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## TRANSFORMING EVIDENCE ANALYSIS AND DISPUTE RESOLUTION IN THE AI ERA

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### ABSTRACT

Artificial Intelligence (AI) is revolutionizing international commercial arbitration, offering transformative advancements in evidence verification, data analytics, and procedural efficiency. By simulating human intelligence, AI enhances arbitration by streamlining evidence review, anomaly detection, and decision-making. A survey by the International Chamber of Commerce (ICC) revealed that 67% of legal professionals believe AI will have a significant impact on dispute resolution processes like arbitration within the next decade. However, its integration into arbitration raises critical concerns, including the authenticity, security, and confidentiality of sensitive data. This paper examines whether the national and international legal frameworks are equipped to address these challenges and accommodate AI-verified evidence.

In India, legal reforms such as the Bharatiya Sakshiya Adhinayam, 2023, and the Arbitration and Conciliation Act, 1996, demonstrate significant flexibility in recognizing AI-analyzed evidence. These provisions, while not explicitly mentioning AI, empower arbitral tribunals to interpret the inclusion of emerging technologies. Similarly, on the international front, frameworks like the IBA Rules on Evidence and the UNCITRAL Model Law emphasize procedural adaptability but have yet to directly address AI's role.

Despite these advancements, the challenges of AI adoption in arbitration are significant. Risks include biases in AI-generated data, inaccuracies in evidence analysis, and the inability of AI to match the emotional intelligence and impartiality of human arbitrators. Additionally, cybersecurity concerns, as evidenced by the 2015 cyberattack on the Permanent Court of Arbitration and data breaches involving AI platforms like ChatGPT, highlight the vulnerabilities of sensitive arbitration data.<sup>1</sup>

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<sup>1</sup> Iareporter.com. (2015). *Permanent Court of Arbitration website goes offline, with cyber-security firm contending that security flaw was exploited in concert with China-Philippines arbitration* | *Investment Arbitration Reporter*. [online] Available at: <http://www.iareporter.com/articles/permanent-court-of-arbitration-goes-offline-with-cyber-security-firm-contending-that-security-flaw-was-exploited-in-lead-up-to-china-philippines-arbitration/> [Accessed 14 Jan 2025].

## Introduction

The emergence of artificial intelligence has greatly changed many facets of life and the human experience in today's world. Its role in evidence verification is especially crucial for national, international, and comparative laws, particularly within the framework of alternative dispute resolution (ADR). The challenge of verifying evidence using AI certainly impacts the efficiency and accuracy of the process, which subsequently affects the justice system. This scenario calls for a thorough examination of current legal frameworks to assess whether existing national laws and international treaties are sufficiently prepared to accommodate the advancement of AI in evidence verification. For instance, India's legal system has shown a readiness to adopt technological advancements, as seen in recent amendments to its laws and adherence to international standards like the Model Law. Through *Bharatiya Sakshiya Adhinayam, 2023*, India is gearing up to change its legal position on electronic and AI-based verified evidence. The *Bharatiya Sakshiya Adhinayam, 2023*, is a recent piece of legislation that introduces various provisions for electronic evidence that can be verified through AI. Sections 61 and 63<sup>2</sup> of BSA, 2023, have widened the ambit of electronic devices and their authenticity in being used as evidence. It explores the wide array of electronic devices and documents that can be used as e-evidence, which also enhances the scope of AI-generated and analysed evidence. Section 19 of the Arbitration and Reconciliation Act, 1996 allows arbitral tribunals the power to determine the admissibility of evidence, and therefore, the acceptability of AI-based evidence would not pose a problem. This trend in the Indian legal system can determine improvement in the quality of legal services through the implementation of advanced tools available for AI.<sup>3</sup> While these technologies can be integrated with the national legal system, concerns related to the integrity of data and security of evidence persist. In addition, the system may not be immune to dissimilarities or gaps in performance as AI uses algorithms to derive results. The flexible approach to evidentiary rules and the nature of law gives India the wiggle room to allow judicial bodies to permit or deny the acceptance of AI-verified documents in the context of a particular case. Consequently, India can establish and secure a position as a nation ready to unlock the unknown potential of AI; however, through this whole process, the risks of defending data security and avoiding bias in results are integral when dealing with such systems. The Arbitration and Conciliation Act, 1996 offers a significant level

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<sup>2</sup> *Bharatiya Sakshiya Adhinayam, 2023*

<sup>3</sup> Alenezi, A.M. (2024) "Artificial intelligence and foreign investment law arbitration: an analysis of regulatory framework implications," *The Journal of World Investment & Trade*, 25(3), pp. 369-409. Available at: [https://brill.com/view/journals/jwit/25/3/article-p369\\_3.xml](https://brill.com/view/journals/jwit/25/3/article-p369_3.xml). (last accessed on: 7 March 2025)

of flexibility for the interpretation and inclusion of AI-based evidence in the frameworks of Indian legal proceedings. This makes use of the opportunity to propel AI development forward to create an ecosystem in which documents verified by AI could be assessed on a case-by-case basis by the arbitral tribunals<sup>4</sup>. This discretion entails the dynamic nature of the legal process amid the technological enhancements, ensuring that the development potential is taken into account in the context of international arbitration at the same time without compromising its sanctity. Nonetheless, the issues connected with the application of this flexibility create a need for the standardization of the AI evidence, as the absence of meticulous guidelines could result in challenges related to data reliability and biases perpetuated by the AI technologies.

### **International and National Legal Frameworks**

The response of international legal systems to AI-authenticated evidence is both encouraging and careful, particularly in the realm of commercial arbitration. The UNCITRAL Model Law marks a significant advancement by integrating AI considerations into the legal framework, enabling jurisdictions to work together on AI advancements.<sup>5</sup> This model law promotes a flexible system that facilitates the initial acceptance of AI evidence and the implementation of standards tailored to different jurisdictions through organized approaches. The amendments made to the rules of the International Bar Association in 2020 also reflect an awareness of the potential risks associated with AI. Current standardized developments still require higher levels of scrutiny over AI evidence submitted to arbitration bodies as a means of protecting against biases. Consequently, international organizations are continually evolving to address the challenges posed by the AI era while striving to maintain evidentiary fairness and integrity. With regard to the means through which the UNCITRAL Model Law<sup>6</sup> can be improved to foster AI use and related innovation, the involvement of the law in international commercial arbitration represents its primary contribution to realize AI and related technology integration. Given its essential nature, the Model Law possesses a key role in terms of gradual acceptance with regard to AI-based processes. This gradual process is pivotal to securing the essential

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<sup>4</sup> Alenezi, A.M. (2024) "Artificial intelligence and foreign investment law arbitration: an analysis of regulatory framework implications," *The Journal of World Investment & Trade*, 25(3), pp. 369-409. Available at: [https://brill.com/view/journals/jwit/25/3/article-p369\\_3.xml](https://brill.com/view/journals/jwit/25/3/article-p369_3.xml). (last accessed on: 7 March 2025)

<sup>5</sup> Alenezi, A.M. (2024) "Artificial intelligence and foreign investment law arbitration: an analysis of regulatory framework implications," *The Journal of World Investment & Trade*, 25(3), pp. 369-409. Available at: [https://brill.com/view/journals/jwit/25/3/article-p369\\_3.xml](https://brill.com/view/journals/jwit/25/3/article-p369_3.xml). (last accessed on: 7 March 2025)

<sup>6</sup> United Nations (2012). *UNCITRAL Model Law on International Commercial Arbitration (1985), with amendments as adopted in 2006* | United Nations Commission on International Trade Law. [online] Un.org. Available at: [https://uncitral.un.org/en/texts/arbitration/modellaw/commercial\\_arbitration](https://uncitral.un.org/en/texts/arbitration/modellaw/commercial_arbitration) (last accessed on: 7 March 2025)

consistency among several jurisdictions.<sup>7</sup> The specific application of these provisions within India also serves to illustrate the country's pledge with regard to harmonizing its national elements with those established in international practice, with a view to promoting progress in terms of technologies relating to the legal field. The flexibility of the framework also permits the arbitration boards to structure its practices with regard to the submission of evidence via AI and related technologies in a manner that does not contravene the established standards as to fairness and reliability. Such quality allows practitioners to counter possible biases and promote transparency with regard to technological developments and innovations, as evidenced in the proactive nature of the Model Law with regard to achieving a balance between care and innovation<sup>8</sup>.

In 2020, the recent amendment to the International Bar Association's (IBA) rules on considering evidence did not make any specific revisions in rules connecting to AI, but there was a prominent upgrade as provisions related to cyber security and data protection were added (Article 2.2(e))<sup>9</sup> to ensure that proper scrutiny and balance are maintained in international arbitration. It highlighted requirements where proper scrutiny must be maintained and set standards that will ensure that AI processes that require submission of documents that were verified through AI inclusion will not disrupt integrity associated with fairness and objectivity in arbitration.<sup>10</sup> So, the provisions of the guidelines within the amendments focus on the evaluation criteria to be adhered to while assessing the consistency and independence of data generated through AI processes. These sections of the amendments reflect an intention to mitigate the adverse effect of biases, which could be established via AI use during arbitration. In order to tackle the AI bias effect, there are clear provisions that the scrutiny must focus on to enhance the credibility and integrity of arbitration against the influence of bias and to cope with the dynamics of technology. Therefore, as it relates to the AI inclusion impact, the amendments highlighted a progressive shift towards acceptance while maintaining scrutiny in

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<sup>7</sup> Alenezi, A.M. (2024) "Artificial intelligence and foreign investment law arbitration: an analysis of regulatory framework implications," *The Journal of World Investment & Trade*, 25(3), pp. 369-409. Available at: [https://brill.com/view/journals/jwit/25/3/article-p369\\_3.xml](https://brill.com/view/journals/jwit/25/3/article-p369_3.xml). (last accessed on: 7 March 2025)

<sup>8</sup> Alenezi, A.M. (2024) "Artificial intelligence and foreign investment law arbitration: an analysis of regulatory framework implications," *The Journal of World Investment & Trade*, 25(3), pp. 369-409. Available at: [https://brill.com/view/journals/jwit/25/3/article-p369\\_3.xml](https://brill.com/view/journals/jwit/25/3/article-p369_3.xml). (last accessed on 7 March 2025)

<sup>9</sup> IBA Rules on the Taking of Evidence in International Arbitration Adopted by a resolution of the IBA Council 17 December 2020 International Bar Association. (n.d.). Available at: MediaHandler (ibanet.org) (last accessed on 7 March 2025)

<sup>10</sup> Alenezi, A.M. (2024) "Artificial intelligence and foreign investment law arbitration: an analysis of regulatory framework implications," *The Journal of World Investment & Trade*, 25(3), pp. 369-409. Available at: [https://brill.com/view/journals/jwit/25/3/article-p369\\_3.xml](https://brill.com/view/journals/jwit/25/3/article-p369_3.xml). (last accessed on: 7 March 2025)

international arbitration. Scrutiny around AI-verified evidence is crucial, primarily due to concerns regarding security, confidentiality, and inherent biases, which can significantly impact legal outcomes. The integration of AI technologies in legal processes posits challenges such as safeguarding sensitive data, where breaches could undermine the confidentiality essential in arbitration and judicial procedures.<sup>11</sup> Additionally, biases encoded within AI systems present a threat to impartiality, as they can inadvertently skew evidence interpretation and decision-making. This bias is complicated by the opacity often associated with AI algorithms, mandating enhanced regulatory oversight and transparency to prevent prejudiced outcomes.<sup>12</sup> While AI has the potential to enhance efficiency, it also presents risks that necessitate robust procedural safeguards and continuous assessment to ensure integrity and fairness within the legal system. The security issues surrounding AI-verified evidence highlight that potential breaches can significantly jeopardize the legal framework's integrity. Given that AI systems handle vast amounts of sensitive data, they are vulnerable to cyber-attacks, which could lead to unauthorized access and the exposure of confidential information. Such incidents threaten the confidentiality expected in judicial and arbitration settings, raising critical concerns about the trustworthiness of AI-generated evidence. Furthermore, the intricate nature of AI algorithms often leads to unclear decision-making processes, complicating the identification and rectification of unauthorized data alterations. Consequently, it is imperative for regulatory authorities to implement sophisticated security measures and transparent AI verification protocols to safeguard against breaches and maintain the evidentiary integrity vital for legal proceedings.

Highlighting the security issues tied to AI-verified evidence reveals the serious risks that breaches can pose to the integrity of the legal system. AI systems, which handle vast amounts of sensitive data, are susceptible to cyberattacks that could result in unauthorized access and the exposure of confidential information. Breaches like these pose a serious risk to the confidentiality that is crucial in judicial and arbitration environments, raising significant concerns about the reliability of AI-generated evidence systems. Moreover, the intricate nature of AI algorithms can lead to unclear decision-making, complicating the detection and

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<sup>11</sup> Alenezi, A.M. (2024) "Artificial intelligence and foreign investment law arbitration: an analysis of regulatory framework implications," *The Journal of World Investment & Trade*, 25(3), pp. 369-409. Available at: [https://brill.com/view/journals/jwit/25/3/article-p369\\_3.xml](https://brill.com/view/journals/jwit/25/3/article-p369_3.xml). (last accessed on: 7 March 2025)

<sup>12</sup> Choudhury, A. and Asan, O. (2022) "Impact of accountability, training, and human factors on the use of artificial intelligence in healthcare: Exploring the perceptions of healthcare practitioners in ...," *Human Factors in Healthcare*, 2, p. 100021. Available at: <https://www.sciencedirect.com/science/article/pii/S2772501422000185>. (last accessed on: 7 March 2025)

correction of unauthorized data changes. As a result, it is essential for regulatory bodies to establish robust security measures and transparent AI verification processes to protect against breaches and uphold the evidentiary integrity required for legal proceedings.

Confidentiality issues present a significant concern when integrating AI systems within legal frameworks, as these technologies may inadvertently compromise sensitive information. AI's capacity to process and analyse vast amounts of data means that any vulnerabilities could lead to unauthorized access of data breaches, thus undermining the confidentiality vital to legal proceedings.<sup>13</sup> Furthermore, the storage and transmission of data via AI systems introduce additional vectors for potential leaks, challenging legal frameworks to maintain information integrity. While AI's algorithmic opacity complicates security measures, it is crucial for legal practitioners to scrutinize these systems rigorously, ensuring that they adhere to stringent data protection standards.<sup>14</sup> Thus, balancing the advantages of AI technologies with robust safeguards is imperative to uphold the confidentiality that forms the bedrock of judicious legal processes. AI systems are often critiqued for their inherent biases, which can significantly affect the reliability of evidence presented in legal proceedings. These biases largely stem from the data used to train AI, which may inadvertently reflect societal prejudices, thus compromising the neutrality expected in legal contexts. According to studies, the opacity of AI algorithms further exacerbates this issue, as it complicates the ability of legal practitioners to detect and rectify biased outputs.<sup>15</sup> This opacity poses challenges for judicial entities that rely on AI-generated evidence, potentially leading to skewed interpretation and decision-making. As such, both national and international frameworks must prioritize the creation of stringent guidelines to ensure the equitable deployment of AI technologies, aiming to reduce inherent biases and preserve the integrity of legal processes.<sup>16</sup>

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<sup>13</sup> Choudhury, A. and Asan, O. (2022) "Impact of accountability, training, and human factors on the use of artificial intelligence in healthcare: Exploring the perceptions of healthcare practitioners in ...," *Human Factors in Healthcare*, 2, p. 100021. Available at: <https://www.sciencedirect.com/science/article/pii/S2772501422000185>. (last accessed on: 7 March 2025)

<sup>14</sup> Alenezi, A.M. (2024) "Artificial intelligence and foreign investment law arbitration: an analysis of regulatory framework implications," *The Journal of World Investment & Trade*, 25(3), pp. 369-409. Available at: [https://brill.com/view/journals/jwit/25/3/article-p369\\_3.xml](https://brill.com/view/journals/jwit/25/3/article-p369_3.xml). (last accessed on: 7 March 2025)

<sup>15</sup> Alenezi, A.M. (2024) "Artificial intelligence and foreign investment law arbitration: an analysis of regulatory framework implications," *The Journal of World Investment & Trade*, 25(3), pp. 369-409. Available at: [https://brill.com/view/journals/jwit/25/3/article-p369\\_3.xml](https://brill.com/view/journals/jwit/25/3/article-p369_3.xml). (last accessed on: 7 March 2025)

<sup>16</sup> Choudhury, A. and Asan, O. (2022) "Impact of accountability, training, and human factors on the use of artificial intelligence in healthcare: Exploring the perceptions of healthcare practitioners in ...," *Human Factors in Healthcare*, 2, p. 100021. Available at: <https://www.sciencedirect.com/science/article/pii/S2772501422000185>. (last accessed on: 7 March 2025)

## **Assessing the Risks in Security and Confidentiality of AI-Analysed Evidence and AI Arbitrators: A Comprehensive Overview**

AI is expected to reach its peak capabilities in the coming years. Right now, it primarily focuses on gathering and processing information from various sources based on user commands. However, once it achieves a stable state, it can evolve into a more secure and reliable platform for users. In fields like arbitration, the limitations of AI can pose significant risks, as it deals with sensitive and confidential information from involved parties. This necessitates a thorough analysis to understand the risks and limitations related to data security and authenticity when using AI-generated evidence and considering AI as arbitrators.

Arbitration is a field that values accuracy and credibility. First, AI can sometimes provide incorrect answers due to inconsistencies in the vast amounts of data it processes. Additionally, the stored data may contain biases that can impact the reliability of the information. This could compromise the quality of legal procedures and discourage parties from choosing arbitration in both national and international settings.

Data analytics using AI can identify patterns and attempt to replicate them with various prompts. However, this might sometimes result in misunderstandings, particularly in international commercial arbitrations, as it may not truly capture the essence of the inquiry. This can impede the ability to persuade the parties when AI is utilized as arbitrators. Arbitration is essentially an intellectual and consensual process, requiring an arbitrator to maintain neutrality and empathize with the parties to effectively resolve the conflict. Thus, it is evident that AI has limitations in completely substituting human arbitrators because of the emotional subtleties involved. When considering the confidentiality and security of stored information, it becomes evident that sensitive data has been shared through AI platforms, which have subsequently regenerated this information due to AI protocols aimed at identifying and protecting such data. A recent incident highlights the validity of these concerns. A Samsung developer, while trying to fix a bug, uploaded snippets of sensitive code to CHATGPT on two separate occasions. This allowed users from other companies to access the information, as CHATGPT retains it for model training. In addition to the risk of unintentional exposure by AI tools, there have been instances where large amounts of confidential data stored together have

been vulnerable to cybersecurity breaches.<sup>17</sup> In 2015, cybercriminals breached the Permanent Court of Arbitration's website, deploying malware to extract sensitive information during the arbitration process between China and the Philippines regarding contested territories in the South China Sea. Although there are various strategies available to reduce risks, existing safeguards fall short in effectively managing the threats posed by artificial intelligence. The incident highlights the vulnerabilities that can arise in high-stakes international disputes, emphasizing the need for more robust security measures. As the landscape of technology evolves, it is crucial to develop comprehensive strategies that can better protect against the unique challenges associated with AI implementation.<sup>18</sup>

Moreover, another concern arises with AI-generated forgeries, as dishonest individuals may create counterfeit documents, images, or video evidence. Although there is a significant chance of inaccuracies in detecting these manipulations, various methods and innovations are being developed to enhance the authenticity of such evidence and documents. This also aids in increasing their acceptance within public and legal systems.

### **Leveraging AI for Faster Dispute Resolution and Streamlined Legal Workflows**

Artificial intelligence can enhance the efficiency of legal proceedings through the automation of routine tasks and sophisticated data analysis. By automating tasks that were traditionally manual, AI systems allow legal professionals to dedicate their efforts to critical areas requiring human judgment and expertise, thereby increasing productivity and efficiency.<sup>19</sup> For instance, AI technologies can swiftly process diverse legal documents, analyse complex data sets, and extract pertinent information, which accelerates case preparation and decision-making processes. Additionally, the ability of AI to analyse vast amounts of legal data with precision aids in the early identification of relevant case precedents and legal arguments, thus

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<sup>17</sup> Lareporter.com. (2015). *Permanent Court of Arbitration website goes offline, with cyber-security firm contending that security flaw was exploited in concert with China-Philippines arbitration* | *Investment Arbitration Reporter*. [online] Available at: <http://www.iareporter.com/articles/permanent-court-of-arbitration-goes-offline-with-cyber-security-firm-contending-that-security-flaw-was-exploited-in-lead-up-to-china-philippines-arbitration/> (last accessed on: 6 March 2025)

<sup>18</sup> Lareporter.com. (2015). *Permanent Court of Arbitration website goes offline, with cyber-security firm contending that security flaw was exploited in concert with China-Philippines arbitration* | *Investment Arbitration Reporter*. [online] Available at: <http://www.iareporter.com/articles/permanent-court-of-arbitration-goes-offline-with-cyber-security-firm-contending-that-security-flaw-was-exploited-in-lead-up-to-china-philippines-arbitration/> (last accessed on: 6 March 2025)

<sup>19</sup> De Sousa, W.G. et al. (2022) "Artificial intelligence and speedy trial in the judiciary: Myth, reality or need? A case study in the Brazilian Supreme Court (STF)," *Government Information Quarterly*, 39), p. 101660. Available at: <https://www.sciencedirect.com/science/article/pii/S0740624X21000964>. (last accessed on: 7 March 2025)

streamlining research tasks and optimizing case strategies.<sup>20</sup> Consequently, the integration of AI into legal practice not only enhances operational efficiency but also supports more informed and timely judicial outcomes, contributing to a more effective judicial system overall. Artificial intelligence presents a compelling opportunity to alleviate the persistent issue of case backlogs in judicial systems by streamlining processes and improving efficiency. By automating routine tasks, AI systems enable judiciary personnel to redirect their focus toward more complex legal matters, thereby expediting case resolution timelines.<sup>21</sup> Furthermore, the integration of AI-driven data analysis tools can facilitate quicker case assessments by identifying pertinent information and relevant legal precedents. With remarkable speed, thus reducing preparatory time for case proceedings.<sup>22</sup> Additionally, the ability of AI to manage document-intensive tasks offers significant potential for decluttering court schedules and enhancing overall procedural productivity, which is pivotal in managing high volumes of pending cases effectively.<sup>23</sup> As judicial systems worldwide continue to grapple with extensive backlogs, the strategic implementation of AI promises to not only enhance operational efficiency but also contribute to more timely justice delivery.

### **Future Implications and Recommendations**

The evolution of AI technologies has far-reaching consequences on the legal system and the emerging potential of AI-verified evidence. The implications of future applications within the law show that these tools can offer unprecedented accuracy and efficiency within court procedures. However, this also highlights a necessity for specific standards and regulations that combat the potential threats posed by AI technologies including algorithmic bias, transparency concerns, and data security issues. Such standards could be achieved using a methodical approach to develop an international set of guidelines similar to the existing UNCITRAL Model Law on Electronic Signatures. This will ensure consistency across jurisdictions and

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<sup>20</sup> Sil, R., Alpana and Roy, A. (2023) "A review on applications of artificial intelligence over Indian legal system," IETE Journal of Research, 69(9), pp.6029-6038. Available at: <https://www.tandfonline.com/doi/abs/10.1080/03772063.2021.1987343>. (last accessed on: 7 March 2025)

<sup>21</sup> Sil, R., Alpana and Roy, A. (2023) "A review on applications of artificial intelligence over Indian legal system," IETE Journal of Research, 69(9), pp.6029-6038. Available at: <https://www.tandfonline.com/doi/abs/10.1080/03772063.2021.1987343>. (last accessed on: 7 March 2025)

<sup>22</sup> De Sousa, W.G. et al. (2022) "Artificial intelligence and speedy trial in the judiciary: Myth, reality or need? A case study in the Brazilian Supreme Court (STF)," Government Information Quarterly, 39), p. 101660. Available at: <https://www.sciencedirect.com/science/article/pii/S0740624X21000964>. (last accessed on: 7 March 2025)

<sup>23</sup> Chatterjee, S. and NS, S. (2022) "Artificial intelligence and human rights: a comprehensive study from Indian legal and policy perspective," International Journal of Law and Management, 64(1), pp. 110-134. Available at: <https://www.emerald.com/insight/content/doi/10.1108/ijlma-02-2021-0049/full/html>. (last accessed on: 7 March 2025)

promote an international response to managing AI technologies in the legal field. Therefore, further investigations should highlight and recommend regulatory frameworks that encourage the appropriate integration of AI technologies within legislated environments and best practices. Consequently, the deployment of AI systems should ensure compliance with the existing principles and legal consequences within a jurisdiction and promote fairness and equality in judicial practise. While the advancement of AI technology holds immense possibility in the continued evolution of legal paradigms concerning AI-verified evidence, and the broader implications of its use in the legal system; it also poses systemic challenges that can only be addressed through the formation of such frameworks. Future developments of AI technology would be even more accurate and efficient, but until these frameworks evolve and are established issues such as bias and data security will always exist. If a functional and well-structured regulatory approach, such as the UNCITRAL Model Law, were adopted, consistency in AI evidence could be rendered across different jurisdictions. This would also serve to create an international response that harmonizes efforts combating risks posed by AI technologies, not just to the legal system, but also to global society.<sup>24</sup> Research, then, should continue to emphasize the need for responsible integration of AI methodology into the legal paradigm functioning as a support system to current laws governing different arenas of global legal procedural fairness.<sup>25</sup> This includes continuously communicating the need for complete guidelines to be integrated into regulation concerning AI usage in the legal system and world, balancing the challenges imposed by AI technology with the need to introduce innovations to improve the justice system.

## **Conclusion**

India presents a promising legal landscape both nationally and internationally to permit AI-validated evidence, although the legal systems of all jurisdictions have a moderate inclination to do so. The unique legislative amendments introduced recently including the Bharatiya Sakshiya Adhinayam, 2023 and the permissive spirit of the Arbitration and Conciliation Act, 1996, projects the ambition of India to bridge traditional jurisprudential exercises with the

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<sup>24</sup> Alenezi, A.M. (2024) "Artificial intelligence and foreign investment law arbitration: an analysis of regulatory framework implications," *The Journal of World Investment & Trade*, 25(3), pp. 369-409. Available at: [https://brill.com/view/journals/jwit/25/3/article-p369\\_3.xml](https://brill.com/view/journals/jwit/25/3/article-p369_3.xml). (last accessed on: 7 March 2025)

<sup>25</sup> Choudhury, A. and Asan, O. (2022) "Impact of accountability, training, and human factors on the use of artificial intelligence in healthcare: Exploring the perceptions of healthcare practitioners in ...," *Human Factors in Healthcare*, 2, p. 100021. Available at: <https://www.sciencedirect.com/science/article/pii/S2772501422000185>. (last accessed on: 7 March 2025)

evolving technology. The UNICITRAL Model Law projects a similarly progressive spirit of legal frameworks internationally to tackle legal harmonization in alignment with the advancement of AI. Despite technological progress anticipated through legislating AI-validated evidence, there is a need to remain prudent about machine learning processes potentially being susceptible to underlying biases as well as security vulnerabilities. Such concerns raise the importance to undertake vigorous evidentiary standards prescribed by legal systems to uphold the evidential value of a document. This could lead to the attainment of procedural efficiency through the alleviation of delays through AI as envisaged by the legal practitioners citing the foregoing potential. These findings therefore shed light upon the importance to balance the legal system between fairness and compliance to permit AI-validated evidence.