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The Click That Binds: Dark Patterns and Consent Paradox in Indonesian Electronic Contracts

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Abstract
The rise of digital transactions has shifted contract formation towards electronic clickwrap agreements. Nonetheless, the appearance of dark patterns manipulative interface designs that influence consumer choices poses a threat to the core principle of consensus ad idem (mutual agreement). This research examines the line between formal agreements and true consent in online contracts affected by dark patterns, exploring their impact on the principle of consensualism in Indonesian contract law. Employing legislative, conceptual, and comparative legal methods, the findings highlight a paradox: although a consumer's click may be legally binding, digital mechanisms can subtly distort free will, effectively creating a modern version of will. While many advanced nations have established supervisory tools, Indonesia's existing legal framework currently lacks specific regulations against dark patterns. Ultimately, Indonesia's digital contract law should evolve from emphasising formal agreements to ensuring substantive, informed consent. This study introduces the "Digital Will Legitimacy Test," focusing on three key indicators: proper information disclosure, autonomous will, and genuine consent.

KEYWORDS
Dark Patterns, Electronic Contracts, Contract Law, Principles of Consensualism

Introduction

The advance of digital technologies in a relatively short time has altered almost all aspects of human life. Digitalisation has changed not only the way of communication, working and transacting but also created a new pattern of legal relations. This has led to a number of innovations in e-commerce, digital services, artificial intelligence and the use of personal data as an economic commodity. These changes are also creating more and more complex challenges for the legal system. The law is a slow mover compared to the pace of societal dynamics. That is a proof of how quickly technology can outpace the regulations that are supposed to control it.

This is in line with the saying that law is always lagging behind the development of society (het recht hinkt achter de feiten aan). Social, economic and technological change is rapid, progressive and far surpasses the creation of laws, which is a long political, academic and legislative process. Therefore, many new practices in society have not been properly regulated, leaving legal vacuums and uncertainty. However, the law cannot remain in this position, because if it cannot keep pace with the pace of people's lives, the order of people's lives will be disrupted. As Satjipto Rahardjo states through the concept of progressive law, the law must follow the dynamics of people's lives and be built on human values. Law exists to serve humans, not the other way around. Therefore, every social development, including the development of digital technology, should be met by establishing legal norms that maintain a balance among the interests of business actors, consumer interests, and the value of justice.

However, this ideal condition has not been fully realised in Indonesian civil law practice. Currently, it has brought significant changes to the pattern of public legal relations, especially in electronic transaction activities. This change is increasingly evident in the rise of internet use in daily life. Based on the 2026 Indonesian Internet Profile Survey published by the Indonesian Internet Service Providers Association (APJII), the number of internet users in Indonesia reached 235.26 million people or 81.72% of the total national population of 287.30 million people[1]. The high level of internet penetration shows the growing breadth of community activities in the digital space, which increases the need for regulation and legal protection in the use of information technology.

The development of internet use also affects people's consumption patterns, especially in buying and selling activities through digital platforms. This is evident in the growth of online shopping activities. Online shopping activities among Indonesians show positive growth in 2026. Based on the Admitad report[2]the number of e-commerce transactions in Indonesia during the January-May 2026 period increased by 18% compared to the same period the previous year. In addition to the increase in transaction frequency, transaction value, or Gross Merchandise Value (GMV), also grew by 21% year-on-year. The increase in transaction value, which is higher than the number of orders, indicates a change in consumer behaviour: people are not only more active in making online transactions, but also making higher-value purchases through e-commerce platforms.

Furthermore, increased internet use and the development of information technology have not only changed the patterns of people's economic interactions but also given rise to new forms of legal relations in the digital space. These changes are evident in the shift from trade activities previously carried out through direct meetings between sellers and buyers to electronic transactions that allow parties to enter into agreements without restrictions on place or time. This shift creates a need for legal instruments that provide legal certainty, protect the parties, and clarify contractual relationships formed through digital media.

In practice, the contractual relationship between business actors and consumers in e-commerce transactions is realised through electronic contracts. Electronic contracts serve as the legal basis that regulates the

[1] Galuh Putri Riyanto and Reza Wahyudi, *The Number of Indonesian Internet Users in 2026 Reaches 235 Million, Only Up 6 Million*, 2025.
[2] Candra Mata, *Indonesia's E-Commerce Transactions Increase by 18%, This Category Becomes the New King of Online Shopping - Industry.co.id*, 2026.

rights and obligations of the parties, including provisions related to the use of services, transaction mechanisms, payments, delivery of goods, dispute resolution, and limits of responsibility of digital service providers. The Indonesian legal system has recognised electronic contracts through Law Number 11 of 2008 concerning Information and Electronic Transactions and its amendments.

In contrast to conventional contracts, which are generally made in the form of written documents with an approval mechanism through physical signatures, electronic contracts are formed through an electronic system by utilising a digital consent mechanism in which users agree to the terms and conditions set by the service provider. These characteristics show a shift in the mechanism for forming agreements from conventional to digital forms. One widely used form of electronic contract in digital trading is the clickwrap agreement.

Muhammad Aftahudin[3]Defines a clickwrap agreement as a form of electronic contract that is categorised as a standard contract because all clauses and the substance of the contract are formulated unilaterally by the service provider without going through a negotiation process with the user. This contract is presented as terms and conditions that form the basis of the user's access to a digital service. The agreement is formed through affirmative electronic actions, such as clicking an "I agree" or "Accept" button, or other forms of digital consent, which are legally treated as acceptance of all stipulated provisions.

The main characteristic of click-wrap agreements is their uniform nature, which leaves little room to change clause content and makes electronic systems the primary means of conveying terms and establishing contractual relationships between service providers and users. Contracts with this form are commonly encountered today in several buying and selling practices through marketplace platforms.

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[3] Muhammad Aftabuddin Fazli and Rahadi Wasi Bintoro, *Application of the Principle of Freedom of Contract in Electronic Contracts in the Form of Click-Wrap Agreements and Legal Protection for the Parties*, 2026, 2080–89.

Although clickwrap agreements provide convenience in forming and implementing contracts practically and efficiently, their application in e-commerce transactions still raises problems related to consumers' ability to understand the agreement's content. In practice, consumers generally do not have adequate time to read in depth, understand, or negotiate contract clauses unilaterally prepared by digital platform operators.

This condition shows an imbalance in bargaining power between business actors and consumers, where consumers have only the option to accept or reject terms set through the adhesion contract mechanism.[4] This imbalance puts consumers in a relatively weaker position because they are not actively involved in forming the substance of the contract, even though they have formally given their consent to the applicable electronic agreement. This phenomenon is also supported by an empirical study by Chakraborty et al. of more than 250 e-commerce companies, which showed that users generally rarely read the terms of digital services, even though agreement to these terms is almost always a prerequisite for accessing digital services.[5]

In addition, the current problem is not only the issue of inequality of position and legal literacy regarding the substance of electronic contracts, but the LPEM FEB UI report reveals that [6]algorithmic mechanisms on digital platforms can also affect how product recommendations and content are presented by considering the economic interests of certain parties, so they are not always based entirely on quality or relevance for consumers.

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4 Amirah Dwi Subarkah and Elsa Gravionika, "The Legal Validity of Clickwrap and Browsewrap Agreements in E-commerce Transactions: A Normative Study of the Principle of Consensualism," *Legality* 6, no. 2 (2024): 264, https://doi.org/10.47637/legalita.v6i2.1783.

5 Aindrila Chakraborty, Ramesh Shankar, dan James R. Marsden, "An empirical analysis of consumer-unfriendly E-commerce terms of service agreements: Implications for customer satisfaction and business survival," *Electronic Commerce Research and Applications* 53, no. November 2021 (2022): 101151, https://doi.org/10.1016/j.elerap.2022.101151.

6 "LPEM UI Research: Digital Platform Shapes Consumer Choice Through Algorithms - E-commerce Katadata.co.id," accessed July 27, 2026, https://katadata.co.id/digital/e-commerce/6a2fdafddcff3/riset-lpem-ui-platform-digital-bentuk-pilihan-konsumen-lewat-algoritma?

This phenomenon shows that the legal relationship between consumers and digital platform operators is not only formed through standard, non-negotiable electronic contract provisions but is also shaped by algorithmic mechanisms that direct preferences and influence consumers' decision-making in digital transactions.

In the realm of contract law, this is an interesting legal phenomenon for further research because, in classical contract law, the principle of consensualism plays an important role; it places agreement as a condition for the occurrence of contracts.[7]

Furthermore, the development of digital transactions shows a contradiction or shift in the process of forming wills, because consumer consent is influenced not only by the substance of the contract provided by business actors, but also by the digital environment built through technological systems. One example of this change is the use of algorithms on digital platforms.

Through profiling and personalisation mechanisms, algorithms can analyse user behaviour and preferences to present information, product recommendations, and offers tailored to consumer characteristics. This can affect the consumer decision-making process and raises questions about the extent to which these decisions still reflect the autonomy of consumer will in digital transactions.[8]

As a result, the consent given by the consumer in a digital transaction may fulfil only the formal aspect of contract formation. At the same time, the quality of the will underlying the agreement can be influenced by the digital environment designed by the platform operator. Thus, the problem in electronic contracts is not only related to the characteristics of standard contracts that limit the negotiation space of the parties but also develops in

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[7] R. Mustar Lofi, *Legal Fiction in Electronic Transactions: The Problem of Agreement Validity in the Era of Smart Contracts*, 9, no. 1 (2025): 106.

[8] Ludovica Sposini, "Platformed Interactions: How Social Media Platforms Relate to Candidate–Constituent Interaction During Finnish 2015 Election Campaigning," *Social Media and Society* 6, no. 2 (2020): 6–7, https://doi.org/10.1177/2056305120903856.

the design aspect of technology that can affect the process of giving consent by consumers.

One of these advanced anomalous phenomena that touches the realm of business ethics and law in consumer will is the existence of dark patterns, which are digital interface design practices that are deliberately designed to direct user behaviour in certain ways, such as making it difficult for users to reject a choice, disguising important information, or encouraging users to make decisions that benefit business actors. One example of dark patterns in digital practices is the legal action taken by the United States Federal Trade Commission (FTC) against Amazon over alleged interface design that affects consumers' registration and cancellation of Amazon Prime services.

In this case, the FTC accused Amazon of using a UI/UX mechanism that makes it easier for consumers to enrol in paid subscription services automatically. In contrast, information about payment consequences and the option to decline the service is not presented clearly enough.[9] One of the main issues is Amazon's checkout process, which offers the option to join Prime when consumers make a purchase. The FTC stated that, in some circumstances, the transaction settlement button does not clearly indicate that the user has agreed to register for the paid Prime service. In addition, the FTC also took issue with the subscription cancellation process, which was made much more complex than the registration process. The case was resolved through a legal agreement between Amazon and the FTC worth US$2.5 billion, which included civil penalties and refunds to affected consumers.[10]

The second case, in digital transactions, is the FTC's case against Epic Games, the developer of Fortnite. The FTC found that Epic Games used a

[9] "FTC Takes Action Against Amazon for Enrolling Consumers in Amazon Prime Without Consent and Sabotaging Their Attempts to Cancel | Federal Trade Commission," 20 Mei 2023, https://www.ftc.gov/news-events/news/press-releases/2023/06/ftc-takes-action-against-amazon-enrolling-consumers-amazon-prime-without-consent-sabotaging-their?

[10] Ho dan Sally, "Amazon to pay $2.5 billion to settle FTC allegations it duped customers into enrolling in Prime | AP News," AP News, 26 September 2025, https://apnews.com/article/amazon-prime-ftc-bezos-online-shopping-a3aa849de1279e3675a162ec6815de84.

confusing and inconsistent interface design that allowed users to make in-game purchases involuntarily. In addition, the FTC found the cancellation and refund mechanism inaccessible to users. As part of this settlement, the FTC required Epic Games to pay US$245 million in refunds to consumers.[11] This case shows that the act of clicking or electronic consent does not always reflect the completely free and conscious will of consumers, as the design of digital systems can influence and direct the user's decision-making process.

The third case is between the FTC and Vonage,[12] where the final results show that Vonage implemented a digital mechanism that makes it difficult for consumers to cancel subscription services, while making the registration process much easier. Consumers must navigate complicated, unclear cancellation steps, so some users are still charged despite their efforts to terminate the service. In the settlement, Vonage was required to pay approximately US$100 million in refunds to consumers. This case shows that the design of digital interfaces can affect not only the process of approving electronic contracts, but also consumers' ability to revoke consent effectively. In Indonesia, in 2022, the Business Competition Supervisory Commission (ICC) reported that as many as 37% of consumer complaints in electronic commerce activities related to additional fees that were not disclosed from the beginning and difficulties in cancelling transactions.[13]

These cases show that the development of digital transactions has presented a new challenge to the concept of agreement in contract law. On

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[11] Lesley Fair, "$245 million FTC settlement alleges Fortnite owner Epic Games used digital dark patterns to charge players for unwanted in-game purchases | Federal Trade Commission," Federal Trade Commission, 16 Desember 2022, https://www.ftc.gov/business-guidance/blog/2022/12/245-million-ftc-settlement-alleges-fortnite-owner-epic-games-used-digital-dark-patterns-charge?

[12] "FTC Action Against Vonage Results in $100 Million to Customers Trapped by Illegal Dark Patterns and Junk Fees When Trying to Cancel Service | Federal Trade Commission," 3 November 2022, https://www.ftc.gov/news-events/news/press-releases/2022/11/ftc-action-against-vonage-results-100-million-customers-trapped-illegal-dark-patterns-junk-fees-when-trying-cancel-service.

[13] Supriyanto and Molid Nurman Hadi, "DARK PATTERN MITIGATION ANALYSIS IN E-COMMERCE IN INDONESIA," *Trade Policy Journal* 4, no. 1 (December 2025): 4, https://jurnal.kemendag.go.id/index.php/TPJ/article/view/1093.

the one hand, Indonesian contract law, through the principle of consensualism, places agreement as the main basis for the birth of an agreement. An agreement is understood as the parties' meeting of the minds that gives birth to a legal relationship. However, the development of electronic contracts based on digital platforms shows that the consumer's consent does not always arise from a process of forming a will that is completely free and independent, but can be influenced by contractual structures and digital technology in the form of standard contracts, algorithmic mechanisms, and manipulative interface designs that direct user choices. That being the case, it begs the question of whether the expressed permission represents the true intention or is merely a formality.

Beyond this discourse, the researcher perceives a normative tension between the principle of will-autonomy in contract law and the reality of will formation in the digital environment. In digital transactions, the consumer's click of consent may be seen as the acceptance of electronic contracts, as is formally required. But these actions can be problematic in substance when the will of the consumer, which serves as the foundation for consent, has been affected by technological mechanisms that the consumer does not fully understand or control. From the perspective of contract law in Indonesia, this issue shows a gap between regulations on the validity of electronic contracts and the development of digital consent-formation practices. Law Number 11 of 2008 concerning Electronic Information and Transactions as amended last by Law Number 1 of 2024 (hereinafter referred to as the ITE Law) and Government Regulation Number 71 of 2019 concerning the Implementation of Electronic Systems and Transactions (hereinafter referred to as PPSE) has recognized the existence of electronic contracts as an instrument of legal relations, while the Civil Code through Article 1320 places agreement as one of the conditions for the validity of the agreement. However, these two legal frameworks have not provided specific parameters for assessing the quality of consumer will when electronic consent is formed in a digital environment that uses algorithms, personalisation, and manipulative designs (dark patterns).

As comparative material, several previous studies related to this article address patterns, including the research on dark patterns by Leiser and Caruana.[14]They examined dark patterns from the perspective of consumer protection law. In their research, they explained that dark patterns are a form of digital interface design deliberately made to influence user behaviour by manipulating choices. As a result, users take actions that do not fully reflect their actual preferences. The research shows that the main problem of dark patterns does not only lie in the delivery of information that is not transparent, but also in the ability of digital design to influence the user's decision-making process.

The second is the research by Sin, Harris, Nilsson, and Beck.[15]. They conducted empirical research on how dark patterns influence consumer behaviour in online shopping transactions. The study shows that manipulative digital design can increase the tendency to make impulse purchases by utilising users' psychological biases, such as scarcity bias and social proof. These findings show that consumer decisions in the digital space are not always formed through a completely rational and independent consideration process. However, the research remains within the realm of consumer behaviour. It has not yet addressed the juridical consequences of decisions influenced by digital design on the validity of consent in electronic contracts.

Third, from the perspective of contract law, Tjong Tjin Tai developed a discourse on the relationship between dark patterns, artificial intelligence, persuasive design, and the concept of freedom of choice in contract law. The research emphasises that classical contract theory is built on the assumption

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[14] Mark Leiser dan Cristiana Santos, "Dark Patterns, Enforcement, and the Emerging Digital Design Acquis: Manipulation beneath the Interface.," *Law and Technology* 8, no. 2 (2024): 18–20, https://doi.org/10.2838/859030.

[15] Ray Sin dkk., "Dark patterns in online shopping: do they work and can nudges help mitigate impulse buying?," *Behavioural Public Policy* 9, no. 1 (2025): 5–7, https://doi.org/10.1017/bpp.2022.11.

of free will and free choice of the parties. However, the development of digital technology through personalisation, algorithms, and user experience design can influence how contractual decisions are formed. This research is closely related to prior research because it also questions the role of free will in digital contracts. Still, it has not specifically analysed consensus ad idem and the possibility of pseudo-will emerging in clickwrap agreements under Indonesian contract law.

In this regard, the author realises that previous research has generally discussed the validity of electronic contracts in terms of the fulfilment of formal agreement elements, the position of standard contracts, and consumer protection in digital transactions. However, few studies have specifically analysed how algorithms, choice architecture, and dark patterns influence the formation of consumer will (consumer agreements) and their implications for the applicability of the principle of consensualism in Indonesian contract law.

Accordingly, this study aims to analyse the boundary between a formal legal agreement and a will that truly reflects free consent in electronic contracts. Thus, the novelty of this research lies in the effort to reconstruct the meaning of the principle of consensualism in the context of digital transactions, especially by examining whether the clickwrap agreement mechanism is still able to reflect the meeting of wills when the dark pattern mechanism has influenced the process of forming consumer consent, the legal consequences that arise and how to reconstruct the ideal electronic contract law in the era of digital disruption.

Methods

This research uses a normative (juridical) research type and applies three approaches: the statutory approach, the conceptual approach, and the comparative legal approach. The legislative approach is carried out through a hierarchical inventory of laws and regulations. In contrast, the conceptual approach examines legal doctrine and the development of theories or ideas related to the field of law being studied. Furthermore, the comparative legal approach is used to examine the form of dark pattern juridical regulation in the legal systems of other countries to obtain a relevant synthesis. The primary legal materials include laws, regulations, and court decisions, while secondary legal materials are obtained from legal journals and academic literature related to the object of research. All of these legal materials are then analysed qualitatively, drawing deductive conclusions from the study of legal provisions, concepts, and comparative results to obtain a systematic understanding of dark pattern juridical arrangements.

Result and Discussion

A. The Position of Agreements in Electronic Contracts (Clickwrap Agreement) Based on the Principle of Consensualism in Indonesian Contract Law

When discussing the law of agreements, understanding it cannot be separated from the legal system of engagement as stipulated in Book III of the Civil Code (KUHPerdata). This is because an agreement is one of the sources of the birth of an agreement, as affirmed in Article 1233 of the Civil Code, which states that each agreement is born either by consent or by law. Thus, the relationship between agreement and agreement is causal: the agreement functions as a legal instrument that gives birth to a civil law relationship between the parties.

From the perspective of civil law, an agreement is not understood solely as a document or formal form that contains the will of the parties, but as a legal construction born from the meeting of the will (consensus) between two or more parties. The meeting of the will reflects a consensus of understanding (consensus ad idem) regarding the objects, rights, obligations, and legal consequences the parties want to create. This view corresponds to the statement of M. Natsir Asnawi, who emphasised that the philosophical foundation of contract law rests on a consensus that is born purely and autonomously. The conformity of the will must absolutely be free from all forms of defects of will (wilsgebreken), especially coercion (dwang), and always imbued with the principle of good faith (goede trouw) as the spirit of the formation of agreements.[16]

Based on this, the fundamental essence of an agreement lies in the conformity of the will, which the law then manifests as a binding legal relationship. When the parties reach an agreement to bind themselves, an agreement is born that produces juridical consequences in the form of rights for one party and obligations for the other. In other words, an agreement is the source of contractual liability, where each party who binds himself is obliged to carry out achievements as agreed in accordance with the provisions of Article 1234 of the Civil Code, which regulates achievements.

These consequences show that a person's freedom to agree is not absolute, but a freedom granted and limited by law. Furthermore, if we analyse Article 1320 of the Civil Code, it can be found that, juridically, an agreement is considered valid if it meets four fundamental elements, namely:

1. the existence of an agreement between the parties that binds them;
2. the ability of the parties to agree;
3. the presence of a certain object;
4. There is a halal cause.

The four elements have a cumulative position, meaning all of these elements must be fulfilled for an agreement to gain legally binding force. Failure to fulfil one of these elements will have legal consequences for the existence and enforceability of the agreement.

From the perspective of the legal doctrine of agreements, the four conditions are classified into two main categories: subjective conditions and objective conditions. The agreement and competence of the parties are subjective conditions because they relate to the subject or parties who form the agreement. In contrast, certain objects and halal causes are objective conditions because they are related to the substance or content

[16] M. Natsir Asnawi and Faisal Santiago, *Contract Law Updates in Indonesia: Pre-Contract, Contract, Post-Contract* (Jakarta: Kencana, 2024), 84.

of the agreement itself.

This classification has juridical implications for the legal consequences in the event of a violation of each element. If there is a defect in the subjective terms, especially related to an imperfection of will or the incompetence of one of the parties, then the agreement is voidable. It has legal existence, but the party whose interests are harmed may request cancellation. In the Dutch legal system, this concept is known as vernietigbare overeenkomst, an agreement that can be cancelled due to a defect in the will or in the legal capacity of the parties.

It is different if a violation occurs against an objective condition in the form of the absence of a certain object or a causa that is contrary to law, decency, and public order. In such conditions, an agreement is considered not to meet the foundation of the existence of the law from the beginning (null and void). In Dutch legal doctrine, it is known as a nietige overeenkomst, an agreement that is null and void because it does not meet the fundamental elements on which it is based.

Based on this construction, an agreement occupies a strategic position in treaty law. An agreement is not only a formal element as stated in Article 1320 of the Civil Code, but also a philosophical basis that gives legitimacy to the enforceability of a contract. Without an agreement, the contractual relationship loses its moral or juridical basis because there is no reason to justify burdening a person with a legal obligation without the will to be bound.

From this theoretical perspective, the principle of consensualism has gained relevance. The principle of consensualism departs from the idea that a contract's binding power comes solely from a certain form or formality and instead derives from the parties' freely given consent. This principle is a representation of the concept of autonomy of will that is one of the main foundations of modern contract law.

In contract law theory, agreement is linked to the idea of meeting of the minds or consensus ad idem. This is a state where the parties have the same understanding of the will to be realised through the agreement. An agreement must demonstrate compatibility between an individual's internal will and the external manifestation provided to the other party, in addition to being an outward declaration of consent.

Over time, the pure embodiment of the principle of consensus ad idem has been seriously challenged by the widespread practice of standard agreements. This contract model arises from the need for practicality and efficiency in the business world, in which business actors determine and set their clauses unilaterally. As a result, freedom of contract, which should be the spirit of consensualism, is degraded to a mere "take it or leave it" option. Because of unequal bargaining power, consumers' consent is often not the result of a balanced bargaining process, but compliance forced by circumstances with the conditions offered.

The digital era then gave birth to clickwrap agreements as the latest form of transforming the standard agreement. This dynamic makes the discourse about "agreement" much more complicated. In the past, in conventional contracts, a person's intention to bind himself was very visible, for example, through the stroke of a wet signature pen on paper or a direct handshake. Now, in electronic transaction traffic, the form of consent is simplified to the extreme: a touch on the "I Agree" or "Agree" button, or simply affixing a virtual checkmark, without the need for the parties' physical presence.

Digital consent in Indonesia has gained normative recognition through the ITE and PPSE Law. Although these regulations have been improved, our positive law still leaves a gap in technical rules on standard parameters for testing the validity of clickwrap agreements. As a result, the juridical basis used as the main reference for assessing the validity of electronic contracts remains the classic legal instrument, namely Article 1320 of the Civil Code.[17]

[17]Damar Tangguh Rabani and Dina Silvia, "The Validity of the Clickwrap and Browsewrap Agreement Mechanism as a Form of Agreement in Electronic Contracts After the

Even though the state has legalised its validity through regulation, the metamorphosis of this form of agreement still raises a critical question: as agreements become increasingly complex in modern contract development, especially with the advent of electronic contracts and clickwrap agreement mechanisms. In conventional contracts, one's will is generally manifested through relatively explicit actions, such as signing documents or exchanging statements directly. However, in electronic contracts, one's will can be manifested only through the digital act of pressing the "agree" button, which is not real.[18] In this view, click agreements distort the purity of the principle of consensualism; the consent that is born no longer reflects the consensus ad idem of two entities standing on an equal footing, but is relegated to a mere form of mechanical submission of the user to the unilaterally dictated electronic system.[19]

The change in the form of the manifestation of the will raises a fundamental question in contract law, namely whether the act of clicking in an electronic contract really reflects the agreement as referred to in the principle of consensualism, or is it just a form of formal consent that does not necessarily reflect the free will and true understanding of the user? However, conceptually, the clickwrap mechanism can be justified under the principle of consensualism, provided that the 'click' maneuver is recognised as a representation of pure conformity of will.[20]

However, in the author's view, such an instrument is not necessarily immune to defects of will (wilsgebreken), especially when wrapped in

Enactment of Law Number 1 of 2024 concerning Electronic Information and Transactions," *Law and Environment Bookchapter* 3 (July 2026): 577.

[18] Uu Lukmanul Hakim and Agus Satory, "Legal Aspects of Electronic Agreements in Digital Business in Indonesia," *Acta Comitas : Journal of Notary Law* 11, no. 01 (April 2026): 142, https://doi.org/10.24843/AC.2026.v11.i01.p10.

[19] Achmad Sujoko, "Pseudo-Consent in Online Loan Electronic Contracts: An Analysis of the Validity of Agreements According to Article 1320 of the Civil Code," *IJTIHAD: Journal of Islamic Law Studies* 4, no. 1 (June 2026): 7.

[20] Amirah Dwi Subarkah and Elsa Gravionika, "The Legal Validity of Clickwrap and Browsewrap Agreements in E-Commerce Transactions: A Normative Study of the Principle of Consensualism," *Journal of Legal Ethics* 6, no. 2 (December 2024): 264, https://doi.org/10.47637/legalita.v6i2.1783.

standard clauses that unilaterally harm consumers. Consequently, the parameters of validity and the position of the agreement in a clickwrap agreement can no longer be measured simply by the fulfilment of procedural and formal aspects but require material testing that penetrates to the substantial justice of the parties' will.

B. The Influence of Dark Patterns on the Validity of Consumer Agreements and the Reconstruction of Digital Contract Legal Arrangements

The shift in transaction activities from the conventional space to the digital environment has changed the mechanism of contract formation. In the practice of electronic contracts such as clickwrap agreements, parties generally no longer obtain consent through direct negotiation; instead, they express it by accepting a standard contract designed by the service provider. This changes the meaning of freedom of contract, which previously included the authority to determine the content of the agreement, to the choice to accept or reject the predetermined provisions.

The complexity of the formation of will in electronic contracts is increasing with the development of the practice of dark patterns, namely digital interface engineering that unethically utilises cognitive biases to direct user behaviour, thereby triggering commercial decisions that benefit business actors but are contrary to the pure will of consumers.[21]

The phenomenon of dark patterns is gaining greater relevance in digital transactions because it is widespread across technology-based services such as e-commerce, digital subscription services, transportation applications, and financial platforms. This practice shows that digital design no longer functions solely as a means of conveying information, but can also influence the formation of

[21] Adisty Sativa and Duhita Driyah Suprapti, "Legal Protection for Consumers Over Fake Discounts as a Form of Dark Pattern in E-Commerce Transactions," *Law and Environment Bookchapter* 3 (July 2026): 31.

consumer will.[22]

Several studies show that dark patterns can direct user behaviour and may reduce consumer freedom and rationality when giving digital consent. Some of these studies, the first conducted by Zae et al, show that dark patterns increase the level of consumer acceptance of a digital offer. Compared to conditions without manipulation, false hierarchy designs, roach motels, and confirm shaming produce higher acceptance rates, showing that the structure of digital design can influence consumer behaviour in determining their will.[23]

Second, Rossi et al stated that vulnerability to dark patterns does not only come from individual factors, but is the result of interaction between three dimensions, namely micro factors in the form of users' personal conditions, meso factors in the form of digital and social interaction environments, and macro factors in the form of economic and regulatory structures that affect the technology ecosystem.[24]

Third, Sin et al. found that dark patterns in the online shopping environment significantly increase consumers' impulse buying tendencies. Manipulative designs such as scarcity and social proof messages can influence the selection and evaluation process, encouraging spontaneous purchases.[25]

Fourth, in Indonesia, Sativa and Suprapti found indications of fake discount practices on one e-commerce platform, namely Tokopedia, in April 2026, through the use of reference prices that do not reflect actual market price conditions. The study highlighted an example of Kinera

[22] Dwi Arman Prasetya, Narumi Hayakawa, and Rahayu Sri Utami, "Juridical Analysis of Dark Patterns Practices in Digital Marketing and Their Impact on Consumers," *Al-Zayn : Journal of Social Sciences & Law* 4, no. 2 (March 2026): 1448.
[23] Amit Zac dkk., "Dark Patterns and Consumer Vulnerability," *Behavioural Public Policy*, 3 February 2025, 29, https://doi.org/10.1017/bpp.2024.49.
[24] Arianna Rossi dkk., "Who Is Vulnerable to Deceptive Design Patterns? A Transdisciplinary Perspective on the Multi-Dimensional Nature of Digital Vulnerability," *Computer Law & Security Review* 55 (November 2024): 14, https://doi.org/10.1016/j.clsr.2024.106031.
[25] Sin dkk., "Dark patterns in online shopping: do they work and can nudges help mitigate impulse buying?," 84.

Celest Wyvern products displayed with a starting price of IDR 1,499,000, accompanied by a discount claim of up to 80%, giving the impression that consumers were receiving a significant price benefit. However, after comparing prices of similar products in the market, it was found that the product was also available at around IDR 302,099 without large discounts, showing a discrepancy between the perception of discounts and the actual price conditions.

In addition to electronic commerce activities, dark patterns can also be found in digital credit services.[26]through various stages of contractual relationships. In the pre-contract stage, service providers can frame credit limits as "available balances" or "special opportunities" so that consumers see it more as a benefit than a liability. In the disclosure stage, cost information can be separated into several components so that the total credit burden is less visible. Meanwhile, in the consent stage, data approval and credit terms can be combined into one affirmative action. In contrast, in the post-contract stage, the cancellation or repayment mechanism can be made harder to find.

These patterns show that dark patterns relate not only to the availability of information, but also to how it is designed and presented, potentially affecting consumers' freedom to give contractual consent.

As digital transaction practices continue to evolve, dark patterns are not merely a marketing tool that influences consumer behaviour but have become a legal issue relating to the validity of the will in the formation of a contract. In the law of treaties, an agreement is not sufficient to constitute a formal declaration of consent. But it must still be regarded as the consequence of a free, conscious process of will, without the presence of misleading influences. The existence of dark patterns therefore raises the fundamental question as to whether electronic consent by clicking is an actual expression of consumer will

[26] Amin Sadiqin, Maria Yovita R. Pandin, and Amiartuti Kusmaningtyas, *DARK PATTERN IN DIGITAL FINANCE APPLICATIONS: THE INFLUENCE OF INTERFACE DESIGN ON CONSUMERS' DECISIONS TO TAKE DIGITAL CREDIT*, t.t., 2709.

or whether it is a mere consequence of digital design by business actors.

From the perspective of Indonesian contract law, the issue is directly related to the element of agreement as one of the subjective conditions of validity of an agreement as stipulated in Article 1320 of the Civil Code. An agreement essentially requires a meeting of minds on the subject matter. Legal effects of an agreement: However, modern electronic contracts demonstrate that the process of forming a will is no longer carried out only through the exchange of statements between the parties, but through a digital system controlled by the service provider. Whoever designs the technology gets to decide how information is framed, how choices are structured, and how users are nudged toward a certain decision.

This condition exposes some limitations of the formal approach to agreement pertaining to digital transactions. In the clickwrap mechanism, the click of the consent button is usually taken as evidence of the existence of an agreement. This provides certainty and efficiency in electronic transactions, but it has not solved the larger problem: how the will is formed. In practice, however, consumers may give consent in a technical sense through dark patterns. However, the hiding of relevant information, the predominance of some options or the psychological pressure created by the design of the interface can influence such decisions.

Thus, dark patterns can be seen as a form of interference with the process of forming will in electronic contracts. Although not all of these practices automatically meet the element of will defects as known in classical treaty law, their characteristics are related to the concepts of dwaling, coercion (dwang), and fraud (bedrog). In the case of fake discounts, for example, consumers can make mistakes because transaction decisions are based on price perceptions engineered through the presentation of unbalanced information. The problem does not lie in the absence of information alone. It lies in how the information is constructed to create a different understanding of the actual transaction conditions.

The same is seen in the practice of hidden costs. The existence of additional cost information in terms of service does not automatically indicate the fulfilment of the principle of transparency if the information is difficult to find, provided after a decision has been made, or disguised by other design elements. In the context of digital contracts, transparency must be understood substantively, i.e. not only about whether the information is available, but whether consumers have a reasonable opportunity to know, understand, and consider the economic consequences before giving consent.

In addition, some forms of dark patterns also exhibit characteristics that resemble pressure in the formation of wills. The use of time limits, claims of stock limitations, or warnings that an opportunity is coming to an end can create psychological pressure that affects the consumer's ability to make rational judgments. While these conditions are not coercive in the classical legal sense of direct threats, such digital mechanisms can still diminish a user’s freedom to make contractual choices.

The issue indicates that the doctrine of defects of will in the Civil Code encounters problems when applied to technology-based contracts. The classic notion of defects of will is premised on the assumption that interference with the will is accomplished by direct acts between parties. Dark patterns work through more complex mechanisms, namely the design of the interface, the structures of information presentation, algorithms and choice architectures. Manipulation in digital contracts is not necessarily deception or direct pressure; it can also be the manipulation of the decision environment, which influences the formation of the user's will. Legal developments in various countries show a shift in approach from simply testing the existence of consent to testing the quality of the decision-making process. The UK, through its unfair commercial practices regime, not only assesses the correctness of the information provided to consumers but also whether a practice can influence or distort economic decisions made by consumers. This approach shows that manipulation of the decision-making process can be a legal issue even if consumers still formally give consent.[27] In Malaysia[28], Misleading practices, false representations, unfair practices, and electronic transactions have been regulated through the Consumer Protection (Electronic Trade Transaction) Regulations 2024 and the Electronic Commerce Act 2006.

The United States' approach through the FTC also places digital design as part of the transaction mechanism that must be monitored. A practice can be considered problematic if the design is misleading or unfair because it reduces the consumer's ability to make decisions independently. On the other hand, India has created specific guidelines on dark patterns prohibiting manipulative practices in electronic transactions, such as bait and switch, drip pricing, and subscription traps. The regulation shows that the validity of digital contracts depends not only on formal consent, but also on a process of will-building that is transparent and free from digital design manipulation.[29]

This is in line with South Korea, the country not only strengthens special regulations related to dark patterns regulated in the Act on the Consumer Protection in Electronic Commerce, the Fair Labelling and Advertising Act, the Framework Act on Consumers, and the Personal Information Protection Act, but also through its institution, the Korea Fair Trade Commission (KFTC), published the Guideline for the

[27] "Unfair Commercial Practices," GOV.UK, accessed September 6, 2026, https://www.gov.uk/government/publications/unfair-commercial-practices-cma207/unfair-commercial-practices.
[28] Wan Farahiyah Izni W. Abd Rahman, Mohamad Rizal bin Abd Rahman, dan Masnizah Mohd, "Engineered Consent in Malaysian E-Commerce: Consumer Protection Against AI-Driven Dark Patterns," *Malaysian Journal of Social Sciences and Humanities (MJSSH)* 11, no. 7 (July 2026): 2, https://doi.org/10.47405/mjssh.v11i7.4115.
[29] Muh Rizki et al., "Consumer Legal Protection against Dark Pattern Practices in E-Commerce Transactions in Indonesia," *Muhammadiyah Law Review* 10, no. 2 (July 2026): 363, https://doi.org/10.24127/mlr.v10i2.5281.

Voluntary Management of Online Dark Patterns, which categorizes 19 types of dark patterns into four main classes and provides technical guidance for business actors to avoid misleading or coercive interface designs.[30]

In the Netherlands and the EU,[31] an integrated, layered protection regime protects consumer autonomy from dark patterns through a comprehensive legal framework that includes DSA, UCPD, GDPR, WHC, and UDV. Based on this legal basis, the Autoriteit Consument & Markt (ACM) implements proactive, technology-based law enforcement, such as automated screening tools that detect digital interface manipulation independently, without relying on individual complaint mechanisms.

Legal instruments available through the Civil Code and Law Number 8 of 1999 concerning Consumer Protection (UUPK), or Law Number 5 of 1999 concerning the Prohibition of Monopoly Practices and Unfair Business Competition (Business Competition Law) as a frame of reference for business actors and the ITE Law and its derivatives, can indeed be used against several forms of digital manipulation. Still, no one has specifically regulated dark patterns. In fact, the main feature of dark patterns is not only the content of the contract, but the digital mechanism that shapes the decision before the contract is agreed.

The limitations of the current legal approach show that the main problem in dark patterns lies not solely in the existence of unfair contract clauses, but in the process before the contract is formed, namely how the user's will is directed through a certain digital design. In treaty law, agreement as the basis for the birth of a contract requires a meeting

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[30] Putri Nabila Az-Zahra', Nurlaily Nurlaily, dan Agustianto Agustianto, "Regulating Dark Patterns in Indonesian E-Commerce: Comparative Lessons from South Korea and the EU," *Journal of Judicial Review* 27, no. 2 (December 2025): 431, https://doi.org/10.37253/jjr.v27i2.11304.

[31] Annisa Annisa dan Sylvana Murni Deborah Hutabarat, "Legal Protection for Consumers in the Context of Dark Patterns in Indonesian Marketplace Applications: A Comparative Study With the Netherlands," *Legal idea* 14, no. 1 (June 2026): 12–13, https://doi.org/10.21070/jihr.v14i1.1149.

of the will (consensus ad idem) of the parties. However, in modern electronic contracts, the will is no longer formed only through the exchange of statements between individuals, but through a digital environment that the platform provider largely controls. Therefore, the approach must shift from testing the existence of consent to testing the legitimacy of the consent-formation process.

Therefore, the reconstruction of Indonesian digital contract law needs to shift from formal consent to substantive informed consent. This contemporary concept reorients the focus from a formal validity test to substantive legitimacy by treating understanding, freedom of choice, and the authenticity of will as key elements in determining the legitimacy of digital consent.[32]

Electronic consent should not be judged solely on the existence of a click action as proof of acceptance, but also on whether the user has had sufficient opportunity to understand the information, consider options, and make decisions freely. Thus, the validity of electronic contracts should take into account the process of forming consent, not just its existence.

At the implementation level, this reconstruction can be achieved by requiring platform providers to maintain the application of the principle of digital informed consent. The user's price, cost, risk, rights and obligations must be provided clearly, easily found and available before the service provider takes any consent actions. Moreover, the fair choice architecture principle requires digital design not to create an imbalance of choices by hiding the opt-out option, complicating service cancellation or making some choices more dominant in a manipulative manner.

[32] Maison Sormin et al., "The Legitimacy of Electronic Consent in Digital Recruitment: An Engagement Law Perspective," *Begawan Abioso* 17, no. 1 (June 2026): 107, https://doi.org/10.37893/abioso.v17i1.1388.

There must also be a change in the way disputes are resolved to prove contracts allegedly made through dark patterns. Showing that a consumer clicked on a consent button is not enough; the court or regulator must consider the overall process of contract formation, including the interface design, the user journey, the placement of material information, and the balance between the option to accept and the option to reject the service. This approach enables the court or regulator to assess if the consent given is a product of free will or of manipulative digital design.

Finally, it is necessary to develop the notion of digital manipulation of consent as a relevant form of interference of will in electronic contracts. The idea is to widen the legal ability to respond to new forms of manipulation that have emerged through technological developments, not to replace the doctrine of defects of will in treaty law. This way the law can guard against situations where consumers are formally left with choices but have lost the substantive ability to make choices in good faith.

In addition, this study proposes a 'Digital Will Legitimacy Test' to operationalise the notion of digitally manipulated consent. This test is a practical parameter for the validity of agreements in electronic contracts. Such a test goes beyond an administrative check of whether the user has pressed the consent button. It tests the formation of the consent process.

In practice, the test is conducted through three indicators. First, proper information disclosure, which is to determine whether material information such as price, additional costs, risks, rights and obligations have been clearly provided before the signing of the contract. Second, autonomy, which tests whether the user has a balanced choice to accept, reject, or cancel the service without obstacles deliberately designed into the digital interface, so the consumer is not automatically selected. Third, the integrity of consent assesses whether the consent given can still be considered a valid decision if manipulative factors in digital design are eliminated. This test is not directed at assessing the user's subjective condition, but at whether there is a relationship between the character of the digital design and the formation of a contractual decision. Thus, what is tested is not whether the consumer personally regrets his decision, but whether the consent arose from a reasonable decision-making process or resulted from hidden information, engineered choices, or design pressures.

In the context of proof, Rott[33] explained that consumers or consumer organisations are not required to prove the existence of unfair practices, but rather to show prima facie evidence of the alleged violation. The initial standard of proof should be applied proportionately, given the inequality of access to information between consumers and digital business actors. After these indications are met, business actors, as the party that controls the system and related information, have an obligation to provide an adequate (meaningful) explanation of the process or mechanism at issue.

In another dimension, it is not only normative and theoretical reinforcement but also technological reinforcement that can be used as a preventive mechanism. Patil[34] explained that dark patterns in digital transactions can be addressed through technological approaches, such as using artificial intelligence to detect manipulative designs, browser extensions to help users recognise these patterns, and blockchain to increase transaction transparency.

Thus, the reconstruction of Indonesian digital contract law must focus on protecting the quality of the will that forms the basis of an agreement, both by strengthening consent standards and by testing

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33 P. Rott, "Digital Fairness and the Burden of Proof," *Journal of Consumer Policy* 48, no. 3 (September 2025): 310–11, https://doi.org/10.1007/s10603-025-09583-4.
34 Dr Anita Patil, *THE RISE OF DARK PATTERNS IN E-COMMERCE: COMPARATIVE LEGAL CHALLENGES AND CONSUMER PROTECTION STRATEGIES*, XI, no. 6 (2023): 1010–12.

mechanisms for the process of forming the will. In the digital context, freedom of contract is no longer sufficient to be interpreted as the freedom to accept or reject a contract by clicking. Still, it must be understood as the real ability of the parties to obtain adequate information, consider legal and economic consequences, and make choices without distortions due to technological manipulation. This approach allows digital transactions to develop within the corridor of the basic principles of treaty law, namely freedom of contract, good faith, balance of the parties, and respect for authentic will.

Conclusion

An examination of contract formation in the digital sphere confirms that clickwrap agreements now enjoy formal recognition within Indonesian law, yet they substantively erode the principles of consensualism and consensus ad idem enshrined in Article 1320 of the Civil Code. A single click rarely reflects a genuinely autonomous act of will. More often it constitutes consumers' mechanical acquiescence to standardised, take it or leave it clauses that platform providers impose unilaterally. Dark patterns aggravate this weakness by exploiting users' choice architecture and cognitive biases. The practice amounts to digital manipulation of consent, a contemporary will defect (wilsgebreken) that goes beyond the classical doctrines of error (dwaling), duress (dwang), and fraud (bedrog).

Since Indonesian positive law has yet to address the particularities of digital interfaces, contract-law reform can no longer rest on procedural safeguards alone. It needs a shift from formal to substantive informed consent, built around a proposed "Digital Will Legitimacy Test." The test asks whether the platform discloses material information, safeguards choice autonomy, and preserves the integrity of the consent process. A proportional reversal of the burden of proof reinforces this test, restoring balance and genuine justice in digital contractual relations.

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