Innovating arbitration through technology

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Report on a session by the Arbitration Committee at the 2019 IBA Annual Conference in Seoul

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Session chairs

Andre Abbud *Barbosa Müssnich & Aragão, São Paulo*

Noradèle Radjai *Lalive, Geneva*

Speakers

Paul Cohen *4-5 Gray's Inn Square Chambers, London*

Justin D'Agostino *Herbert Smith Freehills, Hong Kong*

Rishab Gupta *Shardul Amarchand Mangaldas & Co., Mumbai*

Jennifer Permesly *Skadden Arps Slate Meagher & Flom, New York*

Noradèle Radjai opened the session by remarking that technology has already transformed the way we arbitrate, but the pace of change is quickening. This has also sped up the pace of the dialogue about such technology, making it even harder for most practitioners to follow these developments.

Nonetheless, she cautioned against adopting a passive attitude toward technological advancements as doing so could be professionally dangerous and could result in missed opportunities. Rather, she said, practitioners should realise that understanding the new technological tools that are already available can offer them a competitive advantage.

Against this backdrop, the IBA Arb40 subcommittee (co-chaired by Radjai and Andre Abbud) launched its project on technological resources for arbitration practitioners. The subcommittee identified different technological tools that can improve or enhance different aspects of the arbitration process and presented them in a convenient format on the **IBA website (/technology-resources-for-arbitration-practitioners.aspx)**. This session gave panelists an opportunity to present the challenges and opportunities that these technologies can bring to practitioners.

Introduction to the IBA Arb40's technological resources webpage and tools on case management/presentation

Jennifer Permesly, who led the technological resources project on behalf of the subcommittee, began by observing that the main reasons practitioners do not use new technology are:

- they often think it will be easier to just keep doing things the way they always have even when new, more effective ways become available;
- practitioners simply are unaware of the new technologies.

It was this second issue that Permesly and the IBA Arb40 subcommittee sought to address when they decided to pursue the project on technological resources.

In a nutshell, the project's webpage (which is intentionally not published in print) organises and presents descriptions of a variety of different resources. The information is categorised into eight different categories linked to the type of use for the technologies, such as video and audio conferencing or management and transfer of arbitration data.

Permesly then guided the audience through the category on presentation of graphics and evidence. Users are given a list of different service providers or their tools; clicking on them brings up a short description and a link to the relevant website. She recommended spending some time browsing the categories to get familiar with the tools available so that identification of the right tools will be easier when the need arises.

Permesly next discussed and gave the audience a virtual tour of one featured tool for case management called Opus. This tool allows parties to organise case records in a cost-effective manner, transfer files securely (not through email), collaborate within the system and even automate the entire hearing from that platform (as any exhibits can be accessed). Users may download the files from the platform for printing or annotating on their own private copies or they can annotate directly within Opus through a 'team function', which makes notes only visible to the user and other members of the user's team. In addition, users can exploit automated features within Opus to create standard documents like a joint chronology of events or a who's who list. Overall, case management tools like this have great potential for enhancing cost effectiveness.

Permesly also introduced some tools for case presentation, the purpose of which is to enhance the persuasiveness of counsel's advocacy. Permesly pointed out that, although presentations that make use of visual aids have been found to be 43 per cent more persuasive than those without, studies also show that the human brain cannot effectively read and listen at the same time.

One popular presentation tool featured on the technological resources project webpage is Prezi, an alternative to PowerPoint with templates designed to automatically cause users to be more attentive. For example, it prevents the presentation creator from include more than three points on a page. Permesly opined that use of

this kind of product is going to become more and more necessary because people's ability to focus is changing due to the information overload encountered on a daily basis in modern society. She said this is especially so for millenials, who have learned to subconsciously disengage when not interested in content.

Permesly encouraged audience members to give the new tools a try in one of their upcoming cases and take advantage of what they have to offer.

Biglaw and document review platforms

Justin D'Agostino began his remarks by addressing the meaning of legal technology in the context of arbitration. He said it generally refers to technology that facilitates the handling of documents and is often called 'e-discovery'. This includes technology for gathering documents at the forensics stage, processing and storing that data, analysing and reviewing the data and then presenting it to the tribunal as part of the advocacy and supporting evidence at a hearing.

D'Agostino expressed his confidence that, in the future, references to legal technology will not just refer to document review technology and platforms. As support, he cited an example of software developed by Herbert Smith Freehills that will give clients chances of success, probable outcomes and settlement ranges for different stages in a case. However, he said, most tools like this are still in the development stage.

The adoption of document review technology in arbitration is necessitated by the massive amount of data involved in major cases. In order to avoid the cost and time of reviewing all these documents, an innovative solution is required. When you get the technology right, D'Agostino said, it promotes efficiency, enhances accuracy (removing human error) and it reduces costs. D'Agostino noted that there are numerous market players for all of the different main segments of the legal technology market, many of which are vying to become the dominant market player in their segment, but at the moment there are very few such dominant providers or products.

Relativity is a product used by D'Agostino's firm which, in simple terms, allows users to tag documents in the arbitration in relation to the issues that the document relates to, the author of the document, the language of the document, and so on. The powerful thing about Relativity, he said, is that it allows users to tailor all of these attributes for each case. However, it is very difficult for attorneys to become skilled at Relativity in addition to all of their other responsibilities, and D'Agostino's firm has a specialised team that customises the use of the program on a case-by-case basis.

D'Agostino explained that there are real challenges to embedding this sort of technology into a firm's international arbitration practice, as it requires structural change to internal teams and significant training. Also, one concern is that such technology favors parties with deep pockets, but D'Agostino noted that potential prejudice against smaller-scale clients or law firms is a perennial issue in the law.

D'Agostino next turned to considerations of what he expects that the future of document review will hold. He said that artificial intelligence has always been discussed in connection with technology for disputes, and this has always been linked to the controversial issue of whether it will make lawyers obsolete. D'Agostino stressed that such technology is some time away and 'not just around the corner'. The machine-learning technology being currently employed is only a developing component that falls within the wider scope of artificial intelligence, he said. Predictive coding is a type of machine learning that is being used quite significantly, and even courts, such as the UK High Court, are employing predictive coding 'very deliberately' in resolving disputes.

D'Agostino concluded that, with respect to artificial intelligence technology, although there is a great deal coming down the line, he considers that such technology is still in its infancy. Meanwhile, the document review technology is already very sophisticated and detailed, and clients are demanding that law firms use it in the vast majority of cases.

Is arbitration ready for virtual reality and augmented reality?

Rishab Gupta opened his remarks by emphasising his overall theme: while virtual reality and augmented reality are not being commonly used in arbitration at present, they may be very useful tools in the future.

Gupta then introduced the three different technologies he would be discussing: graphical representation of evidence, augmented reality and virtual reality. He only briefly addressed graphical representation of evidence as it is something practitioners already commonly use (eg, PowerPoint or Prezi) to enhance the persuasiveness of their presentation.

Augmented reality is the superimposition of computer-generated graphics in a user's view of the real world. One (amusing) example of augmented reality is the Pokémon Go game, which immerses participants in a particular situation. Automobile spare parts companies use augmented reality often to show their consumers exactly what they are selling. Without opening the hood of the car, they can show images of what lies beneath the hood.

Virtual reality is a 'cousin' of augmented reality (according to speaker Paul Cohen's article). It creates an immersive setting that replaces the viewer's actual view of the world around him with a virtual view of the world around him. The viewer puts on a headset and can experience a completely different environment, such as an underwater diving situation or a mountain climbing situation.

The key question for purposes of this session, Gupta noted, is how virtual reality may be used in international arbitration. In that regard, he said finding examples from arbitration would be difficult given the confidential nature of proceedings; however, he cited an example of a court that used virtual reality in March 2018 in Beijing. In that case, there was a criminal trial and one of the witnesses effectively reenacted the crime scene using virtual reality so that he could tell the court how the accused entered the room and attacked the victim, and how he as a witness intervened. Using virtual reality, what the witness is imagining is shown on a screen that is viewable to the court, making it easier for the lawyers and judges to imagine precisely what happened at the crime scene.

Gupta explained that one possibility for the use of virtual reality in arbitration is in connection with site visits. Although site visits are not particularly common in arbitration, they do occur from time to time. Gupta cited the well-known example of the *Indus Waters Kishenganga Arbitration (Pakistan v India)*, where a seven-member tribunal conducted site visits on two separate occasions and had to travel to Indian-administered Kashmir to determine the level of construction of a hydroelectric power plant. Gupta opined that replacing the site visits with the use of virtual reality would have been exceptionally cost-effective and would have saved a lot of time.

Another example offered by Gupta of a way in which virtual reality could be employed in arbitration is the virtual hearing. He said most people imagine this would be similar to something like the Jedi Council in Star Wars. Gupta predicted that this use of virtual reality would first happen in meeting rooms and then, after sufficient vetting, would perhaps be adopted in hearing rooms. Gupta noted that if virtual reality is able to eliminate the notable weaknesses of using video conferences for hearings, then it might even be able to eliminate the need for in-person hearings.

In closing, Gupta echoed Permesly's earlier sentiment about having a modicum of courage to use and promote these new technologies. He said that in India, even something as common as real-time transcription has trouble getting approved for use in domestic-seated arbitrations despite the fact that everyone knows the alternative is highly inefficient and ineffective. It will take courage to change such perceptions and promote better practices with regard to adoption of new technology.

The case of instant translation

Paul Cohen first observed that, like the other technological developments discussed during the session, the state of the art with regard to instant translation is what it is but it is evolving extremely fast. What we see today may not at all be what we see tomorrow.

Translation/interpretation is usually done, said Cohen, using the human-intensive method in professional settings. Amusingly, he explained that the science fiction ideal is something like the 'Babel Fish' from *The Hitchhiker's Guide to the Galaxy* fame. The idea is that you place the fish into your ear and, through telepathic transmissions, your brain immediately translates the foreign language into your native language. Cohen opined that the current state of the technology is at about the mid-way point between the human-intensive method and the Babel Fish equivalent, though some may find that hard to believe.

According to Cohen, the progress that has been made thus far with regard to instant translation is thanks to voice recognition software and an online database of languages. There would be no automatic translation if either of these factors was lacking. The key is 'data, data, data, data, data'. Big data has made these developments possible in the following way: machine learning is a system whereby one inputs lots of data into an algorithm, the computer program is taught to recognise that data and come up with correct responses through training it with millions of examples. The more data you input, the more accurate it becomes.

Google Translate's algorithm was changed in 2016 to make it based on machine learning, and people quickly recognised how much better it was than its predecessor. Cohen did a simple experiment using Google Translate to show its accuracy, translating the famous Shakespeare line 'To be or not to be, that is the question' from English to French to Russian and back to English (ie, all Indo-European languages). The result was impressive as the translated English version was almost the same as the original English version (the only difference was that 'that is' was collapsed to 'that's'). On the other hand, the result of an experiment translating the same sentence from English to Chinese and back to English provoked laughter due to its crudeness and inaccuracy: 'Yes or no, this is a problem'.

Cohen did another experiment using a Microsoft instant translation app to show the already advanced current state of the technology. He emphasised that, given the exponential rate of improvement, we are well on our way to a future with highly advanced instant translation capabilities. Cohen remarked that we may be surprised by how fast instant translation capabilities will improve.

Conclusion

In taking stock of the various technological advances that are already affecting the field of international arbitration, the presenters on this interesting and engaging panel provided ample food for thought to the audience.

The panel made clear that in addition to simply understanding the technological developments, it is important to understand the context in which such developments have flourished. This will aid practitioners in spotting the next big development and in grasping where these useful tools fit into the bigger picture of modern international arbitration practice.

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