The Emergence of the Fourth Industrial Revolution and its Impact on International Trade

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ABSTRACT

Trade as we know it will change. This is because the fourth industrial revolution—a period of rapid digital technological advancement—is beginning to impact the world. Coined in Germany as Industry 4.0, despite its name, this revolution is a process of emerging technologies established on older ones. Industry 4.0 represents the fusion of primarily digital developing technologies. This article examines the effects of Industry 4.0 and its revolutionary changes on the volume and nature of global trade, and identifies its quantitative, structural, and comparative impacts on countries and corporations using qualitative methods.. Implementing the core developments of Industry 4.0 will significantly change international trade volume and structure. There will be a significant shift toward services. The goods to gain prominence due to digitalization will mainly be those with high transportation, logistics, data, legislation, and transaction costs. Applying new technologies will also significantly alter the terms of trade.

Keywords: Industrial revolution 4.0, International trade, Digital technology.

INTRODUCTION

The industrial era of the last few centuries has involved at least three revolutions. The first occurred in 1784 in England, marked by the mechanization of production. The second occurred from the late 19th century until the 1970s and involved the application of electricity power to mass production activities. The third revolution started after the 1970s and continues today, characterized by the use of computer and digital technology for automating production activities.

Introduced at the Hanover Fair in Germany, 'Industry 4.0' is a recent concept representing a new, fourth industrial revolution, which is marked by the digitization

of production equipment and its integration with the Internet. Like previous revolutions, it is predicted to provide many opportunities, benefits—and some risks— for humanity. Industry 4.0 includes the integration of physiological, digital, and biological domains, and its core tools include the Internet of Things (IoT), artificial intelligence (AI), cyber-physical equipment and 3D printing, blockchain, cloud computing and big data technologies, and synthetic biology (Sieja & Wach, 2019).

Change in technical progress has been the most consequential factor affecting national economies throughout the industrial era (Rymarczyk, 2012). Technical progress regulates the internal development processes of countries and their globalization, which influences the global economy, particularly catch-up economies. Advanced techniques, revelations, inventions and innovations have drastically changed the nature of domestic and international trade and commerce. Administrators in domestic economies also have strategic opportunities to affect technical progress, especially by promoting e-commerce and e-trade.

In terms of the sectoral framework of global trade, the share of services is expected to grow. Concurrently, there will be an increase in the proportion of goods with high transport, logistic support, certification, contracting, and international border costs, as well as a rise in online and high-content goods. Will such alterations occur in global trade? The rationale for manufacturing and trade growth being affected by technological advancement indicates that these modifications are highly probable. Notwithstanding, they may play out inversely due to the unpredictability of current events.

This article evaluates the potential effects of Industry 4.0 technologies on global trade while recognizing their comparative, quantifiable impacts on structures, regions and companies (Andronicean u, 2020a). The article also describes obstacles to the anticipated changes, and the effects of these changes, including suggestions for measures to mitigate them.

LITERATURE REVIEW

There are numerous examples showing how digital technologies can lead to improvements (World Bank, 2016). However, due to their highly scattered and oblique growth impacts and complex global supply chains, it is hard to estimate their impact on global trade. Despite these challenges, some scholarly analyses still support the positive effects of rapid digitalization of economies. The Internet makes it possible for many small businesses to engage in international trade, increasing inclusion. Additionally, it enables the delivery of more goods to more marketplaces, frequently by newly developed and younger companies. The goods traded by states increase by 0.4 percent for every 10 percent increase in internet usage in the exporting nation. The ordinary bilateral trade value for each product rises by 0.6 per cent for every similar growth in internet usage between two nations (Amiti, M., & Freund, 2010). By providing escrow and dispute settlement mechanisms in addition to feedback and rating systems, online platforms solve problems of information and trust. In the markets for goods and services, the more straightforward trade of

intermediate goods inspires further "unbundling" of production processes (World Bank, 2016).

Most studies on the impact of digitalization on trade focus on the Internet's role because it dramatically expands businesses' ability to create new products and services and cater to new marketplaces. The Internet decreases transaction costs for interactions, data, and coordination through email messages, websites, specialized systems, and online marketplaces, making it easy for companies to engage in global trade. Digital marketplaces provide tools like reviews that boost consumer trust in vendors while reducing matching and data expenses that often impact global trade more than domestic trade. The internet also provides an opportunity to relate a state's volume of international trade in goods and services to the number of broadband users in that nation. According to one researcher, as broadband use continues to grow, trade-to-Gross Domestic Product proportions will increase by an average of 1.7 percent in underdeveloped countries and 6.9 percent in high-income countries over the next five years (Riker, 2014).

The information and communication technologies (ICTs) used to standardize and automate global trade procedures are a central topic of digital trade facilitation discussions. A considerable percentage of regional trade agreements (RTAs) have included measures on digital exchange of trade-related information and data. An evaluation of paperless trade measures contained in worldwide RTAs revealed that, since 2005, more than twice the percentage of paperless trade measures are being now entered into, and current RTAs frequently go beyond the World Trade Organization (WTO) Trade Facilitation Agreement (TFA) in boosting trade facilitation, and in the application of ICTs to trade procedures, with the potential exception of e-payments (Duval & Mengjing, 2017).

In addition is the delicate and complicated connection between online commerce and global trade: current preferential trade agreements (PTAs) such as the Trans-Pacific Partnership and the Japan-Mongolia Economic Partnership Agreement include legal provisions for consumer protection, net neutrality, data localization, cybersecurity, data protection, malware control, and online intellectual property protection. These clauses are meant to facilitate e-commerce and permit the cross-border flow of data. Trading in the digital economy also revolves around several policy-related issues relating to the Internet. According to this viewpoint, the legal language in trade agreements needs to be adjusted because worries about cybersecurity, privacy, and data protection can both hinder and facilitate e-commerce (ESCAP, 2017).

For traders and lawmakers, new trading techniques like e-commerce present both opportunities and challenges. On the one hand is the increased capacity of small and medium enterprises (SMEs) to transition from being minor players in the national market to being major global exporters. On the other hand, several laws and commercial restrictions can keep e-commerce initiatives from realizing their maximum potential. Based on discussions with industry associations and a survey of Canadian information technology (IT) service companies that focus on exports, Dong et al. claim that IT service firms invest more in human capital than physical capital due to the knowledge-concentrated nature of manufacturing. These firms also

mentioned experiencing solid sales growth and having a generally optimistic outlook (2016).

This all suggests that international trade agreements are crucial in determining the future of the digital economy, leading to it being stronger and more resilient. Global trade agreements should be ready to deal with requests from nation states, including harsh and onerous legal provisions like data localization, unfair cybersecurity provisions, an absence of interoperability between home privacy and consumer protection regulations. The cross-border flow of data is essential to the digital economy. Therefore, in order to build a strong and resilient digital economy, it is essential to understand the connections between global trade and the Internet and develop mechanisms to facilitate their joint growth. Countries can better understand their differences and points of agreement through the mediation of international trade agreements. They can also identify priority areas and the political justifications for diverse domestic approaches. Despite the benefits of PTAs, including their ability to address new, urgent issues (like localization measures) and provide legal certainty, they fall short in some respects regarding interconnection and digital trade (Burri, 2016).

For underdeveloped economies to efficiently and successfully use trade as an engine of productivity and growth, it is necessary to participate in global production networks while reducing trade costs. This can be achieved by addressing trade costs affected by onerous regulatory processes, documentation requirements, and non-tariff source materials. The WTO TFA came into force in February 2017, and the increasing number of regional development measures in this area attest to the growing significance of trade facilitation, including paperless trade.

The deployment of more sophisticated paperless trade measures is still in its infancy, according to the Second Global Survey on Trade Facilitation and Paperless Trade Implementation Report. For instance, the creation of a single digital window for accessing trade documents has been undertaken to some extent in nearly 60 percent of national economies. Few have fully operational systems in place, however. The ordinary level of implementation of cross-border paperless trade worldwide (33 percent) is significantly lower than that of other measures taken. Integration of paperless and cross-border paperless measures increase by 7.8 and 9.3 percentage points, from 50.8 per cent to 58.6 per cent and from 25 per cent to 34.3 per cent (Duval & Mengjing, 2017).

Furthermore, how can we encourage paperless trade in the countries of the Asia-Pacific Region to streamline the assimilation of the global supply chain? Duval & Mengjing provide an explanation of paperless trade and discuss how it can improve the efficiency of the worldwide supply chain. Duval & Mengjing also identify significant obstacles to enabling cross-border paperless trade and discuss how those obstacles can be overcome by analyzing paperless trading initiatives and evaluating the preparedness of economies in countries of the Asia-Pacific region for paperless trade.

According to the trade facilitation survey, the first step in organizing and prioritizing the rollout of trading facilitation measures is establishing the necessary institutional mechanisms. The next step is to increase accountability in trading processes by providing as much information as possible about existing rules,

regulatory requirements and practices, and soliciting stakeholder input when establishing new ones. The next step is creating and implementing more straightforward and effective trade formalities. The streamlined and restructured procedures may initially be implemented using paper records, but they can later be enhanced using ICTs and creating paperless trade procedures (Duval & Mengjing, 2017).

Analysts and policymakers must focus on trade facilitation, which is broadly defined as political actions lowering trade costs. The current WTO TFA states that there can occasionally be significant costs associated with integrating trade facilitation. That is also how paperless trade is being implemented. As a result, ongoing discussions must include support for trading and capacity development to facilitate reforms. The future success of policymakers will depend on their ability to unite reformist intent with sufficient human, technological, and financial resources. A robust regional agreement on facilitating cross-border paperless trading would undoubtedly be helpful in this respect (ESCAP, 2014).

Internet usage in Europe and Central Asia (ECA) is still relatively low despite its enormous benefits. Compared to other regions, ECA states have smaller businesses offering products and services online. Compared to the US and Japan, west and northern European countries' GDP proportions for e-commerce sales are lower. Businesses in the ECA that sell their products online frequently concentrate more on the domestic than international marketplace, lacking opportunities to expand their customer base. Additionally, many ECA countries export minimal digitally enabled services (Tan, 2017).

IMPACT OF BREAKTHROUGH TECHNOLOGIES ON INTERNATIONAL TRADE

Cross-border trade expenses are reduced by digital innovations (Ismail, 2020). These expenditures include those relating to information, transportation, logistic support, border crossing, transactions, and trade policy. A steady and low-cost flow of credible data will make finding products, services, and the best manufacturers easier. Furthermore, it will become easier to engage with producers, validate their consistency and the quality of their products, negotiate trade agreements, conclude contracts, travel, store goods, facilitate cross-border approvals, and manage payments.

Online platforms play a significant role in informing exporters, importers, manufacturers, and users and establishing contacts between them. By bridging knowledge gaps regarding the caliber of goods and the reliability of their suppliers, the platforms help to increase partners' trust and confidence. Numerous platforms act as intermediaries between buyers and sellers, guaranteeing that distributed goods are as described, and managing and defending buyers' claims against unkind sellers (Tan, 2017). Due to online reviews, buyer and seller recommendations, and their interrelations through feedback, these platforms are becoming more popular and have an increased user base. These consumer behaviors make it possible to gain crucial competitive advantages in a global setting, despite geographical distance. Numerous SMEs and individual entities from underdeveloped countries will play a

more significant role in international trade as communication costs decline. Their market share will rise in lockstep with the expansion of online platforms in quantity and popularity; they promote pricing and product data to stifle seller competition for the benefit of customers. Global online marketplaces like Google, Amazon, Facebook, Apple, Alibaba, eBay, Flipkart, and Route, link buyers and sellers from around the world (Weber & Gneuss, 2017). For instance, Facebook has roughly 1.4 billion active users, the same as China's entire population. Due to lower transaction costs, greater transparency, and the simplicity of data retrieval, internet sites are now the largest and most influential markets for international trade. The foundational elements of the global trading environment are the e-commerce and advancement systems that major multinational corporations create on their own (Grochal-Brejdak & Szymura-Tyc, 2018).

Intra-corporate supply chains handle the majority of international goods and service flows. In this regard, transnational corporations' parent entities and subsidiaries' operations necessitate perfect coordination and tracking. These companies must exchange information with terminal operators, shipping companies, carriers, customs brokers, insurance companies, and numerous other parties involved in these procedures to function effectively. Without current data, ICT equipment, cloud computing, big data, and the IoT, in particular, they would be unable to operate and develop smoothly. The interconnected transmission expenditures would also be several times greater (Gravili et al., 2018).

Transport and logistics outlays continue to be a significant impediment to international trade. These expenses still account for most total trade expenses despite innovations like container shipping, multi-modal transportation, mastermind centers, GPS, and contemporary modes of transport. Implementing the following innovations should result in significant cost savings in this area: robotization, AI, the IoT, and 3D printing. Firms will optimize cargo flow routes by mixing intelligent robots with the IoT, trialing, correcting, and choosing warehousing and transshipment locations. These two processes—packaging and co-packing—can both be fully automated. Autonomous vehicles will revolutionize the transportation industry. Not only will they be more affordable, but they will also be faster, safer, and more dependable. Transporting momentary products (such as consumer products) for supply chains is essential, especially those that use a just-in-time framework.

Additionally, the use of 3D printing technology could significantly reduce overall transportation and logistics costs in the future, allowing businesses to locate their final manufacturing lines closer to their customers. Products could be made in a single location, with successive stages of production guided by algorithms. This should decrease the sum of subcomponents and elements that need to be moved around supply chains, lowering the volume and regularity of cargo that needs to be transported. The geography of value chains will no longer be determined by selecting a production site in underdeveloped states due to their small labor expenses. Automation, robotization, computerization, and the use of AI in production will all contribute to this. Transnational corporations are relocating a large proportion of their fragmented manufacturing from underdeveloped countries into their own countries.

Additionally, manufacturing will enable businesses to avoid tariffs, other barriers, and border crossing costs when selling products. There is also a reduction in the time needed to produce and deliver products to consumers. One option is to customize products to individual consumers' demands (Strange & Zucchella, 2017).

Electronic systems based on the IoT and blockchain technologies can help reduce costs associated with documenting transactions following applicable customs provisions and procedures, sanitary, veterinary, and phyto- or pathological rules, protection of the environmental legislation, standards of quality, and rules governing licensing of products' origin and distribution. Furthermore, language barriers will be eliminated by automated online translation structures. Each country has regulations and principles that may or may not be altered according to existing trade policy goals. Through practical and automated information management, I.e., the proper selection of and processing of the data collected by firms, they will steer clear of conflicting laws, claims, and redundant procedures, making it simpler to spot waste and fraud. Automatic payments and traditions, verification, and certification of procedures will be possible with smart contracts. Cross-border payments have already been made possible by e-commerce systems and mobile financial services (Ganne, 2018). Payment structures installed on online platforms like Amazon Pay in the United States, PayPal in the United Kingdom, and Chinese Alipay in China, enable businesses to evade structures of financial banks, saving time and money. By digitizing payments, agreements eliminate the expense of bank finance intermediaries and currency conversions. Whether or not payments are made for cryptocurrencies is a contentious issue; if they were, the costs associated with financial transactions would be further decreased. This will depend on several variables, such as the monetary policies of various nations, whether the value of cryptocurrencies will decline, and whether they will be accepted as a form of payment; cryptocurrencies have displayed extreme instability (Brown & Whittle, 2020).

Existing exporters and importers will be able to boost their percentage of cross-border flows. However, it is also likely that new exporters and importers previously precluded by high costs from participating in global trade will appear. These will primarily encompass SMEs, entities of varying sizes from underdeveloped nations and emerging markets, as well as individuals, as previously mentioned.

INTERNATIONAL TRADE VOLUME AND STRUCTURE

The existing widespread use of digital innovations that reduce costs is increasing trade volume while changing its framework (Ismail, 2020). Several goods will see an increase in trade, while others will see a decline. Still, others will slowly disappear, a procedure that is already underway. There will be a growth in trade in goods with higher transportation, logistics, data, regulatory, and transaction expenditures. Therefore, the trade in of time-sensitive goods—intermediate products transferred within distribution networks—will grow, and with them, perishable consumer products. Greater trade transparency and a more straightforward identification of goods will reduce the cost of certification requirements which

should contribute toward a larger share of trade-in certification-intensive goods (World Trade Organization, 2018).

The same effect should occur for products with high data and transaction expenditures. A greater portion of agreement-intensive goods in trade can be protected by blockchain technology payments, robotic transactions, lowered information asymmetry such as through digital networks, and the removal of trading intermediaries. The trading of IT products will rise. It will become more common to trade in data carrier hardware like sensors, camera systems, and liquid crystal displays, as well as devices that use modern technology like smartphones, tablets, and other devices with knowledge content (Lula et al., 2019).

Traditional products with a digital element (digital wrapper) have a bright future ahead of them. Driverless vehicles, which are currently being tested, AI-enabled robots, intelligent houses, clothing, shoes, and radiofrequency identifying technology that allow transportation routes to be tracked, supervised, recognized, and adjusted are all instances of this. Digital elements are also used in warehousing equipment to improve efficiency (Manyika et al., 2016).

The volume and share of customized goods in international trade will shape several contemporary technologies, including the IoT, cloud technology, 3D printing, big data, and digital sites. The increased demand for goods that satisfy consumers' individual preferences should correspond to the increased supply of more diverse goods (World Trade Organization, 2018). Theoretics of demand and supply in global trade explain this procedure: similarity of preferential theory, product diversification, and intra-branch trade theory. Mass customization is made possible by the classifier. It uses infinite elements that influence consumer taste thanks to the collection and processing of big data in the cloud. The ability to produce small batches or even solitary items is made possible by flexible production systems that use reprogrammable robots. 3D printing, the production of customized products close to customers using algorithms obtained via the Internet – will prove crucial for mass customization. This production will ensure that the products are of high quality, tailored to the customers' needs and that transportation and manufacturing expenses are low. As a result, most expenses related to international trade will be reduced, increasing its volume.

Additionally, this will cause the commercial framework to change. Together with the supply chain and finished goods, we will be witnessing the partial removal of intermediate transport. Furthermore, the movements of components and raw materials, as with the equipment necessary for manufacturing based on the 3D system, are likely to increase if these devices are unavailable (Rymarczyk, 2012).

In the interim, a different trend for several digitalized goods is clear. In books, booklets, CDs, DVDs, YouTube clip cassette tapes, maps, postcards, newspaper articles, and video games, commerce will decrease. Books, films, journals, and video games are among the products that are increasingly being downloaded instead of purchased in physical form.

The sharing economy may have an impact on cross-border transfers of finished goods. (World Trade Organization, 2018). With transport companies becoming increasingly convenient and affordable, households will likely be discouraged from purchasing new cars. Additionally, technologically advanced

hybrid vehicles, driverless vehicles, and vehicles equipped with hardware or software could generate new demand.

Small deliveries with low value are also likely to grow in importance within the global trade framework. Digital technology will eliminate the main obstacle SMEs face in relatively small amounts of products, such as those produced in underdeveloped and growing economies. High commercial costs make transfers uneconomical across borders. The emergence of players will fuel an increase in the volume of world trade while radically changing its composition.

TRADE AND COMPARATIVE ADVANTAGE FACTORS: A SHIFT IN EMPHASIS

A thorough examination of the factors that contribute to the development of international trade can be provided by classical and neoclassical economic theory and other modern theories, which emphasize the importance of differences in each country's access to both material and immaterial resources. Labor, investment, and land—raw materials, environment, global ecosystems, and arable land—are factors determining a country's comparative advantage. The revolutionary technologies of Industry 4.0 will fundamentally alter how these factors are prioritized. Understanding their application will be important human and physical capital assets, as significant expenses for research and development are incurred in designing, producing, experimenting, and implementing innovations. Although start-ups are crucial to innovation, transnational corporations still hold significant power in the complicated process required to realize and commercialize creativity. Their capital gives them a competitive edge. This is demonstrated by the fact that major corporations in Germany and other global economic powers are currently developing the Industry 4.0. However, this suggests that the technological gap between developed and underdeveloped nations could broaden.

Symbolized by the digital revolution, automation, and robotization and advanced innovation in products and services will reduce the comparative advantage of cheap labor, a vast resource available in underdeveloped countries. According to one United Nations and World Bank report, the digital revolution, automation, and reshoring will result in the loss of two-thirds of jobs in developing countries over the next few decades (Kozul-Wright, 2016). Additionally, highly skilled people will continue to have a competitive advantage, particularly those whose abilities complement emerging technologies. Recruiting and retaining skilled workers has become more complicated recently, especially in developing nations, due to the supply of highly skilled workers who can support new technological processes.

Except for telecoms and energy infrastructure, the comparative advantages derived from well-developed physiological trade infrastructure, such as ports, railway lines, terminals, and customs clearance infrastructure, will become less significant for states going forward. The growth of economic and commercial sectors that depend heavily on digital technology will require the latter. A tremendous amount of energy is required to operate computer networks, cloud services, and

bitcoin mining. The importance of a sizable market will also only increase in the digital age. In industries that heavily rely on technology, the economy of size and amplitude are mainly related to connectivity with a potentially vast information base. The domestic market's size compared to those of smaller nations makes this connectivity possible (Agrawal et al., 2019).

It is anticipated that countries with strong institutions and just regulations will become more important as trade becomes more digital. Additionally, effective institutions that can enforce laws promptly and effectively, appropriate regulations in areas like taxes, environmental protection, financial flow agreements, intellectual property protection, personal data protection, and online content privacy all contribute to a significant trading benefit. These factors, along with government initiatives to support Industry 4.0, are part of a set of factors that give developed countries an advantage in international trade (Androniceanu et al., 2020b).

However, the demand for gas and oil will help emerging markets and underdeveloped nations with many mineral resources, especially oil and gas. Long-term projections indicate that new techniques for producing renewable energy will also become commonplace. Meanwhile, emerging innovations that will enable less production and the repurposing of potential waste will cause a likely decline in the supply of other mineral reserves.

INTERNATIONAL TRADE BARRIERS FOR DIGITAL TRADE

The adoption of Industry 4.0 devices in global trade faces several obstacles, but these will almost certainly not stop the revolution's progress, in line with earlier industrial revolutions. Countries' regulatory frameworks will be linked to the difficulties encountered in trading advanced technologies. Under pressure from business lobbyists, governments could decide on multiple ways to restrict external competition. Pursuing a strategic trade plan that fosters "nationwide" champions could result in the imposition of import tariffs on Industry 4.0-produced and digitally intensive goods. The flow of complex data across borders could also stop, as overseas competitors in digital industry could take advantage. Data may also threaten a country's security or violate privacy laws, and restrict access to government information concerning different aspects of the state's economy, such as finance, education, or healthcare. Public policy goals, such as privacy protection from cyber-attacks, and protecting the interests of consumers and intellectual property rights, could provide justification for these restrictions. These measures could, however, sometimes mask a quest for trade protectionism. The following illustrations can be used to illustrate regulatory barriers to digital trade (Ciuriak & Ptashkina, 2018):

- Discriminatory regulations or an outright ban on online sales.
- Restricting overseas companies' access to electronic systems or the provision of digital services.
- Blocking or filtering the Internet.
- Restricting Internet advertising.
- Restricting online payments.

- Establishing nationwide rules for Industry 4.0 devices requiring their registration and testing.
- Demanding waiving patent rights, abandonment of secrets of the trade, source codes, and technical obligations.
- Insufficient protection of patent rights, copyrights, and commercial secrets.
- Software piracy.
- Working with local organizations (for instance, by forming a joint venture).
- Tariff and non-tariff barriers on ICT goods.
- Limiting participation by foreign firms in government procurements for services like telecoms and application design.

The key to digital growth and removing government obstacles is global collaboration, the assimilation of regional collections, and global organizations such as the WTO, the Organization for Economic Cooperation and Development, and the International Labor Organization. They have already taken action by developing and publishing regulations and procedures. However, these documents only encourage best practices among various states doing digital trades and are not legally binding. Given that each nation's participation in different digital trades varies, as does their competing interests, we must not expect a speedy resolution to the critical problems in cross-border e-commerce, particularly given the numerous uncertainties surrounding the future of this trade (OECD, 2017).

CONCLUSION

Industry 4.0 is changing technological, social, and business paradigms. These have an impact on how international trade is conducted. Digitalization helps transform outdated trade and business practices into new ones. Digitalization offers a wide range of opportunities for countries to develop paperless trading platforms and lower trade expenses. However, countries must coordinate on issues relating to the cross-border flow of data, privacy, and conditions for competition, among other things. Most nations have put general trade facilitation policies into place to increase transparency, accelerate and streamline niceties, and create suitable institutional frameworks. Digital trading is still not widely used and understood despite being the aspect of global trade that has grown the fastest over the past ten years. The execution score for trade facilitation across the globe is roughly 60 percent (Sen, 2018). To streamline trade processes, enable electronic data exchange, and facilitate communication with all parties involved in the global supply chain, countries must continue to apply current ICTs and develop paperless trade. This trade across borders has enormous potential to lower trade costs and increase trade among international integration organizations. The embrace of global standards, alignment of legal frameworks, disparities in capabilities among stakeholders (including infrastructure and human resources), collaboration between the private and public sectors, and the lack of intergovernmental cooperation.

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