

The Impact of Global Digital Trade Governance on Multinational Corporations

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Abstract. With the strengthening of global digital trend, digital trade has become a crucial part of international business. By integrating the theoretical framework of global digital trade governance with the practical operations of multinational corporations, we can more accurately grasp the actual effects of digital trade governance and how these effects specifically act on the business strategies, market layout, and operating models of multinational corporations. This paper delves into the compliance challenges, business opportunities, and innovation drivers faced by multinational corporations in the context of digital trade governance, and analyzes core issues such as network security and corporate social responsibility in detail. The research results show that digital trade governance has multi-dimensional impacts on multinational corporations. To cope with these impacts, multinational corporations need to build a comprehensive compliance system to address the diversity of regulations and inconsistent standards while seizing the business opportunities brought about by digital trade governance to promote globalization and technological innovation. However, this also brings new challenges such as network security risks and uncertainties in trade policy, requiring companies to strengthen network security protection and closely monitor changes in trade policies. This paper reveals the impact of digital trade governance on multinational corporations, providing strategies and suggestions for enterprises to ensure they maintain a leading position in global digital trade.

Keywords: Digital Trade, Digital Trade Governance, Multinational Corporations, Innovation-Driven.

1. Introduction

In the context of globalization and digitization, digital trade, as an emerging form of international trade, has become a significant driving force for global economic growth. With the acceleration of digital trade development, how to effectively govern digital trade to ensure its positive impact on the global economy has become a focus of international society. By integrating the theoretical framework of global digital trade governance with the practical operations of multinational corporations, we can better understand the actual effects of digital trade governance and how these effects specifically impact multinational corporations' business strategies, market layout, and operating models. Therefore, exploring the impact of the global trade governance system on multinational corporations is particularly important.

In the current context of digital economy and globalization, the rise of digital trade governance raises many key issues, especially its impact on multinational corporations. Global digital trade governance not only affects the economic interests of multinational corporations but also relates to the sustainable development of the global economy. It encourages multinational corporations to pay more attention to social responsibility and sustainable development goals while pursuing their own interests, contributing to the prosperity and stability of the global economy.

The primary purpose of this paper is to delve into the potential impacts of digital trade governance on multinational corporations and reveal core issues and challenges in this emerging field through systematic research. By analyzing regulations, policies, and frameworks of digital trade governance in detail and deeply exploring its actual execution, we emphasize challenges in regulatory differences, data privacy protection, network security, etc., revealing their direct and indirect impacts on multinational corporations' operations and strategies. This will help enterprises understand the actual operation of digital trade governance and how to deal with opportunities and challenges therein,

recognizing that digital trade governance is not only a theoretical issue but also a complex challenge that enterprises need to face in reality.

2. Concept and Development of Digital Trade

Digital trade, as an emerging form of trade, is gradually changing the global trade landscape. In the 1980s, the rise of internet technology laid the foundation for the emergence of e-commerce. With the continuous deepening of global trade, digital trade has gradually become an essential part of international trade. Especially under the impact of COVID-19, global trade has suffered unprecedented shocks, and the rise of digital trade has provided new trading channels for various countries.

Digital trade can generally be divided into goods and services trades. The scope of digital trade goods not only includes traditional goods transactions but also digitized goods such as software, e-books, audio, video, etc. These goods are sold and delivered on digital platforms, breaking geographical restrictions and realizing consumption and transactions globally. The scope of digital trade also extends to various service fields, including remote technical support, online education, telemedicine, etc. Through digital platforms, service providers can cross borders to provide services to global users. Online sales are a typical form of digital trade, with e-commerce platforms becoming the main trading venues for digital trade. In addition, digital trade also involves cross-border data flows, including data exchanges between enterprises and cloud service applications.

With the rise of digital technologies such as big data, artificial intelligence, and cloud computing, international trade is accelerating from traditional value chain trade to new digital trade. According to data from the United Nations Conference on Trade and Development (UNCTAD) and its related estimates, from 2011 to 2022, the scale of global cross-border digital service trade increased from 2.15 trillion US dollars to 3.94 trillion US dollars. In 2021, against the backdrop of downward risks in the global economy, cross-border digital service trade bucked the trend and grew by 14.3% year-on-year, the highest growth rate in the past decade, accounting for 63.6% of service trade.

Although digital trade is booming, so far, the concept of digital trade has not been unified in academia. By combing through literature related to the concept of digital trade, our understanding of digital trade has gradually become clearer. The evolution of the connotation of digital trade can be roughly divided into three stages: e-commerce; digital product and service trade; physical goods and digital product and service trade [1].

In 2013, the U.S. International Trade Commission (USITC) officially proposed that digital trade is domestic business and international trade activities that transmit products and services through the internet. Deardorff A V believes that digital trade involves cross-border business involving digitized products or advertising, ordering, delivery, payment or service behaviors achieved using internet-like digital technologies [2]. Ma Shuzhong believes that digital trade is a new type of trade activity that uses modern information networks as carriers and effectively uses information communication technology to achieve efficient exchange of traditional physical goods, digital products and services, digitized knowledge and information [3]. The "Digital Trade Measurement Manual" jointly issued by Organization for Economic Cooperation and Development (OECD), World Trade Organization (WTO), International Monetary Fund (IMF) defines digital trade as all trades ordered or delivered digitally [4]. The "China Digital Trade Development Report (2021)" further subdivided the OECD-WTO-IMF framework, dividing digital ordering trade into cross-border e-commerce trade of goods and services, and digital delivery trade into digital technology trade, digital service trade, digital product trade and data trade [5].

3. Global Digital Trade Governance

3.1. Establishment of Global Digital Trade Rules

The rapid development of global digital trade and the lack of rules have become the biggest obstacles to its growth, prompting major economies to compete for institutional voice in this field.

Leading economies continually introduce digital trade development strategies or initiatives. Currently, the WTO remains the most popular and effective international economic organization. It has consistently pushed for negotiations on digital trade rules, successively issuing documents such as the "Joint Statement on Electronic Commerce," "Declaration on Global Electronic Commerce," and "WTO Plenary Negotiating Text on Electronic Commerce." These efforts have led to the signing of agreements like the "Agreement on Trade Facilitation," "Agreement on Trade-Related Aspects of Intellectual Property Rights," "General Agreement on Trade in Services," "Information Technology Agreement," and "Technical Barriers to Trade Agreement," which provide some regulation for digital trade's development. Notably, the WTO first raised electronic commerce in its "Work Program on Electronic Commerce" established during the Second Ministerial Conference in 1998. However, it received little attention for almost two decades until France's "Numeric France 2012" in 2008. France followed with "Numeric France 2020" in 2011 and "International Digital Strategy" in 2017, prompting many global countries and organizations to introduce corresponding plans. For instance, Japan's "Smart Japan Strategy 2015," the EU's "Digital Agenda," "Digital Single Market," and "Towards a Digital Trade Strategy," the UK's "Digital Economy Act 2010," "Digital Economy Strategy 2015-2018," and "UK Digital Strategy," Mexico's "National Digital Strategy," Canada's "Digital Canada 150," Germany's "Digital Agenda 2014-2017" and "Digital Strategy 2025," and the US's "Digital Economy Agenda," among others [6].

Evidently, developed countries are the primary drivers of the digital economy's development, but developing countries are actively seeking growth opportunities. For example, China proposed "Digital Fujian" in 2000 and "Digital Zhejiang" in 2003, followed by a series of directives on Digital China. It introduced the "National Informatization Development Strategy Outline" and the "13th Five-Year Plan for National Informatization," clarifying the roadmap and timeline for Digital China's construction and initiating a new journey of China's informatization development. The "Proposal of the Central Committee of the Communist Party of China for Formulating the Fourteenth Five-Year Plan for National Economic and Social Development and the Long-Range Objectives Through the Year 2035" explicitly proposes "accelerating digital development" and makes systematic arrangements for it. The 20th CPC National Congress report emphasizes "innovating the development mechanism of trade in services, developing digital trade, and accelerating the construction of a trade power" and "accelerating the development of the digital economy, promoting the deep integration of the digital economy and the real economy, and building internationally competitive digital industry clusters" [7]. The establishment of digital trade governance rules has undergone a process from non-existence to existence, from extensive to refined, reflecting the rapid development of the global digital economy and its profound impact on international trade.

3.2. Dilemmas in Global Digital Trade Governance

The field of digital trade governance faces a series of challenges and opportunities. As traditional trade rules can no longer meet real-world demands, the dilemmas in global digital trade governance have become increasingly apparent, with a significant imbalance between governance supply and demand.

Regarding global digital trade governance supply, multilateral or bilateral trade agreements play an indispensable role. However, digital trade provisions in these agreements appear scattered and unsystematic. Countries or regions propose their digital trade rule recommendations based on their interests and seek to promote them as global standards. Nonetheless, significant differences in interests lead to a notable gap in global consensus on digital trade rules. Additionally, digital trade faces the issue of uneven regional development, with a particularly pronounced digital divide between

developed and developing economies [8]. As a result, global digital trade governance supply relying on trade agreements struggles to move toward inclusivity.

The demand for digital trade governance arises from the rapid development of global digital trade, necessitating the establishment of a corresponding governance system for regulation and coordination. Firstly, traditional economic and trade rules cannot effectively regulate digital trade as it involves issues beyond their scope, such as privacy protection, data security, intellectual property protection, digital taxes, and digital technology sovereignty. These issues give rise to new governance demands. Secondly, building a digital trade governance system has become a critical area of competition among major powers. With the development of digital globalization, digital trade has emerged as a significant engine driving world economic recovery. Countries compete for the right to set digital trade rules and have a say in this field, with digital trade rules aligned with different interest demands becoming the pursuit of various parties.

4. Challenges in Digital Trade Governance for Multinational Corporations

4.1. Digital Trade Behavior of Multinational Corporations

Multinational corporations play a pivotal role in global trade through e-commerce platforms. These platforms not only provide online shopping, payment, and logistics services but more importantly, they closely connect sellers and buyers worldwide. The globalization of goods and services circulation is thus realized, and the market scope has been unprecedentedly expanded. E-commerce platforms such as Amazon and Alibaba, as the leading players in global digital trade, further promote the global circulation of goods and services by introducing cross-border sellers and consumers. With the increasing popularity and influence of e-commerce platforms in global digital trade, they have become an important force leading the transformation of global trade [9].

In addition, multinational corporations face a series of challenges in data cross-border flow in digital trade. One key issue is regulatory differences because regulations on data privacy and security vary from country to country. This requires companies to comply with regulations in different countries while ensuring data fluidity. For example, the General Data Protection Regulation (GDPR) in Europe sets strict standards for the protection of personal data, and China's Personal Information Protection Law is also gradually strengthening data protection. Therefore, when multinational corporations handle cross-border data, they must fully consider these regulatory differences and take corresponding measures to ensure compliance and data security [10]. This regulatory diversity increases the complexity of multinational corporations' data management and requires them to develop specific and targeted data processing strategies to cope with it. Internet blockages also pose a significant challenge in the process of data cross-border flow. Some countries restrict domestic users from accessing specific international websites through internet blockage measures, which undoubtedly poses a barrier to multinational corporations that heavily rely on the global network. This blockage may make it difficult for companies to manage their businesses efficiently globally, thereby adversely affecting their smooth operation of digital trade.

These challenges have profound impacts on the digital trade strategies and operations of multinational corporations. To effectively cope with the troubles brought by regulatory differences, multinational corporations need to build a global compliance system to ensure strict compliance with relevant regulations in various countries. At the same time, facing challenges such as internet blockages, enterprises need to actively explore technical and compliance means to ensure normal data flow and thereby ensure robust development of digital trade. In this challenging and changing environment, multinational corporations need to possess high flexibility and adaptability, continuously adjusting and optimizing strategies to ensure smooth digital trade.

4.2. Regulatory Compliance and Corporate Responsibility

Multinational corporations face a series of issues regarding compliance with regulations in different countries in digital trade. First, compliance cost is an important consideration factor as

regulatory requirements and standards may vary from country to country; therefore, companies need to invest substantial resources to ensure compliance with local regulations. Additionally, regulatory differences may also pose challenges for companies when formulating global strategies; they need to consider regulatory diversity across different countries to avoid compliance risks. These issues related to regulatory compliance add complexity to corporate strategic formulation and operational decision-making; it requires companies to establish a global legal team or seek professional legal services to ensure compliance. Multinational corporations face difficulties due to regulatory compliance issues when expanding globally. Companies fail to fully understand local regulations when entering emerging markets, leading to compliance issues that affect their business development in the market. This experience highlights the challenges of regulatory compliance for enterprises and emphasizes the importance of recognizing regulatory differences and formulating compliance strategies.

Comparing the similarities and differences between different countries' regulations, we can see the diversity and challenges at the national level. Due to factors such as different legal systems and cultural differences among countries, digital trade faces a complex legal environment internationally. This requires companies to comply with multiple national regulations in cross-border e-commerce, increasing operational complexity. Therefore, the digital trade governance framework needs to strive to coordinate and unify international standards under the premise of respecting national sovereignty to promote the orderly development of global digital trade.

Corporate Social Responsibility (CSR) plays an important role in digital trade governance. For multinational corporations, CSR is not only a moral obligation but also a strategic measure. In digital trade, corporate social responsibility can be reflected through promoting sustainable development and fair trade. Enterprises can achieve sustainable development by reducing environmental impact, promoting green supply chains, and paying attention to labor rights in the supply chain. By participating in fair trade initiatives, companies can increase support for vulnerable groups in the supply chain and achieve more equitable trade relationships.

5. Impact of Digital Trade Governance on Multinational Corporations

5.1. Business Opportunities & Innovation Drivers

Digital trade governance brings abundant business opportunities for multinational corporations, one of which is to open up new markets. Through digital trade platforms, companies can quickly access global markets, realize global operations, and expand their customer base. Convenient services provided by digital trade governance such as payment and logistics also reduce transaction costs in international trade, making it easier for companies to enter emerging markets and find new business opportunities. For example, Alibaba's digital trade platform provides convenient ways for Chinese companies to conduct trades with global customers through digital payment and global logistics services, enabling many small and medium-sized enterprises to succeed in international markets [9].

Digital trade governance promotes innovation by multinational corporations in digital trade. Firstly, technological innovation is an important aspect of digital trade governance. Companies enhance the efficiency and traceability of trade processes by adopting advanced technologies such as big data analysis, artificial intelligence, blockchain etc. Through blockchain technology, companies can establish a more transparent and secure supply chain management system to ensure product traceability and information credibility. Additionally, digital trade governance also promotes innovation in business models. Through digital platforms, companies can communicate directly with consumers, establish more accurate marketing strategies, and realize personalized customization. Some multinational corporations use digital trade platforms to expand profit channels through innovative business models such as subscription services and virtual goods sales. For instance, Amazon achieves rapid delivery worldwide through its digitized sales platform and intelligent logistics system while expanding its business field through cloud computing services. This kind of digital business model innovation enables Amazon to maintain a competitive advantage in the global digital trade market [11].

5.2. Risk Management & Compliance Challenges

Digital trade governance also brings a series of new risks to multinational corporations; one of them is cybersecurity risk. With the advancement of digitization, data exchange and storage become more frequent and larger in scale during companies' digital trades, making them face higher cybersecurity threats. Cyberattacks and data breaches may cause significant damage to companies' business secrets and customer privacy; therefore, multinational corporations need to strengthen cybersecurity measures in digital trade to ensure data security [12]. Another risk is the uncertainty of trade policy. Changes in international trade policies, the outbreak of trade wars, etc., may impact companies' supply chains and market access. Companies need to constantly pay attention to changes in trade policies of various countries, adjust business strategies promptly to reduce the uncertainty risks brought by trade policies. Companies may suffer significant losses if they fail to effectively cope with cybersecurity and trade policy uncertainties, emphasizing the urgency of digital trade governance for corporate risk management.

Under the framework of digital trade governance, multinational corporations face complex compliance challenges, including regulatory complexity and inconsistency of standards. Different countries' regulatory requirements may vary, requiring companies to develop a global compliance strategy to ensure that operations in all regions comply with relevant regulations. As digital trade involves multiple fields, different standards and norms may also lead to fragmentation of compliance standards, increasing the difficulty for companies to comply. To cope with these challenges strategically, it is necessary to establish a global compliance system to ensure that enterprises comply with relevant regulations in all regions. This may involve establishing a professional compliance team, strengthening internal training, and cooperating with industry associations and international organizations to keep up-to-date with regulations and standards.

6. Conclusion

This paper deeply explores the multi-level impacts of digital trade governance on multinational corporations. Multinational corporations need to build a global compliance system and actively explore technical and compliance means to ensure normal data flow. At the same time, corporate social responsibility is also very important, requiring companies to pay attention to sustainable development and fair trade. Digital trade governance brings business opportunities and innovation drivers for multinational corporations, including opening up new markets, technological innovation, and business model innovation. These opportunities and challenges together drive multinational corporations to continuously develop and adapt in global digital trade. However, this also brings new challenges such as cybersecurity risks and uncertainties in trade policy, which require companies to strengthen cybersecurity measures and closely monitor changes in trade policies. In terms of compliance, multinational corporations need to cope with issues such as regulatory complexity and inconsistency of standards, establish a global compliance system to ensure business compliance, such as developing specific compliance strategies, strengthening internal training, and cooperating with international organizations.

Most current research focuses on how changes in global digital trade governance rules can have a significant impact on the competitiveness of multinational corporations but lacks cross-national comparative studies on digital trade governance rules between different countries. Different countries' digital trade governance rules may vary, which could have a significant impact on multinational corporations' global operations and strategic layout. In the future, with continuous innovation and application of digital technology, digital trade governance rules will continue to improve and develop; multinational corporations will also formulate more comprehensive strategies for this purpose to better safeguard their own interests and promote the healthy development of global digital trade. Maintaining competitiveness in the constantly changing digital trade environment will achieve sustainable development.

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