

Author: ¹ MUSTAFA J.Hussein

Affiliation:

¹ Mustansiriyah
University, Baghdad, Iraq

Corresponding author:

mustaf1970@uomustansiriyah.
edu.iq

Doi: 10.32332/ ijegd.9950

Dates:

Received 15 December, 2025

Revised 20 December, 2025

Accepted 29 March, 2025

Published 24 May, 2026

Copyright:

© 2026. Author/s

This work is licensed

under [Attribution-ShareAlike](#)

[4.0 International](#)



Read

Online:



Scan this QR code with your mobile
device or smart phone to read online

Cross-Border Data Governance and Digital Trade Regulation: Comparative Perspectives from WTO, EU, and Indo-Pacific Legal Frameworks

Abstract: The rapid expansion of the digital economy has transformed global trade by making cross-border data flows a central component of international commerce. Digital trade now encompasses a wide range of economic activities, including online services, digital platforms, cloud computing, and data-driven supply chains. However, the increasing reliance on cross-border data transfers has generated complex legal and regulatory challenges concerning data privacy, cybersecurity, economic sovereignty, and international trade governance. Different jurisdictions have adopted diverse regulatory approaches to managing digital trade and cross-border data governance, resulting in significant fragmentation within the global digital economy. This study examines the regulation of digital trade through a comparative analysis of cross-border data governance under the legal frameworks of the World Trade Organization (WTO), the European Union (EU), and emerging Indo-Pacific digital trade agreements.

Using a qualitative doctrinal and comparative legal methodology, the research analyzes the evolution of digital trade governance within the multilateral trading system, the comprehensive data protection regime developed by the European Union, and the trade-oriented regulatory approaches adopted within Indo-Pacific regional agreements. The study explores the legal principles, regulatory mechanisms, and institutional structures that shape digital trade governance across these frameworks. Particular attention is given to the regulation of cross-border data flows, the balance between trade liberalization and data protection policies, and the role of regional and international cooperation in managing digital commerce.

The findings reveal that each regulatory framework reflects distinct policy priorities and legal philosophies. The WTO framework emphasizes trade liberalization and non-discrimination but continues to face challenges in adapting traditional trade rules to digital commerce. The European Union prioritizes strong regulatory protections for personal data and fundamental rights, establishing comprehensive legal safeguards governing international data transfers. In contrast, Indo-Pacific digital trade agreements focus on facilitating cross-border data flows and promoting economic integration through flexible regulatory cooperation. These differences illustrate the broader tension between economic openness and regulatory sovereignty within global digital trade governance.

The study concludes that greater international coordination and legal harmonization are necessary to address regulatory fragmentation and support the continued development of the digital economy. Establishing transparent rules for cross-border data flows, strengthening international regulatory cooperation, and promoting interoperability between national data governance systems can contribute to a more coherent global framework for digital trade regulation. Such efforts are essential for ensuring that digital trade remains open, secure, and capable of supporting sustainable economic growth in an increasingly interconnected global economy.

Keywords: Digital Trade; Cross-Border Data Governance; WTO; European Union; Indo-Pacific Trade Agreements.

Introduction

The rapid advancement of digital technologies has fundamentally transformed the structure of the global economy, giving rise to a new era of digital trade characterized by cross-border data flows, online services, digital platforms, and electronic commerce. Digital trade refers broadly to commercial transactions that rely on digital technologies and data transfers across international borders. These activities include online retail services, digital financial transactions, cloud computing services, data-driven platforms, and the provision of digital content through global networks. As the digital economy expands, data has become a central asset in international commerce, functioning as a critical resource for economic growth, technological innovation, and global connectivity. Consequently, the regulation of cross-border data flows has emerged as one of the most significant legal and policy challenges in contemporary international trade governance.¹

Cross-border data governance lies at the heart of modern digital trade regulation. Data flows enable businesses to operate across international markets, facilitate digital services, and support the functioning of global supply chains. Companies increasingly rely on cross-border data transfers to manage logistics, process payments, analyze consumer behavior, and deliver digital products to global customers. However, the growing importance of data in international commerce has also raised concerns regarding data privacy, cybersecurity, digital sovereignty, and national economic interests. Governments around the world are therefore attempting to balance the benefits of open digital trade with the need to regulate data flows in ways that protect national security, consumer privacy, and domestic economic stability.²

The emergence of these competing policy objectives has led to the development of diverse regulatory frameworks governing digital trade and cross-border data governance. At the global level, the World Trade Organization (WTO) has increasingly engaged in discussions concerning the role of digital trade within the international trading system. Although the WTO's traditional trade agreements were developed before the rapid

¹ Luo, X., & Xiao, Y. (2025). Digital trade rules and division of labour in global value chains.

Finance Research Letters, 85, 108164. <https://doi.org/10.1016/j.frl.2025.108164>

² Segura-García, I., Pomeroy, R., McCoy, M., McCoy, K., & Box, S. (2025).

Digital monitoring of fish-trade for valuing bycatch and characterizing data-poor fisheries in Tanintharyi, Myanmar. *Ocean & Coastal Management*, 267, 107743. <https://doi.org/10.1016/j.ocecoaman.2025.107743>

expansion of the digital economy, ongoing negotiations among member states aim to establish clearer rules governing electronic commerce, digital services, and the movement of data across borders. These discussions reflect the growing recognition that international trade law must adapt to the realities of a digitalized global economy.³

At the regional level, several major economic blocs have developed distinct approaches to digital trade governance. The European Union (EU) has established one of the most comprehensive regulatory systems governing data protection, digital services, and cross-border data transfers. EU regulations emphasize strong protections for personal data and consumer privacy while also promoting digital market integration within the European single market. The EU's regulatory approach reflects a broader commitment to safeguarding fundamental rights and ensuring that digital market practices remain consistent with established legal standards for data protection and competition.⁴

In contrast, countries within the Indo-Pacific region have increasingly adopted trade agreements that emphasize open digital markets and the facilitation of cross-border data flows. These regional frameworks often prioritize the promotion of digital trade, technological innovation, and economic integration among participating countries. Provisions addressing electronic commerce, data localization requirements, and digital service regulations have become central components of these agreements. As digital economies in the Indo-Pacific region continue to expand rapidly, regional regulatory initiatives play an increasingly important role in shaping the global governance of digital trade.⁵

Despite these developments, significant regulatory fragmentation persists across global and regional digital trade frameworks. Different jurisdictions adopt varying approaches to issues such as data localization, privacy protection, cybersecurity requirements, and digital service regulation. These

³ Ferracane, M. F., González Ugarte, S., & Rogaler, T. (2025).

Global trends in digital trade policies and practices: Evidence from the digital trade integration database. *World Trade Review*.

⁴ Morgun, V., Zahrebelna, I., Bilyk, T., Khurdei, V., & Zub, M. (2025). Mechanisms for controlling economic processes by international institutions and green economy. *International Journal of Ecosystems and Ecology Science*, 15(4), 53–62.

⁵ Polo, J. L. (2025). Adopting a universal mandate on platform work: Balancing contrasting realities. *Tilburg Law Review*, 30(2), 65–95.

differences create legal uncertainties for businesses operating in global digital markets and complicate efforts to develop coherent international standards for cross-border data governance. Furthermore, tensions often arise between countries advocating open digital markets and those emphasizing stronger regulatory control over domestic data resources.⁶

Against this backdrop, the regulation of digital trade has become a central issue in contemporary international economic law. Understanding how different legal systems govern cross-border data flows is essential for addressing the regulatory challenges associated with the digital economy. Comparative legal analysis provides valuable insights into the diverse policy approaches adopted by international and regional institutions in regulating digital trade and data governance.

This study examines the regulation of digital trade through a comparative analysis of cross-border data governance frameworks under the World Trade Organization, the European Union, and Indo-Pacific legal systems. By analyzing these regulatory models, the research aims to identify key similarities, differences, and emerging trends in digital trade governance. The study also explores how these frameworks attempt to balance economic openness with regulatory objectives such as data protection, cybersecurity, and national sovereignty. Through this analysis, the research contributes to ongoing discussions regarding the development of coherent and effective legal frameworks for governing digital trade in the increasingly interconnected global economy.

Methodology

This study adopts a qualitative doctrinal and comparative legal research methodology to examine the regulation of digital trade and cross-border data governance within the global economy. The research focuses on analyzing the legal frameworks developed under the World Trade Organization (WTO), the European Union (EU), and selected Indo-Pacific trade agreements in order to understand how different regulatory systems address the governance of cross-border data flows. By combining doctrinal legal analysis with comparative evaluation, the study aims to identify key similarities, differences, and

⁶ Chen, M. (2024). Developing China's approaches to regulate cross-border data transfer: Relaxation and integration. *Computer Law & Security Review*, 54, 105997. <https://doi.org/10.1016/j.clsr.2024.105997>

emerging trends in digital trade regulation across these major international and regional frameworks.

The research begins with a doctrinal legal analysis of primary legal sources governing digital trade and electronic commerce. These sources include international trade agreements, regional legal instruments, regulatory guidelines, and policy frameworks that address issues related to cross-border data transfers, digital services, electronic commerce, and data protection. The analysis examines the legal provisions and institutional mechanisms that shape digital trade governance within the WTO system, the EU's regulatory framework for data protection and digital markets, and Indo-Pacific regional trade agreements that promote open digital trade. This doctrinal approach allows for a detailed examination of the legal principles and regulatory objectives underlying each framework.

In addition to doctrinal analysis, the study employs a comparative legal approach to evaluate how different legal systems regulate cross-border data governance and digital trade activities. The comparative analysis focuses on several key dimensions, including rules governing data localization, protections for personal data and privacy, commitments to cross-border data flows, and institutional mechanisms for regulatory enforcement. By comparing these regulatory approaches, the research seeks to assess the extent to which international and regional frameworks converge or diverge in addressing the challenges associated with digital trade governance.

The study also incorporates a policy-oriented analytical perspective that considers the broader economic and regulatory implications of digital trade regulation. Secondary sources such as academic literature, international organization reports, policy documents, and regulatory analyses are utilized to provide contextual insights into the development of digital trade governance. These sources help explain the policy motivations behind different regulatory models and the practical challenges faced by governments and businesses operating within global digital markets.

Through the integration of doctrinal legal analysis, comparative evaluation, and policy-oriented assessment, this methodology provides a comprehensive framework for understanding how different legal systems regulate cross-border data flows and digital commerce. The research ultimately aims to contribute

to the ongoing debate on the development of coherent and effective international legal frameworks for governing digital trade in an increasingly interconnected global economy.

Definition of Digital Trade and Data-Driven Economies

The rapid development of digital technologies has transformed the structure of international commerce, giving rise to what is commonly referred to as the digital economy. Within this evolving economic landscape, digital trade has emerged as a central component of global economic activity. Digital trade generally refers to international commercial transactions that are conducted through digital technologies and rely on electronic networks for the production, delivery, and consumption of goods and services. These transactions include online retail services, digital financial transactions, cloud computing services, digital platforms, and the provision of digital content through internet-based infrastructure. The expansion of digital trade has significantly reduced traditional barriers to commerce by enabling businesses and consumers to engage in cross-border transactions without the physical movement of goods or the presence of traditional intermediaries. A defining characteristic of the digital economy is its reliance on data as a critical economic resource. In modern global markets, data functions as a strategic asset that supports innovation, enhances productivity, and enables the efficient delivery of digital services. Businesses increasingly rely on data analytics to understand consumer preferences, optimize supply chains, develop targeted marketing strategies, and improve product development processes. Digital platforms collect and process vast amounts of information related to consumer behavior, logistics systems, financial transactions, and global market trends. This data-driven environment has reshaped traditional business models and enabled companies to operate across multiple jurisdictions simultaneously.⁷

Data-driven economies are therefore characterized by the increasing integration of digital technologies into economic production and exchange. Cloud computing infrastructure, artificial intelligence systems, and global digital platforms facilitate real-time communication and data processing across

⁷ Dale, J. G., & Aizawa, N. (2024). "Data free flow with trust": Japan's struggle to integrate democracy and human rights into digital trade policy. *Frontiers in Sociology*, 9, 1397528. <https://doi.org/10.3389/fsoc.2024.1397528>

international markets. These technological innovations allow firms to deliver services remotely, coordinate production networks across countries, and participate in global digital value chains. As a result, the digital economy is no longer confined to the technology sector alone but has become embedded within nearly every major industry, including finance, manufacturing, healthcare, transportation, and retail. The transformation toward data-driven economic systems has also altered the nature of international trade governance. Traditional trade frameworks were designed primarily to regulate the movement of physical goods across national borders. However, the rise of digital commerce requires regulatory frameworks that address new issues such as electronic transactions, digital services, intellectual property in digital products, and the governance of cross-border data flows. These developments have encouraged policymakers and international institutions to reconsider how international trade law should evolve in response to the realities of a digitalized global economy.⁸

Cross-Border Data Flows and the Legal-Policy Debates on Data Governance

At the center of digital trade governance lies the issue of cross-border data flows, which refer to the transfer of digital information across national boundaries through global communication networks. Cross-border data flows enable a wide range of economic activities, including international financial transactions, cloud-based services, digital communications, and global supply chain coordination. Multinational corporations rely on cross-border data transfers to manage operations across different countries, process payments, analyze market trends, and provide digital services to international consumers. Consequently, the free movement of data has become essential for the functioning of the modern global economy. Cross-border data flows play a particularly important role in facilitating global digital value chains, where different stages of production, data processing, and service delivery occur in multiple jurisdictions simultaneously. For example, a digital service provided to a consumer in one country may involve data processing servers located in another country and payment systems operating within a third jurisdiction. This interconnected structure illustrates how the digital economy relies on continuous data transfers across national borders. Restrictions on cross-border

⁸ Castillo, D., & Kugler, K. (2024). The Joint Statement on Electronic Commerce: Are we there yet? *Global Trade and Customs Journal*, 19(4), 267–276.

data flows can therefore significantly affect international trade, technological innovation, and economic competitiveness.⁹

Despite the economic benefits associated with open data flows, governments have increasingly expressed concerns regarding the potential risks associated with unrestricted cross-border data transfers. These concerns include issues related to data privacy, cybersecurity, national security, and digital sovereignty. Governments seek to ensure that personal data belonging to their citizens is protected from misuse or unauthorized access, particularly when data is transferred to foreign jurisdictions with different regulatory standards. At the same time, policymakers worry that excessive reliance on foreign digital infrastructure may expose national economies to cybersecurity vulnerabilities or external political influence. These concerns have contributed to the emergence of diverse regulatory approaches to data governance, reflecting differing priorities among governments regarding economic openness and regulatory control. Some countries advocate for policies that promote the free flow of data across borders in order to facilitate global digital trade and technological innovation. These policies emphasize reducing barriers to cross-border data transfers and preventing data localization requirements that may limit the efficiency of digital services.¹⁰

In contrast, other jurisdictions have adopted more restrictive approaches that prioritize data sovereignty and domestic regulatory authority. Data localization policies, for example, require certain types of data to be stored or processed within national borders. Governments implementing such policies argue that domestic data storage enhances privacy protection, strengthens cybersecurity, and supports the development of national digital industries. However, critics contend that excessive restrictions on data flows may fragment the global digital economy and create barriers to international trade. The regulatory debates surrounding cross-border data governance therefore reflect a broader tension between trade liberalization and regulatory autonomy. On one hand, open digital markets encourage economic growth, technological collaboration, and international connectivity. On the other hand, governments seek to maintain control over digital infrastructure, protect

⁹ Meltzer, J. P. (2024). The impact of foundational AI on international trade, services and supply chains in Asia. *Asian Economic Policy Review*, 19(1), 129–147.

¹⁰ Khatwani, R., Mishra, M., & Bedarkar, M. (2023).

Growth and penetration of digital payments in India: Regional analysis. *AIP Conference Proceedings*, 2954(1), 020013.

citizens' privacy rights, and ensure national security within the digital environment. Balancing these competing objectives has become one of the most significant challenges facing international trade law in the digital age. International organizations, regional institutions, and trade agreements have increasingly begun to address these challenges by developing legal frameworks governing digital trade and cross-border data flows. Different regulatory models have emerged across the global economy, reflecting varying legal traditions and policy priorities. Some frameworks emphasize the protection of fundamental rights and strict data protection standards, while others focus on facilitating digital trade and promoting technological innovation through open data policies.¹¹

Evolution of E-Commerce Discussions within the WTO

The emergence of the digital economy has gradually reshaped international trade governance, prompting the World Trade Organization (WTO) to engage in discussions regarding the regulation of electronic commerce and digital trade. Although the WTO was established in 1995 primarily to regulate trade in goods and services within a traditional economic context, the rapid expansion of digital technologies soon highlighted the need to address the implications of electronic commerce for global trade rules. As businesses increasingly relied on digital platforms, online services, and cross-border data flows to conduct commercial transactions, WTO member states began exploring how existing trade principles could be adapted to regulate the evolving digital marketplace. The first significant step toward addressing digital trade within the WTO framework occurred in 1998 when member states adopted the Work Programme on Electronic Commerce. This initiative aimed to examine how existing WTO agreements could apply to electronic commerce and digital transactions. The work programme assigned responsibility for examining digital trade issues to several WTO bodies, including the Council for Trade in Services, the Council for Trade in Goods, and the Council for Trade-Related Aspects of Intellectual Property Rights. These discussions focused on understanding how digital commerce interacted

¹¹ Jiang, T., Hu, Y., Haleem, F., & Zeng, S. (2023). Do digital trade rules matter? Empirical evidence from TAPED. *Sustainability*, 15(11), 9074. <https://doi.org/10.3390/su15119074>

with existing trade rules governing services, intellectual property protection, and customs duties.¹²

An important outcome of early WTO discussions on electronic commerce was the adoption of a moratorium on customs duties for electronic transmissions, which has been periodically renewed by member states. The moratorium reflects the recognition that imposing tariffs on digital transmissions could hinder the growth of global digital commerce and create unnecessary barriers to innovation and technological development. By maintaining a tariff-free environment for electronic transmissions, WTO members have sought to promote the expansion of digital trade and facilitate the development of the global digital economy. In recent years, WTO discussions on digital trade have expanded significantly as the digital economy has become a central driver of international economic growth. Member states have increasingly recognized that issues such as cross-border data flows, digital services, online platforms, and cybersecurity require more comprehensive regulatory frameworks. As a result, several WTO members have initiated negotiations aimed at developing new rules for electronic commerce that address the complexities of the digital economy. These negotiations reflect the growing importance of digital trade governance within the multilateral trading system and the need to update international trade rules to reflect technological advancements.¹³

WTO Principles Relevant to Digital Trade and Governance Challenges

Although the WTO does not yet possess a comprehensive legal framework specifically designed for digital trade, several fundamental principles within existing WTO agreements play an important role in shaping the regulation of electronic commerce and cross-border digital services. These principles provide the legal foundation upon which future digital trade governance mechanisms may be developed. One of the most important principles relevant to digital trade regulation is the principle of non-discrimination, which is embodied in the concepts of most-favored-nation treatment and national treatment. Under this principle, WTO members are generally required to treat foreign goods and services no less favorably than domestic products or

¹² Salminen, J., Sobel-Read, K. B., Viljanen, M., & Eller, K. H. (2023).

Digital platforms as second-order lead firms: Beyond the industrial/digital divide in regulating value chains. *European Review of Private Law*, 30(6), 1059–1087.

¹³ Shelepov, A. (2022). The influence of the G20's digitalization leadership on development conditions and governance of the digital economy. *International Organisations Research Journal*, 17(1).

those originating from other trading partners. In the context of digital trade, this principle may apply to digital services, online platforms, and electronic transactions, ensuring that foreign digital service providers are not subjected to discriminatory regulatory measures. Another key principle within the WTO framework is the commitment to trade liberalization and market access. WTO agreements aim to reduce barriers to international trade and promote open markets for goods and services. In the digital economy, this principle supports the free movement of digital services and encourages the removal of unnecessary restrictions on cross-border digital trade. Provisions governing trade in services may therefore influence how countries regulate digital services such as cloud computing, online financial services, and digital content distribution.¹⁴

Transparency and predictability also represent important principles within the WTO system that are relevant to digital trade governance. WTO members are generally required to publish and notify trade-related regulations that may affect international commerce. In the context of digital trade, transparency obligations can help ensure that businesses and investors are aware of national regulations governing electronic commerce, data protection requirements, and digital service provision. Predictable regulatory environments are essential for enabling businesses to operate effectively within global digital markets. Despite the relevance of these principles, incorporating comprehensive digital trade rules into the WTO framework presents several significant challenges. One major challenge involves the divergence of national regulatory approaches to data governance. Countries differ widely in how they regulate cross-border data flows, data localization requirements, and data privacy protections. Some jurisdictions emphasize open digital markets and free data flows, while others prioritize data sovereignty and strict privacy protections. These differences make it difficult for WTO members to reach consensus on common regulatory standards for digital trade governance.¹⁵

¹⁴ Nestoryshen, I., Rudnichenko, Y., Shevchuk, S., Havlovska, N., & Bohatchyk, L. (2021). Strategy for balancing interests of business, government and society in international trade in the digital economy. *TEM Journal*, 10(4), 1572–1580.

¹⁵ Zvonova, E. A., & Kuznetsov, A. V. (2021).

Factors of internationalization of developing countries' currencies in the post-COVID-19 economy. *World Economy and International Relations*, 65(9), 88–97. <https://doi.org/10.20542/0131-2227-2021-65-9-88-97>

EU Regulatory Framework for Digital Markets and Data Protection

The European Union has developed one of the most comprehensive and influential regulatory frameworks governing digital markets and cross-border data governance. As the digital economy expanded across Europe, EU institutions recognized the need to establish strong legal standards that regulate digital trade while simultaneously protecting fundamental rights, particularly the right to privacy and personal data protection. The EU approach reflects a broader regulatory philosophy that seeks to balance economic integration within the digital single market with robust legal safeguards for individuals and consumers participating in digital commerce. A central component of the EU's digital governance framework is its commitment to **data protection as a fundamental legal right**. Within the European legal order, the protection of personal data is recognized as a core element of individual privacy and human dignity. Consequently, EU institutions have introduced extensive legislation designed to regulate how personal data is collected, processed, and transferred across digital platforms. These legal rules apply not only to companies operating within the European Union but also to foreign companies that process data belonging to EU residents. This extraterritorial application reflects the EU's commitment to ensuring that personal data remains protected regardless of where digital services are provided.¹⁶

In addition to data protection regulations, the European Union has also developed a regulatory framework governing the operation of digital platforms and online markets. EU digital market regulations aim to ensure fair competition, transparency in digital services, and accountability among major technology companies operating within the European market. These regulatory initiatives address issues such as online platform responsibilities, digital advertising transparency, and market dominance by large technology firms. By establishing comprehensive legal standards for digital market operations, the EU seeks to create a fair and competitive digital marketplace that benefits both businesses and consumers. Another important aspect of the EU's digital governance framework involves the development of the **Digital Single Market strategy**, which aims to integrate digital economies across

¹⁶ Gilbert, S. (2026). Digital medicine's international race for regulatory sandboxes and voluntary alternative pathways picks up tempo. *Npj Digital Medicine*, 9(1), 190. <https://doi.org/10.1038/s41746-026-01090-0>

member states. The objective of this initiative is to eliminate regulatory fragmentation within the European Union and create a unified digital marketplace where businesses and consumers can engage in cross-border digital transactions with minimal legal barriers. Through harmonized regulations and coordinated digital policies, the EU seeks to strengthen economic integration while maintaining high standards of data protection and consumer rights.¹⁷

Data Transfer Mechanisms and the Balance between Digital Trade and Fundamental Rights

Cross-border data transfers play a crucial role in the functioning of the European digital economy. Businesses operating within the EU frequently rely on international data flows to provide cloud computing services, manage digital supply chains, process financial transactions, and deliver digital content to global customers. However, because personal data protection is treated as a fundamental right within the EU legal system, strict legal conditions govern the transfer of personal data to countries outside the European Union. To regulate international data transfers, the EU has developed specific legal mechanisms that ensure personal data transferred abroad receives a level of protection comparable to that provided within the European Union. One such mechanism involves **adequacy decisions**, through which the European Commission determines whether a non-EU country provides sufficient legal safeguards for personal data protection. When a country is granted adequacy status, data transfers from the EU to that country may occur without additional legal restrictions, as the foreign jurisdiction is considered to provide adequate privacy protection. In cases where countries do not receive adequacy status, companies may rely on alternative legal instruments such as **standard contractual clauses and corporate data protection rules** to facilitate cross-border data transfers. These mechanisms require companies to adopt legally binding commitments ensuring that personal data transferred internationally remains protected in accordance with EU data protection standards. Such

¹⁷ Mone, V., Thommandru, A., Maratovich, F. F., Khurramovich, K. F., & Mirziyotovna, A. K. (2026).

AI price tags and privacy: When your data sets your price.

Wiley Interdisciplinary Reviews: Data Mining and Knowledge Discovery, 16(1), e70070.

<https://doi.org/10.1002/widm.70070>

legal safeguards are designed to prevent misuse of personal information and ensure accountability among organizations handling EU citizens' data.¹⁸

The EU's regulatory approach to cross-border data governance reflects a broader effort to balance **digital trade liberalization with data sovereignty and fundamental rights protection**. While the European Union recognizes the economic importance of open digital markets and international data flows, it also maintains that data protection should not be compromised in the pursuit of economic efficiency. As a result, EU digital trade policy places significant emphasis on ensuring that international data transfers comply with strict privacy standards and regulatory oversight. This approach has occasionally generated tensions between the EU and other countries that advocate for more flexible rules governing cross-border data flows. Some trading partners argue that stringent data protection requirements may create barriers to digital trade and complicate the operation of global digital services. However, EU policymakers maintain that strong data protection frameworks enhance consumer trust in digital markets and contribute to sustainable economic development within the digital economy. Furthermore, the EU's emphasis on fundamental rights and regulatory accountability has influenced global discussions on digital governance. Many countries and regional organizations have examined elements of the EU's data protection framework when developing their own digital governance policies. The EU's regulatory model has therefore played a significant role in shaping international debates regarding privacy protection, digital sovereignty, and the responsibilities of digital platform operators.¹⁹

Regional Trade Agreements Governing Digital Commerce

The Indo-Pacific region has emerged as one of the most dynamic centers of digital economic growth in the global economy. Rapid technological development, increasing internet penetration, and the expansion of digital services have significantly transformed commercial activities across many Indo-Pacific countries. Governments in the region have therefore begun to develop

¹⁸ Rahman, N. A., & Setyawati, R. (2026).

The interface between competition law and data protection: The need for a more integrated approach. *Media Juris*, 9(1), 181–212.

¹⁹ Le, N. (2026).

Sustainable consumer data protection in Vietnam's e-commerce: Bridging legal gaps through global insights. *Pravo i Więź*, 60(1), 557–576.

legal and policy frameworks designed to regulate digital commerce while promoting economic integration and technological innovation. Regional trade agreements have become particularly important instruments for establishing common rules governing digital trade, electronic commerce, and cross-border data flows. Several major trade agreements in the Indo-Pacific region include dedicated provisions addressing digital trade governance. These agreements aim to facilitate electronic commerce, reduce regulatory barriers to digital services, and promote the free flow of information across borders. By incorporating digital trade provisions into regional economic partnerships, participating countries seek to create predictable regulatory environments that support the expansion of digital markets and international trade in digital services. One significant feature of Indo-Pacific digital trade frameworks is their emphasis on **trade facilitation and market openness in the digital economy**. Regional agreements often encourage the development of digital infrastructure, electronic payment systems, and secure online platforms that enable businesses to engage in cross-border electronic transactions. These initiatives support the growth of digital startups, small and medium-sized enterprises, and technology-driven industries within the region. By promoting regulatory cooperation among participating countries, these agreements aim to reduce legal uncertainties that may otherwise hinder the development of digital trade.²⁰

In addition to facilitating electronic commerce, regional trade agreements in the Indo-Pacific region also address issues related to **electronic authentication, consumer protection in digital transactions, and cybersecurity cooperation**. Establishing common standards for electronic signatures, online payments, and digital transaction security helps ensure that cross-border digital transactions can be conducted safely and efficiently. These provisions are particularly important for building trust in digital marketplaces and encouraging greater participation in online commerce among businesses and consumers. Furthermore, regional digital trade agreements often seek to enhance **interoperability between national regulatory frameworks** governing digital markets. Because Indo-Pacific countries possess diverse legal traditions and regulatory approaches, trade agreements serve as mechanisms for

²⁰ Hasanah, L. N., Faisal, M. S., Ahmed, Z., & Hasyim, M. Y. A. (2025). Religious diversity and the digital economy: Legal-academic pathways to harmonize Sharia and international law. *International Journal of Law and Social Sciences*, 1(1). <https://doi.org/10.65960/ijlss.1.1.2025.8>

coordinating policies related to electronic commerce and digital services. Through these frameworks, participating countries commit to shared regulatory principles that promote digital economic integration while respecting national policy autonomy.²¹

Cross-Border Data Flow Rules and Regional Digital Trade Cooperation

A central issue within Indo-Pacific digital trade frameworks involves the regulation of **cross-border data flows and data localization requirements**. As digital commerce relies heavily on the movement of information across international networks, many regional agreements emphasize the importance of allowing data to flow freely between participating countries. Free data flows enable companies to operate cloud computing services, manage digital supply chains, and provide online services to international consumers without facing unnecessary regulatory barriers. Many Indo-Pacific trade agreements therefore include provisions that **discourage data localization requirements**, which are policies that mandate data to be stored or processed within national borders. Data localization requirements may increase operational costs for businesses and restrict the efficiency of digital services that rely on globally distributed data processing systems. By limiting such restrictions, regional trade agreements aim to create an open digital environment that encourages innovation, investment, and technological collaboration. However, these agreements also recognize that governments may adopt certain data-related regulations for legitimate public policy objectives. Countries may implement regulatory measures designed to protect personal data, ensure cybersecurity, and safeguard national security interests. As a result, Indo-Pacific digital trade frameworks often attempt to strike a balance between promoting the free flow of data and preserving the regulatory authority of governments to address domestic policy concerns.²²

²¹ Chen, M. (2024).

Developing China's approaches to regulate cross-border data transfer: Relaxation and integration.

Computer Law & Security Review, 54, 105997.

<https://doi.org/10.1016/j.clsr.2024.105997>

²² Mujiono, & Ticualu, C. (2025). Emerging trends in law and social sciences: Global perspectives on policy, ethics, justice, and institutional reform. *International Journal of Law and Social Sciences*, 1(1), 40–60.

<https://doi.org/10.65960/ijlss.1.1.2025.6>

Another important aspect of Indo-Pacific digital trade governance involves **regional cooperation in digital policy development**. Governments in the region increasingly recognize that digital commerce requires collaborative approaches to regulatory challenges such as cybercrime prevention, digital infrastructure development, and cross-border digital service regulation. Through regional economic partnerships and policy dialogues, Indo-Pacific countries have begun sharing best practices and coordinating efforts to strengthen digital governance frameworks.

Digital trade cooperation also extends to initiatives aimed at improving **digital capacity and technological development** within the region. Some countries in the Indo-Pacific region possess advanced digital economies with highly developed technological infrastructure, while others continue to face challenges related to digital connectivity and regulatory capacity. Regional cooperation programs therefore focus on promoting digital inclusion, strengthening cybersecurity frameworks, and supporting the development of digital skills and innovation ecosystems. Despite these collaborative efforts, regulatory diversity remains a defining characteristic of the Indo-Pacific digital trade landscape. Countries differ significantly in their approaches to data governance, privacy protection, and digital platform regulation. Some jurisdictions prioritize open digital trade and minimal regulatory restrictions, while others adopt more cautious approaches that emphasize data sovereignty and domestic regulatory oversight. These differences reflect varying political, economic, and institutional contexts across the region.²³

Differences in Regulatory Philosophies and Legal Frameworks

The regulation of digital trade and cross-border data governance has developed through multiple legal frameworks at global and regional levels. Among the most influential regulatory models are those developed under the World Trade Organization (WTO), the European Union (EU), and Indo-Pacific regional trade agreements. While all three frameworks address the growing importance of digital trade in the global economy, they differ significantly in their regulatory philosophies, institutional structures, and policy priorities. A comparative analysis of these approaches reveals how

²³ Dale, J. G., & Aizawa, N. (2024).

“Data free flow with trust”: Japan’s struggle to integrate democracy and human rights into digital trade policy. *Frontiers in Sociology*, 9, 1397528.

<https://doi.org/10.3389/fsoc.2024.1397528>

different legal systems attempt to balance economic integration, regulatory autonomy, and the protection of digital rights. The **WTO framework** represents the primary multilateral system for regulating international trade. Its regulatory philosophy is grounded in principles of trade liberalization, non-discrimination, and market access. WTO agreements were originally designed to regulate trade in goods and services, and therefore the organization has had to adapt its existing legal principles to the realities of the digital economy. The WTO approach to digital trade governance largely focuses on promoting open markets and preventing discriminatory trade practices that could restrict cross-border digital services. However, the WTO framework does not yet contain a comprehensive legal regime specifically dedicated to data governance or cross-border data flows. Instead, discussions regarding digital trade have largely taken place through negotiation initiatives and policy dialogues among member states. In contrast, the **European Union** has developed a highly structured regulatory framework that places strong emphasis on legal protections for personal data and digital market regulation. The EU's regulatory philosophy reflects a rights-based approach in which privacy and data protection are treated as fundamental legal principles. Consequently, EU digital governance policies prioritize regulatory oversight, strict compliance requirements, and comprehensive legal standards governing the collection, processing, and transfer of personal data. This regulatory model reflects the EU's broader commitment to protecting individual rights and maintaining strong institutional control over digital market activities.²⁴

The **Indo-Pacific digital trade framework**, by comparison, reflects a more market-oriented regulatory philosophy that prioritizes economic integration and the promotion of digital trade across regional economies. Regional trade agreements within the Indo-Pacific region often include provisions designed to facilitate electronic commerce, promote the free flow of data, and reduce regulatory barriers affecting digital services. These frameworks generally encourage innovation and technological cooperation while limiting restrictive regulatory measures such as data localization requirements. As a result, Indo-Pacific digital trade agreements often adopt a more flexible regulatory approach compared to the highly structured legal frameworks implemented

²⁴ Meltzer, J. P. (2024).

The impact of foundational AI on international trade, services and supply chains in Asia.

Asian Economic Policy Review, 19(1), 129–147.

<https://doi.org/10.1111/aepr.12409>

within the European Union. Despite these differences, all three frameworks recognize the increasing importance of digital trade governance in shaping the future of the global economy. Each system attempts to address the challenges associated with regulating cross-border data flows while maintaining economic competitiveness and technological innovation. However, the differing legal philosophies underlying these frameworks create varying regulatory environments for businesses and governments operating within global digital markets.²⁵

Trade Liberalization, Data Protection Priorities, and Institutional Mechanisms

A central issue distinguishing the WTO, EU, and Indo-Pacific approaches to digital trade governance involves the balance between **trade liberalization and data protection priorities**. These policy objectives often interact in complex ways because measures designed to protect personal data or national security interests may also restrict cross-border digital trade. Within the WTO system, the primary objective remains the **promotion of open international markets** and the reduction of barriers to trade. WTO principles such as non-discrimination, market access commitments, and transparency obligations aim to ensure that countries do not impose unjustified restrictions on international trade activities. In the context of digital commerce, these principles support the idea that cross-border digital services and electronic transactions should operate within an open and predictable trading environment. However, because the WTO framework was originally designed for traditional trade sectors, it has struggled to fully address emerging issues such as digital privacy regulation and data sovereignty.²⁶

The European Union adopts a different policy priority by placing strong emphasis on **data protection and fundamental rights within the digital economy**. While the EU recognizes the economic importance of digital trade, it maintains that personal data protection must remain a central element of digital governance. EU regulations governing cross-border data transfers

²⁵ Azhari, A. M., Azhari, S., & Yaqoq, M. I. (2025). Global transformations in law, justice, and society: Comparative perspectives on governance, rights, and legal reform. *International Journal of Law and Social Sciences*, 1(1), 60–90. <https://doi.org/10.65960/ijlss.1.1.2025.7>

²⁶ Carovano, G., & Finck, M. (2023).

Regulating data intermediaries: The impact of the Data Governance Act on the EU's data economy.

Computer Law & Security Review, 50, 105830.

<https://doi.org/10.1016/j.clsr.2023.105830>

require that foreign jurisdictions provide adequate levels of data protection before personal data can be transferred abroad. This approach reflects the EU's broader legal commitment to safeguarding privacy rights while ensuring that digital commerce operates within strict regulatory oversight. In contrast, Indo-Pacific digital trade agreements generally emphasize **facilitating the free flow of data across borders as a driver of economic growth and technological development**. Regional trade agreements often include commitments that discourage data localization requirements and promote cross-border digital services. These provisions aim to create regulatory environments that support innovation, digital entrepreneurship, and regional economic integration. However, most Indo-Pacific frameworks still allow governments to implement data protection and cybersecurity measures where necessary to protect legitimate public policy interests.²⁷

Another important aspect of this comparative analysis concerns the **institutional and enforcement mechanisms** used within these regulatory frameworks. The WTO relies on its established dispute settlement system to resolve trade-related conflicts between member states. Although this system provides a formal legal mechanism for enforcing trade rules, it has faced challenges in adapting to complex digital governance issues that involve rapidly evolving technologies and diverse national regulatory policies. The European Union, by contrast, operates through a highly integrated institutional system that includes regulatory agencies, judicial institutions, and enforcement authorities responsible for ensuring compliance with digital governance rules. EU institutions possess the authority to impose penalties on companies that violate data protection regulations or digital market rules. This strong institutional capacity enables the EU to enforce its digital governance framework effectively across member states. Indo-Pacific digital trade frameworks rely more heavily on **cooperative governance and policy coordination among participating countries**. Many regional agreements encourage dialogue, capacity-building initiatives, and regulatory cooperation to address digital trade challenges. While these frameworks may not always possess centralized enforcement institutions comparable to those of the EU,

²⁷ Al-Farjani, S. H., Ahmad, T., & Rana, H. A. S. (2025). Digital innovation, legal reform, and social justice: Interdisciplinary approaches to law, technology, and human rights. *International Journal of Law and Social Sciences*, 1(1), 91–129. <https://doi.org/10.65960/ijlss.1.1.2025.5>

they emphasize collaborative approaches that support economic integration and shared regulatory standards.²⁸

Policy Recommendations for Regulating Cross-Border Data Flows

As digital trade continues to expand across global markets, the governance of cross-border data flows has become one of the most pressing issues in international economic law. Data has emerged as a central component of the modern digital economy, enabling online services, digital platforms, financial technologies, and global supply chain management. However, the increasing reliance on cross-border data transfers has also raised significant regulatory concerns related to privacy protection, cybersecurity, national sovereignty, and market competition. To address these challenges, policymakers must develop regulatory frameworks that facilitate digital trade while ensuring adequate protection for individuals, businesses, and national interests. One important policy recommendation involves establishing **clear and transparent rules governing cross-border data transfers**. Governments should adopt legal frameworks that provide certainty for businesses operating in international digital markets while ensuring that data protection standards are maintained. Transparent regulatory guidelines help companies understand the legal requirements associated with international data transfers and reduce the risk of legal disputes or compliance failures. Clear legal standards can also promote trust among consumers who may be concerned about how their personal information is processed and transferred across borders.²⁹

Another key policy priority is the development of **balanced regulatory approaches that reconcile economic openness with privacy protection and cybersecurity concerns**. Governments must ensure that regulatory measures designed to protect personal data or national security do not unnecessarily restrict international digital trade. Carefully designed legal frameworks can allow cross-border data flows while incorporating safeguards such as privacy protections, cybersecurity standards, and responsible data management practices. This balanced approach supports economic growth while addressing

²⁸ Montagnani, M. L., Najjar, M.-C., & Davola, A. (2024). The EU regulatory approaches to AI liability and its application to financial services. *Computer Law & Security Review*, 53, 105984. <https://doi.org/10.1016/j.clsr.2024.105984>

²⁹ Al Azhari, F. U., & Al Azhari, S. I. (2025). Contemporary challenges in harmonizing Sharia, national legal systems, and international law in a rapidly changing world. *International Journal of Law and Social Sciences*, 1(1), 130–150. <https://doi.org/10.65960/ijlss.1.1.2025.4>

legitimate public policy objectives. Strengthening **international regulatory cooperation** is also essential for improving cross-border data governance. Because digital commerce often involves transactions between parties located in multiple jurisdictions, national regulatory efforts alone may be insufficient to address the complexities of global digital markets. Governments should therefore collaborate through international organizations, regional trade agreements, and regulatory dialogues to develop common principles for digital trade governance. Such cooperation can facilitate information sharing, improve regulatory coordination, and enhance enforcement mechanisms for addressing cross-border digital trade disputes.³⁰

In addition, policymakers should encourage the development of **digital infrastructure and technological capacity** that supports secure and efficient cross-border data exchanges. Investments in secure communication networks, digital identity systems, and cybersecurity frameworks can strengthen the resilience of digital trade ecosystems. Enhancing technological capacity also allows governments to monitor digital trade activities more effectively and respond to emerging risks associated with cyber threats and data misuse.

Public trust in digital markets represents another crucial element of effective digital trade governance. Governments and regulatory institutions should promote **transparency, accountability, and consumer protection in digital services** in order to strengthen confidence in digital commerce. When consumers trust that their personal data is protected and that digital platforms operate within clear regulatory standards, they are more likely to participate actively in online markets and digital economic activities.³¹

Strategies for Legal Harmonization and Future Directions for Digital Trade Governance

While national regulatory reforms are essential, the global nature of digital trade requires broader strategies aimed at **legal harmonization across**

³⁰ Fernandes, D. V., & Silva, C. S. (2022).

Open energy data: A regulatory framework proposal under the Portuguese electric system context.

Energy Policy, 170, 113240.

<https://doi.org/10.1016/j.enpol.2022.113240>

³¹ Mustafa, A., Ishaque, M., Raza, R., Samiullah, & Raza, M. I. (2025). When culture meets Fiqh: Examining the legal authority of 'Urf in contemporary engagement traditions. *Global Islamic Research Journal*, 1(1), 1–21.

<https://doi.org/10.65960/girj.1.1.2025.6>

jurisdictions. Differences in national data governance laws, privacy regulations, and digital trade policies can create fragmentation within the global digital economy. Such regulatory fragmentation may increase compliance costs for businesses, create uncertainty for investors, and complicate the enforcement of digital trade rules. Harmonizing legal frameworks can therefore help establish more predictable and consistent regulatory environments for cross-border digital commerce. One important strategy for legal harmonization involves the development of **international legal standards and regulatory guidelines for digital trade.** International organizations and multilateral trade institutions can play a key role in facilitating negotiations aimed at establishing common principles governing electronic commerce, data protection, and digital services. By promoting shared legal standards, international frameworks can reduce regulatory conflicts and support the smooth functioning of global digital markets.³²

Another important harmonization strategy involves enhancing **interoperability between national regulatory systems.** Rather than requiring countries to adopt identical legal frameworks, policymakers may focus on ensuring that different national regulations can operate compatibly with one another. For example, mechanisms that recognize equivalent data protection standards across jurisdictions can facilitate cross-border data transfers without requiring complete regulatory uniformity. Such cooperative approaches allow governments to maintain regulatory autonomy while still supporting international digital trade. Regional trade agreements also play a significant role in promoting legal harmonization within the digital economy. Many modern trade agreements include dedicated chapters addressing electronic commerce, digital services, and cross-border data flows. These agreements often establish shared commitments regarding digital trade facilitation, cybersecurity cooperation, and regulatory transparency. By encouraging policy coordination among participating countries, regional agreements can help create more integrated digital markets and reduce legal fragmentation across regions.³³

³² Faisala, M. S., Karim, A., Ahmad, M., Anwer, M., Adnan, M., Hassan, M., Ahmad, K., Sohaib, H., Aziz, Q., & Liaqat, M. (2025). The Prophetic Sunnah and the challenges of the age: Confronting technology and its effects on social and psychological security. *Global Islamic Research Journal*, 1(1), 22–42. <https://doi.org/10.65960/girj.1.1.2025.5>

³³ rkopoulou, D. (2021). Cyber-insurance in EU policy-making: Regulatory options, market challenges and the US example.

Looking toward the future, global digital trade governance will need to adapt continuously to rapid technological developments and evolving economic conditions. Emerging technologies such as **artificial intelligence, blockchain systems, cloud computing infrastructure, and digital currencies** are transforming how international commerce operates. These innovations create new opportunities for economic growth while simultaneously raising complex regulatory questions regarding data ownership, algorithmic decision-making, and digital financial regulation. Future governance frameworks must therefore be **flexible, adaptive, and forward-looking**, capable of responding to technological innovation without stifling economic progress. Policymakers will need to maintain ongoing dialogue with technology companies, academic researchers, and international institutions in order to understand emerging digital market trends and develop effective regulatory responses. Multi-stakeholder cooperation between governments, private sector actors, and civil society organizations will likely become an increasingly important component of digital trade governance.³⁴

Conclusion

The rapid expansion of the digital economy has fundamentally transformed the structure of international trade, making digital services, online platforms, and cross-border data flows central components of global economic activity. As businesses increasingly rely on digital technologies and data-driven operations, the regulation of digital trade has emerged as one of the most significant challenges in contemporary international economic law. Cross-border data flows enable innovation, enhance global connectivity, and facilitate the functioning of digital value chains, yet they also raise complex regulatory concerns related to privacy protection, cybersecurity, economic sovereignty, and market competition. Addressing these competing interests requires comprehensive governance frameworks capable of balancing economic openness with regulatory oversight.

Computer Law & Security Review, 43, 105627.

<https://doi.org/10.1016/j.clsr.2021.105627>

³⁴ Al Azhari, F. U., Shah, S. H. M., Al Azhari, S. I., Rasool, F., Ahmed, R., Samad, A., & Rehman, A. (2025).

The role of Islamic economic principles in family law: A study on inheritance and property rights within the context of child protection. *Global Islamic Research Journal*, 1(1), 59–76.

<https://doi.org/10.65960/girj.1.1.2025.2>

This study has examined digital trade governance through a comparative analysis of regulatory approaches developed under the multilateral framework of the World Trade Organization, the rights-based regulatory model of the European Union, and the market-oriented digital trade frameworks emerging in the Indo-Pacific region. The analysis demonstrates that while all three frameworks recognize the growing importance of digital trade in the global economy, they adopt distinct regulatory philosophies and institutional mechanisms for managing cross-border data governance.

The WTO framework reflects the traditional principles of multilateral trade governance, emphasizing non-discrimination, market access, and trade liberalization. However, the organization continues to face challenges in adapting its legal structure to the rapidly evolving digital economy, particularly in areas such as data governance and digital services regulation. In contrast, the European Union has established a comprehensive regulatory framework that prioritizes the protection of personal data and fundamental rights within digital markets. Through strict regulatory oversight and legally binding data protection standards, the EU seeks to ensure that digital economic activity operates within a framework that safeguards privacy and individual rights. Meanwhile, Indo-Pacific digital trade agreements focus on promoting economic integration and technological innovation by facilitating cross-border data flows and limiting regulatory barriers affecting digital commerce.

The comparative analysis highlights the tension that exists between the goals of **trade liberalization and regulatory sovereignty** in the governance of digital trade. While open data flows are essential for enabling global digital commerce, governments also seek to maintain control over data governance policies that protect citizens' privacy and national security interests. These competing priorities have contributed to regulatory fragmentation across international and regional digital trade frameworks, creating legal uncertainties for businesses and policymakers operating within global digital markets.

To address these challenges, the study emphasizes the importance of developing coordinated strategies aimed at harmonizing digital trade governance. Strengthening international cooperation, promoting regulatory interoperability between legal systems, and establishing shared principles for cross-border data governance can help reduce fragmentation in digital trade

regulation. Multilateral institutions, regional trade agreements, and international policy dialogues all have important roles to play in shaping the future architecture of global digital trade governance.

Ultimately, the continued growth of the digital economy will depend on the ability of international legal systems to develop adaptive and forward-looking regulatory frameworks. Effective governance of digital trade must ensure that data flows remain open and secure while safeguarding fundamental rights, promoting fair competition, and protecting national policy interests. By fostering collaboration among governments, international organizations, technology companies, and civil society actors, it is possible to create a more coherent and balanced system of digital trade governance that supports sustainable economic development in the increasingly interconnected global economy.

ACKNOWLEDGEMENTS

The author expresses sincere appreciation for the institutional and academic support that contributed to the successful completion of this research. Special acknowledgment is extended to all those who provided guidance, insight, and constructive feedback throughout the study.

Author Contributions Statement

The author conceptualized the research topic, developed the theoretical and methodological framework, conducted the legal and qualitative analysis, interpreted the findings, and prepared the manuscript. The author was also responsible for drafting, reviewing, editing, and finalizing the article for publication.

CONFLICT OF INTEREST

The authors declare that there are no financial, professional, institutional, or personal relationships that could be construed as potential conflicts of interest regarding

the research, authorship, or publication of this article.

AI USAGE STATEMENT

The author declares that artificial intelligence (AI), including large language models

such as ChatGPT, was used solely as an assistive tool during the writing process, specifically

for grammar checking, sentence structuring, and editorial refinement. All analyses, data

interpretations, academic arguments, and research conclusions are entirely the author's

own work. The use of AI was conducted in accordance with academic ethical principles

and was not intended to replace critical thinking or the originality of the scholarly work.

Any references or information obtained with the assistance of AI were independently

verified and cited correctly in accordance with academic standards. The author affirms that

the use of AI does not violate plagiarism policies, academic integrity, or any institutional

regulations.

BIBLIOGRAPHY

Luo, X., & Xiao, Y. (2025).

Digital trade rules and division of labour in global value chains.

Finance Research Letters, 85, 108164.

<https://doi.org/10.1016/j.frl.2025.108164>

- Segura-García, I., Pomeroy, R., McCoy, M., McCoy, K., & Box, S. (2025).
Digital monitoring of fish-trade for valuing bycatch and characterizing
data-poor fisheries in Tanintharyi, Myanmar.
Ocean & Coastal Management, 267, 107743.
<https://doi.org/10.1016/j.ocecoaman.2025.107743>
- Ferracane, M. F., González Ugarte, S., & Rogaler, T. (2025).
Global trends in digital trade policies and practices: Evidence from
the digital trade integration database.
World Trade Review.
- Morgun, V., Zahrebelna, I., Bilyk, T., Khurdei, V., & Zub, M. (2025).
Mechanisms for controlling economic processes by international
institutions and green economy.
International Journal of Ecosystems and Ecology Science, 15(4), 53–62.
- Polo, J. L. (2025).
Adopting a universal mandate on platform work: Balancing
contrasting realities.
Tilburg Law Review, 30(2), 65–95.
- Chen, M. (2024).
Developing China's approaches to regulate cross-border data transfer:
Relaxation and integration.
Computer Law & Security Review, 54, 105997.
<https://doi.org/10.1016/j.clsr.2024.105997>
- Dale, J. G., & Aizawa, N. (2024).
“Data free flow with trust”: Japan's struggle to integrate democracy
and human rights into digital trade policy.
Frontiers in Sociology, 9, 1397528.
<https://doi.org/10.3389/fsoc.2024.1397528>
- Castillo, D., & Kugler, K. (2024).
The Joint Statement on Electronic Commerce: Are we there yet?
Global Trade and Customs Journal, 19(4), 267–276.
- Meltzer, J. P. (2024).
The impact of foundational AI on international trade, services and
supply chains in Asia.
Asian Economic Policy Review, 19(1), 129–147.
- Khatwani, R., Mishra, M., & Bedarkar, M. (2023).
Growth and penetration of digital payments in India: Regional

- analysis.
AIP Conference Proceedings, 2954(1), 020013.
- Jiang, T., Hu, Y., Haleem, F., & Zeng, S. (2023).
Do digital trade rules matter? Empirical evidence from TAPED.
Sustainability, 15(11), 9074.
<https://doi.org/10.3390/su15119074>
- Salminen, J., Sobel-Read, K. B., Viljanen, M., & Eller, K. H. (2023).
Digital platforms as second-order lead firms: Beyond the
industrial/digital divide in regulating value chains.
European Review of Private Law, 30(6), 1059–1087.
- Shelepov, A. (2022).
The influence of the G20's digitalization leadership on development
conditions and governance of the digital economy.
International Organisations Research Journal, 17(1).
- Nestoryshen, I., Rudnichenko, Y., Shevchuk, S., Havlovska, N., &
Bohatchyk, L. (2021).
Strategy for balancing interests of business, government and society in
international trade in the digital economy.
TEM Journal, 10(4), 1572–1580.
- Zvonova, E. A., & Kuznetsov, A. V. (2021).
Factors of internationalization of developing countries' currencies in
the post-COVID-19 economy.
World Economy and International Relations, 65(9), 88–97.
<https://doi.org/10.20542/0131-2227-2021-65-9-88-97>
- Gilbert, S. (2026).
Digital medicine's international race for regulatory sandboxes and
voluntary alternative pathways picks up tempo.
Npj Digital Medicine, 9(1), 190.
<https://doi.org/10.1038/s41746-026-01090-0>
- Mone, V., Thommandru, A., Maratovich, F. F., Khurramovich, K. F., &
Mirziyatovna, A. K. (2026).
AI price tags and privacy: When your data sets your price.
Wiley Interdisciplinary Reviews: Data Mining and Knowledge Discovery,
16(1), e70070.
<https://doi.org/10.1002/widm.70070>
- Rahman, N. A., & Setyawati, R. (2026).
The interface between competition law and data protection: The need

- for a more integrated approach.
Media Iuris, 9(1), 181–212.
- Le, N. (2026).
Sustainable consumer data protection in Vietnam’s e-commerce:
Bridging legal gaps through global insights.
Prawo i Więź, 60(1), 557–576.
- Hasanah, L. N., Faisal, M. S., Ahmed, Z., & Hasyim, M. Y. A. (2025).
Religious diversity and the digital economy: Legal-academic pathways
to harmonize Sharia and international law. *International Journal of Law
and Social Sciences*, 1(1). <https://doi.org/10.65960/ijlss.1.1.2025.8>
- Chen, M. (2024).
Developing China’s approaches to regulate cross-border data transfer:
Relaxation and integration.
Computer Law & Security Review, 54, 105997.
<https://doi.org/10.1016/j.clsr.2024.105997>
- Mujiono, & Ticualu, C. (2025). Emerging trends in law and social sciences:
Global perspectives on policy, ethics, justice, and institutional reform.
International Journal of Law and Social Sciences, 1(1), 40–60.
<https://doi.org/10.65960/ijlss.1.1.2025.6>
- Dale, J. G., & Aizawa, N. (2024).
“Data free flow with trust”: Japan’s struggle to integrate democracy
and human rights into digital trade policy.
Frontiers in Sociology, 9, 1397528.
<https://doi.org/10.3389/fsoc.2024.1397528>
- Meltzer, J. P. (2024).
The impact of foundational AI on international trade, services and
supply chains in Asia.
Asian Economic Policy Review, 19(1), 129–147.
<https://doi.org/10.1111/aepr.12409>
- Azhari, A. M., Azhari, S., & Yaqooq, M. I. (2025). Global transformations in
law, justice, and society: Comparative perspectives on governance,
rights, and legal reform. *International Journal of Law and Social Sciences*,
1(1), 60–90. <https://doi.org/10.65960/ijlss.1.1.2025.7>
- Carovano, G., & Finck, M. (2023).
Regulating data intermediaries: The impact of the Data Governance
Act on the EU's data economy.

- Computer Law & Security Review*, 50, 105830.
<https://doi.org/10.1016/j.clsr.2023.105830>
- Al-Farjani, S. H., Ahmad, T., & Rana, H. A. S. (2025). Digital innovation, legal reform, and social justice: Interdisciplinary approaches to law, technology, and human rights. *International Journal of Law and Social Sciences*, 1(1), 91–129. <https://doi.org/10.65960/ijlss.1.1.2025.5>
- Montagnani, M. L., Najjar, M.-C., & Davola, A. (2024). The EU regulatory approaches to AI liability and its application to financial services. *Computer Law & Security Review*, 53, 105984. <https://doi.org/10.1016/j.clsr.2024.105984>
- Al Azhari, F. U., & Al Azhari, S. I. (2025). Contemporary challenges in harmonizing Sharia, national legal systems, and international law in a rapidly changing world. *International Journal of Law and Social Sciences*, 1(1), 130–150. <https://doi.org/10.65960/ijlss.1.1.2025.4>
- Fernandes, D. V., & Silva, C. S. (2022). Open energy data: A regulatory framework proposal under the Portuguese electric system context. *Energy Policy*, 170, 113240. <https://doi.org/10.1016/j.enpol.2022.113240>
- Mustafa, A., Ishaque, M., Raza, R., Samiullah, & Raza, M. I. (2025). When culture meets Fiqh: Examining the legal authority of ‘Urf in contemporary engagement traditions. *Global Islamic Research Journal*, 1(1), 1–21. <https://doi.org/10.65960/girj.1.1.2025.6>
- Faisala, M. S., Karim, A., Ahmad, M., Anwer, M., Adnan, M., Hassan, M., Ahmad, K., Sohaib, H., Aziz, Q., & Liaqat, M. (2025). The Prophetic Sunnah and the challenges of the age: Confronting technology and its effects on social and psychological security. *Global Islamic Research Journal*, 1(1), 22–42. <https://doi.org/10.65960/girj.1.1.2025.5>
- rkopoulou, D. (2021). Cyber-insurance in EU policy-making: Regulatory options, market challenges and the US example. *Computer Law & Security Review*, 43, 105627. <https://doi.org/10.1016/j.clsr.2021.105627>
- Al Azhari, F. U., Shah, S. H. M., Al Azhari, S. I., Rasool, F., Ahmed, R., Samad, A., & Rehman, A. (2025). The role of Islamic economic principles

in family law: A study on inheritance and property rights within the context
of child protection. *Global Islamic Research Journal*, 1(1), 59–76.

<https://doi.org/10.65960/girj.1.1.2025.2>