

WHITE PAPER

## **Artificial Intelligence in the legal profession**

***What makes a great lawyer in the era of AI?***

***What makes a law firm competitive in the age of digital transformation?***

***A visionary look at the paradigm shift taking place in the legal profession***

*The rise of artificial intelligence will radically transform the world of law, redefining how legal work is conceived, managed and executed. It will usher in disruptive change in the market for legal services. Early data and emerging trends are illustrated by Logol, a pioneering Swiss company in the field of AI. Logol is a specialist technology partner of law firms preparing for the game-changing advent of artificial intelligence.*

Historically, the legal sector has been among the slowest to embrace digital transformation. Up until a few years ago, even the best lawyers were still doing most of their work by hand, relying mainly on their strong memory, vast competencies and solid education to perform their work. In the office and in the courtroom, a great lawyer could get by even without a computer. Technology was of help, but did not define how tasks were carried out, from providing legal advice to writing or reviewing contracts, building a case or arguing it in front of a judge. This is about to change, as artificial intelligence starts to revolutionize the legal profession worldwide.

### **The advent of artificial intelligence**

Recent developments in commercial as well as experimental applications indicate that artificial intelligence will lead to unprecedented levels of automation in the legal sector. This transformation will redefine the business scenario and the cost of services, providing great benefits to the consumer. However, traditional 'human' lawyers are not in danger of disappearing any time soon. Law firms will reap equally important benefits from AI, which will bring enormous competitive advantages to its early adopters.

In legal practices, both large and small, there are many processes where AI can help today's lawyers carry out tasks faster and with higher accuracy. These include collecting information, preparing cases, predicting litigation outcomes and automating document management. In general, a firm implementing the right technological instruments can create, review or redact documents 4-5 times faster than before. Moreover, there are also processes where artificial intelligence can work autonomously and in these areas the increase in productivity is truly remarkable.

### **From working alongside lawyers...**

Contract review is one such area, and it has entered a new era thanks to AI. Today, lawyers can review 100 times the number of documents they did before in the same amount of time, and with a level of precision previously unattainable.

Recently enacted regulations in Europe created a situation that focused the spotlight on these newly developed capabilities. In 2018, the EU's General Data Protection Regulation went into effect, requiring companies and organizations to take significant steps, including updating documentation, to achieve compliance. There are examples of large multinational companies that were forced to revise tens of thousands of forms and contracts in order to meet GDPR requirements. Surprisingly, some of them were able to accomplish the task with teams of 3-4 lawyers in a timeframe of only a few months, working at unprecedented speeds, unthinkable only a few years earlier.

Traditionally, a situation such as the one described above would have required a significant number of highly trained and thus highly paid professionals to read through all the documents and make changes wherever needed. However, in this case, AI was put to the task of 'reading' all the contracts and reliably identifying where intervention was required. Revisions were still done by human lawyers, but AI transformed a monumental task into one that could be managed by a small team in a short timeframe. Needless to say, for large law firms or in house legal departments that do substantial amounts of contract review, innovations such as these are a huge potential boost.

#### **...to augmenting human capabilities**

Beyond relieving lawyers of more time-consuming and less satisfying tasks, AI is also redefining what makes a lawyer a great lawyer. Take memory skills, for example. Traditionally, good lawyers were known for having a great memory and it is easy to see why. Trials can last years, and during court hearings, it is necessary to quickly remember when each topic was touched upon and what was said by whom, in order to immediately realize when accounts given by witnesses or other attorneys change or are inconsistent. Today, lawyers can effectively turn to their AI-empowered computers. These can act as digital assistants and immediately present all previous dialogues of any person on any issue since the start of a trial. As a consequence, attorneys can now aspire to compete as top-level lawyers without having to excel in mnemonic skills and without having to carry cumbersome amounts of paper documents with them all the time.

#### **Promising new applications**

New AI-powered machines have been developed that can automate tasks such as spotting weaknesses in contracts and predicting the probability of winning a case in court. In recent years, some of these have competed against human lawyers in carefully conducted experiments to evaluate just how reliable and useful artificial intelligence can be in the legal profession. In one such test in October 2017, 100 London lawyers and an application called Case Crunch were given the basic facts of hundreds of payment protection insurance mis-selling cases and asked to predict whether the UK Financial Ombudsman Service would allow the claims. Case Crunch was able to predict which cases would be allowed with an accuracy of 86.6% compared to 62.3% for the lawyers.

In the US, lawyers with decades of experience in corporate law and contract review were pitted against the LawGeex AI algorithm in a competition to spot issues with five non-disclosure agreements (NDAs). Once again, the machine came out on top, with an average 94% accuracy rate, ahead of the lawyers who achieved an average rate of 85%.

#### **An AI-powered management system**

For the first time, embracing technological innovation becomes crucial for both lawyers and law firms. In order to remain competitive, firms will need to apply new systems to better leverage their



resources, reduce internal costs and offer services for less. A law firm with one expert lawyer and cutting edge technology will be in the position to compete with another firm with multiple equally expert lawyers, but lacking the equivalent technology. The market for legal services will be IT-driven.

Helping lawyers and law firms stay ahead of the AI innovation curve, Logol has created its own dedicated cloud-based management system, ELLE. While many cloud-based management systems for law firms already exist, this is the first one built specifically for artificial intelligence. ELLE is designed to seamlessly integrate with existing tools and applications in the office, featuring a broad range of CRM, invoicing and accounting functionalities. The system automates many of the daily tasks of a legal practice. Moreover, its highly secure cloud-based architecture enables anywhere, anytime access: from home, the courtroom, the airport or, of course, the office – when in person meetings are still necessary. ELLE's AI-enabled functionalities include a powerful chatbot to communicate with the system, as well as effective document creation and self-completion tools.

### **Statistics from early adopters of ELLE**

By integrating AI with a cloud-based management system, Logol has created a complete platform to support the digital transformation of the legal profession. The advantages for law firms in terms of improving the management of resources and in particular the valuable time of the lawyers are significant.

A study among early adopters of Logol's solution shows that its implementation can lead to about a 20% reduction in time spent in the office, half as much time spent on administrative tasks, 30% reduction in overall IT expenditure and a positive impact on customer satisfaction. The system enables a single professional to manage an unprecedented amount of documents, with tools that allow intelligent document creation as well as anonymization. This is critical to enable sharing of documents within the constraints placed by GDPR and other data protection regulations.

### **Man versus machine**

With AI-powered systems outperforming humans at more and more tasks in the legal field, one could legitimately wonder whether in the future there will be anything left for the human lawyer to do. Drawing a parallel with the use of robots in the auto industry can provide a useful analogy to picture the future evolution of AI in the legal profession.

The first robots in the auto industry were introduced at the end of the sixties, over 50 years ago. Basically, their task is to move pieces of metal around and fix them together. Today, Tesla, one of the most technologically advanced companies in the world, with an objective of completely automating its auto production, still employs tens of thousands of workers. The reason is that automating everything simply has not been possible.

Yet, the robot's task in automotive production seems simple compared to automating that of a lawyer, which includes understanding the needs of a client, the weakness of an opponent's case and even the mood of a judge. Just as robotics has grown for decades without reaching the point of substituting all human work in factories, so too automation in the legal profession will most probably be a decades-long process. While law firms may one day achieve complete automation, history tells us that there is a long transition period during which a number of tasks, ever smaller, remain unautomated. However, these tasks also become more and more relevant. This is the part of the work that will ultimately make the difference in the successful outcome of a legal action.



Using a sports analogy, we could compare a lawyer of the past to an athlete, a marathon runner, who after years of training, competes in races relying solely on his muscular strength and endurance. On the contrary, the lawyer of the future is a race car driver, who, thanks to his car, can move much faster than the marathon runner. While physical fitness and endurance are still important characteristics of great race car drivers, pilots also need to understand and master the controls of their car in order to win the race. The lawyer of tomorrow will no longer have to be the “fastest runner”, but the “best driver”; and this will probably hold true for many decades to come.

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## About Logol

Logol, a pioneering Swiss company in the field of artificial intelligence, brings the extraordinary benefits of this futuristic technology to the business world. Serving companies and organizations across multiple sectors, Logol offers advisory services, cloud migration services, cybersecurity solutions, best in class business applications and custom AI-based software development. Logol’s success is based on its extraordinary international team of digital natives with top-class education from some of the most prestigious universities worldwide and extensive experience creating AI-based solutions. Founded in 2017, Logol is rapidly expanding, with 50+ people across offices in Zurich, Chiasso, Lausanne (Gland) and Milan.

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