utilizó un enfoque documental analítico mediante el estudio de textos jurídicos, páginas web especializadas y otros documentos que permiten profundizar en el tema. Como principal conclusión, son evidentes nuevos patrones culturales y nuevas formas autónomas de regulación del comportamiento humano, tráfico jurídico, vinculadas a la propiedad de datos, derechos de intimidad, ventajas estratégicas y políticas que pueden surgir de su uso, entre otros.

*Palabras clave:* justicia; tecnología; COVID-19; sociedad; riesgo; Revolución Industrial.

## ***Direito e tecnologia: repensando a administração da justiça a partir da Quarta Revolução Industrial***

### **Resumo**

Este artigo tem como objetivo uma análise sobre o impacto da implementação da tecnologia na administração da justiça na Colômbia a partir das mudanças introduzidas pela quarta revolução industrial. Embora o uso de TICs para um melhor desenvolvimento da justiça não seja um mandato legal, com a emergência derivada da COVID-19, foi necessário utilizar diferentes estratégias de choque contra a possibilidade de contato físico nos serviços judiciais. O principal objetivo é determinar o impacto causado pelas mudanças apresentadas no uso da tecnologia geradas pelo COVID-19 na justiça colombiana: a aplicação de tecnologias de informação e comunicação (TICs) no direito. Nesse contexto, foi utilizado uma abordagem documental analítica pelo estudo de textos jurídicos, páginas da web especializadas e outros documentos que permitem aprofundar no assunto. Como principal conclusão, são evidentes novos padrões culturais e novas formas autónomas de regulamentação do comportamento humano, tráfego jurídico, vinculadas à propriedade de dados, direitos de intimidade, vantagens estratégicas e políticas que podem surgir do seu uso, entre outros.

*Palavras-chave:* justiça; tecnologia; COVID-19; sociedade; risco; Revolução Industrial.

## **Introduction**

This article is based in the *lectura* named "justice challenges in the Fourth Industrial Revolution era" done on October 28 2020, by Mg. Jorge Octavio Ramírez Ramírez and the doctoral thesis about Artificial Intelligence and justice administration that its been done by Mg. Katherine Gómez García at the Political and Juridical Sciences PhD at Universidad Pontificia Bolivariana- Medellín.

2020 was without any doubt, in the most recent history of the world one of the most changes. Subjects like the pandemic and people lockdown, forced for the urgency rather than planning, that most of human activities had to be moved from the physical reality to the virtual. This change consolidates and makes evident in the social environment its been generating and strengthening a new interaction way wich Will change significantly social patterns.

The communication way, culture, science, economics and for the lawyers the legal traffic of existing and new goods and services brings legal impact not only in the legal business theory but also in the Law as a juridical heteronomous order, based in rules or principles with a vocation for universality, generality, and permanence, that are issues that incides in the juridical systems.

In the juridical field, one of the one of the biggest challenges has been the legal process and the the continuity of the provision of the access to justice service to the population. The above, even more with the emergency state in Colombia decreed by the infections of COVID-19, that, forced, for reasons of public health, to suspend face to face attention in judicial offices, decreasing considerably the physical attention from judges and other court officials.

Starting by the facts presented in previous paragraphs, emerge the idea of studying the impact caused by the changes presented in the technology use that generated (and still generates) COVID-19 in the Colombian justice: the application of the Information and Communication Technologies (TICs) in a area that at first doesn't seem compatible, Law, but, today has shown the need not only to regulate some phenomena by law, but also to use said advances to improve the service and operation of the administration of justice.

The proposed topic will be approached from an analytical documentary approach through the study of legal texts, specialized internet pages and documents that allow an adequate study. In addition, academic databases such as Redalyc and Dialnet will be consulted to obtain scientific articles that can serve as a guide in carrying out the respective analyses.

Likewise, through the web page of the Secretary of the Senate, the regulations to be analyzed will be obtained, this to guarantee topicality on the subject. Despite having as a time limit the years 2011 (date on which the Code of Administrative Procedure is

issued) to March 2021, to give appropriate treatment to the subject, regulations prior to these dates will be used because they are vital for the systematic study of the evolution and development of the proposed article.

To achieve the proposed objectives, the following thematic axes are proposed, which will be addressed in the order presented below:

In the first part, an introduction will be made where key aspects and concepts will be defined, mainly analyzing the risk society. Likewise, the analysis of industrial revolutions and the contribution made to society will be carried out and the topic will be focused on the fourth industrial revolution.

In a second section, it will refer to the Colombian case in the face of digitization and the role of the lawyer in the exercise of Law in the digital age.

Thirdly, some reflections on relevant jurisprudence on these issues will be made. Finally, the conclusions will be presented.

This article will serve as input for the development of a later one in which the use of Artificial Intelligence (AI) in the Administration of Justice in Colombia will be analyzed.

Thus, three objectives are proposed within this text, which are: first, to determine the impact of the fourth industrial revolution on Law. Second, Expose the skills that lawyers must have today and the challenges that the practice of Law poses in the digital age. Third, to analyze the adaptation capacity of the Colombian justice before the impossibility of continuing with the provision of the service to justice in person and the normative adaptation through jurisprudence on some issues of Law and technology.

The foregoing will be worked on transversally through the question, is the Colombian legal system prepared to face the changes presented by the fourth industrial revolution?

## **1. Risk society, Industrial Revolutions and their influence in Law**

### ***1.1 General aspects***

Nobody can argue that the actual society is different that it was years ago, different concepts and perspectives have broken into it, which have caused behaviors to be modified and with this the way of understanding and pronouncing the Law.

Real state or tangible things, the symbol of wealth par excellence, today are on the way to being replaced by information and data, which become, in themselves, generators of wealth, a value or a good. The foregoing even forces us to rethink that definition of article 653 of the Colombian Civil Code (1873) that establishes corporeal things such as those that has a real being and are perceived by the senses and of the incorporeal, which "consist of mere rights."

Although the exposed definition is the one that has been considered valid for many years and is the one that until today is referred to in university cloisters, it differs from reality and the current context, since the data as a good and as an economic value are real. and cannot be classified as mere rights. Information processing and exchange technologies have transformed society and the form of exchange and traffic in goods and services, to the point that, if things are looked at from the point of view of language, it is usual to speak of transactions, as a generic expression that identifies commercial and legal negotiation or traffic.

As part of the changes presented in contemporary societies, a concept arose some years ago that currently helps to identify the needs that arise in today's world, the risk society. Today, States and society itself are understood within a unit that generates some advantages, but also disadvantages; the risks are global and the Law must respond to this.

### ***1.2 The concept of global risk society***

Several authors had worried of the study of the risk and the security in current societies, as mentioned by Martín y Hormigos (2006):

The field of action of security has become so broad that it has a multidimensional nature, connected with legal, political, economic, police or assistance institutions; and conforms the order that a new type of society demands where the conflict appears as something natural within the interaction process. (p. 28)

From the above, it can be concluded that the concern of contemporary States lies in security and external or international threats, since society cannot be conceived in isolation but within a globalized world, with risks and threats to the security that are global, and that must be discussed and controlled by the States, understanding them as a block.

In part, the internationalization of the security problems that States are facing originate from the technological changes that are experienced: communications are currently more efficient, there is a constant interconnection and this means that these security problems or failures arrive in less time and be known by all.

Events such as the 9/11 attacks in the city of New York, the attack in London in 2017 or the attacks in Madrid on March 11, 2004, make States and people act differently, this change is presented as a trigger the fear of being in constant danger.

Going to the support of the risk society, a sociological concept raised by Ulrich Beck in 1986, Montenegro (2005) agrees with what has been presented in previous paragraphs of this document when he says that "what gives specificity to contemporary risk is the globality of the threats and that their causes are modern, in a certain way, global products of modernization, globalized consequences of this" (p. 120).

Despite the sociological approach of the risk society, it's found that this concept fits well into the Law, in fact, it can be applied to different situations in this knowledge area.

It is important to highlight the industrialization processes that the society went through which has a big influence in the risk concept. As industrial revolutions advance, new social behaviors emerge and consequently, legislation must be adapted in order to exercise control by the State and ensure good social relations and the preservation of institutions.

With the passage of time and the consolidation of the changes brought about by industrial revolutions, the risks intensify, and it is appropriate to think about the limits of growth and its consequences. Faced with this, the question necessarily arises: is it possible to limit social growth?

As an answer to the last question, turns appropriate the questioning about the state role and the limits that it can make. Comes out the discussion about if nowadays the state existence can be justified among the modern conceptions or if otherwise it must be rethought to adapt it to the change and avoid it disappearing.

In the relation between risk and Law, Pérez (2008) is accurate by saying:

The technification of law is such that, returning to our original purpose, we can affirm that the reproduction of the legal system supposes, on a certain scale, the creation of risks derived from the uncontrolled progress of law itself as a technique. It can be argued that the law does not escape Grimm's sustained: "The use of new techniques causes risks that many times exceed the dangers of the first phase of industrialization." (p. 101)

Zygmunt Bauman also addresses the concept of risk society, and adds the global adjective, thus it is known as global risk society which

implies having a vision of political reorganization under an interpretive cosmopolitanism of uncertainty, within the studies of public policies to face the reflective and overwhelmed modernity more clearly, within the framework of the construction of the political and politics within the democratizations and current institutional crises in the process of political globalization and prevailing economic globalization. (García, 2015, p. 256)

In addition to the above, a new concept is presented to explain the changes that are evident in modernity, adding the adjective liquid, to signify that the advances that occur in modernity are vertiginous and cannot be contained. Society cannot be supposed to keep its shape for long. Something similar happens to what happens with the states of matter Hall (2017).

Concepts such as risk and catastrophe are differentiated, as well as risk, and other types of variables that consider cultural, ecological aspects, etc., which, in turn, are enriching and delimiting the concept more and more; the foregoing, based on

globalization, which, it could be said, is a kind of binding factor that gives meaning to these appreciations.

### **1.3 Industrial Revolutions and social changes**

The industrial revolutions lived until today, can be classified and named like this: first Industrial Revolution, which emerges in the XVIII century and the main change was the mechanization, hydraulic energy and steam energy (Solex, 2021).

The second Industrial Revolution, begun in 1850 through the modernization of the transportation, and that allowed to move more goods and people in a shorter time. It also stands out massive production.

The third Industrial Revolution begins in the second half of the XX century, and it is also called information society, it's focused in technology and the emerged of the internet.

Finally, there is the Fourth Industrial Revolution, also called Industry 4.0 and it is in which society is currently located. In 2011, began to be named and recognized and it is distinguished by the union between operational technologies and information technologies, which gives rise to intelligent and interconnected machines that facilitate human tasks (it is even thought that at such a point of replace the intervention of man in many of the tasks).

Emphasizing the third and fourth industrial revolutions for the Administration of Justice in Colombia, it can be noted that the key element between them lies in the use of technology and communication for management, administrative and procedural support tasks. of the Judicial Branch, the use of large volumes of data or Big Data, as well as the platforms and software for the planning of procedural strategies and judicial decisions within which is also found, as a result of the Fourth Industrial Revolution, the contributions of Artificial Intelligence (AI), which go beyond the simple digitization of files and support of technology to the daily tasks of the different officials.

## **2. Colombian case: justice digitalization and the lawyer rol in law practice on the digital era<sup>1</sup>**

An study made by the organization Dejusticia, related to the juridical actual and future unsatisfying needs in the colombian population identified "a obvious need of complete information systems, consistents and publics" (La Rota, Lalinde y Uprimny, 2013, pp. 128-129).

Previous statement, leads to conclude that information systems has no rationality nor do they satisfy the needs of the population within the State and that even today, said dissatisfaction continues.

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<sup>1</sup> The listed characteristics into the new lawyer habilities, are infered by a study that made the Analytic Unit at the Universidad Pontificia Bolivariana.

To encourage justice administration and its access through TICs, there will be referenced to the way they have been implemented in the Colombian state in the following terms:

The system, if it can be named as that, was disarticulated mainly by the following facts: lack of language unification, low disposition of open data, non-existent or an information government between Judicial and the Executive Branch, the existence of information, but only administrative registers, among other.

Related with the judicial information itself, the system, only allowed to the external users to see the record of the proceedings ordered by date, but incomplete most of the time besides they were not accessible to all the court offices and that diffculted the online tracking to the procedural subjects that were located away from the urban centers.

Starting in 1996, the 270 Law (Ley Estatutaria de la Administración de Justicia- LEAJ-) ordered, through its article 95, that it should tend to:

The incorporation of advanced technology at the service of the Administration of Justice. This action will focus mainly on improving the practice of tests, training, conservation and reproduction of files, communication between offices and guaranteeing the reasonable operation of the information system.

In 2011, with the expedition of Código de Procedimiento Administrativo y Contencioso Administrativo, the article 305 established that Consejo Superior de la Judicatura should analyze and take the decision among other those related with the "design and implementation of information systems ordered in this Code and others necessary for its development and the proper administration of justice in contentious administrative matters" (Código de Procedimiento Administrativo, 2011).<sup>2</sup>

In a similar sense, article 186 of the same norm provided that the electronic file should be implemented within a period of no more than 5 years, understood as "the set of electronic documents corresponding to judicial proceedings that can be carried out in written form within a process" (Código de Procedimiento Administrativo, 2011).

Previous mandates were enforced by the article 103 of Código General del Proceso (C.G.P.), when it's said:

In all judicial proceedings, the use of information and communication technologies in the management and processing of judicial processes must be sought, in order to facilitate and expedite access to justice, as well as expand its coverage. (Código General del Proceso, 2012)

Complemented by the article 618 C.G.P. that established an action plan which contemplated, among other aspects, "use and adequation of the physical and

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<sup>2</sup> Based on said standard, the study was carried out by the World Bank.

technological infrastructure that warrants the security and integrity of the information and the formation and capacitation of the employees in these new technologies”

As it can be seen, the justice digitalization project and the integration of the technologies of the information to the judicial proceedings isn't new, it began around 24 years ago. In this regard, studies, processes and activities tending towards this digitalization have been carried out, but it is still lacking. Only with the implementation of the electronic file, say the experts, there are approximately 53 attempts.

The above numbers are worrying, specially by the speed with which the technologies and methods that allow the integration of legal matters with current global changes change, since these attempts, in addition to being unsuccessful, represent investment of public resources, community expectations about better access to justice and time that could well be used in the implementation of other types of strategies.

Related to the Judicial Branch, since 2002, was created a system for the management of judicial processes and documentary management called System, called JUSTICE XXI, was created, which admits the distribution, the registration of the judicial process, the actions of the processes and the sentences. It is used in 2,620 judicial offices, which corresponds to 48.2% of the total offices in Colombia.<sup>3</sup>

At first sight, JUSTICIA XXI seemed like an appropriate system, but it presented the same problems that have already been said. Among them, lack of articulation, lack of uniformity of language and training, as well as shortcomings in its appropriation by the internal and external users of that tool.

As a result of the obsolescence and technological limitations of the system, in 2015 the so-called JUSTICIA XXI WEB emerged. By means of this application you can carry out the distribution, the registration of the judicial process, of actions and sentences in the judicial offices and the electronic signature.

Currently, it is possible to file a lawsuit electronically, as well as link the digital documents associated with the process, its distribution and filing, and all the actions of the judges and employees from the virtual desktop that presents folders, actions, communications, and ordered and traceable notifications; the incorporation and conservation of audiences; the creation of digital channels, the consultation of processes. Users who are already enabled in the system do not require a new registration in the portal because the system already recognizes them.

However, its functionality, which would allow its application in other jurisdictions, the truth is that it only covers the 55 judicial offices (1%) that make up this specialty, but its main strength lies in the fact that it was the result of the work of several

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<sup>3</sup> In Colombia as of 2017, according to figures from the Consejo Superior de la Judicatura, there are 5,295 judicial offices (El Nuevo Siglo, 2017).

multidisciplinary teams, in which judicial servants participated, which ensures their appropriation, reliability and use.

Other attempts at "modernization" are due to the efforts of some corporations or judges. Thus, to cite a case, the Council of State has been working since 2017 in this field. The SIGED and SAMAI systems that seek to improve the internal administrative and judicial management of the Corporation's offices, especially in the management of information related to the actions of the processes from the databases of the JUSTICE XXI system, adding other applications such as the electronic signature, the internal management of the offices, the integration with collaborative tools, among others.

Nowadays, the SAMAI program tends to be a true electronic file, since it integrates the distribution and filing; allows the presentation of demands and documents, electronic signature; registration and control of the judicial file: access to the information system; control board of internal actions; data reporting, reports and statistics, consultation and publicity of the documents that are added to the file.<sup>4</sup>

The contingency generated by the pandemic due to COVID-19 infections, paradoxically, led to faster progress. The Superior Council of the Judiciary issued protocols and guides for the management of management and information systems, increased the number of institutional emails for the reception of new processes and memorials, designed and put into operation web applications for the preferential reception of guardianships and habeas corpus, for judicial management.<sup>5</sup>

Likewise, the budget of the Judicial Branch was modified,<sup>6</sup> The future hiring of external personnel was projected to support the digitization work and the planning phase and implementation of a unified digital platform that facilitates judicial management was accelerated.<sup>7</sup>

The aspects mentioned in the previous paragraph contribute significantly to the execution of the plans and activities that the legislator had adopted in terms of digital transformation through Law 1955 of 2019, National Development Plan (PND) 2018-2022 "Pact for Colombia, Pact for Equity", the Government through CONPES 3975 of 2019

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<sup>4</sup> Other experiences are developed in different judicial districts: Magdalena, Medellín, Caquetá. But they are not attached to a orderly and systematic policy.

<sup>5</sup> Virtually, such as «TYBA», «Justicia XXI Web», «Samai», «Sigobius», «Rp1 Cloud», «Lifesize», «Zoom», among others.

<sup>6</sup> The CSJ prepared a contracting project, which is expected to start on November 2, 2020 with a completion date of July 31, 2022, with a total cost of \$110,513,769,320, and an average number of files scanned of 2,559,374. In addition, it assigned the sum of \$92,843,057,735 for the strengthening of the technological platform, of which \$19,863,285,294 are destined to acquire peripheral devices for the digitalization of files and remote work.

<sup>7</sup> A review of the current and projected status in the Judicial Branch is found in the judgment of August twenty-eight (28), two thousand and twenty (2020); Guardianship; Filed 11001-03-15-000-2020-03384-00; National Association of Workers of the Colombian Judicial System and Related -Asonal Judicial S.I. Vs Superior Council of the Judiciary and others.

and the Superior Council of the Judiciary through the Sectoral Development Plan of the Judicial Branch (PSD) 2019-2022.<sup>8</sup>

Surely, the numbers presented have decreased due to the measures adopted. But the digital transformation and access to prompt and enforced justice will also be affected by the number of files –for the year 2019 it was approximately 1.8 million–, the lack of connectivity, the limitations of access to the networks, especially in peripheral areas, the delay in the execution of digitization activities, the training and appropriation by judicial servants of technological tools, the dispersion of efforts and the high cost of a digital justice project.<sup>9</sup>

In any case, what is evident is that the new technologies materialize in support programs for documentary and procedural management, the electronic file and, it should be noted, information systems for the actions within the process.

Exercises a little more advanced than these and directly related to Artificial Intelligence, were created in Colombia's Constitutional Court with the PRETORIA<sup>10</sup> project, whose purpose is to adapt the development carried out in Argentina to Colombian justice and is based on the development and application of some Artificial Intelligence analytical tools related to the guardianship selection process, unification of some procedures and documents, the use of data for purposes of transparency in the eventual review of guardianships and information regarding the definition, promotion and monitoring of public politics.

In different plans and official documents, the exploration of disruptive technologies is projected into the future, which, according to CONPES 3975 of 2019, refers to any improved or completely new technology that replaces and disrupts with the potential to generate great changes and new ways of doing things. Digital disruptions are an effect that changes fundamental expectations and behaviors in a culture, market, industry or process that is caused by digital technologies or channels with far-reaching effects on productivity and well-being through new value networks. and emerging, which represent technological advances that are currently under development or about to be implemented and, in addition, have a relatively undeveloped potential to displace current technology or change business processes, organizations, culture, and among other areas. In other words, they are technologies whose development, and practical applications, have not yet been fully realized. They thus have the potential

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<sup>8</sup> See Echeverri (2020). According to the former Minister of Finance, Juan Carlos Echeverri, a project of this nature is worth between USD 500 and 800 million. In England, he says, USD 800 million was spent, and in Perú 450 million.

<sup>9</sup> See Echeverri (2020). According to the former Minister of Finance, Juan Carlos Echeverri, a project of this nature is worth between USD 500 and 800 million. In England, he says, USD 800 million was spent, and in Peru 450 million.

<sup>10</sup> According to the Constitutional Court of Colombia, it is the integration of state-of-the-art technology at the service of justice (Constitutional Court, 2020).

to have a considerable impact on socio-economic sectors and their patterns of interaction and development. (CONPES 3975 of 2019) such as Artificial Intelligence<sup>11</sup>, data exploitation (Big Data)<sup>12</sup>, among others, but they start from an indispensable premise: reliable information systems and the availability and quality of data, factors that precisely impose uniformity, clear rules, articulation and integration, of language and statistical systems, of jurisprudential information programs – rapporteurships –, of their operation and of the correct understanding of the principle of independence and judicial autonomy.

### **3. Generalities about the role of the lawyer and its impact on the practice of Law.**

Talking about Digital Justice necessarily means making a reference to the lawyer or jurist that is currently required and within the characteristics that must be met, a group of skills common to all jobs of the future are mentioned: a) customer service; b) adequate communication, c) adequate writing; d) bilingualism; e) information hierarchy, f) digital literacy; g) use of management software; h) organizational capacity; i) problem solving; f) flexibility and adaptability; g) time management; h) resilience and self-confidence; i) projection.

Specifically in the field of Law, its operators and professionals are required to have knowledge and practice in interacting with: a) data science; b) Big Data; c) data security; d) automated decision intelligence, which could also be called Artificial Intelligence e) chatbots, f) digital marketing.

For the topic covered in this section, the skills or knowledge of the current lawyer, depending on the labor demand, can be summarized as: data analytics, cybersecurity, programming languages, use of Legal Tech, statistical tools, and skills such as the use of automated decision intelligence, the management of document management software, adaptation of chatbots to resolve doubts, use of Artificial Intelligence tools, blockchain and smart contracts and case resolution according to the legal framework of information services.

The new skills that are required, has their origin in conflicts and their resolution will take place in a new digital dimension and the interaction between humans and machines will increase exponentially: the fourth industrial revolution will have a great impact

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<sup>11</sup> It is a field of computer science dedicated to solving cognitive problems commonly associated with human intelligence or intelligent beings, understood as those that can adapt to changing situations. Its basis are the development of computer systems, the availability of data and algorithms. CONPES 3975 of 2019.

<sup>12</sup> It corresponds to the generation of social and economic value through the use of these for the creation of new goods, services, processes, as well as for the improvement of existing ones. CONPES 3920 of 2018.

The way human beings will communicate with each other, for better or worse. Conflict resolution professionals will have to reassess their theories and practices to face new challenges through the convergence of the physical, digital and biological dimensions. (Segal, 2017)

According to Klaus Schwab states in his debate, "sooner than many expect, the work of professions as diverse as lawyers, financial analysts, doctors, accountants, insurers or librarians could be partially or fully automated" (2016, p. 36).

The previous reflection is not strange, the automation of functions has been raised since previous times, even with the previous industrial revolutions, jobs have been improved or modified. It is worth wondering if developments like Artificial Intelligence will ever replace judges and lawyers.

At the beginning, the answer to the previous question is negative. Although there are cases such as Ross in Canada, Pretoria in the Constitutional Court of Colombia and Prometea in Argentina, the current state of these developments makes almost impossible to completely replace judges and lawyers, since they are used to a greater extent to support the functions of legal operators, resulting in speed and precision when resolving some issues that are considered mechanical in these functions.

#### **4. Some cases on the intervention of technology in Colombian Law.**

##### **4.1. Cryptocurrencies**

To analyze the cryptocurrency section, the Judgment of the State Council, Section Four, will be used as a reference, which is identified with the file: 11001-03-27-000-2018-00030-00 (23837). The procedural parties are:

Plaintiff: SURBTC S.A.S.

Defendant: FINANCIAL SUPERINTENDENCY.

The Financial Superintendence issued circulars No. 29 of 2014; 78 of 2016 and 52 of 2017, through which:

(i) issued warnings about the risks of operations with virtual currencies to the public and (ii) pointed out, or prohibited, to the supervised entities their lack of authorization to keep, invest, intermediate and operate with virtual currencies, and, to allow the use of its platforms to carry out operations with this type of elements. (Car 2018-00030/23837, 2018)

The circulars were sued because, in the plaintiff's opinion, prohibiting financial institutions from carrying out operations with cryptocurrencies corresponds to the Legislator since it involves intervention in the economy (articles 150.21 and 334 of the Constitution).

It also questions the reasons or motives of the circulars because they start from false premises:

(i) are not based on a study or analysis of the impact of virtual currencies on the economy; (ii) there are no studies, statistical analyses, or judicial rulings that demonstrate the relationship of subjects that will operate with virtual currencies and money laundering or terrorist financing activities; (iii) it is not valid to affirm that the coins are the vehicle for the commission of acts related to those criminal offenses, since its underlying technology, blockchain, contributes to the identification of the transactions and of the users who carry out acts related to these criminal offenses, which allows the control of this risk (iv) these currencies are regulated, but not other goods with characteristics similar to cryptocurrencies and that circulate in commerce (tokens, miles, points, digital assets and gift cards).

The process is still ongoing, but the provisional suspension measure was denied, under the following considerations:

(i) that the Superintendency was competent to issue the orders for the acts in question, as well as the warning to the public, as an expression of the inspection, surveillance and control functions that correspond to it and that were enshrined, among others, in Laws 35 of 1993, 964 of 2005, and the Organic Statute of the Financial System. (ii) that the reasons for the act are real, since the potential risk of using virtual currencies for asset laundering and terrorist financing is related to the level of anonymity of the transactions that are carried out with and through these elements, which acquires greater relevance due to its cross-border nature: this has been considered, among others, by the FATF<sup>13</sup> International Financial Action Task Force - in reports that characterize virtual currencies and list their potential risks.<sup>14</sup> (iii) Other risks derive from (a) the lack of legal power to release the virtual currency; (b) the absence of backing by a central bank; and, (c) the absence of regulation in the Colombian legal system that results in the non-existence of provisions regarding the security of operations, reversal of transactions, non-existence of public and private guarantees, among others; (iv) it was not demonstrated that the administration's actions had a purpose other than guaranteeing the permanence, continuity and regularity of the financial system and its components.

As can be seen, it is a provisional suspension measure, which does not imply prejudgment regarding the substantive decision.

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<sup>13</sup> Intergovernmental entity created within the framework of the XV World Economic Summit of the G-7 (today G-8) in charge of the development and promotion of policies to combat money laundering

<sup>14</sup> It is true that in other latitudes different decisions have been made, however, this does not demonstrate the unreality of the motive. On the contrary, it demonstrates its existence and the need for its valuation in accordance with the special and specific circumstances of the corresponding financial system, which justifies the issuance of different orders and guidelines when dealing with financial markets that are also different, such as that of the European Union and Colombia.

And this warning is made because the speed of the changes can possibly lead to the authorities in charge of monetary management, the currency, and the surveillance of the financial sector, depending on the circumstances, they can vary their position.

This statement is supported by two facts:

First. Decree 1234 of September 14, 2020, which aims to regulate the objectives, requirements, and operating stages of the controlled test space-sandbox- as a tool to promote innovation in the provision of financial services and facilitate supervisory authorities and regulation the identification of new financial developments, within which could be included the developments that the Blockchain and virtual currencies represent.

Second. The draft prepared by MINTIC - August 2020 version entitled "DLT/BLOCKCHAIN Guide for the use and implementation of distributed ledger technology (DLT/Blockchain) in the public sector"<sup>15</sup>

## **4.2 Electoral**

In this section, the verdict of the Administrative Court of Risaralda will be considered, identified with filing: 66001-33-33-000-2019-00777-00, Legal Action: Electoral Nullity, Plaintiffs: Emerson Edilberto Jaimes and Catalina Ocampo Morales Defendants: National Registry of Civil Status and Carlos Alberto Maya López (elected).

One of the criticisms of technological platforms, social networks and Artificial Intelligence systems is based on the possibility of manipulating information, data, and news (fake news) in such a way that, in terms of elections, affects the will of the potential voter by "orienting" him to vote for a certain candidate or to adopt a certain decision.

As its name indicates, the will of the voter is mentally manipulated, eliminating their critical capacity in such a way that their intention is prefabricated in the direction desired by the one who controls the technological or digital instruments, which affects the transparency of the electoral process: the Brexit; the election of President Trump, the plebiscite for peace, are some of the examples cited.

A curious case in Colombian jurisprudence, was ruled in the first instance. It was presented in the Municipality of Pereira. In the electoral campaign, the candidate who was ultimately elected as mayor created and used a technological tool or application where he collected data or information from 54,000 potential voters.

For the plaintiffs, with the use of this application, not only the fundamental right to habeas data was violated, by including potential voters without their consent, but also the right to vote freely and voluntarily, since the platform not only registered

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<sup>15</sup> Ministry of Information and Communication Technologies, Vice Ministry of Digital Economy, Directorate of Digital Government, Version 2 August 2020.

in this way, but also allowed you to consult your data, track them georeferenced and verify if you cast your vote.

Under these conditions, by this fraudulent access to information, the constraint exerted on the voter, a vice of nullity was incurred due to violation of the law, which entailed the invalidity of the election.

For the defendant, the scope of said application was not such. It was a simple database, built with the information of the "referrals", used simply for the purposes of electoral marketing or marketing, among other reasons because it did not allow establishing whether the "referred party" had voted and for whom. done. It was, therefore, a legitimate campaign instrument.

Under these conditions, given this fraudulent access to information, the constraint exerted on the voter, a vice of nullity was incurred due to violation of the law, which entailed the invalidity of the election.

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For the Court, in the verdict of this process identified with file 2019-0077 mentioned at the beginning of this section, the application was not a simple database but a mechanism that, due to the way it was used, violated the right to free expression of vote. In this regard, he stated as follows:

The performance displayed by the candidate for mayor of the municipality of Pereira, in interaction with public officials of the municipal administration of Pereira and on the electoral will of the officials and contractor in question, Mr. Fredy Eduardo Ruano, Mr. Diego Fernando Bonilla Ríos and Mr. Luis Carlos Rúa Sánchez, also with a view to exerting influence through these on the people included as "referrals" in the technological application, to increase the number of voters, violates the right to vote enshrined in article 258 of the political charter, according to which suffrage must be freely guaranteed by the State, without "any type of coercion" and whose essential core is the "political freedom to choose a candidate", according to the aforementioned judgments C-224 of 2004 and T -324 of 1994 (...)

The Court concludes:

That the influence exercised by public officials of the municipality of Pereira, in interaction with the candidate for mayor, Mr. Carlos Alberto Maya López, with respect to the aforementioned servants and contractor of the municipal administration, has been demonstrated, also for the purpose that has been It has been demonstrated that, through such servers, ascendancy was exercised over the people included as references in the *Kontacto* technological application, to

increase the number of voters in favor of the campaign of the chosen one, Mr. Maya López, with affectation of the fundamental right to vote free of these.

The verdict was revoked by the Council of State.

### **4.3 Social media and the use of information**

To address the relationship between social media, we will consider what was stated by the Administrative Court of Risaralda, File: 66001-33-33-000-2019-00777-00, Judicial Action: Electoral Nullity, Plaintiffs: Emerson Edilberto Jaimes and Catalina Ocampo Morales Defendants: National Civil Registry and Carlos Alberto Maya López (elected).

The transcendence of social networks in social and individual behavior is undeniable and the incidence of the expressions or publications made in them impact the world of law, especially that of fundamental rights, patrimonial liability, criminal and disciplinary liability, given their massive use by individuals and public authorities.

A case where precisely this discussion underlies occurred with a tweet of the then President of the Republic Iván Duque Márquez:

Respecting the religious freedoms of our country and in a clear expression of my faith, today we celebrate the 101 years of the recognition of our Virgin of Chiquinquirá as Patroness of Colombia. Every day in deep prayer I thank you and ask you for our country. (Duque, 2020)

As a result of this tweet, a guardianship action was presented on the grounds that the "fundamental rights to the secularism of the State, freedom of worship, separation between the State and religion" are violated (STL5798, 2020).

When deciding the guardianship, the Judge indicated that the president incurred in a "clear speech on religious matters whose disclosure is prohibited" since he is prohibited from carrying out conduct that could favor any religious confession-neutrality of the Colombian State-

Although the previous statement is true, continues, that it was announced in a personal account, it is true that its content creates confusion, especially when the ruler's actions are published in it, rather than appreciations or situations of a personal nature.

Upon hearing the challenge, the Supreme Court of Justice of Colombia alludes to the right to free expression – natural to the individual and to a democratic society – to the public authority, in the exercise of its functions, in public proceedings; to the secular State and, to the weighting rules to resolve conflicts between rights.

It concludes that freedom of expression prevails over freedom of worship, provided that the publication can be classified as a personal expression of faith of the ruler, as is the case in this case, and revokes the sentence denying the amparo.

It is worth to emphasize the following parts of the sentence:

The situation analyzed here makes clear the emergence of new dynamics of interaction between public authorities and users of social networks. Likewise, it reveals that the fundamental right to freedom of expression is in the process of constant collective construction and adaptation to these new languages, exchanges, and communication channels.

(...) It is opportune to warn the official who has been sued that he must be particularly careful when using his personal accounts on social networks, while he must ensure that his pronouncements in said spaces conform to the neutrality of the government position he temporarily holds, in order to avoid confusion between his role as a citizen and his investiture as head of state that, in other circumstances, may be considered detrimental to fundamental constitutional guarantees.

In this perspective, an ideal measure to make such a separation effective would imply the proper use of each of the accounts, personal and institutional, of the Presidency of the Republic, in order to disseminate in the latter all matters derived from the public function. Likewise, avoiding alluding to internal matters that could be interpreted as an official position, while the use of the Internet tends to be more and more extensive and social networks are open forums for discussion, which undoubtedly leads to public scrutiny of their publications increases. (STL5798, 2020)

#### ***4.4 Domiciliaries and the employment relationship***

A new form of legal relationship arises from the so-called collaborative economies, where people, using a technological platform, provide services of a personal nature, as occurs with the so-called domiciliary services, Rappi, for example.

Is there in that relationship, where the platform plays the role of intermediary between the final consumer and the provider, an employment or subordination relationship?

Some pronouncements are known, which are not published, where it is concluded that there is a true employment relationship. In comparative law, a sentence issued by the Spanish Supreme Court, affirms through sentence 805 of 2020 the existence of an employment relationship between Glovo and the riders or distributors whom they considered false self-employed.<sup>16</sup>

And in the internal order, according to press information, another from the Sixth Labor Court for Small Causes of Bogotá that declared that the relationship between a resident and the company is of a labor nature, under the principle of primacy of reality.

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<sup>16</sup> This pronouncement was released on September 25, 2020, and the pronouncement is generated through resource 4746/2019

"For the Court, in the provision of the service an indefinite-term employment contract was set up, for which the company must pay the home help for severance pay, service bonus, vacations and pension contributions" (Vita, 2020).

Decisions in comparative law have led to the presentation of several bills in the Colombian Congress<sup>17</sup> to regulate the matter, under the consideration that it is a new phenomenon in the Colombian legal system since the existing regulations do not apply. for neither of the two sectors, both for collaborators or even for companies, nor for the types of existing contracts for the provision of personal services where the distinctive note is subordination or autonomy.

The authors of the projects, Senators Rodrigo Lara and Álvaro Uribe, said that it is necessary to "find a regulatory mechanism that allows the platform collaborators to be protected from eventual job insecurity, but also the platforms from an obligation that would not correspond to them and they would go bankrupt" (El Nuevo Siglo, 2019).

Guarantees such as an accident insurance for homeowners, a policy that allows them lost profits, Social Security, a flexible rule that understands these new businesses.

It also announces other bills to regulate other platforms, transportation, such as Uber<sup>18</sup>, Cabify and cryptocurrencies.

## **Conclusions**

It is a fact that there is a new manifestation of wealth: data and information. It has been shown that they are valuable elements for the development not only of the administration of justice but also of contemporary States and the institutions that exist within them.

Based on the above, there is a new form of social interaction mediated by the media and by social media. The foregoing causes the legal interaction to be modified and adapted to the new social needs, in this way, aspects such as the provision of the justice service are improved, which is a fundamental right for all the inhabitants of the State.

Additionally, new cultural patterns and new autonomous forms of regulation of human behavior and legal traffic are evident, to which the ownership of the data, the right to privacy, the strategic and political advantages that can be derived from its development and use, among others.

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<sup>17</sup> The press release on the project presented in 2020 can be consulted at: <https://senado.gov.co/index.php/component/content/article/13-senadores/1529-proyecto-de-ley-busca-regular-contratacion-de-personas-para-plataformas-digitales?Itemid=101>

<sup>18</sup> Remember the sanction of suspension of the service imposed by the SIC on the Uber platform for unfair competition, revoked by the Superior Court of Bogotá due to expiration of the term to declare

As an aspect to be highlighted in a positive way on the exposed topic, there is the elimination of barriers, the hope of material equality not only to access justice but also information. In addition, the lowering of transaction costs and greater security by being able to trace the content of the documents processed and being able to corroborate their authenticity, which, based on what has been expressed by the Constitutional Court on different occasions, gives the document electronic the same validity as the physical one (functional equivalence).

Although this article did not work in detail, it is found that the insertion of Artificial Intelligence, the use of technological platforms and the digitization of justice, the Blockchain and other tools show that digital transformation is not an option. It is something inexorable, and the optional will be how and when.

New facts have been presented that have transformed society, now there are new contracting and work modalities, therefore, it is the duty of the State to regulate this type of situation to give security to the population and to be able to determine the factual assumptions in which that will operate, this is nothing more than preserving the social order and strengthening the legal and political institutions that exist in modern States.

Acting through algorithms and technology represent some risks and challenges. Perhaps one of the biggest concerns of judicial officers and recipients of the justice service is that algorithms come to replace the human being, and although it will work as stated at the beginning in a later article, well understood, it is necessary to conclude that It is one more tool for judicial work, especially when dealing with cases that we can call simple or easy, as opposed to complex or difficult ones.

It can be affirmed, yes, that technology will not be able to fully replace the judge's interpretation and ability to individualize each case, identify the specificities and "feel" justice.

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