



STUDY OF INTERNATIONAL TRADE LAW IN THE ERA OF INDUSTRIAL REVOLUTION 5.0

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Abstract

This research aims to examine aspects of international trade law in the context of the Industrial Era 5.0. The Industrial Era 5.0 is a continued development of the Industrial Revolution 4.0 which is characterized by the integration of high technology, including artificial intelligence, the Internet of Things (IoT), and blockchain technology, into global production and trade processes. This research focuses on the impacts and legal challenges faced by international businesses, trade organizations and countries in the face of this rapid economic transformation. The research methods used are legal document analysis, case studies, and interviews with international trade law experts. The research results show that the Industrial Revolution 5.0 resulted in profound changes in international trade regulations. Advanced technologies such as artificial intelligence, Internet of Things, and blockchain have changed the global trade landscape. The impact of the Industrial Revolution 5.0 on international trade law is very complex. One of the main impacts is the need for adjustments in international trade regulations and compliance, intellectual property protection, E-Commerce trade, and logistics and transportation. Apart from that, this research reveals the challenges of international trade law in the era of the industrial revolution, namely in the form of increasingly fierce competition, the emergence of new trends in the global economy, adopting new technological developments in international trade law, maintaining privacy and security of information and data, and cyber security.

Keywords: *International Trade Law, Industrial Revolution 5.0, E-commerce, Technology, Intellectual Property Protection.*

A. INTRODUCTION

The Industrial Era 5.0 is a period of continued evolution from the Industrial Revolution 4.0 which has fundamentally changed the global business landscape. High-tech developments, such as artificial intelligence, the Internet of Things (IoT), and blockchain technology, have created a new paradigm in the production, distribution, and consumption of goods and services (Doyle-Kent & Kopacek, 2020; Frick & Grudowski, 2023). This era is characterized by the integration of technology into all aspects of human life, including the business world. This technology has opened the door to greater efficiency, product innovation and unprecedented global connectivity (Elmaraghy et al, 2021; Bafti et al, 2023).

However, along with its benefits, the Industrial Era 5.0 also brings serious challenges, especially in the context of international trade law (Toohey et al, 2021; Gauri & Van Eerden, 2019). International trade law is the legal basis that regulates trade relations between countries, which includes trade agreements, contract law, protection of intellectual property rights, and international dispute resolution (Howse et al., 2005; Petersmann, 1997). With drastic changes in the way business is conducted, it is worth investigating how international commercial law can adapt to these changes.

For example, data privacy issues have become a major concern in the Industrial Era 5.0. International businesses must face increasingly stringent regulations regarding the collection, use and storage of their customers' data, which affects the way international trade is conducted (Chen et al., 2012; Mehmood, 2021). Protection of intellectual property rights has also become more complex with the growth of technology, and international dispute resolution in the digital era raises questions about jurisdiction and effective resolution processes (Furukawa, 2007; Mingaleva & Mirskikh, 2013). Additionally, cybersecurity is a critical concern due to potential threats to business data and international trade infrastructure. Hacking and cyber attacks can disrupt global supply chains and result in huge losses for international companies (Meltzer & Ani et al, 2017).

Therefore, this research has a high urgency in examining the paradigm shift in international trade law caused by the Industrial Era 5.0. It is hoped that the results of this research will provide guidance to governments,

international trade organizations and business actors to develop adaptive and innovative legal frameworks that suit the demands of this new era. This research will also help design international trade policies that are responsive to technological change, maintain the integrity of the global trading system, and encourage sustainable economic growth in the future.

B. LITERATURE REVIEW

1. International Trade Law

According to Schmitthoff (1961), international trade law can be defined as the body of legal principles and rules that govern the exchange of goods and services between nations. A compendium of regulations governing business transactions with a civil character. The legal regulations outlined govern transactions conducted within various nations. The aforementioned definition provides a strong indication that these rules possess a commercial orientation. In his work, Islam (1999) highlights the significant interconnection that exists between international trade and financial interactions. The author posits that trade and financial law encompass a set of regulations, principles, standards, and customary practices that establish frameworks for international trade transactions and payment systems. These frameworks significantly influence the commercial conduct of various institutions, owing to the inherent interdependence between international trade and financial relations. The concept of trade refers to the exchange of goods, services, or resources between individuals, organizations, or nations. According to Booyesen (2003), international trade law encompasses the regulations of international law that pertain to the exchange of goods, services, and the safeguarding of Intellectual Property Rights (IPR). This body of law comprises national legal principles that directly impact or govern international trade as a whole. The inclusion of these national legal regulations within the framework of international trade law is attributable to their inherent characteristics.

In trade law there are such things as basic principles introduced by Alexander Goldstein (2001), there are four principles in international trade law, namely :

- 1) Basic Principles of Freedom of Contract The principle of freedom of contract is actually a universal principle in international trade law. Every legal system in commercial law recognizes the freedom of the parties to make (international) commercial contracts.
- 2) Basic Principles of *Pacta Sunt Servanda* The principle of *pacta sunt servanda* is a principle that requires that agreements or contracts that have been signed must be implemented as well as possible (in good faith). This principle applies universally.
- 3) Basic Principles of Dispute Resolution Through Arbitration Arbitration in international trade is a commonly used dispute resolution forum. Arbitration clauses are increasingly being included in commercial contracts.
- 4) Basic Principles of Freedom of Communication (Navigation). The essence of this principle is that all parties have equal access to communication. Communication or navigation is the freedom of parties to communicate for trade purposes with anyone using various means of navigation or communication, whether land, sea, air or electronic means.

Every law or rule is created for a specific purpose. Likewise with international trade law. This rule was created with the aim of:

- a) protection of trade activities which is the only way to develop a country's economy;
- b) achieve stable international trade;
- c) avoiding national trade policies and practices that harm other countries;
- d) increase world trade volume;
- e) creating profitable trade for the economic development of each country;
- f) improve human living standards
- g) provide more employment opportunities;
- h) develop a multilateral trading system that creates fair and open trade policies for all countries;
- i) increase the utilization of the world's wealth resources so that it can increase buying and selling transactions.

Even though the objectives in international trade law mentioned above are good, international trade law still has quite a lot of weaknesses. These weaknesses can be found in other areas of law, namely the existence of exceptions or "rescue" clauses that relax legal obligations. These weaknesses include:

- a) International trade law is largely pragmatic and permissive. This results in the rules of international trade law being less objective in "forcing" countries to comply with the law (Krisch, 2006). In reality, countries that have political power and economics utilizes trade as a means of political policy.
- b) The rules of international trade law are conciliatory and persuasive (not coercive). This weakness is also a strength for the development of international trade law which causes or enables the development of this law in the midst of a crisis (Brower & Tepe, 1975)/

2. Industrial Revolution 5.0


The notion of Industrial Revolution 5.0 is currently undergoing development and discussion. It primarily pertains to the ongoing advancements in automation and digitization within the industrial and production sectors (Calaghan, 2019). The primary emphasis of this notion is in the amalgamation of technology and human elements, alongside the imperative to cultivate systems that exhibit heightened adaptability and responsiveness to alterations within the production milieu (Costa et al., 2022). The Industrial Revolution 5.0 places greater emphasis on the incorporation of cutting-edge technologies, including artificial intelligence (AI), the Internet of Things (IoT), and robotics, in conjunction with human expertise and innovation. This integration aims to foster the advancement of production systems that are characterized by enhanced efficiency, flexibility, sustainability, and welfare improvement (George & George, 2020). The objective of this endeavor is to develop a manufacturing system that exhibits enhanced adaptability to fluctuations in market demand, places greater emphasis on enhancing customer experience, and maximizes the efficient utilization of finite natural resources. In general, it is anticipated that Industrial Revolution 5.0 will yield numerous advantages for various stakeholders, including industry, customers, workers, and society at large. These benefits encompass enhanced productivity, improved quality, and heightened production safety. Additionally, this revolution is poised to generate novel employment prospects while mitigating adverse environmental consequences (Alkhatib & Lebdy, 2021).

The Industrial Revolution 5.0 began when industry 4.0 had reached its peak and experts believe that the 4.0 era can be perfected again. Industry 4.0, which was introduced in 2011, is intended to modernize business processes, especially in the manufacturing industry (Xu et al., 2021). This era also introduced many technologies that many industry players are still adapting to, such as AI and IoT to make their work easier. Then in 2017, Japan was the first to introduce the vision of Industrial Revolution 5.0. At that time, they called this concept Society 5.0 at the CeBIT exhibition in Germany (Elitan & Anatan, 2020). While industry 4.0 echoes the discourse that AI will replace humans, industry 5.0 does not think so.

As a refinement of the 4.0 era, technology such as AI and robots are here to work together with humans. The Industrial Revolution 5.0 encourages efficiency and productivity thanks to technology utilized by human intelligence (Elangovan, 2021). For example, many people use AI technology called ChatGPT to find out and do many things. However, ChatGPT will not be able to function optimally without the support of human intelligence in giving the right commands. Another example is the use of HRIS software with cloud technology. With human help, this technology can streamline HR work and even in certain features is oriented towards employee welfare. More than just economic efficiency and productivity, Industry 5.0 specifically reflects a shift in focus from economic value to a shift that focuses on social value and welfare, especially of the workers involved in it.

The perceived benefits of Industry 5.0 are predicted to be more than just increasing productivity and reducing costs. When an automation process can reduce time from repetitive work, employees can focus on strategic work, thereby creating a job with high skill requirements (Pathak et al, 2019). Here are some other advantages.

- 1) Increased Efficiency and Productivity. The Industrial Revolution 5.0 will enable increased efficiency and productivity in various industries with process automation and the use of new technologies such as the use of AI and data analysis. For example, in the HR sector, the use of HRIS technology allows companies to integrate company data. This can make it easier for companies to manage employee data and inventory on one platform that is easy to access anytime and anywhere.

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- 2) Improved Product and Service Quality. By using advanced technology, companies can improve the quality of their products and services, thereby increasing customer satisfaction and strengthening their position in the market.
 - 3) Increased Production Flexibility. The Industrial Revolution 5.0 will allow companies to produce more diverse products and adapt to market demands quickly.
 - 4) Increased Work Safety. Technological developments towards the 5.0 era will enable the use of robots and other advanced technologies to reduce the risk of accidents and injuries in the workplace.
 - 5) Sustainability Improvement. The essence of the 5.0 era is to help companies care more about the environment. This can be started by using green energy technology and production processes that are more efficient and responsible not only for society, but also for their impact on the environment.
 - 6) Increasing competitiveness. By implementing advanced technology and more efficient production processes, companies can increase their competitiveness in the global market and expand their market share. Existing human resources are also required to continue to improve their skills so that they not only do repetitive work, but are also able to have strategic thinking to improve performance.
 - 7) Improved Quality of Life. The Industrial Revolution 5.0 can help improve the quality of human life by increasing access to better health and education services, as well as enabling the development of smart cities *that* are more sustainable and environmentally friendly.

C. METHOD

The employed methodology for legal research is the normative juridical research method. In this particular study, law is conceptualized as either the written content found in statutory regulations (referred to as law in books) or as rules and norms that serve as standards for socially acceptable human conduct (Ali, 2021). The primary distinguishing feature of this legal research is in its reliance on legal material as the primary source, rather than social data or factual information. This is due to the nature of normative legal research, which focuses on the study of legal content encompassing normative standards (Soekanto, 2003). The employed data analysis technique is descriptive analytical, which is utilized to ascertain the substance or significance of objects inside legal products. This analysis serves as a point of reference for addressing and examining the legal issues under investigation. The author employs the library research approach to gather data, wherein an inventory of research-related reading materials such as books and journal articles is conducted.

D. RESULTS AND DISCUSSION

1. The impact of the 5.0 revolution on international trade law

From the definition of Industry 5.0, it can be seen that this is an innovative production model whose focus is based on the interaction between humans and machines. This involves utilizing collaboration between increased power and efficient machines as well as the innovative potential of humans (Nel-Sanders, 2023). Existing projects based on industry 5.0 are carried out related to the optimization of artificial intelligence leading to customized products. Industry 5.0 provides benefits to industry for both workers and society. Industry 5.0 provides benefits to industry for both workers and society. This industrial adoption supports technology that makes good use of natural resources. Human robotics, symbolizes the dream of the future of artificial intelligence It helps in human decision making and is supported by technology that helps revolutionize various sectors (Nel-Sanders, 2023).

The influence of the Industrial Revolution 5.0 on international trade law can also be complex and have a significant impact depending on various factors. Below are some of the potential impacts of the Industrial Revolution 5.0 on international trade law.

a) Regulations and Compliance as in GATT

The General Agreement on Tariffs and Trade (GATT) does have a central role in regulating international trade. GATT, which was first introduced in 1947 and later developed into the World Trade Organization (WTO) in 1995, forms an important legal framework in regulating trade policies between countries. However, along with the emergence of new technology in the Industrial Revolution 5.0 era, there is a need for adaptation and improvement in international trade law (Brand, 1989).

First of all, in the context of technology regulation, GATT and other related international trade agreements need to be updated to reflect new emerging challenges. This includes discussing the regulation of

trade in high-tech products, especially those involving data security and privacy protection. Governments and regulatory bodies need to evaluate how technology products and services should be classified in tariff and trade systems (Furthermore, in terms of trade between entrepreneurs, international trade law must take into account the growth of electronic commerce and digital business transactions. This includes regulating electronic contracts, online dispute resolution, and consumer protection in electronic commerce. As the complexity of the digital business ecosystem increases, international agreements need to provide a clear and fair legal framework for all stakeholders.

It is also important to detail provisions regarding product certification and technical standards in international trade agreements. In an era where technology increasingly dominates global trade, uniformity in standards and certification processes is critical to facilitating smooth international trade and avoiding excessive technical barriers. International cooperation will continue to be key in overcoming these challenges. Countries need to collaborate in developing agreements and regulations relevant to new technological and business developments. Along with this, the WTO and other international trade bodies also need to adapt to become more responsive to changes in an increasingly technologically sophisticated global trade environment. In this way, international trade law can meet today's demands and facilitate fair and sustainable trade in the era of the Industrial Revolution 5.0.

b) Intellectual Property Protection

Intellectual property refers to designs, technologies or products invented by certain individuals or companies. Rights refer to the recognition that the inventor must be rewarded, this reward can be in the form of exclusive rights to use it, or to collect royalties by renting out its use (Duffy, 2004). IPR protection is provided through copyright, patent rights, or a trademark, to the owner or inventor. Based on Law Number 19 of 2002 Article 1 paragraph 1 concerning Copyright, what is meant by copyright is the exclusive right for the Creator or recipient of the right to publish or reproduce his work or give permission to do so without reducing restrictions according to statutory regulations applicable. The legal basis governing intellectual property rights in Indonesia includes, Law Number 19 of 2002 concerning Copyright, Law Number 6 of 1982 concerning Copyright (State Gazette of the Republic of Indonesia of 1982 Number 15), Law Number 7 of 1987 concerning Amendments to Law Number 6 of 1982 concerning Copyright (State Gazette of the Republic of Indonesia of 1987 Number 42) and Law Number 12 of 1997 concerning Amendments to Law Number 6 of 1982 as amended by Law Number 7 of 1987 (State Gazette of the Republic of Indonesia of 1997 Number 29)

Intellectual property rights are also related to international trade, this is stated in TRIPS. TRIPS (Trade Related aspects of Intellectual Property Rights) is an international agreement in the field of IPR related to trade. In this context, TRIPS (Trade-Related Aspects of Intellectual Property Rights) is one of the most important international agreements in regulating trade-related intellectual property rights. TRIPS is an integral part of the World Trade Organization (WTO) agreement signed by all WTO member countries.

TRIPS aims primarily to normalize and standardize IPR protection throughout the world, ensuring that WTO member countries have a similar legal framework in terms of IPR. This agreement covers various aspects of intellectual property rights, including patents, copyrights, trademarks, trade secrets, industrial designs, and plant variety protection. In the digital era, TRIPS has become more relevant because technology has made it easier to widely disseminate and reproduce intellectual works, both positively and negatively. On the one hand, technology allows creative industry players to create, distribute and protect their work more effectively. However, on the other hand, this also opens up the potential for violations of intellectual property rights on a larger scale and with a higher level of complexity.

TRIPS provides a strong legal framework to protect intellectual property rights, including rules related to law enforcement, dispute resolution, and sanctions measures in cases of infringement. This provides a tool for WTO member countries to protect creators, inventors and owners of their trademarks in the scope of international trade. Apart from that, TRIPS also creates a balance between intellectual property rights and public interests. This means that the agreement recognizes the importance of access to technology and knowledge for social and economic development, while ensuring adequate protection for owners of intellectual property rights.

c) Electronic commerce (E-Commerce)

Electronic Commerce (E-commerce) in online shopping is related to one area of law, namely International Commercial Law. In Indonesia, E-commerce is regulated in Law Number 11 of 2008 concerning Information and Electronic Transactions, Government Regulation Number 82 of 2012 concerning Implementation

of Electronic Systems and Transactions and Law Number 8 of 1999 concerning Consumer Protection (UUPK) as law. national law which regulates the provisions for e-commerce transactions as well as adequate legal protection for consumers in carrying out e-commerce transactions.

Furthermore, E-commerce has become an important pillar in international trade with its various advantages, such as transaction efficiency and the ability to transcend national borders. The regulation of e-commerce in international law can mainly be found in the UNCITRAL Model Law on Electronic Commerce, a guideline that is not legally binding on countries, but provides a recommended framework for countries to integrate it into their national law (Overby, 1999). One of UNCITRAL's main focuses is establishing legal requirements to make e-commerce transactions binding on the parties. This includes the legal recognition of electronic contracts, allowing agreements in digital form to have the same legal force as physical contracts. In the era of Industrial Revolution 5.0, where technology increasingly dominates global trade, this kind of arrangement is becoming increasingly important (Kwilinski et al, 2019).

The rapid growth of international electronic commerce requires international trade law to accommodate various aspects related to e-commerce. One key aspect is digital payments, which are increasingly becoming the standard in online transactions. Clear regulations regarding digital payments can increase consumer confidence and reduce the risk of fraud. Additionally, international trade law needs to address aspects of electronic contracts. This includes recognizing electronic signatures as valid and clarifying when an electronic contract is considered valid and binding. This is an important step in ensuring legal security for parties involved in e-commerce transactions. Online dispute resolution is another area that needs attention. In the world of e-commerce, disputes between consumers and sellers can arise at the international level. Effective online dispute resolution mechanisms can help avoid expensive and complex cross-border litigation.

d) logistics and transportation

Technological advances in logistics and transportation, such as autonomous vehicles and drones, have brought about significant changes in the way goods are moved across international borders. In the era of Industrial Revolution 5.0, this aspect is becoming increasingly important and creates challenges and opportunities for international trade law. Autonomous vehicles, which can move without a human driver, enable greater efficiency in the international transport process. However, regulations regarding autonomous vehicles are still in the development stage, including issues related to road safety, insurance and legal liability in case of accidents. International trade law needs to address these aspects to facilitate the use of autonomous vehicles in cross-border trade (Achar, 2019).


Drones, or unmanned aircraft, have become an efficient tool in delivering goods, especially in express deliveries and delivering goods to hard-to-reach areas. However, the use of drones across national borders raises questions about international air laws, permits and regulations that vary across countries. International trade law needs to consider how to effectively regulate the use of drones in the context of cross-border trade. In addition, international trade law must take into account the increasingly diverse safety, certification and consumer protection standards associated with international transportation. In order to facilitate smooth and safe international trade, international cooperation in developing uniform standards is essential. This will allow goods to be moved across borders with legal certainty and with risks well managed.

e) Dispute resolution

International trade dispute resolution mechanisms have undergone significant adaptation in dealing with new technology, especially in disputes involving technological aspects such as patent disputes or violations of intellectual property rights (IPR). One of the main changes is the increased use of technology in the dispute resolution process. Online arbitration and online dispute resolution platforms have become more commonly used, allowing parties involved in a dispute to participate without having to physically meet in a specific location. This speeds up the settlement process and reduces costs associated with travel and physical presence (Gioi, 2023).

Additionally, in technological disputes such as patents or IPR violations, experts and arbitrators who have a deep understanding of the technical aspects are becoming increasingly important. Dispute resolution mechanisms have attempted to involve technical experts in the assessment and decision process. They can provide the technical insight needed to understand the complexity of the problem and help produce fair decisions.

The law has also accommodated technological aspects by establishing clearer rules on how intellectual property rights and patents are treated in the scope of international trade. Trade agreements, such as TRIPS (Trade-Related Aspects of Intellectual Property Rights), provide a strong legal framework to protect intellectual property



rights and provide clear guidelines for resolving IPR-related disputes. In addition, international trade law also recognizes the importance of international cooperation in resolving technological disputes. Countries often work together to develop internationally applicable guidelines and standards, which can help avoid conflict and facilitate smoother dispute resolution. Thus, international trade dispute resolution mechanisms continue to adapt to new technologies and technological aspects in dispute resolution. This aims to ensure that dispute resolution remains relevant, effective and fair in the face of changes in an increasingly technologically sophisticated trading environment.

2. Challenges of International Trade Law in the era of the Industrial Revolution 5.0

With the advent of Industrial Revolution 5.0, there is awareness of the potential for significant challenges in international trade law, and proactive steps are being taken to identify and address these challenges. Rapid technological changes, such as artificial intelligence, the Internet of Things, and blockchain, have had a profound impact on the way international trade is conducted. However, efforts have been made to understand and adapt international trade law to these changes, including new regulations governing data protection, privacy, and e-commerce. International cooperation and legal adaptation are key in ensuring that the development of the Industrial Revolution 5.0 goes hand in hand with justice, efficiency and legal certainty in international trade. The following are some of the main challenges that arise in terms of:

a) Competition is getting tougher because of E-Commerce

Traditionally, international trade rules are based on the distinction between physical goods and services. When products can be identified as goods or services, applicable trade regulations can be applied more clearly. However, with the industrial revolution 5.0 with e-commerce becoming increasingly dominant, the distinction between physical goods and services has become blurred (Golic, 2019). For example, in e-commerce, most “products” are digital, such as software, digital content, online services, and so on. These products can be easily sent via the internet to consumers in various countries without any physical restrictions or borders.


As a result, traditional international trade rules may become less relevant or clear enough when dealing with these products. This creates legal uncertainty in terms of tax arrangements, trade regulations and consumer protection. Questions arise as to whether these products should be considered goods or services, and how regulations and taxes should be applied. Apart from that, E-commerce also allows businesses to operate globally without having physical offices in various countries. This obscures a company's identity and origins, making enforcement of international trade laws and regulations more difficult.

In facing these challenges, efforts need to be made to adapt international trade rules to better suit the rapidly evolving realities of electronic commerce. International cooperation in developing relevant frameworks and regulatory updates are important steps to address this issue. Awareness of this change in the international trade paradigm is the first step to identifying the right solutions so that trade remains fair, efficient and in line with technological developments.

b) The emergence of new trends in the global economy

The emergence of new trends in the global economy, such as the digital economy and green economy, has indeed brought about significant changes in the international trade and investment landscape. This trend requires new and more adaptive legal regulations to facilitate sustainable and innovative economic development. Although there are challenges in facing these changes, international economic law also has great potential (Jabbour et al, 2020). The digital economy, for example, has opened up new opportunities in international trade. Businesses can access global markets more quickly through digital platforms and e-commerce. However, legal regulations need to ensure consumer protection, data protection and effective dispute resolution in the context of e-commerce. With the right legal framework, countries can harness the potential of digital trade to increase their economic growth.

On the other hand, the green economy is also an important trend in international trade. Countries are increasingly realizing the importance of investing in environmentally friendly technologies and reducing the environmental impact of economic activities. Legal regulations that support investment in these sectors can create new jobs and reduce carbon emissions. Additionally, globalization has opened the door to greater international trade and investment. Countries that can create an attractive legal framework for foreign investors and business



people will be able to take advantage of this opportunity to improve their economies. This includes drafting mutually beneficial trade agreements and providing strong legal protection for all parties.

In facing global economic changes, it is important to understand that international economic law can act as a catalyst for sustainable economic growth. By adopting appropriate regulations, incorporating innovation in regulations, and promoting international cooperation, countries can optimize the potential of these new economic opportunities and improve the welfare of their societies in a dynamic global economic era.

c) Adopting new technological developments in international trade law

Adopting new technological developments in international trade law reflects an effort to incorporate the latest technology into the legal framework governing trade between countries. In the era of Industrial Revolution 5.0, technologies such as artificial intelligence, Internet of Things (IoT), and blockchain have drastically changed the way business is run. Therefore, international trade law needs to accommodate these changes by updating relevant regulations and rules.

One concrete example is regulations related to electronic commerce or E-commerce. International trade law must recognize and regulate aspects such as electronic contract agreements, consumer protection in online commerce, as well as taxation and data security issues in online transactions. In addition, the use of blockchain technology also influences the process of resolving international disputes and smart contracts that are executed automatically (Krasniqi & Sojeva, 2018).

By adopting new technological developments, international trade law can become more relevant and responsive to global economic developments. It can also help facilitate more efficient and fair international trade in this digital era, while ensuring compliance with internationally accepted trade norms and principles. Therefore, efforts to integrate the latest technology into international trade law is an important step in maintaining the sustainability and relevance of the international trade legal framework.

d) Maintain privacy and security of information and data

Companies that are successful in this era are leveraging new technologies to access global markets more efficiently. However, it is important to remember that trade policy cannot be separated from various other policies that also have a significant impact on digital trade. One of the central issues in this era is the increasingly widespread cross-border data exchange. This has created concerns in terms of data privacy and security, both by governments and citizens. Many people worry that their personal information is being collected, transferred, and used without their knowledge or permission (Yakoleva, 2018).

In these cases, individual privacy and data security are priorities. In addressing these concerns, calls for broader and more expansive Internet regulation have increased. Such regulations may include strict requirements regarding the protection of personal data, consent to use of data, as well as cybersecurity measures necessary to protect sensitive data. However, it is important to find the right balance between privacy protection and data security with the need for smooth international trade. Too much regulation can hinder the cross-border data flows necessary for business and global economic growth.

Therefore, the challenge for international trade law is to develop a balanced framework, which enables efficient digital trade while ensuring adequate data privacy and security. International cooperation in addressing this issue is very important, because data privacy and security issues often cross borders. International legal frameworks must continue to adapt to create an environment conducive to digital trade that is fair and safe for all parties involved.

e) Cybersecurity

Increasingly serious cyber threats are one of the crucial challenges in international trade law, especially in the era of rapidly developing digital trade. Cybersecurity is an important element that needs to be considered in every aspect of digital commerce. Cyber threats can include attacks on critical infrastructure, theft of sensitive data, hacking of financial systems, and more. To maintain the integrity of international trade, international trade law needs to accommodate efforts to protect businesses and infrastructure from cyber attacks (Gagliani, 2020). This includes developing regulations that require organizations and companies to maintain cyber security, as well as reporting cyber attacks if they occur. Protection of customers' personal data and privacy policies are also a major focus, especially in e-commerce.


Apart from that, resolving disputes related to cyber security also needs to be an integral part of international trade law. An effective and fast dispute resolution mechanism needs to be established to handle cyber attack incidents involving parties operating in various countries. International cooperation in combating cyber threats is also very important. Countries need to share information, experience and resources in an effort to counter increasingly sophisticated cyber threats. International legal frameworks should encourage this collaboration and regulate states' obligations to address cross-border cyberattacks. By considering cyber security as an important element in international trade law, the global community can ensure that digital trade continues to operate safely, fairly and efficiently. This helps protect businesses, personal data, and critical infrastructure from potential threats that could harm the global economy and stability.

E. CONCLUSION

The Industrial Revolution 5.0 has had a significant impact on international trade law. With the development of technologies such as artificial intelligence, the Internet of Things, and blockchain, international trade regulations need to adapt to remain relevant in this digital era. One of the main impacts is in terms of regulation and compliance, as seen in GATT (General Agreement on Tariffs and Trade). Regulation of high-tech products, data protection and electronic commerce are major concerns that require refinement and updating in international trade agreements. Intellectual property protection has also become essential, especially in an era where technology facilitates the widespread dissemination and reproduction of intellectual works. Electronic commerce is experiencing rapid growth, requiring clear regulations in terms of electronic contracts, online dispute resolution and consumer protection. Meanwhile, advances in logistics and transportation, such as autonomous vehicles and drones, raise questions about safety regulations and product certification. Finally, the dispute resolution mechanism has also undergone significant adaptation, with the use of technology in the settlement process. Awareness of this challenge is the first step to ensure that international trade law can respond to the dynamics of the Industrial Revolution 5.0 efficiently, fairly and safely.

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