

**ARBITRATION IN THE DIGITAL AGE: RESOLVING CROSS BORDER E-
COMMERCE DISPUTES****Shruti Das**

Assistant Professor, Department of Law, Vishwakarma University, Pune

Dr. Deepshikha Sharma

Assistant Professor, Department of Law, Vishwakarma University, Pune

In an epoch characterised by the transcendence of e-commerce beyond geographical bounds, the demand for effective dispute resolution methods has reached heights that have never been seen before. The purpose of this paper is to explore the changing role that arbitration plays in the resolution of disputes involving international commerce within the context of the digital environment. In it, the numerous obstacles and latent opportunities that have been spawned by the global growth of online transactions are examined. These issues and opportunities include jurisdictional conundrums, the enforcement of foreign and domestic arbitral awards, and the symbiotic integration of sophisticated technology in arbitration processes. This research provides a comprehensive exegesis of arbitration as a streamlined, efficient, and impartial forum for the resolution of international e-commerce disputes. This is accomplished through the analysis of case studies and existing legislative frameworks with recent amendments to the Arbitration and Conciliation Act, 1996. The purpose of the elucidations that are presented in this article is to shed light on practices that are considered to be exemplary and to propose novel paradigms that can enhance the effectiveness of arbitration in the realm of digital commerce. This will ensure that all parties involved are able to reach resolutions that are just and equitable.

Keywords: Arbitration, E commerce, Cross border Commerce, Enforcement, International Commercial Arbitration.

Introduction:

The internet has emerged as a catalyst for business transactions, enabling parties to engage in commercial agreements more swiftly and effortlessly. The rise in online business transactions has unavoidably resulted in a higher number of conflicts between the parties involved, requiring the implementation of efficient mechanisms for resolving these disputes. Due to the distinct attributes of e-commerce transactions, the conventional adversarial system may not consistently be the best effective method for resolving these disputes. On the other hand, Alternative Dispute Resolutions (ADR) provide a more convenient method to resolve problems relating to e-commerce (Turner, R. I., 2000).

ADR proceedings are specifically designed to resolve conflicts that fall outside the purview of traditional jurisdiction and deal with matters that have an extraterritorial nature. ADR procedures provide numerous benefits compared to traditional litigation, including confidentiality, impartiality, and customised procedural norms. This makes ADR an appealing choice for parties engaged in conflicts.

Furthermore, ADR is advancing alongside emerging technology, allowing for the resolution of disputes through electronic means such as videoconferences, emails, and Skype. Online alternative dispute resolution (ADR) procedures are especially advantageous for resolving conflicts that include parties from various geographical locations, which is a frequent occurrence in the field of electronic commerce. They offer a rapid, effective, and adaptable process that does not necessitate the physical presence of the parties involved. Online arbitration is a highly successful method for settling disputes that arise from business-to-business transactions. It is cost-effective and effective, enabling parties to resolve conflicts without the necessity of travelling to various places, so saving time and money. Online arbitration enables a cost-effective, straightforward, and adaptable settlement process while upholding the fundamental requirements of conventional proceedings (Vera Prendes, P. 2010). The arbitration scene is being further transformed by technological breakthroughs like as digitalisation, artificial intelligence (AI), and blockchain. Market participants are investigating how these advancements can improve the effectiveness and excellence of the arbitration process, a trend that has been expedited by the COVID-19 epidemic. This article explores the concept of the "Anatomy of Arbitration," suggesting that arbitrations conducted entirely by artificial intelligence (AI) will ultimately become both technically viable and legally permissible (Coombe, G. W. Jr., 1999).

In the current era of digitalisation, with the ongoing expansion of cross-border e-commerce, there is a growing demand for dispute resolution processes that are both effective and efficient, and that can be carried out quickly. This article examines the impact of technological advancements on arbitration, specifically in the resolution of cross-border e-commerce disputes. It also considers the possibility of completely AI-driven arbitration in the future.

Advancements in technology and their impact on the field of arbitration

Technological breakthroughs such as digitalisation, artificial intelligence (AI), and blockchain are transforming traditional arbitration. Market actors are investigating how these innovations can enhance the efficiency and quality of the arbitration process, a movement that has been expedited by the COVID-19 outbreak. This study investigates the "Anatomy of Arbitration", proposing that arbitrations conducted entirely by artificial intelligence (AI) will someday become both technically viable and legally permissible (Olmos Giupponi, B., 2022).

Arbitration plays a crucial role in Alternative Dispute Resolution (ADR), serving as the preferred way for parties that want a final resolution without going to court. Arbitration is usually a confidential and voluntary procedure in which a panel of arbitrators, rather than government courts, issues a final and enforceable ruling called an arbitral award. Historically, this tribunal consists of arbitrators who conduct hearings in person. Nevertheless, as AI and blockchain technologies emerge, the field of arbitration is undergoing significant changes. Stakeholders are already evaluating the potential of these technologies to reduce expenses, accelerate dispute resolutions, and improve the arbitration process (Olmos Giupponi, B., 2022). Arbitration is a process of settling conflicts where impartial third parties, selected or accepted by the parties involved, make a final and obligatory ruling. It is one of several alternative dispute resolution (ADR) methods that serve as alternatives to the traditional adversarial system. Arbitration is notable for its structured procedural norms, which include specific time

limits for submitting legal arguments and issuing decisions. In contrast to discussion or mediation, once a party has committed to arbitration, they are bound to participate in the procedure and cannot withdraw. Arbitration seeks to achieve a definitive resolution for the issue, rather than simply acting as a mediator or conciliator between the parties involved. The decision made by the arbitrators, known as the award, is both legally binding and capable of being enforced (Vera Prendes, P. 2010).

These attributes confer significant relevance to arbitration among the several accessible alternative dispute resolution methods. Nevertheless, arbitration may not always be the optimal method for resolving a disagreement. Every ADR possesses its own benefits and limitations. Hence, parties ought to assess the most advantageous approach to resolve their specific issue.

Benefits of Arbitration In comparison to conventional jurisdiction

Arbitration possesses certain attributes that render it a compelling choice for resolving disputes:

1. **Selection of the Arbitrators:** Arbitration grants parties the ability to select the arbitrator or panel of arbitrators responsible for resolving the dispute. This is particularly advantageous in conflicts that entail technical or specialised expertise. In e-commerce disputes related to software sales, parties have the option to choose an arbitrator who possesses specialised knowledge in the subject matter. The expertise of an arbitrator can expedite and streamline the resolution of a dispute, resulting in speedier and more cost-effective outcomes. In contrast, a conventional judge may lack the necessary expertise and rely on expert views, thereby prolonging and escalating the expenses associated with the judicial process (Coombe, G. W. Jr., 1999).
2. **Globalisation:** Parties have the freedom to choose any geographical location worldwide for the arbitration proceedings. This is especially beneficial in international conflicts where the involved parties are located in separate nations.
3. **Impartiality and Parity:** Parties have the option to select an arbiter who is free from bias, thereby guaranteeing the impartiality and equality of the arbitration process. Having an impartial arbitrator can be advantageous in conflicts between parties of different nationalities, since it provides an alternative to relying on the national court of one of the parties, when concerns about impartiality may arise (Vera Prendes, P. 2010).
4. **Arbitration has the advantage of flexibility in terms of both method and timing,** as long as the necessary formalities to ensure fair treatment are followed. Arbitration parties are not obligated to follow the formal procedures of a typical court case, which enables them to customise the arbitration process to their own needs (Coombe, G. W. Jr., 1999).
5. **Confidentiality:** Arbitration is commonly seen as a practice that maintains strict confidentiality. Arbitration agreements commonly involve confidentiality requirements that apply to all material shared during the arbitration process. On the other hand, legal processes are open to the public, and relevant information can be made known. The assurance of confidentiality in arbitration can enhance e-business transactions by instilling a sense of security in the parties involved, who can be more willing to engage in transactions knowing that any potential conflicts will be kept confidential. One possible approach is to publicise an arbitral procedure with the parties' prior authorisation. This practice is observed in the

Netherlands, where awards are published in the Journal of Arbitration without disclosing the parties' names.

Disadvantages of Arbitration

Although arbitration offers benefits, it also has specific disadvantages. The expenses and charges associated with the arbitration procedure might be substantial, particularly in the context of institutional arbitration. In addition, while the arbitral award carries legal weight, it is not automatically enforceable and necessitates judicial involvement to ensure compliance with the award or any interim measures. Nevertheless, this paper will examine how online arbitration methods might effectively address these limitations (Coombe, G. W. Jr., 1999).

Online Arbitration

Online arbitration refers to a distinct form of arbitration that is predominantly or totally conducted via electronic communication methods, such as emails, Video over Internet Protocol (VoIP), chat rooms, and so on (Vera Prendes, P. 2010). Institutions occasionally adhere to particular online arbitration systems such as Peacegate or Samadhan site. In order for a proceeding to be classified as online arbitration, the incorporation of electronic communications must be a fundamental aspect of the procedure. If the arbitrator only utilises electronic methods for the purpose of hearing and partially for issuing notices, the arbitration process will be classified as either traditional or virtual arbitration.

For example, if parties utilise emails for specific discussions but provide evidence and arguments in written form and carry out hearings in physical presence, it is considered traditional arbitration. Online arbitration is distinguished by its extensive use of technology at every stage of the process, including the selection of arbitrators, the declaration of neutrality by arbitrators, the notification of parties for the arbitration, the conduct of proceedings, and the publication of the arbitral verdict.

Technology plays a crucial part in the procedure by interacting with both the disputants and the arbitrators. The arbitration framework governs the organisation of the arbitration process, including the procedures for filing a claim, conducting notifications or hearings, and facilitating communication between the involved parties. The distinct characteristics of online arbitration imply that it may necessitate a distinct legal structure, while nevertheless adhering to the fundamental principles of traditional arbitration, guaranteeing its enforceability and adherence to legal due process.

Features of Online Arbitration

Online arbitration is distinguished by its reliance on electronic means of communication, such as videoconferencing, emails, and instant messaging. Technology is essential for facilitating communication and carrying out the procedure. Online arbitration must always ensure the assurance of due process of law, which pertains to the adherence to established rules and principles in legal processes for the protection and enforcement of private rights. Functional equivalence refers to the concept of achieving the same outcome or result in online arbitration. It involves ensuring that the online arbitration process is comparable to traditional arbitration in terms of fairness, efficiency, and effectiveness (Vera Prendes, P. 2010).

The existing legal structure for arbitration relies on conventional, physical means of communication involving paper. Modifying these guidelines to accommodate electronic methods entails examining the objectives and operations of conventional communications and implementing them to their digital counterparts. While electronic techniques and papers may not be identical to old ones, they serve comparable purposes and address the same issues. For instance, an email operates similarly to conventional mail, and an electronic signature should provide an equivalent level of security as a handwritten signature.

In order to establish laws that are efficient for electronic communications, the legal framework should adopt a functional equivalent approach, similar to the one employed in the Model Law on Economic Commerce. This technique examines the objectives and roles of conventional methods and adapts them to electronic counterparts, guaranteeing the preservation of the reliability and protection of electronic documents.

Benefits of Online Arbitration

Online arbitration provides numerous advantages for the parties involved:

1. **Efficient:** Communication between parties is primarily conducted electronically, resulting in a faster process compared to traditional arbitration.
2. **Time and cost savings:** By conducting all conversations online, there is no requirement to physically go to various locations for presenting evidence or attending hearings, resulting in reduced time and costs.
3. **Convenient Accessibility:** Parties have the ability to view the procedure content and present materials from the comfort of their own home or office at any given moment.
4. **Globalisation:** Online arbitration is globalised, enabling parties to participate from any location worldwide without being restricted by specific local laws.
5. **Parties have the ability to establish a method that is more adaptable,** allowing them to determine stages and deadlines according to their own preferences. Additionally, they have the option to choose the specific legal framework that will govern the resolution of the issue.

Limitations of Online Arbitration

Although online arbitration has numerous benefits, it is susceptible to hacker attacks, data loss caused by viruses, and various technical challenges. Parties may be required to allocate resources towards implementing security methods and establishing backup systems in order to safeguard their information. Nevertheless, the disadvantages are frequently surpassed by the advantages of a more concise and cost-effective procedure (Lide, E. C., 1996).

Online arbitration as an appropriate method for resolving business-to-business (B2B) disputes.

International e-commerce disputes encounter numerous challenges, such as the absence of standardised legal norms for online transactions, exorbitant litigation expenses, and the limited expertise of traditional courts in handling such conflicts. Implementing effective dispute resolution systems for these transactions can improve e-commerce by instilling greater confidence in parties when engaging in online transactions.

Online arbitration enables parties to settle disputes using familiar methods in a prompt and cost-effective manner. They derive advantages from the involvement of a specialist in the specific field to settle their disagreement, without requiring any knowledge or skills in information technology. Specialised institutions can be established specifically for the internet market, mirroring the ones found in industries such as wool and tea auctions. Nevertheless, internet arbitration may not be appropriate for certain situations, such as B2C transactions with low monetary value, where mediation or small claims procedures may provide better results (Lide, E. C., 1996).

Arbitration powered by artificial intelligence

Technological innovations such as artificial intelligence (AI) and blockchain are fundamentally transforming the field of arbitration, enhancing its efficiency and reducing costs. Artificial intelligence can aid in the creation and translation of documents, forecast the results of legal cases, and improve the efficiency of legal procedures. The notion of "online courts" and other automated procedures is gaining popularity. With the ongoing advancement of technology, it is possible that entirely AI-driven arbitration could become technically viable and legally permissible, providing a smooth and efficient method for resolving disputes (Lide, E. C., 1996). Artificial intelligence (AI) can aid in multiple aspects of arbitration, such as examining documents, managing cases, and even making decisions. Through the utilisation of artificial intelligence (AI), the arbitration procedures can be accelerated, resulting in decreased expenses and enhanced precision. Blockchain technology has the capability to offer safe, transparent, and unchangeable recordings of arbitration proceedings, hence increasing trust in the process.

Existing Legal Framework for Online Arbitration

While there is no special international legal framework for online arbitration, the principles governing traditional arbitration are generally believed to be applicable. Nevertheless, given the distinctive attributes of online arbitration, it would be advantageous to formulate a specialised set of regulations. This thesis aims to examine the essential regulations for conducting arbitration online (de Werra, Jacques., 2016).

The existing legal framework for conventional arbitration encompasses legislation at both the international and domestic levels. Globally, the Convention and the Model Law are the principal authoritative references that address the fundamental aspects of arbitration. The majority of domestic legislation have been modified to conform with these international instruments.

The Convention

The Convention is the main source of international arbitration law. Regional treaties such as the Inter-American Convention on International Commercial Arbitration (1975) and the European Convention on International Commercial Arbitration (1961) have limited application to specific regions. Conversely, the Convention has been officially approved by more than one hundred countries representing different legal systems (Vera Prendes, P. 2010).

The Convention requires national courts in countries that have signed it to acknowledge and uphold arbitration verdicts rendered in foreign countries, provided that they satisfy all necessary criteria. This is essential because it clearly defines the requirements that an

arbitration process and decision must meet in order to be acknowledged and enforced. In order for an online arbitration award to be acknowledged and implemented, it must satisfy these criteria.

The Convention mandates that signatory states must guarantee that their domestic regulations adhere to its regulations. UNCITRAL produced the Model Law in order to foster consistency in arbitration legislation.

The Model Law

The Model Law was established by UNCITRAL with the aim of assisting governments in the process of updating their domestic arbitration rules. This comprehensive resource covers every facet of the arbitration procedure, ranging from the first agreement to the final decision. The objective of the Model Law is to standardise domestic laws related to arbitration in order to ensure legal assurance for parties engaged in international arbitration. Although the Convention is not legally enforceable and is considered "soft law," the majority of countries that have signed it have made changes to their laws to align with its provisions. This is a broad overview of the arbitration laws in numerous nations.

Online arbitration regulation in India

The government and its think institutes are aggressively advocating for the implementation of Online Dispute Resolution (ODR) procedures. In October 2021, NITI Aayog published a study titled "Designing the Future of Dispute Resolution: The ODR Policy Plan for India," which advocated for the implementation of laws that are conducive to Online Dispute Resolution (ODR). These policies have the objective of improving the business environment and enticing investment to the nation (Sharma, A., 2023).

The Ministry of Law and Justice acknowledged the potential of ODR and in response to a parliamentary question, stated that although ODR is still in the process of being developed, the government intends to gradually implement the recommendations outlined in the NITI Aayog study. This exemplifies the considerable capacity of Online Dispute Resolution (ODR) in India.

Legal Basis for Online Arbitration

Although the Mediation Act of 2023 grants legal support for internet mediation, there is a lack of comparable provisions for online arbitration. Nevertheless, current laws provide backing for Online Dispute Resolution (ODR) and online arbitration. The Arbitration and Conciliation Act of 1996 (A&C Act) regulates the processes of arbitration, whereas the Information Technology Act of 2000 deals with technical matters, specifically sections 4 and 5, which authenticate electronic records and signatures. Therefore, an arbitration agreement that is agreed upon online is considered legal and can be enforced, as confirmed by the Supreme Court in the case of Shakti Bhog Foods Ltd. v. Kola Shipping Ltd., where the court acknowledged the legitimacy of arbitration agreements formed by email (Sharma, A., 2023).

The Supreme Court has bolstered the endorsement of internet arbitration by facilitating contactless resolution of disputes. This include the provision of notice by online means, the commencement of arbitration proceedings, and the documentation of statements and witness testimonies. The Court in the case of Kross Television India Pvt Ltd. & Anr v. Vikhyat Chitra

Production & Ors, confirmed that alternate methods of delivering legal documents, such as email and WhatsApp, are considered acceptable as long as they are recognised. In the case of *State of Maharashtra v. Praful Desai*, the Supreme Court approved the use of video conferencing to record witness testimonies, enabling the online examination and cross-examination of witnesses (Sharma, A., 2023).

Difficulties Linked to Online Arbitration

One significant obstacle in online arbitration is the determination of the arbitration's location when the parties do not have a mutual agreement. Although the arbitration process takes place online, the choice of seat is of utmost importance as it determines the legal jurisdiction for executing verdicts and addressing any disputes. According to Section 20 of the A&C Act, parties have the authority to determine the location of the arbitration proceedings. If the parties cannot reach an agreement, the Arbitral Tribunal will make the decision based on what is most convenient. Nevertheless, the absence of a distinct physical location in cyberspace makes this determination more complex.

Data security and privacy are important considerations in the context of online arbitration. Parties appreciate arbitration for its ability to maintain confidentiality, a quality that can be compromised in online environments. Section 42-A of the A&C Act requires confidentiality, yet there have been breaches, such as the cyber-breach of the Permanent Court of Arbitration in 2015. Confidentiality is safeguarded by Indian law by Section 72 of the Information Technology Act of 2000. This section makes it a criminal offence to disclose personal information without authorisation. Nevertheless, this approach is more focused on punishment rather than prevention (Sharma, A., 2023).

The Digital Personal Data Protection Act of 2023, which was just enacted, prompts enquiries regarding its relevance to online arbitration. Arbitration requires the implementation of precise data protection standards to guarantee secrecy and security.

Important Elements to Specify in an Online Arbitration Code

The government and arbitral institutions have the potential to establish a voluntary Online Dispute Resolution (ODR) code. The International Council for Online Dispute Resolution has suggested the implementation of open standards that may be embraced. The ICCA-NYC Bar – CPR Protocol on Cyber security, which was established in 2019, provides a structured approach for implementing appropriate cyber security measures in arbitration proceedings. These methods encompass document access control and encryption. Online proceedings recording raises privacy problems. The Seoul Protocol on Video Conference in International Arbitration grants the Arbitral Tribunal the freedom to exercise its judgement, whereas the HKIAC mandates the approval of all parties and the tribunal. Indian arbitral institutions presently do not have such regulations.

An exclusive algorithm could tackle bias and impartiality concerns in online arbitration. The UNCITRAL Technical Notes on Online Dispute Resolution offer guidance on challenging the nomination of arbitrators and guaranteeing their neutrality.

In order for India to establish itself as a global centre for arbitration, the implementation of a specialised code for online arbitration is crucial. Explicit instructions on the documentation of procedures and the management of confidential information are essential. To address concerns about bias and foster confidence in the system, it is important to prioritise arbitrator

independence and transparency by following procedures such as the UNCITRAL Technical Notes for ODR(de Werra, Jacques., 2016)..

Traditional Arbitration vis a vis Online Arbitration

In conventional arbitration, the primary focus is on guaranteeing that all necessary procedures are followed, such as correctly serving and notifying the parties involved, and preserving the principles of due process. Additionally, it is important that the internet arbitration award fulfils all prerequisites for acknowledgement and execution. Subsequent to this statement, a comprehensive examination of these matters will be provided (Lasprogata, G. A., 2001).

The Agreement

An essential inquiry is whether parties have the ability to establish an arbitration agreement by online means, as opposed to utilising conventional paper forms. The Convention mandates that the arbitration agreement must be in written form, without explicitly permitting electronic agreements. Nevertheless, according to the Model Law, an arbitration agreement is considered acceptable as long as its content is documented in any format.

This disparity can be perceived as a paradox or an elucidation of the Convention. In response to the growing prevalence of electronic commerce, UNCITRAL released a recommendation in 2006 for governments to interpret the Convention in a comprehensive manner, recognising the legal effectiveness of electronic arbitration agreements. While not legally obligatory, this suggestion must be implemented by all states that have signed it (Lasprogata, G. A., 2001).

While electronic contracting and electronic signatures are recognised by the laws of many nations, it is important to note that this acceptance is not universally adopted. Hence, it is imperative to modify the Convention in order to eradicate any ambiguity regarding this matter.

Customer assistance and alerts

According to the Convention, an award cannot be enforced if the party being accused was not adequately informed about the appointment of the arbitrator or the arbitration process, or if they were unable to express their arguments. The Model Law also mandates the provision of adequate notice for the award to be considered genuine (Benyekhlef, K., & Gélina, F., 2005). Both the Convention and the Model Law do not provide a definition for “proper notice”, thereby deferring to the laws of individual countries. For instance, Mexican legislation, similar to that of other civil law jurisdictions, places great importance on proper delivery of legal documents in order to guarantee the right to due process. The requirement for notices to initiate the procedure is ambiguous on whether they must be delivered in person or can be transmitted electronically, such as through email. Personal notification is essential in certain nations to guarantee proper legal procedure.

Both the Convention and the Model Law do not explicitly endorse the use of email for notifications. It is necessary to revise the legal framework in order to permit notifications over a range of telecommunication devices. However, it is advisable to personally deliver the final prize in order to guarantee its authenticity.

The process

Online arbitration must provide impartiality and egalitarianism, necessitating that the arbitral agreement explicitly outline these attributes. The second chapter will provide a more comprehensive analysis of this matter (Benyekhlef, K., & G  linas, F., 2005).

Electronic Communication Methods

The Model Law does not stipulate specific forms of communication, hence permitting parties to utilise any convenient electronic methods. Nevertheless, these methods serve as a “fourth party” in the process, requiring certain regulatory guidelines.

The location for the arbitration proceedings

According to the Model Law, it is mandatory for parties to reach an agreement regarding the venue of arbitration, and the award must explicitly mention this location. The geographical location is inconsequential in online arbitration, as arbitrators have the ability to be situated in various locations. These requirements should be exempted from online arbitration. Meanwhile, parties have the option to incorporate a provision in their agreement that establishes a fictitious place (Benyekhlef, K., & G  linas, F., 2005).

The award

In order to ensure compliance with an arbitral ruling, the Convention mandates the submission of an officially verified original or duplicate of the decision. Similarly, the Model Law mandates that the award must be in written form and bear the signatures of the arbitrators. This might provide a challenge in the context of online arbitration, as awards may not be issued in physical form or signed in the conventional manner. The validation of digital documents and electronic signatures can be determined by interpreting the Convention and Model Law, albeit this is contingent upon local legislation and judicial standards (Malkawi, B. H., 2009).

Arbitrators have the authority to produce, endorse, and validate the ultimate decision for the party involved. Nevertheless, implementing changes to the existing national legislation to align with contemporary practices would be advantageous.

Conclusion

In the digital era, utilising technological improvements in arbitration and online dispute resolution (ODR) can offer effective, equitable, and secure methods for resolving cross-border e-commerce issues. Online arbitration provides numerous benefits, such as rapidity, cost-effectiveness, convenient accessibility, delocalisation, and adaptability, rendering it an optimal resolution for B2B conflicts. Nevertheless, it also poses obstacles such as potential security vulnerabilities and technical complexities.

Transferring Alternative Dispute Resolution (ADR) to the digital realm, namely by utilising online arbitration, has the potential to greatly augment the expansion of e-commerce. By implementing measures to promote openness and equity in the process of resolving disputes, individuals and organisations can enhance their trust and confidence in engaging in online transactions. This, in turn, contributes to the development and expansion of the global e-commerce industry. With the continuous advancement of technology, the implementation of completely AI-driven arbitration has the potential to significantly enhance efficiency and quality in resolving disputes. This makes it a highly valuable instrument for the future of e-commerce.

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