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Doi: 10.32332/milrev.v5i1.13387

Dates:

Received 17 January, 2026

Revised 27 March, 2026

Accepted 01 June, 2026

Published 13 June, 2026

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Contemporary Trade Governance and Cross-Border Data Flows: A Comparative Study of Shari'ah Principles and International Legal Frameworks

Abstract: The rapid expansion of the digital economy has transformed international commerce, making cross-border data flows a crucial component of global trade governance. The increasing reliance on digital platforms, cloud computing, and data-driven services has generated legal challenges related to data privacy, cybersecurity, digital sovereignty, and regulatory fragmentation across jurisdictions. This study examines how contemporary legal frameworks regulate cross-border data governance and analyzes the tension between trade liberalization and regulatory control in digital trade systems. Using a qualitative doctrinal and comparative legal approach, the research evaluates the frameworks of the World Trade Organization (WTO), the European Union (EU), and major Indo-Pacific digital trade agreements. The analysis applies three criteria—legal enforceability, regulatory flexibility, and data protection intensity—to compare their approaches to digital trade governance and cross-border data flows. The findings reveal significant divergence among these frameworks, driven by differing regulatory philosophies and policy priorities. The WTO primarily emphasizes trade liberalization and non-discrimination, but lacks comprehensive mechanisms for data governance. In contrast, the EU adopts a rights-based model focused on robust data protection and regulatory oversight, while Indo-Pacific agreements favor flexible, market-oriented rules that facilitate data flows with limited restrictions. The study further finds that fragmentation in global digital governance is driven not only by regulatory differences but also by competing views of data as either an economic commodity or a protected legal right. The research concludes that effective global digital trade governance requires a harmonized framework balancing economic openness, data protection, cybersecurity, and national sovereignty. It proposes a principle-based harmonization model grounded in transparency, proportionality, interoperability, and regulatory accountability. Academically, this study contributes by developing a comparative analytical framework and by integrating

Shari‘ah-based perspectives on ethical data governance, trust, and accountability into contemporary international debates on digital trade law.

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

INTRODUCTION

The rapid expansion of digital technologies has fundamentally transformed the structure of international commerce and reshaped the global economy through the emergence of digital trade.¹ Contemporary international trade increasingly depends on cross-border data flows, cloud computing, digital platforms, artificial intelligence systems, online financial services, and data-driven supply chains. In the digital economy, data has become a strategic economic asset that facilitates innovation, enhances global connectivity, and supports the operation of international commercial activities. As a result, the governance of cross-border data flows has emerged as one of the most significant legal and regulatory challenges in contemporary international economic law.²

The increasing reliance on digital trade has raised concerns about data privacy, cybersecurity, digital sovereignty, economic competitiveness, and regulatory accountability. Governments seek to benefit from the economic advantages of open digital markets while simultaneously maintaining regulatory control over personal data, national security interests, and domestic digital infrastructure. This tension between trade liberalization and regulatory sovereignty has led to the development of diverse, often conflicting legal frameworks governing digital commerce and cross-border data transfers. Consequently, significant regulatory fragmentation has emerged within the global digital economy, creating legal uncertainty for businesses, governments, and international institutions attempting to regulate digital trade effectively.³

¹ Hulman Panjaitan et al., ‘Strengthening Consumer Protection in Digital Transactions: A Legal Perspective on Click-Wrap Agreements Under the Consumer Protection Law’, *Jurnal Hukum* 41, no. 3 (October 2025): 666–693, <https://doi.org/10.26532/jh.v41i3.47262>.

² Xiaoke Luo and Yongping Xiao, ‘Digital Trade Rules and Division of Labour in Global Value Chains’, *Finance Research Letters* 85 (November 2025): 108164, <https://doi.org/10.1016/j.frl.2025.108164>.

³ Iris Segura-García et al., ‘Digital Monitoring of Fish-Trade for Valuing Bycatch and Characterizing Data-Poor Fisheries in Tanintharyi, Myanmar’, *Ocean & Coastal Management* 267 (August 2025): 107743, <https://doi.org/10.1016/j.ocecoaman.2025.107743>.

At the international level, the World Trade Organization (WTO) has increasingly addressed digital trade issues through negotiations on electronic commerce and cross-border digital services. The WTO framework generally emphasizes trade liberalization, market access, and non-discrimination in international commerce. However, because the WTO's legal structure was originally designed for traditional trade sectors, questions remain about its ability to effectively regulate modern data governance challenges. In contrast, the European Union (EU) has adopted a rights-based regulatory approach centered on strong data protection standards, privacy rights, and institutional oversight of digital markets. Meanwhile, Indo-Pacific digital trade agreements generally promote open digital markets and facilitate cross-border data flows while allowing limited regulatory exceptions related to cybersecurity and public policy concerns. These competing regulatory approaches demonstrate the growing complexity of digital trade governance in the contemporary global economy.⁴

Previous scholarship has examined digital trade governance from multiple perspectives. Joshua P. Meltzer analyzed the challenges of regulating cross-border data flows within the WTO framework and emphasized the need for updated multilateral trade rules governing digital commerce. Anupam Chander explored the concept of data sovereignty and highlighted the tensions between national regulatory authority and global digital integration. Similarly, Mira Burri examined digital trade provisions within regional trade agreements and argued for greater regulatory coherence and interoperability in international digital governance frameworks. Other contemporary studies have focused on data localization policies, digital privacy protections, and the legal implications of cross-border digital services within regional economic agreements.⁵

Despite the growing body of literature on digital trade governance, existing studies remain limited in several important respects. Most previous research examines the WTO,

⁴ Martina F. Ferracane, Simón González Ugarte, and Tomás Rogaler, 'Global Trends in Digital Trade Policies and Practices: Evidence from the Digital Trade Integration Database', *World Trade Review* 25, no. 1 (February 2026): 127-51, <https://doi.org/10.1017/S1474745625100955>.

⁵ Sora Hakem Hameed and Hussam Abdul Amir Khalaf, 'Mechanisms for Achieving a Green Economy and Practical Challenges', *International Journal of Law and Society* 9, no. 1 (February 2026): 69-74, <https://doi.org/10.11648/j.ijls.20260901.16>.

EU, or Indo-Pacific frameworks separately rather than conducting a systematic comparative legal analysis using unified analytical criteria. Furthermore, much of the existing scholarship focuses primarily on policy discussions of digital trade facilitation or data protection, without sufficiently addressing the underlying normative and legal philosophies that shape regulatory divergence across these frameworks.⁶ Existing studies also devote limited attention to integrating Sharī'ah-based principles into discussions of ethical digital governance, accountability, and data protection in international trade law. Consequently, there remains a significant research gap concerning the comparative evaluation of digital trade governance frameworks through a structured doctrinal approach that combines legal analysis, regulatory theory, and ethical governance perspectives.⁷

This study seeks to address this gap by conducting a comparative legal analysis of cross-border data governance under the WTO, the European Union, and Indo-Pacific digital trade agreements. Unlike previous studies, this research develops a criterion-based comparative framework grounded in three analytical dimensions: legal enforceability, regulatory flexibility, and data protection intensity. The study further contributes to the literature by examining how differing legal philosophies concerning data as either an economic commodity or a protected right contributes to fragmentation in digital trade governance. Additionally, the research incorporates Sharī'ah-based perspectives on ethical governance, trust, transparency, and accountability within the broader debate on international digital trade regulation.

Accordingly, this study is guided by several central questions. First, it examines the principal similarities and differences among cross-border data governance frameworks within the WTO, the European Union, and Indo-Pacific digital trade agreements. Second, it explores how these frameworks seek to balance trade liberalization with important regulatory objectives, including data protection, cybersecurity, and digital sovereignty.

⁶ Meng Chen, 'Developing China's Approaches to Regulate Cross-Border Data Transfer: Relaxation and Integration', *Computer Law & Security Review* 54 (September 2024): 105997, <https://doi.org/10.1016/j.clsr.2024.105997>.

⁷ Juliana Londoño Polo, 'Adopting a Universal Mandate on Platform Work: Balancing Contrasting Realities', *Tilburg Law Review* 30, no. 2 (November 2025), <https://doi.org/10.5334/tilr.416>.

Finally, the study investigates the legal and normative principles that may support greater harmonization in global digital trade governance. By addressing these questions, the study aims to contribute to contemporary debates on international economic law and digital governance by proposing a more coherent and balanced framework for regulating cross-border data flows within the evolving digital economy.

METHOD

This study employs a qualitative legal research methodology, drawing on doctrinal and comparative approaches, to examine the governance of digital trade and cross-border data flows within contemporary international economic law. The research is normative, focusing on the analysis of legal principles, international agreements, institutional mechanisms, and regulatory frameworks related to digital commerce, data protection, cybersecurity, and digital sovereignty. Through a doctrinal approach, the study examines statutory provisions and international legal instruments governing digital trade, while the comparative approach is used to identify similarities, differences, and regulatory trends among the frameworks developed by the World Trade Organization (WTO), the European Union (EU), and several Indo-Pacific digital trade agreements such as CPTPP and DEPA. In addition, the research applies a conceptual approach to explore broader theoretical perspectives concerning digital sovereignty, privacy protection, trade liberalization, cybersecurity governance, and Sharī'ah-based ethical principles in digital regulation.

The data collection process relies on both primary and secondary legal materials. Primary sources include international trade agreements, regional digital governance regulations, official policy frameworks, and legal instruments governing cross-border data. Secondary materials consist of academic journal articles, books, legal commentaries, policy papers, and reports from internationally recognized institutions and organizations. The collected data are analyzed qualitatively through doctrinal interpretation and comparative legal analysis by focusing on legal enforceability, regulatory flexibility, and the intensity of data protection measures within each framework. To ensure the validity and reliability of the findings, the study employs source triangulation and systematic cross-checking between

primary legal documents and peer-reviewed academic literature from authoritative and credible sources.

RESULT AND DISCUSSION

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 conducted through digital technologies and electronic networks for the production, delivery, and consumption of goods and services.⁸ These transactions include online retail services, digital financial transactions, cloud computing services, digital platforms, and the provision of digital content through internet-based infrastructure.⁹ 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.¹⁰ 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 data on consumer behavior, logistics systems, financial transactions, and global market trends. This data-driven environment has

⁸ Bambang Suheryadi et al., 'Bridging Legal Traditions in Consumer Protection: Criminal Liability in Comparative Jurisprudence and Contemporary Islamic Law', *MILRev: Metro Islamic Law Review* 5, no. 1 (April 2026): 492-532, <https://doi.org/10.32332/milrev.v5i1.12863>.

⁹ Akramov Akmaljon Anvarjon Ugli et al., 'Legal Issues of Digital Asset Inheritance from an Islamic Law Perspective', *Ijtihad : Jurnal Wacana Hukum Islam Dan Kemanusiaan* 25, no. 2 (December 2025): 191-212, <https://doi.org/10.18326/ijtihad.v25i2.191-212>.

¹⁰ Mahmood Alaloosh, Ali Shaker Mahmood, and Sabir Hussien Eliwy, 'Securing Digital Trade: A Techno-Legal Analysis of E-Commerce Safeguards in Iraq's Regulation No. 4/2025', *Nusantara: Journal of Law Studies* 5, no. 1 (February 2026): 44-60, <https://doi.org/10.5281/zenodo.18452737>.

reshaped traditional business models and enabled companies to operate across multiple jurisdictions simultaneously.¹¹

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 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.¹² The transformation toward data-driven economic systems has also altered the nature of international trade governance.¹³ Traditional trade frameworks were designed primarily to regulate the movement of physical goods across national borders.¹⁴ 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.¹⁵ 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.¹⁶

¹¹ John G. Dale and Nobuhiro Aizawa, “Data Free Flow with Trust”: Japan’s Struggle to Integrate Democracy and Human Rights into Digital Trade Policy’, *Frontiers in Sociology* 9 (September 2024), <https://doi.org/10.3389/fsoc.2024.1397528>.

¹² Asyharul Muala, ‘Repositioning of Islamic Economics in the Era of Globalization from the Maqsid Syari’ah Perspective: Reposisi Ekonomi Islam Di Era Globalisasi Perspektif Maqoshid Syar’ah’, *Journal of Islamic Law* 1, no. 1 (2020), <https://e-journal.iainptk.ac.id/index.php/jil/article/view/17>.

¹³ Farida Arianti et al., ‘Legality of Agricultural Products Weight Cutting as a Cost of Risk in Trade’, *JURIS (Jurnal Ilmiah Syariah)* 22, no. 2 (December 2023): 355–365, <https://doi.org/10.31958/juris.v22i2.10291>.

¹⁴ Mohammad Nasr Khater, ‘Criminalization of Forgery of Electronic Payment Cards in Jordanian Legislation’, *Pakistan Journal of Criminology* 16, no. 1 (2024), <https://doi.org/https://doi.org/10.62271/pjc.16.1.441.455>.

¹⁵ Majed Alsarhan and Nader Alsarhan, ‘The Scene of Electronic Fraud Crimes: A Comparative Study of Jordanian and Spanish Legislation’, *Al-Biruni Journal of Humanities and Social Sciences*, 2 December 2025, 20, <https://doi.org/10.64440/BIRUNI/BIR0010>.

¹⁶ Dacio Castillo and Kholofelo Kugler, ‘Article: The Joint Statement on Electronic Commerce: Are We There Yet?’, *Global Trade and Customs Journal* 19, no. 4 (April 2024), <https://kluwerlawonline.com/api/Product/CitationPDFURL?file=Journals\GTCJ\GTCJ2024014.pdf>.

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.¹⁷ 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.¹⁸ 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.¹⁹ Consequently, the free movement of data has become essential for the functioning of the modern global economy.²⁰ Cross-border data flows play a particularly important role in facilitating global digital value chains, in which production, data processing, and service delivery occur across multiple jurisdictions simultaneously.²¹ 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 in a third jurisdiction. This interconnected structure illustrates how the digital economy relies on continuous data transfers across national borders. Restrictions on cross-border data flows can therefore significantly affect international trade, technological innovation, and economic competitiveness.²²

¹⁷ M. Wildan Humaidi, Ridwan, and Mohd Mahyeddin Mohd Salleh, 'State-Religion Relations and Halal Governance: Islamic Legal Policy in Indonesia and Malaysia', *Al-Manahij: Jurnal Kajian Hukum Islam*, 1 April 2026, 1-20, <https://doi.org/10.24090/mnh.v20i1.15374>.

¹⁸ Muhammad Ishar Helmi et al., 'Legal Compliance of Acehese Muslim Society in Technological Disruption Era: Study of Online Gambling and Prostitution', *AL-IHKAM: Jurnal Hukum & Pranata Sosial* 20, no. 1 (October 2025): 312-340, <https://doi.org/10.19105/al-lhkam.v20i1.15373>.

¹⁹ Fajar Sukma and Zulheldi Zulheldi, 'Government Policies in Economic Empowerment of Muslim Communities in the Digital Economy Era', *ElMashlahah* 11, no. 2 (December 2021): 146-163, <https://doi.org/10.23971/elma.v11i2.3108>.

²⁰ Paul Atagamen Aidonojie et al., 'Legal and Socio-Economic Challenges of E-Commerce in Uganda: Balancing Growth and Regulation', *Trunojoyo Law Review* 7, no. 1 (January 2025): 1-32, <https://doi.org/10.21107/tlr.v7i1.27704>.

²¹ Ma'en Juwaihian, Hamzeh Abu Issa, and Mohammad Nasr Khater, 'The Crime of Counterfeiting or Imitating a Trademark under Jordanian Trademarks Law', *The Journal of World Intellectual Property* 28, no. 2 (2025): 589-611, <https://doi.org/10.1111/jwip.12346>.

²² Joshua P. Meltzer, 'The Impact of Foundational AI on International Trade, Services and Supply Chains in Asia', *Asian Economic Policy Review* 19, no. 1 (2024): 129-47, <https://doi.org/10.1111/aepr.12451>.

Despite the economic benefits of open data flows, governments have increasingly expressed concerns about the risks of unrestricted cross-border data transfers.²³ These concerns include 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 policies that promote the free flow of data across borders to facilitate global digital trade and technological innovation.²⁴ These policies emphasize reducing barriers to cross-border data transfers and preventing data localization requirements that may limit the efficiency of digital services.²⁵

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.²⁶ The regulatory debates surrounding cross-border data governance, therefore, reflect a broader

²³ Meirison Meirison, 'The Impact of Foreign Capitulation on Islamic Sharia in The Ottoman Empire', *Justicia Islamica* 17, no. 1 (June 2020): 109-27, <https://doi.org/10.21154/justicia.v17i1.1554>.

²⁴ Supeno Supeno, 'International Trade Dispute Settlement Through Dispute Settlement Body (DSB) And International Arbitration Body', *Nurani: Jurnal Kajian Syari'ah Dan Masyarakat* 20, no. 1 (June 2020): 147-162, <https://doi.org/10.19109/nurani.v20i1.6043>.

²⁵ R. Khatwani, M. Mishra, and M. Bedarkar, 'Growth and Penetration of Digital Payments in India: Regional Analysis', *AIP Conference Proceedings* 2954, no. 1 (November 2023): 020013, <https://doi.org/10.1063/5.0179826>.

²⁶ Wiwik Sri Widiarty, Jihyun Park, and Tria Sasangka Putra, 'A Legal Analysis of the Influence of International Trade on Import Restriction Policies in Indonesia', *Jurnal Hukum* 41, no. 3 (October 2025): 741-766, <https://doi.org/10.26532/jh.v41i3.46981>.

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 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 addressed 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 protecting fundamental rights and strict data protection standards, while others focus on facilitating digital trade and promoting technological innovation through open data policies.²⁷

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 discuss 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.²⁸ 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

²⁷ Tao Jiang et al., 'Do Digital Trade Rules Matter? Empirical Evidence from TAPED', *Sustainability* 15, no. 11 (January 2023): 9074, <https://doi.org/10.3390/su15119074>.

²⁸ Mohammad Nasr Khater et al., 'The Crime of Goods Fraud in the Jordanian Penal Code', *Multidisciplinary Reviews* 7, no. 2 (2024): 2024035-2024035, <https://doi.org/10.31893/multirev.2024035>.

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 with existing trade rules governing services, intellectual property protection, and customs duties.²⁹

An important outcome of early WTO discussions on electronic commerce was the adoption of a moratorium on customs duties for electronic transmissions, which member states have periodically renewed. 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 to develop 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.³⁰

WTO Principles Relevant to Digital Trade and Governance Challenges

²⁹ Jaakko Salminen et al., 'Digital Platforms as Second-Order Lead Firms: Beyond the Industrial/Digital Divide in Regulating Value Chains', *European Review of Private Law* 30, no. 6 (December 2022), <https://kluwerlawonline.com/api/Product/CitationPDFURL?file=Journals\ERPL\ERPL2022049.pdf>.

³⁰ *The Influence of the G20's Digitalization Leadership on Development Conditions and Governance of the Digital Economy: International Organisations Research Journal*, n.d., accessed 13 May 2026, <https://iorj.hse.ru/en/2022-17-1/582188069.html>.

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 for future digital trade governance mechanisms. One of the most important principles relevant to digital trade regulation is non-discrimination, 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 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.³¹

Transparency and predictability are also important principles within the WTO system, 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

³¹ Ihor Nestoryshen et al., 'Strategy for Balancing Interests of Business, Government and Society in the Field of International Trade in the Digital Economy', *TEM Journal*, 26 November 2021, 1572-1580, <https://doi.org/10.18421/TEM104-11>.

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 a consensus on common regulatory standards for digital trade governance.³²

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 robust legal standards to regulate digital trade while protecting fundamental rights, particularly privacy and the protection of personal data. 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 to regulate the collection, processing, and transfer of personal data 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.³³

In addition to data protection regulations, the European Union has also developed a regulatory framework governing the operation of digital platforms and online markets.

³² Kuznetsov AI and Zvonova E, 'Factors of Internationalization of Developing Countries' Currencies in the Post-COVID-19 Economy', *World Economy and International Relations* 65, no. 9 (2021): 88-97, <https://doi.org/https://doi.org/10.20542/0131-2227-2021-65-9-88-97>.

³³ Stephen Gilbert, 'Digital Medicine's International Race for Regulatory Sandboxes and Voluntary Alternative Pathways Picks up Tempo', *Npj Digital Medicine* 9, no. 1 (February 2026): 190, <https://doi.org/10.1038/s41746-026-02414-x>.

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 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.³⁴

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 recognized as a fundamental right within the EU legal system, strict legal conditions govern the transfer of personal data to countries outside the EU. 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 the protection of personal data. When a country is granted

³⁴ Varda Mone et al., 'AI Price Tags and Privacy: When Your Data Sets Your Price', *Wiley Interdisciplinary Reviews: Data Mining and Knowledge Discovery* 16, no. 1 (March 2026): e70070, <https://doi.org/10.1002/widm.70070>.

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. When 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 legal safeguards are designed to prevent the misuse of personal information and to ensure accountability among organizations that handle the data of EU citizens.³⁵

The EU's regulatory approach to cross-border data governance reflects a broader effort to balance digital trade liberalization with data sovereignty and the protection of fundamental rights. 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 emphasizes ensuring that international data transfers comply with strict privacy standards and are subject to 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

³⁵ Nasarudin Abdul Rahman and Ria Setyawati, 'The Interface Between Competition Law and Data Protection: The Need for A More Integrated Approach', *Media Iuris* 9, no. 1 (February 2026): 181-212, <https://doi.org/10.20473/mi.v9i1.77162>.

debates regarding privacy protection, digital sovereignty, and the responsibilities of digital platform operators.³⁶

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 developing legal and policy frameworks 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.³⁷

³⁶ Nho Le, 'Sustainable Consumer Data Protection in Vietnam's E-Commerce: Bridging Legal Gaps Through Global Insights', *PRAWO i WIEŻ* 60, no. 1 (April 2026), <https://doi.org/10.36128/19cd0230>.

³⁷ Lailatul Nur Hasanah et al., 'Religious Diversity and the Digital Economy: Legal-Academic Pathways to Harmonize Sharia and International Law', *International Journal of Law and Social Science (IJLSS)* 1, no. 1 (December 2025): 01-40, <https://doi.org/10.65960/ijlss.1.1.2025.8>.

In addition to facilitating electronic commerce, regional trade agreements in the Indo-Pacific address issues such as 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 have diverse legal traditions and regulatory approaches, trade agreements serve as mechanisms for coordinating policies on 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.³⁸

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 free flow of data between participating countries. Free data flows enable companies to operate cloud computing services, manage digital supply chains³⁹, 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 mandate that data 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

³⁸ Meng Chen, 'Developing China's Approaches to Regulate Cross-Border Data Transfer: Relaxation and Integration', *Computer Law & Security Review* 54 (September 2024): 105997, <https://doi.org/10.1016/j.clsr.2024.105997>.

³⁹ Zurria Sakinah, Mumtaz Muzaffar, and Maudy Farras Raihan, 'Indonesia's Strategic Legal and Economic Response to the US-China Trade War: Implications for Global Value Chains, Foreign Investment and MSMEs', *Trunojoyo Law Review* 7, no. 2 (August 2025): 287-313, <https://doi.org/10.21107/tlr.v7i2.30350>.

processing systems. By limiting such restrictions, regional trade agreements aim to create an open digital environment that encourages innovation, investment, and technological collaboration.⁴⁰ 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 aim to strike a balance between promoting the free flow of data and preserving governments' regulatory authority to address domestic policy concerns.⁴¹

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 to improve 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

⁴⁰ Khalid Rashid, 'Reforming Islamic Finance: A Framework for a Proposed Non-Banking Institution to Facilitate Participative Financing', *Al-Muamalat* 13, no. 1 (April 2026): 146-168, <https://doi.org/10.15575/am.v13i1.53042>.

⁴¹ mujiono and Carrel Ticalu, 'Emerging Trends in Law and Social Sciences: Global Perspectives on Policy, Ethics, Justice, and Institutional Reform', *International Journal of Law and Social Science (IJLSS)* 1, no. 1 (December 2025): 40-60, <https://doi.org/10.65960/ijlss.1.1.2025.6>.

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.⁴²

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 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 on digital trade have largely occurred 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, treating privacy and data protection as fundamental legal principles. Consequently, EU digital governance policies prioritize regulatory oversight, strict compliance requirements, and comprehensive

⁴² John G. Dale and Nobuhiro Aizawa, "Data Free Flow with Trust": Japan's Struggle to Integrate Democracy and Human Rights into Digital Trade Policy', *Frontiers in Sociology* 9 (September 2024), <https://doi.org/10.3389/fsoc.2024.1397528>.

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.⁴³

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.⁴⁴ Regional trade agreements in the Indo-Pacific often include provisions to facilitate electronic commerce, promote the free flow of data, and reduce regulatory barriers to 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 than the highly structured legal frameworks implemented in 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 seeks to address the challenges of 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.⁴⁵

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

⁴³ Li Gan, 'Comment on "Income and Wealth Inequality in Asia and the Pacific: Trends, Causes, and Policy Remedies"', *Asian Economic Policy Review* 18, no. 1 (2023): 42-44, <https://doi.org/10.1111/aep.12409>.

⁴⁴ Ubaidillah et al., 'Reconstruction of Maqāṣid Al-Syarī'ah Fī Ḥifẓ al-Māl in Responding to Doom Spending Among Generation Z and the Implications for Family Economic Resilience', *Al-Muamalat* 13, no. 1 (March 2026): 76-101, <https://doi.org/10.15575/am.v13i1.53964>.

⁴⁵ Abdul Mustafa Azhari, Samiullah Azhari, and Dr Muhammad Idrees Yaqqooq, 'Global Transformations in Law, Justice, and Society: Comparative Perspectives on Governance, Rights, and Legal Reform', *International Journal of Law and Social Science (IJLSS)* 1, no. 1 (December 2025): 60-90, <https://doi.org/10.65960/ijlss.1.1.2025.7>.

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 trade barriers. WTO principles, such as non-discrimination, market access commitments, and transparency obligations, aim to prevent countries from imposing unjustified restrictions on international trade. 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.⁴⁶

The European Union adopts a different policy priority, placing strong emphasis on data protection and fundamental rights in 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 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.⁴⁷

⁴⁶ Gabriele Carovano and Michèle Finck, 'Regulating Data Intermediaries: The Impact of the Data Governance Act on the EU's Data Economy', *Computer Law & Security Review* 50 (September 2023): 105830, <https://doi.org/10.1016/j.clsr.2023.105830>.

⁴⁷ Saleh Hashem Al-Farjani, Tanveer Ahmad, and Dr Hafiz Ahmed Saeed Rana, 'Digital Innovation, Legal Reform, and Social Justice: Interdisciplinary Approaches to Law, Technology, and Human Rights',

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, they emphasize collaborative approaches that support economic integration and shared regulatory standards.⁴⁸

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

International Journal of Law and Social Science (IJLSS) 1, no. 1 (December 2025): 91-129, <https://doi.org/10.65960/ijlss.1.1.2025.5>.

⁴⁸ Maria Lilla Montagnani, Marie-Claire Najjar, and Antonio Davola, 'The EU Regulatory Approach(Es) to AI Liability, and Its Application to the Financial Services Market', *Computer Law & Security Review* 53 (July 2024): 105984, <https://doi.org/10.1016/j.clsr.2024.105984>.

develop regulatory frameworks that facilitate digital trade while ensuring adequate protection for individuals, businesses, and national interests. One important policy recommendation is to establish clear, 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.⁴⁹

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 legitimate public policy objectives. Strengthening international regulatory cooperation is also essential for improving cross-border data governance. Because digital commerce often involves transactions across 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 strengthen enforcement mechanisms to address cross-border digital trade disputes.⁵⁰

⁴⁹ Faheem ullah Al Azhari and Sajid Iqbal Al Azhari, 'Contemporary Challenges in Harmonizing Sharia, National Legal Systems, and International Law in a Rapidly Changing World', *International Journal of Law and Social Science (IJLSS)* 1, no. 1 (December 2025): 130-150, <https://doi.org/10.65960/ijlss.1.1.2025.4>.

⁵⁰ Diana Vieira Fernandes and Carlos Santos Silva, 'Open Energy Data – A Regulatory Framework Proposal under the Portuguese Electric System Context', *Energy Policy* 170 (November 2022): 113240, <https://doi.org/10.1016/j.enpol.2022.113240>.

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 enables governments to monitor digital trade activities more effectively and respond to emerging risks posed by 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.⁵¹

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 to harmonize laws across 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 to establish common principles governing electronic commerce, data protection, and digital services. By promoting shared legal standards, international

⁵¹ Abdul Mustafa et al., 'When Culture Meets Fiqh: Examining the Legal Authority of 'Urf in Contemporary Engagement Traditions', *Global Islamic Research Journal* 1, no. 1 (December 2025): 01-21, <https://doi.org/10.65960/girj.1.1.2025.6>.

frameworks can reduce regulatory conflicts and support the smooth functioning of global digital markets.⁵²

Another important harmonization strategy is to enhance interoperability among 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.⁵³

Looking ahead, global digital trade governance will need to adapt continuously to rapid technological developments and evolving economic conditions. Emerging technologies such as artificial intelligence, blockchain, cloud computing, and digital currencies are transforming international commerce. 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

⁵² Dr Muhammad Shah Faisala et al., 'The Prophetic Sunnah and the Challenges of the Age: Confronting Technology and Its Effects on Social and Psychological Security', *Global Islamic Research Journal* 1, no. 1 (December 2025): 22-42, <https://doi.org/10.65960/girj.1.1.2025.5>.

⁵³ Dimitra Markopoulou, 'Cyber-Insurance in EU Policy-Making: Regulatory Options, the Market's Challenges and the US Example', *Computer Law & Security Review* 43 (November 2021): 105627, <https://doi.org/10.1016/j.clsr.2021.105627>.

companies, academic researchers, and international institutions in order to understand emerging digital market trends and develop effective regulatory responses. Multi-stakeholder cooperation among governments, private-sector actors, and civil society organizations will likely become an increasingly important component of digital trade governance.

CONCLUSION

This study demonstrates that the rapid development of the digital economy has significantly reshaped the landscape of international trade, particularly through the increasing importance of digital services and cross-border data flows. The comparative analysis reveals that the World Trade Organization (WTO), the European Union (EU), and Indo-Pacific digital trade agreements each adopt different regulatory approaches in governing digital trade. The WTO primarily emphasizes trade liberalization and market access; the EU prioritizes data protection and fundamental rights through strict regulatory mechanisms; and Indo-Pacific agreements focus on economic integration and technological innovation by facilitating freer data flows. These differing regulatory philosophies illustrate the ongoing tension between the objectives of economic openness and the need for regulatory sovereignty, particularly regarding privacy protection, cybersecurity, and national policy interests. As a result, the fragmentation of digital trade regulations continues to create legal uncertainty and governance challenges within the global digital economy.

The findings further indicate that achieving a more coherent system of digital trade governance requires stronger international cooperation, greater regulatory interoperability, and the development of shared principles for cross-border data governance. Harmonization efforts are essential to balance the interests of trade liberalization with those of protecting individual rights, national security, and digital sovereignty. In this context, multilateral institutions, regional trade agreements, and international policy dialogues play an important role in shaping adaptive and forward-looking governance frameworks capable of responding to the evolving digital economy. Future research is recommended to explore further the implementation of digital trade regulations in developing countries, the role of emerging technologies such as artificial intelligence and blockchain in cross-border data

governance, and the integration of ethical and Sharī'ah-based principles into contemporary digital trade regulation to support a more equitable and sustainable global digital economy.

ACKNOWLEDGEMENTS

The authors would like to express their sincere gratitude to Applied Science Private University for the financial support provided for this research entitled “Contemporary Trade Governance and Cross-Border Data Flows: A Comparative Study of Sharī'ah Principles and International Legal Frameworks.” The support and academic environment facilitated by the university have significantly contributed to the completion of this study. The authors also appreciate all parties who provided academic insight, constructive feedback, and institutional assistance throughout the research process.

AUTHOR CONTRIBUTIONS STATEMENT

Muhammad Azam contributed to the conceptualization of the study, research design, data analysis, and manuscript drafting. Naji Mohammad Alwreikat contributed to the comparative legal analysis, interpretation of international legal frameworks, and manuscript revision. Burhan Alsyouf contributed to data collection, literature review, and regulatory framework analysis. Abdel Salam Atwa Ali Al Fandi contributed to methodological development, legal interpretation, and critical review of the manuscript. Rawdah Abdul Karim Mohammad Pharaon contributed to the analysis of Sharī'ah principles, validation of research findings, and final manuscript editing. All authors have read and approved the final version of the manuscript.

CONFLICT OF INTEREST

The authors declare that there are no conflicts of interest related to the publication of this research. This study was conducted independently and objectively without any commercial, financial, institutional, or personal relationships that could influence the research process, interpretation of findings, or conclusions presented in this article. The authors further confirm that no external party had any role in the design of the study, data collection, analysis, interpretation of results, manuscript preparation, or decision to publish the research. All opinions, analyses, and conclusions expressed in this article are solely the

responsibility of the authors and are presented in accordance with academic integrity and ethical research standards.

AI USAGE STATEMENT

The authors acknowledge the use of artificial intelligence (AI)-assisted tools solely for limited language refinement, grammar checking, and editorial support during the preparation of this manuscript. All substantive aspects of the research, including conceptual development, legal analysis, interpretation of findings, argument formulation, and conclusions, were conducted entirely by the authors. The authors carefully reviewed and verified all AI-assisted outputs to ensure their accuracy, originality, academic integrity, and compliance with ethical publication standards. The use of AI tools did not replace the authors' intellectual contribution, critical analysis, or scholarly responsibility for the content of this article.

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