Kluwer Arbitration Blog

2024 in Review: Technology

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In 2024, the relationship between arbitration and technology continued to resemble a thriller. While integrating technology into arbitration offered the promise of new opportunities, it also introduced new layers of complexity, both in terms of procedure and in terms of disputes arising from technology itself.

Arbitration-Related Technology

Arbitration-related technology is ever-developing, as are the thoughts of arbitration practitioners on what this technology can achieve. 2024 was no different, with various contributors sharing their views on how technological developments will change the way we think about (or do) arbitration. In the short term, technological developments appear to be focused on incremental improvements, rather than radical changes, to the way arbitrations are run. To borrow a phrase from one pair of contributors, there has been more of an "evolution" than a "revolution." In the long term, however, contributors have suggested that we need to rethink the way we approach arbitration and technology altogether to avoid extinction. Only time will tell how we view the role of technology in arbitration. Perhaps time will also tell how technology views us.

Online Dispute Resolution Platforms

In 2024, Online Dispute Resolution ("ODR") platforms gained traction, with the goal of simplifying case management and reducing costs. For example, the Australian Centre for International Commercial Arbitration and the Singapore International Arbitration Centre both developed ODR solutions that gained attention.

Artificial Intelligence

As was the case in 2023, the integration of artificial intelligence ("AI") into arbitration kept reshaping the field in 2024, with advancements in generative AI tools, such as HeyGen, Generative Adversarial Networks (GANs), and real-time deepfake technology underscoring AI's potential. At

the same time, they continued raising ethical and procedural concerns. For a succinct introduction to these technologies and their potential applications—and implications—in arbitration, consider reading this piece from our ongoing Arbitration Tech Toolbox series.

The Good

As was discussed here, over the past year, AI-driven technologies have been increasingly used by arbitral tribunals, institutions, and counsel to assist with tasks such as document review, document drafting, and data analysis. For example, a comprehensive survey of arbitral institutions prepared on the sidelines of the ICCA Congress Panel on AI in Hong Kong, revealed a cautious yet steady adoption of AI by arbitral institutions. Given that these tools can process large datasets with superhuman speed and precision, they pave the way for practitioners to focus on more substantive issues.

In 2024, AI-powered tools also showed their virtue in arbitrator selection, through their capability of using algorithms to analyze historical case data and identifying suitable candidates. This data-driven approach can bring objectivity into what has traditionally been seen as a subjective process.

Another notable advancement was the emergence of Emotion AI, which can detect real-time emotional cues to enhance communication, facilitate settlements, and reduce human biases during arbitration proceedings. However, while promising, these applications also raise important questions about privacy and ethics.

One contributor took a step further and delved into the concept of AI as an arbitrator, a phenomenon that seems to have promise, especially when it comes to the appointment of arbitrators in so-called straightforward cases. Proponents suggest that such mechanisms could lower costs and expedite dispute resolution. However, there remain valid concerns about transparency and the potential loss of nuanced human judgment when utilizing such tools.

The Bad

While promising, these developments brought forth challenges that demand attention. Key concerns were raised here, here, and here. For example, there is the black box problem, where the lack of transparency in AI's decision-making processes raises accountability concerns by making it difficult to understand how the AI tool reached its conclusion. Perpetuating biases embedded in training data remains another risk, potentially skewing outcomes. Confidentiality and security were also highlighted as critical and at risk, particularly in remote hearings, where technologies like deepfakes could compromise the integrity of witness testimonies. High development costs, limited access to relevant data, and the risk of perpetuating stereotypes further complicate AI's broader adoption in arbitration, especially when it comes to using AI in areas such as arbitrator selection.

And the Future

Contributors highlighted different strategies that gained momentum to address these challenges in

2024. Tools for detecting deepfakes and advancements in explainable AI (as a counterweight to the black box problem), gained ground. Education and awareness-raising among stakeholders, and updated arbitration protocols were also pinpointed as essential to preparing practitioners for AI's integration. One contributor, in particular, pointed out that we should not be "looking to deploy AI to do what we already do—just more efficiently—by replacing existing decision-makers with AI programs." Instead, we should explore different ways to deploy AI, such as by using it "to provide 'neutral evaluations' of likely outcomes, based on previous decisions."

Some arbitral institutions led the way. The Silicon Valley Arbitration & Mediation Center ("SVAMC") published guidelines to mitigate risks, such as AI-generated errors, and ensure procedural integrity. Meanwhile, the Stockholm Chamber of Commerce ("SCC") Arbitration Institute put together its *Guide to the use of AI in cases administered under the SCC Rules*, offering best practices for users and tribunals alike. These institutional initiatives are setting the stage for responsible AI adoption and are looking to ensure that AI's integration enhances arbitration without compromising its core values of fairness, impartiality, and transparency.

On the regulatory front, frameworks such as the European Union AI Act are expected to influence the adoption of AI in arbitration. The Act emphasizes transparency, safety, and accountability, and aims to lay a foundation for responsible AI use. One contributor pointed out that while its direct impact on arbitration is still to be seen, it serves as a timely reminder of the need to align AI innovation with good governance.

Technology-Related Arbitration

So far, we have discussed arbitration-related technology. We now turn to technology-related arbitration topics.

Intellectual Property Disputes

Last year, the issue of arbitrability of intellectual property ("IP") disputes was questioned as "[a] [c]oncern of the [p]ast" due to the prevailing international trend toward arbitrability beyond just contractual or infringement claims. Reference was made to the latest arbitration statistics from the WIPO Arbitration and Mediation Center (from 71 new cases in 2014 to 679 in 2023).

However, it was also noted that the position concerning the validity of IP rights remains in flux, with some jurisdictions (e.g., South Africa) prohibiting the arbitration of certain types of IP disputes altogether. It was noted that the position in European Union countries may be influenced by the new unitary patent system introduced on 1 June 2023, which includes the Unified Patent Court ("UPC") and Patent Mediation and Arbitration Centre ("PMAC"). The PMAC's ability to resolve patent disputes does not allow it to "revoke or limit a patent." Instead, the power to "confirm the terms of any settlement or award by consent that revoke or limit a patent" is reserved for the UPC.

The Blog also had the pleasure of reporting on the CIArb-IPOS Conference in Singapore, a conference dedicated to the resolution of disputes concerning IP. Amongst the various topics covered, it was noted that there have been various national and institutional initiatives aimed at

facilitating the resolution of disputes concerning IP. These include the WIPO-Singapore ASEAN Mediation Programme announced in January 2024, which provides funding for mediation of applicable disputes and the Singapore IP Strategy 2030 aimed at making Singapore "a global-Asia node of technology, innovation, and enterprise." But it has been noted that issues remain, such as with respect to valuing intellectual property, especially given that they often: (1) are new and have limited market history or uncertain commercialization prospects; and (2) to the extent there is market information, often relate to a group of intellectual property, making it difficult to isolate the value of the specific one(s) in dispute.

Beyond IP: Emerging Areas

With respect to the broader geopolitical context, one contributor looked into the intersection of AI, national security, and international law, exploring how these dynamics could give rise to technology-related disputes. In particular, the increasing use of regulatory measures by countries, sometimes ostensibly on national security grounds, could encroach on the rights and expectations of foreign investors (e.g., the U.S. and India's ban on TikTok, and Colombia's effective ban on Uber). It was opined that investment treaty protection could be one way to partially safeguard foreign investments but only time will tell how effective this can be.

Finally, JAMS introduced rules to apply to disputes involving AI—unlike those guidelines from the SVAMC and SCC discussed above which govern the use of AI in disputes. The key features of the rules center around protecting the information and trade secrets inherent in AI systems. This includes a process for producing and inspecting "any AI systems or related materials" which relies on an expert to review the same without providing access to the counterparty or its counsel. Another feature is the application of a protective order, unless the parties otherwise agree to different protections.

Conclusion

The above summarizes what we saw (and what our contributors commented on) at the nexus of arbitration and technology in 2024. The pace of change in this field is rapid and we await the unpredictable turn of events 2025 is sure to bring.

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