## AI, Transparency, and Fairness in International Arbitration: Rethinking Disclosure and Due Process in the Age of Algorithmic Adjudication

Dr. Mohaddas Mehboob

<u>mohaddas.naqvi@law.iiui.edu.pk</u> Assistant Professor, Department of Law, IBADAT International University, Islamabad, Pakistan

Sidra Zakir

<u>sidrazakir508@gmail.com</u> LLB Student, Department of Law, Mohi-ud-din Islamic University Nerian Sharif, AJ&K, Pakistan

Hazrat Usman

hazratusmanadvocate@gmail.com Assistant Professor, Department of Law, Mohi -ud-din Islamic University Nerian Sharif, AJ&K, Pakistan

Attiq Ur Rehman

attiqadv88@gmail.com

Lecturer, Department of Law, IBADAT International University Islamabad, PakistanCorresponding Author: \* Dr. Mohaddas Mehboob mohaddas.naqvi@law.iiui.edu.pkReceived: 09-03-2025Revised: 10-04-2025Accepted: 07-05-2025Published: 29-05-2025

#### ABSTRACT

Artificial intelligence (AI) is reshaping every stage of international arbitration, yet its silent incursion into tribunals' reasoning threatens core guarantees of due process. This paper explores whether, and how, arbitral law should compel disclosure and explainability when AI materially informs an award. Using a mixed-methods design, the study combines doctrinal analysis of the New York Convention, UNCITRAL instruments, leading institutional rules, and emerging soft-law guidelines with empirical evidence drawn from the 2025 QMUL–White & Case survey, practitioner interviews, and the landmark LaPaglia v. Valve challenge. Findings reveal a pronounced regulatory gap: hard-law frameworks remain AI-agnostic even as a consensus soft-law "lex mercatoria" of non-delegation, transparency, and human oversight is rapidly crystallising. The paper demonstrates that narrowly tailored duties—requiring tribunals to notify parties of any substantive AI use, provide a concise explanation of its role, and verify outputs—can safeguard party autonomy and enforceability without eroding arbitration's confidentiality or efficiency. Empirical data show stakeholders overwhelmingly support such measures and view them as pre-empting costly post-award challenges. The analysis concludes with a roadmap for implementation through institutional rule amendments, model procedural orders, and possible refinements to the UNCITRAL Model Law. By anchoring algorithmic tools to human accountability, the proposed framework preserves trust in arbitral justice while permitting innovation. Ultimately, the study argues that embracing calibrated transparency today will ensure international arbitration remains legitimate, adaptable, and competitive in the algorithmic era. It thus offers a timely blueprint for courts, tribunals, and institutions seeking to harness AI's efficiencies without compromising fundamental procedural safeguards in global practice.

*Keywords:* Artificial Intelligence in Arbitration, Algorithmic Adjudication, International Arbitration Law, Soft-law Governance

https://academia.edu.pk/

|DOI: 10.63056/ACAD.004.02.0255|

## **INTRODUCTION**

Artificial intelligence (AI) is rapidly transforming legal practice, including the field of international arbitration. From document review and legal research to drafting assistance, AI tools promise greater efficiency and consistency in arbitral proceedings (Queen Mary University of London & White & Case, 2025; Vniversitas, 2025). However, the integration of AI into core decision-making functions raises fundamental questions about due process, transparency, and the human role in adjudication (Global Arbitration Review, 2025; Esports Legal News, 2025). A recent case vividly illustrates the dilemma: in \*LaPaglia v. Valve\* (2025), a party moved to vacate an arbitral award on the basis that the arbitrator "outsourced his adjudicative role" to an AI (specifically, allegedly using ChatGPT to draft parts of the award) (Esports Legal News, 2025). The claimant argued that this undisclosed reliance on AI breached his right to a human-rendered decision and violated fundamental fairness (Esports Legal News, 2025). This unprecedented challenge spotlights the tension between the promise of AI-assisted arbitration and the preservation of parties' due-process rights.

The core concern is that when arbitrators or parties leverage AI to analyze evidence or even formulate reasoning, the arbitral process might cease to be wholly "human." If critical aspects of an award's reasoning are AI-generated, how can parties be assured of the award's integrity? The legitimacy of arbitration rests on party consent and trust in the tribunal's judgment. An algorithm's involvementespecially if kept opaque-could undermine that trust. Due process in arbitration encompasses the right to be heard, to respond to all evidence, and to receive a reasoned decision by an impartial tribunal. If an AI tool introduces conclusions or factual findings not vetted through the arbitral process, a party may be deprived of the opportunity to contest that input (Silicon Valley Arbitration & Mediation Center, 2024; Chartered Institute of Arbitrators, 2025). Moreover, without transparency, parties cannot know whether a decision was based on the evidentiary record or on extrinsic AI-generated data. This poses risks under widely-adopted legal standards: for example, the New York Convention allows refusal of award enforcement if a party was unable to present its case or if the procedure deviated from the parties' agreement (Article V(1)(b), (d)), or if recognition would violate public policy (United Nations, 1958). An arbitral award secretly informed by AI might trigger these grounds, as seen in \*LaPaglia\*, where it was argued that delegating decision-making to a machine was never contemplated by the arbitration agreement (Esports Legal News, 2025).

At the same time, international arbitration highly values confidentiality and efficiency. Parties choose arbitration in part to avoid the public spotlight of litigation and to obtain speedy, cost-effective outcomes. Introducing new disclosure obligations around AI usage could be seen as undermining these advantages. Arbitrators' deliberations are traditionally secret, and awards are typically final and binding with minimal grounds for challenge. Mandatory transparency about AI assistance might clash with the confidentiality of deliberative processes and raise fears of increased challenges or delays. Likewise, requiring explainability of AI inputs could slow down proceedings or discourage arbitrators from using time-saving tools at all. The challenge, therefore, is to find a balanced approach: one that safeguards due process through transparency and explainability, yet does not unduly compromise the confidentiality and efficiency that are the hallmarks of arbitration.

This research paper examines how, and to what extent, international arbitration law should impose mandatory disclosure and explainability obligations when AI-generated or AI-assisted reasoning materially informs an arbitral award. The goal is to determine how such obligations can protect the parties' procedural fairness and confidence in the outcome without eroding arbitration's appeal. The analysis is global in scope, considering leading institutional rules (ICC, LCIA, SIAC, ICSID), international legal instruments (the New York Convention 1958; UNCITRAL texts), emerging soft-law guidelines (e.g., Silicon Valley Arbitration & Mediation Center [SVAMC], 2024; Chartered Institute of

https://academia.edu.pk/

|DOI: 10.63056/ACAD.004.02.0255|

Arbitrators [CIArb], 2025), and recent case law developments (including \*LaPaglia v. Valve\* in 2025). Both doctrinal and empirical perspectives are incorporated. The doctrinal discussion reviews the legal frameworks and normative arguments for transparency in arbitration, while the empirical component draws on real-world examples, practitioner surveys, and reported attitudes toward AI's use in adjudication. Ultimately, the paper argues that carefully calibrated obligations – such as requiring tribunals to disclose any substantive use of AI in arriving at a decision, and ensuring any AI-derived analysis is subject to human verification and party comment – can significantly safeguard due process. Such measures can be designed to maintain confidentiality (by limiting disclosure to the participants and not the public) and preserve efficiency (by integrating transparency into existing procedural steps rather than creating onerous new processes). Achieving this balance is crucial to uphold trust in international arbitration as it enters the age of algorithmic adjudication.

## LITERATURE REVIEW

## AI's Emerging Role in International Arbitration: Benefits and Risks

Advancements in AI have begun to permeate each stage of the arbitral process. In the last decade, arbitration practitioners have increasingly used AI-powered software for e-discovery and document review, harnessing machine learning to identify relevant documents far faster than manual review (Vniversitas, 2025). Predictive coding techniques, once novel, are now accepted by courts and tribunals to manage massive evidentiary datasets, provided protocols ensure accuracy (Vniversitas, 2025). Beyond document management, AI analytics tools are being employed for legal research and case law analysis. Natural language processing allows AI to sift through databases of awards and jurisprudence to find patterns or relevant precedents across jurisdictions (Vniversitas, 2025). These capabilities can assist counsel in building arguments and even help arbitrators in drafting the legal reasoning portion of awards. For example, Thomson Reuters' AI assistant "Co-Counsel" and other off-the-shelf products have been introduced to aid lawyers in case strategy formulation by quickly summarizing legal points (Tam, 2024).

AI is also making inroads in predictive analytics for case outcomes. Some platforms claim to forecast arbitration results by analyzing past awards and arbitrator profiles (Vniversitas, 2025). Tools like Premonition and Lex Machina, originally developed for litigation analytics, have been adapted to arbitration, aiming to predict how certain arbitrators might rule or the likelihood of success in a given forum (Solhchi & Baghbanno, 2023). These tools process large datasets of awards to identify trends (e.g., how often Arbitrator X grants a certain relief) (Vniversitas, 2025). While outcome prediction remains probabilistic, parties and funders are exploring these AI insights for risk assessment and arbitrator selection (Vniversitas, 2025). Indeed, AI is even being used to improve arbitrator selection: by evaluating thousands of arbitrators' prior decisions and backgrounds (Pyć, 2024), algorithms can help parties find candidates who meet certain criteria (expertise, track record) or flag potential bias, thus theoretically increasing the quality of tribunal appointments (Vniversitas, 2025).

Another area of growth is AI assistance in drafting and translation. Large Language Models (LLMs) like GPT-4 can generate human-like text, which some arbitrators have experimented with for producing first drafts of awards or procedural orders (Lin & Cheng, 2024). Anecdotally, an arbitrator of the Shenzhen Court of International Arbitration reported using a generative AI to prepare templates of decisions and correspondence, which identified key information in case materials and streamlined drafting – while the arbitrator retained full control over the final content (Tam, 2024). AI-based translation services (e.g., DeepL) are also valuable in multilingual arbitrations to quickly translate submissions or evidence, though human review is needed for nuance. These uses highlight AI's potential to save time and reduce costs: tasks like summarizing witness testimony or checking citation formats can be handled in seconds by AI, freeing human arbitrators and counsel to focus on strategic issues (Santos, 2024).

https://academia.edu.pk/

Despite these benefits, the adoption of AI in arbitration brings significant risks and challenges. One welldocumented issue is the "black-box" nature of many AI models (SVAMC, 2024). Advanced AI, especially neural-network-based systems, do not explain their reasoning in an intelligible way. They produce results (a summary, a prediction, a draft text) based on complex probabilistic calculations rather than transparent logic (SVAMC, 2024). This opacity gives rise to the problem of explainability: neither the user nor the opposing party may understand why the AI arrived at a particular output. For instance, if an AI translation or summary omits a detail, or an AI drafting tool asserts a legal principle, it may be unclear what data or patterns led to that output. Current AI tools "lack self-awareness or the ability to explain their own algorithms" (SVAMC, 2024). This is particularly problematic in adjudication, where reason-giving is essential. The emerging concept of "explainable AI" attempts to address this by developing AI systems or companion methods that can provide human-comprehensible justifications for their outputs (SVAMC, 2024). In arbitration, using AI tools that have explainability features (or at least allowing parties to interrogate the AI's inputs and outputs) is increasingly seen as critical to maintain transparency (SVAMC, 2024). However, the SVAMC cautions that a complete understanding of complex AI may be beyond laypersons and that expectations of arbitrators mastering AI's technical inner workings should be realistic (SVAMC, 2024).

Another concern is the accuracy and reliability of AI-generated content. While AI can draft text fluently, it is prone to errors and even fabrications. LLMs have a known tendency to "hallucinate" – i.e., to produce plausible-sounding but false statements, including fake case citations or incorrect facts (SVAMC, 2024; Herbert Smith Freehills, 2025). An arbitrator relying on such output risks inserting mistakes into the award. In the \*LaPaglia\* case, the award reportedly contained odd phrasing, redundant passages, and references to facts not in the record, suggesting they may have been AI-generated hallucinations (Esports Legal News, 2025). This highlights the importance of rigorous human oversight: arbitrators must independently verify any AI-generated text or analysis before relying on it in a decision (Herbert Smith Freehills, 2025). Both the SVAMC (2024) and CIArb (2025) guidelines insist that arbitrators double-check AI outputs and bear ultimate responsibility for accuracy. In practice, that means if an AI tool provides a draft paragraph or a research finding, the arbitrator should confirm every citation and fact against the source material – a duty of care analogous to a judge checking a law clerk's memo.

Bias and fairness present further complications. AI systems trained on past legal data might replicate historical biases (e.g., against certain nationalities or claimant types) in predicting outcomes or evaluating evidence (Vniversitas, 2025). If, for example, a predictive model suggests a lower chance of success for claimants from a particular country because historically such claims failed, reliance on that model could entrench bias. Ensuring impartiality is paramount; thus any AI used should be scrutinized for how its training data might influence its suggestions. Developers and users are urged to maintain transparency about training data and mitigation strategies (Vniversitas, 2025).

## Due Process Concerns: Transparency, Explainability, and the Right to Be Heard

The integration of AI into arbitral decision-making implicates core due process principles. The right to be heard, a fundamental tenet of procedural fairness recognized globally, requires that parties have a meaningful opportunity to present their case and respond to the evidence and arguments against them (United Nations, 1958, Art. V(1)(b)). When an arbitrator relies on AI-generated analysis or findings that were not disclosed to the parties, this right may be compromised (Silicon Valley Arbitration & Mediation Center [SVAMC], 2024). If an AI tool produces a summary of facts, a legal conclusion, or even a suggested outcome that influences the arbitrator's decision, and the parties were unaware of this input, they lose the chance to challenge its accuracy, relevance, or potential biases (SVAMC, 2024). This lack of transparency effectively introduces extrinsic evidence or reasoning into the process sub rosa, undermining

the adversarial nature of arbitration where parties expect decisions to be based solely on the record they helped create.

The concept of explainability is closely linked to transparency and due process (SVAMC, 2024). A reasoned award is a hallmark of modern arbitration, allowing parties to understand the basis for the decision and facilitating judicial review (albeit limited). If AI contributes significantly to that reasoning, but its contribution cannot be explained either by the AI itself or by the arbitrator, the award's rationale becomes opaque ((Deng et al., 2024; SVAMC, 2024). Parties are left guessing how certain conclusions were reached. This is problematic not only for party acceptance but also for enforcement. Courts reviewing awards under the New York Convention or national laws may question whether an unexplainable, AI-influenced decision truly constitutes a reasoned award or respects the parties' right to know the basis of the ruling (United Nations, 1958). The demand for explainable AI (XAI) in adjudication stems directly from this due process requirement: decisions affecting rights must be justifiable and scrutable ((Papadimitriou, 2023; SVAMC, 2024).

Furthermore, the use of undisclosed AI raises concerns about arbitrator impartiality and independence. If an arbitrator relies heavily on a particular AI tool, especially one developed by a party or an entity with an interest in the outcome, questions about potential bias could arise (Vniversitas, 2025). Even neutral AI tools can harbor hidden biases based on their training data (Vniversitas, 2025). Without transparency, parties cannot assess whether such biases might have tainted the decision-making process. Disclosure allows parties to inquire about the AI tool used, its provenance, and any safeguards against bias, thereby preserving confidence in the tribunal's neutrality.

## Confidentiality vs. Transparency in the Age of AI

International arbitration traditionally operates under a veil of confidentiality. Proceedings are private, and awards are often not published. This confidentiality is valued by parties seeking to resolve disputes discreetly (Queen Mary University of London & White & Case, 2025). Mandatory disclosure obligations regarding AI use could appear to conflict with this tradition. Arbitrators might worry that revealing their use of AI tools, especially during deliberations, pierces the secrecy of the tribunal's internal processes. Parties might also be concerned that information about the AI tools used could become public if awards are challenged or published.

However, the conflict may be more apparent than real. Disclosure obligations can be designed to respect confidentiality. Disclosure of AI use can be limited to the parties involved in the arbitration, without requiring public dissemination ((Schmitz, 2005; SVAMC, 2024). The purpose of disclosure is to ensure procedural fairness between the participants, not necessarily to inform the public. Moreover, the focus of disclosure should be on the fact of AI use and its general purpose (e.g., "An AI tool was used to assist with document review"), rather than revealing the specific inputs, outputs, or deliberative weight given to the AI's contribution, unless necessary for explainability ( (Vitente et al., 2023; SVAMC, 2024). Secure AI platforms designed for legal use also incorporate data protection features, mitigating risks of breaches (SVAMC, 2024). Thus, a balanced approach can achieve transparency for due process purposes while largely preserving the confidentiality that parties expect.

## The Non-Delegation Doctrine and Human Oversight

A central legal principle is that arbitrators cannot delegate their core decision-making functions (van der Meulen et al., n.d.). Their mandate is personal, based on the parties' trust in their judgment. Relying excessively on AI, particularly for substantive analysis or formulating the award's reasoning, could be seen as an impermissible delegation (Esports Legal News, 2025; Global Arbitration Review, 2025). The

\*LaPaglia\* case highlights this risk: the claimant argued the arbitrator effectively abdicated his adjudicative role to ChatGPT (Esports Legal News, 2025).

To avoid violating the non-delegation principle, human oversight is critical. Arbitrators using AI must remain in control, actively supervising the AI's work, verifying its outputs, and exercising independent judgment (Herbert Smith Freehills, 2025; CIArb, 2025). AI should be a tool to assist, not replace, the arbitrator. Guidelines emphasize that the final decision and reasoning must be the arbitrator's own ((Solhchi & Baghbanno, 2023; SVAMC, 2024; CIArb, 2025). This requires arbitrators to understand the AI tool's capabilities and limitations, critically evaluate its suggestions, and be prepared to justify the award based on their own analysis of the evidence and law. Transparency supports this: disclosing AI use signals that the arbitrator is aware of the tool's involvement and, implicitly, has managed its role appropriately.

#### **Emerging Soft Law and Best Practices**

In the absence of hard law, the arbitration community is developing soft law and best practices through guidelines from professional organizations. These guidelines, while not binding, serve as influential standards of expected behavior. They attempt to strike the balance between innovation and fundamental principles of adjudication. Here we distill the best practices emerging from these instruments:

(a) Non-Delegation Principle: All guidance emphasizes that an arbitrator's mandate is personal and nondelegable (Vniversitas, 2025). The SVAMC Guidelines put this front and center: AI may assist with tasks (data organization, transcription, even suggesting draft language), but the actual analysis of facts, application of law, and reaching of conclusions must be done by the human arbitrator (SVAMC, 2024). This ensures the award's reasoning is truly the product of human judgment. It draws a line at using AI for anything outcome-determinative. The VIAC's Note echoes this, stating arbitrators must retain full control over any decision impacting the case and "shall not delegate any such decision to an AI tool" (VIAC, 2025). The practical implication is that arbitrators should use AI like they would use an assistant or clerk – to support their work, not to perform the core evaluative work. If an AI suggests a result (say, which party should prevail on liability), the arbitrator must independently scrutinize the entire record and come to their own determination, not simply accept the AI's suggestion. By formalizing non-delegation, these guidelines seek to preserve the human element as essential for legitimacy and enforcement. It aligns with the reasoning that only human decision-making was contemplated by the parties and required by public policy (Esports Legal News, 2025; Global Arbitration Review, 2025).

(b) Transparency and Disclosure: Both the SVAMC (2024) and CIArb (2025) Guidelines stress transparency of AI usage as a cornerstone. The recommended best practice is that before using AI in a significant way, arbitrators should inform the parties. For example, if a tribunal wants to employ an AI to summarize witness testimonies or to conduct legal research, the tribunal should disclose this plan, and ideally obtain party agreement (SVAMC, 2024). Even if formal consent is not sought, at minimum parties should have a chance to object or comment (SVAMC, 2024). The rationale is straightforward: it prevents any party from later claiming they were caught off guard or prejudiced. The CIArb Guideline (2025) in fact suggests that such consultations can be made part of procedural discussions (which many arbitrators have now adopted, as noted earlier) (CIArb, 2025; SVAMC, 2024). In instances where disclosure in advance isn't feasible (perhaps the arbitrator turned to an AI tool mid-deliberation upon encountering a complex issue), the guidelines would counsel disclosure afterwards, e.g., in the award or to the parties before finalizing the award. It's interesting that CIArb's Article 9 on Transparency encourages consultation throughout the proceedings whenever AI is used (CIArb, 2025), suggesting this is not a oneoff notice but a continuing obligation to keep parties informed of any new significant AI involvement. As a result, arbitrators following these best practices are far more likely to maintain the confidence of both parties, as everything influencing the decision is out in the open.

https://academia.edu.pk/

|DOI: 10.63056/ACAD.004.02.0255|

(c) Verification and Control (Human Oversight): A recurring theme is that arbitrators must apply critical oversight to any AI outputs - in other words, trust but verify. The guidelines urge that no AI-generated content should be adopted blindly. The SVAMC Guideline 7 and CIArb provisions remind arbitrators that ultimate responsibility for the content of the award rests with the human (SVAMC, 2024; CIArb, 2025). In practice, this means if an arbitrator uses an AI tool to draft a section of the award or to find a case, the arbitrator must meticulously check that section or case for accuracy and relevance before incorporating it (Herbert Smith Freehills, 2025). The hallucination problem has made arbitrators wary; these best practices formalize that wariness into an obligation of diligence. This is comparable to a judge reviewing and editing a draft prepared by a clerk – the final product must be the judge's considered work. One guideline suggests arbitrators document their independent verification, for example by keeping a list of AI outputs and how each was cross-checked, in case questions arise later (Herbert Smith Freehills, 2025). The VIAC Note similarly notes that participants are "responsible for the outputs of any AI tools they use" (VIAC, 2025), underscoring that blame cannot be shifted to the machine. This principle also covers algorithmic bias: arbitrators should be cautious and perhaps adjust for any perceived bias in an AI's suggestion (for instance, if an AI tool seems to always side with respondent's arguments in a contract interpretation, the arbitrator should scrutinize whether that's due to skewed data). Maintaining active human judgment at every step is seen as an antidote to the opacity of AI.

(d) Maintaining Judgment and Deliberative Autonomy: The guidelines also counsel arbitrators to use AI only in subordinate roles and never in a way that overrides their own judgment. The CIArb Guideline explicitly prohibits using AI to make substantive decisions or rulings, reinforcing that AI should not influence the outcome beyond what the arbitrator consciously decides (CIArb, 2025). If, say, an AI analytic tool predicts a damages amount, the arbitrator must not just adopt that; they could use it as a reference point but would need to apply their mind to the evidence of damages and possibly come to a different figure if warranted. The arbitrator's reasoning in the award should not be "the computer said so," but should reflect human logic and legal standards. Guideline commentary from SVAMC and CIArb often use language like the arbitrator's independent analysis must underpin the outcome (SVAMC, 2024; CIArb, 2025). This is aimed at avoiding situations where one might later read an award and suspect it was computer-generated; instead, the award should read as a product of legal reasoning that the arbitrator could explain and defend personally.

(e) Confidentiality and Data Security Measures: A component of best practices that intersects with our previous section is ensuring AI tools are used in a manner consistent with confidentiality. The SVAMC Guidelines advise arbitrators and parties to use only AI tools that are secure and to prevent unauthorized access to sensitive data (SVAMC, 2024). In effect, arbitrators should treat AI like any other service provider under confidentiality undertakings. The guidelines might, for example, discourage using popular public AI chatbots (which might store input data on servers) and instead encourage using local or enterprise solutions or ones specifically designed with privacy for legal use. By highlighting this, the guidelines ensure that transparency about AI use does not equate to sacrificing the privacy of the proceedings. They also reassure parties that the introduction of AI will not leak their secrets—an important trust factor.

(f) Party Autonomy and Agreement: The soft law documents often mention that parties are free to agree on how AI should be used. CIArb notes that parties "have autonomy to agree on the use of AI in the arbitration" (CIArb, 2025). This could mean parties might mutually agree to allow the tribunal to use an AI without constant disclosure (perhaps in low-stakes matters to save time), or conversely agree to prohibit any AI use. It's a reminder that these guidelines provide default expectations, but if all parties are on the same page, that consensus can override default rules (as long as basic due process is still observed). Practically, however, parties rarely negotiate such points in advance, so the guidelines fill the default position: assume transparency and human oversight unless told otherwise (Zabala-Balladares et al., 2024).

https://academia.edu.pk/

|DOI: 10.63056/ACAD.004.02.0255|

Collectively, these best practices from SVAMC, CIArb, VIAC, and others constitute a soft-law "roadmap" for integrating AI in arbitration. They do not carry the force of law, but they are highly persuasive. Arbitral tribunals that deviate from them do so at their peril, as their awards might face greater scrutiny. On the flip side, adherence to these practices could serve as a shield: if an award is challenged for AI usage, an arbitrator (or enforcing court) can point out that the process followed well-recognized guidelines ensuring fairness (CIArb, 2025). In time, we may see these principles codified. For instance, the ICCA (International Council for Commercial Arbitration) may issue a formal report or guidelines consolidating these points – much like ICCA did for data protection in arbitration. Indeed, just as the ICCA-IBA Roadmap to Data Protection (2022) helped arbitrators navigate GDPR concerns in proceedings, one could envision an "ICCA-IBA Roadmap on AI in Arbitration" emerging that builds on SVAMC/CIArb and gets broader community endorsement. The trajectory is clear: soft law is leading, and formal law is likely to follow.

#### **Empirical Perspectives: Attitudes of Practitioners and Real-World Examples**

To complement the doctrinal and normative analysis, it is instructive to consider how arbitrators and practitioners are actually engaging with AI and what their attitudes are. Empirical data, though still limited, sheds light on the readiness of the arbitration community to accept transparency obligations and highlights where concerns lie.

One principal source is the 2025 QMUL–White & Case International Arbitration Survey, which specifically polled stakeholders on AI in arbitration. The survey results confirm that usage of AI is expected to grow significantly in the near term, especially for tasks like factual and legal research, data analytics, and document review (Queen Mary University of London & White & Case, 2025). A striking 90% of respondents anticipated using AI for those purposes, indicating broad acceptance of AI as a support tool (Queen Mary University of London & White & Case, 2025). This suggests that outright resistance to AI is low when it comes to efficiency-oriented tasks. However, the survey also captured a nuanced view: there is "strong resistance" to using AI for tasks requiring discretion and judgment, which are seen as the arbitrator's fundamental domain (Queen Mary University of London & White & Case, 2025). In fact, many respondents approve of arbitrators employing AI for administrative or organizational tasks (like scheduling or transcription) but are uncomfortable with AI being used to evaluate the merits or decide outcomes (Queen Mary University of London & White & Case, 2025). This aligns with the non-delegation principle we discussed; it appears to be a widely shared instinct, not just a theoretical idea.

The survey also highlights practitioners' concerns and preconditions for AI use. The top drivers for using AI were saving time (54%) and reducing costs (44%) (Queen Mary University of London & White & Case, 2025), reflecting efficiency motives. Yet, the biggest obstacles cited were the risk of AI errors or bias (51%) and confidentiality/security concerns (47%) (Queen Mary University of London & White & Case, 2025). Over 38% also noted regulatory gaps as an obstacle (Queen Mary University of London & White & Case, 2025), meaning they are wary of using AI in a vacuum of clear rules. Notably, there was a "tempered enthusiasm": users are interested in AI's benefits but desire clear guidelines and transparency in its use (Queen Mary University of London & White & Case, 2025). The survey explicitly found that the arbitration community's enthusiasm for AI is "tempered... by the desire for transparency, clear guidelines and training on the use of AI" (Queen Mary University of London & White & Case, 2025). This is an empirical confirmation that supports imposing disclosure obligations – the community itself is asking for transparency to feel comfortable with AI.

Another empirical insight comes from an informal 2024 survey of arbitral institutions reported at the ICCA Congress in Hong Kong. It found that most institutions (out of 11 surveyed) were not yet using AI in case administration or decision-making, although they were open to integrating it (Tam, 2024). Among those that did use AI, the usage was typically in internal administrative processes (like marketing or

https://academia.edu.pk/

|DOI: 10.63056/ACAD.004.02.0255|

preliminary data sorting), not in the arbitral decision process itself (Tam, 2024). This indicates that as of 2024, the direct use of AI in rendering awards was very rare – \*LaPaglia\* being an outlier that caught attention precisely for that reason. However, the openness suggests that as comfort levels grow and guidelines mature, institutions might begin pilot programs (for example, using AI to generate draft procedural orders or to analyze party submissions for key issues). One arbitrator, Winnie Tam SC, provided a real-world example where at SCIA they used AI to prepare draft templates of decisions to improve efficiency, but with the arbitrator retaining full control (Tam, 2024). She emphasized that this made work more efficient while ensuring the "autonomy and responsibility of decision-making remain with the arbitrator" (Tam, 2024). This anecdote illustrates how AI can be practically and acceptably deployed: as a time-saver that does not threaten due process because the arbitrator remains in charge and presumably would disclose this practice to parties (especially in SCIA, which is known for tech-forward but transparent approaches).

We also see practitioner commentary and debates reflecting a cautious optimism. Many arbitration practitioners acknowledge that AI can help manage caseloads and reduce human error (like missing a key case or misreading a huge evidentiary record) (Solhchi & Baghbanno, 2023), but they often add in the same breath that there must be human verification and fairness checks. For example, in various forums (webinars, articles), arbitrators have asked: if I use an AI tool to draft part of my award, should I tell the parties? The prevailing sentiment in these discussions is yes, you should – not only to avoid any ethical pitfalls but also to protect the award from later criticism. In one practitioner survey by Herbert Smith Freehills (2023) on AI in dispute resolution, a majority of respondents agreed that an arbitrator should disclose AI use if it materially assisted in decision-making (Herbert Smith Freehills, 2025). This shows an emerging norm among the community itself, even before any rules compel it.

The LaPaglia case, although singular, has had a ripple effect in terms of empirical "data" on attitudes. After the news broke of the challenge, multiple arbitration blogs and think-pieces appeared, largely taking the view that the arbitrator's alleged secret use of ChatGPT was problematic and avoidable. A Global Arbitration Review piece (2025) reported that many practitioners were unsurprised an arbitrator experimented with AI, but were surprised it was done wholesale and without disclosure (Global Arbitration Review, 2025). The general reaction could be summarized as: AI is a tool arbitrators can use, but they must own the outcome and be upfront about it. No prominent voices are advocating for a ban on AI in arbitration; rather, they advocate for caution and transparency.

On the other side of the coin, it's worth noting if any empirical evidence suggests negative impacts of transparency obligations. So far, there's little to indicate that arbitrators feel unduly burdened by the idea of disclosure. In a 2024 practitioner roundtable, some arbitrators expressed concern that revealing AI use might invite unnecessary challenges or affect the perception of their awards ("Will a party take my award less seriously if they know I used an AI to help draft it?"). This is a valid psychological concern – parties might be tempted to blame an unfavorable outcome on the AI usage. However, this is precisely why explainability is important: if an arbitrator explains that the AI was used for a narrow purpose and that the arbitrator independently confirmed everything, it limits a party's ability to cast doubt. Over time, as these practices normalize, parties might even expect a brief statement in awards akin to an "AI use note." For instance, an award might include: "The Tribunal utilized an AI-driven research tool to assist in identifying potentially relevant case law. All such case law cited in this Award was reviewed by the Tribunal and determined to be appropriate and applicable." If this becomes standard, parties likely won't view it negatively—much as they don't view the use of legal databases or clerks negatively.

In conclusion, empirical evidence suggests that the international arbitration community is receptive to AI as an efficiency tool but insists on maintaining human control, fairness, and transparency. The concerns about errors, bias, and confidentiality are real but are seen as manageable through careful oversight and

https://academia.edu.pk/

|DOI: 10.63056/ACAD.004.02.0255|

clear guidelines. The prevailing attitude supports, rather than resists, the kind of disclosure and explainability obligations discussed in this paper, viewing them as necessary safeguards for trust and legitimacy in the age of AI.

## METHODOLOGY

This study employs a mixed methodology, combining doctrinal legal analysis with an empirical review of current practices. Doctrinal research was conducted through an analysis of primary legal instruments and rules governing international arbitration. This includes the text of the New York Convention (United Nations, 1958) and UNCITRAL Model Law, which set the framework for enforcement and due process in awards, as well as national arbitration statutes and recent court decisions interpreting those norms. Institutional arbitration rules (such as those of the ICC, LCIA, SIAC, ICSID, and AAA/ICDR) were examined to determine whether and how they address (or might be interpreted to cover) the use of AI by arbitrators or parties. Particular attention was given to any provisions on tribunal deliberations, evidence-taking, or award reasoning that could implicitly impose or conflict with transparency obligations. For example, English arbitration law's due process protections (e.g., Arbitration Act 1996, s. 68) and comparable provisions in other jurisdictions were analyzed as they might apply to undisclosed AI assistance (Arbitration Act 1996).

In parallel, the research surveyed emerging soft-law and guidance documents. Key sources include the Silicon Valley Arbitration & Mediation Center (SVAMC, 2024) Guidelines on the Use of AI in Arbitration, the Chartered Institute of Arbitrators (CIArb, 2025) Guideline on AI, and a practice note by the Vienna International Arbitral Centre (VIAC, 2025) on AI in proceedings. These instruments, though not binding, reflect consensus best practices and were analyzed to extract principles on non-delegation of decision-making, disclosure duties, explainability, and data confidentiality. The study also considered the draft ICSI–UNCITRAL Code of Conduct for Arbitrators (2023), which, while not AI-specific, enshrines the duty not to delegate decision-making functions (van der Meulen et al., n.d.). Reading these sources comparatively allowed identification of common themes and recommendations for handling AI in arbitration.

To incorporate empirical insights, the methodology included reviewing arbitration community surveys and reported attitudes. Notably, the 2025 Queen Mary University of London/White & Case International Arbitration Survey was analyzed for data on AI adoption, perceived benefits, and concerns (Queen Mary University of London & White & Case, 2025). This survey of over 2,400 arbitration practitioners offers quantitative evidence of how AI is currently used (e.g., 90% expect to use it for legal research or document review) and the chief concerns (e.g., 51% cite risk of AI errors/bias, 47% cite confidentiality risks) (Queen Mary University of London & White & Case, 2025). Such data help ground the discussion in the practical realities and reservations of users. Furthermore, a case study approach was used with \*LaPaglia v. Valve\* (2025) as a focal example, examining court filings and commentary on that case. The allegations, arguments, and judicial treatment in \*LaPaglia\* provide a concrete scenario to test theoretical norms. Additional anecdotal evidence – for instance, accounts of arbitrators using AI tools to draft sections of awards or to manage evidence – were gathered from conference reports and legal media (Tam, 2024). These inform the analysis of how transparency obligations could function in practice.

By triangulating doctrinal sources, soft-law guidelines, survey results, and case studies, the research aims to produce a well-rounded understanding. The analytical approach taken is both descriptive and normative. First, the paper describes the current state of the law and practice: what rules exist (or don't exist) regarding AI in arbitration, and how practitioners are actually approaching AI. Second, it critically evaluates gaps and challenges, asking whether current frameworks adequately protect fairness when AI is used. Finally, it proposes normative recommendations based on the synthesis of these findings. The

methodology's blend of qualitative and quantitative sources ensures that conclusions are not only legally sound but also practically informed. It should be noted that empirical data on AI in arbitration is still limited given the novelty of the topic; thus, the study leverages the most recent available information (up to 2025) and acknowledges that perceptions may evolve rapidly as technology and its regulation advance.

## FINDINGS / RESULTS

The research findings indicate that international arbitration law stands at a critical inflection point regarding the integration of AI into decision-making, and that a balanced framework of mandatory disclosure and explainability obligations is both necessary and feasible. Several key results emerge:

**Current Gap vs. Emerging Norms:** There is a clear gap in existing "hard" legal frameworks – neither the New York Convention, UNCITRAL Model Law, nor major institutional rules currently explicitly regulate or even acknowledge AI-assisted reasoning in arbitrations. Despite this, a consistent set of norms is emerging through soft-law instruments and practice: arbitrators should not delegate decision-making to AI; any substantive use of AI should be transparent to parties; and arbitrators must maintain human oversight and responsibility (CIArb, 2025; SVAMC, 2024). These norms, while not yet codified in binding rules, have gained wide support from bodies like SVAMC, CIArb, VIAC, and influential practitioners, effectively forming a \*lex mercatoria\* of AI governance in arbitration.

**Feasibility of Mandatory Obligations:** Imposing mandatory disclosure obligations for AI use is practical and can be formulated in a limited, arbitration-friendly way. The results suggest that a rule requiring tribunals to inform parties whenever AI is used to evaluate evidence or generate any part of the tribunal's reasoning would safeguard due process without undue burden. Such disclosures can be handled within the arbitration (preserving confidentiality) and timed to avoid delay (e.g., discussed at procedural conferences or noted in awards). Empirically, users indicate they want this transparency – it demystifies the process and allows parties to raise concerns timely (Queen Mary University of London & White & Case, 2025; SVAMC, 2024). The finding is that transparency is seen not as a luxury, but as a prerequisite for trust in AI-assisted arbitration.

**Explainability as a Due Process Tool:** The concept of explainability – ensuring that any AI influence on an award can be understood and interrogated by humans – emerged as a crucial complement to disclosure. Mandatory explainability could mean that if an AI tool was used, the tribunal must provide an explanation either of how the AI was used or of the logic behind the AI-derived input. The research shows this is achievable: arbitrators can, for instance, append AI outputs to the record or describe their methodology (e.g., "the tribunal asked an AI to summarize witness X's testimony and then verified the summary against the transcript"). This allows parties and reviewing courts to scrutinize the AI's role. Explainability obligations thus directly enhance due process by ensuring that the basis of the award's reasoning remains transparent and challengeable on the merits, rather than hidden behind a black-box (SVAMC, 2024).

**Preserving Arbitration's Advantages:** Crucially, the results indicate that these obligations need not undermine confidentiality or efficiency, as long as they are narrowly tailored. Confidentiality is maintained by keeping disclosures internal (between parties and tribunal) and by insisting on secure AI tools (SVAMC, 2024). Efficiency is preserved by limiting obligations to material AI uses and integrating them into normal procedure (for example, case management discussions and reasoned awards, rather than separate satellite processes). Indeed, transparency can prevent efficiency loss by heading off post-award challenges (a lesson drawn from the \*LaPaglia\* case, where the lack of disclosure led to court litigation) (Esports Legal News, 2025). The findings underscore a positive synergy: clear upfront disclosure can inoculate awards against later procedural challenges, thereby reinforcing finality – a core efficiency goal.

**Doctrinal and Empirical Convergence:** Another result is the notable alignment between doctrinal principles and practitioner attitudes. Doctrinally, principles of natural justice and party autonomy support requiring notice of extrinsic information influencing a decision. Empirically, surveys and commentary show practitioners broadly concur that undisclosed AI use would be unfair and potentially unacceptable (Queen Mary University of London & White & Case, 2025; Global Arbitration Review, 2025). There is no significant constituency arguing to keep AI usage secret; rather, the debate is about how best to disclose and manage it. This convergence means that any new rules implementing disclosure/explainability are likely to gain legitimacy and adherence in practice, rather than being seen as burdensome. Essentially, the arbitration community is primed to accept and implement such obligations, as they align with its shared values of fairness and accountability.

**Recommendations for Implementation:** Synthesizing the above, the research results point toward specific recommendations. For arbitrators, even ahead of formal rules, the best practice is clear: use AI cautiously, disclose its use, and document your independent verification (Herbert Smith Freehills, 2025; CIArb, 2025). For institutions, the findings support updating arbitration rules or at least issuing guidance notes to formalize these expectations (e.g., an ICC practice note on "Arbitration and AI" adopting SVAMC/CIArb principles). For lawmakers and international bodies, a perhaps modest but meaningful step would be to incorporate commentary in legislative guides or model law revisions clarifying that hidden AI reliance could be a breach of procedural justice. The result of these steps would be a more resilient arbitration process: one that leverages AI's benefits under a framework that preserves the parties' trust and the enforceability of awards.

In conclusion, the results confirm that mandatory disclosure and explainability obligations are not only warranted to safeguard due process in the age of AI, but they are also workable within the arbitration paradigm. The key is calibrating the obligations to be effective yet not overbroad. The evidence suggests that the international arbitration community can implement these measures in a way that maintains the delicate equilibrium of confidentiality, efficiency, and fairness that defines arbitration.

## **DISCUSSION / ANALYSIS**

The above findings invite a deeper discussion on how best to implement these obligations in practice and what their broader implications might be for international arbitration. Striking the right balance is crucial: too lenient a regime could fail to prevent "algorithmic injustice," while overly strict rules might stifle beneficial innovation or conflict with party autonomy.

One major discussion point is how formal and enforceable these obligations should be. One approach is to incorporate them into arbitrator codes of ethics and institutional rule-books, effectively making them part of the agreed arbitration framework. This has the advantage of clarity and enforce ability: if an arbitrator fails to disclose AI reliance, it could be considered a breach of the rules, possibly giving rise to challenges under existing provisions for procedural irregularities. For instance, if the ICC Rules were amended to require disclosure of AI assistance, a violation could trigger Article 34 of the Model Law or New York Convention Article V(1)(d) as a departure from agreed procedure (United Nations, 1958). However, this raises the question of enforcement and sanction. Would every failure to disclose AI be grounds to annul an award, or would courts apply a harmless error test (only annul if the non-disclosure actually prejudiced the party)? Likely the latter, to avoid frivolous challenges. Thus, an implementation nuance would be crafting standards for materiality – perhaps requiring a showing that the AI-influence was significant and that the lack of disclosure deprived the party of the chance to address a point, in order to set aside the award. This ensures that trivial or inadvertent non-disclosures don't unravel otherwise valid awards.

Another approach is using "soft enforcement" via tribunal discretion and cost implications. For example, tribunals could voluntarily adopt protocols (or parties request them) where if a party or arbitrator fails to

https://academia.edu.pk/

|DOI: 10.63056/ACAD.004.02.0255|

abide by agreed AI transparency (say a party uses AI to generate a brief and doesn't disclose it, resulting in false citations), the tribunal can penalize that behavior in costs or evidentiary weight. This would incentivize compliance without immediately involving courts. The empirical evidence of community support suggests that many arbitrators would willingly comply out of reputational and ethical concerns alone. Indeed, ex ante party agreements (perhaps via institutional model clauses) on AI transparency could become part of arbitration clauses in tech-heavy industries, signaling that the parties desire and consent to these obligations from the outset.

A critical aspect of implementation is protecting arbitrator deliberative secrecy while enforcing transparency. This might require careful delineation: arbitrators should disclose what external inputs (including AI) they used, but not how each arbitrator weighed them or any details of deliberation discussions. For instance, a tribunal statement "we used AI tool X to draft an initial summary of the contract; we then deliberated and reached our conclusions" reveals the tool's use but not the internal back-and-forth among arbitrators. Some arbitrators might worry that even that much disclosure invites intrusive scrutiny. But as mentioned, this is analogous to disclosing reliance on a treatise or expert consultation – it can be done factually, without revealing any arbitrator's personal stance during deliberations. Over time, a standard form of disclosure might emerge, much like standard wording for conflict of interest disclosures. If widely adopted, it would normalize the practice and quell arbitrators' fears that such transparency reflects negatively on their work.

The discussion also extends to party behavior. If parties know an arbitrator is using AI (or might use it), will that change how they present their cases? One could argue it might encourage parties to likewise engage AI to bolster their presentations (e.g., using AI to test their arguments or predict the tribunal's leanings). That in itself is not problematic, as long as what is submitted is accurate and any AI-derived analysis by a party's team is also explained and validated. Parties might also tailor their submissions to help an AI – for example, providing structured summaries or data sets hoping the arbitrator's AI tool will process them favorably. This dynamic is speculative but interesting: a transparent AI environment could create a sort of "meta strategy" layer. However, since ultimately humans decide, the best strategy remains presenting convincing arguments on the merits.

From a policy perspective, adopting these obligations reinforces fundamental principles without undoing arbitration's advantages. It shows that arbitration can adapt to technological change proactively and responsibly. Some critics of arbitration might argue that private tribunals using AI could become unaccountable "black boxes," but our discussion demonstrates the opposite: with mandatory transparency, arbitration could in fact become a model for how to integrate AI into adjudication responsibly. In some way, international arbitration might leap ahead of national courts in this regard. (Many state courts are grappling with whether judges can or should use AI for drafting opinions or sentencing decisions; arbitration can implement rules faster through party agreement or institutional change.) This could bolster the legitimacy of arbitration in the public eye, countering any notion that it's a secretive process. In investor-state arbitration, for instance, where transparency is a growing norm, disclosing AI use would likely be expected by states and civil society alike as part of procedural openness.

We must also consider future developments: AI is evolving rapidly. Today's obligations might need recalibration tomorrow. For example, if "explainable AI" techniques improve, arbitrators might rely on AI that can show its reasoning graphically or in plain language. In that case, the explainability obligation might shift from the arbitrator providing an explanation to the arbitrator verifying the AI's built-in explanation for accuracy. Or if, hypothetically, parties someday agree to use an AI "co-arbitrator" (a far-fetched but debated concept), then the disclosure would be inherent and different safeguards (like a human veto over any AI suggestion) would need to be codified. The current obligations should be seen as minimum safeguards that can be built upon. The discussion thus acknowledges that flexibility should be

maintained – possibly through guidelines rather than hard-and-fast rules at the outset, so that adjustments can be made as technology and consensus evolve.

In conclusion, the discussion affirms that imposing disclosure and explainability duties is not only doctrinally sound but practically achievable in international arbitration. The arbitration community's receptiveness, the alignment with existing principles of fairness, and the adaptability of arbitration rules all favor such a reform. The key will be careful implementation: ensuring that in making arbitration more transparent with respect to AI, we do not inadvertently open back doors to frustrate awards or burden the process. The evidence suggests that, if properly scoped, these obligations will strengthen the arbitral process by preventing misuse of AI and preserving the parties' confidence that even as we introduce algorithms into arbitration, the process remains firmly anchored in human judgment and justice.

## CONCLUSION

The advent of artificial intelligence in adjudicative processes poses one of the most significant new challenges – and opportunities – for international arbitration in the 21st century. This paper set out to answer how, and to what extent, arbitration law should impose mandatory disclosure and explainability obligations when AI-generated or AI-assisted reasoning materially informs an award. Through a comprehensive analysis of legal frameworks, soft-law guidelines, case studies, and practitioner attitudes, the inquiry yields a clear answer: international arbitration should embrace narrowly-tailored mandatory obligations that ensure transparency of AI use and preserve human accountability, thereby safeguarding due process without undermining arbitration's core benefits.

Firstly, the research underscored that due process and fairness considerations compel a certain level of transparency whenever AI meaningfully contributes to decision-making. Parties have a right to know the bases of the tribunal's decision and to be heard on all inputs that inform the outcome. An undisclosed AI tool – effectively acting as an uninvited, opaque "assistant" – is incompatible with those rights. As demonstrated by the \*LaPaglia v. Valve\* case, non-disclosure of AI reliance can give rise to allegations of procedural unfairness and excess of powers (Esports Legal News, 2025; Global Arbitration Review, 2025). The conclusion drawn is that to maintain the legitimacy and enforceability of awards, arbitrators must disclose any significant use of AI during the arbitral proceedings or in drafting the award's reasoning. This disclosure can be crafted as a rule or guideline that triggers when AI outputs go beyond mere clerical help and enter the realm of substantive analysis or fact-finding.

Secondly, the paper concludes that explainability obligations are a necessary complement. It is not enough for a tribunal to state "we used an AI" – the parties (and potentially enforcement courts) should be provided with a minimally sufficient explanation of what the AI was used for and how its output was handled. The research showed that this might be as simple as including a paragraph in the award or a procedural order detailing the use and confirming human oversight. Such explanations demystify the process and allow any potential issues (e.g., an AI-produced factual error) to be identified and addressed. Crucially, explainability ensures that the award's reasoning remains traceable to human judgment, even when AI tools have played a supporting role.

Thirdly, the analysis established that these obligations can be implemented without sacrificing arbitration's traditional advantages of efficiency and confidentiality. Transparency can be managed within the confines of the arbitration, and disclosure requirements can be integrated into existing procedural milestones. Far from hindering efficiency, upfront transparency about AI use can actually enhance it by preempting costly and time-consuming post-award challenges based on procedural secrecy (Esports Legal News, 2025). The empirical data confirms that practitioners desire this transparency and believe it can coexist with arbitration's core features (Queen Mary University of London & White & Case, 2025).

Ultimately, the paper advocates for a proactive and principled approach. International arbitration should not wait for crises like \*LaPaglia\* to force reactive changes. Instead, institutions, practitioners, and lawmakers should collaboratively develop clear rules and guidelines now. These should mandate disclosure of substantive AI use, require basic explainability, reaffirm the non-delegation principle, and insist on human verification of AI outputs. Adopting such standards will bolster trust in the arbitral process, ensure its continued relevance in an AI-driven world, and uphold the fundamental commitment to fairness and due process that underpins the legitimacy of any adjudicative system. By embracing transparency and accountability, international arbitration can harness the benefits of AI responsibly, ensuring that technology serves justice, rather than obscures it.

## LIMITATION AND STUDY FORWARD

The analysis is principally doctrinal and leans heavily on emerging soft-law instruments and a single emblematic case (LaPaglia v Valve), so its normative conclusions rest on a still-thin evidentiary base. Empirical inputs are restricted to recent practitioner surveys and anecdotal reports; the authors themselves acknowledge that reliable usage data are "still limited given the novelty of the topic" and may shift quickly as both technology and regulation evolve.

Moreover, the study's global sweep forces a necessarily general treatment of national laws; jurisdictionspecific nuances—particularly in enforcement courts—remain under-explored. Finally, because most hard-law frameworks do not yet mention AI, many findings are predictive, measuring prospective risks rather than observing tested outcomes, which may affect their external validity.

Study Forward. Future research should pair the paper's normative roadmap with longitudinal, mixedmethods work: (i) track real-time adoption of AI by tribunals and institutions across key seats to test whether transparency measures curb challenges; (ii) undertake comparative case studies once courts begin ruling on awards that disclose (or conceal) AI assistance; (iii) build quantitative datasets linking disclosure practices to enforcement results; and (iv) experiment with "sandbox" procedural rules inside leading institutions to gauge how calibrated disclosure thresholds affect cost and duration. Parallel technical research—especially into verifiable, explainable AI modules—would supply the evidentiary depth currently missing and allow doctrine to evolve alongside the tools it seeks to govern.

## CONFLICT OF INTEREST AND ETHICAL STANDARDS

The authors declare unequivocally that no personal, financial, or institutional relationships exist that might be perceived as influencing the research presented here. The work received no external funding, and none of the authors holds consultancies, equity, or board memberships in entities that could gain from the study's conclusions. The article is entirely original, free from plagiarism, and has not been submitted elsewhere. Because the inquiry is purely doctrinal and desk-based, it required no experiments on humans or animals; consequently, no ethical-review approval or informed-consent documentation was necessary. All sources have been appropriately cited, and the research adheres to the highest standards of academic integrity, transparency, and responsible scholarship.

## ACKNOWLEDGEMENT

We extend our gratitude to the faculty and staff of the Department of Law, IBADAT International University, for providing access to library resources and constructive feedback during the drafting stages. We also thank the anonymous peer reviewers whose insights helped refine the manuscript. Any remaining errors are our own.

https://academia.edu.pk/

#### **AUTHOR'S CONTRIBUTION**

Conceptualization & Supervision: **Dr Mohadas Mehboob** originated the research idea, framed the overall study design, and provided continuous scholarly guidance.

Methodology, Doctrinal Analysis & Writing – Original Draft / Review: Hazrat Usman (Assistant Professor, Department of Law, Mohi Ud Din Islamic University) and Attique Ur Rehman (Lecturer, Department of Law, IBADAT International University Islamabad, Pakistan) developed the comparative legal framework, conducted the primary doctrinal and empirical analysis—including the LaPaglia v. Valve case study—and prepared and critically revised successive manuscript drafts to ensure coherence and analytical rigour.

Data Curation & Technical Support: **Sidra Zakir** (LLB Student, Mohi Ud Din Islamic University) compiled the database of AI-related arbitral materials, managed citation software, and formatted the manuscript and reference list to meet journal requirements.

All authors discussed the findings, contributed to interpreting the results, approved the final manuscript, and agree to be accountable for its accuracy and integrity.

### REFERENCES

Arbitration Act 1996, c. 23 (UK). https://www.legislation.gov.uk/ukpga/1996/23/contents

- Chartered Institute of Arbitrators (CIArb). (2025). Guideline on the Use of Artificial Intelligence in Arbitration. [URL not provided in source]
- Deng, W., Yang, H., Ma, L., Li, W., & Wang, G. (2024). Explainable Legal Judgment Prediction via Concept Tree and Concept Forest Reasoning with Collegiate Bench Mechanism. <u>https://doi.org/10.3233/faia240152</u>
- Esports Legal News. (2025, May 16). LaPaglia v. Valve: Arbitrator Accused of Outsourcing Decision to ChatGPT. https://esportslegal.news/2025/05/16/lapaglia-v-valve-chatgpt/
- Global Arbitration Review. (2025, May 17). LaPaglia v Valve: The Fallout from an Arbitrator's Alleged ChatGPT Use. [URL not provided in source]
- Herbert Smith Freehills. (2025, March). AI-volution in Arbitration: the new Chartered Institute of Arbitrators guidelines. Arbitration Notes. https:// www.herbertsmithfreehills.com/notes/arbitration/2025-03/ai-volution-in-arbitrationthe-newchartered-institute-of-arbitrators-guidelines
- Kluwer Arbitration Blog. (2024, June 27). JAMS Publishes Artificial Intelligence Arbitration Rules, but Are They Fit for Purpose? https:// arbitrationblog.kluwerarbitration.com/2024/06/27/jams-publishes-artificialintelligence-arbitration-rules-but-are-they-fit-for-purpose/
- Lin, C.-C., & Cheng, P. (2024). Legal Documents Drafting with Fine-Tuned Pre-Trained Large Language Model. https://doi.org/10.48550/arxiv.2406.04202
- Pyć, D. (2024). Zastosowanie systemów sztucznej inteligencji w arbitrażu morskim. *Prawo Morskie*, 41– 54. <u>https://doi.org/10.24425/pm.2023.147844</u>
- Queen Mary University of London & White & Case. (2025). 2025 International Arbitration Survey: Adapting Arbitration to a Changing World. [URL not provided in source]
- Santos, H. R., & Gómez, R. H. (2024). Traducción de Culturemas con Sistemas de Traducción Automática Basados en IA. *Estudios y Perspectivas Revista Científica y Académica*, 4(3), 2734-2736.
- Silicon Valley Arbitration & Mediation Center (SVAMC). (2024). SVAMC AI Guidelines (First Edition). https://svamc.org/wp-content/uploads/SVAMC-AI-Guidelines-First-Edition.pdf

https://academia.edu.pk/

- Solhchi, M., & Baghbanno, F. (2023). Artificial intelligence and its role in the development of the future of arbitration. *International Journal of Law in Changing World*, 2(2), 56–76. https://doi.org/10.54934/ijlcw.v2i2.56
- Tam, W. (2024, May 11). ICCA Hong Kong 2024: Technological Horizons. Kluwer Arbitration Blog. https://arbitrationblog.kluwerarbitration.com/2024/05/11/icca-hongkong-2024-technologicalhorizons/
- United Nations. (1958). Convention on the Recognition and Enforcement of Foreign Arbitral Awards (New York Convention). https://uncitral.un.org/en/texts/arbitration/ conventions/foreign arbitral awards
- van der Meulen, A., Purice, M., & Bianchi Ferran, C. (n.d.). UNCITRAL Working Group III finalises Draft Code of Conduct for Arbitrators in International Investment Disputes. Freshfields Bruckhaus Deringer Risk & Compliance. Retrieved May 25, 2025, from https:// riskandcompliance.freshfields.com/post/102iews/uncitral-working-group-iii-finalisesdraft-codeof-conduct-for-arbitratorsin-int
- Vienna International Arbitral Centre (VIAC). (2025, April). VIAC Note on AI. https:// www.viac.eu/wpcontent/uploads/2025/04/VIAC-Note-on-AI.pdf
- Vniversitas. (2025). The Use of Artificial Intelligence in Arbitration: Friends with Benefits. Vniversitas, 74. https://revistas.javeriana.edu.co/files-articulos/VJ/74(2025)/ 6722763004/index.html
- Schmitz, A. J. (2006). Untangling the Privacy Paradox in Arbitration. *Social Science Research Network*, 1211. <u>http://scholarship.law.missouri.edu/cgi/viewcontent.cgi?article=1592&context=facpubs</u>
- Vitente, A. C., Escuadra, C. J. T., Regino, J., & Rotor, E. R. (2023). Editorial: The Use of Artificial Intelligence (AI)-Assisted Technologies in Scientific Discourse. *Philippine Journal of Physical Therapy*, 1–3. <u>https://doi.org/10.46409/002.hnuy6271</u>
- Solhchi, M., & Baghbanno, F. (2023). Artificial intelligence and its role in the development of the future of arbitration. *International Journal of Law in Changing World*, 2(2), 56–76. https://doi.org/10.54934/ijlcw.v2i2.56
- Zabala-Balladares, K. L., Moncayo-Morlas, N. K., Jiménez-Andrade, W. G., & Ros-Álvarez, D. (2024). Ética y responsabilidad en el uso de la inteligencia artificial en procesos judiciales [Ethics and responsibility in the use of artificial intelligence in judicial processes]. 3(especial2), 239–246. https://doi.org/10.62574/bdvzg165