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**SMART COURTS IN
CHINA: A CASE STUDY
ON TECHNOLOGICAL
INNOVATION**

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Abstract: This article analyzes Chinese smart courts, highlighting how technological advances in the judiciary can impact social and administrative aspects, in addition to judicial activity itself. Through a bibliographic and documentary review, using the deductive method, Chinese “smart courts” were analyzed and their system was compared to the Western system. It was discussed how these smart courts were implemented, highlighting their efficiency and improvement in the administration of justice. However, the critical need for strict data governance to protect citizens’ human rights and privacy was emphasized, given the massive collection and use of personal and legal information. The Chinese experience illustrated the possibility of successfully integrating technology into the judicial system, but also highlighted the importance of balancing innovation with robust rights protection measures, a crucial aspect for other countries interested in adopting similar systems to consider.

Keywords: artificial intelligence; jurimetrics, predictive justice, technology.

INTRODUCTION

Technological advancement and the exponential growth of artificial intelligence have generated great interest among scholars, especially after the excitement caused by the launch of Chat GPT in November 2022. However, this phenomenon is not new, not even in the legal sphere, in which has been in use for almost a decade (AWAD, 2023).

The evolution of the Judiciary towards “cyber justice”, as some have called it, follows a common recipe. The first step occurs with the digitization of files and the availability of documents and decisions online. With the dissemination of this data, companies in the legal sector reuse it, giving rise to legal techs, which are companies specialized in processing legal information using artificial intelligence

tools to calculate risks, create statistics and make predictions (LETTERO, 2018). Finally, the Judiciary itself develops similar tools.

From the processing of legal data made available online, two techniques emerged that combine data analysis with the use of artificial intelligence resources to extract information and indicators that contribute to the effectiveness and improvement of the Judiciary. Predictive law analysis aims to predict future legal results based on historical data, while jurimetrics (NUNES, 2020) analyzes and quantifies data related to the legal system, providing useful information, such as the average case resolution time, the efficiency of courts and even issues related to equity and justice.

The “smart courts” in China have recognized the immense potential of these technological tools and are using them in a comprehensive way, covering not only their administrative applications, but also incorporating them in the training of algorithms dedicated to recommending judicial sentences.

OBJECTIVES, METHOD AND RESEARCH TECHNIQUES

This research sought to analyze these courts, with the aim of revealing the principles underlying their construction and understanding how they operate in the judicial sphere. The main objective lies in extracting lessons about the development and improvement of judicial practices in a technological context.

The methodology used in this study was based on a deductive approach, conducted through indirect research. This research was mainly based on a bibliographic and documentary review, with an emphasis on the analysis of foreign texts that detail the functioning of Chinese smart courts.

RESULTS AND DISCUSSION

In 2014, China began a comprehensive process of digitizing its vast judicial collection, resulting in cases and decisions being made available online. This effort currently encompasses an impressive 200+ million cases¹.

The Chinese judicial system differs substantially from Western models. In China, the president of the highest court, the Supreme People's Court, is an elected politician who also performs functions similar to those of a Minister of Justice. In 2018, Zhou Qiang was elected to this position and his administration focuses on implementing what he calls "intelligent cuts", a term referred to in English as "smart courts" (STERN, p. 522).

Smart courts represent an essentially technology-driven approach, aligned with the political vision of the Chinese Communist Party, which seeks to drive social and economic development through technological innovation (COUSINEAU). Fundamentally, this model is based on the analysis of large volumes of legal data, which are processed in different contexts, covering the social, administrative and jurisdictional spheres.

With regard to the social aspect, defenders of this system argue that it has allowed the monitoring of social contradictions and the prediction of economic and social trends. This, in turn, offers valuable guidance for future public policymaking, demonstrating how smart courts play a significant role in integrating technology with contemporary social and economic challenges.

In the courts of Shandong, Yunnan, and Xishan (STERN, p. 525), we find concrete examples of how the implementation of technology in Chinese judicial systems can play a significant role in social progress. The Shandong court successfully used judicial "big data" to investigate the root causes of

serious violent crimes and understand the complex social contradictions that contribute to these events. Similarly, the Yunnan court conducted comprehensive analyzes of trends related to cases involving drug use. The Xishan District Court in Kunming has distinguished itself as a pioneer in employing large-scale judicial data to promote the modernization of municipal governance, using this data not only to identify social contradictions but also to support the formulation of more municipal policies. effective.

However, the use of judicial data has also generated criticism regarding ethical issues, mainly due to the fact that data collected through artificial intelligence is being applied to the controversial Chinese social scoring system (LIMA, 2023, p. 62). One example was the creation of a list of defaulters and violators, covering debtors and those who defied court orders. These people are subject to restrictions that include a ban on traveling by plane or high-speed trains, acquiring or building property, enrolling their children in private schools, and facing obstacles in their Party and Army careers, as well as losing the ability to issue shares or bonds for defaulting companies (ZUBOFF, 2019).

At the administrative level, the data is used to generate statistical reports that closely monitor the productivity of judges and courts (AMARAL). This allows the definition of efficiency standards, workload and clearance rates, as well as enabling the assessment (STERN, 2021, p. 525) and prediction of litigation, thus directing the effective allocation of resources.

Artificial intelligence systems play a crucial role in improving the efficiency, transparency and accessibility of the judicial system. One example is the 206 System robot (LIMA, 2023, p 25), which plays a fundamental role in criminal hearings, transcribing statements through voice recognition, identifying

¹ The documents are available on the website called "China Trials online".

contradictions in statements and presenting information on the court screens according to voice commands. Another example is WeChat, a tool used by the Hangzhou Court, in eastern China, which optimizes communication with the parties involved, speeding up notifications and interactions related to legal proceedings (LIMA, 2023, p 25).

The Hebei Higher People's Court has adopted Smart Trial 1.0 System since 2016, automating the creation of electronic files, filling in case information and valid identity confirmation of parties, and notification of related cases to avoid repeated litigation. Additionally, the system identifies laws and legal documents related to the case and displays jurisprudence from similar cases in real time. Statistics prove that the system reduced administrative work by a third and transactional work by 20% (CUNHA, 2022, p 63).

However, it is at the jurisdictional level that the most significant innovation is revealed. Some courts ² have already implemented sentence recommendation software, presented as instruments to improve both the speed and quality of judicial provision. These tools are capable of reviewing the evidence in the case, checking the jurisprudence and, at the end of the process, suggesting the decision, including providing a draft sentence as a reference (SHIH).

One such tool is in use in Beijing (STERN, p. 527). To illustrate how it works, consider a case of drunk driving: the judge, after entering specific parameters of the case, such as blood alcohol content and damage caused, can access a previously written sentence based on precedents from similar cases.

Another technology that deserves to be highlighted is the Xiao Zhi robot, which plays the role of a judge's assistant in the administration of legal processes (LIMA, 2023, p 26). This robot assists the

judge throughout the process, concisely summarizing the arguments presented by the parties, analyzing the evidence gathered and, at the end, recommending the writing of the sentence (WANG, 2023, p. 350).

The use of generative artificial intelligence represents a technology that accelerates and improves the efficiency of judges in preparing their sentences and decisions. However, it is essential that the construction of the AI model and the selection of training data are conducted rigorously, in order to avoid possible biases and the imposition of ideological guidelines during the decision-making process. It is important to highlight that this last aspect has been highlighted as one of the disadvantages of this model, as there are allegations that the Chinese government trained the system with decisions aligned with the agenda of the Chinese Communist Party, under the alleged justification of standardizing jurisprudence.

China's Judiciary has established a strategic partnership with technology companies to develop this entire advanced infrastructure. Companies such as iFlytek, Tencent and Alibaba (COUSINEAU) have played a key role in developing software for smart courts. For example, the city of Shanghai collaborated with iFlytek to develop its own system, which was subsequently adopted by several other courts across the country.

The close relationship between the public sector and the private sector raises legitimate concerns regarding data security. This is an aspect that requires special attention to assess the extent to which the courts are committed to protecting this sensitive data and who could potentially take advantage of it. The complex interaction between the government and technology companies is a delicate topic and represents a system model that would require considerable adaptations to be adopted in the Western scenario, which has its own data governance regulation (COUSINEAU).

CONCLUSION

Smart courts in China represent a remarkable manifestation of the transformative potential of technology in modernizing and optimizing the judicial system. Its successful implementation highlights the ability of artificial intelligence to improve the delivery of public services and address complex social issues.

However, the path towards effective and fair smart courts is not without significant challenges, especially when we look at the Chinese model. The use of judicial information in evaluating social scores raises serious concerns related to privacy and the protection of personal data. In addition to concerns about the use of data for purposes other than the original ones, the presence of sensitive, potentially inaccurate or erroneous information, together with the lack of regulation and transparency, raises highly relevant ethical questions. It is imperative that robust regulatory and transparency measures are established to safeguard individual rights and ensure the fair and ethical use of these systems.

Training sentence recommendation systems emerges as a critical and complex point in the adoption of advanced technologies in judicial systems. One of the most worrying risks associated with this process is the potential for ideological bias, which can have serious implications for the justice, impartiality and equity of the legal system.

Data management, especially with regard to ensuring privacy and limiting information sharing in collaborations with private companies, is another concern. The close relationship between the public sector and the private sector is a notable feature of Chinese efforts to modernize its courts, but this collaboration also raises legitimate concerns, particularly regarding data security. Court records contain highly sensitive and personal

information, and the complex interaction between the government and technology companies raises questions about the access and protection of this data. Preserving the privacy and integrity of this information is critical to cultivating public trust in the judicial system.

The massive collection and use of personal and legal information require a solid regulatory framework that safeguards citizens' human rights and privacy. Public trust plays a crucial role in the effective functioning of these courts, and this level of trust can only be achieved through rigorous implementation of data security measures, transparency and independent oversight.

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