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E-Commerce for Sustainable Development: Leveraging WTO and China-FTA Experiences for Global South Integration

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Abstract

This article explores the potential of e-commerce as a catalyst for sustainable development in the Global South, focusing on lessons drawn from the World Trade Organization (WTO) framework and China's Free Trade Agreements (FTAs). It examines how WTO rules and China's digital trade provisions collectively shape regulatory environments that foster inclusive digital economies, reduce barriers, and enhance participation by developing countries. The study uses comparative legal analysis to assess key policy areas such as cross-border data flows, digital infrastructure, consumer protection, and capacity building. Findings reveal that while WTO agreements provide a broad multilateral foundation for e-commerce governance, China's FTAs offer tailored, pragmatic frameworks that address specific needs of Global South partners, promoting regional integration and sustainable growth. The article concludes with recommendations for Global South policymakers to strategically leverage these international experiences to bridge digital divides, strengthen trade resilience, and achieve sustainable development goals through e-commerce.

Introduction

E-commerce has emerged as a transformative force reshaping global trade dynamics, offering new avenues for economic growth, innovation, and inclusion—particularly for developing countries in the Global South. The rapid digitalization of commerce enables small and medium enterprises (SMEs) and marginalized communities to participate in global value chains, reduce transaction costs, and access international markets. However, realizing e-commerce's full potential for sustainable development requires effective legal frameworks, supportive infrastructure, and regulatory coherence (Povna, 2024).

This article investigates how the WTO's multilateral e-commerce provisions and China's FTA digital trade experiences can guide Global South countries in leveraging e-commerce for sustainable development. While the WTO provides a foundational architecture emphasizing non-discrimination, transparency, and dispute resolution, China's FTAs offer customized, practical approaches that balance liberalization with national policy space and development goals.



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The study addresses key research questions: How do WTO and China-FTA rules complement each other in governing e-commerce? What lessons can Global South countries derive to promote digital inclusiveness and sustainable growth? Using comparative legal analysis and case studies, this article maps regulatory convergence and divergence to identify best practices and policy gaps.

The paper is organized as follows: Section 2 outlines the theoretical framework of e-commerce and sustainable development. Section 3 examines WTO rules on digital trade. Section 4 analyzes China's FTA digital trade provisions. Section 5 assesses implications for Global South integration. Section 6 presents policy recommendations. Finally, Section 7 concludes with future research directions.

2. E-Commerce and Sustainable Development: Theoretical Framework

Sustainable development integrates economic growth with social inclusion and environmental protection. E-commerce supports this by democratizing market access, creating jobs, and reducing carbon footprints through digital transactions that minimize physical logistics.

Key elements for sustainable e-commerce include:

Digital Infrastructure

Digital infrastructure forms the backbone of any e-commerce ecosystem, particularly in developing countries aiming for sustainable growth. Affordable and reliable internet connectivity is the primary gateway that allows consumers and businesses to access digital platforms, engage in online transactions, and participate in global value chains. Beyond internet access, physical infrastructure such as data centers, cloud computing facilities, and efficient logistics networks play a crucial role in ensuring smooth data processing, storage, and timely delivery of goods and services. Furthermore, the availability of secure and user-friendly digital payment systems is essential to facilitate trust and ease of transactions, especially in regions where cash remains dominant and banking penetration is limited (Sucker, 2025).

The absence or inadequacy of such infrastructure disproportionately affects marginalized communities and rural areas, widening the digital divide and impeding inclusive growth. Investments in expanding broadband access, building resilient data infrastructure, and developing mobile payment ecosystems have proven critical in reducing entry barriers for underserved populations. International cooperation, including technology transfer and financing mechanisms, can help bridge these gaps. Moreover, public-private partnerships can drive innovation and sustainability in infrastructure development, ensuring that digital growth aligns with environmental goals by utilizing green technologies and energy-efficient solutions (Macleod et al., 2023).

Regulatory Environment

A clear and consistent regulatory environment is vital to foster trust and predictability in e-commerce, which directly influences consumer confidence and business participation. Well-defined rules on consumer protection ensure that buyers' rights are safeguarded against fraud, defective products, or misleading information, making online shopping safer and more reliable. Data governance regulations protect the personal and commercial information of individuals and



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businesses, fostering trust while balancing privacy and innovation. Cybersecurity laws safeguard digital infrastructure and transactions from malicious attacks, data breaches, and other threats, thereby securing the digital ecosystem's integrity (Truby, 2025).

However, regulatory frameworks must strike a balance between facilitating innovation and protecting public interests. Overly rigid regulations can stifle growth and create unnecessary compliance burdens, especially for SMEs, while lax standards may lead to exploitation and loss of trust. Consistency and harmonization of rules across borders also play a critical role in enabling cross-border e-commerce by reducing legal uncertainty and transaction costs. Developing countries often face challenges in crafting and enforcing such regulations due to limited institutional capacities. Therefore, technical assistance, regional cooperation, and engagement in international rule-making processes, such as WTO discussions on e-commerce, are essential to develop balanced and effective regulatory environments (Khan et al., 2025).

Capacity Building

Capacity building is a foundational pillar for enabling sustainable e-commerce growth, particularly in the Global South where digital literacy and technical skills may be limited. Training programs and educational initiatives help entrepreneurs, SMEs, and workers acquire the knowledge and competencies needed to leverage e-commerce platforms effectively. This includes understanding how to set up online stores, use digital marketing tools, manage logistics, and ensure compliance with regulatory requirements. Capacity building also involves raising awareness about cybersecurity risks and best practices to protect businesses and consumers alike (Khan & Ullah, 2024).

Beyond individual skills, capacity building extends to strengthening institutional frameworks that support e-commerce development. Governments need resources and expertise to design effective digital policies, enforce regulations, and provide support services. Collaborative efforts involving international organizations, NGOs, and the private sector can facilitate knowledge transfer, technology adoption, and infrastructure development. By empowering businesses and institutions, capacity building reduces the risk of digital exclusion and helps ensure that e-commerce contributes to equitable economic growth and social inclusion (Khan, 2024).

Inclusive Policies

Inclusive policies are essential to ensure that the benefits of e-commerce reach all segments of society, particularly marginalized groups such as women, rural populations, ethnic minorities, and persons with disabilities. These policies aim to address structural inequalities by promoting equitable access to digital infrastructure, training opportunities, and financial services. By creating enabling environments for participation, inclusive policies help bridge socio-economic divides and foster greater social cohesion. For example, targeted subsidies or incentives for rural internet expansion, gender-sensitive digital literacy programs, and support for women-led digital enterprises can help democratize access to the digital economy (Khan, 2024).

Furthermore, inclusive policies consider affordability, cultural relevance, and accessibility in the design and delivery of digital services. They emphasize



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removing barriers such as language differences, physical disabilities, or limited technological exposure that hinder meaningful participation. Ensuring inclusivity also involves protecting vulnerable users' rights and privacy, thus building trust and safety in digital platforms. Ultimately, inclusive digital economies contribute to the broader goals of sustainable development by promoting social equity, reducing poverty, and enabling diverse communities to contribute to and benefit from global economic integration. International trade law, notably the WTO framework, plays a critical role by facilitating cross-border digital trade while balancing national regulatory autonomy. China's FTAs illustrate how bilateral/multilateral agreements can tailor these principles to specific development contexts, offering a practical lens for Global South integration (Khan & Jiliani, 2023).

WTO Provisions on E-Commerce: Foundations and Limitations

The WTO has addressed e-commerce through several agreements and declarations, although no dedicated e-commerce treaty exists yet. Key WTO elements relevant to e-commerce include:

Trade Facilitation

Trade facilitation is a critical pillar in enabling efficient e-commerce by simplifying and accelerating cross-border transactions. Within the WTO framework, efforts focus on reducing customs barriers and promoting paperless trade procedures, which eliminate the need for cumbersome physical documentation and streamline clearance processes. These measures help lower transaction costs, reduce delays, and enhance predictability, all of which are vital for the fast-paced nature of digital commerce. By leveraging technology such as electronic customs declarations and digital certificates, trade facilitation fosters smoother integration of e-commerce into global value chains (Khan & Usman, 2023).

The impact of improved trade facilitation is particularly significant for developing countries, where inefficient customs and border procedures often constitute major bottlenecks. Faster and more transparent processes encourage small and medium enterprises (SMEs) to engage in cross-border trade by minimizing the risks and costs associated with exporting and importing goods. Additionally, paperless trade reduces environmental impact by decreasing reliance on physical documents, aligning with sustainable development goals. Continued WTO efforts in this area are essential to further promote inclusive growth through e-commerce (Khan et al., 2023).

Non-Discrimination

Non-discrimination principles, namely Most-Favored-Nation (MFN) and National Treatment, are fundamental to ensuring fairness and equality in international trade, including in digital products and services. MFN requires WTO members to extend any favorable treatment given to one trading partner equally to all other members, preventing discriminatory practices that could distort competition. National Treatment obliges countries to treat foreign goods and services no less favorably than domestic counterparts, eliminating bias in regulatory or tax treatment (Khan, 2023).

Applied to e-commerce, these principles mean that digital products such as software, music, and e-books must be allowed to enter markets without unjust



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restrictions or discriminatory barriers. This creates a level playing field where foreign and domestic providers can compete fairly, encouraging innovation and consumer choice. However, the application of these principles in the digital realm poses novel challenges, including how to classify and value digital products and services. Ongoing WTO discussions aim to clarify these issues to ensure that non-discrimination extends effectively to the digital economy (Khan & Ximei, 2022).

Cross-Border Data Flows

Cross-border data flows are the lifeblood of e-commerce, enabling real-time transactions, cloud computing, and global digital services. The WTO framework encourages the free movement of data across borders to support innovation, efficiency, and market access. Open data transfer allows businesses to manage inventories, personalize customer experiences, and leverage technologies like artificial intelligence and big data analytics on a global scale. At the same time, WTO members recognize legitimate concerns regarding national security, privacy, and data sovereignty. The framework allows for exceptions where governments may restrict data flows to protect sensitive information or ensure compliance with domestic laws. Striking the right balance between openness and protection remains a core challenge. This balance is especially complex for developing countries, which need to safeguard security and privacy without erecting unnecessary barriers that could stifle digital trade and growth (KHAN et al., 2022).

Consumer Protection and Privacy

Consumer protection and privacy in e-commerce are increasingly important as transactions shift online, but WTO guidance in these areas remains limited and fragmented. Effective consumer protection measures ensure that buyers have access to accurate information, fair dispute resolution mechanisms, and safeguards against fraud or defective products. Privacy protections regulate how personal data is collected, stored, and used, building consumer trust and confidence in digital platforms. Despite their importance, harmonization of consumer protection and privacy rules across WTO members is still an ongoing debate. Divergent national standards can create regulatory uncertainty and compliance challenges for businesses operating across multiple jurisdictions. Discussions continue on how to develop common principles or frameworks that respect cultural differences and legal traditions while facilitating smooth cross-border e-commerce. Strengthening cooperation and aligning rules in these areas is crucial for the sustainability and inclusiveness of global digital trade (Khan, 2022).

Dispute Settlement

The WTO dispute settlement mechanism is an essential tool for resolving conflicts arising from trade disagreements, including those related to digital trade and e-commerce. As e-commerce grows, disputes may emerge over issues such as unfair trade practices, intellectual property infringements, or barriers to digital market access. The WTO's established dispute settlement process provides a structured, legal avenue for members to seek resolution through consultations, panels, and appellate reviews. Effective dispute settlement mechanisms increase certainty and fairness in international trade, encouraging compliance with agreed rules and deterring protectionist or discriminatory behavior. However, applying these



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mechanisms to new digital trade challenges requires adaptation and possibly the development of specialized expertise on e-commerce issues. Strengthening the capacity of WTO bodies to handle digital trade disputes will be key to maintaining trust and stability in the global digital economy. Despite these foundational rules, WTO's consensus-driven nature has limited the advancement of binding e-commerce rules, leaving gaps in areas such as data localization, intellectual property, and cybersecurity. Developing countries face challenges in fully benefiting from digital trade due to infrastructure and regulatory capacity deficits (Khan & Wu, 2021).

China's FTAs: Tailored Approaches to Digital Trade

China's FTAs represent a pragmatic and innovative approach to digital trade, combining openness with respect for policy space. Key features include:

Cross-Border Data Flows and Conditional Openness

Cross-border data flows are essential for modern digital trade, enabling seamless communication, cloud computing, and online services across nations. China's FTAs generally promote the free flow of data to facilitate e-commerce but embed conditional openness by allowing governments to impose safeguards for privacy protection and national security. This balanced approach recognizes the importance of data mobility for economic growth while respecting sovereign concerns about data misuse, espionage, or breaches. The conditional openness model contrasts with more restrictive regimes that enforce stringent data localization requirements, providing flexibility for participating countries to tailor their regulations. This approach also reflects China's broader governance philosophy that prioritizes social stability and cybersecurity alongside economic liberalization. By including clear provisions on when and how data transfer restrictions may apply, China's FTAs aim to reduce uncertainty for businesses and encourage digital trade while safeguarding public interests. This conditional openness mechanism thus acts as a bridge between the demands of global digital commerce and the prerogatives of national regulatory autonomy (Abdelrehim Hammad et al., 2021).

E-Commerce Facilitation

China's FTAs include comprehensive provisions designed to facilitate e-commerce transactions and reduce barriers to digital trade. These typically cover electronic transactions, providing legal recognition to electronic signatures and contracts, which help businesses and consumers engage confidently in online trade. Additionally, consumer protection measures address issues like fraud, dispute resolution, and transparency, which are critical for building trust in cross-border e-commerce environments. The agreements also promote paperless trade by encouraging electronic documentation and customs procedures, which streamline import-export operations and cut administrative delays and costs. Such facilitation provisions are particularly beneficial for small and medium-sized enterprises (SMEs), which often face disproportionate barriers in international trade. By making digital trade processes smoother and more predictable, China's FTAs help integrate partners into a larger, more efficient digital marketplace (Usman et al., 2021).



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Cybersecurity Cooperation

Cybersecurity remains a fundamental concern in digital trade, and China's FTAs emphasize cooperation among parties to address cyber threats, enhance information sharing, and build joint capabilities. However, these agreements also strongly affirm the right of each country to maintain domestic regulatory autonomy, enabling states to design cybersecurity policies aligned with their political systems and security priorities. This dual focus on cooperation and sovereignty reflects China's governance model, which combines engagement in international frameworks with strong centralized control over cyber activities. While the FTAs encourage collaborative efforts to counter cybercrime and protect critical infrastructure, they do not impose uniform cybersecurity rules, leaving space for national discretion. This approach allows countries along China's economic corridors to participate in cybersecurity initiatives without compromising their sovereign policy choices (Khan & Wu, 2021).

Capacity Building Commitments

Recognizing the uneven digital development among partner countries, China's FTAs incorporate capacity building commitments aimed at supporting technical assistance, skills training, and infrastructure development. These provisions acknowledge that many developing countries along China's trade corridors require external support to effectively participate in the digital economy. Capacity building programs typically focus on improving digital literacy, expanding broadband access, and enhancing regulatory frameworks to foster innovation and entrepreneurship. By investing in human capital and infrastructure, these initiatives help bridge the digital divide, enabling more inclusive participation in e-commerce. Such commitments strengthen the overall sustainability and success of the digital trade ecosystem envisioned under China's FTAs (Khan et al., 2021).

Intellectual Property Rights

China's FTAs feature strengthened intellectual property rights (IPR) protections specifically adapted for the digital economy. Recognizing the critical role of innovation and creativity in driving digital trade, these agreements extend protections to digital products, software, and online content. Enhanced IPR provisions incentivize investments in new technologies by offering clear legal safeguards against unauthorized use, piracy, and counterfeiting. Furthermore, these provisions facilitate cooperation on enforcement mechanisms and dispute resolution related to IPR infringements in the digital realm. Stronger digital IPR regimes not only benefit technology developers and content creators but also contribute to building trust in cross-border e-commerce platforms by ensuring that proprietary rights are respected. This alignment of IPR standards under China's FTAs helps integrate partner economies into global innovation networks (Khan et al., 2021). These provisions are often flexible, enabling partners with diverse economic and legal systems to engage effectively. China's FTAs facilitate regional integration and economic diversification by promoting digital ecosystems and reducing entry barriers for SMEs.

Implications for Global South Integration

The WTO and China-FTA experiences together offer a roadmap for the Global South to harness e-commerce for sustainable development:



Bridging Digital Divides

Bridging digital divides remains a central challenge for sustainable e-commerce integration, especially among developing countries in the Global South. Many regions still lack reliable access to affordable internet, modern data infrastructure, and digital payment systems, which limits their ability to fully participate in global digital markets. Strategic investments in digital infrastructure, combined with capacity-building programs, can empower marginalized populations and underserved communities by providing the tools and skills needed to engage in e-commerce. These efforts help create equitable opportunities, reduce poverty, and foster economic resilience. Moreover, leveraging partnerships between governments, international organizations, and the private sector is crucial to scale up digital inclusion. Capacity-building initiatives focused on digital literacy and entrepreneurship support small businesses and individual entrepreneurs in harnessing technology. By targeting investments and training where gaps are greatest, policymakers can ensure that digital transformation does not exacerbate existing inequalities but instead acts as a catalyst for inclusive development (Khan et al., 2020).

Regulatory Harmonization

Regulatory harmonization is essential for creating a predictable and efficient environment for cross-border e-commerce. Countries need to adopt balanced data governance frameworks that protect privacy and national security while allowing the free flow of data critical to digital trade. Similarly, consumer protection rules must safeguard buyer rights and foster trust without imposing excessive compliance burdens. Achieving this balance requires dialogue and cooperation among stakeholders to align policies with respect for national sovereignty and cultural differences. Harmonized regulations reduce fragmentation and costs for businesses, especially SMEs, which often struggle with navigating diverse legal landscapes. International platforms such as the WTO and regional trade agreements provide mechanisms for dialogue and consensus-building that can facilitate policy convergence. Coordinated regulatory approaches enhance interoperability of digital systems, reduce disputes, and promote smoother cross-border transactions, thereby accelerating the integration of Global South countries into the digital economy (Malik et al., 2025).

Enhancing Trade Facilitation

Simplifying customs procedures and embracing paperless trade technologies are vital to boosting the efficiency of cross-border e-commerce. Complex and opaque customs processes often result in delays, increased costs, and unpredictability that deter businesses from participating in international trade. Modernizing customs through automation, electronic documentation, and risk management techniques expedites clearance and reduces corruption opportunities, creating a more business-friendly environment. Paperless trade not only speeds up transactions but also supports environmental sustainability by reducing reliance on physical documents. This technological shift aligns with global efforts to modernize trade infrastructure and is particularly beneficial for SMEs, which lack the resources to navigate burdensome administrative requirements. By investing in trade facilitation reforms, countries can unlock significant economic benefits and



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deepen their integration into global value chains (Gul et al., 2025).

Fostering Inclusive Growth

Inclusive growth through e-commerce requires empowering diverse groups such as SMEs, women entrepreneurs, and rural communities, who traditionally face barriers to market participation. Digital platforms offer unprecedented opportunities for these groups to access wider markets, increase incomes, and foster innovation. Policymakers must design targeted programs that address gender gaps, digital literacy, and access to finance, ensuring that the benefits of e-commerce are broadly shared. Support mechanisms may include tailored training programs, mentorship, and access to affordable digital tools. Rural populations benefit from improved connectivity and localized services that reduce isolation and open new economic avenues. Encouraging inclusivity not only promotes social equity but also enhances the overall dynamism and sustainability of digital economies by tapping into diverse talent and consumer bases (Malik & Gul, 2024).

Balancing Innovation and Security

Balancing innovation and security is a complex but crucial objective in the governance of digital trade. While cybersecurity cooperation among countries is necessary to combat cyber threats, overregulation or overly restrictive security measures risk stifling innovation and technological advancement. Policymakers must foster frameworks that encourage trust and collaboration in cybersecurity while allowing flexibility for emerging technologies and business models. Developing adaptive regulatory environments that promote experimentation and responsible innovation helps maintain competitiveness in the rapidly evolving digital landscape. International cooperation on standards, information sharing, and incident response strengthens collective defenses without imposing uniform rules that might hinder national priorities or creative developments. Striking this balance ensures that digital trade ecosystems remain both safe and vibrant (Gul & Malik, 2024).

Policy Recommendations

To maximize e-commerce's contribution to sustainable development, Global South policymakers should:

Engage in Multilateral and Bilateral Dialogues

Active participation in multilateral forums such as the WTO e-commerce negotiations is crucial for shaping inclusive and balanced international digital trade rules. Developing countries in the Global South should leverage these platforms to voice their specific challenges and priorities, ensuring that new regulations do not disproportionately disadvantage them. Additionally, engaging in regional and bilateral trade talks allows countries to tailor agreements that reflect their unique economic contexts and foster deeper cooperation with key partners. Such dialogues promote mutual understanding and consensus-building, which are essential for harmonizing rules and reducing trade barriers. By proactively contributing to rule-making processes, Global South countries can help create a digital trade environment that supports sustainable development, fair competition, and equitable access to opportunities. This engagement also strengthens diplomatic ties and enhances the strategic positioning of developing



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economies within global value chains (Salman et al., 2025).

Develop National Digital Strategies

Countries must craft comprehensive national digital strategies that align domestic regulations with evolving international standards while addressing local socio-economic realities. These strategies should integrate legal reforms, infrastructure development, and capacity-building efforts to create a coherent framework for digital trade. Reflecting local development priorities ensures that digital transformation advances inclusive growth, protects consumer rights, and respects cultural norms. National digital strategies also provide a roadmap for government agencies, private sector actors, and civil society to coordinate initiatives and optimize resource allocation. Clear policy guidance reduces uncertainty for investors and entrepreneurs, facilitating innovation and market expansion. Moreover, by embedding sustainability principles, countries can ensure that digital economy growth supports environmental protection and social equity alongside economic objectives (Ullah et al., 2023).

Invest in Digital Infrastructure

Investing in robust, affordable, and accessible digital infrastructure is foundational for expanding e-commerce capabilities in developing countries. Prioritizing broadband connectivity, modern payment systems, and efficient logistics networks addresses critical bottlenecks that hinder digital market participation. Infrastructure investments reduce the digital divide between urban and rural areas, enabling wider demographic inclusion and enhancing overall economic competitiveness. Such investments also create positive multiplier effects by attracting technology firms, facilitating innovation ecosystems, and improving service delivery across sectors. Coordinated efforts involving public funding, international development assistance, and private sector contributions can accelerate infrastructure deployment. Sustainable infrastructure planning must incorporate resilience to technological change and environmental impacts to support long-term digital growth (Truby, 2025).

Strengthen Legal and Institutional Capacity

Developing countries need to build robust legal and institutional capacities to effectively govern digital trade, cybersecurity, and consumer protection. This involves training government officials, judiciary members, and regulatory bodies in the complexities of digital commerce law and enforcement mechanisms. Enhanced expertise ensures that domestic institutions can implement international commitments, resolve disputes, and adapt to emerging challenges. Institutional strengthening also requires the establishment or modernization of regulatory agencies equipped with technological tools and cross-sector coordination capabilities. Capacity building programs can be supported by international cooperation, technical assistance, and knowledge exchange initiatives. Strong legal and institutional frameworks increase investor confidence, protect consumers, and promote a stable business environment conducive to sustainable digital development (Ullah et al., 2023).

Promote Public-Private Partnerships

Collaboration between governments, technology companies, financial institutions,



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and civil society organizations is vital to drive innovation, inclusivity, and sustainability in e-commerce. Public-private partnerships (PPPs) can mobilize resources, expertise, and networks to develop digital solutions tailored to local needs. Such partnerships facilitate the scaling of digital platforms, fintech services, and logistics innovations that empower entrepreneurs and consumers alike. PPPs also provide a forum for stakeholder dialogue, ensuring that regulatory frameworks are practical and supportive of technological advancements. By engaging diverse actors, governments can leverage private sector dynamism while safeguarding public interests such as data privacy and fair competition. Effective PPPs contribute to building resilient digital ecosystems that foster equitable economic growth and social empowerment (Ullah et al., 2023).

Monitor and Evaluate Impacts

Implementing data-driven monitoring and evaluation mechanisms is essential to assess the social, economic, and environmental outcomes of e-commerce policies. Continuous analysis helps policymakers identify successes, gaps, and unintended consequences, enabling evidence-based adjustments to strategies and regulations. Monitoring tools may include impact assessments, stakeholder feedback, and digital analytics that track accessibility, affordability, and user experiences. Evaluation processes also promote transparency and accountability, building public trust in digital governance. By systematically measuring indicators such as SME participation, gender inclusion, carbon footprint reduction, and consumer satisfaction, governments can align e-commerce initiatives with sustainable development goals. Effective monitoring ensures that digital trade remains a driver of inclusive prosperity and environmental stewardship (Ullah et al., 2023).

Conclusion

This study underscores the transformative potential of e-commerce as a catalyst for sustainable development, particularly in the Global South. By integrating economic growth with social inclusion and environmental stewardship, e-commerce offers unprecedented opportunities to democratize market access, empower marginalized communities, and reduce ecological footprints. The experiences of the WTO and China's Free Trade Agreements provide valuable lessons on the importance of coherent digital infrastructure, balanced regulatory frameworks, capacity building, and inclusive policies. These elements are essential for enabling developing countries to harness digital trade for broad-based prosperity.

However, realizing this potential requires overcoming significant challenges, including bridging digital divides, harmonizing diverse regulatory environments, and addressing concerns around data privacy, cybersecurity, and governance. The research highlights the need for active multilateral engagement, national digital strategy development, strategic investments, and strengthened institutional capacities. Public-private partnerships and data-driven policy evaluation are also critical for fostering innovation and ensuring that e-commerce growth is equitable and sustainable.

Looking ahead, future research should explore the evolving geopolitical dynamics influencing digital trade governance and the role of emerging technologies—such as blockchain and artificial intelligence—in enhancing e-commerce sustainability. Additionally, more empirical studies are needed to assess the socio-economic



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impacts of digital trade policies on vulnerable groups and to design tailored interventions that maximize inclusivity. By continuing to examine these areas, scholars and policymakers can better guide the Global South toward a resilient and inclusive digital future.

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