SHORT COMMUNICATION

Online dispute resolution: can we leave the initial decision to Large Language Models (LLM)?

Resolución de litigios en línea: ¿podemos dejarle la decisión inicial a las Large Language Models (LLM)?

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ABSTRACT

In the era of digitization and artificial intelligence, online dispute resolution has become a topic of growing interest. In this article, we will explore the potential of Large Language Models (LLM) in online dispute resolution, how they can be implemented, the necessary technological resources, as well as their limitations and challenges. LLMs have the ability to process and analyze large volumes of data in a short period of time. This allows them to evaluate many indicators, criteria, and parameters, something that could take a long time for human judges or experts. This speed and efficiency can be particularly useful in cases involving a large number of documents, such as contracts, expert reports, and others. To implement LLMs in online dispute resolution, adequate technological resources are needed. One of the main challenges is ensuring the security and privacy of the data processed by these models. To do this, the use of technologies such as blockchain can be of great help, as it allows for the creation of secure, decentralized, and unalterable records of transactions and decisions made during the dispute resolution process. LLMs are promising tools for online dispute resolution, but it is important to recognize their limitations and challenges. Although they can offer greater efficiency and agility in the analysis of legal cases, they should not be used as substitutes for human legal professionals. Instead, LLMs should be considered as complementary tools, which can enhance and enrich the decision-making process in legal cases. By responsibly and ethically implementing LLMs in online dispute resolution, and proactively addressing the risks of bias and partiality, these tools can provide great value in the legal field and improve accessibility to justice for all.

Keywords: Large Language Models; Pre-Trained Model; Online Dispute Resolution; Dispute Resolution; Law.

RESUMEN

En la era de la digitalización y la inteligencia artificial, la resolución de litigios en línea se ha convertido en un tema de creciente interés. En este artículo, exploraremos el potencial de los Modelos de Lenguaje Amplio (LLM) en la resolución de disputas en línea, cómo pueden implementarse, los recursos tecnológicos necesarios, así como sus limitaciones y desafíos. Los LLM tienen la capacidad de procesar y analizar grandes volúmenes de datos en poco tiempo. Esto les permite evaluar muchos indicadores, criterios y parámetros, algo que podría llevar mucho tiempo a los jueces o expertos humanos. Esta rapidez y eficacia pueden ser especialmente útiles en casos que implican un gran número de documentos, como contratos, informes periciales y otros. Para implantar los LLM en la resolución de litigios en línea, se necesitan recursos tecnológicos adecuados. Uno de los principales retos es garantizar la seguridad y privacidad de los datos procesados por estos modelos. Para ello, el uso de tecnologías como blockchain puede ser de gran ayuda, ya que permite crear registros seguros, descentralizados e inalterables de las transacciones y decisiones

tomadas durante el proceso de resolución de disputas. Las LLM son herramientas prometedoras para la resolución de litigios en línea, pero es importante reconocer sus limitaciones y desafíos. Aunque pueden ofrecer una mayor eficiencia y agilidad en el análisis de casos jurídicos, no deben utilizarse como sustitutos de los profesionales jurídicos humanos. En su lugar, los LLM deben considerarse herramientas complementarias, que pueden mejorar y enriquecer el proceso de toma de decisiones en los casos jurídicos. Aplicando de forma responsable y ética los LLM a la resolución de litigios en línea, y abordando de forma proactiva los riesgos de parcialidad y sesgo, estas herramientas pueden aportar un gran valor en el ámbito jurídico y mejorar la accesibilidad a la justicia para todos.

Palabras clave: Grandes Modelos Lingüísticos; Modelo Preentrenado; Resolución De Litigios En Línea; Resolución De Litigios; Derecho.

INTRODUCTION

In the era of digitization and artificial intelligence, online dispute resolution has become a topic of growing interest. Large Language Models (LLMs), such as OpenAI's GPT, are technologies that promise to revolutionize the way we approach and resolve legal conflicts.[1,2] These models can quickly analyze a large amount of information and offer solutions based on relevant indicators and parameters.[3,4,5,6]

But is it feasible and ethical to leave the initial decision to these tools? In this article, we will explore the potential of LLMs in online dispute resolution, how they can be implemented, the necessary technological resources, as well as their limitations and challenges.

DEVELOPMENT

Potentialities of LLMs in online dispute resolution

LLMs have the ability to process and analyze large volumes of data in a short period of time.[7] This allows them to evaluate many indicators, criteria, and parameters, something that could take a long time for human judges or experts. This speed and efficiency can be particularly useful in cases involving a large number of documents, such as contracts, expert reports, and others.

In addition, LLMs can process and synthesize information from various sources,[8] allowing for a more comprehensive assessment of cases. This is especially relevant in situations where disputes involve multiple jurisdictions or complex laws.

Implementation and technological resources

To implement LLMs in online dispute resolution, adequate technological resources are needed. One of the main challenges is ensuring the security and privacy of the data processed by these models. To do this, the use of technologies such as blockchain can be of great help, as it allows for the creation of secure, decentralized, and unalterable records of transactions and decisions made during the dispute resolution process.

It is also essential to protect the personal data of the parties involved in the dispute, and for this, strict data protection regulations and protocols must be followed.[9] Likewise, it is necessary to establish where LLMs will obtain information. In principle, they could access only the case files, but external sources could also be consulted if necessary and with the consent of the parties.

Limitations and challenges of LLMs in online dispute resolution

Despite their potential, it is important to keep in mind that LLMs also have limitations and challenges. One of the main problems is that these tools cannot always contextualize or analyze the context in which the dispute develops. This can result in decisions that do not take into account crucial aspects of the case, such as pre-agreements between the parties or specific circumstances that may affect the interpretation of the law.

Furthermore, LLMs may face difficulties in adapting to new legal procedures or changes in legislation, as their training is based on historical data and is not always immediately updated. This could lead to LLM-proposed decisions being based on obsolete laws or regulations.

Another significant challenge is the risk of biases or partialities in the models. LLMs are trained based on large amounts of data that, in many cases, may contain implicit or explicit biases.[10,11,12] These biases can be the result of discriminatory practices, cultural stereotypes, or partialities of developers and industries. If not properly addressed and corrected, these biases could be perpetuated in the decisions made by LLMs, resulting in injustices or discrimination.

Complementarity with the current legal system

Given the nature of the limitations and challenges mentioned, it is crucial to consider LLMs as a complementary

tool rather than a single solution for online dispute resolution. Human judges and experts should continue to play a fundamental role in the decision-making process, using LLMs as an additional tool to accelerate and improve case analysis.

This also implies that, rather than leaving the initial decision entirely in the hands of LLMs, legal professionals should review and validate the recommendations provided by these tools before making a final decision. This would allow for the full advantage of the benefits offered by LLMs, while ensuring that decisions are made fairly and ethically.

Potentialities and benefits

Despite their challenges and limitations, LLMs have great potential in online dispute resolution. These tools can improve efficiency and streamline the decision-making process in legal cases, especially in those involving large amounts of information or complex laws. Additionally, they can help reduce the workload of legal professionals and allow them to focus on more crucial aspects of cases.

The implementation of LLMs in online dispute resolution can also contribute to greater accessibility and democratization of legal services. By automating part of the case analysis process, the costs associated with dispute resolution could be reduced, allowing a larger number of people to have access to justice.

The following figure summarizes the elements that have been addressed in this article, in which the most important elements of each have been detailed:
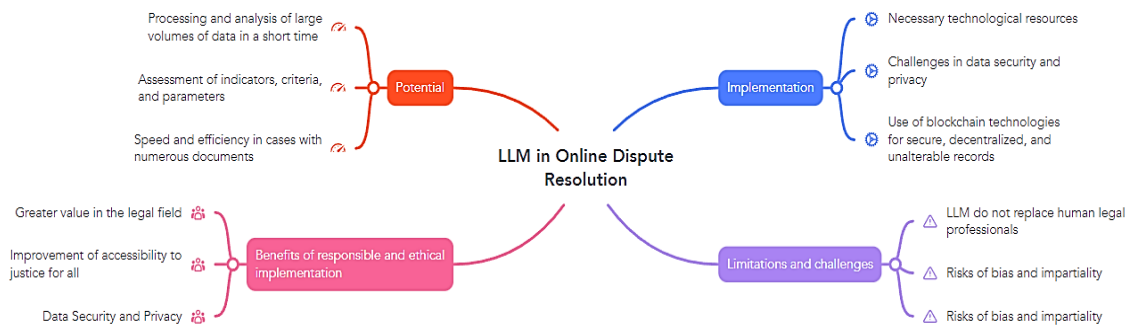
FINAL REMARKS

LLMs are promising tools for online dispute resolution, but it is important to recognize their limitations and challenges. Although they can offer greater efficiency and agility in the analysis of legal cases, they should not be used as substitutes for human legal professionals. Instead, LLMs should be considered as complementary tools, which can enhance and enrich the decision-making process in legal cases. By responsibly and ethically implementing LLMs in online dispute resolution, and proactively addressing the risks of bias and partiality, these tools can provide great value in the legal field and improve accessibility to justice for all.

Despite advances in Large Language Models (LLMs), members of a court remain irreplaceable in dispute resolution. Judges and lawyers possess specialized legal knowledge and a deep understanding of ethics and human context that LLMs cannot yet fully replicate. In addition, LLMs may be subject to biases and errors, which could affect impartiality in judicial decisions. While LLMs can be useful as support tools in online dispute resolution, the initial decision still requires the expertise and human judgment of court members.

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CONFLICTS OF INTEREST
None.

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