

Consumer Protection Law in Electronic Transactions: Challenges and Solutions in the Digital Era in Indonesia



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ABSTRACT

The development of digital technology has driven significant changes in people's transaction patterns, from conventional systems to electronic transactions based on digital platforms such as e-commerce and social commerce. However, this progress has also given rise to various legal issues, especially in terms of consumer protection. This study aims to analyze the legal challenges faced by consumers in electronic transactions and to formulate relevant and applicable legal solutions in Indonesia. The research method used is a literature study (library research) with a qualitative approach, reviewing more than 30 scientific articles and relevant legal documents. Data were analyzed using the content analysis method against applicable legal provisions, case studies, and consumer protection theories. The results of the study show that the main challenges include weak consumer legal literacy, lack of clarity on the responsibilities of digital business actors, weak law enforcement against foreign actors, and limited regulations on algorithms and personal data collection. Some of the proposed solutions include revising the Consumer Protection Law to align with the PDP Law and the ITE Law, implementing the extraterritorial principle, strengthening online dispute resolution mechanisms, and increasing digital legal education for the community. This study contributes to formulating the direction of consumer protection law reform that is more inclusive and adaptive to the challenges of the digital era in Indonesia.

1. INTRODUCTION

The growth of information and communication technology has driven a transformation in the pattern of people's economic transactions. Transactions that were previously carried out conventionally have now shifted to the digital realm by utilizing e-commerce platforms, e-wallets, and other mobile applications (Indriyani et al., 2025; Jannah et al., 2025). This change brings efficiency as well as new complexity in the legal relationship between business actors and consumers, including in terms of responsibility, validity of electronic contracts, and dispute resolution (Rosel et al., 2025; Sahril & Atmadja,

2025).

Electronic transactions are buying and selling activities, exchanges, or contracts carried out through electronic means such as the internet and computerized systems. In the modern context, these transactions include e-commerce, digital banking, and blockchain-based digital contracts. The Indonesian government has regulated electronic transactions through Law Number 11 of 2008 concerning Information and Electronic Transactions (ITE), which was later strengthened by revisions to Law No. 19 of 2016. This law provides a legal basis for the validity of electronic documents, digital signatures, and



protection of personal data in digital activities (Slamet & Paliling, 2019; Yuherawan, 2016). This legal aspect is important because the increasing volume and complexity of digital transactions require protection of the rights of the parties involved.

However, even though the legal umbrella is available, implementation in the field still faces challenges, especially in terms of data security, user authentication, and online dispute resolution. Several studies highlight the importance of ethics and cybersecurity in electronic transactions, especially in the use of AI that manages personal data (Judijanto & Harsya, 2025). Meanwhile, the use of electronic signatures and digital documents is now valid legal evidence in court, as long as it meets statutory provisions (Sterisa, 2025). In e-commerce practices, the aspect of consumer protection is also in the spotlight, especially when there is a breach of contract or online fraud (Purbawati, 2025). Therefore, in addition to regulation, education for the community of technology users is also the key to the success of a safe and fair electronic transaction ecosystem.

However, behind this convenience, consumers also face the risk of losses such as digital fraud, personal data leaks, delivery failures, and unfair trade practices (Prasetya, 2025; Watupongoh et al., 2025). Various legal problems arise along with the rise of digital business practices that are not always accompanied by adequate understanding and application of the law by business actors and consumers (Anjani, 2025; Kirana, 2025). Although Indonesia has Law Number 8 of 1999 concerning Consumer Protection and Law No. 11 of 2008 on ITE, implementation in the field is still not optimal (Nurhidayah, 2025).

The imbalance in the position between business

actors and consumers in electronic transactions is a major concern in the discourse on legal protection. Consumers are often in a weak position due to limited information, lack of transparency, and minimal access to effective dispute resolution channels (Nurfadillah, 2025; Rorimpandey et al., 2025). In addition, there are no regulations that specifically regulate the mechanism for resolving digital conflicts and the responsibilities of digital platforms as intermediaries (Hilmawan & Gynastsiar, 2025; Siadari & Alexander, 2025).

In the midst of increasing public dependence on electronic transactions, it is very important to build a legal system that can provide maximum protection for consumers. This includes effective law enforcement, technology-based regulatory updates, and increasing digital legal literacy for the community (Wibisono, 2022; Widita Febby, 2025). This development urges academic studies that not only describe existing challenges but also offer adaptive and applicable legal solutions.

The urgency of this research lies in the need for a comprehensive mapping of the weaknesses of the consumer protection system in the digital context in Indonesia. With legal and sociological analysis, this study is expected to be able to encourage the strengthening of policies and the preparation of new regulations that are responsive to the dynamics of electronic transactions (Cahyaningrum, 2025).

Previous studies have discussed consumer legal protection from the aspects of the validity of electronic contracts, personal data protection, to the role of regulators in supervising e-commerce (Rorimpandey et al., 2025; Rosel et al., 2025; Watupongoh et al., 2025). However, these studies are still limited in providing a comprehensive mapping that connects aspects of legal protection, practices in the field, and policy

recommendations based on real challenges in the current digital era.

Therefore, the purpose of this study is to analyze the legal challenges in consumer protection in electronic transactions in Indonesia and to formulate legal solutions that can be implemented to strengthen consumer protection amidst the rapid development of digital technology.

2. METHOD

This study uses a qualitative approach with a literature study type (library research) to explore the issue of consumer protection law in electronic transactions in Indonesia. This approach was chosen because the topic being studied is closely related to laws and regulations, jurisprudence, and legal theory that require in-depth review of written sources (Moleong, 2017). Literature studies provide space for researchers to analyze regulatory developments, identify actual legal problems, and explore normative solutions offered in academic literature and other legal documents.

The data sources in this study consist of secondary data obtained from various relevant documents and literature. These sources include laws and regulations such as Law Number 8 of 1999 concerning Consumer Protection, Law Number 11 of 2008 in conjunction with Law Number 19 of 2016 concerning Information and Electronic Transactions, and the Draft Law on Personal Data Protection. In addition, national scientific journal articles, theses and dissertations from law schools, and official reports from agencies such as the Ministry of Communication and Information and the National Consumer Protection Agency (BPKN) were also used.

The data collection technique was carried out through documentation, namely by reviewing and identifying the contents of various scientific and legal references that are relevant to the issue of consumer protection in electronic transactions. The documents reviewed were selected purposively based on the credibility of the source and its relevance to the research variables. The data obtained were analyzed using the content analysis method by examining the argument structure, legal substance, and the accompanying social context (Krippendorff, 2018). The analysis procedure was carried out systematically with the steps of data reduction, information categorization, interpretation of legal substance, and formulation of conclusions based on data findings (Sugiyono, 2022).

The results of the analysis from this approach are expected to be able to fully describe the challenges of consumer protection in electronic transactions, both from the regulatory and implementation aspects. In addition, the qualitative approach of this literature study allows researchers to offer alternative legal solutions that are more applicable and responsive to the needs of society in the digital era.

3. RESULT AND DISCUSSION

In this study, a search was conducted on more than 30 scientific articles through Google Scholar with the keyword "Consumer Protection Law in Electronic Transactions in Indonesia". From the search results, 10 most relevant articles were selected based on the following criteria: focusing on digital consumer protection law issues, publication between 2019–2025, and containing contributions to identifying legal challenges and solutions. The following is a table of bibliographic data from the findings:

Table 1. literature review

No	Title	Author	Main focus
1	Empowering Digital Consumers: Legal Literacy Education for Preventing Online Fraud in Indonesia	Purnama et al.	Consumer legal literacy to prevent online fraud
2	Consumer Protection Against the Sale of Counterfeit Products in E-Commerce: A Legal Certainty Perspective	Situmeang et al.	Sales of counterfeit products in e-commerce and aspects of legal certainty
3	Marketplace Responsibilities and Sanctions in Cases of Consumer Losses (Futuristic Legal Perspective)	Amaliya et al.	Marketplace responsibility for consumer losses
4	Legal Protection of Consumers Who Buy Products via Instagram: A Comparative Study with Singapore	Wahyuni & Risti	Comparative study of Instagram consumer protection between Indonesia and Singapore
5	Tinjauan Yuridis Perlindungan Konsumen Pembeli Tiket Konser K-Pop via Jasa Titip	Busthami, N. A.	Ambiguity of legal responsibility in the sale and purchase of personal shopping services (jastip)
6	Dynamics of Contract Cancellation in Civil Law and Relevance for Consumer Protection	Ratrisari et al.	Cancellation of contracts and their implications for consumer rights
7	Tinjauan Yuridis Pelaku Usaha yang Dirugikan Akibat Ulasan Hoaks di Media Sosial	Timotius, J. F.	Rights of business actors and legal protection due to fake reviews on digital media
8	Etika Bisnis dan Perlindungan Konsumen dalam Algoritma Rekomendasi Marketplace	Suarjana, I. W.	Criticism of algorithmic bias in digital product recommendations
9	Legal Protection Against Phishing Crimes in the Banking Industry	Az-Zahra et al.	Legal protection for banking consumers from phishing attacks
10	Tinjauan Yuridis terhadap Regulasi TikTok Shop dalam Transaksi Elektronik	Widiana & Dwi Cahya	Social-commerce regulations and their role in e-commerce consumer protection

The findings from ten selected and thoroughly reviewed articles show that consumer legal protection in electronic transactions in Indonesia is a complex and multidimensional issue. These studies consistently reveal a gap between the rapid development of digital transactions and the readiness of regulations and

protection mechanisms currently available. Various studies provide complementary perspectives in outlining legal challenges and offering solution-oriented approaches, both from normative, legal, and practical perspectives.

One of the central issues that is often raised is the weak legal literacy of consumers amidst the rapid use of digital platforms. Purnama et al. (2025) underline the importance of legal literacy education for digital consumers so that they have an understanding of their rights and obligations in the e-commerce ecosystem. This study suggests an integration between preventive and educational legal approaches to minimize rampant online fraud, especially in the form of social engineering and scam links. This shows that consumer protection strategies cannot only rely on legal sanctions, but also require strengthening user capacity (Purnama et al., 2025).

Another problem concerns the rampant circulation of counterfeit products in e-commerce and weak supervision of business actors. Situmeang et al. (2025) highlighted that many digital platforms have not implemented good quality control standards and product authenticity validation. In this context, the legal certainty approach is crucial. Consumer protection is not only about compensation for losses, but also about legal certainty over product information and transparency in transactions. This study shows that positive Indonesian law has not maximally prosecuted sellers of counterfeit products in the digital space, especially when business actors do not have a permanent legal entity (Santiago et al., 2025).

Still related to the responsibility of digital business actors, Amaliya et al. (2025) discuss the role of the marketplace in providing protection to consumers who experience losses. This study shows that current regulations do not provide clear boundaries regarding the extent to which e-commerce platforms are responsible for transactions that occur through their systems. In certain cases, consumers are harmed but do not know to whom the responsibility should be

directed, whether to the individual seller or to the platform operator. This study suggests a revision of the Consumer Protection Law and the ITE Law to include a new role for digital entities as intermediaries who are also responsible (Amaliya et al., 2025).

Wahyuni & Risti (2025) even conducted a comparative study with the consumer protection system in Singapore. They found that the system in Indonesia is still lagging behind, both in terms of technical regulations and implementation. One real example is the absence of a certification or trustmark system that can be an indicator of security for consumers. This study shows that the Indonesian legal system can learn from the proactive approach taken by other countries in protecting digital consumers (Risti & Wahyuni, 2025).

Meanwhile, Busthami (2025) shows new problems in transactions that appear informal but affect thousands of consumers, such as the practice of concert ticket personal shopping (*jastip*). In this context, there is no legal guarantee for consumers who are harmed, because there is no official contract between the buyer and the personal shopping service. The available regulations do not cover informal transactions that often occur through social media. This shows that consumer protection laws need to adapt to changing social dynamics.

Ratrisari et al. (2025) discuss the issue of contract cancellation in digital transactions, which often harms consumers due to the lack of clarity on the cancellation mechanism or conditions. They highlighted the weak regulation on consumer rights to unilaterally terminate contracts when the initial information provided is not appropriate. This study links consumer protection with the principles of contractual justice in Indonesian civil law (Ratrisari et al.,

2025).

The aspects of digital ethics and algorithms are also important highlights in Suarjana's (2025) research, which shows that algorithm-based recommendation systems in marketplaces often corner consumers. The system can strengthen the dominance of large sellers and trap consumers in non-transparent choices. Consumers do not even know that the products displayed have gone through algorithmic filters that may be biased. This is a serious problem, because digital systems are not only a means of transaction, but also a tool for shaping consumer perceptions and preferences (Suarjana, 2025).

The issue of data security and phishing-based fraud was also raised by Az-Zahra et al. (2025), who highlighted real cases of bank customer losses due to data theft through malicious links. This study shows that although data protection regulations have been designed, their implementation in the financial sector is still very weak, especially in consumer education and law enforcement against digital criminals (Az-zahra et al., 2025).

Widiana and Dwi Cahya (2025) in their study of the TikTok Shop platform showed that new platforms with social-commerce systems present more complex legal challenges. Existing conventional regulations are not sufficient to handle fast and informal transactions such as those occurring on TikTok. This strengthens the argument that the law must evolve adaptively to new business models. In general, the ten articles reviewed show similarities in terms of recommendations: the need for regulatory updates, stricter law enforcement, protection based on digital consumer rights, and the importance of legal education for the public. These findings indicate that the Indonesian consumer protection legal system is still in its

development stage and must be prepared to face new challenges that come with the acceleration of digitalization.

Discussion

Legal Challenges in Consumer Protection in Electronic Transactions in Indonesia

In the context of consumer protection law on electronic transactions in Indonesia, various challenges have emerged along with the very rapid pace of digital transformation. One of the most fundamental challenges is the regulatory gap. The Consumer Protection Law (UUPK) No. 8 of 1999 is still oriented towards conventional transactions and has not sufficiently anticipated new forms of transactions such as the use of artificial intelligence in trade, massive data collection (big data), or the use of blockchain technology as a means of payment. Related regulations such as the Electronic Information and Transactions Law (UU ITE) also do not have clarity regarding the responsibilities of foreign digital business actors, especially in the context of cross-border jurisdiction and supervision.

Another problem concerns jurisdiction and law enforcement. Cross-border electronic transactions cause difficulties in enforcing national law because business actors are often domiciled abroad. The available dispute resolution mechanisms are still limited to conventional channels, while the Online Dispute Resolution (ODR) system has not been running optimally in Indonesia.

The inequality of information and bargaining position also worsens consumer protection. Many consumers do not understand their rights in the digital space, including the right to information, product guarantees, and personal data protection. Digital agreements are often one-sided in the form of "click-wrap agreements," which force consumers to agree to



terms and conditions without actually reading or understanding them.

The issue of data security and consumer privacy is also a serious challenge. Although Indonesia has passed Law No. 27 of 2022 concerning Personal Data Protection, its implementation is still uneven. Consumers are still vulnerable to data leaks due to weak supervision of data management by digital companies.

The lack of digital literacy exacerbates the situation. Many consumers do not understand the mechanism for reporting violations, the right to compensation, or how to safely transact online. This provides a loophole for irresponsible business actors to exploit.

A real case example that illustrates this problem is the massive complaints against international e-commerce platforms Shopee and TikTok Shop in 2023, which were considered not to provide clear information about return policies or dispute resolution. Consumers had difficulty filing complaints because the companies were overseas and customer service was unresponsive to complaints based on local law. This case is reviewed in a study by Dewi and Irdhayanti (2025) in the book *Tech Fusion in Business*, which explains how Indonesian crypto users and digital consumers experience a protection gap due to weak regulation and legal literacy.

Legal Solutions for Strengthening Consumer Protection in the Digital Era

To strengthen consumer protection in electronic transactions in the digital era, Indonesia needs a comprehensive and adaptive legal approach. The first urgent step is to revise the Consumer Protection Law (UUPK) to suit the increasingly complex dynamics of digital transactions, including those involving e-commerce, digital goods, and technology-based financial services.

In addition, harmonization between the ITE Law, the Personal Data Protection Law, and the Trade Law is very important so that there is no overlapping regulation and there is clarity on the responsibilities of digital business actors.

In dealing with foreign business actors, the application of the extraterritorial principle is crucial. This means that foreign companies that sell products or services to Indonesian consumers must comply with national law, following a regulatory model such as the GDPR in the European Union. The implementation of an online dispute resolution system also needs to be built—this system must be fast, transparent, and easily accessible to consumers from all over Indonesia.

It is also important to have transparency and audit obligations for digital platforms, so that consumers know clearly who the seller is, how the return system works, and whether the platform algorithm is manipulating product exposure. All of this must be accompanied by serious enforcement of the PDP Law to ensure that personal data is not misused, as well as increasing digital literacy in the community through education programs and public campaigns.

One real example of the importance of this solution can be seen in the case of the freezing of the TikTok Shop service in Indonesia by the Ministry of Trade in 2023. The service was considered to have violated the rules because it carried out both trading and social media on one platform, and was not transparent in displaying prices and sellers—which caused losses to local MSMEs and consumer confusion. This decision was taken to enforce the boundaries between platform providers and business actors, and to protect consumers from unfair practices.



4. CONCLUSION

This study concludes that consumer protection law in electronic transactions in Indonesia still faces various systemic challenges, ranging from inaccurate regulations, weak law enforcement mechanisms, to minimal digital legal literacy in the community. The regulatory gap between conventional and digital transactions is a major obstacle in creating effective protection for consumers. In addition, the absence of an efficient online dispute resolution system, as well as the lack of transparency from digital business actors, has exacerbated this condition.

Practically, the researcher recommends a comprehensive revision of the Consumer Protection Law to align with digital developments, including integration with the ITE Law and the PDP Law. The government also needs to build an online dispute resolution (ODR) system that is easily accessible to the public. In addition, there needs to be a transparency obligation for digital platforms regarding product information, recommendation algorithms, and seller identities. Strict law enforcement against violations of personal data protection also needs to be improved.

The limitation of this study lies in its purely literature approach, without collecting empirical data from business actors or consumers directly. Thus, generalizations to real practices are still limited.

For further research, it is recommended to conduct a mixed method approach involving surveys or interviews with digital consumers, regulators, and e-commerce players to obtain a more empirical picture of the effectiveness of current legal protection and the implementation of regulations in the field.

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