The impact and challenges of AI on the legal industry

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Abstract: The rapid development and widespread application of artificial intelligence (AI) are profoundly affecting various industries, including the legal industry. The advent of AI technology has brought many opportunities to the legal industry, but it also brings some challenges. This study aims to explore the impact and challenges of AI on the legal industry and to analyze its context. AI technology has been becoming more and more widely used in the legal industry. For example, AI can be used for the automatic processing of legal documents, contract analysis, legal advice, etc. Some techniques can improve productivity, reduce mistakes, and provide more accurate information to lawyers and legal workers. In addition, AI can also predict the outcome of legal cases through big data analysis and machine learning, which is of great significance for the case success rate and decision-making. However, AI also poses some challenges to the legal industry. First, the application of AI technology may lead to job opportunities for some legal workers, especially those engaged in repetitive, mechanical work. Secondly, the development of AI technology may change the working mode and process of the legal industry, which requires new skills and knowledge of legal workers. In addition, AI technology may also bring some legal and ethical problems, such as algorithmic discrimination and data privacy. Although the legal industry involves relatively little artificial intelligence at the present stage, but with the further development of the society, whether the artificial intelligence will replace the legal workers to complete the work? What impacts and challenges will AI bring to the legal industry?

1. Introduction

The development of artificial intelligence has raised concerns about whether the legal profession will be replaced. In today's era, artificial intelligence has become one of the symbols of scientific and technological progress, with its unique advantages and characteristics, gradually penetrated into various fields. Let's first take a look at the basic concepts and development process of artificial intelligence here.

Artificial intelligence is a kind of science and technology that simulates human intelligence. Through the use of computer algorithms and data, computers can learn, reason, understand language, recognize images and other tasks like people. Since the 1950s, artificial intelligence has
experienced a long process of development. From the initial expert system, image recognition, to the current deep learning and natural language processing, artificial intelligence technology has become more and more mature.

So, what about the legal profession? Will it be replaced by artificial intelligence? First, we need to make clear the basic concepts and characteristics of the legal profession. The legal profession refers to the personnel engaged in legal work, including judges, prosecutors, lawyers, etc. They need to have legal knowledge, practical experience, communication skills and other qualities. So what about the impact of AI on the legal profession?

On the one hand, artificial intelligence can provide judges and prosecutors with decision-making assistance tools. For example, the intelligent judicial system can make automated judgment and decision-making according to the case data and laws and regulations, reducing their work burden and improving work efficiency. On the other hand, AI has also had a positive impact on freelancers such as lawyers. They can use artificial intelligence technology to conduct legal retrieval, risk assessment, case management and other work, improving work efficiency and accuracy.

However, this has also raised concerns about whether the development of artificial intelligence will replace the traditional legal profession? In the short term, artificial intelligence will not completely replace human lawyers. First, law is a field that involves morality and ethics and requires the judgment and emotional understanding of human lawyers. Secondly, some complex legal issues require the experience and interpersonal relationships of human lawyers to solve. However, with the further development of artificial intelligence technology, there may be more intelligent legal assistants or agents in the future, who can handle some simple legal affairs and decisions, which may have a profound impact on the legal profession.

In general, the development of artificial intelligence has brought both opportunities and challenges to the legal profession. We look forward to seeing more intelligent tools and systems bring more convenience and efficiency to the legal profession in the future. At the same time, we also need to pay attention to the characteristics and needs of the legal profession to ensure that the development of artificial intelligence technology will not have an excessive impact and replacement on this field.

2. The concept and development of artificial intelligence

2.1. The concept of artificial intelligence

Artificial intelligence is human-like behavior, human-like thinking, rational thinking, and rational action. For artificial intelligence, we gave it another name "AI" (Artificial Intelligence), which is the research and development of a new technical science for intelligent theories, methods, technologies and application systems for simulating, extending and extending people.\[1\]

2.2. The development of artificial intelligence

The term "artificial intelligence" was formally introduced by a computer expert named John McCarthy in the 1950s and 1960s, which was seen as a sign of the official birth of artificial intelligence. After a conference held by Dartmouth College in 1956, AI reached its first peak. During this period of more than a decade, computers were widely used in mathematics and natural language fields to solve algebra, geometry, and English problems.

2.3. The form of artificial intelligence

There are three forms of artificial intelligence: weak artificial intelligence, strong artificial intelligence and super artificial intelligence. \[2\]Among them, weak artificial intelligence is good at
artificial intelligence that is good at a single aspect of artificial intelligence. It is necessary to use the existing intelligent technology to improve our economic and social development. Strong artificial intelligence is human artificial intelligence at the level. It refers to artificial intelligence that can be comparable to human beings in all aspects, and it is capable of both mental and physical activities. Super artificial intelligence is artificial intelligence that is smarter than the brightest human brain in almost every field, and it's a little bit better than humans in every way.

3. The concept and characteristics of the legal profession

3.1. The concept of the legal profession

The legal profession refers to the community composed of legal affairs professionals represented by lawyers, judges, prosecutors and notaries, with specialized legal professional training and skilled legal skills and legal ethics. In the narrow sense, the legal profession mainly refers to judges, prosecutors, inspectors, lawyers, notaries, and grass-roots legal service workers. In the broad sense, the legal profession includes the above profession, but also includes the professional positions engaged in legal affairs in enterprises and institutions, such as legal commissioner, legal supervisor, and other personnel in the legal department.

3.2. The characteristics of the legal profession

One is professionalism. Legal practitioners are people who need to have specialized legal training and thus have professional knowledge and skills in the law. Our country has certain requirements for the legal profession. For example, lawyers need to pass the national judicial examination and obtain the legal profession qualification certificate. Lawyers also need to have a practicing certificate.

Second, ethics. Legal professionals themselves need to have the purpose of serving the people. While knowing the law and using the law, they should abide by the core values of socialism with Chinese characteristics. They should punish evil and promote good, and be fair and honest.

Third, innovation. With the rapid economic development, the social interests are increasingly diversified and the interest pattern is more and more complex, so the country needs a more perfect legal system as a guarantee. Therefore, the law itself has the characteristics of keeping pace with The Times, so it requires the legal profession to continue to learn, update their own legal knowledge, and keep up with the development of the law and The Times.

Fourth, autonomy. Legal profession has considerable autonomy and autonomy.

Legal professionals engage in legal activities, and generally are not subject to interference from external forces. They decide their own activities independently or independently, and are responsible for their own actions.

4. The positive impact of AI on the legal profession

4.1. The positive impact of artificial intelligence on government positions such as judges and prosecutors

With the rapid development of social economy, the number of various cases appears "explosion" growth trend. With the reform of the staffing system of judges and inspectors, the number of them has been further reduced, and the professional characteristics of the legal profession make it difficult for their work to be replaced by other personnel. Therefore, a common pressure for judges and prosecutors is "fewer cases". However, at this time, the AI has unlimited knowledge reserve and strong learning ability. By sorting out and learning a large number of cases, AI can also extract effective information to provide reference for legal professionals.
Because judges and prosecutors office jobs will deal with all kinds of documents and documents, and the seriousness of the legal work, the file quality requirement is high, the basic document does not allow mistakes, therefore, artificial intelligence in the analysis of the document can also show the errors, so as to make up for the legal workers negligence. At the same time, the paper improves the accuracy of the documents, avoids the manpower and time needed for the secondary review, and makes the legal industry services more efficient and stable.

4.2. The positive impact of AI on freelancing careers, such as lawyers

Due to the personalized characteristics of the case, according to different cases need to consult different information, collect a large number of cases. Important information can be extracted by analyzing previous case cases. However, the whole process is very complex and tedious, and different cases have to repeat the same search work. So AI can quickly filter historical data and find cases, laws and suggestions that can support lawyers’ views in the shortest possible time. Thus saving lawyers time to search.

Forensics and consulting services can also be handled through artificial intelligence, without lawyers taking the time for themselves. As a result, lawyers have more time to spend in areas that really need more professionalism.

Since artificial intelligence has not been popularized before and the disclosure of information is not transparent enough, the public is not know about the quality of lawyers. The new legal platform built through artificial intelligence can help citizens to understand the quality and main focus of lawyers at a glance, so as to make intuitive choices.

5. AI challenges to the legal profession

5.1. Challenge to the job position

There is no doubt that the development of artificial intelligence is profoundly changing the way we live and work. Its intelligence, autonomy, big data and other characteristics, make it show incomparable advantages in many fields. In many complex, heavy, and accurate tasks, AI can already be done independently or can achieve satisfactory results with less human intervention. This undoubtedly saves a lot of time and energy for humans, giving people more time to pay attention to more important things.

However, with the spread of artificial intelligence, we also have to face the reality that some of the jobs traditionally done by humans may be replaced by robots. The trend is particularly evident in the legal industry. Needless to say, the application of artificial intelligence in the field of law has posed a threat to some legal professionals. This is because AI can efficiently process large amounts of legal data and information, complete complex legal analysis, and provide accurate legal advice. This makes the work of many traditional judicial assistants possible to be replaced by artificial intelligence.[4]

So, how should the legal profession meet this challenge? First, they need to adapt to the new working environment, actively learn new skills and methods, and improve their professional quality and comprehensive ability. Second, they need to reposition their professional roles from traditional "tool men" to innovative and independent thinking professionals. [5]In addition, they can also use the power of artificial intelligence to use it as an auxiliary tool to improve work efficiency and quality.

5.2. Challenges to Ethics

In China's legal system, the principle of public order and good customs occupies an important position. Public order and good customs, namely short for public order and good customs, is an
indispensable part of the law, which is used to regulate people’s behavior in social life and maintain social order and public interests. Therefore, in the laws and regulations involving public order and good customs, the discretion of the judge is particularly important.\textsuperscript{[6]}

In the era of artificial intelligence, when artificial intelligence technology permeates the process of judges, people began to explore how to set different standards to assist artificial intelligence to a certain extent. However, can AI use logical algorithms to make "human touch" judgments about a case? This requires us to think deeply. Although artificial intelligence has powerful data processing and analysis capabilities, it is a machine, which lacks human emotion and subjective consciousness. Therefore, can it be a specific problem analysis through the specific situation and combined with the relevant situation of the parties? \textsuperscript{[7]}This is a question that needs to be discussed seriously.

In this process, we need to take into account many factors, such as the personal situation of the parties, the specific situation of the case, the social and public interest, and so on. Although artificial intelligence can provide some help, but the final judgment still needs to be completed by people. Therefore, we need to set up and guide artificial intelligence so that it can better serve the human society.

In general, the application of AI in judges’ judgments is an area full of challenges and opportunities. We need to think seriously about how to rationally use AI technology, so that it can better serve the human society, and we also need to take into account the risks and challenges it may bring. Only in this way can we make artificial intelligence truly become the right-hand man of human society.

5.3. The challenge to the subject identification

In the case of highly autonomous AI, the business that AI is engaged in will indeed slowly overlap with the business scope of the legal professional workers. This overlap not only means the intersection of work content, but also is likely to cause controversy over responsibility. So, should artificial intelligence participation in judicial work be classified as judicial staff? It may be a reasonable starting point. After all, the judicial staff are an integral part of the legal system, and they are responsible for interpreting the law, applying the law, and safeguarding social justice in the process.

However, the inclusion of AI in the category of judicial staff could also cause a number of problems. Should AI systems be given the same power? Should they have the same independent judgment as human judicial workers? On the other hand, should we classify AI as a separate category? This seems to ignore the essential difference between AI and humans, and may also raise the problem of over-reliance on AI.\textsuperscript{[8]}

At present, the law does not stipulate this, which really makes it impossible to predict what will happen when AI gets into the legal profession. The scope of liability cannot be determined, which undoubtedly increases the risk and uncertainty of the legal profession. We may need to revisit the existing legal system to accommodate this new, highly autonomous technology. At the same time, we also need to formulate corresponding regulations and mechanisms to ensure that AI’s behavior in judicial work is legal and fair, and that it can bear its due responsibilities. This may involve the moral, ethical and legal issues of AI, which require in-depth research and discussion. In general, this is a problem that needs us to treat seriously and think about, and it is also an area worthy of our further discussion.

5.4. Challenge to legal supervision

In the traditional legal system, the legal profession is usually supervised by the government, and the judicial integrity is guaranteed through the restriction of public power. However, with the rapid development of artificial intelligence technology, we are in a new era, the application of artificial intelligence in the judicial field is more and more extensive, so how to regulate the judicial behavior
of artificial intelligence? This is indeed a question worth thinking about.\(^9\)

First of all, we need to be clear that AI itself does not have moral judgment, and its behavior depends entirely on the procedures and rules we set for it. However, once an AI does something else, ethical and legal matters may be involved. For example, AI may play a key role in automatically analyzing, judging and making decisions about cases. So, is this decision-making process just and legal? If there is a dispute, how to deal with it?

Secondly, what we need to consider is the choice of regulatory subjects. In the traditional judicial system, the government is the main regulator. However, is this kind of regulation still applicable in the era of artificial intelligence? Do you need to introduce other institutions, such as industry associations, independent regulatory agencies, etc.? How should the powers and responsibilities be distributed between these agencies?

The application of artificial intelligence in the judicial field is a double-edged sword. It brings not only great convenience and efficiency, but also brings many new challenges and problems. How to regulate the judicial behavior of artificial intelligence and ensure that it is fair and legal is an important issue for us at present.\(^{10}\) On this issue, we need to think deeply and actively explore, in order to establish a judicial system adapted to the era of artificial intelligence.

6. Conclusion

The impact and challenges of AI on the legal industry include two aspects. First, the positive impact of AI on legal professions such as judges and lawyers is to improve work efficiency and accuracy. Artificial intelligence can help judges in case analysis and prediction, and provide more accurate judgment advice. For freelancers such as lawyers, AI can quickly screen and provide information about cases and laws, saving lawyers search time. In addition, AI can build a new legal platform to help the public choose the right lawyers. Second, AI challenges to the legal profession include job substitution and ethical issues. The intelligence and autonomy of artificial intelligence enable it to complete complex and accurate work tasks, which may lead to the replacement of some jobs of legal professionals. In addition, the application of AI in the adjudication stage may raise ethical issues, such as whether AI can make a human judgment. In summary, AI has a positive impact on the legal industry and can improve work efficiency and accuracy, but it also brings some challenges, such as job replacement and ethical issues.

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