

Digitalization and the Use of AI in the Taiwanese Judiciary

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I. Introduction

The digitalization of judicial proceedings and the integration of artificial intelligence within courtrooms have emerged as a global phenomenon. Taiwan is no exception. Even prior to the formal enactment of the ‘Basic Act on Artificial Intelligence’ on January 14, 2026¹, AI had already established a profound presence in Taiwan legal practice. It has been instrumental in

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¹ Article 1 of this Act explicitly reveals its legislative purpose as (1) to achieve the construction of a smart nation; (2) to promote the research and development and industrial development of human-centered artificial intelligence; (3) to protect the basic rights of citizens in the AI era; and (4) to implement digital equality and social sustainable development. In addition, Article 4 provides that the government's promotion of artificial intelligence research and application should be based on the premise of developing good governance and infrastructure, while taking into account social welfare, digital equality, promoting innovation and research, and strengthening national competitiveness. The same Article also outlines seven core principles on AI research, development and applications: (1) Sustainable development and well-being; (2) human autonomy; (3) privacy protection and data governance; (4) data stability and security; (5) Transparency and Explainability; (6) Fairness and non-discrimination; and (7) accountability.

streamlining everything from preliminary trial preparation and law firm administration to the rigorous review of legal documents and contracts. More crucially, the Taiwanese judiciary is now leveraging these AI-driven innovations to mitigate the systemic strain caused by an overwhelming caseload and administrative burden.

This paper traces the development of Judicial Digitalization in Taiwan, and explores subsequently the application of artificial intelligence within the realms of sentencing consistency and family law.

II. Development of Judicial Digitalization²

In 2013, the Judicial Yuan, the highest judicial and administrative body in Taiwan, determined to develop a judicial digital system and actively promoted the digitalization of courts to achieve comprehensive e-litigation and other court activities.

Following detailed planning and preparation, a Judicial E-Learning Promotion Committee was established, and it was decided to develop an electronic case file system, an electronic catalog and display system supporting trial observation, and an e-litigation service system for prosecutors and lawyers.

The initial focus of court digitalization was on establishing an electronic catalog and display system for case files, integrating this system into the existing judges' operating system. That way, judges could freely choose to use a document camera or scan specific case files, enjoying the same convenience as a comprehensive scan. The medium-term goal emphasized paperless litigation procedures, and planned to establish an online litigation and electronic document exchange system to enhance the digitalization of judicial environment.

The digitalization of case files was first applied to the Disciplinary Court because the judges of the Court are composed of judges from different courts located throughout Taiwan, making it difficult for them to meet together before a trial³. The digitalization of case files enabled judges of the

² Cf. Judicial Weekly (司法週刊), Vol. 1641 (2013/4/19), p. 1.

³ The Taiwanese Disciplinary Court is responsible for adjudicating disciplinary cases against judges,

Court to download the necessary digital case files remotely, greatly reducing the inconvenience caused by storing paper case files.

In addition, based on the existing electronic transcript retrieval system, the Judicial Yuan integrated various cloud services into a single login platform, providing prosecutors and lawyers with access to court schedules, court hearings and case progress inquiries, and integrating prosecutors' court appointment scheduling and lawyers' online application for payment orders, so that both the prosecutors and lawyers were able to enjoy integrated services through a single login.

Finally, it is worth noting that in Taiwan, parties and their attorneys who agree to the use of electronic documents and electronic signatures, and who designate the "Judicial Yuan Electronic Litigation Document Platform," may file lawsuits or appeals, and engage in litigation activities by using the electronic litigation system offered by the Judicial Yuan and all Taiwanese courts. The courts' online filing systems are a 24/7 service; online filing can be completed in just a few minutes, reducing the hassle of traveling to submit paper documents and improving the quality and efficiency of judicial services. Electronic filing systems are available for civil, administrative, and constitutional litigations; however, their adoption is most prevalent in cases before the Intellectual Property and Commercial Court.

III. Use of AI in Sentencing

1. Background

The implementation of AI in the Taiwanese legal system made its debut in the realm of sentencing.

According to Article 57 of the Taiwanese Criminal Code⁴, when a judge determines the sentencing for a guilty criminal defendant, the judge should

prosecutors, and other civil servants. The trial of the first instance is conducted by a panel of three judges: one presiding judge from the Disciplinary Court, and two senior judges selected by the Judicial Yuan from the ordinary courts and administrative courts. If the defendant is a judge or prosecutor, it is required that two additional academics or impartial members of society should serve as lay judges. The lay judges are also selected by the Judicial Yuan.

⁴ The Ministry of Justice provides an official English translation of the Taiwanese Criminal Code, which can be accessed through the 'Laws & Regulations Database of the Republic of China (Taiwan)': <https://law.moj.gov.tw/ENG/LawClass/LawAll.aspx?pcode=C0000001>.

consider all circumstances, paying particular attention to the following matters as standards for determining the severity of punishment: (1) the motive and purpose of the crime; (2) the stimulation the offender perceived at the moment of committing the offense; (3) the means used for the commission of the crime; (4) the offender's living conditions; (5) the offender's character; (6) the offender's level of intelligence; (7) the relationship between the offender and the victim; (8) the degree to which the offender violated his/her obligations; (9) the danger or harm caused by the crime; (10) the offender's attitude after the crime. In addition, under Article 59 of the Criminal Code the judge may at his/her discretion to reduce a punishment if the circumstances of the commission of the offense are so pitiable that even the minimum punishment is considered too severe.

The inherent abstraction of Articles 57 and 59 of the Criminal Code grants judges' extensive discretionary power, leading to significant disparities in sentencing for cases with similar circumstances, even when adjudicated by the same judge(s). As a result, the general public harshly criticizes judges for their lack of predictability and consistency in sentencing, which has led to a subsequent erosion of judicial institutional trust.

To mitigate sentencing inconsistencies, Taiwan officially implemented the 'Citizen Judge Act' on January 1, 2023. Under this new regime, specific serious felonies⁵ must be adjudicated and sentenced jointly by professional judges and lay citizens⁶, aiming to enhance transparency and public participation of criminal adjudications.

⁵ Article 5 sec. 1 of the Citizen Judges Act provides that 'Except for juvenile criminal cases and cases involving offenses provided in the Narcotics Hazard Prevention Act, a case of the first instance in the following categories that is designated to the jurisdiction of the district court in which a prosecutor has initiated a public prosecution shall undergo the trial with the participation of citizen judges: (1) Where the accused has committed an offense punishable with a minimum punishment of imprisonment for not less than ten years; or (2) Where the accused has intentionally committed an offense that caused death.'

⁶ According to Article 83 sec. 1 of the Citizen Judges Act a verdict of guilty is rendered by the approval of the Tribunal with the two-third members, including at least one citizen judge and one judge; In the circumstances that the said approval is not satisfied, a verdict of not guilty or a finding in favor of the defendant should be rendered. Furthermore, sec. 3 of the same article provides that a decision of the Deliberation on sentencing is rendered by the Tribunal with the approval of the majority members, including at least one citizen judge and one judge. However, a decision of death penalty shall not be rendered without the approval of the two-third members, including at least one citizen judge and one judge.

2. Sentencing and AI

Long before the implementation of the 'Citizen Judges Act', the Judicial Yuan had already created an AI-assisted sentencing system to reduce the caseload of judges and strive to achieve consistency in sentencing.

Actually, this system was born out of the public backlash during the 'White Rose Movement'⁷ where citizens were outraged at court rulings and judgements that are in clear violation of the people's sense of justice. In light of this, the Taiwanese judiciary determined to introduce a systematic and objective sentencing reference tool to improve the transparency, consistency and fairness of sentencing.

With the implementation of the citizen judge system, the Judicial Yuan has fully implemented the AI Sentencing Information System. Recognizing that citizen judges lack formal legal training⁸, the system is designed to provide a standardized reference range to structure the sentencing discretion. In addition, by offering insights into past sentencing trends for similar cases, the system prevents adjudicators, including both citizen judges and professional judges, from being overwhelmed and effectively alleviates the cognitive burden of the sentencing process.

The AI-assisted sentencing system provided by the Judicial Yuan is a so-called 'fact-based system', which collects, organizes, and presents sentencing-related information from similar past cases⁹. This information

⁷ The 'White Rose Movement' refers to two criminal offences of child sexual abuse that occurred in 2010. The judges of the two cases, including five from the Supreme Court, issued lenient sentences based on the rationale that the young victims did not explicitly resist the assaults. The controversial judgements incited public backlash, manifesting in both physical demonstrations and digital activism. The term 'dragon judges' has emerged in the Taiwanese lexicon, symbolizing a strong disconnect between judicial rulings and public expectations of judiciary.

⁸ Under Article 14 of the Citizen Judges Act, following persons are ineligible to serve as citizen judges: (1) current and former judges; (2) current and former prosecutors;(3) current and former lawyers and public defenders; (4) current or former full-time professors, associate professors, or assistant professors at universities or independent colleges approved by the Ministry of Education, teaching major legal subjects; (5) civil servants of the Judicial Yuan, the Ministry of Justice, and their subordinate agencies; (6) personnel who have passed the judicial officer examination or the lawyer examination; (7) judicial police officers and judicial police.

⁹ There was another AI-assisted sentencing system that was referred to as the 'evaluative model'. This model, covering crime types including firearms offenses, drug offenses, and sexual assault

covers judgments from all district courts, high Courts, and the Supreme Court, and is updated daily. Since February 2013, the Judicial Yuan has incrementally provided judges, prosecutors, attorneys, and the general public with access to sentencing distributions for similar cases, thereby enhancing the fairness and transparency of judicial outcomes. Currently, the system covers 10 major categories of offenses: unsafe driving, hit-and-run, assault, theft, fraud, homicide, robbery, sexual assault, weapons offenses, and drug-related crime. It is crucial to note, however, that the system serves as a reference tool and does not provide binding sentencing recommendations for specific cases.

According to the Judicial Yuan the AI sentencing information system (including factual and evaluative types) has four major advantages¹⁰:

1. Data is updated in real time: the judgment data is more recent than that of the first-generation sentencing information system and can be continuously updated to the latest judgment data, allowing for flexible adjustments as needed.
2. Adjustments can be made as needed: options to add judgment data or reduce sentencing factors, list commonly used sentencing factors in judgments, and reduce situations where too many search results or no search results are found due to overly detailed distinctions in sentencing factors.
3. Advanced search is available: after querying, you can see the range of sentencing distribution under the influence of the selected sentencing factors, and you can directly query the content of the judgment.
4. Intelligent learning and smart annotation: Semantic annotation is adopted, following the context of sentencing factors and the wording of aggravating and mitigating legal provisions, which is

offenses, extracts sentencing factors from judgments and maps them to the relevant criteria under Article 57 of the Criminal Code. By categorizing these factors as aggravating, mitigating, or neutral, the model provides organized data for querying specific case details. Currently, however, the system has been transitioned into an exclusive internal resource for research purposes within the Judicial Yuan and is unavailable for public consultation.

¹⁰ See the report of Judicial Weekly (司法週刊), Vol. 2143 (2023/2/10), p. 4.

conducive to the development of AI automatic annotation functions. A backend system is also set up to promptly modify the annotated content, and the AI automatic annotation is retrained based on the modified annotation results, which helps to continuously update data and reduce errors.

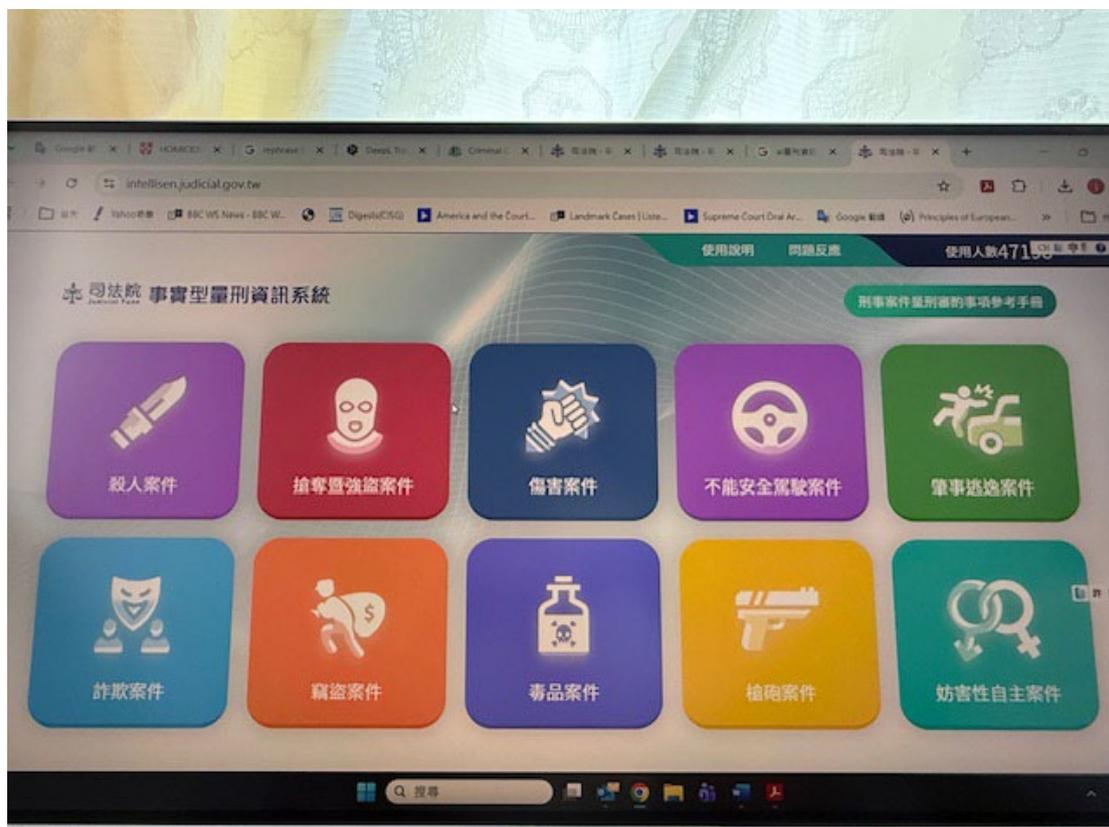
In addition, according to the Judicial Yuan, the system also considers the changing social values. In other words, past judgments may be interpreted differently in modern times. The system provides a function to search for sentencing tendencies by 'time interval' allowing users to select the time range of data themselves to reduce the influence of historical bias¹¹.

The Judicial Yuan has reaffirmed its commitment to leveraging digital technology to refine and optimize sentencing information systems. By expanding these databases, the judiciary aims to bolster sentencing equity, transparency, and predictability, thereby fostering greater public confidence in the legal system¹².

¹¹ Y.C. Yeh (葉于甄), AI Enters the Courtroom: Technology and Jurisprudence Dance Together (AI 進軍法庭, 技術與法理共舞), Officer of the Court (在野法曹), Taipei Bar Association, Vol. 65, 2025/10/4, <https://dissent.tba.org.tw/special/4781>.

¹² Judicial Yuan, supra note 10.

Figure 1: Fact-based AI-assisted Sentencing System¹³ : 10 major categories of offenses



¹³ This system is accessible at <https://intellisens.judicial.gov.tw/>.

Figure 2: Hit-and-run: Applicable Provision is Article 185-3, Paragraph 1 of the Criminal Law, with 96,533 judgments available for reference

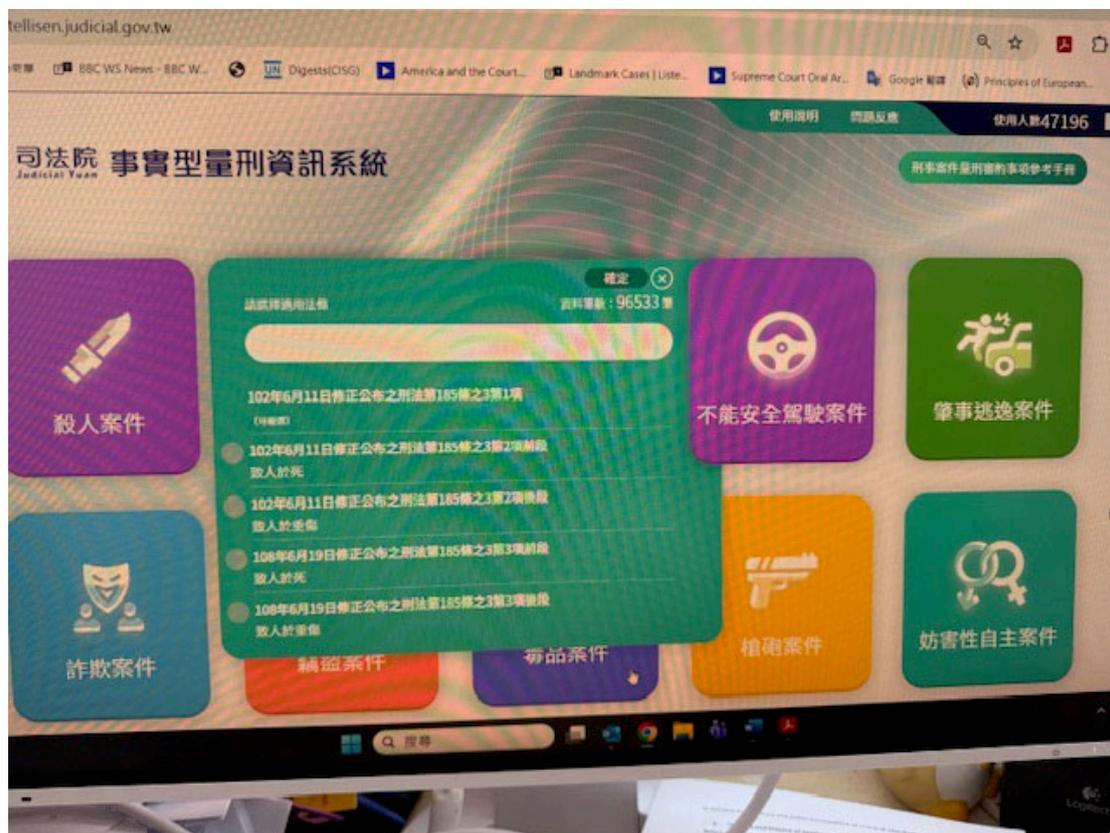
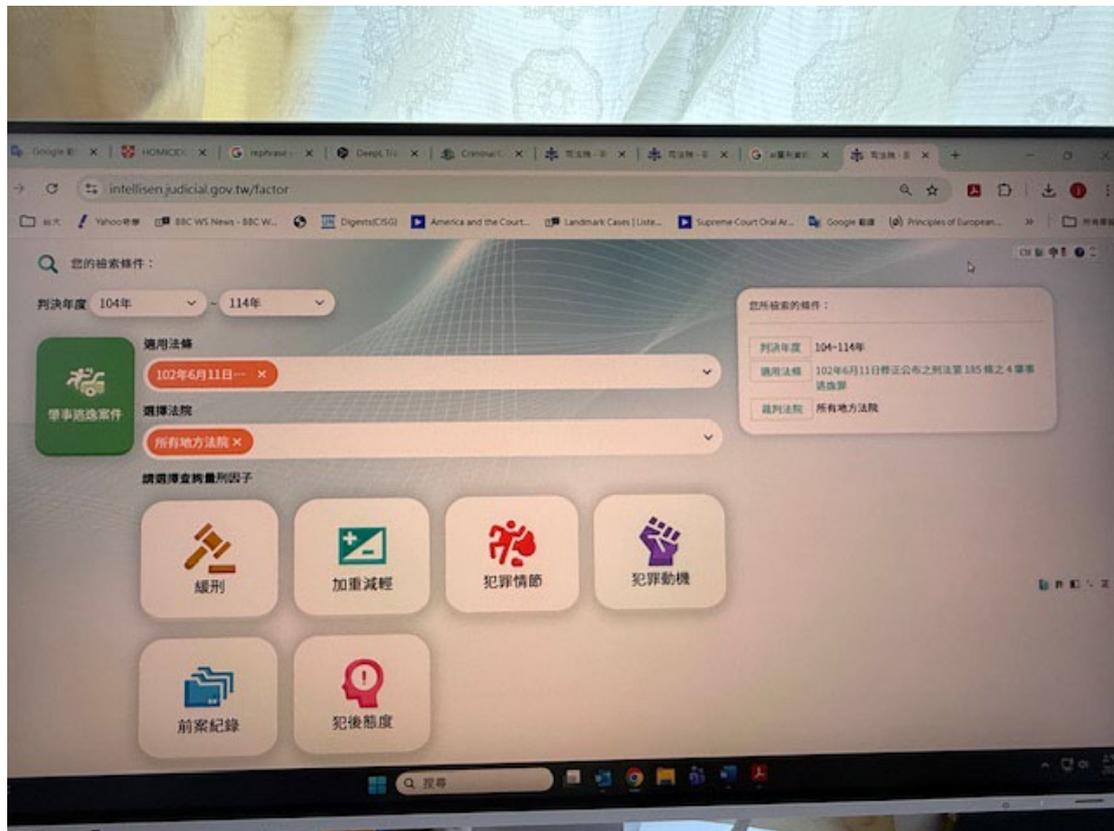


Figure 3: Hit-and-Run: Judgements from 2015 to 2025, all sentencing factors that should be taken into consideration, including the motive and purpose of the crime, the offender's attitude after the crime, criminal record etc.



IV. Use of AI in Child Guardianship Arrangements

Another significant application of AI within judicial processes involves parental rights litigation, specifically in determining child guardianship arrangements after divorce of the parents.

Under Article 1055 of the Taiwanese Civil Code, in the absence of a custody agreement following a divorce, the court may intervene to determine child guardianship at the request of the spouses, interested parties, or social welfare organizations, or act on its own initiative (*ex officio*). Furthermore, Article 1055-1 of the Code stipulates that when adjudicating custody, the court must prioritize the best interests of the child; in doing so, it shall conduct a comprehensive evaluation of all circumstances, with particular emphasis on: (1) The age, gender, number, and health of the children; (2) The child's own preferences and developmental needs; (3) The parents' age, profession, character, health, financial capacity, and overall living environment; (4) Each parent's willingness and commitment to child-rearing; (5) The emotional bonds between the child and the parents, as well as other household members; (6) Any conduct by one parent that obstructs the other's exercise of parental rights; and (7) The cultural traditions, customs, and values of each ethnic group¹⁴.

It is evident that the 'best interests of the child' standard laid down in Article 1055, along with the criteria illustrated in Article 1055-1, remains highly subjective. Such vagueness can lead to inconsistencies in judicial outcomes, as different judges may interpret similar facts differently.

Consequently, the Taiwanese legislature has mandated that custody disputes undergo mediation as a procedural prerequisite to judicial adjudication. Nevertheless, the inherent indeterminacy of the 'best interests of the child' standard frequently still leads to divergent interpretations among mediators, undermining the consistency of the process.

¹⁴ Point 7 shall apply particularly when one or both parents are indigenous or non-Taiwanese citizens.

To address these challenges, the Judicial Yuan has introduced AI-driven tools to help litigating parents, their attorneys, mediators and social workers better grasp the judicial logic behind custody rulings. By analyzing past precedents, these AI systems facilitate out-of-court settlements and clarify legal expectations, ultimately minimizing the emotional and financial costs associated with protracted litigation.

Moreover, numerous Taiwanese district courts that frequently deal with family law cases have integrated a 'AI-assisted parental rights adjudication prediction system' into their proceedings. Under this framework, litigants interact directly with the AI-driven system, inputting specific factors mandated by Article 1055-1 of the Civil Code. This interactive process allows the litigating parents to independently explore custody outcomes that presumably align with the best interests of the child, providing a data-driven foundation for their specific case.

An experienced family mediator suggested that AI-driven tools should be operated directly by the parties involved. By engaging with these tools, parents can learn to view the 'best interests of the child' through a dispassionate, third-party lens. This allows mediators and social workers to maintain their neutrality while using AI-generated insights as an objective baseline for negotiations. Consequently, this minimizes subjective biases and expands the potential for a mutually agreeable parenting plan, significantly enhancing the mediation's overall efficacy¹⁵.

In this regard, it is worth briefly introducing an AI system developed by a group of scholars at National Tsing Hua University — the generative AI dialogue robot Sister Lee (Sister Lee's Design for Facilitating Mediation).

According to the developers, their AI system is able to offer the litigating parents a structured framework to evaluate their roles as caregivers, summarizing the strengths and weaknesses of their case. It acts as a bridge, translating complex court logic into understandable terms so parents can see how their statements influence legal outcomes. By encouraging multi-perspective testing, the system helps litigants move past personal emotions and focus on the statutory factors that truly drive parental rights decisions,

¹⁵ See the report of Judicial Weekly (司法週刊), Vol. 2219 (2024/8/2), p. 4.

leading to a more rational and informed legal strategy¹⁶.

V. Conclusion: Will AI replace judges?

As illustrated, the Taiwanese court system is highly digitalized, with AI playing an essential role in judiciary. This is especially true in cases involving sentencing trends and parental rights disputes, where AI-driven insights help bridge the gap between abstract legal principles and practical, data-backed outcomes.

As a consequence, one might be compelled to ask: 'Will AI eventually replace the judge'?

It is a general consensus in Taiwan that AI can only serve as an auxiliary tool, and the final judgment should still be made by judges or citizen judges in order to maintain judicial ethics and the public scrutiny of judgments.

A senior judge emphasized that as long as the system security, correct instructions, clean data, and rigorous review are achieved, AI can become the most reliable and tireless collaborator in the judiciary. In addition, a user manual published by a Taiwanese district court explicitly points out that the use of AI is restricted by three core mandates: (1) Collaborative Role: AI assists but does not replace judges; all results must be verified by a human judge. (2) Accountability: All AI findings must be traceable to their sources and reproducible to avoid arbitrary conclusions. (3) Strict Confidentiality: Information security is the highest priority, requiring AI usage to stay within the court's firewall and prohibiting any unauthorized disclosure of unmasked data¹⁷.

Finally, the Judicial Yuan, in alignment with the guidelines published by the competent administrative agency, has also frequently underscored its intent to deploy AI as an auxiliary tool to alleviate the judicial burden, particularly for drafting judgments in specific crime categories. Nevertheless, the core judicial functions—including fact-finding, legal interpretation, and sentencing—remain the exclusive prerogative of the judges, ensuring that human discretion is not displaced by algorithmic output.

¹⁶ Cf. Contemporary Law Journal (當代法律), Vol. 41 (May 2025), pp. 37. The Sister Lee's Design for Facilitating Mediation is accessible at <https://hssai-custodiai.phys.nthu.edu.tw>.

¹⁷ See the report of Judicial Weekly (司法週刊), Vol. 2293 (2026/1/16), p. 4.