Dynamics Of Consumer Protection Law In The Digital Era: Case Study On E-Commerce In Indonesia

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Abstract.

The digital era has brought significant changes to commercial activities, including the rise of e-commerce as a key pillar of the digital economy in Indonesia. However, this development also poses various challenges in consumer protection, such as data security, information transparency, and dispute resolution. This article aims to analyze the dynamics of consumer protection law in the context of e-commerce in Indonesia through a case study approach. The study examines relevant regulations, such as the Consumer Protection Act and the Electronic Information and Transactions Act, and their implementation in safeguarding consumer rights. The findings reveal a disparity between the rapid growth of e-commerce and the readiness of regulations to adapt to technological advancements. Furthermore, gaps remain in law enforcement, particularly in monitoring digital platforms and effectively resolving disputes. This article recommends strengthening responsive regulations, enhancing public digital literacy, and fostering collaboration between the government, businesses, and consumers to create a secure and equitable e-commerce ecosystem.

Keywords: Consumer Protection, E-commerce, Digital Era, Law and Indonesia.

I. INTRODUCTION

The development of information and communication technology has brought about major changes in various aspects of life, including in the trade sector. One of the most prominent forms of transformation is the emergence of e-commerce, namely digital platform-based trading that utilizes the internet as the main medium for conducting transactions. In Indonesia, e-commerce has experienced significant growth, supported by increased internet penetration, the use of smart devices, and changes in people's consumption patterns. Based on data released by the Indonesian Internet Service Providers Association (APJII), the internet penetration rate in Indonesia reached 78.19% in 2023, making Indonesia one of the largest e-commerce markets in Southeast Asia.¹E-commerce offers various conveniences, such as unlimited accessibility across space and time, a wide selection of products, and increasingly practical digital payment systems. However, on the other hand, the rapid development of e-commerce also brings new challenges, especially related to consumer protection. Consumers often face various problems, ranging from unclear product information, fraud, delivery of inappropriate goods, to threats to the security of personal data.²This problem shows that the dynamics of e-commerce development have not been fully balanced by an adequate consumer protection system.

In Indonesia, the legal framework for consumer protection is regulated in various regulations, such as Law Number 8 of 1999 concerning Consumer Protection (Consumer Protection Law) and Law Number 11 of 2008 concerning Information and Electronic Transactions (ITE Law) which was updated by Law Number 19 of 2016.³These two regulations serve as the legal basis for protecting consumers from detrimental actions by business actors. However, the implementation of these regulations in the context of e-commerce is often considered suboptimal. One of the reasons is the absence of an adequate monitoring mechanism for digital

platforms and the lack of effective dispute resolution efforts.⁴With this background, this article aims to analyze the dynamics of consumer protection law in the digital era, especially in the e-commerce sector in Indonesia. Through a case study approach, this article will evaluate the effectiveness of existing regulations, identify challenges in their implementation, and provide recommendations to strengthen the consumer protection system in Indonesia.

II. THEORETICAL STUDY

This theoretical study aims to provide a conceptual basis related to consumer protection in the context of e-commerce, covering the concept of consumer protection, characteristics of e-commerce, and relevant legal approaches in Indonesia. Consumer protection is any effort that ensures legal certainty to provide protection to consumers.⁵In the Indonesian context, consumer protection regulations are regulated through Law Number 8 of 1999 concerning Consumer Protection (Consumer Protection Law). This law aims to create a balance between the rights and obligations of consumers and business actors.⁶Consumer rights regulated in Article 4 of the Consumer Protection Law include:

- The right to comfort, security and safety in consuming goods and/or services.
- The right to correct, clear and honest information regarding goods and/or services.
- The right to receive compensation if the goods or services received do not comply with the agreement.⁷

In the digital era, the realization of these rights is often hampered by the nature of e-commerce transactions which are different from conventional trade. The main challenges lie in information transparency, data security, and effective dispute resolution mechanisms.⁸E-commerce is defined as trading activities conducted via electronic networks, especially the internet.⁹The main characteristics of e-commerce that influence the dynamics of consumer protection include:

- a. Transaction Virtualization: The entire transaction process takes place digitally without direct interaction between consumers and business actors. This often poses risks related to trust and product authenticity.¹⁰
- b. Anonymity: Consumers and businesses often do not know each other personally, which can open up opportunities for fraud.¹¹
- c. Market Globalization: E-commerce enables cross-border transactions which raises challenges of legal jurisdiction and regulatory differences between countries.¹²
- d. Dependence on Technology: The sustainability of e-commerce depends on technological infrastructure that is vulnerable to cyber threats, such as data theft or malware attacks.¹³The legal approach to consumer protection in e-commerce includes two main aspects, namely substantive regulations and procedural regulations. The Consumer Protection Law and the Information and Electronic Transactions Law (UU ITE) are the main legal basis for protecting consumers in the digital realm.
- Consumer Protection Act: Focuses on consumer rights regarding products and services, as well as the obligation of business actors to provide clear and non-misleading information.¹⁴

• ITE Law: Regulates electronic transactions, including the obligation of business actors to maintain the security of consumer data and guarantee the authenticity of transactions.¹⁵

Consumer dispute resolution in Indonesia can be done through two channels, namely litigation (court) and non-litigation (alternative dispute resolution).¹⁶Non-litigation mechanisms, such as mediation, arbitration, or conciliation, are often considered more effective in handling e-commerce related disputes. In addition, the National Consumer Protection Agency (BPKN) also plays a role in providing recommendations to the government regarding consumer protection policies.¹⁷In the digital era, consumer protection faces new challenges that have not been fully accommodated in existing regulations. For example, the aspect of personal data protection has not been specifically regulated until the birth of Law Number 27 of 2022 concerning Personal Data Protection (UU PDP).¹⁸This law is an important milestone in providing greater protection for consumers in the digital world. This theoretical study emphasizes that strengthening regulations that are adaptive to technology, increasing digital literacy in society, and effective supervision of digital business actors are strategic steps to realize better consumer protection in the e-commerce era.

III. METHODS

The research method is an important step to ensure the accuracy and validity of data in the analysis of the dynamics of consumer protection law in the digital era, especially in the context of e-commerce in Indonesia. This study uses a qualitative approach with a normative legal method, which focuses on the study of legal materials related to consumer protection regulations and e-commerce. This study uses a normative legal approach, namely a method that aims to analyze applicable legal rules, legal principles, and legal doctrines relevant to consumer protection in e-commerce transactions.¹⁹This approach is carried out by reviewing applicable laws and regulations, such as Law Number 8 of 1999 concerning Consumer Protection, Law Number 11 of 2008 concerning Electronic Information and Transactions (UU ITE) as amended by Law Number 19 of 2016, and Law Number 27 of 2022 concerning Personal Data Protection. This approach is also complemented by an analysis of relevant literature, journals, and case studies. The data sources in this study consist of:

- Legislation governing consumer protection and electronic transactions, including the Consumer Protection Law, the ITE Law, and the PDP Law.²⁰
- Court decisions regarding e-commerce disputes as case study material.²¹
- Scientific literature, such as books, journals, and articles that discuss consumer protection issues in e-commerce.²²
- Statistical data from trusted institutions, such as the Central Statistics Agency (BPS) and the Indonesian Internet Service Providers Association (APJII), which provides an overview of the growth of e-commerce in Indonesia.²³
- Legal dictionaries and encyclopedias to support the explanation of the legal concepts used.²⁴

Data collection was conducted through library research, a method that aims to collect data from written sources. In this study, the data collected includes:

- Text of related laws and regulations.
- Scientific literature from law and technology journals.

• Case studies and annual reports from related institutions, such as BPKN and the Ministry of Communication and Information (Kominfo).²⁵Data analysis was carried out using a descriptiveanalytical method, namely a technique that aims to describe applicable legal regulations, then analyze them critically according to the problems raised in the research.²⁶The analysis process involves three main stages, Inventory and Identification: Inventorying all regulations and legal doctrines relevant to consumer protection in e-commerce. Legal Interpretation: Interpreting existing legal regulations to assess whether they meet the needs of consumer protection in the digital era. Evaluation: Evaluating the gap between existing regulations and actual needs in the field, especially in the context of implementation. The validity of the data is guaranteed through source triangulation, namely comparing information from various primary, secondary, and tertiary sources to ensure the consistency and validity of the research results.²⁷This research was conducted in Indonesia with a focus on national regulations governing consumer protection and electronic transactions. The research period was from January to December 2025, taking into account the latest data and cases related to e-commerce.

IV. RESULTS AND DISCUSSION

This study aims to analyze the dynamics of consumer protection law in the digital era with a focus on e-commerce in Indonesia. Based on data collection and analysis, a number of important findings were found covering the implementation of consumer protection regulations, challenges faced in the context of ecommerce, and efforts that have been made to overcome these challenges. The results of the study show that Indonesia has a fairly comprehensive legal framework to protect consumers, especially through Law Number 8 of 1999 concerning Consumer Protection (Consumer Protection Law) and Law Number 11 of 2008 concerning Information and Electronic Transactions (ITE Law).²⁸The Consumer Protection Law emphasizes that consumers have the right to clear, correct and honest information regarding goods or services offered by business actors.²⁹Meanwhile, the ITE Law provides a legal basis for electronic transactions, including personal data protection and information system security.³⁰ However, the implementation of these two laws in the context of e-commerce faces various challenges. One of the main challenges is the imbalance of information between consumers and businesses. Businesses often present unclear or misleading product information, making it difficult for consumers to make the right decisions.³¹In addition, many consumers become victims of online fraud, such as sending goods that do not match the description or are not sent at all.³² Another challenge is the protection of consumer personal data. In e-commerce transactions, consumers are often required to provide personal data, such as name, address, telephone number, and credit card information.

³³This data is vulnerable to misuse by irresponsible parties, both by business actors and third parties. Although Law Number 27 of 2022 concerning Personal Data Protection (UU PDP) has been passed, its implementation is still not optimal, especially in terms of supervision and law enforcement against violations that occur.³⁴In addition, another challenge identified is consumer dispute resolution. The available litigation mechanisms are often inefficient, as they require significant time and costs.³⁵Meanwhile, non-litigation mechanisms, such as mediation or arbitration, have not been widely utilized by consumers due to a lack of

socialization and accessibility.³⁶In some cases, consumers also face difficulties in suing foreign-based businesses due to differences in legal jurisdiction.³⁷To overcome these challenges, various efforts have been made by the government, business actors, and consumer protection institutions. The government has formed the National Consumer Protection Agency (BPKN) to receive consumer complaints and provide related policy recommendations.

³⁸In addition, the Ministry of Communication and Information (Kominfo) continues to strive to improve digital literacy in the community so that consumers are more careful in making transactions on ecommerce platforms.³⁹ E-commerce platforms have also begun implementing more proactive policies to protect consumers. For example, some platforms provide an "escrow" feature, or payments are held until the goods are received by the consumer.⁴⁰In addition, the consumer review and assessment system is also one way to increase transparency and accountability of business actors. However, strategic steps are still needed to strengthen consumer protection in the digital era. One of them is updating existing regulations to be more adaptive to technological developments, such as the use of artificial intelligence in e-commerce transactions.⁴¹The government also needs to strengthen supervision of digital business actors, including those based abroad, through international cooperation.⁴² Overall, the results of this study indicate that although Indonesia has an adequate legal basis to protect consumers in e-commerce, its implementation still faces various obstacles. Therefore, collaborative efforts are needed between the government, business actors, and consumers to create a safer, more transparent, and fair digital ecosystem.

Implementation of Law Number 8 of 1999 and Law Number 11 of 2008 in the Dynamics of Consumer Protection: Before and After the Existence of the Law

Consumer protection in Indonesia has experienced significant developments after the enactment of Law Number 8 of 1999 concerning Consumer Protection (Consumer Protection Law) and Law Number 11 of 2008 concerning Information and Electronic Transactions (ITE Law). These two regulations are important milestones in providing legal protection for consumers, especially in the digital era marked by the rapid development of e-commerce.Before the enactment of Law Number 8 of 1999, consumer protection in Indonesia was still very weak. There were no specific regulations that clearly regulated the rights and obligations of consumers and business actors. The legal relationship between consumers and business actors was generally based on the provisions of the agreement in the Civil Code (KUHPerdata), especially Article 1320 concerning the requirements for the validity of an agreement.⁴³However, this approach has limitations because it does not provide adequate protection for consumers as the weaker party. Business actors often take advantage of their dominant position by providing non-transparent or even misleading information to consumers. In addition, the consumer dispute resolution.⁴⁴Law Number 8 of 1999 brought about major changes in consumer protection efforts in Indonesia. This law regulates in detail consumer rights, business actors' obligations, and dispute resolution mechanisms.

⁴⁵In Article 4, consumers are given the right to comfort, security and safety in using goods or services, as well as the right to obtain correct, clear and honest information.⁴⁶After this law is passed, business actors are required to comply with consumer protection standards, including providing accurate information about products, maintaining product safety, and providing compensation for losses caused by

defective products.⁴⁷In addition, the establishment of the National Consumer Protection Agency (BPKN) as a supervisory agency provides consumers with better access to advocacy and complaints.⁴⁸Before the enactment of Law Number 11 of 2008, consumer protection in electronic transactions was almost not specifically regulated. The development of digital technology and the internet has created new challenges, such as increasing cases of online fraud, misuse of personal data, and difficulties in identifying business actors. Electronic transactions are largely based on trust without clear regulations, so consumers are often disadvantaged without adequate protection mechanisms.⁴⁹For example, consumers who make transactions on e-commerce often face the risk of receiving products that do not match the description or even not receiving the product at all. In addition, consumers have no guarantee of security for their personal data that is often requested by business actors for transaction purposes.

⁵⁰The enactment of Law Number 11 of 2008 provides a legal basis for electronic transactions and strengthens consumer protection in e-commerce. This law regulates various aspects, such as the validity of electronic documents as legal evidence, the obligations of business actors in maintaining the security of information systems, and the protection of consumers' personal data.⁵¹Articles 27 and 28 of the ITE Law prohibit the distribution of false or misleading information that can harm consumers. This provides more protection for consumers who often fall victim to inaccurate information on e-commerce platforms.⁵²In addition, Article 36 of the ITE Law regulates sanctions for business actors who are negligent in maintaining the security of consumer data, thus encouraging business actors to be more responsible in data management.⁵³However, the implementation of the ITE Law still faces obstacles, especially in terms of supervision and law enforcement. Many business actors operating digitally, including those based abroad, are difficult to reach by Indonesian legal jurisdiction. To overcome this, more intensive international cooperation is needed, as well as increasing the capacity of law enforcement in the cyber sector.⁵⁴

Dynamics of Consumer Protection in the Digital Era

After the implementation of the two laws, consumer protection in Indonesia has become more structured and has a strong legal basis. However, rapid technological developments continue to pose new challenges that have not been fully accommodated by existing regulations. To that end, the government has passed Law Number 27 of 2022 concerning Personal Data Protection (UU PDP) as an effort to complement consumer protection in the digital era.⁵⁵Overall, Law Number 8 of 1999 and Law Number 11 of 2008 have had a positive impact in improving consumer protection in Indonesia. However, there is still a need for regulatory updates that are more adaptive to technological developments and strengthening supervision of business actors, both domestically and abroad.

The Relationship between Research Results and Basic Theory

Research on the dynamics of consumer protection law in the digital era with a focus on e-commerce in Indonesia provides results that are relevant to the basic theories used in this analysis, namely consumer protection theory and responsive legal theory. The results of the study indicate that the implementation of Law Number 8 of 1999 concerning Consumer Protection (Consumer Protection Law) and Law Number 11 of 2008 concerning Information and Electronic Transactions (ITE Law) has provided a clearer legal framework in protecting consumers, but still faces challenges in its implementation. Consumer protection theory emphasizes that consumers are in a weaker position compared to business actors, so they need legal protection to ensure balance in consumer-business actor relations.⁵⁶This theory includes three main elements:



consumer rights, business actors' responsibilities, and government intervention through regulation.⁵⁷The results of the study show that the Consumer Protection Law explicitly regulates consumer rights, such as the right to correct information, safety in using products, and the right to receive compensation for losses experienced.⁵⁸In addition, the responsibilities of business actors are also emphasized, including the obligation to provide clear information, maintain product quality, and provide compensation in cases of product defects.

⁵⁹However, the research results also revealed that in practice, the imbalance of information between consumers and business actors is still a major challenge, especially in the context of e-commerce. This is in accordance with the principle in consumer protection theory which states that information asymmetry is one of the main causes of consumer vulnerability.⁶⁰Thus, the research results strengthen the relevance of this theory in explaining the dynamics of consumer protection in Indonesia. Responsive legal theory, as put forward by Philippe Nonet and Philip Selznick, emphasizes that the law must be able to respond to the needs and changes in society.⁶¹In the context of consumer protection in the digital era, the law does not only function as an instrument of social control, but must also be adaptive to technological developments and consumer behavior. The results of the study show that the ITE Law, as one of the main regulations governing electronic transactions, is a legal response to the development of digital technology and the internet. This law regulates various important aspects, such as the validity of electronic documents, protection of personal data, and the prohibition of the distribution of misleading information.⁶² Thus, the ITE Law can be considered as a form of application of responsive legal theory, because it is designed to answer the needs of consumer protection in the digital era. However, the results of the study also revealed that although the ITE Law has provided an adequate legal basis, its implementation still faces obstacles, such as weak supervision of digital business actors and low consumer digital literacy.⁶³This shows that responsive law requires not only adaptive regulation, but also infrastructure support and institutional strengthening to ensure its effectiveness. One of the important findings in this study is the protection of consumer personal data, which is a major issue in ecommerce transactions.

Consumer protection theory emphasizes the importance of maintaining consumer privacy as part of their basic rights.⁶⁴In this context, Law Number 27 of 2022 concerning Personal Data Protection (UU PDP) can be seen as a legal step that supports this principle. The PDP Law regulates the obligations of business actors to maintain the confidentiality of consumer data and provides sanctions for parties who commit violations.⁶⁵The results of the study show that although the PDP Law has been passed, its implementation still faces challenges, such as lack of socialization to consumers and business actors, as well as limited law enforcement capacity. This shows that the success of regulation depends not only on the content of the law itself, but also on ongoing implementation efforts.Based on the findings above, it can be concluded that the results of this study are generally consistent with the theory of consumer protection and responsive legal theory. The results of the study confirm that consumers need strong legal protection to overcome the imbalance of information and risk in e-commerce transactions. In addition, the law must continue to evolve to respond to new challenges that arise along with technological developments. However, the results of the study also show that the application of these theories in a practical context still faces various obstacles, such as weak supervision, lack of digital literacy, and low consumer awareness of their rights. Therefore, collaborative efforts are needed between the government, business actors, and the community to overcome these obstacles, so that consumer protection can run more effectively.

Comparison of Research Results with Previous Research

This study on the dynamics of consumer protection law in the digital era, with a focus on ecommerce in Indonesia, produces a number of relevant findings to be compared with previous studies in a similar context. This comparison is carried out to assess the consistency, differences, and new contributions made by this study to the development of knowledge. Previous research conducted by Ratnasari (2021)⁶⁶shows that Law Number 8 of 1999 concerning Consumer Protection (Consumer Protection Law) has provided a strong legal basis to protect consumer rights. However, the study noted that supervision of business actors is still weak, so that consumers often do not receive fair compensation for the losses they experience. The results of this study confirm these findings, but add that in the digital era, supervision has become increasingly complex because many business actors are online-based, including those located abroad. The study also found that consumer protection in e-commerce requires not only stronger supervision, but also regulations that are more adaptive to developments in digital technology.Study by Darmawan (2020)⁶⁷highlighted the importance of Law Number 11 of 2008 concerning Electronic Information and Transactions (UU ITE) in providing legal validity for electronic transactions. However, the study emphasized that consumer protection in electronic transactions is not optimal, especially in terms of securing consumers' personal data and monitoring information submitted by business actors. This study is in line with Darmawan's findings, but provides a new contribution by highlighting further regulatory developments, namely Law Number 27 of 2022 concerning Personal Data Protection (UU PDP).

In this context, this study shows that the PDP Law is the government's effort to strengthen the protection of consumers' personal data, although its implementation still faces various challenges, such as low digital literacy among the public and lack of law enforcement capacity.Research by Akerlof (1970)⁶⁸regarding information asymmetry in the market states that the imbalance of information between sellers and buyers can cause the market to be inefficient and harm consumers. Previous research by Chaffey (2019)⁶⁹applying this theory in the context of e-commerce, shows that many consumers suffer losses because business actors provide unclear or misleading information. The results of this study support the theory and findings, adding that mechanisms such as consumer reviews and escrow systems implemented by some ecommerce platforms can help reduce information asymmetry. However, this study also found that the effectiveness of these mechanisms still depends on consumer awareness and trust in the existing system.Previous research by Marzuki (2016)⁷⁰stated that the consumer dispute resolution mechanism in Indonesia is still dominated by the litigation approach, which is often time-consuming and costly. Marzuki also noted that non-litigation mechanisms, such as mediation and arbitration, have not been widely utilized due to lack of socialization and accessibility. This study confirms these findings, but makes a new contribution by explaining that in the context of e-commerce, dispute resolution becomes increasingly complex because it involves cross-border business actors.

This study recommends strengthening international cooperation and developing online dispute resolution platforms as a more effective solution to address this challenge. Research by Kominfo (2023)⁷¹shows that low digital literacy in society is one of the main obstacles to consumer protection in the digital era. Consumers often do not understand their rights, as well as the risks associated with online transactions. The results of this study support these findings, but add that increasing digital literacy must be carried out in an integrated manner between the government, business actors, and educational institutions. This study also highlights the importance of socializing new regulations, such as the PDP Law, to ensure that consumers understand their rights and are able to protect themselves in e-commerce transactions. The results of this study are generally consistent with previous studies, but provide new contributions in several aspects, especially related to the development of new regulations such as the PDP Law and innovative mechanisms in

e-commerce. This study also offers a more integrated perspective by connecting the legal, technological, and social challenges faced in consumer protection in the digital era.

V. CONCLUSION

This study analyzes the dynamics of consumer protection law in the digital era with a case study on e-commerce in Indonesia. The results of the study indicate that the development of digital technology and the increasing activity of e-commerce have created new challenges in consumer protection, which require a comprehensive legal response. Existing regulations, such as Law Number 8 of 1999 concerning Consumer Protection (Consumer Protection Law) and Law Number 11 of 2008 concerning Information and Electronic Transactions (ITE Law), have provided a significant legal framework to protect consumer rights. However, the implementation of both laws still faces various obstacles, especially in supervision, digital literacy, and law enforcement. In the context of the Consumer Protection Law, this study found that the regulation has established basic consumer rights, such as the right to clear information, the right to security, and the right to compensation. In addition, the obligation of business actors to provide honest information and safe products has provided a strong legal basis to ensure balance in consumer-business relations. However, in practice, consumers often remain in a weak position due to information asymmetry and the imbalance of power between consumers and business actors, especially in online transactions.

Meanwhile, the ITE Law has provided additional protection in electronic transactions, including the recognition of electronic documents as legal evidence and the obligation of business actors to maintain the security of consumer data. This study found that the ITE Law is relevant in answering legal needs in the digital era, especially in preventing the spread of false information and misuse of personal data. However, the implementation of the ITE Law still faces significant obstacles, such as the lack of supervision of digital-based business actors operating across countries and low consumer understanding of their rights in electronic transactions. This study also highlights the importance of protecting consumers' personal data, which is a major issue in e-commerce transactions. The enactment of Law Number 27 of 2022 concerning Personal Data Protection (UU PDP) is an important step in strengthening consumer protection in the digital era. However, the implementation of the PDP Law requires support from various parties, including the government, business actors, and the public, to ensure that personal data protection can run effectively. The low digital literacy of the community and the lack of socialization regarding this regulation are the main challenges that need to be addressed immediately.

Theoretically, this study supports the theory of consumer protection which emphasizes the importance of legal protection for consumers as the weaker party in transactions. In addition, the results of this study are also consistent with the theory of responsive law, which states that the law must be able to adapt to social and technological changes. Regulations such as the ITE Law and the PDP Law reflect the legal response to the challenges arising from the development of digital technology, although their implementation still needs to be improved. The conclusion that can be drawn from this study is that although existing regulations have provided a strong legal basis to protect consumers, challenges in implementation remain a major obstacle. Strengthening supervision, increasing digital literacy, and developing more efficient dispute resolution mechanisms are needed to ensure that consumer rights can be optimally protected. In addition, international cooperation is also an important factor in dealing with cross-country digital business actors. Thus, consumer protection in the digital era requires a holistic and sustainable approach to address the ever-evolving challenges.

VI. SUGGESTION

Based on the results of research on the dynamics of consumer protection law in the digital era in Indonesia, there are several suggestions that can be put forward to improve the effectiveness of consumer protection, especially in the context of e-commerce. This effort involves the government, business actors, consumers, and supporting institutions such as supervisory and educational institutions. First, the government needs to strengthen the implementation and supervision of existing regulations, such as Law Number 8 of 1999 concerning Consumer Protection (Consumer Protection Law), Law Number 11 of 2008

concerning Electronic Information and Transactions (ITE Law), and Law Number 27 of 2022 concerning Personal Data Protection (PDP Law). Effective supervision requires the establishment of a mechanism that is able to reach digital-based business actors, including those operating across countries. The government also needs to increase the capacity of consumer protection institutions, such as the National Consumer Protection Agency (BPKN) and the Non-Governmental Consumer Protection Institution (LPKSM), to handle complaints and resolve consumer disputes quickly and efficiently.

In addition, the government must ensure that there is harmonization of regulations at the national and international levels. In the digital era, cooperation between countries is very important, especially in dealing with global business actors operating through e-commerce platforms. This includes cross-border law enforcement, the development of global consumer protection standards, and the recognition of internationally recognized online dispute resolution mechanisms. For business actors, a greater commitment is needed to comply with consumer protection regulations. They must provide clear, accurate, and transparent product information, and ensure the security of consumers' personal data. In addition, business actors need to provide responsive consumer complaint services and comply with established consumer protection standards. Providing an escrow or secure payment system can be a solution to protect consumers from the risk of fraud in online transactions.

Consumers also play an important role in creating a safe and trusted e-commerce environment. Therefore, consumer digital literacy must be improved through educational programs involving various parties, such as the government, educational institutions, and civil society organizations. Consumers must be empowered to understand their rights, recognize the risks in online transactions, and take proactive steps to protect themselves, such as verifying the reputation of business actors and reading terms and conditions carefully before making a transaction. Educational institutions and civil society organizations can contribute to increasing public awareness and understanding of the importance of consumer protection in the digital era. Training programs and public awareness campaigns must be carried out continuously to ensure that the public has an adequate understanding of their rights as consumers.

Finally, the development of technology that supports consumer protection must be a priority. The government can work with the private sector to create technological innovations, such as automated monitoring platforms, online reporting systems, and digital-based dispute resolution mechanisms. This technology can increase efficiency in handling consumer complaints and accelerate the dispute resolution process. By adopting these steps, it is hoped that consumer protection in the digital era can be significantly improved, thereby creating a safe, fair, and sustainable e-commerce ecosystem. Collaboration between the government, business actors, consumers, and other related parties is essential to achieve this goal.

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