

TECHNOLOGY AND ARBITRATION: TRANSFORMING DISPUTE RESOLUTION

**Dissertation submitted to the National University of
Advanced Legal Studies, Kochi in partial fulfilment of the
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DECLARATION

I declare that this dissertation titled, " **TECHNOLOGY AND ARBITRATION: TRANSFORMING DISPUTE RESOLUTION**", researched and submitted by me to the National University of Advanced Legal Studies, Kochi in partial fulfilment of the requirement for the award of Degree of Master of Laws in International Trade Law, under the guidance and supervision of **Dr. APARNA SREEKUMAR** is an original, bona-fide and legitimate work and it has been pursued for an academic interest. This work or any type thereof has not been submitted by me or anyone else for the award of another degree of either this University or any other University.

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PREFACE

This dissertation “TECHNOLOGY AND ARBITRATION: TRANSFORMING DISPUTE RESOLUTION” is made in partial fulfilment of the requirement for the award of Degree of Master of Laws in International Trade Law to the National University of Advanced Legal Studies, Kochi.

This dissertation delves into the profound legal implications arising from the integration of Online Dispute Resolution (ODR) and emerging technologies in arbitration, specifically focusing on its intricate relationship with India’s arbitration framework and global practices. The central purpose of this dissertation is to thoroughly outline the development of ODR, particularly its evolution alongside advancements like artificial intelligence, blockchain, and digital communication tools, and critically examine the ensuing legal, technological, and societal challenges in India. Focusing primarily on the gaps within the Indian arbitration system, I explore the particular shortcomings of the Indian juridical framework and draw comparative insights from other jurisdictions such as Singapore, the United States, and the European Union.

My study strives to respond to fundamental questions about the influence of ODR on the accessibility and efficiency of arbitration, the unique challenges posed by issues such as digital literacy, data security, and cross-border enforcement, and whether India’s existing arbitration system adequately addresses such intricate matters. Ultimately, this paper aims to suggest tangible legal reforms and policy recommendations to fill the gaps and create a balanced environment that promotes technology-driven dispute resolution while ensuring fairness, transparency, and global compatibility.

I hope that the observations and suggestions made in this dissertation will add to the global discourse on the integration of technology in arbitration and serve as a valuable reference for policymakers, legal practitioners, and scholars working towards developing a robust, modern, and accessible arbitration framework for the digital age.

LIST OF ABBREVIATIONS

Abbreviation	Full Form
ADR	Alternative Dispute Resolution
AI	Artificial Intelligence
AIR	All India Reporter
ALR	American Law Reports
API	Application Programming Interface
BCE	Before Common Era
CJTS	Community Justice and Tribunals System
eIDAS	Electronic Identification, Authentication and Trust Services
EU	European Union
FAA	Federal Arbitration Act
GDPR	General Data Protection Regulation
ICANN	Internet Corporation for Assigned Names and Numbers
ICC	International Chamber of Commerce
IAA	International Arbitration Act
ICODR	International Council for Online Dispute Resolution
ML	Machine Learning
NCTDR	National Center for Technology and Dispute Resolution
ODR	Online Dispute Resolution
OECD	Organisation for Economic Co-operation and Development
PoW	Proof of Work
SAMA	Settlement and Mediation Aid
SIAC	Singapore International Arbitration Centre
SICC	Singapore International Commercial Court
SIMC	Singapore International Mediation Centre
TIC List	Technology, Infrastructure and Construction List

UDRP	Uniform Domain Name Dispute Resolution Policy
UNCITRAL	United Nations Commission on International Trade Law
UETA	Uniform Electronic Transactions Act
UNCTAD	United Nations Conference on Trade and Development
UKJT	UK Jurisdiction Taskforce
WIPO	World Intellectual Property Organization
WTO	World Trade Organization

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3. Bharat Broadband Network Ltd. v. United Telecoms Ltd., (2019) 5 SCC 755
4. Delhi Metro Rail Corporation v. Delhi Airport Metro Express Pvt. Ltd., (2022) 7 SCC 527
5. DLF Home Developers Ltd. v. Rajapura Homes, (2021) 5 SCC 263
6. Fuerst Day Lawson Ltd. v. Jindal Exports Ltd, (2011) 8 SCC 333
7. Govind Goenka v. Invesco Developing Markets Fund, (2022) 3 SCC 347
8. K.K. Modi v. K.N. Modi, (1998) 3 SCC 573
9. National Highways Authority of India v. Gayatri Jhansi Roadways Ltd, (2019) 5 SCC 737
10. ONGC v. Afcons Gunanusa JV, (2022) 8 SCC 340
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13. Shakti Bhog Foods Ltd. v. Kola Shipping Ltd, (2009) 2 SCC 134
14. Swiss Timing Ltd. v. Organising Committee, Commonwealth Games, (2014) 6 SCC 677
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CHAPTER I

Introduction

Many cases occur, in which it is perfectly clear, that by means of a reference to arbitration, the real interests of the parties will be much better satisfied than they could be by any litigation in a Court of justice.” -Lord Langdale¹

1.1 General Introduction

Arbitration is a form of alternative dispute resolution that operates independently of the formal judicial system. It involves a private process where disputing parties mutually agree to submit their conflict to an impartial third party for a binding resolution. This neutral entity can be a Sole Arbitrator or an Arbitral Tribunal made up of multiple arbitrators. Compared to traditional litigation, arbitration is generally more efficient, confidential, and flexible. It is widely used in resolving commercial, contractual, and international disputes.

The foundation of arbitration lies in the mutual agreement of the parties, typically established through an arbitration agreement. This agreement may either exist as a separate contract or be embedded as a clause within the main contract. When a dispute arises, it is referred to the selected arbitrator(s) for adjudication. Arbitrators are usually specialists with knowledge in relevant legal and industry areas, enabling them to handle complex matters effectively.

The arbitration process follows procedural rules either chosen by the parties or prescribed by an arbitral institution. The outcome, known as the arbitral award, is binding and enforceable. Courts generally play a minimal role in arbitration, thereby preserving its independence. In cross-border disputes, arbitration is favoured for its neutrality and the global enforceability of awards under instruments like the New York Convention. It also gives parties the freedom to determine procedural elements such as venue, language, and applicable law. Overall, arbitration provides a tailored and expert-driven approach to resolving disputes outside the public court framework.²

¹ The Earl of Mexborough v. Bower, (1843) 7 Beav. 132.

² Vatsala Chauhan, *Arbitration in India: The Process and the Problems with a Special Focus on International Commercial Arbitration* (2020)

Nonetheless, despite these advantages, the swift expansion of e-commerce and digital transactions has engendered new challenges for conventional dispute resolution methods. Traditional arbitration and judicial processes frequently encounter challenges about accessibility, efficiency, and expense in resolving conflicts within the digital domain. In response, Online Dispute Resolution (ODR) has evolved as a novel option that utilizes technology to provide swifter, more cost-effective, and more accessible methods for resolving conflicts, especially those related to online transactions.

This dissertation seeks to examine the transformative impact of technology on arbitration by analysing how various countries have integrated technological advancements into their dispute resolution frameworks. It will offer a comparative study of India's progress in this area and propose recommendations to strengthen the country's implementation of ODR and related technologies for more effective dispute resolution.

1.2 Background of the Research

The Indian legal system has historically faced challenges with protracted delays and a significant backlog of cases. Consequently, parties frequently endure prolonged delays of several years to attain justice via the judicial system. Arbitration was used as a more expedient and adaptable method for resolving disputes. Nonetheless, arbitration in India has progressively transformed into a formal, protracted, and expensive process, akin to conventional court processes.

As online commerce and digital transactions expand, there is an increasing demand for expedited and more effective dispute resolution methods. Conventional approaches are inadequate for managing the fast pace and substantial volume of contemporary digital conflicts. Online Dispute Resolution (ODR) has arisen as an effective alternative in this setting. Online Dispute Resolution (ODR) employs technology to facilitate dispute resolution processes, enabling parties to submit papers, participate in hearings, and obtain results via the internet.

Online dispute Resolution (ODR) can render conflict resolution more economical, expedient, and accessible, particularly for individuals and small enterprises. Numerous nations, including Singapore, the United States, and European Union members, have established efficient ODR systems. The Singapore International Arbitration Centre

(SIAC) Gateway exemplifies a fully digital platform designed for the efficient management of arbitration matters.

India, while its robust technological skills, has been delayed in adopting Online Dispute Resolution (ODR). Only a handful of sites are currently operational, and legal backing for Online Dispute Resolution remains constrained. A significant number of individuals are unaware of how to utilize internet platforms for conflict resolution. There is a distinct necessity for legal reforms, enhanced infrastructure, and more public awareness to facilitate the implementation of ODR in India.

The present study seeks to analyse the successful implementation of ODR in various nations and how their approaches may influence India's approach. It will also delineate the legal, technological, and societal concerns that require attention. India can enhance its ODR framework by adopting international best practices. This will mitigate delays, alleviate the strain on courts, and facilitate more prompt access to justice.

1.3 Scope of the Study:

This study focus at how technology is changing the way arbitration works. It compares how different countries, especially India, are using technology in resolving disputes. The goal is to suggest ways India can improve its use of Online Dispute Resolution (ODR) and similar tools to make resolving conflicts faster and easier. The study also examines the laws, institutions, and technology needed for ODR to work well in India and reviews examples from other countries to create a plan that fits India's needs. The research also explores how technology in arbitration like ODR have developed worldwide and in India. It looks at different online tools like settlement platforms, arbitration websites, e-mediation, and complaint systems. By showing how ODR can save time, reduce costs, and lighten the load on courts, the study highlights its potential to become a key way to solve disputes in India, especially as e-commerce and internet use grow rapidly.

1.4 Objectives

1.To explore the historical development and international practices of Online Dispute Resolution (ODR), and understand its importance in the context of India's arbitration framework.

2.To identify and analyse the key legal, technological, and infrastructural barriers that hinder the successful implementation of ODR in India.

3.To assess the efficiency of established ODR systems in countries such as Singapore, the European Union, and the United States, and examine how these models can be adapted to suit India's unique legal and social landscape.

4.To develop practical recommendations for legal reforms and digital innovations that can support the structured and widespread adoption of ODR in the Indian arbitration system.

1.5 Hypothesis:

By utilizing technology, particularly ODR platforms, the arbitration system can address current inefficiencies and expand access to justice

1.6 Research Methodologies:

This dissertation adopts a doctrinal research methodology, which includes:

Case Law Analysis: An in-depth analysis of significant court decisions that emphasize the increasing role of technology in modern legal processes.

Literature Review: An extensive review of scholarly articles, books, and reports that explain Online Dispute Resolution (ODR) and other tech-driven methods of dispute resolution.

Comparative Analysis: A study of ODR frameworks in various countries to identify successful practices that could be adapted to strengthen India's legal approach.

1.7. Research Questions:

1. What is the current status of arbitration in India, and how effective is the existing arbitration structure in meeting conflict settlement requirements?

2. What is the extent to which Online Dispute Resolution (ODR) can resolve the obstacles and constraints that are inherent in conventional arbitration processes?
3. How can India improve the effectiveness and timeliness of its dispute resolution procedures by learning from other nations' successful ODR implementations?
4. How can the Indian arbitration system be informed and enhanced by technology-driven platforms like the SIAC Gateway to address its current issues?
5. What measures must the Indian government implement in its legislation in order to
6. facilitate the utilization of ODR?

1.8. Statement of Problem:

The traditional arbitration process frequently encounters constraints such as geographical distances, time limitations, and inflated expenditures, which may restrict access to justice for disputing parties. Online Dispute Resolution (ODR), utilizing technology to address disagreements via digital platforms, possesses the capacity to overcome these challenges. The implementation of ODR significantly differs among countries, mainly due to variations in digital accessibility and infrastructure. Despite the global acceptance and utilization of ODR, its expansion in India has been gradual and inconsistent. The Indian legal system is in the early phase of integrating Online Dispute Resolution (ODR), characterized by an absence of platforms and limited legislative recognition. This paper seeks to examine the present condition of ODR in India by concentrating on the legal, technological, and social constraints that restrict its broader implementation. It examines effective ODR models from other nations to ascertain their potential in enhancing India's arbitration system, rendering it more

modern and accessible. The research aims to identify gaps in legislation, technology, and public awareness and recommend changes for the use of ODR in arbitration throughout India.

1.9 Chapterisation:

Chapter1: Introduction

This Chapter provides a brief introduction to the concept of Technology in Arbitration. It outlines the scope and objectives of the study, presents the research questions, states the problem, and formulates the hypothesis. Additionally, the chapter explains the research methodology, offers an overview of the chapter structure, and includes a review of the relevant literature.

Chapter2: The Arbitration in India and its History and Challenges.

This Chapter explores the development of arbitration in India, beginning with ancient local practices and evolving into a structured legal system. It outlines major reforms, including the Arbitration and Conciliation Act of 1996, which modernized the framework in line with international standards. The chapter discusses how arbitration promotes party autonomy, faster dispute resolution, and aligns with global norms like the UNCITRAL Model Law and the New York Convention. It also addresses ongoing issues such as judicial overreach, procedural delays, high costs, and the need for stronger institutions and skilled arbitrators. Through legislative updates and judicial decisions, the chapter highlights India's efforts to position itself as a leading arbitration-friendly jurisdiction.

Chapter 3: Rise of Online Dispute Resolution (ODR)

This Chapter explores the evolution of Online Dispute Resolution (ODR) as a modern extension of traditional arbitration, enhanced through technologies like artificial intelligence, blockchain, and digital communication tools. It highlights international efforts—including in the EU, US, Singapore, and India—to create legal and institutional frameworks that support and legitimize ODR. The chapter discusses key advantages such as improved accessibility, reduced costs, and efficient handling of

cross-border disputes through features like virtual hearings and automated case systems. It also acknowledges ongoing challenges, including technological gaps, privacy concerns, and enforcement inconsistencies. By examining global case studies and platforms such as SAMA, Kleros, and eBay, the chapter emphasizes ODR's growing role in making dispute resolution faster, more transparent, and widely accessible.

Chapter 4: Comparative Analysis of ODR and its opportunities in Indian Arbitration system

This Chapter examines how countries such as the U.S., EU, and Singapore implement Online Dispute Resolution (ODR) and considers how India can follow their lead. It discusses how technologies like AI and digital platforms can simplify and speed up resolving disputes. The chapter points out that although India has great digital potential, challenges like limited internet access, legal shortcomings, and low awareness remain. It recommends legal updates, mobile-friendly solutions, and awareness programs to strengthen ODR in India. Overall, the chapter emphasizes that ODR has the potential to make justice in India faster, more affordable, and accessible to all.

Chapter 5: Conclusion and Future Directions

This Chapter explores how Online Dispute Resolution (ODR) can make India's legal system faster, cheaper, and more accessible. It highlights the need for legal reforms, government support, and public awareness to successfully implement ODR. With the right steps, India can become a global leader in digital justice.

1.10 Literature Review:

1. Christopher To, *Everything You Need to Know about Arbitration in India*, 3 Indian Rev. Int'l Arb. 54 (2023)

This article offers a comprehensive overview of the arbitration landscape in India, including key legislative frameworks and institutional structures. It highlights recent reforms aimed at making India a more arbitration-friendly jurisdiction. The author emphasizes the growing role of India in international

arbitration forums. Practical insights into enforcement, party autonomy, and challenges are also included.

2. Rohan Verma & Navrati Dongrey, *The Future of International Commercial Arbitration in India*, 5 Int'l J.L. Mgmt. & Hum. 291 (2022)

This piece explores India's potential to become a global hub for international commercial arbitration. The authors examine infrastructural and legislative developments such as the Arbitration and Conciliation (Amendment) Acts. They also discuss the role of Indian courts and arbitration institutions in promoting party confidence. The article concludes by advocating further institutional reform and global integration.

3. Anjali Singh, *Challenges to Arbitration in India*, 2 JUS CORPUS L.J. 93 (June-August 2022)

The author outlines key challenges faced by arbitration in India, including judicial interference, procedural delays, and lack of institutional support. The article discusses how these challenges reduce the efficiency of arbitration. Emphasis is placed on the need for greater awareness and training. The author suggests reforms to improve the credibility and accessibility of arbitration mechanisms.

4. Cristina Ioana Florescu, *The Interaction between AI and IA: Technology as the New Partner of Arbitration*, 18 Rom. Arb. J. 42 (Jan.-Mar. 2024)

This article delves into how artificial intelligence is transforming international arbitration processes. It highlights tools like AI-driven document review, predictive analytics, and virtual hearings. The author argues that while AI improves efficiency and transparency, ethical and legal concerns remain. The article concludes that a hybrid model integrating human judgment and AI tools is ideal for future arbitration.

5. S. R. Manjula, *The History and Development of Law of Arbitration in India*, 4 Int'l J.L. Mgmt. & Human. 5831 (2021):

The article traces the evolution of arbitration in India from pre-colonial panchayat systems to modern statutory frameworks. It discusses the impact of

British legal influence and the development of the 1996 Arbitration and Conciliation Act. Key amendments aimed at aligning with UNCITRAL Model Law are examined. The author advocates for awareness and capacity building to strengthen arbitration.

6. Boddu Harshith Sai, *History and Evolution of the Arbitration Law in India with Comparison to Singapore*, 4 Indian J.L. & Legal Rsch. 1 (2022-2023):

This comparative study explores the growth of arbitration law in India alongside Singapore's arbitration regime. It highlights India's gradual legislative evolution and reform initiatives. In contrast, Singapore's success is attributed to a proactive government and strong institutional support. The article recommends India adopt a similar integrated approach to gain international credibility.

7. Adithya Narayanan, *Evolution of Arbitration in India*, 4 Indian J.L. & Legal Rsch. 1 (2022)

The author provides a chronological review of arbitration in India, focusing on historical roots and recent reforms. It details major legislative landmarks such as the 1940 and 1996 Acts. Judicial attitudes and evolving arbitration case law are analyzed. The article calls for systemic improvements to enhance arbitral autonomy and speed.

8. Raghib Naushad & Nabil Iqbal, *Tracking the History of Alternative Dispute Resolution in India*, 3 Int'l J.L. Mgmt. & Human. 235 (2020):

This article investigates the broader ADR mechanisms in India, including mediation and conciliation. It emphasizes India's traditional reliance on community-based dispute resolution like panchayats. The legal framework under Section 89 of the CPC and the 1996 Arbitration Act is discussed. The authors advocate a cultural shift to revive informal dispute resolution methods.

CHAPTER 2:

The Arbitration In India And Its History And Challenges.

2.1 Introduction:

Over the years, arbitration in India has undergone significant transformation influenced by historical developments, legislative reforms, and judicial interventions. While arbitration continues to be promoted as a preferred mode of dispute resolution, several challenges still persist. The growing complexity of commercial transactions, the impact of globalization, and the demand for efficient dispute resolution have further underscored the importance of arbitration in the Indian context.

To understand the current state, it is important to trace the roots of arbitration in India. The evolution of arbitration in India reflects a shift from traditional community-driven dispute resolution methods to a well-defined modern legal framework. Substantial progress has been made in recognizing arbitration as a legitimate and effective alternative to conventional litigation. Nevertheless, issues such as judicial intervention, procedural delays, and the lack of robust institutional arbitration frameworks continue to pose obstacles. In recent years, legislative amendments and government initiatives to strengthen institutional arbitration reflect India's intent to position itself as a global arbitration hub.

Against this background, this chapter will offer an in-depth analysis of the evolution of arbitration in India, tracing key historical milestones and examining the ongoing challenges within the system. It will further evaluate the impact of reformative legislation and judicial decisions, along with current efforts aimed at enhancing the efficiency and credibility of arbitration in the country.

2.2 Objectives of Arbitration in India³

The primary objectives of arbitration in India are diverse and strategically designed to enhance the effectiveness, transparency, and global competitiveness of the country's dispute resolution framework. These aims contribute to building a resilient legal environment that supports both domestic and international trade and investment.

1. Alleviating the burden on the judiciary:

³ Adithya Narayanan, Evolution of Arbitration in India, 4 INDIAN J.L. & LEGAL RSCH. 1(2022).

Arbitration helps ease the burden on the Indian judiciary by offering an alternative way to resolve the disputes. Since it is known that courts are overloaded with cases, arbitration allows many commercial and civil matters to be handled outside the formal legal system, speeding up the overall justice delivery process⁴. Besides that, procedural delays can be reduced by promoting out-court settlement. The idea of Arbitration will offer quicker redressal to the disputes than from the conventional method. So one will be able to avoid the lengthy and slow process which mostly happens due to the lack of resources. By promoting this, everyone will be delivered with justice in less time, which also helps the judges and the court staff manage their workload more efficiently. Generally, it will balance the workload of the traditional method by strengthening legal ecology.

2. Ensuring timely resolution of disputes:

One of the major aims of the Arbitration is that it is generally quicker than traditional court litigation. Disputes can be settled promptly with fixed timelines and fewer procedural formalities. And that is very important in case of commercial transaction which needs timely outcomes. In contrast to the traditional method of solving the disputes, arbitration includes only fewer phases. Courts may take years to settle the matter, but the Arbitration can resolve it within months. For domestic settlement of disputes, the country has the Arbitration and Conciliation Act 1996, which mentions about 12-month time limit for settling the dispute. This will reduce the uncertainties and encourages the businesses to continue the operations which improves the economic productivity and confidence.

3. Providing an impartial platform for commercial disputes:

Arbitration offers a neutral setting where parties can select unbiased arbitrators, which is particularly beneficial in international matters. This helps impartiality, especially in the international disputes where parties may come from different legal or cultural backgrounds.⁵ This adaptability aids in balancing the playing field for both international and domestic parties. Arbitration can be chosen based on impartiality, independence and expertise. It also provides a neutral forum in cross-border disputes, reducing concerns about bias. Foreign companies may see courts as biased, particularly in national settings. This can create confidence among the international parties by

⁴ ibid

⁵ Adithya Narayanan, Evolution of Arbitration in India, 4 INDIAN J.L. & LEGAL RSCH. 1(2022).

providing a neutral forum. Furthermore, the arbitral institutions centres like the ICC or SIAC offer global standards of impartiality is provided. Thus, arbitration becomes a reliable method of settling complex business issues.

4. Boosting investor trust:

It is important to reassure both domestic and foreign investors that their rights will be protected. And this helps in encouraging economic growth and foreign investment by resolving the disputes efficiently and fairly. Investors look for countries that will protect the rights and investments are legally protected. It is expected that arbitration will offer an impartial, well-organised settings which will guarantee and ensure fair handling of disputes. When these matters are resolved efficiently, it will minimise the risk of uncertainty and monetary loss. There will be an increase in the investor confidence, when fast and enforceable remedy is given. And the increase rate of FDI (Foreign Direct Investment) into the nation is subsequently encouraged by this. India's commitment to changes which will facilitate arbitration shows its openness to international business. It will give investors the freedom to avoid prolonged litigation, and also helps in enforcing arbitral awards globally under the conventions like New York Convention enhances legal certainty. Overall, arbitration fosters a stable environment for the investment and economic growth.

5. Positioning India as a global arbitration centre:

Many countries like Singapore and UK, are known as international centres for Arbitration. India should also become a prominent hub for both domestic and international arbitration by improving its laws and institutions related to arbitration. One move in this regard is the establishment of the India International Arbitration Centre (IIAC). A strong arbitration environment can attract cross-border commercial disputes to be resolved in India. This can enhance India's reputation as a business-friendly, legally advanced country. The transfer of legal labour to foreign venues may reduce the outflow of legal work by promoting international arbitration with Indian users. Within India, arbitrators, law firms and institutions are stand to gain. India's soft power in international legal circles when its home framework is robust. This will help in enhancing the global competitiveness in arbitration which complements the India's broader economic goals. Thus, India's goal of becoming a centre for arbitration therefore strengthens its standing in global legal and economic stature.

6. Upholding party autonomy:

One of the important aspects is the arbitration empowers parties to customize procedural aspects such as the venue, language, and appointment of arbitrators according to mutual convenience. This flexibility makes arbitration easier and more comfortable for everyone involved. This autonomy makes it possible to tolerate cultural and legal diversity to be adopted in the cross-border disputes. When parties were involved in the process's creation, they are more inclined to trust it. Additionally, it encourages amicable settlements and friendly behaviour. The party autonomy enhances the legitimacy of the outcome. It also encourages trust in the process and strengthens voluntary adherence to rewards.

7. Minimizing litigation expenses:

The process of Arbitration often proves to be more economical than traditional court proceedings, especially in complex commercial or cross-border cases. People going to court can be expensive due to lawyers' fees, repeated hearing and other costs. It is usually useful in big commercial or international cases where time and money are very important.⁶ Procedural guidelines that diminish unnecessary formalities may be agreed upon by the parties. Arbitrator's fees and administrative costs of arbitrators can be balanced by savings on delayed court expenses. Hence, the arbitration supports and promotes the economic efficiency while delivering justice.

8. Maintaining confidentiality in proceedings:

One of the main aims of Arbitration ensures privacy, which is essential for parties seeking to protect sensitive commercial information from public exposure. Court cases are usually open but arbitration are private in nature. Keeping it in private actually helps the businesses to protect their reputation and sensitive data.⁷ Arbitration awards are often not made public, process can be confidential. This will encourage the companies to safeguard their brand name and reputation along with their financial interests. In contrast, the court proceedings are part of public record. Confidentiality helps preserve

⁶ ibid

⁷ ibid

and bind the parties and arbitrators which are already included in the arbitration rules. This protection of confidence guarantees discretion, privacy and security in settling the disputes.

9. Supporting enforceability of arbitral awards:

When the arbitrator gives a decision, called ‘award’, which is legally binding just like the court order. Awards under Indian law and international conventions like the New York Convention, ensuring finality, which means awards made in India can be enforced in other countries and vice versa.⁸ Furthermore, awards rendered in one nation may be enforced in another nation. Arbitration can be enforced internationally, where the arbitral awards follow a simplified procedure, while the court rulings may need a complicated procedure to get enforced overseas. Credibility and legal clarity are ensured by its enforcement, which is a resolution tool.

10. Encouraging alignment with international standards:

By adopting globally recognized legal frameworks such as the UNCITRAL Model Law, India enhances its reputation as a reliable arbitration-friendly jurisdiction. This helps India match the global standards, making it easier for foreign parties to trust the Indian legal system. It also allows that India is serious about making its arbitration system modern and reliable.⁹ It will ensure the fairness and transparency when it is aligned with the global norms. Thus, India is a more desirable location for international commerce and arbitration.

2.3 IMPORTANCE OF ARBITRATION

Arbitration holds a crucial position in India’s legal and business landscapes, serving as one of the most effective alternatives to traditional court-based dispute resolution. With the Indian judiciary burdened by a growing backlog of cases, arbitration has emerged as a faster, more cost-effective method for settling disputes. Both domestic and international business entities increasingly rely on arbitration to safeguard commercial relationships, enforce contractual obligations, and maintain confidentiality in sensitive

⁸ Adithya Narayanan, Evolution of Arbitration in India, 4 INDIAN J.L. & LEGAL RSCH. 1(2022).

⁹ Adithya Narayanan, Evolution of Arbitration in India, 4 INDIAN J.L. & LEGAL RSCH. 1(2022).

matters. Its flexibility, party autonomy, and enforceable awards make arbitration a more attractive option than litigation, which is often delayed by procedural hurdles.¹⁰

In the age of globalization, arbitration has gained prominence as a key mechanism for facilitating cross-border trade and investment. As India aims to establish itself as a global economic powerhouse, a strong arbitration framework has helped bolster investor trust by offering a neutral, credible dispute resolution process. The incorporation of globally accepted standards such as the UNCITRAL Model Law and the New York Convention ensures that arbitral awards issued in India are enforceable internationally, thereby enhancing the country's reputation as a business-friendly jurisdiction. Efforts to promote institutional arbitration—through centres like the New Delhi International Arbitration Centre (NDIAC) and the Mumbai Centre for International Arbitration (MCIA)—have brought structure and professionalism to arbitration practice in India.¹¹

Another major advantage of arbitration lies in minimizing judicial interference while improving procedural efficiency. Unlike court litigation, which is often hampered by delays and rigid procedures, arbitration empowers parties to design their own processes, select qualified arbitrators with subject-matter expertise, and reach quicker resolutions. Legislative reforms—especially through the Arbitration and Conciliation Act, 1996, and its subsequent amendments—have reinforced this efficiency by curbing unnecessary court involvement and encouraging a more streamlined process. The increasing use of technology, including virtual hearings, also showcases arbitration's adaptability to modern commercial demands.¹²

Moreover, arbitration plays a pivotal role in resolving disputes involving government entities and public sector undertakings (PSUs). Given the complexity and scale of public contracts in sectors like infrastructure, energy, and procurement, arbitration provides a viable alternative to lengthy litigation, helping to prevent delays that could hinder economic development and project execution. Recent judgments by the Supreme Court, especially concerning the enforceability of arbitration clauses in commercial

¹⁰ Shubhranshi Ghosh & Rishabh Patil, Is Arbitration Really Accomplishing Its Objectives?, 5 INT'L J.L. MGMT. & HUMAN. 454 (2022)

¹¹ *ibid*

¹² Shubhranshi Ghosh & Rishabh Patil, Is Arbitration Really Accomplishing Its Objectives, 5 INT'L J.L. MGMT. & HUMAN. 454 (2022)

agreements, signal India's pro-arbitration stance and further solidify arbitration's role as a credible and essential dispute resolution tool.¹³

2.4 HISTORY OF ARBITRATION IN INDIA

(1) Hindu Laws in Ancient India

The study of ancient Hindu law on arbitration, along with classical Indian texts such as the Vedas, Sutras, Epics, and Dharmashastras, provides valuable insights into the dispute resolution mechanisms that existed in ancient times. The Smritis describe the presence of three types of courts: the Puga, which was a council composed of individuals from various sects and tribes living in the same locality; the Sreni, an assembly of tradesmen and artisans; and the Kula, a gathering of members from the same caste group. The King, in this system, functioned as the appellate authority, hearing appeals from these local courts.¹⁴ Arbitration, as a method of resolving disputes through a neutral third party, has been practiced in India since ancient times. This system developed gradually, reflecting the country's diverse legal, social, and religious traditions. The idea of impartial individuals or groups settling disputes was deeply embedded in the socio-legal fabric of early Indian society, long before the advent of formal courts.¹⁵

Arbitration During the Vedic Age (1500 BC – 600 BC)

The earliest evidence of arbitration in India dates back to the Vedic period. At this time, communities were largely self-governing, and formal judicial institutions as we know them today did not exist. Instead, disputes were resolved through informal, community-based assemblies known as Panchayats. These Panchayats were made up of respected elders and influential members of the village or community who were trusted to deliver fair and just decisions.¹⁶

The Panchayat's authority was rooted in customary law, moral principles, and religious teachings. The decisions were based not only on written or oral traditions but also on

¹³ Ibid

¹⁴ S. R. Manjula, The History and Development of Law of Arbitration in India, 4 INT'L J.L. MGMT. & HUMAN. 5831 (2021).

¹⁵ Ibid

¹⁶ Ibid

the collective sense of justice upheld by the community. This ensured that the outcomes were accepted and followed, reducing the need for further escalation.¹⁷

Ancient legal texts like the Dharma Shastras also recognized arbitration tribunals as legitimate bodies for dispute settlement. The Dharma Shastras are among the earliest codified legal documents, providing guidance on morality, duties, and legal processes. Their recognition of arbitration reflects its importance as an accepted dispute resolution mechanism.

There were three main types of arbitration tribunals during this time:

Puga: The Puga was a local assembly that consisted of community members, including traders, labourers, and other citizens. These organizations were established in villages or towns and served as decision-making bodies for the resolution of local issues. The Puga primarily addressed issues that affected the daily lives of the community, such as neighbourhood disputes, minor trade disputes, or local administrative matters. Mutual respect and generally recognized social norms were the foundations of these assemblies. The objective was to maintain harmony and cooperation within the local community, and their decisions were informed by customs rather than strict legal codes¹⁸

Sreni: The Sreni were well-organized organizations or guilds of individuals who were engaged in the same profession, such as goldsmiths, weavers, carpenters, or potters. Not only were these guilds economic entities, but they also served a significant social and legal function. They established their own internal systems and regulations to resolve disputes among members. The Sreni would intervene to equitably resolve any disputes between two merchants regarding pricing, trade, or business practices. This contributed to the preservation of trust and discipline within the group, thereby guaranteeing the uninterrupted operation of business operations. The Sreni's decisions were held in high regard and contributed to the establishment of a sense of order in economic life prior to the widespread use of formal tribunals.¹⁹

¹⁷ *ibid*

¹⁸ *ibid*

¹⁹ S. R. Manjula, The History and Development of Law of Arbitration in India, 4 INT'L J.L. MGMT. & HUMAN. 5831 (2021)

Kula: The Kula was a traditional group or council that consisted of senior members or elders of a family, caste, or kinship group. This entity was concerned with the resolution of private and family-related disputes, including disputes regarding inheritance, marriage, or property within the same caste or family. The Kula was established to maintain community harmony and prevent public embarrassment or conflict. It functioned informally and was predicated on the counsel of esteemed elders, moral principles, and social customs. The Kula was instrumental in the preservation of harmony and respect within these closely knit groups, as family and caste were highly sensitive issues in ancient Indian society. The Kula was a traditional group or council that consisted of senior members or elders of a family, caste, or kinship group. This entity was concerned with the resolution of private and family-related disputes, including disputes regarding inheritance, marriage, or property within the same caste or family. The Kula was established to maintain community harmony and prevent public embarrassment or conflict. It functioned informally and was predicated on the counsel of esteemed elders, moral principles, and social customs. The Kula was instrumental in the preservation of harmony and respect within these closely knit groups, as family and caste were highly sensitive issues in ancient Indian society.²⁰

These tribunals operated effectively as the decisions made were generally binding, and arbitration was preferred for its ability to deliver swift and amicable solutions compared to other methods.

Influence of Islamic Rule: Delhi Sultanate and Mughal Era

With the establishment of Islamic rule in India, particularly during the Delhi Sultanate and later the Mughal Empire, arbitration began to incorporate Islamic legal principles known as Sharia law. This period introduced a dual system of dispute resolution.²¹

On one hand, informal community-based arbitration mechanisms, like the Panchayats and guild tribunals, continued to function, especially for local and customary matters. On the other hand, formal judicial proceedings were conducted in Qazi courts, presided

²⁰ S. R. Manjula, The History and Development of Law of Arbitration in India, 4 INT'L J.L. MGMT. & HUMAN. 5831 (2021)

²¹ Adithya Narayanan, Evolution of Arbitration in India, 4 INDIAN J.L. & LEGAL RSCH. 1 (2022)

over by Islamic judges called Qazis. These courts applied Sharia law to civil, commercial, and personal disputes, reflecting Islamic jurisprudence.²²

This blend of customary and religious legal systems marked an important phase in the evolution of arbitration in India. It demonstrated how the arbitration process could adapt to accommodate different cultural and religious frameworks, allowing diverse communities to resolve disputes according to their beliefs while maintaining overall social order.²³

Role of Kings and Judicial Councils (Dharma Sabhas)²⁴

During this period, monarchs played an important role in the administration of justice. Kings often established Dharma Sabhas, or judicial councils, to adjudicate disputes that were more complex or of public importance. However, for many local disputes, arbitration panels and Panchayats continued to serve as the primary forums for resolution.

This decentralized approach to justice was characteristic of the Gupta period and later, where arbitration was acknowledged as a legitimate alternative to state-administered courts. It allowed disputes to be settled quickly at the community level without overwhelming the king's judiciary.

Arbitration Under the Dharmashastras (9th Century AD Onwards)²⁵

The Dharmashastras, a set of authoritative Hindu legal treatises including the Manusmriti, Yajnavalkya Smriti, Vishnusmriti, and Narada Smriti, provided a more formalized framework for dispute resolution. These texts detailed legal principles, duties, and the functioning of courts and tribunals.

According to legal scholar Dr. Priyanath Sen in his work *The General Principles of Hindu Jurisprudence*, the dispute resolution institutions during this time included:

Panchas: Panchas were panels that consisted of five respected and knowledgeable members who were selected from the local Panchayats, which were village-level

²² *ibid*

²³ *ibid*

²⁴ *Supra* 18

²⁵ *ibid*

councils. Elders, community leaders, or knowledgeable individuals who were acknowledged for their integrity and wisdom were the typical members. In civil disputes, the Panchas acted as arbitrators. Their primary responsibility was to facilitate voluntary resolution by mediating between parties, scrutinizing evidence, and listening to arguments. The Panchas would render a binding or advisory verdict after evaluating the evidence and implementing customary and religious laws, following which the disputing parties would approach them. Their decisions were frequently final and respected within the community, demonstrating social and moral authority. The Panchas were instrumental in the expeditious resolution of disputes without litigation and the preservation of social harmony, which was achieved through the use of moral authority and community consensus.²⁶

Parishads: Parishads were larger, often autonomous councils that operated as judicial entities with greater jurisdiction than Panchas. They may be established at the village, district, or regional level. Parishads addressed more intricate disputes, encompassing land, caste, and familial matters, and had the capacity to resolve conflicts either informally or formally in accordance with customary norms. They exhibited significant judicial autonomy, frequently operating in accordance with customary laws, local traditions, and religious doctrines. Their choices possessed social legitimacy and, in numerous instances, legal enforceability inside the community. These councils frequently functioned through agreement, employing collective wisdom and established protocols. Their rulings could only be contested through superior authority, such as the king.²⁷

3. The King: The king was considered the supreme authority in the judicial hierarchy. Local entities such as Panchas and Parishads adjudicated conflicts at the community level, but the king functioned as an appellate authority, reassessing these rulings upon request for additional remedy by the involved parties. The king's responsibility encompassed the administration of justice in accordance with dharma (righteousness).

²⁶ S. R. Manjula, The History and Development of Law of Arbitration in India, 4 INT'L J.L. MGMT. & HUMAN. 5831 (2021)

²⁷ *ibid*

He would evaluate choices to ensure they were equitable, lawful, and aligned with religion and societal ethics. Cases might be appealed to the king, particularly where parties were unsatisfied with the rulings of municipal tribunals. The king's review often entailed listening to arguments, scrutinizing case particulars, and rendering a final judgment. The king possessed the power to amend or nullify local rulings, so upholding a hierarchical oversight within the judicial system. This system bolstered the central ruler's authority while honoring local traditions. Autonomous councils or assemblies with judicial powers.²⁸

These institutions reinforced the legitimacy of arbitration by integrating it into a formal judicial hierarchy. The king's role as an appellate authority also ensured oversight, maintaining a balance between local autonomy and centralized control.²⁹

(2) Arbitration During the Islamic and Mughal Rule (1206–1757):

The medieval period in India, often referred to as the Muslim rule, was characterized by the application of Islamic law (Sharia) to Muslims, while non-Muslims were governed according to their personal laws. Arbitration, known as tahkeem, was a recognized form of dispute resolution during this time. The arbitrator was called a Hakam, while the Qazi served as the official judge in the courts. Decisions or awards rendered by the Hakam were binding on the parties involved.³⁰

The official language of the courts was Persian, reflecting the administrative and cultural influence of the rulers. The term Salis (derived from Persian) was used for an arbitrator, and Salisnama referred to the arbitration agreement between disputing parties. Notably, any award made in favor of immediate family members such as a parent, child, or wife was considered invalid from the outset (void ab initio).³¹

During the Sultanate period, the judicial system was highly centralized, with the king acting as the supreme source of justice. The monarch personally decided the most significant cases. Assisting the Sultan in judicial administration were officials such as

²⁸ *ibid*

²⁹ S. R. Manjula, The History and Development of Law of Arbitration in India, 4 INT'LJ.L. MGMT. & HUMAN.5831 (2021).

³⁰ *ibid*

³¹ *ibid*

the Chief Sardar and the Chief Qazi. At the local level, Panchayats continued to function in villages, handling minor disputes and maintaining social order.

Under Maratha rule, there was a stronger focus on resolving disputes amicably. The highest court was known as the Hazr Mazlis, presided over by the king. The Nyayadish, or chief justice, was responsible for adjudicating both civil and criminal cases. The village Panchayat remained the primary body for everyday administration of justice and was the main instrument for civil dispute resolution.

The Mamlatdar, an official representative of the Peshwas at the district level, had the authority to convene a Panchayat outside the disputing parties' villages. The Peshwa, who acted as the prime minister, served as an appellate authority to hear appeals against Panchayat decisions.³²

With the advent of Islamic rule in India, arbitration practices began to incorporate the principles of Islamic jurisprudence, widely known as Sharia law. During the Delhi Sultanate and Mughal Empire periods, dispute resolution operated through a dual system that combined informal, community-based arbitration with formal judicial processes conducted in Qazi courts. These courts were overseen by Islamic judges, or Qazis, who applied Sharia principles to adjudicate both civil and commercial disputes, ensuring justice according to religious law. The traditional dispute resolution mechanisms in India evolved significantly during the Islamic and Mughal periods, maintaining their importance at the grassroots level despite the establishment of formal courts under Islamic rule:³³

1. Panchayati System: Despite the establishment of Islamic courts, local arbitration through Panchayats remained widespread and continued to function as a preferred method of dispute resolution, especially at the grassroots level.

2. Qazi Courts: While these courts primarily applied Islamic law, they also recognized and accepted arbitration outcomes derived from community-based mechanisms, particularly in commercial and civil matters.

³² ibid

³³ ibid

3. Customary Law and Arbitration: Islamic rulers often permitted Hindu and other local communities to continue using their indigenous arbitration practices to resolve disputes, especially in rural areas where customary law was deeply rooted.

4. Mughal Encouragement: The Mughal rulers, notably Emperor Akbar (1556–1605), actively promoted arbitration as a tool for maintaining social harmony. Akbar acknowledged the importance of customary dispute resolution methods and supported their coexistence alongside formal court systems.

(3) British Colonial Era (1757–1947) – Codification of Arbitration Laws

During British rule, the colonial administration introduced formal legal institutions in India, significantly shaping the development of arbitration practices. What was once a predominantly community-based and informal process gradually evolved into a legally recognized method governed by statutory provisions.

a. Early British Policies on Arbitration: In the 1770s and 1780s, the Bengal Regulation Acts of 1772 and 1781 were enacted, which allowed disputing parties the option to refer their conflicts to an arbitrator. The arbitrator was selected by mutual agreement between the parties, a principle that continues to underpin arbitration procedures globally to this day.³⁴ The Regulation Act of 1772 was a pioneering piece of legislation that allowed parties to submit their disputes to arbitrators, with the resulting awards being enforceable through British courts. Initially, the British relied on indigenous dispute resolution methods, but they later codified these practices to align arbitration with their own legal system. The Bengal Regulation of 1882 further refined this approach by limiting dispute referrals to civil courts. It authorized revenue officers to refer rent and revenue disputes to arbitration and directed collectors to actively encourage parties to resolve their conflicts through arbitration.³⁵

The Madras Regulations of 1816 granted Panchayats the authority to resolve certain disputes. Sections 312 to 327 of the Code of Civil Procedure, 1859, addressed the process of referring disputes to arbitration without involving the courts. Additionally,

³⁴ ³⁴ S. R. Manjula, The History and Development of Law of Arbitration in India, 4 INT'L J.L. MGMT. & HUMAN. 5831 (2021).

³⁵ S. R. Manjula, The History and Development of Law of Arbitration in India, 4 INT'L J.L. MGMT. & HUMAN. 5831 (2021).

Section 28 of the Indian Contract Act, 1872, recognized arbitration agreements as an exception to contracts that otherwise restrain legal proceedings.³⁶

b. Indian Arbitration Act, 1899

The Indian Arbitration Act of 1899 was the first comprehensive arbitration law in India. Based on the English Arbitration Act of 1889, it was applicable only to the Presidency towns of Bombay, Calcutta, and Madras. The Act included provisions for the enforcement of arbitral awards and aimed to restrict judicial interference. However, its reach was limited, as it did not cover disputes arising in rural areas of India.³⁷ Although the act aimed to formalize arbitration, but it was less considered because its provisions were limited in scope and lacked features essential for efficiency and enforceability.³⁸

c. Arbitration Provisions in the Civil Procedure Code, 1908:³⁹

To broaden the reach of arbitration, provisions related to arbitration were incorporated into the Civil Procedure Code (CPC) of 1908. This development made arbitration agreements legally enforceable beyond the Presidency towns, helping to create a more uniform legal framework across India. However, arbitration under the CPC remained under significant court control, which limited its independence and effectiveness.

d. Arbitration Act, 1940:

A key pre-independence legislation was the Arbitration Act of 1940, which consolidated and revised India's arbitration laws. Modelled on the English Arbitration Act of 1934, it applied nationwide but focused only on domestic arbitration. Under this Act, judicial intervention was necessary at every stage of the arbitration process — before the dispute was referred to the arbitral tribunal, during the proceedings, and after the award was issued. Courts had to first decide whether a dispute existed and if it was suitable for arbitration. Moreover, the arbitral award had to be formally recognized by the court as a rule before it could be enforced.⁴⁰ The Act detailed specific procedures for arbitration agreements, the appointment of arbitrators, and the issuance of awards. It permitted courts to intervene both in the appointment of arbitrators and in reviewing

³⁶ Ibid

³⁷ Adithya Narayanan, Evolution of Arbitration in India, 4 INDIAN J.L. & LEGAL RSCH. 1(2022)

³⁸ ibid

³⁹ Arbitration Provisions in the Civil Procedure Code, 1908

⁴⁰ S. R. Manjula, The History and Development of Law of Arbitration in India, 4 INT'L J.L. MGMT. & HUMAN.5831 (2021).

arbitration awards. While arbitration awards were made binding, they remained open to challenge in the courts. Despite its progressive aims, the Act faced criticism for allowing excessive judicial interference, having procedural complexities, and causing delays, which rendered arbitration inefficient in practice.

The limitations and shortcomings of the act led to the enactment of the Arbitration and Conciliation Act 1996, which incorporated international standards, notably UNCITRAL Model Law, to make arbitration in India more efficient and flexible.

4. Post-Independence Developments and the Arbitration and Conciliation Act, 1996: After the gaining of independence, India acknowledged the necessity to amend its arbitration laws to more effectively address contemporary economic issues and conform to international standards. The previous legislation, especially the Arbitration Act of 1940, was widely regarded as obsolete and insufficient to address the requirements of a swiftly liberalizing economy. To rectify these deficiencies, India referenced international frameworks, particularly the UNCITRAL Model Law of 1985, which sought to establish a consistent and fair arbitration structure globally. Informed by these global standards, India opted to reform its arbitration rules by introducing the Arbitration and Conciliation Act, 1996. The new law supplanted the obsolete 1940 Act and established a comprehensive, contemporary legal framework prioritizing fairness, efficiency, and flexibility in conflict resolution.⁴¹

The primary objective of the 1996 Act was to establish a conflict settlement structure that was both effective domestically and internationally acknowledged. It aimed to reduce judicial intervention, so fostering arbitration as a genuinely private and independent procedure. The Act included stipulations for the execution of foreign arbitral awards, in accordance with international agreements such as the New York Convention. It also recognized conciliation and several alternative dispute resolution methods, reflecting the evolving dynamics involved in dispute management.⁴²

The 1996 legislation represented a notable shift from earlier regulations by prioritizing expedited dispute settlement, the conclusiveness of verdicts, and the independence of arbitral tribunals. The use of international best practices seeks to enhance India's arbitration framework, rendering it more appealing to foreign investors and participants

⁴¹ Adithya Narayanan, Evolution of Arbitration in India, 4 INDIAN J.L. & LEGAL RSCH. 1(2022)

⁴² *ibid*

in international trade. The bill significantly modernized India's legal framework for commercial arbitration, enhancing its integration into the global economic system. These post-independence developments illustrate India's endeavours to establish a conflict resolution system that may facilitate its expanding economic and international trade aspirations.⁴³

Recent Reforms and Government Initiatives (2015–2021):

Since the implementation of the Arbitration and Conciliation Act in 1996, India has systematically revised the legislation to tackle difficulties and modernize the arbitration procedure. The Arbitration and Conciliation (Amendment) Act, 2015, was a crucial reform that established a compulsory 12-month timeframe for arbitrators to issue their awards, with the primary objective of reducing judicial interference and accelerating conflict settlement. This amendment was vital in improving the efficiency and predictability of arbitration processes in India.⁴⁴

The Arbitration and Conciliation (Amendment) Act, 2019, subsequently introduced a significant advancement by creating the Arbitration Council of India (ACI). The ACI was established to advance institutional arbitration, aiming to enhance professionalism, certify arbitrators, and standardize the arbitration procedure. This initiative was integral to India's overarching objective of aligning its arbitration framework with international best practices, hence enhancing the arbitral ecosystem.⁴⁵

The Arbitration and Conciliation (Amendment) Act, 2021, instituted a provision for courts to automatically suspend arbitral verdicts in instances of fraud charges. This measure aimed to mitigate concerns regarding fraudulent arbitral decisions; however, it has led to discussions about whether such a stay diminishes the enforcement efficacy of arbitration awards, so affecting India's appeal as a jurisdiction conducive to arbitration.

Alongside these legislative revisions, India established the India International Arbitration Centre (IIAC) in 2019. The IIAC is an institutional arbitration entity established to offer a comprehensive framework for domestic and international arbitration matters. It aims to diminish reliance on ad hoc arbitration methods and

⁴³ *ibid*

⁴⁴ Adithya Narayanan, Evolution of Arbitration in India, 4 INDIAN J.L. & LEGAL RSCH. 1(2022)

⁴⁵ Adithya Narayanan, Evolution of Arbitration in India, 4 INDIAN J.L. & LEGAL RSCH. 1(2022)

promote a professional and institutional arbitration framework, so strengthening India's dedication to becoming a global center for conflict settlement via arbitration.⁴⁶

The ongoing changes show India's commitment to establishing a contemporary, efficient, and internationally aligned arbitration system that rectifies previous shortcomings and fosters investor trust in the resolution of commercial disputes.

2.5 Current Challenges in Arbitration in India⁴⁷

While arbitration offers an alternative to traditional litigation, it faces several challenges that impact its efficiency. Some key challenges, supported by relevant case laws, include:

1. Judicial Intervention:

The primary objective of Alternative Dispute Resolution (ADR) mechanisms, especially arbitration, is to avoid court involvement. However, some degree of judicial intervention is unavoidable to ensure the arbitration process functions smoothly. Such intervention is globally recognized, with most legal systems allowing subordinate courts to supervise arbitration matters, although some disputes escalate to the highest courts. India follows a similar approach, where many arbitration cases are initially dealt with by lower courts.⁴⁸

Despite efforts to reduce court involvement, judicial intervention remains a significant challenge in Indian arbitration. Courts often step in at different stages of the arbitration process, causing delays and escalating costs. For instance, in the *Hooters* case, the court declined to enforce the arbitration clause, stating that,⁴⁹

"The parties agreed to submit their claims to arbitration-- a system whereby disputes are fairly resolved by an impartial third party. Hooters by contract took on the obligation of establishing such a system. By creating a sham system unworthy even of the name of arbitration, Hooters completely failed in performing its contractual duty."

⁴⁶ Adithya Narayanan, Evolution of Arbitration in India, 4 INDIAN J.L. & LEGAL RSCH. 1(2022)

⁴⁷ Anjali Singh, Challenges to Arbitration in India, 2 JUS CORPUS L.J. 93 (June-August 2022)

⁴⁸ Bhoomika S. Kumar, ADR System in India: Challenges, 5 INT'L J.L. MGMT. & HUMAN. 818 (2022).

⁴⁹ *Hooters of America v. Phillips*, 1999

Case Law: In *ONGC v. Saw Pipes Ltd.* (2003)⁵⁰ the Supreme Court expanded the scope of “public policy” as a ground to set aside arbitral awards under Section 34 of the Arbitration and Conciliation Act, 1996. This broad interpretation has led to increased judicial scrutiny of arbitral awards.

A prominent example is the *Hooters* case⁵¹, where the court declined to uphold the arbitration clause. Moreover, in a series of judgments, including the landmark decisions under Section 34 of the Act, the Supreme Court expanded the interpretation of “public policy” as a ground to set aside arbitral awards. This broader scope has resulted in heightened judicial scrutiny of awards, reducing the finality and certainty of the arbitration process.

2. Loopholes in the drafting of the law:

Another major impediment to the effectiveness of arbitration in India has been the drafting flaws in the original legislation. Prior to the 2015 amendment, Section 34 of the Arbitration and Conciliation Act, 1996 contained a provision that allowed an automatic stay on the enforcement of an arbitral award upon the mere filing of an application to set it aside. This created a significant barrier to the execution of awards, enabling parties to delay compliance and prolong disputes. This loophole was addressed by the 2015 amendment, which clarified that an arbitral award would not be automatically stayed merely because it was challenged in court. Instead, a party would have to specifically apply for a stay, and the court would have discretion to grant it.⁵²

However, the insertion of Section 87 through a later amendment created further confusion. It stipulated that the amended provisions of 2015 would apply only to arbitration proceedings initiated after the amendment came into force. This provision effectively revived the automatic stay for many cases and was criticized for undermining the reform’s intent. The Supreme Court, in *Hindustan Construction Company Ltd. v. Union of India* (2019),⁵³ declared Section 87⁵⁴ unconstitutional for

⁵⁰ (2003) 5 SCC 705; AIR 2003 SC 2629

⁵¹ *Hooters of America v. Phillips*, 1999

⁵² Anjali Singh, Challenges to Arbitration in India, 2 JUS CORPUS L.J. 93 (June-August 2022)

⁵³ *Hindustan Construction Co. Ltd. v Union of India* (2019) Writ Petition (Civil) No. 1074/2019

⁵⁴ Arbitration and Conciliation Act, 1996, s 87

being arbitrary and contrary to the objectives of speedy dispute resolution which was eventually overturned in *Hindustan Construction Co. Ltd. v Union of India*.

3. Appointment of Retired Judges as Arbitrators is a Standard Procedure: It is astonishing to find that the greatest arbitrators are swamped with arbitrations due to a lack of choices. The reason for this is that we do not allow fresh arbitration attorneys to be appointed as arbitrators, hence retired judges are typically selected. This practise must be stopped, and new attorneys should be appointed as arbitrators in conflicts. As a result, making the arbitration procedure is more resilient overall, and the level of awards will not suffer consequences. It is usually difficult to sustain the quality of awards when there are a large number of arbitration proceedings. No other government, like ours, prefers to select solely former judges as arbitrators⁵⁵

2. Delays in Arbitration Proceedings

Arbitration is intended to provide a swift resolution to disputes; however, delays often arise due to procedural complications, inadequate infrastructure, and extended timelines in the appointment of arbitrators.⁵⁶ In *Union of India v. Singh Builders Syndicate* (2009)⁵⁷ the Supreme Court acknowledged the issue of high costs and delays in arbitration and emphasized the need for timely resolution.

3. High Cost of Arbitration:

In recent times, it has become increasingly common for arbitration proceedings in India to be conducted at costly venues. In some instances, parties are required to bear the expense for an entire day, even when the session lasts only a short while. The costs rise significantly when the venue is a five-star hotel. Parties often feel uncomfortable or embarrassed declining such expensive venue requests, even if they are financially burdensome.⁵⁸ The cost of arbitration can be quite prohibitive, particularly when retired judges or senior advocates are appointed as arbitrators, as they often charge substantial fees. This high expense discourages small businesses and individual parties from

⁵⁵ ⁵⁵ Anjali Singh, Challenges to Arbitration in India, 2 JUS CORPUS L.J. 93 (June-Augus

⁵⁶ *ibid*

⁵⁷ 2009) 4 SCC 523; AIR 2009 SC 1322

⁵⁸ Christine Cervenak, David Fairman and Elizabeth McClintock, *-Leaping the Bar: Overcoming Legal Opposition To ADR in the Developing World"*, *Dispute Resolution Magazine* 1998

choosing arbitration as a dispute resolution mechanism. In *National Highways Authority of India v. Gayatri Jhansi Roadways Limited* (2019)⁵⁹ the Supreme Court highlighted the issue of high fees charged by arbitrators and need for reasonable fee structure.

4. Lack of Institutional Arbitration Culture

Although India is home to notable arbitration institutions like the Delhi International Arbitration Centre (DIAC), Nani Palkhivala Arbitration Centre (NPAC), and Mumbai Centre for International Arbitration (MCIA), it still lacks globally renowned institutions such as the Singapore International Arbitration Centre (SIAC), International Chamber of Commerce (ICC), and London Court of International Arbitration (LCIA). A majority of arbitrations in India remain ad hoc, which significantly hampers the development of a strong and reliable arbitration framework. Unlike the well-established litigation culture, a vibrant arbitration culture is still missing. Building a global arbitral hub requires prominent arbitration specialists, akin to Gary Born who played a pivotal role at SIAC. However, given the demanding schedules of leading litigation lawyers in India, it is unlikely that they can dedicate the time and focus necessary to lead and develop arbitration centres to international standards.⁶⁰ India has a limited number of credible arbitral institutions, which results in a heavy reliance on ad hoc arbitration. This form of arbitration often suffers from the absence of standardized procedures and operational efficiency. In *M/s. S.B.P. and Co. v. M/s. Patel Engineering Ltd.* (2005)⁶¹ the Supreme Court emphasized the importance of institutional arbitration and role of institutions in appointing arbitrators to ensure impartiality and efficiency.

5. Enforcement of Awards

Even after an arbitral award is rendered, parties often encounter difficulties in its enforcement, particularly when the opposing party resists compliance, leading to further litigation. In *Fuerst Day Lawson Ltd. v. Jindal Exports Ltd.* (2001)⁶² the Supreme

⁵⁹ (2019) SCC OnLine Del 8466.

⁶⁰ Anjali Singh, Challenges to Arbitration in India, 2 JUS CORPUS L.J. 93 (June-August 2022).

⁶¹ 8 SCC 618; AIR 2006 SC 450

⁶² (2001) 6 SCC 356.

Court dealt with enforcement of foreign awards, and emphasized the need for a quick process.

6. Limited number of Qualified Arbitrators

One of the key challenges is the scarcity of dedicated, full-time arbitration lawyers. Arbitration proceedings are often treated as secondary to regular court cases, with lawyers typically scheduling them after courtroom hours. After a long day in court, they are often too fatigued to conduct lengthy arbitration sessions. Moreover, if they have court commitments, they may seek adjournments or only allocate time for arbitration when their court schedules permit. Similarly, some arbitrators who also practice law are unable to dedicate sufficient time and attention to the arbitration process. This highlights the pressing need for a cadre of full-time arbitration professionals who can invest both time and expertise in handling arbitration matters efficiently.⁶³

India faces a shortage of trained and experienced arbitrators, which significantly impacts the quality, efficiency, and credibility of the arbitration process. This lack of skilled professionals often results in poorly reasoned awards, procedural delays, and diminished confidence among parties—especially in complex commercial disputes. In the caselaw of Delhi High Court in *Shakti Bhog Foods Ltd. v. Kola Shipping Ltd.* (2009)⁶⁴ held that only arbitrators with requisite expertise should be appointed to handle complex commercial disputes. Addressing these issues is key to making arbitration a effective and credible dispute resolution mechanism in India.

2.6 RECENT UPDATES

In recent years, arbitration in India has experienced substantial reforms and renewed focus, mostly propelled by proactive governmental measures and progressive judicial rulings intended to foster an arbitration-friendly atmosphere. These initiatives constitute a component of a comprehensive plan to position India as a favoured location for the resolution of both domestic and international economic disputes.

⁶³ Anjali Singh, Challenges to Arbitration in India, 2 JUS CORPUS L.J. 93 (June-August 2022).

⁶⁴ (2009) 159 DLT 410.

Significant amendments encompass the Arbitration and Conciliation (Amendment) Acts of 2015 and 2019, aimed at curtailing superfluous judicial intervention and optimizing arbitration processes. The 2015 Amendment established stringent deadlines for concluding arbitration to address the persistent issue of delays. It also improved party autonomy and curtailed excessive judicial intervention, so enhancing procedural efficiency. The 2019 Amendment enhanced the framework by establishing the Arbitration Council of India (ACI), responsible for evaluating arbitral institutions and advancing institutional arbitration across the country. This signified a transition from the mostly ad hoc arbitration paradigm to a more systematic framework consistent with global best practices.

The establishment of the New Delhi International Arbitration Centre (NDIAC) in 2019 complemented these reforms by offering a premier institutional framework for arbitration in India, featuring advanced infrastructure and procedural capabilities. Judicially, the Supreme Court's landmark ruling in *PASL Wind Solutions Pvt. Ltd. v. GE Power Conversion India Pvt. Ltd.* (2021)⁶⁵ underscored the judiciary's commitment to respecting arbitration agreements and curbing judicial overreach. The Court upheld parties' autonomy to select foreign seats for arbitration, enhancing the international credibility of Indian arbitration jurisprudence.

India is also actively benchmarking itself against established arbitration hubs like Singapore and London. With continuous improvements in legal frameworks, institutional capacity, and judicial support, the country is steadily advancing towards becoming a leading arbitration centre in Asia.

2.7 Conclusion:

India has made notable progress in arbitration through legislative reforms and evolving judicial pronouncements aimed at aligning domestic practices with international standards. Amendments to the Arbitration and Conciliation Act, along with a greater focus on party autonomy and minimal court interference, reflect a positive shift toward a more arbitration-friendly legal regime. However, several critical challenges remain that prevent India from realizing its full potential as a global arbitration hub. Chief among these is the persistent problem of excessive judicial intervention, which

⁶⁵ (2021) 7 SCC 788

undermines arbitration's fundamental purpose—providing a speedy and efficient alternative to traditional court litigation. There is also a pressing need to strengthen institutional arbitration by developing well-equipped, globally competitive arbitral institutions staffed with trained professionals and governed by transparent and credible procedures. Enforcement of arbitral awards is another key area requiring improvement. Delays and procedural hurdles in enforcement reduce arbitration's effectiveness and weaken confidence among foreign investors and parties in India's dispute resolution system. Until these issues are adequately addressed, arbitration in India will continue to face barriers to becoming the preferred mode of dispute resolution, especially in international commercial matters. While India has laid a strong foundation for a robust arbitration ecosystem, sustained efforts are necessary to foster an environment that respects arbitration autonomy, ensures institutional efficiency, and guarantees prompt enforcement of awards. Only then can arbitration truly emerge as a reliable and advantageous alternative to traditional litigation in the Indian context.

Chapter III:

Transforming Arbitration: The Role of Online Dispute Resolution and Emerging Technologies

3.1 Introduction

The transition from traditional Alternative Dispute Resolution (ADR) to Online Dispute Resolution (ODR) signifies a major development in the way conflicts are resolved in today's digital world. Conventional ADR methods—such as mediation, arbitration, and negotiation—have traditionally involved direct, face-to-face interactions. While effective in many instances, these processes often come with drawbacks like the logistical challenges of coordinating in-person meetings, high travel expenses, and limited access for people living in remote or underserved regions. With the rapid advancement of technology and increasing demand for faster, more user-friendly processes, there arose a pressing need to make dispute resolution more accessible and adaptable.⁶⁶

In response to these challenges, ODR has evolved as a technological extension of traditional ADR.⁶⁷ It does not replace ADR principles but rather enhances them by incorporating tools such as video conferencing, digital messaging, and secure online platforms for document sharing and communication.⁶⁸ This digital adaptation enables parties to communicate flexibly—either in real-time or at their convenience—which is especially beneficial in resolving disputes across different locations and time zones.⁶⁹ Online mediation and arbitration resemble their in-person equivalents, although they offer more flexibility and diminish procedural delays, so making the resolution process more efficient and accessible.⁷⁰

This transition is already apparent globally in regions like the European Union, where the ODR Regulation enables cross-border consumer dispute resolution⁷¹, and the United States, where platforms like Modria and Matterhorn have made small claims

⁶⁶ Ronald D. Cole, *Cyber-Law: Uncharted Waters*, 23 GPSolo 30 (Jan./Feb. 2006).

⁶⁷ *ibid*

⁶⁸ *ibid*

⁶⁹ *ibid*

⁷⁰ Ronald D. Cole, *Cyber-Law: Uncharted Waters*, 23 GPSolo 30 (Jan./Feb. 2006).

⁷¹ Tyler Technologies, "How Modria Uses Online Dispute Resolution to Help You." Available at: Tyler Technologies

and family law processes more efficient.⁷² As ODR continues to develop, the integration of emerging technologies is set to revolutionize the way disputes are resolved in the digital era.⁷³

In summary, Online Dispute Resolution (ODR) has become a groundbreaking method for resolving disputes by leveraging digital technologies to facilitate negotiation, mediation, and arbitration without the need for physical presence. Utilizing tools such as video conferencing, AI-driven case management systems, and blockchain for secure documentation and enforcement, ODR enhances accessibility, efficiency, and flexibility.⁷⁴

The growth of ODR is globalization and the increasing prevalence of cross-border transactions, particularly in e-commerce. As businesses and consumers interacting across international lines, disputes often arise between parties governed by different legal systems, can create confusion and make resolution difficult. In such cases, conventional ADR processes can be hindered by jurisdictional barriers and legal discrepancies. ODR helps overcome these issues by allowing disputes to be resolved digitally without the need for parties to be physically present. Many ODR platforms with features like multilingual interfaces, automated case tracking, and globally aligned procedures ensure a smoother dispute resolution experience across borders.⁷⁵

International legal instruments have further strengthened legitimizing ODR practices. For instance, the UNCITRAL Model Law on ODR and the Singapore Convention on Mediation (2019) provide legal recognition for cross-border mediation outcomes and promote standardization across different jurisdictions. These frameworks help reduce uncertainty in online dispute resolution and encourage broader acceptance by providing clear legal backing.⁷⁶

Ultimately, the evolution from ADR to ODR reflects a broader transformation in the legal landscape. ODR not only preserves the foundational goals of traditional dispute resolution but also introduces innovations that make the process more accessible, time-efficient, and aligned with the global and digital nature of today's interactions. This

⁷² National Law Commission of India, "Consultation Paper on Online Dispute Resolution."

⁷³ European Union, Regulation (EU) No 524/2013 on Online Dispute Resolution for Consumer Disputes.

⁷⁴ European Union, Regulation (EU) No 524/2013 on Online Dispute Resolution for Consumer Disputes.

⁷⁵ Ronald D. Cole, *Cyber-Law: Uncharted Waters*, 23 GPSolo 30 (Jan./Feb. 2006).

⁷⁶ Ronald D. Cole, *Cyber-Law: Uncharted Waters*, 23 GPSolo 30 (Jan./Feb. 2006).

evolution marks a critical step forward in creating legal systems that are more inclusive, responsive, and equipped for the demands of the 21st century.⁷⁷

3.2 Features of ODR

Online Dispute Resolution (ODR) platforms provide numerous advanced capabilities that distinguish them from conventional dispute resolution techniques such as in-person arbitration or court processes. These platforms are engineered to utilize digital tools and technologies to expedite, simplify, and enhance accessibility in conflict resolution for all individuals, irrespective of their geographical location. The following are the principal characteristics of ODR articulated in clear terms:

1. Digital Communication Channels:

ODR makes use of digital communication channels—such as video calls, emails, and chat interfaces—to allow interaction between disputing parties and neutrals like mediators or arbitrators. This remote structure removes the need for physical presence and enables dispute resolution from any location in the world⁷⁸. This means people no longer need to travel or attend physical meetings, instead they can join the hearings or discussions from the home or office which will save the time and money while making the process more convenient especially people living in different cities or countries.

2. Automated Case Management:

Artificial Intelligence (AI) in ODR platforms streamlines case-related activities such as document filing, deadline reminders, and progress tracking. These features accelerate the resolution process and reduce administrative errors⁷⁹. That is this automated system will help in avoiding delays, reduce paper works and ensure that every step in the process is completed on time. Also, it focusses on helping the users to stay organised without needing a physical file or manual tracking.

3. AI and Predictive Analytics:

⁷⁷ Ronald D. Cole, *Cyber-Law: Uncharted Waters*, 23 GPSolo 30 (Jan./Feb. 2006).

⁷⁸ Noopur Amin, "A New Frontier in Online Dispute Resolution: Combining AI and Mindfulness," 15 *Case W. Res. J.L. Tech. & Internet* 283 (2024), <https://scholarlycommons.law.case.edu/jolti/vol15/iss2/3/>.

⁷⁹ OECD, "OECD Online Dispute Resolution Framework," *OECD Public Governance Policy Papers*, No. 59 (2024), <https://doi.org/10.1787/325e6edc-en>.

ODR platforms are increasingly using data analytics and machine learning to provide parties with predictive insights based on prior case patterns. This helps users make informed decisions about how to proceed with their disputes.⁸⁰ This allows the user to make better, more informed decisions- such as whether to settle early or proceed with arbitration.

4. Secure Documentation and Blockchain:

Blockchain technology is integrated into ODR systems to provide secure, immutable records of documents and agreements. To ensure the safety and reliability of the information, there are many ODR platforms which used blockchain technology to manage documents and agreements, that helps in efficient digital record keeping where it is nearly impossible to alter without permission. That is, once a document is uploaded or an agreement is signed, it cannot be changed without being detected and also ensures the integrity of the resolution process⁸¹

5. Cost and Time Efficiency:

ODR platforms are designed to be more cost-effective and time-efficient compared to traditional methods. That is in traditional legal systems, parties often spend money on the lawyers' fees, travel, accommodation, court fees and other expenses. Also parties do not need to travel or spend time on lengthy in-person meetings, the overall costs are significantly reduced, making it an ideal solution for low-value disputes' eliminates the geographic barriers to dispute resolution, enabling parties from different parts of the world to engage in the process without the need for physical presence, which is particularly valuable in cross-border disputes⁸². Moreover ,ODR platforms offer flexibility by supporting various dispute resolution methods such as negotiation,

⁸⁰ Rohit Kumar Singh, "Online Dispute Resolution: Effective Solution to Address Cross-Border E-Commerce Disputes," *ET Government* (Oct. 28, 2023),

⁸¹ Vani Sriranganayaki, "Online Dispute Resolution Is the Future of Alternative Dispute Resolution," Justice Accelerator (Jan. 21, 2024), <https://justiceaccelerator.ai/blog/online-dispute-resolution-is-future/>

⁸² "Online Dispute Resolution Needed a Booster Shot. This COVID-Era Game-Changer Might Be It," Mint (2024), <https://www.livemint.com/industry/online-dispute-resolution-arbitration-odr-platforms-legal-pendency-courts-out-of-court-settlements-videoconferencing-11730184872203.html>.

mediation, and arbitration. This ensures that the method chosen is suited to the nature of the dispute, enabling a more customized and efficient resolution process.⁸³

6. Enhanced Transparency:

ODR processes provide real-time tracking and updates on the status of cases, enhancing the transparency of the resolution process. Everyone involved in the dispute can see what stage the case is at, and what documents are required to be submitted and what documents are needed to submit further. This ensures that both parties are equally informed and can track their dispute's progress at every step.⁸⁴ In other platforms, there are digital logs or dashboards where all the information's and actions are recorded and it can be viewed by both the parties. This kind of transparency will encourage the level of trust and ensures that the process is done fair and accountable.

3.3. Legal Frameworks for ODR

ODR is rapidly gaining global recognition, prompting the development of various legal frameworks to facilitate its adoption and integration within existing judicial systems. International organisations, judicial institutions and governments are actually progressively enacting laws and policies to ODR and integrate it into the current legal framework. These legal frameworks aim to speed up the dispute resolution, enhance accessibility and reduce cost, particularly in an age characterized by digital interaction and cross border commerce. The following are the legislative efforts that facilitated the proliferation of ODR across various jurisdictions:

a. European Union (EU) ODR Regulation:

The European Union has been a worldwide leader in promoting ODR .The EU has established Regulation (EU) No 524/2013, which provides a comprehensive framework for ODR, especially in the context of consumer disputes. The regulation mandates that businesses provide consumers with access to an online platform to resolve disputes

⁸³ "The Rise of Online Dispute Resolution in 2024," Corp Law Hub (2024), <https://corplawhub.com/corporate-law/dispute-resolution/the-rise-of-online-dispute-resolution-in-2024/>.

⁸⁴ OECD, "OECD Online Dispute Resolution Framework," OECD Public Governance Policy Papers, No. 59 (2024), <https://doi.org/10.1787/325e6edc-en>.

without going to court. This framework aims to improve consumer protection and ensure easy access to dispute resolution across EU member states.⁸⁵ The European ODR platform is user-friendly, multilingual and complimentary. This ODR helps the merchants and consumers to resolve the disputes amicably, equitably and transparently. The EU ODR seeks to promote the consumer confidence in the cross-border transactions by making it easier to redress the parties. Furthermore, the regulation aligns with the EU's objectives of consumer protection and the promotion of the Single Digital Market. Overall, the EU ODR rules established a precedent for other countries seeking to implement standardised, consumer-oriented digital dispute resolution systems.

b. United States – Federal and State-Level ODR Initiatives:

In the United States, ODR has been adopted at both the federal and state levels within the judicial system. States such as California and New York have introduced ODR mechanisms for small claims courts, enabling parties to settle disputes via digital platforms, often without need of legal representation or a court attendance. Additionally, the national entities like American Arbitration Association (AAA) promotes the use of ODR in both commercial and consumer contexts.

In 2020, the Federal Trade Commission (FTC), along with other regulatory bodies, recognised the advantages of ODR in enhancing the efficiency and accessibility of dispute, particularly during the time of COVID -19 pandemic when in person hearings were restricted.⁸⁶ These initiatives signify a comprehensive effort to modernize the administration of justice and helped in enhancing the accessibility of the legal assistance through technology. The FTC, in conjunction with other authorities, acknowledged that ODR may improve access to justice by reducing time, costs and barriers for individual and businesses. These efforts collectively showcase a national commitment to incorporating technology into the judicial system. By enhancing the efficiency and accessibility of conflict resolution, ODR initiatives in the US provide equitable opportunities for the individuals and businesses of all sizes. Ultimately, these efforts could significantly reshape the future of legal services in the nation.

⁸⁵ Regulation (EU) No 524/2013 of the European Parliament and of the Council on Online Dispute Resolution for Consumer Disputes, 2013 O.J. (L 165) 1.

⁸⁶ **Federal Trade Commission (FTC) – 2020 Privacy and Data Security Update** Fed. Trade Comm'n, *Privacy and Data Security Update: 2020* (May 2021),

c. India – Proposed ODR Framework⁸⁷:

India is now in the initial phase of establishing and promoting ODR in an efficient manner. The National Law Commission has proposed the development of a legal framework to encourage the use of ODR in various sectors, especially consumer disputes and e-commerce. This is part of India's broader push to modernize its legal system by integrating technology. The Ministry of Law and Justice has also recommended creating an official platform for ODR, particularly to address the backlog of cases in Indian courts.⁸⁸

The core goals of these ideas were to reduce the huge backlog of the cases in the Indian courts, also providing faster resolutions to the low-value disputes and tries to enhance the access to justice in rural and disadvantaged area. This can be done by incorporating digital technologies into the dispute resolution process like ODR which might enhance the accessibility of legal remedies, particularly who face challenges in reaching traditional courts due to geographical or financial constraints.

In 2020, a notable step was taken forward, when NITI Ayog, a leading government think tank, collaborated with the private sector organisations to pilot the ODR platforms. These pilot projects exhibited the validity and efficacy of digital conflict resolution in practical environment. Also, the involvement of government institutions in promoting and supporting these initiatives reflects India's strong dedication to modernize its justice system and using technology to enhance the legal accessibility and efficiency especially in the context of expanding digital economy

d. Singapore –The Singapore International Mediation Centre (SIMC):

Singapore has positioned itself as a leader in ODR particularly for international and commercial conflicts. The Singapore International Mediation Centre (SIMC) provides a platform for resolving disputes via online mediation and arbitration, especially in cross-border commercial cases. International parties can resolve the conflicts via virtual meetings, eliminating the need for travel as well. Also, it is recognised for its

⁸⁷ NITI Aayog, Designing the Future of Dispute Resolution: The ODR Policy Plan for India (Mar. 10, 2021), <https://niti.inroad.in/en/node/1399>.

⁸⁸ Vidhi Centre for Legal Policy, ODR: The Future of Dispute Resolution in India (July 28, 2020), <https://vidhilegalpolicy.in/research/the-future-of-dispute-resolution-in-india/>.

rapid, economical and secure settlement of cross border issues. The Singapore Convention on Mediation, signed in 2019, aims to support ODR on a global scale, enhancing the recognition and enforcement of mediated settlement agreements internationally.⁸⁹

In parallel, The Singapore International Arbitration Centre (SIAC) is another key institution, which is world's top ranked arbitration institution. It widely focusses on providing efficient case administration and its handling of complex and delicate international disputes. In order to facilitate efficient digital arbitration, SIAC introduced SIAC gateway, which is an online platform that helps the users to submit cases, upload documents and monitor case status. This platform has helped to solve many disputes by improving the access to arbitration. Together the SIAC and SIMC help and supported the growth of ODR in the country where the parties do have an access to platform which is user-friendly, secure and supported by a legal system that recognises and enforces their outcomes. So, for countries like India, Singapore system is actually a roadmap to build a efficient technology driven dispute resolution framework.

e. UNCITRAL ODR Framework:

The United Nations Commission on International Trade Law (UNCITRAL) has developed a Model Law on ODR to promote the use of ODR across different countries. The Model Law provides guidelines for establishing ODR systems that can be adopted in national legal frameworks, offering a standardized approach to integrating ODR into both domestic and international legal settings.⁹⁰ One of the main is to promote the uniformity and cooperation among the legal system, helping different countries to adopt ODR , by enabling seamless digital dispute resolution with a strong legal recognition.

3.4 Global Practices and Institutional Developments

Various countries and international intuitions have created systems and policies to support the incorporation of the ODR into traditional legal frameworks as it develops a

⁸⁹ Singapore Int'l Mediation Ctr., <https://simc.com.sg/> (last visited Apr. 17, 2025).

⁹⁰ U.N. Comm'n on Int'l Trade L., Model Law on Online Dispute Resolution (2024), <https://uncitral.un.org/en/texts/arbitration/odr>.

headway globally. These attempts for incorporating ODR is a symbolic representation of a collective acceptance of ODR's capacity to enhance access to justice, resolve disputes more efficiently and reduce court burdens, particularly in cross border and digital economies. The following are the examples that will explain the manner in which various jurisdictions and organisations are utilizing technology to modernize dispute resolution

1. European Union (EU):

The European Commission established the EU Online Dispute Resolution platform to facilitate the resolution of disputes between consumers and online traders, providing a single point of entry for such cases. The platform is designed to improve consumer confidence and foster cross-border e-commerce by streamlining dispute processes⁹¹ It functions as a single digital access point that will enable the parties to submit complaints and establish connection with certified dispute resolution bodies. The main aim was to enhance the trust in consumers and confidence in online trade by ensuring the dispute resolution is accessible ,rapid and cost effective.The platform supports multiple language and streamlines the complaint filing process, facilitating consumers to navigate international disputes. The EU ODR platform contributes to the Digital Single Market agenda by providing transparent and uniform system. It also ensures that customers can resolve issues outside the traditional system, also helps in saving the time and money. This platform addresses the a broad spectrum of client grievances , including defective products and delivery complications. Moreover it act as a paradigm for using technology to enhance international commerce and safeguard consumer protection . In this way, the EU ODR framework showcases a progressive strategy for harmonizing legal procedures across multiple jurisdictions.

2. United States:

At the both federal and state levels, the United States has put to effect a variety of ODR Platforms, like Modria have been used in e-commerce disputes and integrated into court systems in Ohio and California⁹². Their application spans divorce mediation, small claims, and tax appeals, contributing to massive cost and time savings⁹³.This has helped

⁹¹ Regulation 524/2013 of the European Parliament and of the Council, 2013 O.J. (L 165) 1 (EU)

⁹² Colin Rule, Modria and the Future of Dispute Resolution, 2012 J. Disp. Resol. 11, 12–15

⁹³ Ethan Katsh & Orna Rabinovich-Einy, Digital Justice: Technology and the Internet of Disputes 1–15 (Oxford Univ. Press 2017)

the courts in saving time and money by reducing the need for in-person hearings. The federal Trade Commission (FTC) and the American Arbitration Association (AAA) have also advocated for the adoption of ODR in order to improve the public access to justice and efficiency. Throughout the COVID-19 epidemic, the benefits of the ODR system became very evident, as in person hearing were restricted and digital alternatives addressed the void. By diminishing the need for in-person appearances, ODR has helped modernize the American Judicial system. These efforts also show increasing recognition that justice must be efficient, accessible and user-centric. Also, the ODR platform enables to resolve the dispute quickly and efficiently without any expensive legal counsel. In this context, U.S has set an example that how technology may or can transform the dispute resolution and encourage inclusivity.

3. Singapore:

Singapore is a leading arbitration hub that has embraced technological integration. The Singapore International Arbitration Centre (SIAC) uses an advanced electronic case management system and offers fully virtual hearing facilities. The Singapore International Mediation Centre (SIMC) has also introduced ODR procedures for cross-border disputes. The SIAC and SIMC collaborate to promote the expansion of ODR in the nation, ensuring that the parties have access to a secure, user-friendly platform that is backed by a legal system that acknowledges and enforces its results. These institutions cooperate to ensure that the ODR services are fully safe and secure. Also, it ensures the efficiency and comprehensive backed the Singapore's legislative framework. This kind of integration only increases the access to justice but also encourages Singapore's attractiveness as a dispute confliction centre. The government of Singapore gives strong support for the inclusion off technology in the legal services is a crucial element in these developments. Therefore, the Singapore system serves as a blueprint for the establishment of a technology-driven dispute resolution framework that is both efficient and effective in countries such as India

4. India:

India has seen rapid development in the ODR landscape. Platforms like SAMA, CADRE, and AGAMI resolve disputes related to finance, real estate, and consumer issues. SAMA provides a digital platform that coordinates with legal institutions, NBFCs , and banks to resolve dispute through mediation and arbitration. AGAMI is an

non-profit initiative that is dedicated to the advancement of innovation in law and justice , including the support of the expansion of ODR throughout India , while CADRE specializes in real estate -related disputes , employing structured online negotiation tools. NITI Aayog, in collaboration with private stakeholders, has been instrumental in shaping policy and infrastructure for mainstreaming ODR through its 2021 ODR handbook.

Additionally, Indian courts have begun accepting e-filings, conducting virtual hearings, and promoting ODR mechanisms in commercial and consumer cases, especially post-COVID-19.⁹⁴ In overall, India's proactive measures to institutionalize ODR suggest an increased effort to modernize its legal infrastructure, improve the convenience of doing business and also guarantees timely ,affordable and accessible access to justice for all citizens

5. International Chamber of Commerce (ICC):

The ICC has updated its arbitration rules to embrace digitalization. The "Digital Arbitration Rules" now support online submissions, AI-assisted document review, remote hearings, and blockchain usage for maintaining immutable records of proceedings⁹⁵. The ICC also supports the utilization of the blockchain technology to guarantee the authenticity and security of the records. By adopting innovation, these reforms demonstrate that global institutions are adapting to the demands of the digital era.

6. UNCITRAL and OECD:

The UNCITRAL has played a vital role in promoting the global use of Online Dispute Resolution. UNCITRAL introduced Technical Notes on ODR serve as guidance for countries to build consistent and interoperable ODR frameworks to support countries in developing their own ODR systems. These notes are not legally binding ,rather they function as practical guidelines. They focus on helping governments, tribunals and private organisations in the development of digital platforms that are consistent , transparent and secure for the resolution of disputes ,particularly those that relate to

⁹⁴ NITI AAYOG, HANDBOOK ON ONLINE DISPUTE RESOLUTION (2021), <https://www.niti.gov.in> (last visited Apr. 17, 2025)

⁹⁵ INT'L CHAMBER OF COM., DIGITAL ARBITRATION RULES, <https://iccwbo.org> (last visited Apr. 17, 2025)

cross border e-commerce. The primary focus is on ensuring that ODR processes stick to international standards and are readily adaptable to various legal system.

While OECD recommendations emphasize user-centric design and institutional cooperation.⁹⁶ It underscores the importance of user centered ODR platform , which are designed to be user friendly and accommodate to the requirements of the general public rather than just legal professionals. It also stresses the importance of the digital inclusion which guarantees that individual from every aspect of life ,including those residing in rural or underserved areas , have access to ODR support. OECD helps in emphasizing the importance of institutional collaboration of governments ,tribunal and private organisations to establish fair and dependable ODR systems. These endeavors by UNCITRAL and OECD are designed to modernize justice systems in both developed and developing countries by establishing ODR systems that are globally consistent, accessible to all, and people-friendly.

7. World Intellectual Property Organization (WIPO):

WIPO has implemented ODR mechanisms for domain name disputes under the Uniform Domain Name Dispute Resolution Policy (UDRP), showing the efficacy of tech-based arbitration models⁹⁷. Through this process, the parties involved in the online conflicts, for example domain name infringement, can settle disputes entirely online. This method has been demonstrated to be a rapid and effective approach to managing digital conflicts, particularly in the technology and innovation sectors. This UNDP was created by the ICANN with an aim of resolving the conflicts between the trademark holders and domain name registrants.

WIPO's ODR systems actually helps in facilitating the online management of complaints, answers and evidence submissions. This fully grown systems has shown efficiency, cost effectiveness and it helped in saving the time for the parties involved in the dispute. It offers quick and transparent settlement without any need for the actual court presence. The concept of impartiality has been followed by this system which made attractive for the cross-border internet related conflicts. Ultimately, the WIPO's

⁹⁶ U.N. COMM'N ON INT'L TRADE L., TECHNICAL NOTES ON ONLINE DISPUTE RESOLUTION, <https://uncitral.un.org> (last visited Apr. 17, 2025).

⁹⁷ World Intell. Prop. Org., UDRP Overview, <https://www.wipo.int> (last visited Apr. 17, 2025).

ODR initiatives highlighted how technology may be used to solve the complex IP-related problems in the global digital economy.

8. UNCTAD and HiiL (The Hague Institute for Innovation of Law):

Recent UNCTAD research suggests ODR is central to resolving cross-border e-commerce conflicts and recommends standardized regulatory support for global interoperability⁹⁸. UNCTAD promotes regulatory framework that facilitate worldwide interoperability, enhancing the collaboration of various different countries systems to work together.

HiiL, on the other hand, emphasizes that ODR should be citizen-centred and data-driven to remain relevant and just.⁹⁹ It also promotes the use of data-driven methodologies to guarantee equity and pertinence in ODR outcomes. This indicates that well constructed ODR systems may improve access to justice to justice, especially in the marginalized communities.

Both UNCTAD and HiiL emphasize the need of maintaining fairness and openness in the face of technology advances in dispute resolution . Through collaboration, they facilitate globally recognised best practices in the ODR. These efforts defines more inclusive compatible future for the digital dispute resolution.

9. Brazil and Latin America:

Brazil's judiciary has incorporated ODR in resolving millions of consumers and small claims disputes via platforms integrated into the court system, significantly easing court backlogs. This initiative aims to reduce the substantial litigation backlogs in conventional courts. The ODR solution enables parties to submit claims, present evidence and receive decisions without physically attending court. The transition to digital procedures has significantly decreased the time and expenses related to litigation. The ODR system user friendly nature also improves access to justice for people in rural or economically disadvantaged regions.

⁹⁸ U.N. CONF. ON TRADE & DEV., DIGITAL ECONOMY REPORT 2020, <https://unctad.org> (last visited Apr. 17, 2025)

⁹⁹ Hague Inst. for Innovation of L., Justice Innovations 2021, <https://hiil.org> (last visited Apr. 17, 2025).

Similar efforts in Mexico and Colombia are being piloted in partnership with World Bank support to expand access to justice through technology in disadvantaged area¹⁰⁰. These platforms help resolve not only consumer disputes but also housing and labour disputes. These technology-backed approach also ensures better case tracking and transparent outcomes. Overall, Brazil and its neighbours are demonstrating that ODR can play a key in modernizing justice systems in emerging economies.

10. China:

The Hangzhou Internet Court uses blockchain and AI to hear ODR cases involving intellectual property, contracts, and e-commerce. This helps the parties to file cases, upload documents, present evidence, case updates and receive judgments entirely online. Automated judgment delivery and evidence preservation systems reduce processing time drastically also demonstrates how advances technologies can make a change in the legal process¹⁰¹. The court's blockchain system ensures that digital evidence is tamper-proof and securely preserved. AI tools promote legal research, case management, and the generation of draft decisions. These advances significantly diminish case processing durations and enhance the speed and more efficient of the dispute resolution process. Automated judgement delivery allows parties to get rulings without any delay. This illustrates how the integration of the technology may update and democratize legal systems globally.

3.5 Integration of other Technologies in Arbitration

The integration of technology into international arbitration has evolved progressively over the years, with its early adoption limited to the use of emails for communication and access to online legal research databases. However, the COVID-19 pandemic significantly accelerated this trend, pushing the widespread use of digital tools such as remote hearings and digital case management systems. Technology has since become a critical component in enhancing the efficiency, reducing costs, and improving time management in arbitration proceedings. Legal practitioners and institutions are now utilizing a wide range of technological solutions, including e-discovery platforms,

¹⁰⁰ WORLD BANK, OECD REVIEW OF LATIN AMERICAN ODR PRACTICES, <https://www.oecd.org> (last visited Apr. 17, 2025).

¹⁰¹ Hangzhou Internet Ct., Blockchain and AI in ODR, <https://hzcourt.gov.cn> (last visited Apr. 17, 2025)

predictive analytics, automated contract management, and online dispute resolution (ODR) systems.

A notable example of this integration is Allen & Overy's FUSE platform, which was developed to incorporate innovative digital tools into the arbitration process. These technologies not only streamline procedural elements but also aid in predicting outcomes and legal decision-making. With the continued expansion of blockchain, artificial intelligence, and data-driven insights, technology is poised to play an increasingly central role in shaping the future of arbitration.¹⁰²

3.5.1 Artificial Intelligence (AI)

AI in arbitration leverages advanced algorithms for statistical learning, incorporating deep learning models such as natural language processing, question-and-answer systems, e-discovery, tech-assisted reviews, and enhanced search engines, as well as classical machine learning models that utilize statistical learning tools. These technologies offer a wide range of applications, including the detection of dishonesty during cross-examination through techniques like magnetic resonance imaging (MRI) or the prediction of the cost and duration of arbitration proceedings.

Additionally, data analytics software plays a crucial role by gathering information from similar cases, assisting in outcome predictions, understanding the reasoning behind decisions, and optimizing procedural strategies for favorable results. In legal research, data analytics is used to automate tasks like legal drafting, proofreading, and document analysis. Predictive analytics, in particular, enhances document review and production, categorizing documents into relevant folders using algorithmic processes. A notable case illustrating the use of predictive analytics is *Brown v BCA Trading Ltd* in the UK, where the court rejected objections to using predictive coding, recognizing its potential to reduce costs and improve the efficiency of achieving a fair outcome.

AI tools are also being applied to appoint arbitrators by identifying the most suitable candidates, automate case management, and answer arbitration-related questions. In some jurisdictions, such as China, AI and big data are becoming integral to arbitration through e-justice platforms, which handle various aspects like publicizing court

¹⁰² Ramsha Kausar Khan, *Arbitration in the Digital Age: The Growing use of Technology in International Arbitration*, 14 PLR 1 (2023).

information, connecting litigation services with applications, collecting real-time data, and supporting the trial process.

Research tools such as ROSS, Arbitrator Intelligence, and CodeLegit are helping streamline the arbitration process, while platforms like Cybersettle assist in resolving disputes in sectors such as finance.¹⁰³ So AI has become a transformative force in the field of arbitration, streamlining processes and improving efficiency. Here are the key applications: ¹⁰⁴

1. Document Analysis:

The legal system has seen significant improvement in using the AI powered tools in Document Analysis, such as Kira System and Lex Machina, which has considerably improved and are specifically designed to manage and analyse large volumes of legal documents. These technologies utilize the Natural Language Processing to interpret the legal language, to analyse the contract, identification of key clauses, extraction of some phrases, highlighting relevant legal information needed. These tools help the lawyers and the law firms to save time and resources, if compared to the traditional methods. Also helps the lawyers to enhance productivity and improve overall quality of the legal analysis¹⁰⁵

For example, if an arbitration contains a dispute on the construction contract, here AI may help in identifying and extracting the essential sections(such as dispute resolution clauses, judicial review circumstances or indemnity clauses) and highlight any anomalies compared to normal industry practices. AI also ensures that the consistency among the related documents.(e.g., confirming the various versions of contract express the same provisions about governing law or seat of the arbitration.

In India, when there is document-intensive cases, then these AI driven tools can help in saving the parties in significantly save the huge amounts of time and minimize the expenses. This will improve the arbitration process and it will focus on equalizing

¹⁰³ibid

¹⁰⁴ Christoph Salger, Decentralized Dispute Resolution: Using Blockchain Technology and Smart Contracts in Arbitration, 24 PEPP. DISP. RESOL. L.J. 65 (2024).

¹⁰⁵ ibid

opportunities .It also enables the smaller enterprises or resource-limited parties to manage the substantial data quantities with assurance.

2. Predictive Analytics:

Basically, the Predictive Analysis uses the AI tools for analysing the historical or past legal cases and find patterns that can help the lawyers to predict the future outcome of the cases. With the help of analysing the past data, the system can assess the probability of a party's success in a dispute. This can help the individuals and well as the lawyers to choose whether to move forward with arbitration, settle the case or adjust their legal strategy. So, from the Predictive Analysis, one can enhance his decision making, enables to prepare more for the arbitrations, helps in leading to a smarter planning and improved negotiation outcomes.¹⁰⁶

For example, it may analyse how the arbitrators in disputes involving construction against IT contracts or how certain legal instruments of legal issues ,such as violation of secrecy. This especially helpful in the high stakes or investment arbitration, where the risks and stakes are considerable. Predictive techniques may answer essential inquiries, such as chance of success in breach of confidentiality or the average duration of the similar cases. So the assisting parties in determining whether to proceed with arbitration or seek settlement

In India, with the expansion of commercial arbitration institutions like MCIA and DIAC, these enabled the predictive analysis in order to assist the both Indian enterprises and international investors in making data-informed judgements. Ultimately, it enables them to enhance the efficiency, reliability and predictability of the arbitration process .This is done by improving their case strategies, identifying risks and opportunities and exploring early settlement when required.

3. Virtual Assistants:

AI has transformed use support in arbitration with the use of chatbots and virtual assistants. That is AI- powered chatbots and virtual assistants are now being used to offer real time support to the individuals engaged in the arbitration process. Mostly these tools are beneficial for the people who are not well versed in legal procedures,

¹⁰⁶ ibid

which makes the process smoother and more accessible. These digital assistants can assist with several tasks such as filing claims, arranging hearings, addressing fundamental procedural questions and guides the users in every stage of the arbitration. So, this helps the users to have an interaction with the system with more confidence and independence. The primary advantage of these tools is their 24/7 availability which will enhance the overall user experience. Moreover, these tools make the arbitration process more approachable and less intimidating and far simpler to traverse for all parties concerned.¹⁰⁷

For instance , they help the users to get the knowledge on how to submit an arbitration notice and how to respond to claims as well. They also helps in managing the schedules by negotiating with parties and arbitral tribunal to set up hearings and meetings which can otherwise be a complicated process. Additionally, they address the basic legal or procedural issues which includes the difference between an interim award or how to initiate enforcement proceedings.

In nations like India, where many disputes involve people or small enterprises without the financial means to hire the expensive lawyers, these technologies have a particularly significant influence. In this case, there are virtual assistants serve as “first responders” to the fundamental legal and procedural questions, enabling the users to go through the procedure with more assurance and autonomy. This is seen in platforms like Presolv360 and Sama, who have created chatbots to assist plaintiffs and respondents in the arbitration process for small claims and consumer cases. These AI-powered options contributed to a more inclusive and user friendly dispute resolution environment by lowering the barrier to access the justice and then focus on making arbitration more approachable and less terrifying.

4. Decision Support Systems:¹⁰⁸

Machine learning is progressively used in the field of arbitration to facilitate or support fair and equitable decision making. In order to suggest potential resolutions based on the past cases and similar disputes, certain modern arbitration platforms use machine learning algorithms to analyse outcomes. Mostly this technology is used in small -value disputes where the cost and duration of the conventional arbitration may not be feasible.

¹⁰⁷ ibid

¹⁰⁸ ibid

These systems provide data-driven suggestions based on the prior cases, which will help the arbitrators to reach a well-informed and equitable conclusion. The use of this technology enhances the uniformity, consistency and quality of arbitration outcomes while saving time and resources.¹⁰⁹

For instance, if an AI-driven system recognises that like customer disputes were often resolved through partial refunds, it can propose this as equitable and fair resolution, which will facilitate quicker settlements. Worldwide, these technologies are being involved into the ODR platforms that can handle and manage high volumes of claims, like eBay's resolution centre which leverages data-driven insights in order to recommend equitable and consistent settlements.

In India, the decision support system was gaining significance in the consumer dispute resolution and in expanding areas as such fintech and e-commerce, there is efficient and effective management of many low-value disputes which needs solutions that should be quick, predictable and fair as well.

3.5.2 Blockchain Technology

Blockchain technology plays a significant role in dispute resolution by facilitating electronic awards and e-signatures through smart contracts. These smart contracts, which are digital ledgers of transactions, are designed to automatically record and execute agreements. The structure of blockchain involves a chain of information blocks, where each block contains data from the previous one, all secured through cryptographic processes. This transparency makes blockchain a secure and trustworthy mechanism for use in arbitration. Additionally, blockchain-based online dispute resolution (ODR) platforms, such as Kleros.io, provide a comprehensive system for resolving disputes. These platforms help collect evidence, select appropriate jurors, and make decisions through a voting system, enhancing efficiency and ensuring fairness in the process.¹¹⁰

¹⁰⁹ *ibid*

¹¹⁰ Ramsha Kausar Khan, *Arbitration in the Digital Age: The Growing use of Technology in International Arbitration*, 14 PLR 1 (2023).

Key Features¹¹¹

1. Decentralization:

One of the core features of the blockchain is the Decentralization, which means there is no single authority or any controlling server to control the data. In this, the data is more like distributed across the network of computers. In simple words, unlike traditional databases controlled by a central authority, blockchain is managed by multiple participants within a peer-to-peer network, reducing the risk of data manipulation or centralized control. This structure will help in minimizing the corruption, that no single can alter anything or any data without the consensus. So, this type mostly ensures greater independence and neutrality of stored information.

2. Transparency and Security:

This offers enhanced transparency and security by documenting data in encrypted blocks that are linked together to form a chain. That is, information is stored in encrypted blocks that are chronologically linked, forming a tamper-proof and traceable chain. This ensures high levels of data integrity and accountability. Each block contains a digital signature, timestamp and record of all transactions. Once the data is recorded on the blockchain, it cannot be modified without changing all subsequent blocks, this is something that is practically impossible due to encryption and distributed nature of the system. Throughout the process, legal documents, evidence and case details are guaranteed to remain authentic and secure due to this tamper proof design.

3. Consensus Mechanisms:

Consensus Mechanism Blockchain employs cryptographic and game-theoretic protocols to ensure agreement among all participants regarding the current state of the ledger, thereby enhancing trust and consistency. Include consensus procedures like Proof of Work(PoW), to maintain the consistency and confidence within the network. This give us the guarantee that no erroneous information is been included in blockchain.

¹¹¹ Supra 40

Blockchain integration ensures enhanced security, trust, and efficiency in arbitration processes through several key functionalities:¹¹²

1. Smart Contracts:

These are self-executing digital agreements that automatically enforce the terms of a contract, reducing the risk of non-compliance and minimizing post-award enforcement issues. That is once both parties agree to settlement, the smart contract can easily release the payment or deliver any service without any need of human intervention. So this will reduce the chances of non compliance and also limits the need for enforcements through the courts. It is very useful for settling conflicts across countries or enforcing arbitration rulings.¹¹³

2. Tamper-Proof Records:

Blockchain provides time-stamped, immutable digital ledgers of all case activities, ensuring a transparent and secure record of proceedings that cannot be altered or erased. During a dispute resolution, the blockchain helps in keeping a permanent ledger that keeps track of all the papers and actions which includes filings, communications, submission, and final decisions. This act as a secure log of the whole arbitration process which can be referred to in case of enforcement, compliance verifications and also even appeals.

3. Cross-Border Enforcement:

The decentralized nature of blockchain supports the enforcement of arbitral awards across jurisdictions, aligning with the principles of the New York Convention and enhancing international cooperation. Because of the blockchain records conform to international legal norms like New York convention, decision from the arbitration and related agreements maintained on the blockchain may fully recognised and enforces in different legal system.

By offering secure data storage, trust-building mechanisms, and automated enforcement tools, blockchain is proving to be a valuable asset in the modernization of arbitration and online dispute resolution systems.¹¹⁴

¹¹² *ibid*

¹¹³ *ibid*

¹¹⁴ *ibid.*

3.5.3 Online Arbitration Platforms

The use of virtual hearings in arbitration has grown significantly, leading to reduced travel costs and greater procedural efficiency. Online platforms now support various aspects of arbitration, including procedural discussions, evidence review, witness examinations, and consultations. While this shift offers convenience, concerns have been raised about transparency and the effectiveness of remote hearings in complex cases. Arbitration tribunals increasingly rely on digital tools such as Zoom, Google Meet, and Cisco WebEx, along with features like speech recognition, real-time translation, and electronic submissions.

Case management systems further enable parties to exchange information and file claims online. Many states have taken steps to promote online arbitration, and institutions such as the Singapore International Arbitration Centre (SIAC), Vienna International Arbitral Centre (VIAC), and Stockholm Chamber of Commerce (SCC) have launched dedicated platforms for virtual proceedings. In China, bodies like the Shenzhen Court of International Arbitration (SCIA) and the Guangzhou Arbitration Commission (GZAC) offer advanced digital services, including remote hearings and voice-to-text transcription, to enhance the arbitration process¹¹⁵

Platforms like Modria, Cybersettle, and eBay's ODR system offer scalable dispute resolution mechanisms:¹¹⁶

1. Modria:

Used in over 60 million cases worldwide, Modria specializes in tax, family, and commercial disputes.¹¹⁷ It is known for his capacity for providing adaptable answer which manages both the simple and complex cases across many different industries. The main purpose is to automate the entire dispute resolution process, which automatically reduce the human intervention and streamline the entire process for a faster and more affordable in nature. It has automated decision making system to analyse and evaluate the particulars of each case and provide adequate remedies needed

¹¹⁵ Ramsha Kausar Khan, Arbitration in the Digital Age: The Growing use of Technology in International Arbitration, 14 PLR 1 (2023).

¹¹⁶ Supra 40

¹¹⁷ Colin Rule, *Modria and the Future of Dispute Resolution*, 2012 J. Disp. Resol. 11, 12–15.

based on predefined rules. This technique is beneficial for parties who cannot independently achieve a settlement on their own. This can be done by offering a impartial and neutral approach to resolve the disputes efficiently.

2. Cybersettle:

It is a platform focuses on insurance claims using a blind-bidding system. It is mainly designed for the resolution of insurance claims. This blind bidding system make the parties submit their individual offers without knowing the other party's bid. The system will automatically selects the middle point between both the bids as the settlement amount. This system avoids the need for negotiation which can be lengthy and helps in settling the claims more efficiently

3. eBay and PayPal:

eBay and PayPal handle over 60 million disputes annually using automated resolution tools, providing quick redress to consumers. This is platform where the resolution mechanism is every quick and efficient for the consumers and the sellers in e-commerce space. This ensures that the disputes are solved fairly and quickly by using automated tools, which also enhances the consumer experience. When the dispute arises on eBay and PayPal , the platform initiates a sequence of the procedures to resolve the issue, such as automated refunds, arbitration and dispute mediation. Then the platform evaluates according to the basic rules also with provided evidence, which helps in giving a prompt decision. This pattern helps the consumers get redressed and for companies to reduce the costs.

3.6 Advantages of ODR

a. Cost-Effectiveness :

Online Dispute Resolution (ODR) significantly lowers legal expenses by eliminating the need for in-person appearances and protracted litigation processes. This makes it especially advantageous for corporations and individuals who may lack the financial resources to engage in traditional court proceedings..¹¹⁸It is particularly attractive for

¹¹⁸ Deepakshi Bhalla & Kriti Sharma, ODR - An Impending Solution to Disputes, 4 INDIAN J.L. & LEGAL RSCH. 1 (2022).

the individuals, small enterprises or companies with less financial resources to engage in a conventional litigation, since the entire process is done online. There is no need for in-person appearance, travel or expensive legal representation. When these barriers are reduced, any individual can seek for justice and need not have to worry about the high costs.

b. Time Efficiency:

ODR provides a quicker and more economical alternative to conventional litigation, which is often delayed, costly, and procedurally complex. By resolving disputes entirely online, it removes challenges such as determining jurisdiction, applicable laws, or selecting a physical venue.¹¹⁹ By conducting all the proceedings and communication online, the ODR helps in eliminating the bottlenecks, including the selection of the physical venue, determining the jurisdiction and focus on following the applicable laws.

c. Accessibility:

ODR platforms often support multiple languages, including Spanish and Portuguese, enhancing usability for Latin American e-consumers. In some instances—such as with the Latin American Institute of Electronic Commerce (ILCE)—consumers can file claims at no cost, promoting greater access to justice.¹²⁰ Most of the ODR platforms are mobile friendly, 24/7 availability and supports multiple languages, also removing the barriers to the justice like geographical, time constraints and language limitations. ODR promotes greater access to justice when all the financial and linguistic barriers are removed, even in disadvantaged areas also for isolated populations.

d. Asynchronous Communication:

In contrary to the conventional courts which demands that the parties to appear as fixed times, ODR allows parties to engage in the process at their own convenience. They can submit documents, respond to arguments, and review decisions without needing to be present in real-time, thereby increasing procedural flexibility and simplifying data

¹¹⁹ María Mercedes Albornoz & Nuria González Martín, Feasibility Analysis of Online Dispute Resolution in Developing Countries, 44 U. Mia. Inter-Am. L. Rev. 39 (2012)

¹²⁰ María Mercedes Albornoz & Nuria González Martín, Feasibility Analysis of Online Dispute Resolution in Developing Countries, 44 U. Mia. Inter-Am. L. Rev. 39 (2012)

management..¹²¹ This not only helps the parties in different zones or countries or with tight schedules but it will also help in improving procedural flexibility.

e. Transparency:

The digital nature of ODR ensures that all proceedings are electronically recorded and traceable, with real-time updates available to the parties. This fosters a transparent and accountable dispute resolution process.¹²² This will help the users to monitor or get updates about the case status in real time and access a comprehensive digital record of all actions performed, documents provided and rulings rendered. This amount of transparency diminished the likelihood of prejudice , corruption or procedural irregularities which are often issues in the conventional method of solving the disputes.

f. Economic Development:

By enhancing confidence in online transactions, ODR plays a critical role in stimulating the digital economy. It strengthens commercial ties and builds trust between the parties, which is essential for economic growth in developing regions.¹²³ When the parties are feeling like conflicts will get addressed quickly and equitably then the parties will opt for the participation in the online platforms. This is how the legal infrastructure , including conflict resolution processes helps in functioning as a tool for economic policy and development planning for law students.

g. Reduces Bias:

ODR reduces the likelihood of subjective or unconscious bias by focusing on written submissions and factual claims, rather than the personal characteristics of the parties. This is particularly effective in text-based and asynchronous formats..¹²⁴ The decisions are taken on the basis of the documents provided and not the appearance or any elemnts

¹²¹ Deepakshi Bhalla & Kriti Sharma, ODR - An Impending Solution to Disputes, 4 INDIAN J.L. & LEGAL RSCH. 1 (2022).

¹²² Dr. P. Jogi Naidu & Bhagavatula Naga Sai Sriram, Online Dispute Resolution (ODR) in India: Opportunities, Challenges, and Future Prospects, 6 Int'l J. Legal Sci. & Innovation 750 (2024).

¹²³ Feasibility Analysis of Online Dispute Resolution in Developing Countries, 44 U. Mia. Inter-Am. L. Rev. 39 (2012)

¹²⁴ Deepakshi Bhalla & Kriti Sharma, ODR - An Impending Solution to Disputes, 4 INDIAN J.L. & LEGAL RSCH. 1 (2022).

such as race ,gender,accents or physical appearnaces. Decision making without considering these factors can help the parties to get a fair and equitable resolution, particularly in sensitive disputes.This system can be called as giving “Blind justice”- where it treats the parties equally without any social or personal identification.

h. Expertise:

ODR enables parties to consult professionals with specific technical or legal knowledge, irrespective of their location. This broadens access to high-quality expertise, which may not be available locally.¹²⁵ In some of the complex disputes, which involving intellectual property , fintech or international commerce, the conventional courts may not be having required informations about the matters. But the ODR platforms facilitates the appointment of arbitrators who are having relevant expertise in the subject matter regardless where they are based. So here , the ODR breaks the geographical barriers and promotes equitable decision making.

i. Cross-Border Dispute Resolution:

ODR proves especially valuable in handling international disputes, where the expenses associated with travel and legal representation often outweigh the value of the claim. It provides a practical and cost-efficient solution for cross-border conflicts.¹²⁶ For example, if an enterprise engaged in cross-border ecommerce may solve the disputes without having a huge cost on the legal counsel and other expenses like travel. This supports the aims of the UNCITRAL Model law and the New York Convention, which focus on promoting the enforcement and recognition of the arbitral awards across borders.

j. 24/7 Availability:

ODR platforms offer 24/7 availability, allowing parties to engage with the process at their convenience. This continuous access enhances flexibility and ensures timely

¹²⁵ Dr. P. Jogi Naidu & Bhagavatula Naga Sai Sriram, Online Dispute Resolution (ODR) in India: Opportunities, Challenges, and Future Prospects, 6 Int'l J. Legal Sci. & Innovation 750 (2024).

¹²⁶ Feasibility Analysis of Online Dispute Resolution in Developing Countries, 44 U. Mia. Inter-Am. L. Rev. 39 (2012)

resolution of disputes across different time zones.¹²⁷ The case effectiveness can be greatly improved by the constant access, which helps in the minimizing delays and efficiency. This helps in the promoting the digitize the public services ,including judicial delivery systems.

3.7 Disadvantages of ODR

1. Digital Divide:

Many individuals in rural or economically weaker sections lack access to reliable internet and digital literacy, creating inequality in participation. Limited access to technology and the internet in rural areas restricts ODR's reach.¹²⁸ Even in the absence of the reliable internet ,people find it difficult to engage in the ODR. In mos of the regions, having a smartphone or the computer is very common, but the digital literacy is what lacking in these places. This can lead to the unequal access to the justice, favouring urban and technologically adept persons. It is required to have basic knowledge or skills to upload the documents ,compose the messages ,or join for a video conference. So this can become a hindrance in the navigation of the system to the every parts of the country. Government must take basic steps to provide resources and awareness regarding spreading of the knowledge and skills to use the technology. Until that time the ODR remains unavailable to some people.

2. Cultural Resistance:

Latin American societies prioritize face-to-face interactions, which can hinder the adoption of ODR. Persistent illiteracy and computer illiteracy in rural areas limit the population's ability to engage in online dispute resolution.¹²⁹ Mostly, the traditional dispute resolution feels more reassuring for the people who are not well verse digital process. This cultural bias will complicate the expansion of ODR in some places because changing the mindset will take time and giving awareness programs and

¹²⁷ Dr. P. Jogi Naidu & Bhagavatula Naga Sai Sriram, Online Dispute Resolution (ODR) in India: Opportunities, Challenges, and Future Prospects, 6 Int'l J. Legal Sci. & Innovation 750 (2024).

¹²⁸ Dr. P. Jogi Naidu & Bhagavatula Naga Sai Sriram, Online Dispute Resolution (ODR) in India: Opportunities, Challenges, and Future Prospects, 6 Int'l J. Legal Sci. & Innovation 750 (2024).

¹²⁹ María Mercedes Albornoz & Nuria González Martín, Feasibility Analysis of Online Dispute Resolution in Developing Countries, 44 U. Mia. Inter-Am. L. Rev. 39 (2012)

campaigns will be a long process and also training programs. So the implementation and adoption of the ODR is sensitive when it comes to the local customs.

3. Security and Privacy Concerns:

The ODR system uses the encryption and cybersecurity, even though encryption exists, sophisticated cyberattacks and data breaches remain potential threats. Online platforms may be vulnerable to data breaches, raising concerns about confidentiality and privacy.¹³⁰ There are high chances of getting sensitive and personal information exposed by the hackers and data breaches which fears the people to get into the ODR platforms. If people are scared of losing their personal data, this can affect the implementation of the ODR as well. Many countries do not have proper and efficient data protection to avoid these cyber attacks and data breaches. In order to ensure security in ODR systems, need frequent updates and consistent monitoring. If there is no trust in the online safety, then users will hesitate to use ODR

4. Language Barriers:

With over 20 languages and hundreds of dialects, India is a linguistically diverse country. This India's linguistic diversity poses challenges in providing ODR services in multiple languages.¹³¹ Most of the ODR system is in two languages like Hindi and English, which actually limits their accessibility. There are people in the country do not know these two languages, which affect their confidence in using these ODR system. This is basically making the ODR not user friendly for the native speakers or people with low literacy. Also this language barrier can also lead to misunderstandings or parties won't be able to express their arguments as such. So language barrier is one such hindrance in implementing the ODR system in the country.

5. Enforcement Issues:

Some jurisdictions lack legal recognition for blockchain-based records or smart contract enforcement. There is no specific hard law regulating ODR in Latin America, and existing ADR regulations may not fully address ODR needs. The lack of

¹³⁰ Deepakshi Bhalla & Kriti Sharma, ODR - An Impending Solution to Disputes, 4 INDIAN J.L. & LEGAL RSCH. 1 (2022).

¹³¹ Dr. P. Jogi Naidu & Bhagavatula Naga Sai Sriram, Online Dispute Resolution (ODR) in India: Opportunities, Challenges, and Future Prospects, 6 Int'l J. Legal Sci. & Innovation 750 (2024).

harmonized e-commerce legislation creates obstacles for ODR development. Soft law rules, such as best practices and codes of conduct, are still in the early stages of development.¹³² This shows the legal uncertainty which makes the parties hesitant to rely on the ODR. Without proper recognition of ODR, it is difficult to solve the dispute in efficient way. It is high time to make required changes in the legal framework to bring the support to the digital resolutions and ensure that they have capacity of the enforcement.

6. ICT Infrastructure Gap:

Internet and broadband access are expensive and of poor quality in many areas. Basic infrastructure, such as reliable electricity and roads for delivery, is lacking in some regions.¹³³ The poor-quality internet can affect the entire process of ODR system which includes the video calls, uploads and real time communications. In some areas electricity is one of the main issue, so it becomes hard to use any digital system. Another drawback is the roads and delivery services, which affects the logistics of the dispute resolution. These gaps prevent the implementation of the ODR system. This also created inequality in the legal access and reduce the confidence in receiving the justice. So the ICT-infrastructure must go hand in hand with the ODR development.

3.8 Case Laws and Legal Frameworks

The emergence of the arbitration and ODR has been influenced by many judicial decisions and many advancements underscoring a worldwide shift towards digital and efficient system. In India, there are many landmark cases such as *Past Wind Solutions Pvt Ltd v. GE Power Conversion India Pvt Ltd*¹³⁴, where the court recognized the autonomy of Indian parties to opt for a foreign arbitration seat, reinforcing the liberal stance toward party autonomy and facilitating global enforcement. Similarly, in *Shakti Bhog Foods Ltd. v. Kola Shipping Ltd*¹³⁵, the Supreme Court affirmed the enforceability of foreign arbitral awards under the New York Convention and streamlined judicial

¹³² María Mercedes Albornoz & Nuria González Martín, Feasibility Analysis of Online Dispute Resolution in Developing Countries, 44 U. Mia. Inter-Am. L. Rev. 39 (2012)

¹³³ María Mercedes Albornoz & Nuria González Martín, Feasibility Analysis of Online Dispute Resolution in Developing Countries, 44 U. Mia. Inter-Am. L. Rev. 39 (2012)

¹³⁴ (2021) 7 SCC 1

¹³⁵ (2009) 2 SCC 134

review of such awards. The case of *Fuerst Day Lawson Ltd. v. Jindal Exports Ltd*¹³⁶, the court clarified that the enforcement of foreign awards is akin to a decree and should not be unnecessarily delayed through judicial intervention. While in the case of *National Highways Authority of India v. Gayatri Jhansi Roadways Ltd*¹³⁷, the court emphasized the need for minimal judicial interference and strict adherence to timelines in arbitration, reflecting a pro-technology and pro-efficiency approach.

Internationally, many innovative platforms have been initiated, like Kleros – built on the Ethereum Blockchain, which uses randomly selected jurors and smart contracts to solve the disputes in the crypto economy also ensures transparency and speed. Similarly, IBM dispute with the Taos demonstrated a licensing conflict effectively settled through blockchain-based arbitration, demonstrating the speed, efficiency, and reliability of smart contracts in modern dispute resolution.¹³⁸

Private platforms such as eBay and PayPal managed over 60 million complaints using automated ODR in every year by keeping the consumer trust and system scalability. These platforms use proprietary Online Dispute Resolution (ODR) systems to automatically manage buyer-seller disputes. This automation enhances user trust while significantly reducing the workload on customer support teams.¹³⁹

Next is the SAMA in India, in collaboration with major institutions like ICICI, HDFC, and Airtel Payments Bank, SAMA has successfully resolved over 500,000 disputes. This highlights the growing effectiveness and scalability of technology-driven dispute resolution mechanisms within the Indian legal and financial ecosystem.¹⁴⁰ The Singapore International Mediation Centre (SIMC) shown flexibility to the pandemic, which means, the Singapore International Mediation Centre (SIMC) introduced remote mediation protocols for cross-border commercial disputes. These expedited procedures enabled resolutions within just 2–3 weeks, illustrating the adaptability and efficiency of virtual dispute resolution during global disruptions.¹⁴¹

¹³⁶ . (2001) 6 SCC 356

¹³⁷ . (2019 SCC OnLine Del 6391)

¹³⁸ Pablo Cortés, Online Dispute Resolution Services: A Selected Number of Case Studies, (2014) 20 Computer & Telecomm. L. Rev. 172

¹³⁹ Pablo Cortés, Online Dispute Resolution Services: A Selected Number of Case Studies, (2014) 20 Computer & Telecomm. L. Rev. 172

¹⁴⁰ Pablo Cortés, Online Dispute Resolution Services: A Selected Number of Case Studies, (2014) 20 Computer & Telecomm. L. Rev. 172

¹⁴¹ Pablo Cortés, Online Dispute Resolution Services: A Selected Number of Case Studies, (2014) 20 Computer & Telecomm. L. Rev. 172

On the international front, China has established advanced internet courts equipped with facial recognition and voice-enabled technologies to conduct virtual hearings. In the United States, ODR platforms prioritize convenience by utilizing text-based and asynchronous communication methods, enabling parties to resolve disputes remotely. Australia has witnessed a significant rise in ODR usage, propelled by its robust ADR culture and well-developed internet infrastructure.¹⁴²

In India, notable ODR platforms such as CADRE, SAMA, and the Centre for Online Dispute Resolution have emerged, offering efficient and streamlined solutions to various types of disputes. Judicial recognition in India about the ODR continues in the case of , in *Grid Corporation of Orissa Ltd. v. AES Corporation*,¹⁴³ the Court upheld the validity of negotiations and virtual conferencing unless explicitly restricted by contractual terms or law and the case of *State of Maharashtra v. Dr. Praful B. Desai*¹⁴⁴, marked a significant step by recognizing video conferencing as a legitimate method for recording witness statements. Additionally ,In *Dhodha House v. S.K. Maingi*:¹⁴⁵, the Court acknowledged that parties could be considered virtually present at a location irrespective of their physical presence, reinforcing the legal acceptance of remote participation and *Trimex International FZE Ltd. v. Vedanta Aluminium Ltd.*,¹⁴⁶, the Court upheld contracts formed through emails, laying a solid foundation for the enforceability of e-contracts within the ODR framework.

Additionally, the eBay pioneered the use of Online Dispute Resolution in the private sector as early as 1999, allowing users to file complaints, initiate settlements, and proceed to online mediation—all through a digital platform. This model proved highly effective and was soon adopted globally.

Furthermore, in India, notable ODR platforms such as CADRE, SAMA, and the Centre for Online Dispute Resolution have emerged, offering efficient and streamlined solutions to various types of disputes. Collectively, these advancements have illustrated how the integration of technology is important and helped in the transformation of the dispute resolution to a better online version.

¹⁴² Deepakshi Bhalla & Kriti Sharma, ODR - An Impending Solution to Disputes, 4 INDIAN J.L. & LEGAL RSCH. 1 (2022).

¹⁴³ (2005) 11 SCC 571,

¹⁴⁴ , (2003) 4 SCC 601

¹⁴⁵ (2006) 9 SCC 41

¹⁴⁶ (2010) 3 SCC 1

3.9 Conclusion

ODR and technological integration are redefining arbitration by prioritizing speed, cost-effectiveness, and inclusivity. With AI, blockchain, and online platforms, dispute resolution becomes scalable and transparent. While challenges like algorithmic fairness, data privacy, and legal harmonization remain, institutions such as ICC, UNCITRAL, and OECD are actively shaping standards. As the global landscape evolves, adopting a hybrid model—balancing human expertise with technological precision—will be key to making ODR a truly global tool for justice.

Chapter IV

Comparative Analysis of Online Dispute Resolution (ODR) and its Opportunities in the Indian Arbitration System

4.1 Introduction:

"In the rush to return to normal, use this time to consider which parts of normal are worth rushing back to." – David Hollis

The rise of digital technology has significantly transformed dispute resolution processes across the globe. In an era dominated by e-commerce, virtual agreements, and cross-border transactions, legal frameworks and arbitration systems are evolving to keep up with these changes. Traditional court systems, often burdened by high costs, lengthy timelines, and procedural complexities, have driven the need for more innovative and technology-enabled alternatives. The advancement of technology and the widespread use of social media have connected people worldwide, enabling them to conduct business transactions online. This connectivity has resulted in a rise in cross-border disputes, which has prompted the creation of innovative methods to resolve these conflicts.¹⁴⁷

One notable example is eBay, which in 1999 became one of the first private organizations to implement such a technique for dispute resolution. The eBay platform enabled customers to file complaints online and initiate a settlement process. If the parties could not reach an agreement, the platform would then trigger an online mediation process. Designed to identify issues early, the system promoted self-regulated negotiation followed by mediation or arbitration if necessary. Since its inception, this approach has evolved significantly and is now widely adopted by various countries and organizations. This method is commonly known as Online Dispute Resolution (ODR).¹⁴⁸ With passing time, the theory of Online Dispute Resolution has

¹⁴⁷ Ethan Katsh, 'ODR: A Look at History' in Mohamed Abdel Wahab and others (ed), Online Dispute Resolution

Theory and Practice (EIP 2013) 27

¹⁴⁸ *ibid*

developed as the outcome of advancement and enhanced familiarity with the technology¹⁴⁹

In simple terms, Online Dispute Resolution (ODR) is a way to solve disputes using technology. It is basically electronic Alternative Dispute Resolution (e-ADR), where the parties communicate and resolve their issues online without meeting in person. ODR has more benefits compared to traditional offline methods because people don't have to be physically present in the same place. At its core, ODR uses information and communication technology tools to help parties settle their disputes.¹⁵⁰

ODR includes different ways of resolving disputes like e-Negotiation, e-Conciliation, e-Arbitration, and more. It is a process conducted over the internet, where parties communicate through tools like videoconferencing. Over time, many countries have started adopting ODR as a preferred method. ODR is not limited to online-only disputes; it also handles traditional disputes such as unfair trade practices and intellectual property violations that can be resolved using information technology.¹⁵¹ ODR is usually informal, flexible, and creative. It doesn't follow strict rules or rigid procedures. Instead, it is designed to fit the convenience of the parties involved. The process is voluntary and requires the agreement of both sides. ODR provides quick, clear, and friendly ways for parties to resolve their disputes online.¹⁵² ODR has had a very positive impact on the corporate sector, legal professionals involved in dispute resolution, and the courts.¹⁵³ The corporate sector frequently faces disputes arising from customers, business partners, competitors, and other stakeholders. In addition to these conflicts, companies must handle numerous other challenges that demand significant time, money, and resources. Online Dispute Resolution (ODR) assists corporations in resolving these disputes quickly and efficiently, often without involving the courts. As a result, businesses benefit from using ODR because it helps

¹⁴⁹ *ibid*

¹⁵⁰ Pragya Kumar, *online dispute resolution (ODR)- resolving conflicts from behind by screens*, KNOWLAW (JUN 13, 2022)

¹⁵¹ Moghe, *online dispute resolution mechanism: prospects and challenges in India*, LEGAL SERVICE INDIA (JUN 12, 2022, 12:30 IST),

¹⁵² Niti Aayog, *Designing the future of dispute resolution*, NITI AAYOG, <https://www.niti.gov.in/sites/default/files/2021-11/odr-report-29-11-2021.pdf>

¹⁵³ *ibid*

them avoid lengthy litigation, saving both time and protecting their reputation in the marketplace.¹⁵⁴

Online Dispute Resolution (ODR) marks a significant breakthrough in arbitration and mediation by incorporating technology into every stage of the dispute resolution process—from filing and documentation to negotiation, mediation, arbitration, and enforcement. Consequently, ODR serves both as a supplement to and an alternative for traditional judicial systems. The strength of ODR lies in its ability to improve access to justice, especially for disputes that involve low monetary value but occur frequently, such as consumer complaints, micro-insurance claims, traffic violations, and small commercial disputes. ODR's importance has grown even more in the post-pandemic world, where virtual hearings and remote participation have become standard practice.

Countries like the United States, United Kingdom, the European Union, and Singapore have embraced ODR by enacting legislation, establishing court-supported platforms, and creating institutional frameworks. These nations have invested in technologies such as artificial intelligence, blockchain, multilingual interfaces, and digital case management systems to make dispute resolution faster and reduce delays. India is also beginning to explore the digitization of arbitration, though it remains in the early stages. While eCourts and virtual hearings have gained traction, a fully developed legal and technological infrastructure for ODR is still lacking. Given India's heavy caseload, growing digital presence, and tech-savvy population, the potential for ODR is immense. However, progress is hindered by structural, cultural, and legal challenges. This chapter provides a critical examination of the ODR frameworks and technological innovations implemented worldwide and assesses their relevance to the Indian context. It highlights existing systemic obstacles, explores possible technological solutions, and suggests necessary legal reforms for effective adoption. The chapter aims to present practical recommendations to transform India's arbitration system through the integration of ODR.

¹⁵⁴ Deepak Verma, Anshu Banwari and Neerja Pande, online dispute resolution and corporate executives of India, INTECHOPEN (JUN 12, 11:06 IST), <https://www.intechopen.com/chapters/61440>

4.2 Benefits of ODR:

1. Cost-Effective Mechanism:

One of the primary barriers to accessing justice is the high cost associated with traditional dispute resolution methods. In this regard, Online Dispute Resolution (ODR) offers a cost-effective alternative. It eliminates the need for parties to travel long distances and significantly reduces legal expenses by expediting the resolution process. Moreover, traditional litigation imposes several indirect costs on businesses, such as loss of valuable time, decreased employee well-being, reduced investor confidence, and ultimately, a slowdown in economic productivity. ODR presents an efficient solution, particularly for corporate entities seeking to minimize costs and for individuals who cannot afford the financial burden of lengthy court proceedings.¹⁵⁵

For instance, it might be more difficult for a business engaged in legal proceedings to secure capital. On the other hand, the ODR inexpensive methods facilitate parties' ability to quickly settle disputes and move on. SAMA and Presolve360 in India typically charge much lower fees for their ODR services than a typical litigation or even traditional arbitration proceeding. Because they are digital, they also remove geographical restrictions, which makes it simpler for the parties in rural or small communities to get reasonably priced dispute resolution.

2. Convenient and Time-Efficient:

The judiciary in many jurisdictions faces the persistent issue of case backlogs due to various systemic delays. ODR emerges as a promising solution to this problem by offering a faster and more convenient way to resolve disputes. Being an extension of Alternative Dispute Resolution (ADR), ODR inherits its simplicity and speed while eliminating the need for physical presence. Virtual communication platforms, essential to ODR, are especially beneficial for resolving cross-border disputes. Additionally, in sectors like e-commerce, ODR platforms provide consumers with standardized, user-

¹⁵⁵ Deepakshi Bhalla & Kriti Sharma, ODR - An Impending Solution to Disputes, 4 INDIAN J.L. & LEGAL RSCH. 1 (2022).

friendly systems for addressing grievances, thereby streamlining and accelerating the dispute resolution process.¹⁵⁶

For examples, in cross-border e-commerce disputes, Indian customers may use online platforms to interact with the foreign vendors in cross-border e-commerce disputes, settling dispute without the need for costly international travel or complicated foreign legal procedures.

Additionally, ODR adapts well to India's mobile populace. With more than 1.2 billion mobile phone users, digital dispute resolution seamlessly integrates into the daily routines of individuals, enabling them to access it from the comfort of their own residences at their leisure.

3. Customizable Processes:

ODR integrates the flexibility of ADR processes such as arbitration, mediation, and negotiation with technological tools, including artificial intelligence. This synergy enables the development of diverse and adaptive dispute resolution models. ODR can thus serve as a multi-door justice system by tailoring its processes to specific categories of disputes, enhancing both accessibility and efficiency.¹⁵⁷ For instance, AI-assisted mediation can recommend probable outcomes or deal points based on past similar cases, helping parties in concentrating discussions on feasible resolutions.

In arbitration, digital tools facilitate the secure sharing and enable AI to analyse precedents and key facts, assisting the arbitrators in making informed decisions. Programs are implemented by negotiation platforms to evaluate counteroffers and offers guiding parties towards fair settlements. This adaptability is indispensable in India, where disputes encompass everything from the recovery of the microloans to online fraud. ODR can develop adaptable processes that produce more equitable, efficient and superior results by blending technology.

4. Promotes Access to Justice:

¹⁵⁶ *ibid*

¹⁵⁷ *ibid*

ODR plays a vital role in broadening access to dispute resolution mechanisms by addressing critical obstacles such as geographical distance from courts, high litigation costs, and physical limitations of parties. Online processes like virtual mediation and negotiation are built on consensus and cooperation, offering a more amicable and less adversarial route to justice. Furthermore, ODR allows parties to engage from the comfort of their chosen environment, making the process less intimidating and more accessible. As ODR evolves, it can encourage wider participation in dispute resolution, especially among marginalized or economically weaker sections of society.¹⁵⁸

Courts are simply too far away, too expensive, and too intimidating for many Indians, particularly those in rural or economically disadvantaged areas. The gap can be bridged by the implementation of ODR. If a farmer in a remote village in Bihar who has a grievance against an agri-tech company. He has the option of participating in an online mediation session via his smartphone, rather than travelling to Patna or Delhi. Typically, the ODR platforms provide plain-language instructions and simplified interfaces, eliminating the necessity for him to comprehend elaborate legal phrases or travels terrifying judicial processes.

5. Minimizes Human Bias in Judgement:

Concerns about bias and fairness in traditional adjudication are well-documented, with judgments sometimes being influenced consciously or unconsciously by human factors. ODR addresses this issue by reducing the role of human interaction. Text-based and asynchronous communications—such as emails and written submissions—focus on the facts and claims rather than the identities or appearances of the parties involved. This objectivity minimizes the potential for prejudice and promotes more impartial outcomes. Additionally, ODR empowers parties by giving them greater autonomy to assert their rights in a streamlined, less formal environment—something often constrained in conventional litigation due to its complexity and cost.¹⁵⁹

Digital procedures such as written pleadings, standardised forms, and anonymised submissions redirect attention from the identity of the parties to the facts of the case. There are some AI tools analysing written submissions also operate based on the facts

¹⁵⁸ *ibid*

¹⁵⁹ *ibid*

rather than subjective opinions ,hence further reducing bias. This does not suggest the elimination of human judgement, arbitrator and mediators remain important although the framework of ODR may facilitate the minimization of influence from extra personal elements on this decision.

6. Catalyst for Legal Modernization:

ODR has the potential to significantly modernize the legal ecosystem by fostering awareness of rights and providing tools for their enforcement. With regular use of digital platforms such as mobile apps, video conferencing, and online document submission, both dispute resolution and justice delivery can become more equitable and efficient. The burden of physical documentation and storage—an ongoing challenge for courts—can also be addressed through ODR, which allows for secure, digital preservation and easy transfer of case materials. Over time, the widespread adoption of ODR and virtual courts can lead to structural reforms in the legal system, making justice more accessible and less delayed—truly embodying the principle that “justice delayed is justice denied.”¹⁶⁰

4.3 ODR and Technology-Driven Arbitration Systems in Other Countries

Countries across the globe have adopted different approaches toward integrating technology in arbitration and legal dispute resolution. These developments are supported by comprehensive legal frameworks and institutional backing that guide and regulate the use of ODR tools.

4.3.1 United States:

The rise of Online Dispute Resolution (ODR) in the United States marks a transformative shift in the realm of Alternative Dispute Resolution (ADR), spurred by technological advancements and the growing demand for more accessible and efficient justice mechanisms. The inception of ODR in the U.S. can be traced back to the 1990s, when private sector innovators began exploring digital solutions to overcome the

¹⁶⁰ Supra 9

inherent challenges of traditional legal processes—such as high costs, procedural delays, and geographical constraints. Initially confined to commercial arbitration and e-commerce platforms, ODR has gradually expanded to include public sector involvement. Several state court systems have launched pilot ODR initiatives to handle small claims, family law matters, and traffic violations. States like Michigan, Utah, and Ohio have implemented guided ODR systems that aim to resolve disputes without necessitating formal court appearances, thus easing court burdens and increasing access to justice—particularly for self-represented litigants.¹⁶¹

From a regulatory standpoint, the United States does not yet possess a centralized legal framework dedicated exclusively to ODR. Instead, the development of ODR is supported by a patchwork of existing laws, including the Federal Arbitration Act (FAA), the Electronic Signatures in Global and National Commerce Act (E-SIGN), and the Uniform Electronic Transactions Act (UETA), which collectively validate online arbitration, electronic contracts, and digital signatures. Additionally, both judicial bodies and private ODR providers often adhere to international standards set by institutions such as UNCITRAL, the International Council for Online Dispute Resolution (ICODR), and the National Center for Technology and Dispute Resolution (NCTDR), ensuring fairness and consistency in ODR practices.¹⁶²

Advantages of ODR in the United States¹⁶³

1. Enhanced Efficiency and Access:

ODR systems in the U.S. enable parties to resolve disputes at their own pace, often asynchronously, meaning they don't need to respond in real time. This flexibility saves time and cuts down costs. It is especially beneficial for individuals in rural or remote areas who otherwise struggle to access physical courts. This flexibility will help the users be less stressful, enabling them to answer at their convenience, rather than adhering to fixed court or hearing schedules. This helps in increasing the access to justice for the people that are often residing at the remote places and who have got economic

¹⁶¹ E. P. Ermakova, Evolution and Sources of Legal Regulation of ODR in the USA, 62 PERM U. HERALD JURID. SCI. 689 (2023)

¹⁶² *ibid*

¹⁶³ *ibid*

constraints. As a result it can provide the justice delivery in more responsive and user centered.¹⁶⁴

2. Advanced Technological Integration:

The U.S. has incorporated modern tools such as Artificial Intelligence (AI) and data analytics into ODR platforms. These tools help manage large volumes of cases efficiently and support decision-making by identifying patterns or suggesting outcomes based on previous cases. It helps in the prediction of future outcomes by examining the past cases, which helps both parties. Platforms like Modria incorporate such intelligent tools to provide fast, data-driven insights and try to settle the dispute with less time. AI-driven chatbots are another tool that helps users by answering procedural questions, guiding them through the filing process without human intervention. These technological advancements help in reducing the administrative burden on the courts and on the legal professionals as well. This will enable to conclude the process with a better judgement which will be more transparent, timely and reliable.¹⁶⁵

3. Lower Costs:

By removing the need for physical appearances, paperwork, and long hearings, ODR significantly reduces the cost of dispute resolution. This makes it particularly suitable for resolving low-value or civil disputes where high legal fees would otherwise be a burden. ODR helps the parties to connect virtually so that it will eliminate the huge cost of having the negotiation in person. Also, it allows the parties to upload the documents, without any paperwork burdens. This is beneficial for the small claims or low-value civil disputes when the expenses of the legal action may surpass the claim's worth.

Challenges and Limitations of U.S. ODR¹⁶⁶

¹⁶⁴ *ibid*

¹⁶⁵ *ibid*

¹⁶⁶ E. P. Ermakova, Evolution and Sources of Legal Regulation of ODR in the USA, 62 PERM U. HERALD JURID. SCI. 689 (2023)

1. Lack of Uniform Standards:

ODR systems vary widely between states and platforms, leading to inconsistencies in procedures and user experiences. There is no single standardized framework guiding ODR across all U.S. jurisdictions.¹⁶⁷ Because the US has a federal system of government where each state is able to make laws to regulate its own judicial procedure, that include its ODR. This lacks the standardisation which will create inconsistency in user experience, procedural fairness and legal protections. Without a consistent legal framework to regulate the ODR, then the parties face ambiguous procedures, which will reduce the confidence in the ODR systems.

2. Concerns about Data Security and Privacy:

ODR involves the online exchange of sensitive information. The absence of comprehensive data protection laws like the European Union's GDPR raises concerns about user privacy and the security of digital records.¹⁶⁸ Different states must be having different private laws, which make it difficult to provide a consistent data privacy rules across the ODR system. Users must be lacking the awareness about the collection, storage, use or dissemination of their data. This can result in the insufficient informed consent and transparency. Furthermore, the ODR system can be vulnerable to the cyberattacks, data breaches or illegal access particularly if managed by third-party providers without strict compliance protocols. This can also result in lacking the confidence in the ODR system.

3. Digital Divide and Technological Barriers:

Not all individuals have reliable access to the internet or digital literacy, especially in underserved or rural communities. This creates inequality in the ability to use and benefit from ODR services.¹⁶⁹ Even among those with access, digital literacy can be a question. Digital literacy is not universal even if there is availability of high speed internet, smartphones or any digital services. Bridging this digital divide requires not

¹⁶⁷ *ibid*

¹⁶⁸ *ibid*

¹⁶⁹ *ibid*

just the infrastructure but also investment in digital education, user-friendly platforms or any other service channels etc. So these measures can avail the ODR system easily.

4. Legal Ambiguity and Enforceability:

Many ODR platforms operate under international guidelines rather than binding national laws. This results in legal uncertainties, especially regarding the enforceability of decisions and whether the process meets due process standards.¹⁷⁰ Moreover, some argue that certain ODR processes may lack in procedural protections mandated by the due process clause of the U.S constitution, including right to be heard, the right to appeal. In the absence of the legislative reforms or unified national guidelines are adopted, ODR will remain in a legally grey area, making its use more riskier for high stakes or complex disputes.

4.3.2 European Union:

The European Union (EU) has established itself as a leader in the advancement of Online Dispute Resolution (ODR) systems, particularly in response to the growing number of consumer disputes arising from cross-border e-commerce. As digital transactions become increasingly widespread and complex, the EU recognized the necessity for a dispute resolution mechanism that is accessible, efficient, and cost-effective, allowing consumers to resolve grievances without resorting to traditional court procedures. To address this need, the EU developed a centralized ODR platform that facilitates prompt and equitable dispute resolution across member states, relieving parties from the often lengthy and expensive litigation process.¹⁷¹ This centralized platform, supported by Regulation (EU) No 524/2013 and the Consumer ADR Directive (2013/11/EU), incorporates AI-driven claim categorization and provides multilingual support, thereby enhancing ease of access and usability for consumers throughout the EU.¹⁷²

¹⁷⁰ *ibid*

¹⁷¹ Tran Viet Dung, Lea Leveau & Khuu Hong Linh, Developing an Online Consumer Dispute Resolution Platform in the Field of E-Commerce in Vietnam: Lessons from the European Union, 2021 VIETNAMESE J. LEGAL SCIENCES 31 (December 2021)

¹⁷² Deepakshi Bhalla & Kriti Sharma, ODR - An Impending Solution to Disputes, 4 INDIAN J.L. & LEGAL RSCH. 1 (2022).

At the core of the EU's ODR framework lies Regulation (EU) No 524/2013, commonly referred to as the ODR Regulation. This regulation establishes an EU-wide online platform designed to help consumers and traders resolve disputes related to cross-border online purchases in a straightforward and user-friendly manner. Complementing this is Directive 2013/11/EU on Alternative Dispute Resolution (ADR), which guarantees consumers access to out-of-court dispute resolution methods that are impartial, transparent, and effective. Together, these legal instruments create a unified structure that bolsters consumer trust and confidence in online commerce.¹⁷³ Nonetheless, the EU faces challenges akin to those encountered in India, such as difficulties in harmonizing laws across diverse jurisdictions, significant costs associated with implementing the system, and a focus primarily on consumer disputes, which may limit the broader applicability of ODR.¹⁷⁴

To ensure the security and integrity of its ODR system, the EU integrates additional legal safeguards addressing data privacy and digital authentication. The General Data Protection Regulation (GDPR) plays a crucial role in safeguarding the personal information of participants in dispute resolution, fostering greater trust in the system. Moreover, the eIDAS Regulation (EU No 910/2014) provides legal recognition to electronic signatures and digital identities, facilitating secure and verifiable digital interactions across member states.¹⁷⁵ The importance of ODR in enhancing access to justice and accelerating dispute resolution is underscored by the EU's efforts to streamline procedures and uphold consumer protections through ethical data management, as governed by GDPR and eIDAS regulations.¹⁷⁶

By combining these legal protections and standards, the EU has created a reliable and resilient ODR framework. Its approach balances procedural fairness with advanced

¹⁷³ Tran Viet Dung, Lea Leveau & Khuu Hong Linh, Developing an Online Consumer Dispute Resolution Platform in the Field of E-Commerce in Vietnam: Lessons from the European Union, 2021 VIETNAMESE J. LEGAL SCIENCES 31 (December 2021)

¹⁷⁴ Deepakshi Bhalla & Kriti Sharma, ODR - An Impending Solution to Disputes, 4 INDIAN J.L. & LEGAL RSCH. 1 (2022)

¹⁷⁵ Tran Viet Dung, Lea Leveau & Khuu Hong Linh, Developing an Online Consumer Dispute Resolution Platform in the Field of E-Commerce in Vietnam: Lessons from the European Union, 2021 VIETNAMESE J. LEGAL SCIENCES 31 (December 2021)

¹⁷⁶ Deepakshi Bhalla & Kriti Sharma, ODR - An Impending Solution to Disputes, 4 INDIAN J.L. & LEGAL RSCH. 1 (2022).

technological safeguards, establishing a trusted mechanism for resolving online consumer disputes. Beyond enhancing access to justice within the EU, this model serves as an influential example for other regions aiming to develop or improve their digital dispute resolution capabilities.¹⁷⁷

Features and Functionality of the EU ODR Platform

The EU's centralized ODR platform is a cutting-edge digital solution aimed at simplifying the resolution of consumer disputes.¹⁷⁸ It functions as a central interactive website available in all official EU languages, serving as a single point of access for both consumers and traders.¹⁷⁹ The system uses AI technology to automatically sort complaints into categories and supports communication in multiple languages, which is essential in the EU's linguistically diverse environment.¹⁸⁰ Filing a complaint online is simple, with minimal effort, while businesses are mandated to display their contact information and a direct link to the platform on their websites that ensures the transparency.¹⁸¹ The platform allows parties to negotiate directly, and if that fails, disputes can be escalated to mediation or arbitration within the same system. Overall, the entire process is designed to be fast, affordable, cost-effective, and user-friendly.¹⁸² Also it helps the people to resolve cross-border disputes without going to conventional court system.

Advantages of the EU ODR System

The European Union's ODR platform aims to resolve the challenges of cross border disputes within the internal digital market of EU. This ODR platform gives a systematic and structured legal compliant system which is multilingual as well, to promote a fast, affordable and transparent dispute resolution, specially for the online transactions. The following are some of the advantages of this platform:

¹⁷⁷ Tran Viet Dung, Lea Leveau & Khuu Hong Linh, Developing an Online Consumer Dispute Resolution Platform in the Field of E-Commerce in Vietnam: Lessons from the European Union, 2021 VIETNAMESE J. LEGAL SCIENCES 31 (December 2021)

¹⁷⁸ *ibid*

¹⁷⁹ *ibid*

¹⁸⁰ *ibid*

¹⁸¹ Tran Viet Dung, Lea Leveau & Khuu Hong Linh, Developing an Online Consumer Dispute Resolution Platform in the Field of E-Commerce in Vietnam: Lessons from the European Union, 2021 VIETNAMESE J. LEGAL SCIENCES 31 (December 2021)

¹⁸² *ibid*

1. Cross-Border Dispute Resolution:

It allows disputes arising from online purchases across different EU member states to be settled quickly and efficiently.¹⁸³ Mostly the transaction takes place between the EU member states, which will be leading potential conflicts governed by different national laws. Traditional methods of solving the disputes will take a longer period of time and also ends up in complicated legal procedures, jurisdictional clarification and also requires potential court appearances in foreign jurisdictions. This can be avoided by the ODR platform where it provides a digital environment where parties were able to solve the dispute neutrally. This actually promotes the legal certainty, trust and confidence in the parties to adopt ODR. For example, if a consumer in Germany buys a product from the French online retailer and finds it defective and also EU ODR portal to file a complaint and settle the issue in their own language. They avoid the hurdle of the comprehending French consumer legislation engaging a legal representative in France or completing travel for a court appearance. Digital

neutrality is essential for fostering an atmosphere in which firms and consumers may engage in transactions with confidence. Ultimately, this enhances cross-border e-commerce, promoting economic development and consumer protection across the EU.

2. Cost and Time Savings:

In comparison to the conventional method of solving the disputes, the system minimizes delays and reduces expenses.¹⁸⁴ The ODR platform can decrease the delay and the cost, also helps the parties to use free and offers a structured and organised system of negotiations, mediations and if required arbitration too. All the communication can be done online including the hearing, uploading documents etc. There is no need for the physical hearing or travel which will accumulate huge cost for the entire process of dispute resolution. This will finally help the parties solve every kind of disputes with no much expenditure. by examining the past dispute cases, user behaviour and results, which automatically increases the platform's ability and capacity to streamline the whole process and makes it efficient and user centric. Conventional litigation incurs substantial expenses including attorney fees, court fees, translation and travel

¹⁸³ *ibid*

¹⁸⁴ *ibid*

expenditures, particularly in international conflicts. Cases may extend for months or even years because to procedural complexities and scheduling conflict. ODR platforms streamline these procedures by transitioning all activities to an online format. Time savings in time are similarly significant. Because all communication-submissions, evidence sharing, hearings-happens online, parties are not need to coordinate around real hearings. This makes the entire process more efficient and in better way.

3. Improved Efficiency with Machine Learning:

The integration of machine learning technology helps minimize procedural delays, speeding up and streamlining the dispute resolution process.¹⁸⁵ It enhances the platform performances . by examining the past dispute cases, user behaviour and results , which automatically increases the platform's ability and capacity to streamline the whole process and makes it efficient and user centric. For instance, Machine Learning can illustrate what a “standard” settlement resembles in analogous disputes, automate processes such as preliminary screens and document analysis to reduce the bottlenecks and offer tailored next steps based on user behaviour. In an e-commerce dispute involving a missing product , ML ca instantly identify similar cases, high light best practices and suggest equitable compensation based on historical settlements, therefore minimizing redundant labour for mediators or arbitrators. This accelerates the process while fostering user trust in a data-driven system that adapts to new conflicts and guarantees consistent transparent results in the increasing realm of cross-border e-commerce.

4. Data Protection and Privacy:

Under the strict rules of the GDPR, the platform ensures personal data is handled securely and confidentially.¹⁸⁶ The platform completely complies to the GDPR(General Data Protection Regulation), considers to the one of the world's most stringent data protection statute. This aims to ensure that all the user data is collected and stored in a secure and transparent manner. There is a need of explicit consent from the user , limits the data usage , and grants strong rights to the people for viewing , rectifying or for erasing the data . This platform mainly fosters to build trust and confidence among the parties and make sure that no information is exposed or misused. Platforms must

¹⁸⁵ Supra 30

¹⁸⁶ Supra 31

implement encrypted connection(such as HTTPS and SSL certificates),securely store data (often inside the EU), ad limit access to authorised individuals exclusively. For example, when a customer uploads a receipt or personal communication, the document will be protected from the misuse, guaranteeing it will not be sold or disclosed to other parties ,so fostering trust and confidence in the platform.

5. Encouraging Positive Behaviour:

The ODR platform focus on building an environment which helps the businesses to resolve the complaints fairly and easily. The transparency of the dispute process motivates traders to resolve complaints promptly so it gradually enhances consumer trust and confidence in online shopping.¹⁸⁷ All the disputes are visibly documented within the EU official system , so that it will make the traders more serious about engaging in resolving issue. This culture of accountability is fostered , that helps in enhancing consumer trust in the cross border transactions. Therefore , if this responsible behaviour continues , it will make every transaction better and healthier and solves each and every complaints of the individuals without any delay. Moreover, when the enterprises see the process as equitable and effective, they are more likely to choose ODR and they try to include ODR into their legal framework. This actually creates a culture of responsibility and accountability for the entire EU digital economy

Limitations:

Despite the above said advantages , there are some limitations to the EU ODR platform that can affect its overall scalability and effectiveness. One such major challenge is the legal harmonization, aligning various national legal frameworks and ensuring consistent application remains a complex task.¹⁸⁸ Additionally, significant implementation costs and maintenance for establishing and maintaining the ODR platform, alongside necessary regulatory supervision, involves considerable financial investment.¹⁸⁹ The substantial investment is required also for staff training , and to conduct a smooth and efficient operation and compliance. Another limitation is the

¹⁸⁷ ibid

¹⁸⁸ Tran Viet Dung, Lea Leveau & Khuu Hong Linh, Developing an Online Consumer Dispute Resolution Platform in the Field of E-Commerce in Vietnam: Lessons from the European Union, 2021 VIETNAMESE J. LEGAL SCIENCES 31 (December 2021)

¹⁸⁹ Deepakshi Bhalla & Kriti Sharma, ODR - An Impending Solution to Disputes, 4 INDIAN J.L. & LEGAL RSCH. 1 (2022).

limited scope of the platform, which primarily focused on consumer disputes related to online sales, which restricts its wider use in other types of conflicts such as commercial disputes, employment and family.¹⁹⁰ Furthermore, low levels of public awareness and adoption is another limitation where the effectiveness of the system is somewhat hindered by the still-growing awareness and usage among consumers and businesses.¹⁹¹ This unawareness of the usage of the platform will lack confidence and trust to use this effectively. These challenges explain about the need for best legal coordination, investment etc to make potential use of the ODR.

4.3.3 Singapore:

Singapore has firmly established itself as a leading hub for arbitration in Asia, attracting both domestic and international commercial disputes. This reputation is grounded in its robust legal infrastructure, a judiciary that strongly supports arbitration-friendly principles, and a comprehensive institutional framework that ensures fair and efficient dispute resolution.¹⁹²

A major contributor to this development is the Singapore International Arbitration Centre (SIAC), which, since its establishment in 1991, has played a pivotal role in positioning Singapore as a global arbitration hub. SIAC has consistently updated its arbitration rules in line with international best practices, focusing on efficiency, transparency, and effectiveness in arbitration proceedings.¹⁹³

In parallel with its progress in arbitration, Singapore has also emerged as a pioneer in integrating Online Dispute Resolution (ODR) into its judicial system. This strategic adoption of digital innovations is part of Singapore's broader vision to enhance access to justice, streamline legal processes, and build a future-ready judiciary. Singapore's legal landscape thus reflects a dual commitment—towards both strengthening

¹⁹⁰ Supra 38

¹⁹¹ Deepakshi Bhalla & Kriti Sharma, ODR - An Impending Solution to Disputes, 4 INDIAN J.L. & LEGAL RSCH. 1 (2022).

¹⁹² Lawrence G. S. Boo, SIAC and Singapore Arbitration, 1 ASIAN BUS. LAW. 32 (2008)

¹⁹³ Sabiha Shiraz, The New SIAC Rules (2007), 2 ROM. ARB. J. 6 (October-December 2008)

institutional arbitration mechanisms and embracing cutting-edge technology to modernize traditional dispute resolution methods.¹⁹⁴

Several key platforms and initiatives highlight Singapore's leadership in ODR. The Community Justice and Tribunals System (CJTS) offers an end-to-end digital solution for small claims, employment, and community disputes. It allows parties to file cases, communicate, and resolve matters online, eliminating the need for physical court appearances and reducing procedural delays. Complementing this is the eLitigation system and the Integrated Case Management System (ICMS), both of which digitize core court functions such as document submission, hearing scheduling, and case tracking—streamlining court operations and improving transparency.¹⁹⁵

To further support this digital transformation, Singapore has established the Courts of the Future Taskforce, a forward-looking initiative dedicated to integrating artificial intelligence into judicial decision-making. This includes tools for predicting outcomes, assisting in case analysis, and managing caseloads in specialized areas like motor accident and family law disputes. The initiative underscores Singapore's ambition to transform its judiciary into a technology-enabled ecosystem that delivers timely and high-quality justice.¹⁹⁶

These developments underscore Singapore's unique position at the intersection of advanced arbitration practice and judicial innovation. The convergence of institutional strength, technological integration, and proactive legal reform has allowed Singapore to set a global benchmark in both arbitration and online dispute resolution.¹⁹⁷

Moreover, Singapore has built a robust and forward-thinking legal framework to effectively manage technology-related disputes.¹⁹⁸ A key example is the Technology, Infrastructure and Construction List (TIC List) within the Singapore International Commercial Court (SICC), which specializes in complex cases involving tech and

¹⁹⁴ Lawrence G. S. Boo, *SIAC and Singapore Arbitration*, 1 *ASIAN BUS. LAW.* 32 (2008)

¹⁹⁵ *ibid*

¹⁹⁶ *Supra* 43

¹⁹⁷ *ibid*

¹⁹⁸ Judy Yueh Ling Song & Esther Tan, *Beyond Traditional Contracts: The Legal Recognition and Challenges of Smart Contracts in Malaysia and Singapore*, 2024 *J. L., MKT. & INNOVATION* 323 (2024)

infrastructure issues. Complementing this is legislation such as the Payment Services Act 2019, which enables secure handling of digital assets, including cryptocurrencies, and supports innovative mechanisms like rapid, on-chain dispute resolution. Singapore's legal strategy resonates with international developments like the UK Jurisdiction Taskforce's (UKJT) Digital Dispute Resolution Rules, which promote expert-led resolutions and enforceability through blockchain technologies. While not always explicitly highlighted, Singapore's leadership in international arbitration is well-recognized, with the Singapore International Arbitration Centre (SIAC) standing out for its ability to manage sophisticated disputes involving smart contracts and digital assets. Together, these initiatives underscore Singapore's commitment to a legal environment that is both technologically adept and globally relevant.¹⁹⁹

Legal framework:

Singapore follows a dual-track arbitration framework, distinguishing between domestic and international arbitrations. Domestic arbitrations are governed by the Arbitration Act (Cap. 10) (AA), which provides the legal basis for arbitration agreements, the conduct of proceedings, and the enforcement of awards within Singapore²⁰⁰. This original legislation remains central to domestic dispute resolution, though its relevance decreases when cross-border elements are involved.²⁰¹ International arbitrations, on the other hand, fall under the International Arbitration Act (Cap. 143A) (IAA), enacted in 1994.²⁰²

The IAA aligns closely with the UNCITRAL Model Law (1985, amended in 2006), offering a globally accepted legal framework that emphasizes party autonomy, minimal judicial intervention, and streamlined enforceability of arbitral awards.²⁰³ Section 5 of the IAA outlines what constitutes an international arbitration, including disputes involving parties from different jurisdictions or those choosing an international seat. Parties can mutually agree to adopt either the IAA or AA, providing procedural

¹⁹⁹ *ibid*

²⁰⁰ Henny Mardiani, Arbitration in Singapore, 16 J. ARB. STUD. 217 (2006)

²⁰¹ Sabiha Shiraz, The New SIAC Rules (2007), 2 ROM. ARB. J. 6 (October-December 2008)

²⁰² Henny Mardiani, Arbitration in Singapore, 16 J. ARB. STUD. 217 (2006)

²⁰³ Sabiha Shiraz, The New SIAC Rules (2007), 2 ROM. ARB. J. 6 (October-December 2008)

flexibility based on their preferences and the nature of the dispute.²⁰⁴ The differences between the AA and IAA extend beyond scope and into procedural elements like judicial intervention, tribunal powers, and avenues for appeal.²⁰⁵ The IAA restricts court interference, except on limited grounds such as fraud or breach of natural justice, aligning with international expectations.

In contrast, the AA permits appeals on questions of law and allows broader statutory grounds for setting aside awards. Both statutes protect arbitrators through express immunity provisions, shielding them from liability for procedural errors, negligence, or decisions made in good faith.²⁰⁶ Singapore courts support arbitration by enforcing interim measures like injunctions, assisting in the appointment of arbitrators, and respecting the confidentiality of proceedings. Additionally, judicial support includes recognition and enforcement of awards, along with the authority to set them aside under limited statutory grounds, such as public policy violations or procedural irregularities.²⁰⁷ This active yet restrained judicial stance reinforces Singapore's status as an arbitration-friendly jurisdiction.

Singapore's arbitration landscape is also shaped by institutional rules and international conventions²⁰⁸. The Singapore International Arbitration Centre (SIAC) plays a key role through its evolving procedural rules, most notably the 2007 amendments which enhanced alignment with global best practices.²⁰⁹ These rules offer flexibility, neutrality, and efficiency, making SIAC a preferred institution for many international disputes. Recent developments include the introduction of Emergency Arbitrator procedures in Singapore law, reinforcing rapid interim relief mechanisms²¹⁰.

On the international front, Singapore is a signatory to the New York Convention (1958), enabling mutual enforcement of foreign arbitral awards. It is also a party to the Singapore Convention on Mediation (2019), which facilitates cross-border recognition of mediated settlement agreements, enhancing the broader dispute resolution

²⁰⁴ Henny Mardiani, Arbitration in Singapore, 16 J. ARB. STUD. 217 (2006)

²⁰⁵ Sabiha Shiraz, The New SIAC Rules (2007), 2 ROM. ARB. J. 6 (October-December 2008)

²⁰⁶ Henny Mardiani, Arbitration in Singapore, 16 J. ARB. STUD. 217 (2006)

²⁰⁷ Sabiha Shiraz, The New SIAC Rules (2007), 2 ROM. ARB. J. 6 (October-December 2008)

²⁰⁸ *ibid*

²⁰⁹ *ibid*

²¹⁰ *ibid*

ecosystem.²¹¹ Such treaty commitments promote trust and accessibility in international arbitration and mediation, further bolstered by Singapore's global reputation for neutrality and procedural rigor.²¹²

Finally, Singapore's legal environment, legislative reforms, and policy initiatives make it a model arbitration jurisdiction. The government actively supports arbitration through regular amendments to legislation and the SIAC Rules, ensuring they remain modern and business-friendly.²¹³ The framework guarantees party autonomy in drafting arbitration clauses, confidentiality of proceedings, and predictable enforcement mechanisms. Reforms like streamlined emergency arbitration processes and enhanced court assistance mechanisms have positioned Singapore as a global leader in dispute resolution.²¹⁴ Its green and transparent legal ecosystem, combined with a judiciary well-versed in arbitration law, ensures that both domestic and international users can resolve disputes efficiently. These features—flexibility, enforceability, limited court interference, and adherence to international standards—together reinforce Singapore's position as a neutral, arbitration-forward jurisdiction attracting global disputes.²¹⁵

SIAC and its Supported Services:

The Singapore International Arbitration Centre (SIAC), established in July 1991, has swiftly risen to prominence as a leading global arbitration institution, especially within Singapore's robust legal environment for international dispute resolution. Despite being younger than established counterparts like the ICC and CIETAC, SIAC has earned a strong reputation for its credibility and professional administration of arbitration proceedings. SIAC serves as a neutral administrator, applying its own arbitration rules or other recognized international rules like UNCITRAL to ensure the fair and efficient resolution of disputes.²¹⁶

²¹¹ *ibid*

²¹² Henny Mardiani, Arbitration in Singapore, 16 J. ARB. STUD. 217 (2006)

²¹³ *Supra*57

²¹⁴ *ibid*

²¹⁵ *ibid*

²¹⁶ Lawrence G. S. Boo, SIAC and Singapore Arbitration, 1 ASIAN BUS. LAW. 32 (2008)

As a non-profit organization, SIAC plays a pivotal role in Singapore's development as a global arbitration hub, supported by the country's robust legal framework for international dispute resolution.²¹⁷ Functioning as a neutral administrator, SIAC applies its own arbitration rules or other widely recognized frameworks, such as the UNCITRAL Arbitration Rules, to ensure fair and effective outcomes²¹⁸.

With over 900 cases handled since its inception—70% of which involve international parties—SIAC has demonstrated significant global reach and influence. Its consistent case growth and adherence to international standards have firmly positioned it as a key player in the global arbitration landscape.²¹⁹

SIAC plays a comprehensive and pivotal role in resolving arbitration disputes by administering proceedings, offering a wide array of support services, and ensuring efficient case management. Specifically, SIAC oversees arbitration proceedings under its own rules or the UNCITRAL Arbitration Rules, providing procedural guidance and administrative support throughout the process. There are situations where parties will become unable to find the right arbitrators, that time SIAC facilitates the appointment of arbitrators, particularly in cases where parties are unable to reach an agreement, through its Deputy Chairman or specialized Nomination and Confirmation Committees, ensures impartiality and expertise from the side of arbitrators .

To support this ,SIAC Maintains extensive panels of qualified arbitrators, including both international experts and regional representatives from ASEAN, along with a reserve list to ensure availability and suitability for appointments. Another core function of the SIAC is that ,it provides a range of supplementary services such as logistical coordination, transcription, translation, secretarial assistance, and hearing room facilities to streamline the arbitration process. For keeping efficiency, it Monitors and manages the progress of arbitration proceedings, ensuring timely supervision and arrangement of all logistical aspects of hearings.

²¹⁷ Henny Mardiani, Arbitration in Singapore, 16 J. ARB. STUD. 217 (2006)

²¹⁸ *ibid*

²¹⁹ *Supra* 66

Furthermore, SIAC offers Provides registry and authentication services for arbitral awards, aiding in their recognition and enforcement in foreign jurisdictions, which helps in enhancing the credibility and international reach of its arbitration services.²²⁰

Streamlined procedure By the SIAC:

The Streamlined Procedure introduced by SIAC offers a faster and more efficient method for resolving disputes, particularly suited for smaller or less complex cases. This mechanism is designed to reduce both time and cost, making arbitration more accessible—especially for small and medium-sized enterprises.²²¹ The procedure can be invoked if both parties consent, or under certain conditions—such as when the claim amount does not exceed SGD 1,000,000, or when the nature and complexity of the case justify its application. Next is the initiation part, either party may request the application of this procedure at any time before the arbitral tribunal is constituted. While mutual consent is generally required, in specific cases—like when the disputed amount is under SGD 1,000,000—consent from the opposing party may not be necessary. In such instances, the decision rests with the tribunal or the President of SIAC in accordance with the rules.

Once the tribunal is constituted, the tribunal is expected to render the final award within three months of its constitution, significantly shortening the usual arbitration timeline. Next there are some procedural limitations, that is the process is largely based on written submissions, with minimal or no hearings. The parties may only present factual or witness evidence if the tribunal deems it necessary, ensuring a more focused and efficient process. Moreover, in order to ensure early procedural clarity, a case management conference is scheduled within three days of the appointment of a sole arbitrator to establish a clear procedural timeline from the outset. Additionally, the procedure must be cost effective, as both the tribunal's and SIAC's administrative fees are capped at 50% of the maximum applicable fees, reducing the financial burden on the parties. Finally it's the tribunal discretion, that is the arbitral tribunal is empowered

²²⁰ Henny Mardiani, Arbitration in Singapore, 16 J. ARB. STUD. 217 (2006)

²²¹ Shravan Nirajan & Aisvaria Subramaniam, 2023 SIAC Unraveled - The Pinnacle of Arbitration Practice, 3 INDIAN REV. INT'L ARB. 57 (December 2023)

to resolve the dispute based solely on the documents and written submissions, maintaining minimal procedural formalities to facilitate prompt adjudication.²²²

Purpose of the Streamlined Procedure:

The overarching aim of the Streamlined Procedure is to promote faster, more affordable dispute resolution. By simplifying procedures and reducing costs, it encourages wider use of arbitration, particularly by smaller businesses and for lower-value claims.²²³ SIAC distinguishes itself from other arbitral institutions through its strong emphasis on adaptability, technological integration, and procedural innovation. One of its key strengths lies in its commitment to continuously enhancing its rules and procedures through regular updates and public consultations, ensuring alignment with global arbitration trends. Its proactive introduction of features such as the Streamlined Procedure, the SIAC Gateway, and acceptance of third-party funding highlights its modern and responsive approach.

Technological integration is central to SIAC's operations, with the SIAC Gateway serving as a comprehensive online platform for case filing, communication, and document sharing. By supporting hybrid, virtual, and in-person hearings, SIAC maximizes efficiency and accessibility, setting itself apart from more traditional institutions that still rely heavily on in-person proceedings.²²⁴

Procedural innovation is another hallmark of SIAC's approach. The Streamlined Procedure, tailored for low-value disputes, features strict timeframes, limited evidentiary requirements, and significantly reduced costs. Additionally, mechanisms like Preliminary Determination enable the early resolution of specific issues, expediting the overall process—an approach not widely adopted by other arbitral bodies. SIAC also balances procedural efficiency with party autonomy, giving tribunals discretion in how hearings are conducted and whether to adopt streamlined procedures. With a global outlook grounded in local relevance, SIAC aligns its operations with international

²²² *ibid*

²²³ Shravan Niranjana & Aisvaria Subramaniam, 2023 SIAC Unraveled - The Pinnacle of Arbitration Practice, 3 INDIAN REV. INT'L ARB. 57 (December 2023)

²²⁴ *ibid*

standards while addressing the specific needs of Asian and global commercial users. Its integration of digital case management, transparent procedures, and commitment to innovation make SIAC a forward-thinking institution, offering arbitration services that are faster, more flexible, and cost-effective, well-suited to the evolving demands of international commerce.²²⁵

Advantages:

The arbitration system in Singapore provides a efficient ,strong and globally esteemed environment for solving the disputes ,which needs to be supported by a definitive legislative framework and contemporary institutional assistance. One of the main advantage of the country is the dual-track arbitration system—comprising the Arbitration Act (AA) for domestic matters and the International Arbitration Act (IAA) for international disputes—ensures legal clarity and certainty for all parties involved.²²⁶ The IAA further supports the arbitration is by providing limited judicial interference, preserving party autonomy and promoting the finality of arbitral awards.²²⁷

As a signatory to the New York Convention, Singapore ensures that arbitral awards made under its jurisdiction are widely enforceable across member countries.²²⁸ Moreover, parties are free to choose applicable arbitration rules, such as SIAC or UNCITRAL Rules, and can opt in or out of specific regimes to suit their needs.²²⁹ SIAC continues to demonstrate adaptability by updating its procedures to reflect evolving arbitration trends and technological advancements.

For instance, initiatives like the Streamlined Procedure and upgraded online management tools illustrate its commitment to responsive and modern dispute resolution.²³⁰ SIAC approach to the ongoing rule development, were actively engaging with the arbitration community through public consultations before introducing rule

²²⁵ *ibid*

²²⁶ Henny Mardiani, Arbitration in Singapore, 16 J. ARB. STUD. 217 (2006)

²²⁷ *ibid*

²²⁸ *ibid*

²²⁹ *ibid*

²³⁰ Shravan Niranjana & Aisvaria Subramaniam, 2023 SIAC Unraveled - The Pinnacle of Arbitration Practice, 3 INDIAN REV. INT'L ARB. 57 (December 2023)

changes to ensure they meet global expectations and user needs. The proposed 7th Edition of the rules reflects significant improvements in clarity, efficiency, and fairness based on community input.²³¹ The use of technology is very much evident in the SIAC Gateway, which offers a one-stop digital platform for case filing, communication, and document exchange. It facilitates virtual and hybrid hearings, aligning with global digital practices and reducing administrative burdens. This approach enhances transparency, shortens timelines, and simplifies case handling.²³² Another aspect is the comprehensive administrative support, which offers end-to-end case management services, including the appointment of arbitrators, logistical arrangements, and registration of awards, enhancing procedural efficiency.²³³

And the average duration of an arbitration proceeding in Singapore is around 18 months from the notice of arbitration to the final award.²³⁴ SIAC also allows parties to tailor proceedings according to their needs, whether through in-person, virtual, or hybrid hearings. The rules also permit agreement on customized elements such as cybersecurity measures and document protocols, enhancing procedural autonomy.²³⁵ It maintains and control costs by placing limits on tribunal fees in expedited cases through simplified procedures and reduced document requirements. Digital solutions further cut costs by minimizing physical logistics and enhancing operational efficiency²³⁶

Furthermore, Singapore is recognized as a politically neutral and commercially sound jurisdiction, making it an attractive seat for international arbitration.²³⁷ Also arbitrators are granted immunity from liability, and legal provisions exist to prevent the dissipation of assets during proceedings, ensuring security and fairness²³⁸. Moreover, parties can agree on the number of arbitrators, and in the absence of agreement, a sole arbitrator is appointed by default.²³⁹ SIAC's World class infrastructure provides access to high-quality facilities, including hearing rooms, transcription and translation services,

²³¹ *ibid*

²³² *ibid*

²³³ Henny Mardiani, Arbitration in Singapore, 16 J. ARB. STUD. 217 (2006)

²³⁴ *ibid*

²³⁵ Shravan Nirajan & Aisvaria Subramaniam, 2023 SIAC Unraveled - The Pinnacle of Arbitration Practice, 3 INDIAN REV. INT'L ARB. 57 (December 2023)

²³⁶ *ibid*

²³⁷ Henny Mardiani, Arbitration in Singapore, 16 J. ARB. STUD. 217 (2006)

²³⁸ *ibid*

²³⁹ *ibid*

secretarial support, and certification of awards.²⁴⁰ Altogether, Singapore's arbitration is a friendly legal environment includes technological innovation and the credibility of SIAC contribute to its global standing as a leading centre for dispute resolution.²⁴¹

Limitations:

While SIAC is globally renowned for its efficiency and innovation in arbitration, it also has many drawbacks that may affect its efficacy, accessibility and procedural clarity. The primary concern is the cost structure, that is its fee structure is based on the value of the claim, which can become costly in high-value disputes. For instance, fees may range from SGD 2,750 to SGD 25,000 in international arbitration cases.²⁴² Additionally, SIAC primarily provides limited certification and authentication services for awards issued under its administration. Ad hoc arbitration awards, those not overseen by SIAC, do not automatically qualify for certification, which may affect their recognition or enforceability. To be eligible, certain conditions must be fulfilled, such as formally depositing the award with SIAC.²⁴³

Moreover, Singapore courts are generally supportive of arbitration, enforcing arbitral awards from foreign jurisdictions can be complex. Variations in national arbitration laws and the interpretation of international instruments like the New York Convention may lead to additional procedural requirements. As a result, awards issued in countries with differing legal frameworks may face delays or hurdles in recognition and enforcement in Singapore or other jurisdictions.²⁴⁴

Next, the effectiveness of SIAC arbitration heavily depends on the parties' willingness to cooperate and adhere to procedural rules. Uncooperative behavior can still lead to delays and procedural complications, despite SIAC's streamlined mechanisms.²⁴⁵ Although court intervention is generally limited under Singapore's arbitration laws, judicial discretion remains in key areas—such as granting a stay of

²⁴⁰ *ibid*

²⁴¹ *ibid*

²⁴² *ibid*

²⁴³ Lawrence G. S. Boo, SIAC and Singapore Arbitration, 1 ASIAN BUS. LAW. 32 (2008)

²⁴⁴ *ibid*

²⁴⁵ Henny Mardiani, Arbitration in Singapore, 16 J. ARB. STUD. 217 (2006)

proceedings or setting aside awards—which may affect the finality of arbitration outcomes.²⁴⁶

Concerns also exist regarding the arbitrator pool, mostly, SIAC offers both regional and international panels of arbitrators, but appointments outside these panels are allowed, potentially raising concerns about subject-matter expertise or procedural consistency.²⁴⁷ Further ambiguity arises from rules such as 13.1 and 13.1(c), which permit the use of the Streamlined Procedure based on the "circumstances of the case," lack defined criteria, potentially creating uncertainty and leaving wide discretion to arbitral tribunals.²⁴⁸

Also this discretion to the SIAC President or arbitral tribunals to approve Streamlined Procedure applications may override the parties' agreed procedural expectations.²⁴⁹ Along with this ,the Streamlined Procedure may limit proceedings to written submissions and documents, potentially denying parties the chance for oral arguments or witness examination.²⁵⁰ There are also retrospective application concerns, that it applying newly introduced procedural rules to arbitration agreements made before their adoption could conflict with previously negotiated party rights.²⁵¹

Nonetheless,the vague references to "circumstances warranting" the procedure in Rule 13.1(c) leave parties uncertain about its application and heavily reliant on tribunal judgment.²⁵² Also, the multi-step appointment process, involving nomination committees and confirmation bodies, may create procedural delays or disputes between parties regarding arbitrator selection.²⁵³ While SIAC is primarily designed for commercial arbitration, and may not be fully suitable for specialized matters like bunker claims or financial derivatives, which may require tailored procedures.²⁵⁴ Lastly, Although SIAC aims to resolve cases within 18 months on average, actual durations

²⁴⁶ *ibid*

²⁴⁷ *ibid*

²⁴⁸ Shraavan Niranjana & Aisvaria Subramaniam, 2023 SIAC Unraveled - The Pinnacle of Arbitration Practice, 3 INDIAN REV. INT'L ARB. 57 (December 2023)

²⁴⁹ *ibid*

²⁵⁰ *ibid*

²⁵¹ *ibid*

²⁵² *ibid*

²⁵³ *Supra* 94

²⁵⁴ Henny Mardiani, Arbitration in Singapore, 16 J. ARB. STUD. 217 (2006)

may be extended by case complexity, party conduct, or judicial involvement, impacting procedural efficiency.²⁵⁵

The Singapore International Arbitration Centre (SIAC) plays a pivotal role in regional dispute resolution by providing comprehensive administrative support for both institutional and ad hoc arbitrations. It handles a large volume of international arbitration cases under its own rules as well as other frameworks like the UNCITRAL Arbitration Rules. SIAC also facilitates the appointment of arbitrators, offering parties access to a reputable panel of regional and international experts.

By upholding strict confidentiality and transparent procedures, SIAC enhances the credibility of arbitration proceedings. Its role is crucial in promoting international trade and investment by offering a neutral and reliable forum for resolving cross-border disputes, thereby strengthening Singapore's reputation as a global arbitration hub. Additionally, SIAC supports the enforcement of arbitral awards by offering certification and authentication services, ensuring their recognition and enforceability across jurisdictions.

It further contributes to the regional arbitration landscape by supporting ad hoc arbitrations and engaging in the continuous development of arbitration law and infrastructure in Asia. Overall, SIAC fosters legal certainty and economic trust in the region, making Singapore an attractive venue for multinational corporations seeking efficient and enforceable dispute resolution mechanisms.²⁵⁶

Building on Singapore's strong pro-arbitration framework, the Singapore International Arbitration Centre (SIAC) plays a pivotal role in regional dispute resolution by providing comprehensive administrative support for both institutional and ad hoc arbitrations. It manages a significant number of international arbitration cases under its own rules as well as other frameworks like the UNCITRAL Arbitration Rules, facilitating the appointment of arbitrators and granting parties access to a reputable panel of regional and international experts.

²⁵⁵ *ibid*

²⁵⁶ Lawrence G. S. Boo, SIAC and Singapore Arbitration, 1 ASIAN BUS. LAW. 32 (2008)

By maintaining strict confidentiality and transparent procedures, SIAC bolsters the credibility and integrity of arbitration proceedings. This role is essential in promoting international trade and investment, offering a neutral and dependable forum for resolving cross-border disputes, which in turn enhances Singapore's standing as a premier global arbitration hub. Furthermore, SIAC supports the enforcement of arbitral awards through certification and authentication services, helping ensure their recognition and enforceability across multiple jurisdictions. Beyond case administration, SIAC contributes to the growth of the regional arbitration ecosystem by supporting ad hoc arbitrations and actively participating in the ongoing development of arbitration laws and infrastructure throughout Asia. In sum, SIAC strengthens legal certainty and economic trust in the region, solidifying Singapore's appeal as the preferred venue for multinational corporations seeking efficient, reliable, and enforceable dispute resolution solutions.²⁵⁷

4.4 Potential Applicability and Adaptability to the Indian Context

India is at a key point where the need for quick and efficient dispute resolution meets a rapidly growing digital society. With over 800 million internet users and the fast rise of online shopping, digital payments, and global services, there's a strong need to modernize how disputes are resolved using technology. With India expected to have around 500 million online shoppers by 2030 and increasing internet penetration, there is a significant demand for effective dispute resolution mechanisms that can cater to this expanding digital economy.²⁵⁸

India can learn from global practices. For example, Singapore has a Community Justice and Tribunals System (CJTS) that handles small claims, rental disputes, and employment issues completely online. India could create a similar platform to handle such everyday disputes quickly and cheaply.²⁵⁹ Also, Singapore's SIAC (Singapore International Arbitration Centre) is a world-class example of a technology-friendly

²⁵⁷ *ibid*

²⁵⁸ Pratham Arya & Lisa Sankrit, Keeping It Online: Developing an ODR Mechanism for India's E-Commerce Disputes, 2022 RGNUL FIN. & MERCANTILE L. REV. 1 (2022)

²⁵⁹ <https://coat.asn.au/wp-content/uploads/2018/11/Community-Justice-and-Tribunals-System-presentation.pdf>

arbitration center. SIAC allows parties to file cases, submit documents, and conduct hearings online. India can develop its own version of this by upgrading institutions like the Mumbai Centre for International Arbitration (MCIA) or creating a centralized digital arbitration portal that works across states and sectors.²⁶⁰

The European Union (EU) has a single online platform to handle consumer complaints from cross-border online shopping—India can follow this model to resolve e-commerce disputes more easily. The United States uses AI tools to read legal documents, sort cases, and even help predict outcomes. India can adopt these tools to speed up legal processes. The UK’s CE-File system allows electronic case filings and tracking, which can inspire India to develop similar systems for commercial arbitration.²⁶¹ However, due to the absence of dedicated ODR regulations and the shortcomings of existing mediation frameworks, there is a pressing need to develop bespoke ODR systems tailored to Indian legal and social realities.²⁶²

Legally, India is already prepared to adopt ODR. The Arbitration and Conciliation Act, 1996 can be amended to clearly include online dispute resolution. The Information Technology Act, 2000 allows for digital agreements and electronic records. The Digital Personal Data Protection Act, 2023 ensures privacy, which is essential for secure online systems.²⁶³ To ensure effective implementation, it is important to establish legal principles and ICT (Information and Communication Technology) standards that align with India’s technological infrastructure and legal culture, making ODR systems both effective and enforceable.²⁶⁴ Even the Indian courts are now open to digital changes. In *Trimex International FZE Ltd. v. Vedanta Aluminium Ltd.* (2010), the Supreme Court accepted a contract made through email. During the COVID-19 pandemic, courts started using video conferencing for hearings, proving that digital dispute resolution is practical and acceptable in India.²⁶⁵ Moreover, India can benefit from designing ODR mechanisms that incorporate local dispute types, cultural nuances, and the current

²⁶⁰ *ibid*

²⁶¹ <https://ec.europa.eu/consumers/odr/main/?event=main.consumer.rights>

²⁶² Pratham Arya & Lisa Sankrit, Keeping It Online: Developing an ODR Mechanism for India's E-Commerce Disputes, 2022 RGNUL FIN. & MERCANTILE L. REV. 1 (2022)

²⁶³ <https://ksandk.com/litigation/odr-legality-arbitration-conciliation-1996/>

²⁶⁴ Pratham Arya & Lisa Sankrit, Keeping It Online: Developing an ODR Mechanism for India's E-Commerce Disputes, 2022 RGNUL FIN. & MERCANTILE L. REV. 1 (2022)

²⁶⁵ <https://www.onlinelegalindia.com/blogs/online-dispute-resolution-in-india/>

digital infrastructure, making them more accessible and acceptable to Indian consumers and businesses. The paper also emphasizes drawing inspiration from international jurisdictions with advanced ODR frameworks while adapting them thoughtfully to India's unique legal and technological environment.²⁶⁶

4.5 Existing Barriers and Challenges in the Indian Arbitration System

As India moves towards digitization in dispute resolution, online arbitration presents a promising alternative to traditional methods. However, several key challenges continue to impede its effective implementation across the country. Nevertheless, a range of significant challenges still hinders its widespread and effective adoption nationwide. One of the most controversial issue is the inadequate digital infrastructure and skilled personnel, who are well-versed in arbitration procedures, which affects the smooth functioning of virtual arbitration.²⁶⁷ This is compounded by the ambiguities in legal and procedural framework for addressing the laws applicable to arbitration agreements, procedural standards, and the validity of electronic signatures and awards.

Without these, legal uncertainties persist.²⁶⁸ The country also faces underdeveloped mediation ecosystem characterised by limited usage, limited trust among litigants, uncertainties around enforceability, and a dearth of well-trained mediators—making mediation a less preferred mode of dispute resolution.²⁶⁹ Additionally, a substantial portion of the population lacks access to digital devices and internet connectivity, especially in underserved areas. These gaps pose major hurdles to adopting technology-driven dispute resolution on a national scale.²⁷⁰ The lack of specific legal provisions for the enforcement of decisions delivered through ODR raises concerns over their legal strength, potentially reducing user trust and participation.²⁷¹ Then there are concerns related to data security, confidentiality, system compatibility, and reliable authentication mechanisms pose significant barriers that must be addressed to build

²⁶⁶ Pratham Arya & Lisa Sankrit, Keeping It Online: Developing an ODR Mechanism for India's E-Commerce Disputes, 2022 RGNUL FIN. & MERCANTILE L. REV. 1 (2022)

²⁶⁷ Kalyani Karnad & Vaishnavi Kanchan, Scope of Online Arbitration in India, 15 SUPREMO AMICUS 142 (2020)

²⁶⁸ *ibid*

²⁶⁹ Pratham Arya & Lisa Sankrit, Keeping It Online: Developing an ODR Mechanism for India's E-Commerce Disputes, 2022 RGNUL FIN. & MERCANTILE L. REV. 1 (2022).

²⁷⁰ *ibid*

²⁷¹ *ibid*

trust in online arbitration platforms.²⁷² Another barrier is that ,many parties, including litigants and legal professionals, remain sceptical of online arbitration due to their familiarity with traditional face-to-face proceedings, making it essential to foster greater confidence in virtual processes.²⁷³

Moreover, while Indian courts have accepted electronic communications and video hearings, the broader acceptance and enforceability of electronic arbitral awards still require legal and procedural reforms²⁷⁴. Also the deep-rooted preference for traditional courtroom litigation and widespread scepticism towards online mechanisms can act as cultural and institutional barriers to ODR adoption, necessitating focused reforms and awareness initiatives.²⁷⁵ Operational and human resource constraints such as the challenge of building and sustaining a network of competent, impartial, and tech-savvy neutrals is a pressing operational challenge, critical for ensuring the credibility and effectiveness of ODR systems in India.²⁷⁶

Also, differences in technological proficiency between younger and older generations, along with limited training for legal practitioners, contribute to resistance in adopting online arbitration methods.²⁷⁷ Lastly, limited technological reach outside urban centers, especially in lower courts and institutions outside major cities, remains inadequate, restricting the widespread adoption and accessibility of online arbitration across the country.²⁷⁸

4.6 Technological Solutions and Their Feasibility

The successful implementation of ODR in India will depend on scalable, inclusive, and secure technological solutions that accommodate the country's socio-economic diversity. Below are some key technologies and their practical feasibility:

²⁷²Kalyani Karnad & Vaishnavi Kanchan, Scope of Online Arbitration in India, 15 SUPREMO AMICUS 142 (2020)

²⁷³ *ibid*

²⁷⁴ *ibid*

²⁷⁵ Pratham Arya & Lisa Sankrit, Keeping It Online: Developing an ODR Mechanism for India's E-Commerce Disputes, 2022 RGNUL FIN. & MERCANTILE L. REV. 1 (2022).

²⁷⁶ *ibid*

²⁷⁷ *Supra* 121

²⁷⁸ *ibid*

1. Mobile-First ODR Platforms:

Since mobile phones are the primary mode of internet access for most Indians, mobile-first platforms are essential. Apps designed for low data usage, multilingual support, and user-friendly interfaces—similar to Singapore’s CJTS—are key to ensuring broader public accessibility, especially in rural and semi-urban areas. Presolv360, a Mumbai-based ODR platform, emphasizes mobile-first UX to ensure accessibility for consumers, especially in low-bandwidth environments²⁷⁹ Lok Adalat’s integration with ODR platforms like Sama and Presolv360 uses Aadhaar-based eKYC and virtual courtrooms, resolving over 10 lakh disputes digitally in 2023²⁸⁰

2. Artificial Intelligence (AI):

AI tools can be employed for document review, triage, and preliminary dispute assessment. Predictive analytics may help parties understand likely outcomes and decide whether to settle. The feasibility of AI integration is rising with the advancement of tools such as ChatGPT, DoNotPay, and LexisNexis Ravel Law. Platforms like the eBay Resolution Centre, which leverage data analytics to settle disputes with minimal human input, highlight the practical potential of AI in handling large volumes of cases efficiently. This indicates that integrating AI modules into Indian ADR systems could offer a scalable and effective solution.²⁸¹

3. Blockchain for Enforcement:

Smart contracts can automate compliance with arbitral awards. Blockchain can also be used to create tamper-proof digital records. However, legislative recognition of blockchain records is still evolving in India. Blockchain ensures tamper-proof records and smart contracts for automated dispute resolution, as proposed by the NITI Aayog Expert Committee²⁸² Legal recognition under the Information Technology Act, 2000 and Indian Contract Act, 1872 supports blockchain’s enforceability²⁸³

²⁷⁹ <https://www.onlinelegalindia.com/blogs/odr-service-providers/>

²⁸⁰ <https://www.onlinelegalindia.com/blogs/odr-service-providers/>

²⁸¹ Kartikey Raja, Online Disputes Resolution (ODR): The Future of Justice in India, 3 INT’L J.L. MGMT. & HUMAN. 2171 (2020).

²⁸² <https://www.livelaw.in/lawschool/articles/blockchain-odr-india-next-generation-justice-adr-292222>

²⁸³ <https://lawbhoomi.com/blockchain-for-indian-lawyers/>

4. Virtual Hearing Platforms:

Secure video conferencing platforms with features like real-time translation, screen sharing, and e-document verification can replace physical hearings. These have been tested during the COVID-19 pandemic with positive feedback. International arbitration institutions like the ICC and the Singapore International Arbitration Centre (SIAC) have successfully implemented videoconferencing for remote hearings, a practice that can be effectively integrated into the Indian judicial system²⁸⁴ The Supreme Court's initiative to implement hybrid hearings and standardized video conferencing systems, as seen in states like Delhi and Gujarat, underscores the practical viability of such technologies.²⁸⁵

5. Digital Case Management Systems:

Integrated platforms that allow users to file cases, upload evidence, schedule hearings, and track progress can dramatically reduce procedural delays and improve transparency. Case management and scheduling tools developed by the private sector can be adopted and integrated into the judiciary to enhance operational efficiency.²⁸⁶ The Delhi High Court's Case Management System (CMS) facilitates e-filing, real-time case tracking, and automated hearing schedules.²⁸⁷ AI-powered case management systems help reduce case backlog by streamlining case allocation and enhancing procedural transparency.²⁸⁸

6. Natural Language Processing (NLP):

NLP tools can offer automated translation, legal document summarization, and voice-enabled interfaces to assist users in vernacular languages.²⁸⁹ They can summarize the lengthy documents which saves the time and effort of the users and also the professionals. This can help the illiterate and semi-literate users by using voice enabled interface powered by NLP. Technologies like these will help a lot of people from the

²⁸⁴ Kartikey Raja, Online Disputes Resolution (ODR): The Future of Justice in India, 3 INT'L J.L. MGMT. & HUMAN. 2171 (2020).

²⁸⁵ <https://www.scobserver.in/journal/supreme-court-takes-stock-of-virtual-hearing-systems-in-high-courts/>

²⁸⁶ Supra 133

²⁸⁷ <https://ecommitteesci.gov.in/project/case-management-system-cms/>

²⁸⁸ <https://theamikusqriac.com/the-role-of-technology-in-transforming-the-indian-judiciary/>

²⁸⁹ <https://indiaai.gov.in/article/natural-language-processing-for-plain-language-contracts-empowering-informed-decision-making>

disadvantaged areas of the country and also it builds the confidence trust with the ODR system.

7. E-filing and Digital Platforms:

The Supreme Court and various High Courts in India have implemented e-filing systems and virtual courtrooms, reflecting both the practicality and growing acceptance of digital solutions within the judiciary.²⁹⁰ The online case tracking, uploading of the documents and remote hearings are all supported in this platform, which clearly shows the judicial initiatives and openness to the digital transformation and provide an environment for the adoption of ODR system in broader sense.

8. National Judicial Data Grid (NJDG):

Developed by the Supreme Court's e-Committee, the NJDG serves as a centralized database for judicial information, providing a solid digital foundation to support ODR initiatives.²⁹¹ This will help in getting real-time statistics on the case pendency, clearance rates and disposal timelines. This act as a backbone for building a transparent and efficient ODR system.

9. Public-Private Collaboration:

The proposal emphasizes the need for strategic partnerships between the judiciary and private technology firms to create customized ODR platforms tailored to India's legal and infrastructural context.²⁹² When judiciary ensures legal compliance and procedural fairness, privates firms focus on bringing up the creativity in the technology. These kind of collaboration between the judiciary and the private firms helps in creation of customised platform, that will suit to India's legal, cultural and infrastructural needs.

10. Cloud-Based Infrastructure:

Government or authorized private cloud services can be leveraged to store case data, ensuring scalability and remote accessibility. While these technologies offer significant advantages, their feasibility depends on a collaborative effort involving government investment, private sector innovation, and legal reform. It helps in ensuring scalability

²⁹⁰ Kartikey Raja, Online Disputes Resolution (ODR): The Future of Justice in India, 3 INT'L J.L. MGMT. & HUMAN. 2171 (2020).

²⁹¹ *ibid*

²⁹² *ibid*

for handling a large number of cases, especially in regions where there is limited physical infrastructure. In order to adopt this cloud solutions , it must require investment, regulatory oversight to maintain the trust.

4.7 Necessary Changes in the Legal and Regulatory Framework:

India must undertake specific legal reforms to unlock the full potential of Online Dispute Resolution (ODR). Key recommendations include:

1. Amendment to the Arbitration and Conciliation Act, 1996: Incorporate explicit provisions for online arbitration agreements, digital proceedings, and enforceability within Sections 4 to 7 of the Act. Amend the Arbitration and Conciliation Act to explicitly acknowledge and provide a regulatory framework for online arbitration processes.²⁹³ This can reduce the ambiguity and enhance the trust in the ODR process, which also include language that can acknowledge the digital signatures, electronic filings, and virtual hearings as legally equivalent to the traditional procedures. Moreover, the amendments should provide rules and guidelines for the usage of video conferencing and other digital tools in arbitration. By acknowledging online processes inside the legal framework would guarantee alignment with modern dispute resolution practices. Overall these amendments are no essential for integrating the ODR as a feasible and effective method for the dispute resolution.
2. Introduction of a Dedicated ODR Framework: Similar to the Consumer Protection (E-Commerce) Rules, a comprehensive ODR Code under the National Legal Services Authority (NALSA) should be introduced to define procedural standards, ensure data protection, and set accreditation norms for service providers. The NITI Aayog Report recommends developing sector-specific ODR guidelines under the supervision of NALSA to promote greater accessibility, transparency, and accountability in the digital dispute resolution

²⁹³ Kalyani Karnad & Vaishnavi Kanchan, Scope of Online Arbitration in India, 15 SUPREMO AMICUS 142 (2020)

process.²⁹⁴ By codifying these recommendations, the consistency can be ensured and also avoids fragmentation across the various industries. Such framework would also establish the requirements of ODR service providers which will enhance the public confidence in these platforms. Then there is regulatory clarity which will also enhance the use especially by the enterprises and consumers that will lead to the procedural fairness and maintains the principles of natural justice. Procedural fairness and maintains the principles of natural justice. Ultimately, it would provide a strong basis for the adoption of ODR across the dispute categories.

3. Strengthening the IT Act, 2000: Broaden the scope of Section 65B to facilitate the admissibility of electronic evidence in ODR. Legal recognition should also be extended to blockchain-based records and smart contracts.²⁹⁵ Sections 4 and 5 of the Information Technology Act provide legal recognition to electronic records and digital signatures, thereby laying the groundwork for the procedural legitimacy of ODR mechanisms. Nevertheless, more explicit language about the ODR scenarios would improve the trust and reduce the disputes and conflicts over the admissibility. By enhancing the IT act, there is guarantee that ODR proceedings will not get hampered by the procedural challenges in the conventional court. This will gradually help in aligning the domestic and international practices. Finally, the amendments will provide a conducive legal framework for the efficient operation of ODR platforms.
4. Data Protection and Confidentiality: ODR platforms must comply with the Digital Personal Data Protection Act, 2023, and be monitored by an independent regulatory body to ensure data privacy and confidentiality. ODR platforms are required to adhere to certain regulations to protect the user's data. Additionally, an independent regulatory body should be assigned to oversee the ODR systems for adherence to data privacy regulations. Also, this would prevent data breaches and ensure that participants information is used solely for dispute

²⁹⁴ <https://www.niti.gov.in/sites/default/files/2023-03/Designing-The-Future-of-Dispute-Resolution-The-ODR-Policy-Plan-for-India.pdf>

²⁹⁵

<https://cdnbbsr.s3waas.gov.in/s3ec030b6ace9e8971cf36f1782aa982a7/uploads/2024/12/2024121034.pdf>

resolution. Such safeguards are essential for establishing use confidence and promoting broader adoption of ODR. Encryption , safe storage and use control personal data are the fundamental components of the ODR systems. Overall, the strong measure for data protection will enhance both the equity and efficiency in digital dispute resolution

5. Institutional Empowerment: Agencies like the Legal Services Authorities or the Arbitration Council of India should be given statutory authority to accredit, monitor, and regulate ODR platforms. These authorities may establish standards , certify the platforms and monitor the compliance with the ethical and procedural norms. This accreditation methods will ensure the quality and the uniformity across the ODR suppliers. Institutions may also encourage awareness initiatives and improve the skills of mediators and arbitrators in the digital environments. The accreditation methods will ensure quality and the uniformity across the PDR providers. These institutions will also provide the professionalism and procedural equity for all the parties involved. Empowering these agencies will improve that the ODR platforms remain accessible and inclusive. Finally giving recognition to these institutions roles would also encourage structured and credible foundation for the implementation of the ODR in India.
6. Alignment with Global Norms: India should consider adopting the UNCITRAL Technical Notes on ODR (2017) and evaluate accession to international treaties that facilitate cross-border enforcement of digital dispute resolutions. Moreover, adherence to the international conventions such as New York Convention also ensures the enforceability of he digital awards across the jurisdictions. This will also facilitate the resolution of the cross-border disputes involving the Indian enterprises and foreign investors. Aligning with these standards enhances India's standing as a contemporary , arbitration-friendly jurisdiction. Ultimately , it will provide open potential for the country, India and to serve as the Centre for the international ODR services.
7. Recognition of Online Mediation: Under the Mediation Act, 2023, specific rules should be framed to formally recognize online mediation processes and enforce

settlements signed digitally. This would include the guaranteeing secrecy, establishing the procedural guidelines for the virtual sessions, and confirming e-signatures on settlement agreements. It enhances the accessibility and convenience while diminishing litigation expenses. This measure will guarantee that internet mediation is not seen as a subordinate or informal procedure. Establishing its function would promote broader acceptance among the courts, businesses and the people. Ultimately, this would make the India's dispute resolution landscape more strong, inclusive and prepared for the future.

4.8 Capacity-Building and Awareness-Raising Requirements:

To ensure the sustainability and integrity of ODR in India, extensive efforts must be made in institutional capacity-building and public education. A key step creating a pool of qualified professionals and neutrals—such as mediators and dispute resolution experts—is essential to ensure trust and quality in ODR processes. Establishing a Mediation Council of India to oversee training and certification would help strengthen institutional capacity and standardize practice..²⁹⁶ Next there is a need for specially designed ODR platforms tailored to the needs of the Indian judicial system—particularly subordinate courts—are essential. Their successful implementation requires enhancing institutional capacity through the training of judges, court staff, and legal professionals in the use and management of these digital tools.²⁹⁷

Another key step is the integration of ODR, legal tech, and digital law as core modules in law schools to prepare future professionals. Next is the launch of public campaigns where, multilingual campaigns using television, radio, social media, and panchayat meetings to raise awareness about the benefits of ODR. Moreover, judiciary support is also needed which includes training on ODR procedures for judges to reduce hesitancy in enforcement of online awards and settlement agreements. Encouraging the private sector by incentivising startups and legal tech companies to innovate in the ODR space through government-backed incubation and grants. Next key step is the raising of public awareness is essential for the effective adoption of ODR. Litigants and stakeholders

²⁹⁶ Pratham Arya & Lisa Sankrit, Keeping It Online: Developing an ODR Mechanism for India's E-Commerce Disputes, 2022 RGNUL FIN. & MERCANTILE L. REV. 1 (2022).

²⁹⁷ Kartikey Raja, Online Disputes Resolution (ODR): The Future of Justice in India, 3 INT'L J.L. MGMT. & HUMAN. 2171 (2020).

need to be informed about the availability, operation, and benefits of digital dispute resolution. Promoting legal literacy will further enhance participation and build trust in these systems²⁹⁸

Lastly, implementing ODR pilots in sectors such as consumer protection, e-commerce, banking, and MSMEs, and evaluate performance before full-scale roll-out. Also establishing ODR kiosks or centres in gram panchayats and municipal offices for citizens without smartphones or internet access.

4.9 Conclusion

India stands at a critical juncture in its journey toward digitized dispute resolution. The global comparison of ODR systems highlights the diversity of approaches—ranging from AI-driven tools in the US to multilingual cross-border platforms in the EU and state-supported models in Singapore. These examples offer actionable insights for India's own evolution. The Indian legal ecosystem already possesses some foundational components necessary for an effective ODR regime, such as digital laws, e-courts infrastructure, and the Arbitration and Conciliation Act. However, to realize the transformative potential of ODR, concerted reforms are essential. This includes amending key legislation, empowering institutions, enhancing technological accessibility, and building public trust through education.

Technologically, India must leverage its strength in software innovation and mobile penetration to create inclusive, user-friendly ODR platforms. At the same time, the state must ensure that such systems uphold principles of fairness, confidentiality, data security, and enforceability. The integration of ODR can play a pivotal role in decongesting courts, resolving high-volume disputes, and increasing access to justice—especially for underserved communities. The future of arbitration in India lies not in resisting digital change but in embracing and shaping it through proactive governance, legal foresight, and collaborative innovation. As Mahatma Gandhi once said, "Justice that love gives is a surrender, justice that law gives is a punishment." In embracing

²⁹⁸ *ibid*

ODR, India has the opportunity to move toward a more compassionate, accessible, and inclusive justice system.

Chapter V:

Conclusion and Future Directions

5.1 Introduction

India is currently at a crucial stage in its legal development. As we move further into the digital age, traditional legal systems are finding it challenging to keep up with the demands of a fast-paced, online world. One area where change is urgently needed is dispute resolution. Traditional courts are slow and limit accessibility, especially for small businesses, consumers, and individuals from rural areas.

In reaction to these increasing challenges, the legal system in India is having a enormous shift driven by the technological evolution and the rising demands of a digitally literate populace. The conventional method of arbitration, though advantageous, are increasingly more burdened by the weight of slow and lengthy hearings, high costs, and accumulation of unresolved cases. In this regard, the ODR becomes not merely as an option but also as an essential component of 21st century in delivering the justice. ODR tries to make the use of technology for a faster dispute resolution and efficient access to the individuals and businesses alike. ODR also offers a way ahead to solve issues with traditional system by combining the digital platforms, artificial intelligence and focus on making the procedures faster.

Countries all across the world have harnessed the benefits of the ODR to change their legal system. The digital technologies and conventional legal system can interact, as demonstrated by the United States' implementation of the Modria and Matterhorn, Singapore's SIAC Gateway and EU 's ODR regulation. These examples show, how to facilitate resolution without any physical appearances and focus on integrating the artificial intelligence, blockchain and predictive analysis which helps in having a efficient, transparent and consistency.

It is known that India is still lagging behind in digitizing its dispute resolution procedures while India is being adept in technology in the areas of banking and e-commerce. There are over 4 crore case pending in the courts, so the urgency to reform cannot be overstated. Moreover, there are many initiatives taken by the government

such as NITI Ayog's ODR handbook, the Mediation act of 2023 and the Digital Personal Data Protection Act of 2023 are admirable initial steps. Nonetheless, the current objective is to establish a comprehensive ecosystem which is supported by the legal, institutional and technological reforms.

This chapter aims to offer a detailed and thorough roadmap for integrating the ODR into the India's legal system. After the in-depth analysis of various aspects regarding the ODR which includes the case laws, legal reforms and international practices, this section will serve as a guide to the policy makers, legal professionals and scholars aiming to make arbitration modernised in India

5.2 Findings and Suggestions:

This research posits the idea that Online Dispute Resolution (ODR) provides a number of advantages that range from making the entire process faster and minimizing costs to accessibility for more people, which eventually marks it as a monument for how technology can improve the Indian arbitration system. Tools like video conferencing, artificial intelligence, secure online document sharing, and blockchain can make the entire process smoother and more reliable. Many countries have already started using these tools. For example, Singapore has done an excellent job of creating a strong system through the Singapore International Arbitration Centre (SIAC). The SIAC system brought Singapore to be an ideal place in the world for resolving disputes in the digital era. In such a scenario, India can consider SIAC system as a reference to build a similar system under the guidance of the government, providing trust and structure for the model. It will also make the model and the system to be treated as fair, efficient, and secure.

For this to happen, India will have to make several important changes to its existing laws and regulations. They include:

1. Updating the Arbitration and Conciliation Act, 1996 with precise instruction on online arbitration and other proceedings that are done digitally. The new rules must include digital agreements, online hearings, electronic evidence, and

online enforcement of arbitration awards. This will bring clarity and confidence to use ODR

2. Expansion of the Information Technology Act, 2000. While electronic records and digital signatures are legally recognized, the law must also put into use blockchain records, smart contracts, and video recordings as valid evidence. This can generate trust where ODR decisions will be respected.
3. Amendments to the Indian Evidence Act, 1872, favour the use of digital evidence, which is easier to use during arbitration. The law should facilitate the use of digital files, recordings, and transcripts without requiring unnecessary formalities.
4. Importance of the Digital Personal Data Protection Act, 2023, on the protection of user data. Security of the sensitive and confidential information used in ODR platforms must be enforced, and strict rules on the ways of collecting data, its storage and how it is shared.
5. Finally, the Mediation Act, 2023 should also include online mediation. This means that settlements reached through online mediation should be valid and enforceable. Many people prefer mediation
6. because it is less formal and more cooperative. If it can be done online in a legal and secure way, more people will use it.

Nonetheless, India should also focus on the generation of a new legal framework in favour of online dispute resolution attained through the National Legal Services Authority (NALSA), the Arbitration Council of India, or a new digital dispute resolution authority. The new law must ensure the clear delivery of how a case should be registered, occurrences of hearings, submission of evidence, and enforcement of decisions. It must also include the criteria for the certification of ODR platforms and the eligibility criteria of digital arbitrators or mediators.

In order to effectively use ODR, India has taken a comprehensive approach. Firstly, implementing a specific Online Dispute Resolution Act is essential. And the legislation

is required to explain the scope of the ODR, provide standards for the digital arbitration, mediation and negotiation and must include provisions relating to the digital signatures, blockchain based document authentication and finally online hearings. It should also guarantee digital procedures reflects the conventional due process while offering the flexibility and accessibility that ODR offers. Also, the act must define the roles of the digital arbitrators, establish mechanisms for the enforcement of decision taken and must also set accreditation standards for the ODR platforms. If an example is taken, then EU's ODR regulation stands out, it offers a framework for a centralized system of consumer dispute resolution.

From this, Indian can learn how to regulate the service providers and the integration of many languages under one platform. This kind of approach can bring legitimacy and facilitates confidence, which will help the courts, parties and mediators trust and to adopt the system. In addition to this, a distinct legal mandate will ensure uniformity across the jurisdictions. In the case of *Swiss Timing Ltd. v. Organising Committee (2014)*,²⁹⁹, it has illustrated that judicial non interference promotes the independence of the digital process, which makes the legislative reinforcement more crucial.

Secondly, there is an urgent need for amending the Arbitration and Conciliation Act 1996. This involves the insertion of an additional chapter which talks about addressing the digital filings, e-notices, electronic awards and the enforcement of digital judgements. Presently, the legislation fails to adequately address the digital conduct of arbitration. The recognition of the video conferencing, asynchronous communication, and the cloud document submission would formalize practices that many platforms are already informally doing. This update would promote the transition of the arbitration to online including the institutional and ad hoc arbitration. In accordance with the Digital Personal Data Protection Act of 2023, it is required to set the data security and confidentiality standards by the framework. In the United States, there has been similar changes made under the Electronic Signatures in Global and National Commerce Act (E-SIGN). In order to elevate digital arbitration the same enforceability as its traditional identical, India needs to guarantee its legality. The

²⁹⁹ (2014) 6 SCC 677.

significance of a well- structured arbitration agreement is reaffirmed in the case of *K.K. Modi v. K.N. Modi* (1998)³⁰⁰, where the court held that legislation must be reinterpreted for digital technology.

Thirdly, the IT Act of 2000 needed to be upgraded to address evolving technology. Currently, it now accepts and acknowledges digital signatures and electronic records, however there is no any mention of smart contracts, automated dispute triggers or blockchain verified submissions. This disparity or the gap is creating legal uncertainties for the digital agreements, particularly in realms of finance and e-commerce. The addition of clauses that recognises the AI-generated evidence and defining responsibility and liability for the algorithmic decision will be vital. It is required that the amendment needs to establish cybersecurity policies for ODR systems and must include the penalties for data breaches.

In addition to this the law must promote the integration of two-factor authentication and biometric logins by platforms particularly for the users who lives in the rural areas. In the case of Estonia, the digital identities and blockchain have been institutionalised across legal system. These upgrades will guarantee that technological framework of ODR is legally acknowledged and safeguarded. The digital contracts were judicially recognised in the case of *Trimex International FZE Ltd. v. Vedanta Aluminium Ltd.* (2010),³⁰¹ which will improve the legality.

Subsequently, the legal education must adapt to digital age. All the Law schools must include ODR, digital forensics and legal technology into their courses. There should be mandatory internship provided in the platforms of SAMA or Presolv360, which will give the students with more practical experience. Programs like Continuing Legal Education(CLE) must educate practicing attorneys and judges, how to use the digital technologies at their convenience. Also the Bar Council of India can make CLE on the ODR mandatory for License renewal.

Moreover, building simulation laboratories for the online mediation at institutions would help to reduce the knowledge-practice divide. This will promote the next generation of legal professionals is well verse in both technological and in interpreting digital evidence and managing online hearings. The need for the clarity in electronic

³⁰⁰ (1998) 3 SCC 573.

³⁰¹ (2010) 3 SCC 1

evidence and online contracts has been underscored in the case of *Shakti Bhog Foods Ltd. v. Kola Shipping Ltd. (2009)*,³⁰², the court affirmed that legitimacy of the arbitration terms established by the email.

Finally, there is the need of cooperation between the public and commercial sector to scale and mainstream the ODR. The provisions of the grants and incubation support to legal-tech firms that are in the process of developing arbitration platforms that are AI-driven. The Ministry of Law has got the authorisation to establish the pilot projects in certain sectors such as banking insurance and consumer complaints. These pilot project can then be assessed and expanded nationally.

Even public awareness campaigns through regional media can educate citizens about how to obtain and use these services. The NALSA (National Legal Services Authority) can play a vital role in integrating the marginalized communities. These efforts, when paired with the multilingual assistance and streamlined processes, have the potential to make the ODR widely used option rather than a specialized one. Moreover, the cross-border enforceability must be strategically considered as shown in the *Tata Sons Ltd. v. Siva Industries (2021)*³⁰³, where the court acknowledged the validity of the international arbitration outcomes a critical precedent for global expansion of the ODR.

There are many other case laws that has immensely supported the implementation of the technology and enforcement of online arbitration and adaptation of arbitration procedures to technology advancements. The cases support the for the inclusion of ODR with the Indian arbitration process are so relevant. In the case of *Amazon.com NV Investment Holdings LLC v. Future Retail Ltd., (2022)*³⁰⁴, the case actually supported the award from the foreign state Singapore and it was enforceable in India. This reaffirmed that the enforceability of interim relief measures in international digital arbitrations and supports global trust in Indian enforcement. Next case is the, *PASL Wind Solutions Pvt. Ltd. v. GE Power Conversion India Pvt. Ltd., (2021)*, here, the court affirmed that two Indian parties may choose a foreign seat of arbitration. This actually facilitated the cross-border flexibility in the seat selection and is essential for entities who has involved in the international e-commerce. Moreover, in the case of

³⁰² (2009) 2 SCC 134

³⁰³ (2021) 2 SCC 1

³⁰⁴ (2022) 1 SCC 209

Vidya Drolia v. Durga Trading Corporation, (2021)³⁰⁵, the Supreme Court elucidated the concept of arbitrariness and reinforced that judicial involvement must be limited in order to maintain the efficiency and integrity of the arbitration. Similarly, in the case of *DLF Home Developers Ltd. v. Rajapura Homes*, (2021)³⁰⁶, the party autonomy was upheld and a fundamental principle of ODR when user -directed procedures are crucial. Next, in the high value interest cases, the integrity of arbitration was affirmed in the case *Delhi Metro Rail Corporation v. Delhi Airport Metro Express Pvt. Ltd.*, (2022)³⁰⁷, which highlighted the ODR based verdicts will be binding and conclusive. Further there is cases that supports hybrid and online formats, one among them is the *Govind Goenka v. Invesco Developing Markets Fund*, 2022 ³⁰⁸, the court has validated the foreign seated arbitration which has conducted online by establishing a significant precedent. Another case is the *ONGC v. Afcons Gunanusa JV*, (2022)³⁰⁹, here the Supreme Court acknowledged the flexibility and use of technological instruments for solving the disputes. Next is the case of *Andhra Pradesh Industrial Infrastructure Corporation Ltd. v. S. S. Constructions*, 2021³¹⁰, which speaks about digital filings and online procedural compliance. And also accepts the ODR procedures in the judicial digital process. Finally, *Bharat Broadband Network Ltd. v. United Telecoms Ltd.*, (2019)³¹¹, court has emphasized the need of timely and economical arbitration and affirming the practical digital processes. Collectively these judgements will give us an idea that, the Indian judicial system is trying its very best to make a foundation in the technology-driven inclusive dispute resolution framework.

Moreover, the India has taken steps to digitalize the system—using video conferencing, e-filing systems, and using platforms like SAMA and Presolve 360 to resolve disputes online—a fully functional government-guided platform with clear laws must be required for ODR to be put into practice.

India has a large number of backlog cases, which slows down seeking justice and generates red tapism. Under such a scenario, ODR can help in easing out the backlogs by handling cases with low-value claims, and courts can administer complex matters.

³⁰⁵ (2021) 2 SCC 1

³⁰⁶ (2021) 5 SCC 783

³⁰⁷ 2022) 1 SCC 131

³⁰⁸ 2022 SCC OnLine Bom 266

³⁰⁹ (2022) 6 SCC 92

³¹⁰ 2021 SCC OnLine AP 3800

³¹¹ (2019) 5 SCC 755

It also allows people from far places to get justice without traveling and at minimal expense. With an increase in digital culture, ODR is the best solution for keeping up with the speed of the digital economy and building trust between consumers and service providers.

Considering the working of SIAC model, the use of modern technology, global standards, and global trust, creating a similar model that can gain global attention should be considered. The Mumbai Centre for International Arbitration (MCIA) or a new national platform can be turned into an Indian version of SIAC. With proper support, training, and legal backing, India can even surpass other countries.

5.3 Conclusion:

Online Dispute Resolution is not just a choice but a necessity in this digital era. The accessibility, feasibility, and easiness of it, will ensure success in this fast-paced country. With the rapid growth of the country in e-commerce. Digital payments and the cross-border transactions, the number of disputes will be only going to be high in number. If ODR is implemented and it has the capacity to handle and manage these dispute that is arising from the e-commerce, digital, payments and cross-border transactions. The ODR helps in minimizing the delays ad costs that plague the conventional court system.

The suggestions in this chapter show you how to get to that future, that is how AI, blockchain, and secure digital platforms can transform arbitration and mediation. India has to invest in education, awareness, and infrastructure if it wants to become a world leader in digital arbitration. It can learn from what other countries do and use new technology to help it reach this goal. The government of the country plays a proactive role by making the digital friendly regulations and by investing in secure IT infrastructure and encouraging private sector participation in building ODR platform.

At the same time, the private sector, including the law firms ,arbitration centres, technological enterprises must invest in continuous training for the professionals and also focus on ensuring that arbitrators, mediators and negotiators can use the new and innovative tools while maintaining fairness and neutrality.

With a combined effect of government support, public awareness, modern technology and training of employees, ODR will enable India to become a global leader in ensuring digital justice. The future of arbitration in India is online, and that destiny starts now.

“Justice cannot be for one side alone, but must be for both.” — Eleanor Roosevelt

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