



Legal protection for digital consumers: a literature review of the limitations of the civil code in the platform economy era

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ABSTRACT

The transformation of the global economy towards the digital era has shifted the pattern of consumer and business interaction into the digital platform ecosystem, creating new challenges in consumer legal protection. This study is a systematic, logical, and relevant literature review of the limitations of the Civil Code (KUHPerdata) in responding to the dynamics of digital transactions. This study focuses on how conventional norms in the Civil Code that are oriented towards physical transactions and traditional civil relations have not been able to accommodate the complexity of interactions in a platform-based economy. Through an analysis of the legal theory of consumer protection, the theory of contractual justice, and the progressive legal approach, it was found that the Civil Code is still weak in guaranteeing the principles of transparency, accountability, and protection of personal data in digital transactions. In addition, the legal status of the platform as an intermediary party in the contract between the seller and the buyer creates a vacuum of norms regarding legal responsibility in the event of consumer default or loss. The implications of this finding emphasize the urgency of regulatory reform by adopting adaptive digital consumer protection principles, including updating national legal instruments to align with developments in information technology. This study also recommends the establishment of a new legal framework that specifically regulates consumer protection in the digital ecosystem, to ensure justice and legal certainty amid the rapid growth of the platform economy

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1. Introduction

The development of information and communication technology has driven a major transformation in the way people conduct transactions, shifting from conventional trading systems to digital ecosystems. Digital platforms such as marketplaces, e-commerce applications,

and algorithm-based services are now the backbone of modern economic transactions (Elmousalami et al., 2025). This change has also created a new legal framework that demands protection for digital consumers, who no longer deal directly with sellers but instead through complex technological intermediaries (Robbi & Ardhiyanto, 2023).

Amidst the rapid growth of the digital economy, consumer disputes related to product inconsistencies, algorithm manipulation, misuse of personal data, and unclear legal responsibilities between businesses and digital platforms have become increasingly prevalent (Dauerer, 2025). According to a 2022 report by the National Consumer Protection Agency (BPKN), there has been a significant increase in consumer complaints regarding online transactions, particularly in the e-commerce and digital services sectors. This indicates that existing legal protection mechanisms are inadequate to address the complexities of legal issues in the platform economy (Novita & Santoso, 2021).

One of the main causes of the weak legal protection of digital consumers in Indonesia lies in the continued use of colonial legal instruments, such as the Civil Code (KUHPerdata), as the legal basis for contracts and civil relations. The 19th-century Civil Code was not designed to address issues in cyberspace, such as face-to-face transactions, the validity of electronic contracts, or the role of algorithms in buying and selling decisions (Masyittah et al., 2024).

In this context, an important question arises: to what extent the Civil Code remains relevant in ensuring justice and legal protection for digital consumers in the platform economy era (Avdiushchenko & Meinrenken, 2025). Several previous studies have highlighted the substantial limitations of classical civil law. For example, Rahardjo's (2020) research explains that Indonesian private law does not yet have a specific instrument governing the relationship between consumers and platforms, despite the platform's role as an intermediary having a significant impact on digital contracts (Pokhrel, 2024).

The limitations in ensuring transparency, accountability, and protection of personal data in electronic transactions were also criticized by Pratama (2021), who stated that the Civil Code does not recognize key concepts in the digital ecosystem such as *smart contract*, *automated decision making*, and *clickwrap agreement*. As a result, many consumer disputes lack legal capacity and are resolved solely through informal negotiation, which is detrimental to consumers (Karar et al., 2025).

The urgency of this research is heightened given the continued rise in internet penetration in Indonesia, with over 213 million active users in 2023, according to a report by the Indonesian Internet Service Providers Association (APJII) (Jon & Park, 2025). With the increasing public dependence on digital services, the government is required to be progressive with legal policies that guarantee comprehensive consumer protection without hindering the development of digital innovation (Studi et al., 2025).

On the other hand, civil law reform is relevant not only for consumer protection but also for building public trust in the national digital ecosystem (Romero-Moreno, 2025). The lack of legal certainty in online transactions has the potential to reduce public participation in the digital economy and open up opportunities for abuse of economic power by large-scale digital platforms (Nugraha et al., 2023).

This study aims to conduct an in-depth literature review of the limitations of the Civil Code in responding to the need for digital consumer protection in the platform economy era (Matlin et al., 2025). Using a descriptive, literature-based analytical approach, this study examines the normative and practical aspects that contribute to the structural weaknesses of classical civil law and offers theoretical arguments for relevant legal reforms (Arifin et al., 2021).

Considering these facts, this research is crucial to ensuring that national laws, particularly the Civil Code, remain relevant and adapt to the challenges of the digital era. Reviewing the legal basis for consumer protection on digital platforms is a strategic step in creating an inclusive, equitable, and sustainable digital ecosystem (Howells, 2020).

The development of the digital economy, especially in the form of platform *economies* such as e-commerce, ride-hailing, and other on-demand services, have given rise to a new model of legal relationship between business actors and consumers. In this context, the classic contractual relationship as regulated in *Civil Code (KUHPerdata)* is experiencing challenges due to the characteristics of the digital economy which is cross-jurisdictional, algorithm-based, and asymmetric in terms of information and bargaining position.

Several legal literatures (e.g., Ghosh, 2021; Susanti, 2019; Raharjo, 2023) show that the Civil Code has not fully addressed consumer protection needs in the digital context. Basic concepts such as good faith, agreement, and default are not sufficiently adaptive to digital contractual relations of a nature-automated, *clickwrap agreements*, as well as *use terms and conditions non-negotiable*.

Recent research highlights that digital platforms tend to dominate contractual and information architecture (Zuboff, 2019; Helberger et al., 2021), leaving consumers in a subordinate position. Consumer digital legal literacy is also low, and the Civil Code does not explicitly provide mechanisms to strengthen consumers' bargaining power. On the other hand, *Terms of Use* often hide clauses that are detrimental to consumers, which are normatively contrary to the principles of contractual *justice*.

International and national literature is beginning to move towards an integration of approaches. *Regulatory technology* and protection based *consumer rights by design* For example, European Union regulations through the Digital Services Act (DSA) and the General Data Protection Regulation (GDPR) have driven a paradigm shift in consumer protection towards proactive regulation/digital risk-based. In Indonesia, the Personal Data Protection Bill and the revised Consumer Protection Law have begun to adopt a similar spirit, but have not yet fully harmonized with the normative structure of the Civil Code.

The main gaps in the current literature lie in: (1) Lack of elaboration on systemic reform of the Civil Code to be compatible with digital *consumer contract*; (2) Lack of implementation models; algorithmic-based legal protection or automated *enforcement mechanisms*; (3) Consumer inaccessibility to online dispute resolution (ODR) mechanisms in Indonesia. Only a few studies have analyzed the possibility *reengineering* a civil law system based on digital trust and contractual transparency.

Based on the background and phenomena that have been explained, the problem formulation in this study is 1) what are the characteristics of digital consumer transactions in a platform-based economic ecosystem and their implications for legal protection, 2) what are the normative limitations of the Civil Code in providing legal protection for digital consumers, 3) how the discrepancy between the theory and practice of Indonesian civil law in the context of digital consumer protection can be analyzed through a study of contemporary legal literature, 4) what is the urgency and direction of updating national civil law so that it is in line with the principles of digital consumer protection that are adaptive to technological developments.

2. Method

This research method uses a qualitative approach with descriptive-analytical library research. Data are obtained through systematic interpretation of primary and secondary legal sources, such as the Civil Code (KUHPerdata), related laws and regulations, scientific journals, reports from international institutions, and previous research results relevant to digital consumer protection issues (Ayaz et al., 2025). And the literature used published in the last five years. The analysis is conducted logically and critically, emphasizing the identification of normative gaps between classical civil law provisions and the need for consumer legal protection in platform-based digital transactions. This approach was chosen to explore the limitations of existing law and formulate a direction for legal reform that is more adaptive to developments in information technology (Quarta, 2020).

3. Analysis and Results

3.1 What are the characteristics of digital consumer transactions in a platform-based economic ecosystem and their implications for legal protection

Consumer transactions in the digital era have undergone a fundamental paradigm shift. In a platform-based economic ecosystem, interactions between businesses and consumers are mediated by digital entities, such as marketplaces, e-commerce applications, or digital service providers (Huang et al., 2025). Key characteristics of these transactions include the absence of face-to-face interaction, the use of algorithms for product matching, payment automation, and the use of big data to personalize offers. Consumers are often only involved in the final stages of the transaction, without understanding how their personal information is used by the system (Howells, 2020).

Previous research has shown that in the platform economy model, consumers become objects of an automated system that regulates consumption behavior based on behavioral data (Tao & Wang, 2025). This creates an information gap between consumers and platforms. This transaction model also weakens consumers' bargaining power due to unilateral contractual clauses (standard form contract) drafted entirely by the platform or business actor, with no room for negotiation (Dzuhriyan et al., 2024).

Moreover, the dynamics of today's digital transactions not only create new legal relationships but also expand the scope of risks faced by consumers. The phenomenon of digital profiling and automated decision-making in platform systems makes consumers vulnerable to price discrimination (*price discrimination*), preference manipulation through personalized advertising, and the exploitation of unconscious behavioral data (Ostanina & Titova, 2020). Consumers are also often trapped in dark patterns, digital interface designs deliberately designed to encourage consumers to make less-than-rational decisions, such as automated subscriptions or impulse purchases (Cordova et al., 2025). These risks are exacerbated by the lack of human involvement in digital transactions, which makes it legally difficult to prove breach of contract, defective will, or privacy violations (Arifin et al., 2021). Therefore, the legal relationship between consumers and digital businesses can no longer be simplified as a simple contractual relationship, but must be seen as complex, asymmetrical, and requires more progressive and responsive legal intervention within the digital ecosystem (Quarta, 2020).

Thus, the fully automated and algorithm-based characteristics of digital transactions require a different legal protection framework than conventional transactions, particularly to ensure fairness and transparency (Ostanina & Titova, 2020).

3.2 What are the normative limitations of the Civil Code in providing legal protection for digital consumers

The Civil Code, as the primary civil law in Indonesia, essentially regulates civil matters in general. However, in the context of digital consumer protection, several normative limitations become very apparent (Karar et al., 2025):

1. Rigid in the elements of electronic contracts, Article 1320 of the Civil Code requires explicit "agreement." In digital contracts, agreement is often expressed through "clicking agree" to complex and lengthy terms and conditions. This raises questions about whether consumers truly understand or agree to the contract's contents (Masyittah et al., 2024).
2. While the Civil Code does not regulate digital entities as legal parties, it does not yet recognize the legal status of digital platforms as active parties in contracts. In many cases, platforms claim to be merely intermediaries, despite actually having dominant algorithmic control (Novita & Santoso, 2021).
3. It does not accommodate aspects of consumer data and privacy, aspects such as personal data protection, misuse of information, and cybersecurity are not regulated in the Civil Code, even though they are key issues in digital transactions (Khalilul Anna Billahi Robbi & Ainurrahman Ardhiyanto, 2023).

As explained by previous researchers, the Civil Code is overly private and unresponsive to public protection. This prevents digital consumers from receiving adequate protection from existing civil regulations (Basri, 2020).

Furthermore, the Civil Code also does not provide space for consumer protection principles oriented towards substantive justice, such as the principle of non-exploitation, the fairness of clauses, and the principle of objective responsibility (Afrin et al., 2025). In the digital ecosystem, unilateral clauses contained in the *format standard form contract* They often contain provisions that limit or even eliminate consumers' right to file legal objections, including shifting responsibility entirely to third parties (vendors/merchants) (Anovanko et al., 2025). The Civil Code lacks a legal instrument to assess unequal bargaining power or to cancel contracts that substantially disadvantage consumers (Ramli et al., 2020).

On the other hand, the liability framework in the Civil Code still focuses on *fault liability*, which requires proof of negligence or malicious intent (Brodny & Tutak, 2025). This is particularly inappropriate for digital ecosystems involving automated systems, algorithms, and artificial intelligence (AI), where it is difficult to directly prove the legal actors (Lima et al., 2025). In practice, digital consumers struggle to claim compensation because the burden of proof rests entirely on them, even though many losses arise systemically through closed and opaque algorithms (Aimelia et al., 2025).

Furthermore, the lack of legal recognition of electronic contracts as legally equivalent to physical contracts also creates legal uncertainty (Kokorin, 2025). The Civil Code does not yet provide explicit guarantees regarding validity. *clickwrap*, *browse wrap*, or contracts formed automatically through digital interactions (Aimelia et al., 2025). This has implications for the potential for arbitrary contract cancellation or business actors' neglect of their responsibilities in the event of a dispute (Lima et al., 2025).

Worse still, in the context of cross-border transactions, the Civil Code lacks a legal protection mechanism for consumers interacting with global platforms, such as Amazon, Alibaba, or TikTok Shop (Dame & Hukum, 2025). There are no regulations on applicable law, judicial authority, or internationally binding online dispute resolution mechanisms. Thus, the Civil Code's normative gap in responding to the challenges of the digital economy is not merely technical, but also concerns the constitutional protection of consumer rights in the highly complex digital space (Anovanko et al., 2025).

3.3 How the discrepancy between the theory and practice of Indonesian civil law in the context of digital consumer protection can be analyzed through a study of contemporary legal literature

In theory, civil law upholds the principles of freedom of contract and individual responsibility (Ramli et al., 2020). However, in practice, this freedom is often exploited by businesses or platforms through *terms and conditions* An unbalanced approach (Secinaro et al., 2025). A study by Becher & Benoliel (2019) showed that more than 90% of consumers do not read the terms and conditions before agreeing to an online contract (Robbi & Ardhiyanto, 2023).

Furthermore, in the context of digital contractual practices, the ideally equal and voluntary principle of freedom of contract has been distorted (Van Opstal, 2025). Consumers no longer have a strong bargaining position because they are trapped in a situation where *take it or leave it*, where the use of digital services is only possible upon agreement to all terms and conditions unilaterally established by the platform. This creates a pseudo-contractual relationship, as the agreement is not the result of free negotiation, but rather a hidden coercion resulting from dependence on digital services. In classical civil law, this kind of situation is difficult to address because the primary emphasis is on the formality of the agreement, not substantive justice (Basri, 2020).

Furthermore, digital consumer dispute resolution that is delegated to internal platform mechanisms tends to be non-objective and lacks transparency, as the platform acts as the party that unilaterally regulates, adjudicates, and decides disputes (Firoozi et al., 2025). In many cases, consumers struggle to trace evidence or access technical information, such as system logs, algorithm records, or documentation of digital interactions, which are crucial to supporting their legal position. This demonstrates that conventional civil law is not designed to address the data asymmetry and information access that are key characteristics of digital interactions (Erick et al., 2019).

From an institutional perspective, LPKSM also faces challenges in championing the interests of digital consumers due to limited regulations and technological capacity (Colangelo & Martínez, 2025). There is no integrated oversight system that can effectively prosecute digital platforms for contractual or data protection policy violations. This situation leaves digital consumers in a vulnerable position. *legal vacuum*, namely the lack of protection that makes them vulnerable to exploitation (Novita & Santoso, 2021).

Within Satjipto Rahardjo's progressive legal framework, law should not be limited to normative texts, but rather should be presented as a social engineering tool capable of adapting to changing times. The mismatch between the idealism of freedom of contract and the practice of unilateral domination in the digital economy is a form of systemic failure that needs to be addressed with a legal approach that emphasizes substantive justice, algorithmic transparency, and collective responsibility of digital platforms. Without legal reform, freedom of contract becomes a hidden instrument of oppression in a platform economy that continues to grow without adequate legal controls (Dzuhriyan et al., 2024).

3.4 What is the urgency and direction of updating national civil law to align with the principles of digital consumer protection that are adaptive to technological developments?

The urgency of reforming the Civil Code arises from the lag of its legal structure in responding to technological disruption (Erni, 2025). In many countries, civil law has transformed by adopting instruments *consumer protection act* digital-based. In Indonesia, harmonization efforts are still partial, such as through the ITE Law, the Consumer Protection Law, and the PP PSTE, but they have not yet been integrated into a strong and comprehensive private legal framework (Novita & Santoso, 2021).

Required updates include:

1. Recognition of digital contracts as a form of valid contract in civil law
2. Affirmation of the legal responsibility of digital platforms for consumer losses
3. Integration of personal data protection in contextual relationships
4. Application of the principle of substantial justice in standard form contracts
5. Compilation technology-based digital consumer dispute resolution instruments (online dispute resolution)

According to the OECD Digital Consumer Guidelines (2021), countries that successfully protect digital consumers are those that have adaptive laws and regulatory technology (regtech) integrated with public service systems (Mulia, 2025).

4. Conclusion

The transformation of transactions in the platform-based digital economy has presented new legal challenges that cannot be fully addressed by the Civil Code (KUHPPerdata), a colonial legacy. The automated, closed, and algorithmically driven nature of digital transactions places consumers in a vulnerable position. This is exacerbated by the lack of comprehensive recognition of electronic contracts in civil law, the unclear legal status of digital platforms as legal subjects, and the weakness of regulations on personal data protection, a crucial component of consumer rights in the digital age. In practice, the principle of freedom of contract is often abused by businesses by including unilateral clauses without room for fair negotiation. This imbalance reflects the gap between civil law theory, which prioritizes the equality of the parties,

and the reality of highly asymmetrical legal relationships in the digital world. This fact demonstrates the urgency of more progressive, adaptive, and contextual civil law reform to provide legal certainty and substantive justice for consumers in the platform era. The contribution of this article lies in strengthening the normative and empirical arguments regarding the need for updating national civil law in responding to the challenges of digital transactions. Specifically, this article encourages a reconstruction of fundamental concepts in civil law such as agreement, breach of contract, and freedom of contract to better align them with the needs of digital consumer protection. Furthermore, this article contributes to mapping policy areas requiring intervention, such as the legal recognition of digital contracts, establishing the legal responsibility of platforms as providers of digital ecosystems, and strengthening personal data protection as an inherent legal right of consumers. With an interdisciplinary approach and based on contemporary legal analysis, this article provides a conceptual and practical basis for policymakers, academics, and law enforcers to formulate a digital consumer protection system that is fairer, more inclusive, and responsive to the dynamics of the platform-based economy era.

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