

EMBRACING THE MACHINE: HOW NEW TECHNOLOGIES ARE RESHAPING INTERNATIONAL ARBITRATION

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The legal profession has long been cautious in its embrace of innovation. Yet the past few years have shown that even the most traditional corners of law—international arbitration included—can no longer afford to ignore the transformative power of technology. What began as emergency adaptation during the COVID-19 pandemic has now matured into a lasting structural shift. From virtual hearings to AI-enhanced document analysis, the future of arbitration will not be handwritten on paper—it will be shaped by the tools that are trained, coded, and processed.

Counsel's AI Toolkit: From Admin to Strategic Insight

To understand the transformation underway, one must begin where much of arbitration begins: in the counsel's war room. The rise of AI has quickly moved beyond filing logistics or remote hearings into areas that cut to the heart of legal strategy and case building. Counsel teams, now routinely pressed by both cost and time pressures, are leveraging AI at every stage of arbitration. In document production, they turn to predictive coding tools that can review, classify, and prioritize enormous volumes of disclosure with startling speed. What was once the task of a room full of junior associates for weeks is now compressed into hours. These tools do not merely search for keywords. They learn. They cluster themes, recognize repeated fact patterns, and flag unusual outliers.

Consider a typical construction dispute involving thousands of project emails, technical reports, and meeting notes. An AI-powered review tool might identify that every mention of "delay" in the correspondence is statistically likely to appear alongside references to "Supplier X." No one had noticed the link before. Suddenly, the legal team has a clearer path to building its factual narrative.

These insights go beyond mere speed. Some tools generate interactive issue maps or communication timelines from raw data—allowing counsel to narrow focus, plan strategy, and prepare for witness interviews more effectively.

Legal research is also undergoing a profound shift. Traditional research methods, often involving days of manual database review, are being supplemented by AI-driven systems that understand context. Feed in the core facts of your case and the model does not just return search results—it suggests relevant authorities, doctrine, or even

comparative law principles. While risks like hallucinations and jurisdictional blind spots remain, the promise is immense.

Drafting, too, is evolving. First-pass memorials, procedural histories, exhibit lists, and submission summaries can now be prepared with AI assistance. Lawyers are not delegating thinking, but accelerating production. Instead of starting from a blank page, they begin from a structured output and refine from there.

Even during hearings, AI is quietly present. Teams now rely on real-time AI transcription tools (e.g., Verbit, Otter.ai) to highlight testimony discrepancies or cross-reference a witness's answer with prior exhibits on the fly. In high-value construction disputes, quantum and delay experts are supported by predictive AI tools that model counterfactual timelines or simulate valuations across different assumptions—enhancing expert reports' credibility and clarity.

And then there is strategy. Arbitration funders and claimants are increasingly turning to AI-powered analytics to model case outcomes and likely settlement bands. These models digest data from prior awards, tribunal composition, seat-specific enforcement patterns, and more. While no algorithm can guarantee a win, they offer a sharper lens through which clients can decide whether to arbitrate, settle, or walk away.

Arbitrators: From Paper Stacks to Prompt Engineering

The arbitrator's role, too, is shifting. While the decision-making mandate remains personal and non-delegable, AI tools can dramatically reduce the burden of digesting voluminous submissions. Tribunal members are increasingly using AI summarisation engines to condense hundreds of pages of pleadings into side-by-side overviews of each party's position. These are especially valuable in large-scale investor-state or complex commercial arbitrations, where disputes involve overlapping claims, multiple respondents, or parallel proceedings.

AI can also assist arbitrators in identifying inconsistencies in the factual record. Some tools are capable of extracting all statements made by a particular witness across different submissions, highlighting contradictions or gaps. In arbitrations involving recurring issues across many contracts (e.g., in construction or insurance disputes), AI can flag when a tribunal's draft reasoning diverges from its own earlier findings—helping ensure consistency and reducing the risk of annulment or enforcement challenges. For example, in a construction arbitration involving several sub-contracts, the tribunal may have already found that a particular delay event was not on the critical path in one part of the case. If a later draft section of the award treats that same event as critical, AI can identify this inconsistency before the award is finalised.

Some arbitrators are even training personal AI assistants on their prior awards, writing style, and preferred templates. These assistants can help generate first drafts of procedural orders or summarise the parties' positions, allowing arbitrators to focus their time on legal reasoning and case analysis. Just as tribunal secretaries have long provided support under supervision, so too may AI “copilots” take over repetitive tasks—if used transparently and ethically.

The Fine Line Between Support and Substitution

But with these innovations come serious questions. The closer AI moves toward substantive reasoning, the more it enters dangerous territory. The use of generative AI in award drafting must be handled with the utmost care. Once an arbitrator relies on AI to phrase legal conclusions or weigh facts, questions of transparency and legitimacy arise. Who really decided the case? Was the losing party given an opportunity to address reasoning that may have been crafted by a machine?

This is not merely a theoretical concern. In *LaPaglia v. Valve*¹, a party sought to vacate an arbitral award, arguing that the arbitrator had improperly used AI during drafting. The complaint cited unexplained factual claims and language patterns inconsistent with the record. While the case did not resolve the issue conclusively, it raised the unsettling question: who authored the award—the tribunal, or the tool? If the reasoning of an award is perceived as machine-generated rather than tribunal-crafted, parties may doubt whether the arbitrators genuinely engaged with the evidence and arguments. Such doubts can undermine confidence in the fairness of the process and provide fertile ground for annulment or enforcement challenges.

The risks are manifold. If AI introduces arguments, authorities, or facts not raised by the parties, due process is at stake. Arbitrators may be unable to explain why certain arguments or findings—originating from AI rather than the record—found their way into the award. If arbitrators rely on AI in ways they cannot meaningfully explain or defend, their reasoning becomes opaque. And if the parties sense that their dispute was decided by an "invisible fourth arbitrator," trust in the process is eroded.

That said, AI can and should play a role in arbitral administration. Institutions such as the ICC and SIAC have already adopted digital case platforms like Case Connect and SIAC Gateway, improving case tracking, e-filing, and communication. These platforms do not decide cases—but they make arbitration more efficient and accessible. They represent the acceptable face of AI: structure without substance, facilitation without substitution.

In the end, the best analogy may still be the one that compares AI to a junior trainee. Fast, eager, occasionally brilliant—but also prone to misunderstanding, overconfidence, and sometimes outright error. Just like with a trainee, supervision is key.

The challenge for the arbitration community is to draw the line carefully. Used wisely, AI can reduce burden, enhance clarity, and even improve the quality of reasoning by freeing human minds for what they do best: judgment. But the legitimacy of arbitration rests not on efficiency, but on the confidence that decisions are made by people, not prompts. The future of arbitration is not artificial. It is augmented.

¹ See *LaPaglia v. Valve Corp.*, available at: <https://www.acerislaw.com/wp-content/uploads/2025/04/LaPaglia-v.-Valve-Corp.pdf>

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