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ARTIFICIAL INTELLIGENCE IN THE LEGAL ORGANIZATIONAL WORLD: A LITERATURE REVIEW ON IMPACTS AND CHALLENGES

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ABSTRACT

This article explores the growing impact of artificial intelligence (AI) on organizations operating in the legal field and the legal system. The method used was inductive and presents as its nature the applied research contemplating intervention in a certain social reality, with a qualitative approach, exploratory, theoretical and practical objective, through bibliographic research, made possible through a narrative review of the literature. To this end, in addition to the classic literature, articles published in journals were mapped, surveyed by structured search procedures on the Capes Journal Portal, in the Academic Search Premier and Business Source Elite databases (both made available by Ebsco), Scientific Electronic Library Online (Scielo) and Research Gate. As a result, it was evidenced, in summary, that AI has generated controversies among lawyers, many of whom resist its adoption, in part due to the mythological view popularized by cinema and the media. Conclusively, AI does not replace lawyers and organizations, but it improves work efficiency, bringing greater predictability and agility to processes.

Keywords: Artificial Intelligence. Organizations. Legal Efficiency. Technology in Law.

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INTRODUCTION

Artificial intelligence (AI) is widely recognized as a disruptive tool in several areas of knowledge. In the legal field, its impact is reflected in the automation of repetitive tasks, the optimization of processes, and the expansion of access to justice. However, the adoption of AI is not without controversy, mainly due to the negative perceptions popularized by the media and cinema.

AI is defined as the ability of machines to perform complex tasks, such as perception, action, and reasoning, traditionally performed by humans. Technology is increasingly present in various industries, including law, where it can streamline repetitive processes, allowing lawyers to focus on more complex intellectual tasks.

Yuval Harari (2018) argues that AI has advantages over human work, since it can be networked efficiently, unlike human individuals. The author demystifies the idea of a massive replacement of humans by robots, suggesting that AI is already widely integrated into our everyday lives.

In the context of Brazilian legal organizations, the scenario observed is that the mechanical work of lawyers has been decreasing, influenced by emerging technologies and the processes of economic globalization, in addition to the dynamics of transformation of capitalism that, in the last 20 years, have led the legal profession, especially in the USA, to an approximation of the profession to the "business world" (ABEL, 1989, DEZALAY AND SUGARMAN, 1995; KARPIK, 1995), as a response to the new needs of the market, especially in the business context, giving rise to new specialized legal skills.

The work of the lawyer and the law firms, organizations that are not yet, in fact, recognized in Brazil due to limitations of the class body and resistance on the part of some professionals, has always been classified as individual, liberal, classical, in organization, clientele and tacit knowledge, autonomy and absence of alterity permeate the work of the lawyer who, Often it relied exclusively on the traditional sources of law - law, doctrine and jurisprudence, for its exercise. For a long time, the folder, the pen, the typewriter and, later, the text editors of the computers, accompanied lawyers in their trajectories and, with these few resources, caused significant transformations in our society. In addition, the generalism of knowledge in the profession has always been dominant, where lawyers worked simultaneously in several areas of law – civil, criminal, labor, etc. (ARNAULT, 2002).

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Gradually, despite the aforementioned "resistance" of some professionals in this area, the logic of liberal work has been replaced by the corporate, capitalist, institutional one, guided by productivity and efficiency. We see, then, the formation of law firms or collectives, with a clear orientation towards business and focused on the organizational world.

It is equally relevant to note that the legal professions, until then considered only in national contexts, new scenarios have emerged, in the face of a global market that involves people, ideas and solutions to social problems, based on a growing variety of transnational doctrines (GARTH, 2014), with Artificial Intelligence being one of the great watersheds between the past, present and future of the legal profession.

With this, this article explores the growing impact of artificial intelligence (AI) on organizations and the legal system, discussing how this technology can transform professional practices, analyzing the controversies that arise around the adoption of AI, addressing economic and cultural challenges associated with the topic.

The method used was inductive and presents as its nature the applied research contemplating intervention in a certain social reality, with a qualitative approach, exploratory, theoretical and practical objective, through bibliographic research, made possible through a narrative review of the literature. The literature review is based on the selection of bibliographic references and the interpretation of the contents contained therein and is the appropriate method to define a theme in time and space, situating it in the set of information or research activities previously developed by researchers. It also refers to a methodological approach that enables the collection of scientific data on the chosen subject. (MEDEIROS AND TOMASI, 2016; MATTAR, 2017).

For the elaboration of the theoretical research reported here, in addition to the classic literature, articles published in journals were mapped, surveyed by structured search procedures in the Capes Journal Portal, in the *Academic Search Premier* and *Business Source Elite* databases (both made available by *Ebsco*), *ScientificElectronic Library Online* (Scielo) and *Research Gate*. The verification in these indexes occurred from the terms *Artificial Intelligence, Advocacy, Law, Legal Efficiency, Technology in Law*, combined with the use of logical operators, in the *title* and *abstract* fields.

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Duplicate texts, videos, images or those that, after reading the titles and abstracts, did not present concepts that are related to the theme of this investigation were excluded. There was a temporal delimitation of the last five years (2018-2023), in view of the movements initiated from the publication of works that questioned the longevity of the legal profession in the face of the advancement of artificial intelligence, but only essays in Portuguese were selected, as well as those whose full texts were available, resulting in 20 articles, whose main themes were: Adoption of disruptive technologies in law, such as artificial intelligence; Efficiency in legal processes through automation and analytics; Ethical and regulatory challenges in the use of AI; Impact on legal careers, including new skills in demand; Transformations in law firms and judicial decisions.

ANALYSIS AND DISCUSSION

The use of artificial intelligence systems in legal organizations has been among the topics of discussion of the professional performance model of lawyers and other professionals in the area, even generating controversies in this regard. "The application of artificial intelligence to Law, certainly, touches the pride of some professionals, who opt for a Luddite position of denial of the evolution of language and the advancement of the means of legal work." (FELIPE; PERROTA, 2018, p. 4)

In fact, the topic of artificial intelligence is still quite mythological, not only for lawyers and their "firms", but for society in general, considering the way it has always presented us through cinema and sensationalism, so, first of all, it is necessary to clarify what Artificial Intelligence actually means. In this sense, we turn to Russell and Norvig (2009), who present eight definitions found in the specialized literature:

- "The exciting new effort to make computers think... machines with minds, in the full and literal sense" (Haugeland, 1985)
- "[The automation of] activities that we associate with human thinking, activities like decision-making, problem solving, learning... " (Bellman, 1978)
- "The art of creating machines that perform functions that require intelligence when performed by people" (Kurzweil, 1990)
- "The study of how to make computers do things that, at the moment, people are better at" (Rich and Knight, 1991)
- "The study of mental faculties through the use of computational models" (Charniak and McDermott, 1985)

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- "The study of the calculations that make it possible to perceive, reason and act" (Winston, 1992)
- "A field of study that seeks to explain and emulate intelligent behavior in terms of computational processes" (Schalkoff, 1990)
- "The branch of computer science that is concerned with the automation of intelligent behavior" (Luger and Stubblefield, 1993) (RUSSELL; NORVIG, 2009)

Para DE SOUZA TOLEDO et. al. (2020, p. 2043) "Artificial Intelligence (AI) is a branch of computer science that proposes the development of devices that simulate the human ability to reason, perceive, make decisions and solve problems, in short, the ability of a machine to be intelligent."

Synthetically, we can say that Artificial Intelligence is a machine that automatically performs sequential and complex actions related to activities that are linked to human thinking, for decision-making and problem-solving. They are non-human elements performing human tasks that require perception, action and reaction, that is, machines replicating human cognitive capacity (MALDONADO; FEIGELSON, 2019)

Harari (2018) mentions that the research that has been carried out in recent decades in the fields of neuroscience and information economics has allowed scientists to understand how human beings make decisions, coming to the conclusion that it is a probabilistic analysis carried out by the billions of neurons in the human brain and pattern recognition:

> "Good drivers, finance professionals, and lawyers don't have magical intuitions about traffic, investing, or trading—and rather, by recognizing recurring patterns, they locate and try to avoid inattentive pedestrians, inept borrowers, and cheaters." (HARARI, 2018)

Artificial intelligence has been revolutionizing several markets, given its versatility and, especially, its connectivity and updating capacity. However, Harari (2018) highlights that there is a turning point between human and non-human activities that puts AI in an advantageous position:

> "Because humans are individual beings, it's hard to connect to each other and make sure they're all up to date. In contrast, computers are not individuals, and it is easy to integrate them into a flexible network. So we are not looking at the replacement of millions of individual human workers by millions of individual robots and computers, but probably the replacement of individual humans by an integrated network." (HARARI, 2018)

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In other words, what Harari seeks to demystify is the scenario in which several machines with high information processing capacity may be circulating around the world and occupying jobs, homes and schools, places that have always been occupied by humans.

On the contrary, artificial intelligence systems have the role of facilitating various tasks and are present in the daily lives of most people without them even realizing it. At the exact moment I write this text, a spelling and grammar correction tool interacts with me and with that it improves my writing, recording the information that is compared with that that was put by other users, along with the sources of literature, so that my writing is perfect, even if I am unaware of some rules of the language that is being used or make a typo.

An interesting observation made by Crawford (2021) is that artificial intelligence is neither intelligent nor artificial, as it takes into account a series of workers who are involved not only in its development, but also and especially in its training, from the provision of data that feeds it with processable information.

Nevertheless, the uncertainties that permeate the use of artificial intelligence in the legal field constitute great dilemmas for lawyers, but it seems undeniable to be an excellent tool so that the repetitive and boring work is no longer performed by this professional who is highly qualified to be demanded by purely mechanical tasks. The relevance of such systems within the judiciary is also verified, so that a quick response can be given in the solution of the disputes that arise there, and in general, they are quite time-consuming because they have always been dependent exclusively on human elements.

In practical terms, for example, in order for the work in the various courts to be more efficient and faster, within the "Justice 4.0" program[3], the National Council of Justice-CNJ joined the Sinapses project (figure 3), a platform developed by the Court of Justice of Rondônia (TJRO) that is responsible for managing supervised training, versioning and availability of Artificial Intelligence models.

Thus, respecting the autonomy of each of the Brazilian Courts, this platform seeks to standardize the knowledge acquired by the machines from their training, which allows for greater effectiveness, especially with regard to repetitive demands.

[3] https://www.cnj.jus.br/tecnologia-da-informacao-e-comunicacao/justica-4-0/

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Currently, in the Brazilian Judiciary, several artificial intelligence systems are already under development that have the function of ensuring better jurisdictional performance, which will possibly also contribute to the work of lawyers who will have greater predictability and assertiveness in conducting their clients' cases.

In public advocacy, some initiatives have been implemented. As an example, the Petition Assistant Module (MAP) of the Federal Public Defender's Office Information System (SISDPU), developed by Serpro, the Federal Government's IT company, which allows improving the classification of petitions using Artificial Intelligence (AI) and the creation of initial petition drafts using templates pre-defined by the DPU, ensuring a more agile service for the population that seeks the Defender's Office [4], taking away from lawyers the repetitive and boring activity so that the professional can better dedicate himself to the intellectual activity itself.

Artificial intelligence has also been inserted into the routine of private law firms, which start to work under a new logic, the business one, having already been made possible, currently, considering that the costs of access and ease of use of AI systems have reduced substantially. Some factors that explain this accessibility can be listed as follows:

SAAS (SOFTWARE AS A SERVICE) SOLUTIONS

Many AI-based software are offered as cloud services, eliminating the need for upfront investments in robust infrastructure. Tools such as contract analysis, legal research, and automation of repetitive tasks can be hired for monthly or annual subscriptions, usually scalable according to the size of the office. (https://www.luminance.com/)

OPEN SOURCE TOOLS AND APIS

Platforms such as OpenAI, Hugging Face, and other providers offer APIs that allow you to integrate language models and data analysis into workflows at reduced costs. Open-source tools, such as spaCy and GPT-3, can be used to customize specific solutions without large investments. (https://spacy.io/ and https://platform.openai.com/docs/)

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AUTOMATION OF REPETITIVE TASKS

AI allows you to automate processes such as document screening , contract analysis, legal document creation, and due diligence. This reduces reliance on manual labor, resulting in savings in time and financial resources. Popular tools include Kira Systems, Luminance, and DocuSign Insights for contract analytics and management. (https://kirasystems.com/)

ACCESSIBILITY OF TRAINING AND IMPLEMENTATION

Modern AI systems are more intuitive, requiring less advanced technical training. Many vendors offer technical support and rapid implementation, allowing small or medium-sized firms to adopt the tools without the need to hire technology experts. (https://www.lawgeex.com/)

REDUCTION OF OPERATING COSTS

By reducing the time required for tasks such as legal research or document review, AI significantly decreases the costs associated with billable hours. This is particularly valuable for offices working with fixed budgets or large-scale projects. (https://casetext.com/)

CUSTOMIZATION FOR SMALL AND MEDIUM OFFICES

Previously, AI was seen as an exclusive technology for large firms with robust budgets. Today, smaller businesses have access to modular tools that can be customized to meet their specific needs. (https://www.legalzoom.com/)

FINAL CONSIDERATIONS

The impact of AI is investigated through different perspectives. Studies such as Harari's (2018) emphasize that network connectivity and updating are unique advantages of AI over human work. On the other hand, cultural resistance to AI, exacerbated by its mythification in the media, poses a significant obstacle. Many lawyers express concerns about the impact of technology on the profession, even though AI is widely used in tasks such as predicting court outcomes and automating petitions.

[4] Available at: https://www.serpro.gov.br/menu/noticias/noticias-2020/inteligencia-artificial-public-defender's office-union. Accessed on: 11 set. 2021.

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The low cost and ease of access of AI in legal organizations is driven by an ecosystem of practical and accessible tools. This allows even small organizations to adopt technology to increase efficiency, reduce costs, and improve customer service. However, it is still essential to consider ethical and regulatory aspects in the use of these tools to ensure compliance with legal and privacy standards.

It is concluded that artificial intelligence does not replace human work, but complements activities in the legal sector, promoting greater efficiency and predictability. A strategic application of AI can contribute to a more agile and accessible justice, favoring both professionals and citizens.

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