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The Conceptual Framework of Legal Technology and its Dimensions

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Abstract:

With the advent of the digital age, the legal sector is at a crossroads between tradition and innovation. Legal technology, often referred to as “LegalTech”, is becoming a cornerstone for firms and professionals looking to optimize their operations and provide better service to their clients. This article aims to explore the facets of this technological integration in the legal world. Legal technology refers to all the software, applications and digital platforms designed to assist legal professionals in various aspects of their work. It covers a wide range of tools, from the automation of routine tasks to the use of artificial intelligence for legal research. The goal is to make legal services more efficient, accessible and affordable.

By reducing the time spent on repetitive tasks, technologies allow legal professionals to devote more time to strategy and creative thinking, which are crucial aspects of their profession.

Key words : digital age, legal technology, digital platforms, artificial intelligence, legal professionals .

Introduction:

The fusion of law and technology is no longer a prospect, but a tangible reality. In a world where digital technology governs a large part of our interactions, the legal implications have become a terrain to be navigated with caution for innovators, businesses and legal practitioners. Several major trends and issues are shaping the legal-technological landscape.

The digital revolution continues to disrupt and change our world, so it is important to find legal solutions to organize and supervise these changes. Today, almost all people have a digital existence and own connected objects. It is therefore important to understand the risks and challenges of these profound changes in the daily lives of the majority of the population.

As our society is driven by digital and IT developments, new technology law is becoming an essential legal area. This complex discipline examines legal issues related to the use, development and regulation of information, communication and innovation technologies. Different topics can then be addressed such as copyright infringement, violation of image and privacy rights, cybercrime. With the advent of the digital age, the legal sector is at a crossroads between tradition and innovation. Legal technology, often called "LegalTech", is becoming a cornerstone for professionals seeking to optimize their operations and offer better service. The questions of this research paper are:

What is the impact of legal technology on the judicial field? How is technology changing the world of law? What are the challenges facing legal technology?

This article aims to explore the facets of this technological integration in the judicial world.

1. The concept of legal technology, its fields and challenges

Legal technology represents a wide range of software with almost infinite possibilities. Some of the benefits of using these innovative tools for legal practice include better resource management, increased transparency of organizational data and ease of access, and reduced human error. All of these improvements

translate into faster overall case processing. By finding ways to automate outdated or time-consuming operational activities, law firms can now devote their newly freed resources and staff to more complex procedures¹.

1.1. The concept of legal technology

New technology law is a branch of law that has developed over the years in the face of the digital revolution. While living without a mobile phone, computer or tablet and without an internet connection is becoming very complicated, it is no less concerning what its presence on the web can imply².

Legal technology refers to all software, applications and digital platforms designed to assist legal professionals in various aspects of their work. It covers a wide range of tools, from the automation of routine tasks to the use of artificial intelligence for legal research. The objective is to make legal services more efficient, accessible and affordable³.

This indeed encompasses a wide range of legal issues, from privacy to intellectual property of software and technological innovations. In addition, rapid advances in areas such as artificial intelligence, cyber security or social networks have increased the need to regulate and legislate on these issues; this is why new technology law occupies a major place in today's jurisdiction. It is an interdisciplinary field that combines different aspects of law and is characterized by its constantly evolving nature, as it must adapt to technological innovations and the new legal challenges that arise from them.

The digitalization and online storage of case law, laws and regulations has created an increasingly large bank of information, accessible almost instantly. Across the country, states have begun to prepare the ground for the next big wave of changes in data privacy and technological regulations related to the implementation of technology in the legal industry. Discussions around outdated decisions that once stifled innovation and reduced consumers' overall access to legal services could pave the way for even greater growth in the sector.

While this technology has created new efficiencies and improvements in the day-to-day operational activities of both firms and their clients, it also challenges important ethical discussions at the intersection of law and technology, such as who bears risk and is assigned liability as legal workflows become automated and even controlled by increasingly powerful artificial intelligence.

1.2. Key Areas of Legal Technology

Legal technology covers several areas such as:

1.2.1. Automation of legal tasks

Legal task automation tools simplify administrative procedures, such as filling out forms or managing client files. This frees up time for lawyers, allowing them to focus on work with higher added value⁴.

1.2.2. Law firm management software

Software designed for law firm management, such as accounting and billing software for lawyers, optimizes financial and administrative monitoring, ensuring better internal organization and increased accuracy⁵.

1.2.3. Collaboration platforms

Lawyer platforms promote collaboration between legal professionals. They facilitate document sharing and communication within the firm but also with clients, paving the way for a more integrated legal practice. While it is important to follow current digital developments to understand how they work and their potential dangers, it is even more important with new legal developments to understand how to apply them to different challenges⁶.

Privacy is one of the most important issues because with the proliferation of personal data online and increased surveillance, data protection laws have become crucial to ensure the privacy of individuals and their security. Intellectual property, Copyright, patents and trademarks are also key elements of new technology law. It is about protecting intellectual creations, inventions and brands in an ever-changing digital environment. The fight against counterfeiting and theft of intellectual property online is a major concern⁷.

1.2.4. Cyber security:

Online security is a critical issue. Cyber security laws and regulations aim to protect computer systems against attacks, intrusions and hacking. They are essential. New technology law has a significant impact on our society since it governs the use and development of many of the tools we use to shop, express ourselves, develop our skills, etc. Consumer protection laws in the digital domain aim to ensure that online users are informed, protected against fraud, against deceptive commercial practices and that they have recourse in the event of a dispute.

E-commerce it has become a pillar of global trade since every day millions of consumers use this means to make their purchases, whatever they may be. Whether in the field of fashion, cosmetics, IT, insurance or food, for example, it is more than a habit! New technology law then regulates online transactions, electronic contracts, the liability of e-commerce platform providers and many other aspects⁸.

1.2.5. Freedom of expression:

New technology law must balance the right to freedom of expression online with the fight against disinformation or cybercrime. New technology law is a crucial legal area that is shaping our ever-changing digital world to make it the safest and most secure place to develop in our daily lives. As technology continues to advance, it will continue to evolve to meet changing needs!⁹

1.2.6. Drafting contacts and expert reports:

Whether drafting a complex contract or expert report, or correspondence with courts that are teeming with laws and regulations, or developing uniform standard templates, document creation is a central element in daily legal activities. The document creation process is constantly in the spotlight, and it now needs to be

optimized with intelligent legal technology tools. This ranges from automated document and contract production to voice recognition facilitating digital dictation, and collaborative tools that simplify and accelerate the collaborative work of developing, approving and finalizing documents¹⁰.

The use of legal technology software solutions such as digital dictation and collaboration tools in a practical and cost-effective manner, and how easily they can be integrated into the existing IT environment.

1.2.7. The changing legal market

The legal market has been undergoing a transformation for a long time, driven by economic, demographic, regulatory, technological and competitive challenges. The pandemic has clearly shown that legal technology solutions that enable work to be done regardless of location and time are of paramount importance for maintaining business operations¹¹.

For the future development of the legal market, the focus will be on the functions, means and capabilities that will enable organisations and firms not only to survive in a new environment, but also to succeed by meeting the challenges and exploiting the opportunities that arise.

While digital case management was already well established before the pandemic, the development of teleworking has led to the emergence of other processes in daily legal practice that must now be digitalised. In legal research, it has become clear that despite the widespread use of databases, lawyers still rely heavily on their own physical libraries as a supplement, which they have since sorely missed. In the actual processing of mandates, while digital tools have greatly reduced the workload, they are now even essential for internal processes¹².

Many activities at the heart of the legal profession are now being replaced by digital processes, and not just as a transitional measure. The sustainable establishment of digital solutions makes many processes simpler, faster and more legally secure. In this respect, the coronavirus health crisis has given a decisive boost to the digitalisation of legal professions. We are already seeing today that companies and law firms have gradually implemented other digital solutions and the corresponding processes on a sustainable basis¹³.

The performance with which lawyers use technologies has a significant impact on their ability to meet the expectations of their clients/company management. Legal departments are already faced with the injunction to increase their productivity and, as a strategic business partner, bring added value to their organization¹⁴.

They are therefore relying much more aggressively on the support provided by new technologies. And they are now passing this pressure on to the law firms with which they collaborate.

Large disparities in the evaluation criteria of law firms: while law firms consider price to be the most important criterion, legal departments place it in fourth place. In the use of new technologies, the factors that are most important for law firm clients are rather the improvement of productivity, performance and collaboration (at the same level as the ability to understand clients' needs and cooperate with them)¹⁵.

1.3. Impact of LegalTech on Legal Practice

Legal departments have identified improving case and contract management, as well as automating routine processes, as the biggest challenges they face. Law firms that want to add value to their in-house legal clients should consider how they can help them meet these challenges more effectively¹⁶.

In addition to law firm management software, law firms should also consider the digital support that can be provided for the actual casework. Lawyers and attorneys are now much more aware of this benefit, and are actively seeking solutions to help them do so. They also see that there are a large number of reliable digital solutions on the market today¹⁷.

1.3.1. Improving efficiency

By reducing the time spent on repetitive tasks, technologies allow legal professionals to devote more time to strategy and creative thinking, which are crucial aspects of their work.

1.3.2. Accessibility and democratization of law

Legal technology facilitates access to legal services for large sections of the population, thus contributing to the democratization of law.

By providing new tools, such as CRMs for law firms, LegalTech is encouraging legal service providers to rethink the way they deliver and manage their services¹⁸.

1.3.3. Professionals' fears

Some professionals express fears about data security and the potential loss of jobs due to automation. However, the current trend shows an increasing adaptation to digital with reinforced cybersecurity measures.

The adoption of artificial intelligence in law is revolutionizing legal research and big data analysis, making it possible to detect patterns and predict legal outcomes with greater accuracy.

The advancement of legal technology is inexorable, reflecting the evolution of client expectations and the need for legal professionals to remain competitive in an ever-changing world¹⁹.

2. Legal technology and new perspectives

The widespread use of connected tools has significantly changed the way most lawyers work. From a work environment essentially based on the consultation of books and other printed documents, the legal environment has moved, in less than a decade, to an environment characterized by the omnipresence of the network²⁰. But the legal environment remains rather turned towards the past. Legal circles value compliance with proven methods, with the law and with judicial precedents. A lawyer finds his valour in the confirmation of his argument, by the judicial authority, not necessarily by innovating²¹.

But like several other fields of activity, the legal environment is affected by the transformations made possible by the generalization of the networked environment.

2.1. The relationship between legal technology and law

As a discipline, law has always been marked by a close relationship between the legal standard and the technical contexts in which it is stated and applied. Before the generalization of writing, the law was transmitted by memory, it was stated in custom. With the advent of the printing press, the rule of law can be

communicated through multiplied writing decisions of the past are available and can serve to inspire contemporary decision-makers²².

Law essentially concerns information processes. It is therefore sensitive to the changes that technology induces in the conditions of production and exchange of information. But lawyers live in a world that is necessarily marked by the technologies used to produce and process information²³.

The way in which the law is understood and applied is partly dependent on the medium by which it is communicated. For example, the place taken by precedents in the Common Law is largely explained by the availability of printed texts. Before printed publications of judgments became available, the role of precedent in the decision-making process was much less apparent. Among the innovations that are about to profoundly change legal work, the use of online environments for dispute management and resolution is often mentioned. Online negotiation and mediation are already practiced in several fields of activity. For example, the online auction platform eBay uses automated online tools to handle several million disputes each year²⁴.

Domain name disputes on the Internet have long been handled exclusively online on platforms of the World Intellectual Property Organization (WIPO). Dispute management systems and documentary funds associated with large-scale disputes are increasingly used by legal professionals²⁵.

Cyber justice is emerging. It is defined as the integration of information and communication technologies into the judicial world. It aims to improve accessibility to justice for all, mainly by integrating information and communication technologies to develop technological solutions to the problems facing the judicial system. Tools for managing and electronically filing legal proceedings are being developed, as well as applications for managing schedules and calendars²⁶.

2.2. Challenges facing legal technology:

The current challenge is to upgrade the basic training of lawyers. Most undergraduate law programs address very little of the technological tools now available to lawyers.

Legal training, which values conformity more than innovation, is slow to take into account the growing role of technical normativity in the enunciation and application of the rights and obligations of litigants²⁷.

The omnipresence of the networked environment is now a central factor in the evolution of today's societies. The possibilities offered by the availability of connected tools can undermine entire fields of activity that are slow to take into account changes.

They concern, depending on the case, the posting of information on the websites of judicial institutions, the dematerialization of certain procedures relating to the exchange of data and documents between lawyers and the court, or even the dematerialization of stages of the judicial process such as filing an appeal before a court²⁸.

The objective is, in each case studied, to remedy the constraints linked to administrative-type relations (by replacing them with others such as those linked

to technological mediation), to facilitate relations with the judicial system to allow better access to the right(s) and to justice. The possibility of permanent access, that is to say without depending on the opening and closing times of the administrations, to general legal information but also to information on the progress of one's own case, the possibility of initiating appeals online are considered as a rapprochement with the litigant and progress for him²⁹.

It is in this same spirit that the use of information and communication technologies is developed in the courts are thus interested in a few indicators which provide information both on the computerization of the courts and especially on the access of litigants to online services, accessible remotely via the Internet, whether it is a question of consultations or the introduction of requests online as well as access to case law databases. On the other hand, the dematerialization of the procedures themselves remains partial and not widespread in Brazilian jurisdictions since it offers the possibility of digitally initiating legal proceedings³⁰.

Providing litigants with legal information that allows them to better assert their rights, to know which jurisdiction to contact, what type of request they can make, does not, however, resolve all access problems and may even create others. A first difficulty obviously lies in the ability to effectively access digital tools, . The issue of the digital divide, of effective access to Internet technologies is central for developing countries but also for certain categories of populations in developed countries. A second difficulty relates to the ability to master highly specialized legal content³¹.

But this also questions the place of legal professionals, in particular that of lawyers, these intermediaries between laypeople and the legal world. They traditionally play a central role in transforming an individual experience into litigation, a role that can be questioned, displaced by certain uses of technologies, and in particular by the provision of online services. The legal universe is indeed complex and the law itself is intrinsically so. Developing modelling methods can make this complexity visible, better conceptualize and even better understand³².

This is obviously a central issue from the general point of view of the governance of law, but it is also from the point of view of lawyers, their mastery of legal expertise (and therefore their power in the relationship with their client) and their ability to play with the rules. Recalling this complexity of law and the challenges of better understanding it is also useful for emphasizing this obscure world of law and justice that technology promoters often aim to illuminate and simplify³³.

Many lawyers are open to embracing and using new technologies in their legal practice. This is partly because we can no longer resist technological change. This industry and its people are not averse to staying on top of legal trends and are using technology where possible to streamline their processes and make them more efficient.

With the new technology a huge part of remote work and life in general, many people are more open to new technologies and expect technologies such as virtual meetings to continue to grow. This means embracing new technologies and staying on top of new developments in the technological world.

2.3. The Benefits of Legal Technology

The legal sector, traditionally considered conservative, is undergoing a significant transformation thanks to legal technologies. This technological revolution is influencing all aspects of legal work, from contract management to the growth of legal operations³⁴.

2.3.1. Legal Technology improves collaboration

Many firms have adopted legal technology to help remote employees access data more efficiently and quickly. Digitizing documentation, online approval processes, and implementing practices such as contract templates have helped improve collaboration between teams. Using technology has also allowed legal departments to collect and analyse relevant project data such as budgets, processes, and status updates in real time³⁵.

In addition, when most legal firms adopt new technologies, they look for software that will allow them to properly comply with options such as contract lifecycle management and entity management.

As the legal profession and industry grows with technology, there are always concerns regarding data protection and security. Cybersecurity has been a concern since we started storing data online. With remote working becoming the norm in recent years, cyber security has become a hot topic for many organizations³⁶.

Companies are preparing protocols and measures to take in case of data breaches. The focus has become more significant as company data is accessed from a variety of geographic locations and IP addresses within the organization for digital document management and archiving, accounting and financial reporting. These solutions are supplemented by online shops that sell legal advice provided by humans in standardized formats. They have specialized in selling specific legal offers or in asserting rights in mass procedures, such as claims for reimbursement in the event of flight delays and cancellations, or appeals filed in mass recovery procedures³⁷.

Legal Technology 2.0 aims to carry out legal work and communication processes largely autonomously. This is where Legal Technology 2.0 stands out as a clearly innovative solution on the legal services market. The fields of application of Legal Technology 2.0 now cover almost all individual steps within the scope of overall legal activity, from the presentation of facts to the automatic production of legal documents and acts such as contracts, agreements and appeal applications, through to the final settlement of a dispute through online dispute resolution³⁸.

Legal technologies 3.0 go even further than the applications of legal technology 2.0. We are talking here about IT solutions that do not simply allow individual work steps or simple and very limited legal services to be carried out autonomously, but which are likely to profoundly change the work of "human" lawyers and attorneys. Since this is the most sophisticated group of legal IT applications, their level of development is still far from commercial viability.

2.3.2. Legal technology promotes artificial intelligence

While "the growing role of legal technology" is a major concern for lawyers who claim that their organization is very well prepared for this development, it is mainly legal technology tools specializing in the creation of documents that will

gain considerably in importance. We are talking here specifically about digital tools that can facilitate and improve work in law firms or departments³⁹.

Whether drafting a complex contract or expert report, or correspondence with the courts that is full of laws and regulations, or developing standardized templates, document creation is a central element in daily legal activities. The process of creating documents is constantly in the spotlight, and it is now necessary to optimize it with intelligent legal technology tools.

General Counsels in organizations are using legal technology to become more efficient by streamlining processes and creating document templates where possible. They also use the technology to bill clients and track files digitally. In addition, many use applications to track meetings, tasks, and important documents and emails. This allows the general counsel to focus on tasks and projects that are focused on the business of the company and to manage and use their time more efficiently⁴⁰.

Many upcoming lawyers are well versed in technology and its use for and in their profession. This new generation of lawyers is ready and expected to know and understand the digital world. With newer technologies being launched and developed such as Algorithmic Reasoning (AR), VR and the Metaverse, upcoming lawyers must have up-to-date technological knowledge.

Many legal professionals will not go back to their old way of practicing. The rapid digital transformation that the world has undergone will continue to shape the legal technology landscape and the industry. People will continue to be open to new technologies that are introduced to them while using the ones that are already in use to grow in the industry.

Artificial Intelligence (AI) is emerging as a must-have technology in many sectors and law is no exception to this revolution. Whether analysing legal documents, researching case law or predicting critical deadlines, AI offers unprecedented opportunities. However, this transformation also raises major questions: what are the current limits of these tools⁴¹.

The digital transformation of the legal sector, particularly in the legal profession, is a phenomenon that has gradually intensified in recent years. This evolution has first improved research methods and document production, while facilitating communication with clients. Artificial intelligence (AI) has accompanied this change in a subtle way, introducing innovations such as data extraction.

Access to generative AI tools, both free and paid, has transformed many industries, including legal translation. Automation is not new to the field, but new tools are enabling us to go further, faster. However, in our legal sector, the demands remain the same, particularly in terms of accuracy and confidentiality.

With capabilities spanning digital design, data and document management, and cloud services and enablement . They combine the best tools available in the industry with our own expertise in data management and analytics to drive efficiency and produce measurable results.

Searching for similar cases was a slow and tiring process, often leaving you frustrated, especially on days when the library did not have the specific resources

you desperately needed. Each page added to the exhaustion, while the clock ticked away precious hours that could have been spent formulating your strategy.

Conclusion:

By assisting or replacing legal work processes with digital solutions, legal technology combines the major fields of Information Technology and Law. But after completing a full legal education, few people want to tackle computer science studies. And it is not necessary anyway. It is more about understanding which stages of a lawyer's work have the potential to be digitalized, and what tools legal practitioners need to practice their profession more simply and efficiently. It doesn't take a rocket scientist to understand that the sustainability of both law firms and corporate legal departments depends on the use of digital solutions and the motivation to integrate them into their processes.

Although the digitalization of law firms has so far been driven by external factors such as the introduction of the special electronic mailbox for lawyers and the coronavirus pandemic, the demands on digital solutions are also increasing on the client side and are even becoming a determining factor in the awarding of a mandate to a law firm.

Law firms that actively take up this challenge will forge their own path to digitalization and will be able to seamlessly integrate digital tools into their processes management of their firm and those necessary for the smooth running of their mandate, will have a decisive advantage. It is on this basis that new business models can be developed, optimized services can be provided to clients and the firm can establish its attractiveness as an employer.

Some corporate legal departments have already been able to take advantage of the opportunities offered by legal technology. As pioneers of digitalization, they have shown that it is possible to automate many routine tasks in a legal department. Specialized software solutions for legal departments are no longer limited to the work processes of in-house lawyers, but often also offer interfaces to other digital tools used in companies. This makes it possible, for example, to process data quickly, resolve issues immediately and manage budgets on a day-to-day basis.

Finally, we will propose some recommendations:

Encouraging stakeholders and other levels of government concerned to contribute to the development of government digital strategies;

Integrating government digital strategies into overall public administration reforms;

Identifying areas of complementarity, concordance and mutual reinforcement between government digital strategies and other related sectorial strategies;

Identifying an institution officially responsible for coordinating digital administration, as well as mechanisms to align overall strategic choices relating to digital investments with the

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