

REGULATING ONLINE DISPUTE RESOLUTION IN THE DIGITAL ERA: A COMPARATIVE SOCIO-LEGAL ANALYSIS

Munkh-Erdene Batdulam^{1*}, Hesti Septianita²

¹*Shikhibutug University, Mongolia*

²*Faculty of Law, Pasundan University, Indonesia*

*Correspondence: munkherdenebatdulam1616@gmail.com

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Abstract

This paper examines the growing relevance of Online Dispute Resolution (ODR) as a mechanism for resolving conflicts in the digital era. It explores how ODR challenges traditional legal concepts, particularly the definition of “written form,” and how it contributes to fair, efficient, and accessible dispute settlement at both domestic and international levels. The study employs a socio-legal approach, combining doctrinal analysis of international and national regulations with comparative research across jurisdictions. Empirical insights from surveys and interviews with practitioners and users of ODR platforms supplement the analysis, highlighting the practical effectiveness and limitations of ODR in real-world contexts. ODR has emerged as a critical tool in e-commerce and digital transactions, with global online buyers projected to exceed 2 billion. The COVID-19 pandemic further accelerated its adoption, making digital mediation and arbitration a necessity rather than an option. Despite its advantages in accessibility and efficiency, gaps remain in legal harmonization, recognition of electronic communications as valid “written forms,” and trust in digital platforms.

Keywords: *online dispute resolution; social perspectives; legal domain; written form; information security.*

Abstrak

Penelitian ini membahas tentang perkembangan Penyelesaian Sengketa secara daring (ODR) sebagai mekanisme penyelesaian konflik di era digital. Penelitian ini juga mengeksplorasi bagaimana ODR menantang konsep hukum konvensional, utamanya pada definisi ‘bentuk tertulis’ dan bagaimana ODR berkontribusi terhadap penyelesaian sengketa yang adil, efisien, dan aksesibel di tingkat nasional maupun internasional. Studi ini menerapkan pendekatan *socio-legal* yang dikombinasikan dengan analisis doktrinal terhadap regulasi nasional dan internasional melalui studi perbandingan lintas yurisdiksi. Pendekatan empiris melalui survei dan wawancara dengan para praktisi dan pengguna platform ODR menjadi pendukung analisis, menyoroti efektivitas praktis dan batasan-batasan ODR dalam konteks dunia nyata. ODR muncul sebagai *critical tool* dalam transaksi digital dan *e-commerce* dengan pembeli online global yang diproyeksikan melebihi 2 milyar. Pandemi Covid-19 lebih lanjut mengakselerasi adopsi metode ini, menjadikan mediasi dan arbitrase digital menjadi kebutuhan ketimbang sekedar pilihan. Selain kelebihan dalam aksesibilitas dan efisiensi, kesenjangan tetap ada terkait harmonisasi hukum, rekognisi komunikasi elektronik sebagai ‘*written forms*’ yang sah, dan kepercayaan pada platform digital.

Kata Kunci: *domain hukum; keamanan informasi; online dispute resolution; perspektif sosial; written form.*

Introduction

The rapid expansion of cross-border digital transactions has created an urgent demand for efficient, accessible, and fair mechanisms for resolving disputes in the online environment. Traditional court systems, constrained by procedural rigidity, jurisdictional complexity, and escalating caseloads, have proven inadequate to meet the pace of global e-commerce. As a result, Online Dispute Resolution (ODR) has emerged as a transformative framework that extends the principles of alternative dispute resolution (ADR) into the digital domain. ODR incorporates technology-enabled tools such as e-mediation, e-arbitration,¹ and negotiation platforms to facilitate the settlement of disputes beyond physical borders.²

Citizens are increasingly turning to the courts to protect their rights, leading to a growing workload for the judicial system. This surge not only prolongs dispute resolution but also escalates legal costs in relation to the value of the disputes. Mediation, as an alternative dispute resolution method, offers a clear advantage due to its cost-effectiveness and swifter process compared to traditional court proceedings. However, without the advancement of e-mediation, the risk of an overwhelmed court system with substantial backlogs and protracted proceedings remains a significant concern. This is why many countries worldwide are exploring various approaches to mediation, reflecting a rising interest in alternative dispute resolution over litigation.

Enhancing digital signature knowledge and information and communication technology skills is crucial for comprehending and analyzing e-mediation while intensifying relevant factors. Recent innovations—such as the use of artificial intelligence (AI) to handle procedural tasks in arbitration proceedings by courts in some countries³—illustrate both the promise and complexity of integrating technology into dispute resolution.⁴ Thus it is important for us to investigate how the use of technology,⁵ especially artificial intelligence, the internet and Online Dispute Resolution can help the functioning of courts and provide better support for pro se litigants.⁶

¹ Ethan Katsh and Orna Rabinovich-Einy, *Digital Justice: Technology and the Internet of Disputes* (Oxford University Press, 2017), <https://doi.org/https://doi.org/10.1093/acprof:oso/9780190464585.001.0001>.

² Ethan Katsh, Mohamed S. Abdel Wahab, and Daniel Rainey, *Online Dispute Resolution: Theory and Practice – A Treatise on Technology and Dispute Resolution* (Eleven International Publishing The Hague, 2022).

³ Fonny Taurusia, “Penggunaan Arbitrase Dalam Penyelesaian Sengketa Konsumen Di Bpsk,” *Journal of Legal, Ethical and Regulatory* (2017), <https://repository.unair.ac.id/12846/>.

⁴ Agus Agus et al., “The Use of Artificial Intelligence in Dispute Resolution Through Arbitration: The Potential and Challenges,” *Sasi* 29, no. 3 (2023): 570, <https://doi.org/10.47268/sasi.v29i3.1393>.

⁵ John Zeleznikow, “Using Web-Based Legal Decision Support Systems to Improve Access to Justice,” *Https://Www.Tandfonline.Com/Journals/Cict* 20 11, no. 2 (2002): 15–33.

⁶ Elisabeth Wilson-Evered and John Zeleznikow, *Online Family Dispute Resolution Evidence for Creating the Ideal People and Technology Interface* (Springer Nature, 2021).

This includes intelligent case acceptance, multilingual real-time translation, blockchain-based evidence recognition, and submission of opinions and statements, potentially quadrupling the efficiency of dispute resolution. Such developments demonstrate how algorithmic tools can enhance efficiency through automated case screening, translation, and blockchain-based evidence management, while simultaneously raising normative concerns regarding accountability, bias, and transparent.⁷

With e-mediation, individuals can use their smartphones or computers to resolve disputes from their location. When encountering an electronic dispute, consider options such as negotiating independently, engaging with a known party, or seeking legal advice from local government agencies or bar associations. Online mediation is often the preferred choice due to its convenience and accessibility. Comparative and synthesis methods were used in this research.

Adversarial adjudication in public courts has always been the primary mode of formal dispute resolution. However, it is plagued by problems of backlog, delay, and limited accessibility to many citizens. These reasons have forced us to search for alternatives. This movement began in the latter half of the nineteenth century globally. Many alternatives were proposed. But mediation has emerged as the most viable alternative. Mediation is a voluntary dispute resolution method that attempts to settle disputes with an amicable approach.

This study seeks to understand the effectiveness and shortcomings found in the application of the mechanism of ODR in some countries and regions. The research gap addressed in this paper lies in the limited comparative and socio-legal analysis of ODR regulation across different jurisdictions, especially in Asia, where digitalization is advancing but legal harmonization remains nascent. Existing studies tend to focus on single jurisdictions or purely doctrinal discussions without empirical grounding. There has been little examination of how national systems operationalize international standards—for instance, how countries such as Japan, China, and Indonesia reconcile ODR mechanisms with their domestic legal traditions.

Accordingly, this study aims to analyze the development of ODR regulation from a comparative socio-legal perspective, assessing how international frameworks are interpreted and applied at national levels. The research seeks to identify legal and policy gaps that impede harmonization and propose recommendations for strengthening transnational cooperation in digital dispute settlement.

The study addresses the following research questions of how international and national legal instruments regulate ODR, particularly regarding the recognition of electronic communications and procedural fairness, the comparative strengths and weaknesses of ODR implementation in selected jurisdictions (the EU, China, Japan, the United States, and Australia); and how these experiences can inform the

⁷ Anirban Chakraborty and Shuvro Prosun Sarker, “Resolving Disputes with an Healing Effect: The Practice of Mediation in India,” *Revista Brasileira de Alternative Dispute Resolution* 4, no. 8 (2023): 62, <https://doi.org/10.52028/rbadr.v4i8.4>.

development of effective and harmonized ODR frameworks in India, Bangladesh and South East Asia, especially in Indonesia

Also, this paper argues that a well-regulated ODR framework-grounded in fairness, transparency, data protection, and accessibility-can enhance access to justice and strengthen public trust in digital legal systems. By employing a social-legal approach, combining doctrinal and empirical methods, this study is expected to contribute to both theoretical and policy debates on the future digital justice.

Methods

The study employs a socio-legal research approach, which allows for a comprehensive exploration of Online Dispute Resolution (ODR) not only from a normative legal perspective but also in relation to its practical operation within society. At the doctrinal level, the research undertakes an in-depth analysis of both international and national regulations governing electronic communications, arbitration, mediation, and consumer protection.⁸ This includes examining key international instruments such as the UNCITRAL Model Law on Electronic Commerce, the UNCITRAL Technical Notes on ODR, and regional frameworks like the European Union ODR Regulation, as well as domestic legal instruments including a comparative analysis is conducted across selected jurisdictions—such as the European Union, China, Australia, Japan, United States, India, Bangladesh, and Indonesia focusing on how each system defines “written form,” recognizes electronic communications, and integrates ODR into existing legal processes.

Empirically, data were collected through document analysis, semi-structured interviews, and online surveys distributed to respondents including e-commerce consumers and legal professionals from Indonesia, Japan, and China. The triangulation of doctrinal and empirical findings ensures validity and contextual depth.

Beyond doctrinal and comparative analysis, the research incorporates an empirical dimension to bridge the gap between legal theory and practice. Surveys are distributed to e-commerce consumers, business operators, and legal professionals to measure perceptions of accessibility, fairness, efficiency, and trust in ODR mechanisms. In parallel, semi-structured interviews with practitioners, including mediators, arbitrators, and platform administrators, are conducted to capture professional insights into the strengths, limitations, and evolving challenges of ODR implementation. These empirical findings are then triangulated with doctrinal analysis to assess whether existing legal frameworks adequately address the realities of ODR in practice. By combining legal interpretation with real-world evidence, this socio-legal methodology ensures that the study not only evaluates the sufficiency of current laws but also identifies areas where reform or harmonization may be necessary to enhance the legitimacy, accessibility, and sustainability of ODR systems in the digital era.

⁸ Mohamad Fateh Labanich et al., “Modernising the Arbitration Industry: The Potential of an AI-Arbitration Legal Framework in Malaysia,” *Manchester Journal of Transnational Islamic Law and Practice* 21, no. 2 (2025): 124–44.

Result and Discussion

Regulating Online Dispute Resolution in The Digital Era: A Comparative Socio-Legal Analysis

The findings are structured across five sub-sections: The International Framework; Advantages and Limitations; Data Security and Privacy; Procedural Fairness; and The Role of Artificial Intelligence. ODR has expanded globally but remains uneven in regulation. The EU's centralized ODR platform exemplifies integration between law and technology, while China's Internet Courts showcase innovation through blockchain and AI⁹ Japan's ODR Support Council¹⁰ emphasizes accessibility, and the United States continues to rely on private platforms such as Modria and Cybersettle.¹¹

The sharp increase in online transactions across borders and the need for mechanisms to resolve disputes arising from such transactions, which is Online Dispute Resolution (ODR), has led UNCITRAL to adopt the Technical Notes on Online Dispute Resolution to assist the State members, in particular developing countries and states whose economies are in transition, ODR administrators, ODR Platforms, neutrals, and the parties to ODR proceedings in developing and using ODR systems. Even though the Technical Notes are non-binding, but it is descriptive and hold principles of fairness, transparency, due process, and accountability.¹² Advantages include accessibility and efficiency, aligning with UN SDG 16. Limitations include the lack of harmonized enforcement and varying digital literacy. Data protection remains pivotal; while GDPR sets global standards, many Southeast Asian nations, including Indonesia, are still strengthening frameworks.

One of the steps taken further by ASEAN is the negotiation on Digital Economy Framework Agreement (DEFA)¹³ One of the major challenges, however, is harmonizing ODR with national legal frameworks. While UNCITRAL provides guiding principles, national courts must recognize and enforce ODR agreements or settlements to ensure legal certainty. The absence of a uniform global framework sometimes leads to inconsistency in enforcement, particularly in cross-border disputes.¹⁴

Online dispute resolution is considered as one of alternative dispute resolutions best to settle disputes, particularly online business disputes. ODR offers the advantage of being quick and user-friendly, in addition to not being subject to time

⁹ Carrie Shu Shang and Wenli Guo, "The Rise of Online Dispute Resolution-Led Justice in China: An Initial Look," *Australian National University Journal of Law and Technology*, 2020, 26–42.

¹⁰ Mayu, "Japanese Government Introducing ODR in Civil Courts," *Nikkei Newspaper*, 2019.

¹¹ Varsha Shankar, "The Rise Of Online Dispute Resolution: Revolutionizing Conflict Resolution In The Digital Age," 2024.

¹² "Online Dispute Resolution," United Nation, n.d.

¹³ Jingting Liu, Tan Kway Guan, and Taojun Xie, "Further Steps for Asean's Digital Economic Integration," 2023.

¹⁴ Katsh, S. Abdel Wahab, and Rainey, *Online Dispute Resolution: Theory and Practice – A Treatise on Technology and Dispute Resolution*.

and space constraints.¹⁵ Just with a smartphone, individuals can easily access the necessary information and follow on-screen instructions to navigate e-mediation. Moreover, the absence of physical meetings provides the flexibility to engage in the process from anywhere and at any time. Even if one opts for court proceedings, legal consultations, or independent negotiations, there are instances where access to document preparation or advice can be challenging. Additionally, e-mediation is often cost-effective or even free. However, it is important to note that online mediation may not be suitable for all types of disputes.

A drawback of online dispute resolution is its limited applicability to certain dispute categories, and in some cases, it may not lead to a final resolution. E-mediation can be challenging to apply in non-negotiable or complex disputes, and existing e-mediation mechanisms worldwide may not encompass all dispute types. In cases where parties fail to reach an agreement, they may resort to alternative measures such as initiating legal proceedings or seeking legal counsel.¹⁶

On the international front, e-commerce continues to experience substantial annual growth rates, prompting an increased quest for e-dispute solutions in a globalized world. As envisioned by technologists, traditional litigation cannot match the potential, effort, time, and cost savings associated with online dispute resolution.¹⁷ These principles are assumed to encompass fundamental tenets of dispute resolution, including justice, transparency, and neutrality. However, integrating these principles into a unified set of universal standards proves challenging due to their individual nature.

ODR also faces critical challenges in terms of data privacy and cybersecurity. Trust in ODR platforms depends heavily on robust data protection mechanisms, as sensitive personal and financial data are exchanged online. Regulations such as the EU General Data Protection Regulation (GDPR) have become global benchmarks, ensuring user confidence in electronic mediation processes. Without adequate safeguards, the credibility and fairness of ODR may be undermined.^{18,19}

Digital mediation must ensure procedural fairness and equal treatment of all parties.²⁰ The trust of the involved parties in the process is vital for its success. In evaluating the fairness of the procedure during dispute resolution, four key elements

¹⁵ Mohammad Farid Fad, "Penyelesaian Sengketa E-Commerce Melalui Online Dispute Resolution Dalam Perspektif Hukum Islam," *Jurnal Hukum Islam* 17, no. 1 (n.d.), <https://doi.org/10.28918/jhi.v17i1.1579>.

¹⁶ Anderson Mori and Tomotsune, "Dispute Resolution Group Newsletter International Arbitration Team," n.d.

¹⁷ E Katsh and J Rifkin, *Online Dispute Resolution, Resolving Conflicts in Cyberspace*, 1st ed. (San Francisco: Wiley, n.d.).

¹⁸ Pablo Cortés, "Online Dispute Resolution for Consumers in the European Union," 2010, <https://doi.org/10.4324/9780203847756>.

¹⁹ "European Union Regulation (EU) 1026/679 (GDPR)" (n.d.).

²⁰ Ofir Turel and Yufei Yuan, "Online Dispute Resolution Services: Justice, Concepts, and Challenges," 2021, https://doi.org/https://doi.org/10.1007/978-3-030-49629-6_25.

come into play:²¹ Neutrality, Delivering your voice (Right to be heard), Be kind and respectful, and Equality and transparency. Technological advances such as AI-assisted arbitration offer speed but also raise questions of algorithmic bias.²²

The future of ODR will also likely involve the integration of Artificial Intelligence (AI), where algorithms assist in categorizing disputes, suggesting potential solutions, or even drafting settlement agreements. While AI can enhance efficiency, it raises questions of accountability, transparency, and bias, which must be addressed through ethical and legal safeguards.²³

Another significant contribution of ODR lies in expanding access to justice. By removing geographical and procedural barriers, ODR ensures broader inclusion for individuals in remote areas, those with disabilities, or parties with limited financial resources. This aligns with the UN Sustainable Development Goal 16 on promoting peace, justice, and strong institutions.²⁴

In 1998, the European Commission introduced seven fundamental principles for handling consumer disputes beyond traditional court settings: Independence, Transparency, Adherence to the principle of open discussion, Effectiveness, Legitimacy, Free access, and Consideration of principles such as representation for resolving electronic disputes.²⁵

Three critical scenarios pave the way for the realization of digital mediation, including: *Firstly*, Monetary Disputes: Online dispute resolution is exceptionally well-suited for settling financial disputes, especially those in which the obligation to pay is clear, but details such as the division of the amount, payment duration, and method need agreement. These disputes typically involve straightforward and non-controversial issues. Online dispute resolution excels in such cases, as traditional dispute resolution methods may be impractical due to costs and complexity, particularly for smaller sums. *Secondly*, Child Allowance: Disputes related to child support and alimony are often financially driven and may vary depending on factors like parental employment, the child's age, the number of children, income status of divorced couples, and the specified payment amount. Exploring digital mediation as an avenue to reach agreements becomes a viable option. *Thirdly*, Inconsistencies within Internet Platform Services: Discrepancies within Internet Platform Services, such as disputes between buyers and sellers on online marketplaces, lend themselves well to electronic reconciliation. These disputes are often

²¹ John W. Thibaut and Laurens Walker, *Procedural Justice: A Psychological Analysis* (L. Erlbaum Associates, 1975).

²² Christian Djeflal, *Artificial Intelligence and Public Governance: Normative Guidelines for Artificial Intelligence in Government and Public Administration* (Springer Nature, 2019).

²³ Katsh and Rabinovich-Einy, *Digital Justice: Technology and the Internet of Disputes*.

²⁴ United Nations, "Transforming Our World: The 2030 Agenda for Sustainable Development," n.d., <https://sdgs.un.org/2030agenda>.

²⁵ Munkh-Erdene Batdulam, "Developing the Legal Regulation of Online Dispute Resolution," *Revista Brasileira de Alternative Dispute Resolution* 5, no. 10 (December 2023), <https://doi.org/10.52028/rbadr.v5i10.art11.nz>.

characterized by their limited scope, making online mediation a cost-effective and efficient solution. However, it's crucial to acknowledge that the potential solutions may be constrained by the nature of the disputes.

At the international level, comparative models demonstrate diversity in enforcement mechanisms. The EU has centralized its ODR system with legislative backing, the U.S. relies heavily on private platforms such as Modria and Cybersettle, while China integrates ODR directly into its court system through specialized Internet courts. Japan and Australia also provide examples of hybrid approaches, balancing court-driven oversight with private-sector innovation. This diversity underscores the importance of developing minimum international standards for the enforcement and recognition of ODR settlements.²⁶

Countries in Online Dispute Resolution

Japan

Introducing Japan's most convenient online mediation service, which now offers an expedited resolution process, taking just around a month – a significant improvement over traditional dispute resolution methods. What's even better is that notification fees are completely waived. This development aligns with the Japanese government's decision on July 17, 2020, when they established the “ODR Support Council”. This council was created with the vision that electronic reconciliation would become a vital part of our social infrastructure. The council is wholeheartedly committed to making the public aware of the numerous benefits of mediation, including its flexibility in managing cases, simplicity, speed, confidentiality, and its ability to adapt to the specific needs of each dispute. What's more, this service can be accessed using a smartphone, providing the flexibility to resolve disputes at any time and from any location. Thanks to electronic reconciliation in Japan, a wide range of disputes, such as those involving child support, rent, medical expenses, and loans, are now being successfully resolved.

United States of America

In the United States, the rise of electronic reconciliation has coincided with the widespread expansion of the Internet. By 2019, more than 50 electronic courts had been established across the country. The extensive geographic reach of the United States has greatly benefited from electronic reconciliation, fostering the growth of mediation. Mediation has effectively alleviated many issues by offering digital reconciliation, resulting in a substantial reduction in costs compared to traditional solutions, making justice accessible to a broader population. The U.S. has pioneered the development of three major ODR platforms with global reach, including Modria, Cybersettle, and SquareTrade.

²⁶ Julia Hörnle, *Cross-Border Internet Dispute Resolution* (Cambridge University Press, 2009), <https://doi.org/https://doi.org/10.1017/CBO9780511576102>.

Modria²⁷, headquartered in San Francisco, focuses on resolving civil disputes in the commercial sector and aims to provide ODR technology for internal business disputes. It has expanded its services to ease the caseload in New York and collaborate with U.S. public institutions like the American Arbitration Association, handling over 300,000 cases annually.

Cybersettle²⁸ in operation since 1996, has gained significant support and resolved nearly 200,000 claims, amounting to a payment of \$1,457,299,751 to date. In contrast, the SquareTrade platform, which is no longer available independently, played a pivotal role in shaping the “eBay” ODR system. Unlike other platforms, SquareTrade offered digital mediation in cases where mutual agreements could not be reached, finalizing matters through digital agreements. Currently, SquareTrade has been integrated into the eBay ODR platform, providing dispute resolution services. eBay Resolution Centre, can be used when disputes arise. eBay was established in 1995 and has become one of the world’s largest online. SquareTrade was an independent private company which shared eBay’s aim of promoting customer confidence in doing business and using services online. It is well-known that the eBay e-trust—ie trust in digital environments—strategies are designed to make customers comfortable when buying and selling online so as to maximize the number of sellers and buyers attracted to its online marketplace.²⁹ The trust building measures of eBay include: (1) the mutual rating system of trade satisfaction; (2) identity verification; (3) secure online payment services like PayPal or Escrow; (4) insurance policy; and (5) the ODR service provided by SquareTrade until June 2008, which was replaced by the eBay Dispute Resolution Centre in 2008.

The algorithmic nature of these platforms ensures fair treatment in dispute resolution, eliminating human errors and one-sided biases. They also offer computer-mediated communication options for buyers and sellers, along with patent-pending technology. The process typically begins with the complainant registering with a unique identifier and password on the SquareTrade platform, providing details of the dispute. Mediation allows parties to independently resolve the issue within a timeframe of up to 10 days.³⁰

eBay has gained international recognition for its acceptance of ODR, handling over 60 million disputes annually.³¹ Another platform, PayPal, employs a distinct dispute resolution process, where sellers must rebut claims by demonstrating their fulfilment of responsibilities. The process commences with the buyer raising a dispute, temporarily halting money transfers between the involved parties.

²⁷ CEDR, “Centre for Effective Dispute Resolution (CEDR) Online Portal,” n.d.

²⁸ Cybersettle, “Financial Negotiation and Settlement on Cybersettle,” Cybersettle, n.d.

²⁹ Faye Fangfei Wang, “Online Arbitration” (London: Informa Law from Routledge Oxford, n.d.), <https://doi.org/10.4324/9781315625980>.

³⁰ Katsh, S. Abdel Wahab, and Rainey, *Online Dispute Resolution: Theory and Practice – A Treatise on Technology and Dispute Resolution*.

³¹ Katsh, S. Abdel Wahab, and Rainey.

Parties are obligated to resolve disputes within 20 days.³² Unresolved disputes proceed to a drafting requirement and a final decision before the PayPal case is reviewed. The platform imposes restrictions on the appeals process to prevent unnecessary appeals. In the United States, ODR coverage has proven to be limitless in its scope and impact.

China

China, as a global technology and e-commerce leader, is recognized for its pioneering efforts in digital reconciliation mediation. With a staggering 800 million Internet users, the necessity to transition virtual disputes into digital formats has driven the transformation of traditional dispute resolution mechanisms. China has witnessed two significant initiatives to introduce Online Dispute Resolution (ODR) into its legal landscape.

As with other jurisdictions, China has introduced a range of newer technologies into its justice sector to promote greater access to justice, improve judicial transparency and to promote just outcomes for disputing parties with legal issues. Chinese courts' practice of embracing technology is unique as an overarching approach has been adopted by the central government to build the 'smart court' system across the entirety of its courts. Arguably, the smart court system, which relies on computer technologies that enable big data use, blockchain formation and advisory and determinative forms of artificial legal intelligence, has, to a certain degree, promoted easier access to justice, enabled faster dispute resolution, saved costs by moving judicial process online and ensured that judgments can be enforced. On the other hand, however, there are concerns relating to the use of some technologies that include the use of automated judgments, digital divide issues, judicial independence, as well as issues linked to privacy and data protection. This article concludes that some caution should be exercised in developing the 'smart court' system, primarily in relation to the oversight and introduction of more disruptive technologies to ensure that cheap and quick dispute resolution can be achieved without detrimental impacts on justice.³³

The first initiative involves digital reconciliation mediation facilitated by internally integrated ODR platforms with substantial support from the national e-commerce industry.³⁴ Notably, Chinese courts have undergone a radical transformation by adopting digital processes, with three digital courts operating in major cities, including Hangzhou, Beijing, and Guangzhou, handling over 120,000 disputes by 2019. Hangzhou's digital court has specialized in internet and e-

³² "Resolving a Dispute Filed with PayPal," n.d.

³³ Changqing Shi, Tania Sourdin, and Bin Li, "The Smart Court – A New Pathway to Justice in China?," *International Journal for Court Administration* 12, no. 1 (2021): 1, <https://doi.org/10.36745/ijca.367>.

³⁴ Shi, Sourdin, and Li.

commerce disputes and is regarded as a leading example of electronic reconciliation mediation.³⁵

The court procedures in Hangzhou underscore the prevalence of online mediation, where mediators connect with parties through phone, online communication, or video conferencing, mirroring the Internet court concept.³⁶ An intriguing aspect of these courts is their inclination towards the integration of artificial intelligence, raising the possibility of AI-driven dispute resolution in the future.

These three digital courts adhere to a set of standards defined by the “Rules of Procedure for the Control of Electronic Matters of the People's Republic of China,” which came into effect on August 1, 2021. Although the effectiveness of these procedures and their implementation by the courts remains a subject of ongoing assessment, mediation through electronic reconciliation is thriving within the Chinese judiciary.

This flourishing is, however, showing signs of deceleration, which can be attributed to two primary factors. First, the absence of a formal legal framework has impeded the e-commerce industry's development. Second, the readiness of experienced private sector entities to take on the risk of ODR implementation has facilitated the integration of ODR into their complaint resolution systems.³⁷ Notably, Alibaba Group, with over one billion users, including the world's largest C2C e-commerce platform, Taobao, has harnessed ODR successfully.³⁸

Addressing information security concerns in electronic mediation remains a challenge, but in 2019, China's Ministry of Industry and Information Technology, Cyberspace Administration, and the Ministry of Public Security and Market Regulation adopted guidelines for the detection, collection, and use of personal information by software. Whether implemented at the private or public level, China demonstrates an unwavering commitment to the continuous evolution of the digital dispute resolution process, establishing itself as a pioneer in the field of ODR.

European Union

The European Union (EU) boasts a unique feature in the way its member states are intricately connected and are progressively embracing digital technologies. This interconnectedness has led to the rapid adoption of Online Dispute Resolution (ODR) within the EU. The EU has already established a framework of common policies and regulations covering various areas, including e-commerce and online

³⁵ Batdulam, “Developing the Legal Regulation of Online Dispute Resolution.”

³⁶ “Hangzhou Internet Court,” n.d.

³⁷ Lizhi Liu and Barry R. Weingast, “Law, Chinese Style: Solving the Authoritarian’s Legal Dilemma Through the Private Provision of Law,” in *25th Annual ISNIE / SIOE Conference* (Society for Institutional & Organizational Economics, 2021).

³⁸ Lizhi Liu and Barry R. Weingast, “Taobao, Federalism, and the Emergence of Law, Chinese Style,” *Data Sovereignty: From the Digital Silk Road to the Return of the State* 7, no. 1993 (2023): 137–58, <https://doi.org/10.1093/oso/9780197582794.003.0007>.

procedures. As a result, ODR has been widely accepted, and its implementation is well-regarded, particularly within the context of e-commerce.

One notable milestone is the EU Parliament's adoption of ODR legislation, known as the Regulation, specifically focused on consumer disputes in the realm of e-commerce. This legislation seeks to safeguard consumer rights by creating a European ODR platform with the objective of resolving disputes between consumers and merchants online, independently, fairly, efficiently, and expeditiously, thus bypassing traditional court proceedings.³⁹

The Council of the EU has taken the responsibility of developing, designing, and maintaining this ODR platform, offering cost-free services for notifying respondents of complaints and supplying electronic tools for redress. Furthermore, an e-reconciliation point of contact is mandated to have at least two consultants with expertise in ODR. The regulations also address critical aspects related to databases, personal data processing, data privacy, security, user data, and the roles of competent authorities.

The inherently cooperative nature of the EU has driven the modernization of traditional dispute resolution mechanisms both at the national and international levels. This transformation has facilitated the gradual transition towards electronic dispute resolution. The EU's remarkable success in integrating ODR can be attributed to its member states' strong interconnectedness and the presence of established legislative bodies, ensuring consistency across various domains.

The EU has set a pioneering example for e-mediation in cross-border disputes and has become a global model for ODR implementation. Additionally, the EU's focus on handling e-commerce disputes, particularly those involving consumers and small businesses, has played a crucial role in ensuring equal treatment throughout the dispute resolution process.

Australia

Australia has made significant strides in establishing a stable Alternative Dispute Resolution (ADR) environment over the past few decades. Courts and arbitral tribunals in Australia now possess the authority to direct disputes towards ADR processes, making ADR a de facto prerequisite before pursuing litigation. Alongside this progress, Online Dispute Resolution (ODR) has slowly but successfully integrated into the legal framework, with the Australian Dispute Resolution Advisory Council (ADRAC) taking a leading role in evaluating ODR's development in the country.

While Australia has achieved an advanced stage of ODR development by international standards, ADRAC has recognized that this growth hasn't fully met initial expectations. The country's unique characteristics, including its vast geographical remoteness and a forward-thinking population, have the potential to accelerate legal innovation in the realm of electronic mediation.

³⁹ "Council Regulation 524/2013, Pp 165. 2013" (n.d.).

However, Australia has exhibited some reluctance in embracing the electronic revolution in the legal sector. Concerns about the perceived impersonality of electronic processes and the complexity that users may encounter have contributed to this cautious approach. Nonetheless, a significant milestone was reached when the Federal Court of Australia recently introduced e-litigation within domestic courts, signifying a pivotal moment in the reform of e-mediation within the judicial system.

While there is no specific legislation solely dedicated to e-mediation, several laws related to e-commerce encompass the foundational principles of ODR. These laws include the Australian E-Commerce Regulations, the Competition Act, and the Electronic Transactions Act. The Australian E-Commerce Regulations are designed to enhance public confidence in businesses engaged in e-commerce activities. The Competition Act serves as the primary federal instrument for regulating fair trade and commercial matters, ensuring adherence to legal standards in commercial transactions. Consequently, the Competition Act is often examined in conjunction with the Electronic Transactions Act. These legislative changes have contributed to the adaptation of the legal framework to the online environment. Although they do not explicitly outline ODR, the mechanisms in e-commerce regulations align closely with the core principles of ODR.⁴⁰

In addition, the development of e-mediation in any jurisdiction faces a significant challenge due to the heightened risk of data breaches and privacy infringements. Studies conducted in countries that employ e-mediation reveal notable shortcomings in data protection and consumer safeguard dissatisfaction. However, e-mediation has demonstrated its exceptional utility, particularly in cases of infectious disease outbreaks and domestic violence, effectively alleviating the burdensome time constraints associated with traditional court processes.

This approach, which entails resolving legal issues through expert-guided discussions without the need for court intervention, offers numerous advantages. Notably, e-mediation operates seamlessly even on weekends and holidays, facilitating smoother negotiation processes. Expanding the definition of the term “Written form” to encompass “letters, e-mails, and telegrams” while simplifying the regulation of legal content is a progressive step. This approach, already successfully adopted internationally, offers several advantages, particularly in enabling the transmission of requests, petitions, and complaints over long distances while preserving their content.

Conduct an investigation into and introduce e-courts, which have brought about a profound transformation in the exercise of judicial authority through electronic processes. The initial step should involve the implementation of e-mediation for dispute resolution. It is believed that this approach can pave the way

⁴⁰ M Kirby, “The Future of the Courts – Do They Have One?,” *Journal of Law, Information and Science* 9, no. 2 (n.d): 141, <https://www.austlii.edu.au/cgi-bin/viewdoc/au/journals/JLLawInfoSci/1998/12.html>.

for the regulation of legal relations within our country, mirroring the rules and standards set forth in the “Rules for Electronic Proceedings of the People's Court of the People's Republic of China”. As per the Government of Japan's decision dated July 17, 2020, it is advisable to consider the establishment of a council akin to the “Council to Support Online Dispute Resolution”. This council can play a vital role in overseeing and supporting the implementation of online dispute resolution initiatives. Embrace the adoption and testing of an Online Dispute Resolution (ODR) platform. In essence, this involves studying and leveraging global experiences in the field of electronic mediation to enhance the effectiveness and applicability of ODR in your jurisdiction.

Leverage e-commerce platforms to facilitate the submission of claims by both consumers and merchants. In the event of a dispute, consider employing electronic mediation as a means of resolution. This approach will help alleviate the burden on traditional courts, ensuring that such disputes do not overburden the court system. Legal regulation can be effectively achieved by incorporating principles within existing laws related to e-commerce, negating the necessity for the creation of a separate law specifically dedicated to Online Dispute Resolution (ODR). This can encompass various areas, such as Civil Law, Family Law, Conciliation Law, E-Commerce Regulations, Competition Law, and laws about Electronic Transactions.

In the process of dispute resolution, it is advisable to incorporate the four essential elements or principles that ascertain procedural fairness. These elements, which include Neutrality, Voice, Courtesy, Equality, and Transparency, should be integrated into laws and regulations as guiding principles for every electronic mediation process. This will ensure that the process is fair, transparent, and equitable for all parties involved.

Indonesia and Southeast Asia

From regulatory/legal basis perspective, Indonesia implements laws that can support ODR, e.g., Undang-Undang No. 30 Tahun 1999 concerning *Arbitrase dan Alternatif Penyelesaian Sengketa* (Arbitration and ADR Law) covers arbitration/ADR and allows communications by electronic means.⁴¹ In addition, Indonesia Information and Electronic Transaction Act (Law No. 11, 2008 and its amendment, and furthermore Governmental Regulation on E-commerce also mention that e-commerce disputes may be resolved electronically (online dispute resolution) in principle.⁴² Indonesia uses ODR mechanism in certain consumer complaint or e-commerce settings. The consumer protection agency (*Badan Perlindungan Konsumen*

⁴¹ Ilmina Jihan Zafira, “Integrasi Layanan Online Dispute Resolution (ODR) Di Indonesia Sebagai Upaya Optimalisasi Pemenuhan Hak Konsumen Di Era Disrupsi,” n.d.

⁴² Laelatus Syahna FA, Soesi Idayanti, and Erwin Aditya Pratama, “Online Dispute Resolution Sebagai Solusi Sengketa E-Commerce,” *Jurnal Bisnis Dan Manajemen (JURBISMAN)* 1, no. 3 (2023): 713–36.

National (BKNP)) has indicated ODR as part of its consumer protection approach in digital era.⁴³ Arbitration institutions such as *Badan Arbitrase Nasional Indonesia* (BANI) have rules/procedures for electronic arbitration (online elements) and are moving toward ODR platforms.⁴⁴

However, there is no dedicated comprehensive law in Indonesia specifically for ODR that sets out institutional arrangements, procedural rules, and enforceability. Despite that ODR is very much in the “prospect” stage in Indonesia, and is attractive because of digitalization and growth of e-commerce, yet actual widespread deployment, enforcement, user-awareness and infrastructure are still uneven.⁴⁵ In the context of e-commerce, the progressive paradigm demands that the legal system not be rigidly bound by procedural formalities but instead adapt to digital dynamics. Consumer disputes in the online space differ from conventional disputes in that they require fast, efficient, and technology-based resolution.⁴⁶

Meanwhile, ASEAN has launched the ASEAN Guidelines on Online Dispute Resolution in February 2022 to help ASEAN member states designing or improving their national ODR systems, especially for e-commerce and consumer disputes. The Guidelines covers design criteria of national ODR systems, IT requirements for interoperability, data-security and privacy, legal and procedural requirements, and regional/international cooperation.⁴⁷ However, per 2023 only a few ASEAN members currently have national ODR systems in place or rolling out-notably Indonesia, Philippines, and Thailand. While other ASEAN member states (Brunei, Cambodia, Laos, Malaysia, Myanmar, Singapore, and Vietnam) have general consumer protection laws and Alternative Dispute Resolution (ADR) mechanisms, only these three have fully implemented a national ODR system designed to handle consumer and e-commerce disputes.⁴⁸

ODR has been included in ASEAN Priority Areas of Cooperation which is stated in Strategic Goals of ASEAN Strategic Action Plan on Consumer Protection (ASAPCP) 2016-2025 under the Strategic Goals 3 emphasizing that ASAPCP 2025

⁴³ “Penyelesaian Online Dispute Resolution BKNP RI,” BKNP RI, 2022.

⁴⁴ APEC Economic Committee, “APEC Workshop on Implementation of Online Dispute Resolution (ODR) in APEC Economies, Including through the APEC ODR Collaborative Framework,” Asia-Pacific Economic Cooperation, 2024, <https://www.apec.org/docs/default-source/>.

⁴⁵ Muhammad Azwar, “Prospek Penerapan Online Dispute Resolution Dalam Upaya Penyelesaian Sengketa Bisnis Di Indonesia,” *Media Iuris* 2, no. 2 (n.d.), <https://doi.org/10.20473/mi.v2i2.13912>.

⁴⁶ Riyadus Solikhin, “Perkembangan Dan Urgensi Penerapan Online Dispute Resolution (ODR) Dalam Penyelesaian Sengketa Perdagangan Elektronik Di Indonesia Development and Urgency of Implementation Online Dispute Resolution (ODR) in Elektronik Commerce in Indonesia Padjadjar” 11 (2023): 65–79.

⁴⁷ The Asean Secretariat Jakarta, “Asean Guidelines on Online Dispute Resolution (ODR),” *The Asean Secretariat Jakarta*, 2022.

⁴⁸ The ASEAN Secretariat, “Regional Report on Needs and Gaps of Consumer Dispute Resolution in ASEAN,” 2023.

will be put on product safety issues and establishing an ASEAN Online Dispute Resolution (ODR) Network.⁴⁹

Conclusion

From the global framework and principles point of view, Online Dispute Resolution (ODR) has emerged as a response to the rise of cross-border online transactions. While UNCITRAL's Technical Notes on ODR are non-binding, they provide a foundation built on fairness, transparency, due process, and accountability. Many regions—including Japan, the USA, China, the EU, and Australia—have integrated ODR into their legal systems, either through specific regulations, e-commerce laws, or institutional support, highlighting its growing role in international dispute settlement. While Indonesia uses ODR mechanism in certain consumer complaint or e-commerce settings. From the practical advantages and challenges, ODR offers significant benefits such as speed, accessibility, cost-effectiveness, and flexibility, making it suitable for monetary, family-related, and e-commerce disputes. However, its limitations lie in addressing complex, non-negotiable disputes and ensuring trust, neutrality, and data protection. For effective legal regulation, existing laws (e.g., civil, family, e-commerce, and electronic transaction laws) should incorporate ODR principles—neutrality, equality, transparency, and fairness—without necessarily requiring separate ODR-specific legislation.

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⁴⁹ "ASEAN Strategic Action Plan on Consumer Protection (ASAPCP) 2016-2025," 2025, <https://aseanconsumer.org/cterms-regional-cooperation-in-asean/asean-strategic-action-plan-on-consumer-protection-asapcp-2016-2025>.

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