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DOES ARTIFICIAL INTELLIGENCE HELP WOMEN IN INTERNATIONAL ARBITRATION? A FEW REMARKS ON DIVERSITY IN ARBITRAL TRIBUNALS

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New technologies are transforming international arbitration, with institutions adopting digital tools and case management systems to streamline proceedings. Artificial Intelligence (AI), in particular, is reshaping the field by introducing innovation-driven solutions that enhance efficiency. This article explores AI's role in international arbitration, focusing on its potential to improve gender diversity in the appointment of arbitrators. Specifically, it examines whether AI-based selection tools can reduce discrimination and challenge entrenched stereotypes, such as the dominance of the “male, pale, and stale” profile in arbitral tribunals. The study suggests that AI could mark a turning point by promoting more inclusive selection processes. However, this potential hinges on the development of unbiased, well-programmed AI systems. While AI offers a promising path toward increasing diversity, its effectiveness will depend on its ability to avoid replicating existing biases and ensure fairness in the selection and appointment of women arbitrators.

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1. INTRODUCTION

Innovations are widely used in the legal industry, and international arbitration is no exception in this regard. There are many new solutions that have been implemented for the sake of improving the daily work of arbitral institutions and arbitrators [11]. In addition, innovation-driven technologies, including Artificial Intelligence (AI), are having a significant impact on the legal industry and are even changing the landscape of dispute resolution. As a result, new technologies are widely seen as a way to improve the entire arbitration process through greater efficiency and thus lower costs of the proceedings. Various arbitral institutions worldwide are competing with each other and offering their own solutions, including case management systems. Nowadays, the proper use of such technologies has become a priority for arbitration itself [12].

This article aims to identify the use of AI in international arbitration in general and then to focus on its potential application in relation to the selection and appointment of arbitrators. This begs the question of whether such an AI tool could be seen as improving the level of diversity within the arbitral tribunals and thus reducing the level of discrimination in the appointment of women as arbitrators. One must note that currently there is a stereotype of arbitrators such as “male, pale and stale” [8]. Therefore, it seems crucial to analyze whether the new technologies, including AI, could be seen as a solution to this challenging problem of diversity in international arbitration. Likewise, it is also worth examining whether this AI tool could be recognized as a turning point in the process of selecting and appointing arbitrators.

2. INNOVATIONS IN INTERNATIONAL ARBITRATION

At the outset, it is worth defining the term “innovation” in the context of international arbitration. This raises the question of whether both arbitral institutions and the practice of arbitration as a whole are innovative. Indeed, this question relates to the expected products of such innovation, namely efficiency or effectiveness. Therefore, according to Alex Ryan and Jerry Koh of the MaRS Solution Lab, innovation could be defined as “the invention of a new way of creating significantly more value and the adoption of the invention at scale” [9]. In fact, this definition requires that innovations must represent something novel (that is, something that has not existed before), which leads to a gain in value creation and must turn into the “new normal”. Despite these specific criteria, lawyers are rather hyper-optimistic and call almost

everything an innovation. Even though such a practice is widespread, it is necessary to re-evaluate recent improvements in international arbitration in view of the aforementioned definition of innovation itself. In this light, a new question arises as to whether to classify “compressed timetables/fast tracks, diversity initiatives, publication of awards, regional centres, arbitrator performance ratings, codes of conduct, and evidence disclosure rules” [9]. Even if such changes could be classified as innovation in improving the overall process, many others are more moral and ethical imperatives.

There are many different types of measures that have been adopted in international arbitration. Firstly, the so-called “fast-track proceedings” have been introduced for the sake of shortening the time limits of the entire arbitral proceedings. Therefore, in view of this improvement, it is possible to expedite the appointment of the arbitral tribunal, the organization of the case management conference (CMC), the filing deadlines and even the rendering of the arbitral award. Similarly, under these “fast-track proceedings”, an arbitral tribunal benefits from its discretionary power in view of procedural measures, the appointment of a sole arbitrator and even the means of handling hearings, among others. Such an innovation was introduced by the International Chamber of Commerce (ICC) in 2017. As such, the ICC has amended its rules to include provisions on fast-track proceedings under the name of “Expedited procedure” [9].

Another example is the Prague Rules (also known as the Rules on the Efficient Conduct of Procedures in International Arbitration), which were introduced for the sake of enhancing efficiency and reducing the costs of the arbitral proceedings. Even if they contain practical solutions that are worth watching, they have limited practical implications for international arbitration. Apparently, such a solution may result from the fact that the Prague Rules will only apply if parties so agree or if the arbitral tribunal makes such a decision based on its own initiative (after consultation with the parties involved). In addition, “While the Prague Rules are thus a potentially useful case management tool for skilled arbitrators sitting in cases with sophisticated parties, they also provide a potentially cautionary tale on why the arbitration community threatens to alienate its user base even with initiatives that purport to serve it” [9].

Finally, the innovation-driven technologies had a significant impact on the way disputes are resolved. One of the most important changes relates to the emergence of artificial intelligence in international arbitration.

3. AI TOOLS IN INTERNATIONAL ARBITRATION: PAST EXPERIENCE AND FUTURE CHALLENGES

Innovation-driven technologies and their evolution are changing the landscape of international dispute resolution. In the context of more international, complex and time-sensitive disputes, both private and state parties are choosing to handle their disputes through arbitration. Indeed, this mechanism of dispute resolution based on technology provides many advantages, including those related to privacy, fairness, cost control and even expertise in a particular field. At the outset, simple technologies have been introduced, such as email, digital data maintenance, and online case management platforms. Indeed, such solutions have changed the inter-personal relationships between different actors of the arbitral proceedings. In addition, it is worth remembering that the pace of change within the framework of international arbitration is a next step towards a more pro-technological stance. Therefore, the process of integrating technology into arbitration has become a reality. The COVID-19 pandemic has forced the international community to implement such solutions more quickly to reduce face-to-face interactions between the parties involved in the arbitral proceedings. As a result, rapid and cost-effective mechanisms have been launched to handle disputes during the global pandemic. Even though new technologies, including cloud storage, e-disclosure, and video conferencing, along with online platforms, have been adopted, more advanced technologies are already on their way. A turning point has been reached thanks to the emergence of artificial intelligence (AI), which has simply revolutionized the landscape of international arbitration [4].

Indeed, the AI has provided many interesting tools that are useful in terms of facilitating the day-to-day work of practitioners involved in international arbitration [15]. At the same time, there are many fears and speculations based on claims that AI will replace human judgment [16]. Rather, the current trend should be analyzed from the perspective of improving the arbitral proceedings. Such tools are widely available to arbitration practitioners around the world. In the face of AI, arbitration itself may prove to be more efficient. Against this background, generative AI seems to be a promising tool that not only increases efficiency but also provides deeper insights in addition to a certain level of precision [6]. Even though both lawyers and arbitrators might feel inclined to use AI in drafting their written submissions or arbitral awards, there are no rules governing these issues thus far. The cornerstone has been laid by the Silicon Valley Arbitration & Mediation Center (SVAMC), which released the final Guidelines on the Use of Artificial Intelligence in Arbitration on 30th April 2024. These Guidelines should be seen as providing for

a fair, secure and properly balanced use of AI throughout the arbitration. Importantly, the Guidelines define AI as “any computer system that perform[s] tasks commonly associated with human cognition, such as understanding natural language, recognizing complex semantic patterns and generating human-like outputs” [1].

Indeed, there is no doubt that AI is widely used in international arbitration. Therefore, large language models, commonly known as LLMs, play a crucial role in generative AI. It is worth adding that such LLMs are based on training materials stemming from books, images, and websites. This means that LLMs could be classified as generative pre-trained transformers (GPT) and function as the basis for other platforms such as ChatGPT and Anthropic's Claude. In other words, the generative AI's Natural Language Processing (NLP) has been empowered not only to fully “understand” but also interpret, and even generate language like humans. Apparently, such a feature, albeit not perfect, is realized at a relatively advanced level. In addition, it represents deep “understanding” allowing to identify patterns, relationships and even anomalies in a very short time [6].

Reliance on NLP tools could significantly reduce the workload of lawyers, arbitrators and arbitral tribunals. Apparently, NLP is based on a special type of software that can easily read “natural language”, namely, the human language. In practice, NLP allows for contextualizing the language and gives accurate results in terms of legal texts' analysis. To illustrate, such a tool could properly analyze an arbitration clause and identify both the *lex arbitri* and the *lex loci arbitri*. Likewise, NLP could provide translations of documents in different languages during the arbitral proceedings (Waqar, 2022).

Bearing in mind these features of LLMs, both arbitral tribunals and arbitrators may make use of LLMs on a daily basis for the sake of improving the quality and even efficiency in performing tasks. To illustrate, LLMs may be widely applied in document analysis thanks to search and index tools. Given this feature, it is possible to ask a question concerning a huge document set's content. Compared to tools providing only findings of certain words within the document, this AI can analyze the meaning of the content provided. Therefore, such an AI could facilitate the life of arbitrators dealing with a large set of documents in ongoing arbitral proceedings. An arbitrator may upload such documents and ask AI to make an analysis based on a particular fact. There are also more advanced AI tools which offer the possibility to link sources in the document set. This means that once an arbitrator asks this AI about some facts, he gets the firsthand information through the direct link to the relevant pages in the document. Indeed, such

a solution would be of interest in the case of preparing for a hearing or even during the real-time proceedings [6].

In addition, AI tools have been trained to compare content within various documents. Thus, they can easily speed up the process of finding both similarities and differences in the case. Likewise, an arbitrator may benefit from this AI tool to check whether there are any evidentiary inconsistencies among multiple transcripts. Interestingly, it is worth mentioning AI tools that are specialized in contracts. In practice, such an AI platform helps to identify contract provisions that are spread throughout the entire document [6].

Finally, AI tools can provide a summary of documents in a very short time. Therefore, arbitrators can save time by asking this AI to generate a detailed summary of the needed content, such as a preliminary hearing, for instance. The same applies in the case of timelines. Based on the case analysis, AI can provide a timeline for the ongoing proceedings. As such, there is no need to undergo the entire process manually. AI can identify, compile, and lastly order various data like a human being [6].

Overall, one must note that the use of AI has been analyzed through the lens of enhancing the decision-making process and improving the efficiency of the arbitral proceedings that could be achieved in different ways. AI tools may be useful in providing document review and e-discovery. Through their ability to review a relatively huge amount of data, they may identify the relevant evidence when needed. Indeed, it can reduce both the time and cost compared to the traditional ways. In addition, AI tools are empowered with predictive skills. This means that they can analyze previous arbitral cases and predict the possible outcome in the ongoing proceedings. Likewise, arbitration practitioners may benefit from such AI-powered tools to conduct research in terms of finding case law and precedents in a more efficient way. Through such actions, they can save time and even increase the quality of their legal argumentation. AI seems to be helpful in checking whether there is compliance between arbitral proceedings and applicable laws and regulations. AI also provides solutions to ensure due diligence processes throughout the implementation of mechanisms that can easily discover any probable conflicts of interest. Similarly, AI assists in case management through such actions as automating scheduling, meeting deadlines and managing documents. In addition, there are also AI-driven online dispute resolution (ODR) platforms that provide the possibility to solve disputes fully online based on automated communication alongside much easier negotiations. Interestingly, the proper use of AI can be beneficial in terms of ensuring data security and privacy of arbitral proceedings. AI can easily identify and prevent data breaches alongside authorized

access. Given that, AI should be seen as a tool, taking care to comply with the regulations on data protection. Apparently, there is a consensus that AI should function as a supportive tool in the decision-making process and thus render an arbitral award. One must note, however, that AI can support the decision-making process by analyzing evidence, identifying patterns and even providing information, once needed, to the arbitral tribunals [4]. Such actions, even limited in their scope, should be seen as a response to the overloaded arbitrators who can transfer some lengthy and strictly analytical work to the AI tools.

The above-mentioned applications of AI tools in arbitration seem to be the cornerstone for speeding up the entire process. Many solutions can be easily implemented in the daily work of arbitrators. Considering these examples, it seems that there are no risks in using AI tools in arbitration in this way. In fact, such AI is used only as a tool that does not affect the ongoing arbitral proceedings on the merits of the case. On the contrary, it also provides solutions to facilitate the daily work of arbitrators and arbitral tribunals. Nonetheless, the process of rendering an award is still handled by a human arbitrator. Therefore, such an application of AI tools should be allowed in light of respecting the fundamental principles of arbitration itself.

Even though there are many benefits or advantages of making use of AI in international arbitration, it is also important to pay attention to the challenges ahead. Indeed, any potential risks that may arise in the wake of using AI depend on the context in which such a tool has been implemented. The use of AI within the ongoing arbitral proceedings may result in some challenging procedural issues. To illustrate, the AI may use inaccurate wording while translating documents, which could impact the evidence or even the integrity of the arbitration process. Once there are any problems concerning the due process and fairness of the arbitration itself, it may give rise to possible problems with the enforcement of arbitral awards rendered in such proceedings. Therefore, it seems crucial to follow the newly adopted regulations on these issues, namely the law applicable at the place of enforcement (aside from the law of the seat) alongside the enforceability of any award [4].

Considering these risks, it seems important to use AI tools cautiously within the framework of international arbitration. On the one hand, there is a consensus saying that AI tools may significantly speed up the arbitral process, enhance the credibility and even persuasiveness of the arguments. On the other hand, the misuse of such tools may lead to severe consequences for the parties involved in the proceedings, with an unenforceable arbitral award as a result. This means that AI should still be used cautiously during the arbitration process to avoid possible challenges for that reason.

4. SIGNIFICANCE OF AI SELECTION TOOLS IN APPOINTING WOMEN ON ARBITRAL PANELS

AI also has the potential to appoint arbitrators in the proceedings. Indeed, it is possible to identify both advantages and challenges of such a solution.

Considering advantages, AI tools may easily gather all necessary information related to a potential arbitrator, even that which has been disclosed by the arbitral institutions. The latter refers to the attempts made by arbitral tribunals to enhance transparency during arbitral proceedings. In addition, the analysis of such information would be easier and less time-consuming when made by an AI tool instead of a human being. Importantly, AI could also be helpful in ensuring that an arbitrator is both impartial and independent, alongside having a good reputation on the issues significant from the perspective of the parties involved in the arbitral proceedings. Indeed, using such AI tools may be crucial in reducing potential conflicts of interest and positively impacting the diversity in arbitration. In practice, parties would have the possibility to select their arbitrator from the wider group, given the merits and some more sophisticated criteria. Therefore, personal beliefs and some prejudices would not play any role once this solution is adopted. It is worth stressing that both “Equal Representation in Arbitration Pledge” and “ArbitralWomen” are in favour of such unbiased decisions made on arbitral panels [3].

Daniel Becker and Ricardo Dalmaso Marques point out that “technology may assist the parties in arbitrators’ selection by allowing them to (finally) obtain reliable data regarding their patterns, social and professional networks, as well as previous and current appointments and performances. If properly used, although it may not entirely solve the diversity issue for now, it could become an efficient weapon in the fight for a stronger and more legitimate process of selection and evaluation of arbitrators” [3]. This entails that the parties, arbitral institutions and other arbitrators would still have the power to make final choices on the selection of arbitrators. However, the selection process would be based on reliable data such as the aspects and qualities of arbitrators. It is thus worth remembering that many features of arbitrators could be even unnoticed, unreachable or underestimated during the arbitral proceedings, and AI tools help to fill this gap [3].

On the one hand, the proper training of AI tools may result in positive consequences by providing objective criteria. Given that, it would be much easier to improve and enhance the entire process of selecting and further appointing members of the arbitral tribunal. On the other hand, the key issue is to

find a “golden mean” in teaching algorithms that would be free of biases. Even though the input of proper data should be seen as a response to this challenging problem, there are still many pitfalls ahead. Indeed, the automated decisions still remain far from being classified as “bias-free”. This entails that the international arbitration community should join its efforts in addressing such challenges both carefully and mindfully. Such cooperation would be handled for the sake of avoiding possible backlash in biased appointments. For that reason, sensitive data, including gender, age, ethnicity, religion, and many others, should not be uploaded or used carefully. Thanks to such preventive actions, it would be possible to avoid or at least anticipate undesired outcomes stemming from automated processes [2], [3].

Even though AI may make such decisions, there are some challenges that need to be addressed while dealing with the process of both the selection and appointment of arbitrators by AI tools. To name a few, one of the most challenging issues refers to the objectives of making appointments. On one hand, the arbitral institutions aim to select fair, impartial and robust arbitrators. On the other hand, the parties involved in the proceedings pay much more attention and thus prioritize these arbitrators who are much more predictable in rendering arbitral awards with the expected outcome. In addition, the process of proper AI training would be costly. To tackle this practical problem, arbitral institutions may join their efforts in developing such AI tools which would best fit their needs. Finally, another challenge relates to the available data that are crucial in terms of arbitrator's selection, namely the previous decisions, personal opinions or even biases. Given the historical data on the composition of arbitral tribunals, stereotypes on arbitrators such as “male, pale and stale” may arise as a result. It is worth adding, however, that the SVAMC AI Guidelines touch upon the AI tools and the possibility of their use in the process of selection and appointment of arbitrators. In general, these Guidelines allow such use, but they are against a full reliance on the result provided by an AI. Therefore, according to the SVAMC AI Guideline 1, “without human input or without assessing the AI tool's selection critically and independently or controlling for biases and other limitations” [8].

It is worth noting, after Kabir Duggal and Amanda Lee, that arbitral panels representing the “male, pale and stale” stereotype will, over time, come to be seen as defective, as they do not reflect the composition of society in a broad sense. Where appointments are being made by arbitral institutions of prospective arbitrators, they should propose a more diverse list of arbitrators. Co-arbitrators engaged in choosing a presiding arbitrator should likewise broaden the pool of arbitrators that they consider for selection” [5].

Indeed, the proper training of algorithms plays a crucial role in appointing arbitrators. The problem arises in how to properly define a “suitable or good arbitrator,” as there is no objective definition thus far. Against this background, the AI “may consider a well-ranked arbitrator as one who has a good availability, renders awards fast, etc. Therefore, as an example, the algorithm may understand that it makes more sense to appoint men over pregnant women on temporary leave. Hence, this (unforgivable and mistaken) bias could lower the score and rank of potential female arbitrators” [3].

5. DIVERSITY AS A “GOLDEN MEAN” IN INTERNATIONAL ARBITRATION

Diversity plays a key role in international arbitration due to global interest in this type of dispute resolution [7]. Alongside the global spread of cross-border disputes involving parties from around the world, arbitral panels seem to be rather homogenous in their structure. Therefore, it is widely recognized that “old white males” prevail on arbitral panels globally. One must note that the Stockholm Chamber of Commerce (SCC) even released its statistics on gender diversity in appointing arbitrators in 2019. According to these statistics, women comprised only 23% of appointed arbitrators in cases handled by the SCC. This entails a significant gender imbalance regarding arbitral proceedings and the appointment of arbitrators. It is worth adding, however, that gender is one of the aspects influencing diversity in international arbitration. Indeed, many other characteristics should be considered, such as race, age, geography, language, and ethnicity. To illustrate, “the neutrals roster at the American Arbitration Association (AAA) is approximately 23 per cent diverse for gender and race. A study of closed ICSID cases found that tribunals were composed entirely of all Anglo-European arbitrators nearly half of the time (45 per cent), and only 11 cases (four per cent) were arbitrated by entirely non-Anglo-European panels” [15].

Even though these statistics on gender structure among arbitrators are rather pessimistic, the process of promoting diversity in international arbitration should not only be promoted but also enhanced. Diversity plays a significant role in strengthening the quality, legitimacy and relevancy of the entire arbitral proceedings and impacts the rendering of arbitral awards. According to the ICCA Reports, “gender diversity and inclusion cannot be fully addressed by approaching gender as a binary issue” [13].

From 2015 to 2021, there was a positive trend in appointing women as arbitrators in arbitral proceedings. The rate of women's appointments increased from 12,6% to 26,1%. This is mostly a result of efforts undertaken by arbitral tribunals, which took a proactive stance. Therefore, arbitral institutions nominated women in up to 54% of the cases. Despite this fact, there are still relatively few appointments of women that are made either by the parties themselves or by co-arbitrators. This entails that there is no application of the same trend in appointments made by arbitral tribunals. Given that, women are less often recognized as nominees in the arbitral proceedings [13].

It is worth noting that there are several reasons for opting for gender diversity in international arbitration. Such reasons may be summarized as follows: legitimacy by representation, improved decision-making process, equal opportunities among arbitrators, increased talents and the need to have women in international law.

The first reason refers to the diversity that exists in the arbitral tribunal as a reflection of the parties and practitioners that are involved in international arbitration. Therefore, such diversity aims to strengthen the arbitral proceedings and render arbitral awards. Secondly, diversity existing in the arbitral tribunal may lead to better critical thinking and thus may result in a broader understanding. This entails that through the incorporation of diversity of thoughts, there is a much better quality of decisions issued by the arbitral tribunal. Indeed, it would also result in better outcomes of the entire arbitral process. Thirdly, "Embracing diversity at the tribunal level also promotes opportunities for women practitioners, which in turn provides a more level playing field for their career advancement" [13]. Finally, according to the ICCA Report, throughout the gender diversity landscape, there is an increasing trend of economic growth, which impacts the broader context, including international trade, investment, and arbitration functions. Interestingly, the inclusion of women in arbitral tribunals may also result from the international law obligations which must be fulfilled by the States [13].

Aside from gender diversity, international arbitration should also acknowledge and uphold a diverse and inclusive arbitration community. To achieve this goal, it is important to properly promote many other forms of diversity, which include "cultural, religious, sexual orientation, and disability" [13], among others.

It is worth noting that the International Chamber of Commerce (ICC) in Paris, as a leading arbitration institution worldwide, also encourages diversity in the process of appointing arbitrators.

Furthermore, diversity has even become a key priority for the President of the ICC Court – Claudia Salomon in 2021. Once she said that “Arbitrator diversity in all forms is essential to the legitimacy of international arbitration by ensuring that the arbitrators represented in cases reflect the diversity – and values – of the global business community” (ICC, 2022). Such a trend has been seen in selecting and appointing arbitrators in cases handled by the ICC.

Aside from the ICC, law firms have already taken measures to bridge the gender gap in arbitration, such as gender-based nominations, using anonymized CVs, consultation and compendiums alongside providing education, inclusivity and collaboration. Apparently, law firms have an impact on the list of potential arbitrators. This entails that they can prepare a diverse list that complies with the gender-based requirements. Indeed, the so-called Checklist of Best Practices for the Selection of Arbitrators may be important while selecting an arbitrator based on objective criteria that enhance efficiency and diversity. Furthermore, anonymized CVs could also be seen as a solution to this challenging problem. Apparently, through such an action, it would be possible to mitigate unconscious bias. In the light of such practice, arbitrators would be evaluated and thus appointed in view of their qualifications, experience and expertise instead of personal characteristics [13].

Overall, one must note that diversity is a winner in the implementation of user-based innovation. There are many new networks and initiatives emerging that promote diversity in international arbitration. To name a few, ArbitralWomen was launched in 1993 as a response to a small number of women appointed as arbitrators in the ongoing proceedings. Therefore, it had the aim to increase the presence of female practitioners within the framework of international dispute resolution. In 2018, the Alliance for Equality in Dispute Resolution was established to enhance diversity and inclusivity in arbitration. There are also institutional networks and initiatives such as the ICC's Young Arbitration and ADR Forum (YAAF), Advanced Arbitration Academy Programme and the HKIAC's Women in Arbitration (WIA) [9].

6. CONCLUSION

This analysis concludes that the international community should use AI tools in international arbitration carefully. Even if at first glance, they provide many advantages, which are mostly analyzed from the perspective of cost-effective solutions, they also include many challenges and risks. Although there is a general consensus about the use of AI tools to expedite arbitral proceedings, the negative

consequences of AI cannot be overlooked. In some cases, they may even lead to an unenforceable arbitral award. Given that in mind, AI should be used cautiously in arbitral proceedings to avoid possible challenges based on that reason.

Indeed, AI tools have the potential to put arbitration itself on a new track while dealing with diversity. Therefore, they can be applied in international arbitration for the sake of improving diversity on arbitral panels and thus reducing the level of discrimination in appointing women therein. Nonetheless, the success of such application of AI tools depends on their proper programming, which should be free of biases.

There is no doubt that AI tools can already collect a huge amount of data concerning a potential arbitrator, even that disclosed by the arbitral institutions. Such a new trend would enhance transparency in selecting and appointing arbitrators on the panels. AI could also select an arbitrator who fulfils the requirements on both impartiality and independence with respect to their good reputation on the issues raised by parties involved in the arbitral proceedings. Such application of AI tools should thus be seen as a response in reducing potential conflicts of interest and enhancing the diversity in international arbitration. Despite the introduction of such tools, the final decision on the selection of arbitrators and their appointment on arbitral panels would still be made by the arbitral institutions based on the best qualities of the candidates. AI could analyze data that is often overlooked, inaccessible, or underestimated during arbitral proceedings. To fully benefit from such new technologies, there is a need to provide proper training of AI tools that would be based on objective criteria. In practice, this means that we should find a “golden mean” in teaching algorithms how to provide an outcome that would be free of biases. One idea to tackle this problem refers to the joint effort of the international community to address these challenges both carefully and mindfully. Indeed, such cooperation is needed to avoid any possible backlash in biased appointments. To reduce risks in this regard, sensitive data such as gender, age, ethnicity, religion, and many others should not be uploaded, or they should be used carefully. Throughout the adoption of such preventive actions, it would be possible to avoid or at least anticipate undesired outcomes as a result of automated processes. In addition, there is no accurate definition of a “suitable or good arbitrator” thus far. Against this background, the AI “may consider a well-ranked arbitrator as one who has good availability, renders awards fast, etc. Therefore, as an example, the algorithm may understand that it makes more sense to appoint men over pregnant women on temporary leave. Hence, this (unforgivable and mistaken) bias could lower the score and rank of potential female arbitrators” (Becker, Marques). Despite many

challenges ahead, the introduction of such AI tools could improve the number of women-arbitrators, if AI are trained properly without biases.

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¿AYUDA LA INTELIGENCIA ARTIFICIAL A LAS MUJERES EN EL ARBITRAJE INTERNACIONAL? ALGUNAS COMENTARIOS SOBRE LA DIVERSIDAD EN LOS TRIBUNALES ARBITRALES

RESUMEN

Las nuevas tecnologías están transformando el arbitraje internacional, y las instituciones están adoptando herramientas digitales y sistemas de gestión de casos para agilizar los procedimientos. La Inteligencia Artificial (IA), en particular, está transformando el campo al introducir soluciones innovadoras que mejoran la eficiencia. Este artículo explora el papel de la IA en el arbitraje internacional, centrándose en su potencial para mejorar la diversidad de género en el nombramiento de árbitros. En concreto, examina si las herramientas de selección basadas en IA pueden reducir la discriminación y desafiar estereotipos arraigados, como el predominio del perfil "masculino, pálido y rancio" en los tribunales arbitrales. El estudio sugiere que la IA podría marcar un antes y un después al promover procesos de selección más inclusivos. Sin embargo, este potencial depende del desarrollo de sistemas de IA imparciales y bien programados. Si bien la IA ofrece una vía prometedora para aumentar la diversidad, su eficacia dependerá de su capacidad para evitar replicar los sesgos existentes y garantizar la equidad en la selección y el nombramiento de árbitros.

Palabras clave: inteligencia artificial, mujeres, arbitraje internacional, nombramiento, diversidad

人工智能能否助力女性参与国际仲裁？关于仲裁庭多元化的几点思考

摘要

新技术正在改变国际仲裁，各机构纷纷采用数字化工具和案件管理系统来简化程序。尤其是人工智能 (AI)，它通过引入创新驱动的解决方案来提升效率，重塑了这一领域。本文探讨了人工智能在国际仲裁中的作用，重点探讨了其在仲裁员任命过程中提升性别多样性的潜力。具体而言，本文考察了基于人工智能的遴选工具能否减少歧视，并挑战根深蒂固的刻板印象，例如仲裁庭中“男性化、苍白、陈腐”的形象占据主导地位。该研究表明，人工智能可以通过促进更具包容性的遴选流程，标志着一个转折点。然而，这种潜力取决于开发出公正、程序完善的人工智能系统。虽然人工智能为提升多样性提供了一条充满希望的道路，但其有效性取决于它能否避免复制现有的偏见，并确保女性仲裁员的选拔和任命的公平性。

关键词：人工智能、女性、国际仲裁、任命、多样性