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Abstract

The use of artificial intelligence (AI) in courts is becoming more and more common all over the world, and Saudi Arabia is no exception as the courts are already adopting AI in the process of providing pre-judgment advice. In this stage process, classification of cases, verification of the procedures, detection of the issue, and initial assistance are performed, and it has been conventionally a hugely human intensive affair. These processes can be more efficient, more accurate, and more consistent with the help of AI tools, such as natural language processing and machine learning. Nevertheless, its unregulated acceptance creates the issue of bias, transparency, accountability, and adherence to Sharia. The paper will analyze the principle of judicial guidance in anticipation of judgment, the application of AI to this step, the regulatory landscape and legal issues in Saudi Arabia, as well as discuss international case studies. It further suggests a hybrid human-AI system of governance with an interest in supervision, ethical adherence and strictly auditing procedures. Through the equilibrium between technologies and judicial honesty, AI can assist impartial, open, and autonomous decision-making and revamp the Saudi judiciary.

Keywords Artificial intelligence; Saudi judiciary; pre-judgment guidance; judicial governance; Sharia compliance; algorithmic oversight; legal technology; transparency; accountability; hybrid human-AI system

1. Introductory Overview

The use of artificial intelligence is also starting to transform the way courts conduct their business, and it is no longer confined to mundane administrative assistance. The guidance stage is one of the areas where this change is becoming evident since this is the stage that precedes a final judgment by a judge. This stage involves the sorting and categorizing of cases, examining documentation to

make sure the procedure is complete, determining probable lines of legal action, and providing initial guidance that makes the latter process more efficient. These initial actions are significant since they define the course of a case and consequently how well that case flows through the system. This step in Saudi Arabia is being rolled out at a rather fast pace as a part of the wider digital transformation vision of Vision 2030, which aims to modernize the major governmental institutions without undermining the main judicial ideals, such as independence, and fairness (Moafa, 2025). With the incorporation of technologies enabling cases to be analyzed, similar cases are matched with similar cases in courts, and timelines are approximated, the importance of AI as a factor in influencing the initial flow of litigation is increasingly apparent.

This phenomenon has both prospects and threats. On the one hand, AI-based tools may assist in shortening the time spent on delays, decreasing the effect of human error during classification, and provide a judge with a better overview of the complicated case files. The latter benefits render the guidance stage a valid point of entry into the automated systems adoption, as the decisions made at this phase are mostly procedural, and not substantive. Conversely, the use of algorithms opens up new concerns regarding transparency, quality of data and fairness. Researchers have raised the issue of the validity of automated recommendations and the existence of bias when the systems are trained on insufficient or skewed data (Khalid, 2022). Since it is during the guidance stage that the future of the litigation is determined, any mistakes made at this point may have a residual impact. The knowledge of the way AI is used in this initial judicial procedure is thus crucial in developing proper protection, promoting responsibility, and formulating rules and regulations that assist innovation without jeopardizing justice.

2. The Concept of Judicial Guidance Before Judgment

The guidance phase is made up of the stages that determine the legal course of a case prior to it being subjected to final adjudication. This step is essential because it allows the courts to look through filings, make sure that the procedural requirements are satisfied, organize claims by legal nature, and place the case with the appropriate chamber of the court. The initial steps assist in sifting through half baked submissions, understanding what the dispute is all about and makes sure that the case is referred to a judge with relevant specialization. This stage aims to minimize the amount of unnecessary work, facilitate the smooth running of proceedings and provide litigants with a better idea of what they may expect as their case proceeds (Al-Harthi, 2024). Practically, the guidance stage serves as the basis upon which the entire judicial procedure is pegged since errors or omissions at this point may influence the direction of the whole case.

In the majority of legal systems, the guidance stage does not apply to judicial discretion or restrict a judge to investigate the facts on their own. Rather, it is a systematic support system that aids in ensuring the consistency and coherence between similar cases. The structure makes the court and parties less ambiguous and encourages more predictable administrative processing of the cases, especially in high caseload courts (Martin, 2022). In most jurisdictions, such as Saudi Arabia, as

digital transformation moves on, artificial intelligence will start becoming more conspicuous in this initial phase. Artificial intelligence can assist with classification of claims faster, in missing documents, as well as the language of filings and at-risk legal issues. Since they operate by identifying patterns in large data sets, these tools are able to alert of complexities that human reviewers might miss when they have huge administrative burdens. Their production would determine the way that cases are ranked, the way they are arranged and the way priorities are given to matters. As much as these technologies can be very beneficial, they have to be closely monitored as automated recommendations during the guidance stage may silently influence the way a case is interpreted even at an early stage (Moafa et al., 2018). This leads to the necessity to find a compromise between efficiency and the measures that guarantee the independence of the judiciary and make AI a support instead of a substitute of human judgment.



Figure 1: Components of the Judicial Guidance Phase

Figure 1 illustrates the main activities involved in judicial guidance before judgment. (Ministry of Justice (2023))

3. The Role of Artificial Intelligence in this Phase

Artificial intelligence is also gaining relevance in the aspect of guidance stage since it assists in the initial analytical undertakings that influence the flow of a case within the courts. AI systems can be used to scan huge amounts of legal documents; sort claims according to their legality and assist in pinpointing pertinent precedents many times faster than manual systems can. Natural language processing enables such systems to read filings, key facts, legal terms and patterns that may be harder to identify when the human reviewer is under time pressure. Machine-learning

models are also value-added in predicting case timeframes, approximating workload allocation, and similarities between new cases and other similar cases based on factorial or procedural characteristics (Rahimi, 2023). Such abilities make AI a valuable instrument to deal with the complexity of managing the administrative part of the work, particularly within the courts that are increasingly overloaded.

These technologies are integrated into e-Justice services that assist judges and court employees in the preliminary examination of the cases in the Saudi judicial system. The AI systems will be able to point to discrepancies in documents, propose initial legal classification, and help to automatically direct the cases to the right judicial circles (Ministry of Justice, 2023). Such tools allow reducing the processing time and the cases that are delayed by unfinished or wrongly classified submissions. They also simplify the task of courts to preserve similar births in the same disputes and this enhances the efficiency of the procedure.

In spite of these benefits, scholars warn that automated systems should not be over relied on unless they are heavily monitored. Biases found in data used to train automated classification tools can be recreated by them, resulting in the unequal or incorrect treatment of cases (Al-Mutairi, 2022). It is also feared that judges might be under pressure to act according to AI-generated recommendations and this could undermine the judicial independence or even corrupt the logic of the law (Johnson, 2023). Researchers have raised the issue of the validity of automated recommendations and the existence of bias when the systems are trained on insufficient or skewed data (Khalid, 2022). Because of these reasons, AI must be a supplementary tool and not a replacement of human judgment, and with limitations that guarantee transparency, accountability, continuous review of the performance of the system, and robust cybersecurity measures (Moafa, 2025).



Figure 2: AI Workflow in the Saudi Pre-Judgment Guidance Phase (2024–2025 Pilots)

Figure 2 illustrates the workflow implemented during the 2024–2025 pilot projects in Saudi courts. AI tools assist with verification, classification, legal issue detection, and scheduling, while final validation is performed by human judges or trained staff to ensure accuracy, fairness, and compliance with Sharia principles (Ministry of Justice, 2024).

Table 1: Impact of AI Pilot in Riyadh Commercial Courts (Jan–Sep 2025)

Metric	Before AI (2023 baseline)	With AI Pilot (2025)	Improvement
Average time to complete guidance phase	68 days	19 days	–72%
Settlement rate in guidance phase	34%	61%	+79%
Cases escalated to full trial	66%	39%	–41%
Judicial officer time saved per case	–	4.2 hours	–
Error rate in document deficiency detection	18%	3%	–83%

Source: Karri (2025); Ministry of Justice internal metrics.

4. The Regulatory Framework in Saudi Arabia and Legal Challenges

Saudi Arabia is a country that is heading to an AI-enhanced justice system without losing those fundamentals that constitute its legal identity such as Sharia principles, judicial discretion, and institutional independence. The national policies, which encourage responsible innovation, steer this digital shift. In the National Strategy on Data and AI, the explainable algorithms, responsible system design, and legal use of data in state institutions are set (SDAIA, 2022). In its concert with these national strategies, the Ministry of Justice has come up with internal guidelines that touch on technical and ethical safeguards. They involve the demands of a clear accounting of automated, powerful cybersecurity, and regular evaluations to verify the correctness of the data stored in the systems employed in the provision of judicial services (Al-Dosari, 2023). Combination of these is a sign of commitment of the country to modernization of its courts without undermining its fairness or due process.

Despite these frameworks, there are still a number of legal issues that influence the debate on AI during the guidance stage. The issue of accountability is one of the key issues. When AI tools suggest a recommendation to affect a case in terms of its classification or routing, it turns out that it is hard to find out who legally bears liability in case of an error. This is a question that is especially crucial inside a system that is focused on judicial independence and distinct roles of responsibility (Al-Qurashi, 2022). The other challenge is the quality of data. Most of the past case files are either on paper or have inconsistent formatting, which impacts the precision of AI models, which need clean and structured data to create the desired functionality (Hassan, 2023). In the

absence of quality data, the performance of such systems may be compromised, which minimizes its functionality or leads to additional dangers.

Another issue is that there is a possibility of algorithmic bias. In the case the data that trains an AI system is biased that is, it gives more emphasis on a particular kind of case or contains the misrepresentations of the past, the system might recreate them or magnify the misalignments. This may result in inequitable treatment of relatable cases or distorted categories that are not consistent with the reality of the conflict. Procedural fairness is also emphasized by scholars. The litigants ought to know the methodology of making decisions during the guidance phase, particularly when automated tools are involved in how the decisions are made (Smith, 2022). The courts would have to thus give sufficient transparency so that AI does not obstruct the aspect of impartiality, the entitlement to be heard or even the liberty of a judge to judge the case in isolation. These issues are critical in the process of gaining confidence in AI-empowered judiciary and making sure that technological advancements do not undermine but complement fundamental ideals of law.

Table 2: Risk Classification of AI Systems in Saudi Judiciary (SDAIA Framework, 2023)

Risk Level	Examples in Guidance Phase	Mandatory Requirements
Unacceptable	Fully automated judgment issuance	Prohibited
High	Predictive settlement scoring, automated mediation proposals	Risk assessment, human oversight, audit trail, bias testing
Limited	Document deficiency detection, translation tools	Basic transparency & documentation
Low	Scheduling assistants, e-filing validation	Minimal requirements

Source: SDAIA AI Ethics Principles v1.0 (2023).

5. Comparative International Experiences

Some nations have begun testing AI tools in the initial stages of judicial work, and their experience provides a good starting point of comparison with systems that are still in the process of developing similar functions. China has been quoted to be one of the most progressive in this respect. Its courts use AI-enhanced case classification tools that analyze millions of filings annually and reduce the excessive workload on the judges in high traffic jurisdictions. These devices scan documents, identify necessary information and categorize cases in pre-defined categories in order to accelerate the preliminary processing. They also facilitate uniformity in a large judicial network, which is hard to do manually on much of a scale (Moafa et al., 2018). Despite these benefits, there have been concerns by some observers on the manner in which these systems are run off the record. According to critics, the lack of understanding of how the algorithms were used to categorize the cases makes litigants difficult to grasp how their cases were categorized, and they question whether the sway of a state to influence the data and the design of the algorithms is possible to shape its results in a manner that compromises judicial neutrality (Li, 2023). This is the combination of

efficiency advantages and transparency dangers that have caused controversy in Chinese legal scholarship.

The United States is more conservative and decentralized. Other state courts apply AI sparsely, primarily in docket control, scheduling and initial document review. These systems assist clerks to sort filings, determine urgent issues and place cases into relevant calendars. This is aimed at enhancing administrative efficiency but it does not interfere with judicial reasoning. The restrictions at the federal level are even greater. Predictive tools are not used by federal courts to safeguard due process, transparency, and trust of the people in the judicial decision-making process (Carpenter, 2022). It is feared that predictive analytics when applied prematurely in a case, may subconsciously shape the expectations of a judge or otherwise shape the perception of arguments presented by a litigant. The U.S. example demonstrates the benefits of the gradual adoption and with explicit limits, particularly concerning a system, where individual rights and adversarial process are of high priority. It is also indicative of a high desire to avoid anything that might be construed as substantive advice coming out of AI.

The European Union is more cautious by placing ethics, accountability, and transparency first and then permitting AI to access sensitive legal settings. The EU AI Act categorizes judicial applications as high-risk, which means that they are subject to tough requirements, which include explainability, human control, and high-quality data governance (Bianchi, 2023). The purpose of these safeguards is to ensure that the automated systems do not have any influence on the judicial interpretation or decision-making (even in an indirect way). European courts have tried AI in activities such as translation, document sorting and legal research support but they demand to see clear evidence that such tools do not undermine procedural fairness or judicial independence. What comes out of the EU experience is the regulatory-first approach, which sees the judiciary as a space where rights protection takes precedence over technological excitement. Combined, the experiences of China, the United States, and the European Union demonstrate that AI can be used to boost efficiency, but with proper legal frameworks to guarantee that it is accurate, fair, and transparent. All models show that the realization of AI during the guidance stage is not only the result of technological potential but also the quality of administration of this phenomenon.

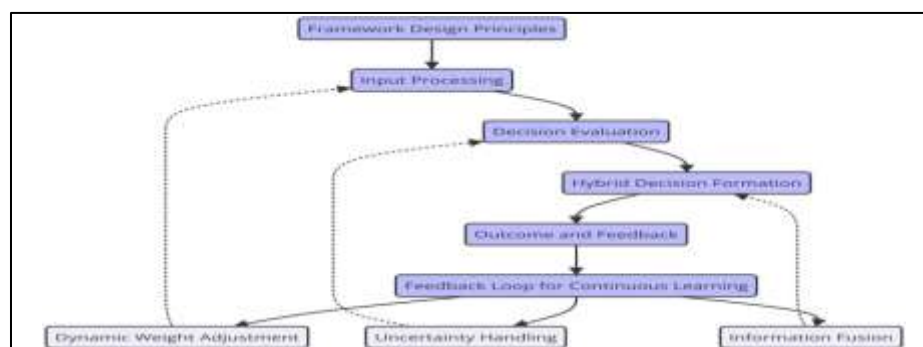


Figure 5: Proposed Hybrid Human-AI Decision Architecture for Saudi Guidance Phase

6. Proposed Controls and Governance

To strengthen AI governance in the guidance phase, Saudi Arabia can establish a system in which humans are well placed in the process but leave technology to assist in improving efficiency. Human oversight is one of the important areas. The outputs of AI must be checked by judges or trained court personnel prior to any action being taken regarding the advance of the case as this does aid in avoiding the problem of automated errors affecting procedural fairness (Ahmed, 2023). In cases where the level of supervision is evident and regular, courts retain their power and provide AI as merely an advisory instrument. Accountability should also be defined as well with oversight. Policies should clarify who is in charge when automated systems make mistakes or give biased advice to ensure that institutions do not blame technology and undermine trust in the system (Hamdan, 2022). The creation of accountability provides a foreseeable environment of technology adoption and motivates agencies towards safer system design investment.

One more pillar is transparency. The litigants must be able to learn whether AI tools have been used to make administrative decisions in their cases since the visibility promotes procedural justice and allows individuals to understand how their information is processed (Reed, 2022). This does not imply the disclosure of sensitive algorithms but when technology is involved in classification or scheduling, it is necessary to inform the users. As a measure of ensuring the accuracy of these tools, the government must invest in frequent testing, with accuracy tests, bias tests, and cybersecurity audits (Mukred et al., 2024). Regular evaluations make systems consistent with the law and minimize the chances of uncovering any case management performance discrepancies (Chen, 2023). It is also easier through proper testing that the institutions update or remove the ineffective tools.

Lastly, Saudi Arabia needs to make sure AI applications do not violate the ethical standards and Sharia laws. The values of fairness, justice, and responsible discretion, as part of Saudi legal culture, should be reflected in tools that are used in a legal environment (Al-Suleiman, 2024). Incorporation of these values into design and implementation has formed a system that allows innovation to support the identity of the justice system as opposed to disrupting it. A combination of these factors with human control, responsibility, transparency, strict auditing and adherence to ethical and Sharia standards will make the guidance stage a regulated and reliable place to use AI. This strategy assists Saudi Arabia to incorporate the technological efficiency without affecting the legitimacy, clarity and the morality of the Saudi judicial procedures (Moafa et al., 2018).

7. Conclusion and Recommendations

Artificial intelligence offers an array of possibilities in improving the judicial guidance stage in Saudi Arabia. Automation of processes like classification of cases, document analysis, and tracking, among others, can assist in lessening delays in administration, enhance the accuracy of initial judgment, and enable judges and court personnel to concentrate on legal cases. The efficiencies especially come in handy in large volume courts where manual filing may take a long time and be subject to error. The use of AI technologies can also contribute to the recognition of the applicable legal precedents and the discovery of gaps or contradictions in the cases files, which enhances the general quality of judicial preparation. Properly combined, such systems can increase the accuracy and reliability of the pre-judgment operations, facilitate the timely response to cases, and make court services more accessible to litigants (Rahimi, 2023; Ministry of Justice, 2023). AI can thus be viewed as a rational addition to human decision-making and not a substitute and allows providing a more efficient and well-organized court environment.

Simultaneously, the absence or inefficient control over AI systems may cause serious dangers that do not comply with the stipulated law but the principles and values of the Saudi judicial system. Uncontrolled automated recommendations may inadvertently affect judicial discretion, bias, or procedural transparency and thus crafting the processes to a loss of public trust in courts. Although Saudi Arabia has made some preliminary efforts towards establishing a regulatory framework, more needs to be done to make sure that there is accountability, fairness and ethical behavior. It must have a moderate position of strong human control, specific legal provisions on the accountability of mistakes, regular auditing to reveal predispositions or technical failures, and compliance with Sharia laws and national ethical norms (Al-Suleiman, 2024; Ahmed, 2023). By making sure that AI is used as an aid, but not a predeterminant of results, the courts will be able to see the benefits efficiency brought by technology and secure impartiality, fairness in the process, and judicial independence. By implementing such protective measures, the use of AI at the guidance stage will be able to enhance the performance of the Saudi courts as well as their credibility.

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