

# Analysis of the Validity and Effectiveness of Electronic Contracts in Legal Protection of Digital Transactions in Indonesia

Muhammad Sulaiman, Novritsar Hasitongan Pakpahan, Arif Rachman Putra

Sunan Giri University of Surabaya, Indonesia

## ARTICLE INFO

### Article history:

Received 2 April 2022

Revised 15 September 2022

Accepted 28 September 2022

### Key words:

Electronic contract,  
Validity,  
Legal protection,  
Indonesia,  
Electronic signature,  
Regulation,  
Consumers.

## ABSTRACT

*This research discusses the validity and effectiveness of electronic contracts in providing legal protection for parties involved in electronic transactions in Indonesia. While Law Number 11 Year 2008 concerning Electronic Information and Transactions (ITE) legally recognizes electronic contracts, there are challenges in terms of TTE verification and consumer protection. Electronic signatures (TTE) are often considered less valid than manual signatures due to unclear verification standards and doubts over their security. While there are regulations governing consumer protection, their implementation in electronic transactions is weak, leading to legal uncertainty. There is a need to update regulations on TTE verification and personal data protection, as well as increase the capacity of supervisory institutions to ensure the implementation of legal and secure electronic transactions. This research also recommends increasing digital literacy among the public and business actors so that they better understand the rights and obligations in electronic contracts. Thus, it is expected that electronic contracts can provide better legal protection for the parties involved in digital transactions.*

## INTRODUCTION

The development of information and communication technology has brought significant changes in various aspects of life, including in the field of legal. One of the striking changes is the use of electronic contracts in business transactions, which is increasingly popular in Indonesia. Electronic contracts allow parties to bind themselves in an agreement without the need to meet face-to-face or sign physical documents. With this convenience, many parties have begun to switch from manual contracts to electronic contracts as a more efficient and practical alternative. While the development is rapid, the use of electronic contracts is not free from various legal issues, both in terms of validity and effectiveness. Electronic contracts provide flexibility and efficiency in drafting agreements, especially related to e-commerce which is growing rapidly (Adelina, 2020; Purnamasari, 2021).

According to Indonesian legal principles, the validity of electronic contracts is regulated in a number of regulations, one of which is Law Number 11 Year 2008 concerning ITE, which was later updated by Law Number 19 Year 2016 Article 1320 of the Civil Code of Indonesia (KUHPer) which regulates the validity of a contract is also adapted to cover electronic forms

(Prastya et al., 2021). There are still many questions that arise regarding the extent to which Indonesian law recognizes and protections such electronic contracts regarding the protection of the rights of the parties involved in the contract (Achsan et al., 2020). This includes issues such as the authenticity of digital signatures, the preservation of evidence of electronic transactions, as well as the enforceability of contracts that are sometimes difficult to follow up in court.

While electronic contracts have been recognized in regulations, their implementation in legal practice in Indonesia still faces various obstacles. This can be seen from the many cases involving electronic contract disputes, where there are often difficulties in proving and executing legal decisions (Hasibuan & Rahmania, 2020). The process of verifying the identity of the parties in electronic transactions, for example, is often not easy to do, given the many methods and technologies used, as well as the variability in their level of security. Weaknesses in legal protection of consumers in electronic transactions are also an issue that needs more serious attention from regulators (Torong, 2021). The self-executing characteristics of electronic contracts require clarity in legal aspects so as not to cause harm to the parties involved (Ardhiansyah & Nugraha, 2020).

\* Corresponding author, email address: [arifrachmanputra.caniago@gmail.com](mailto:arifrachmanputra.caniago@gmail.com)

The lack of understanding among the public and business actors about the importance of complying with proper procedures in drafting electronic contracts worsens the situation (Biondi, 2016). There are still many business actors who do not utilize technology to the fullest, or even do not understand the applicable regulations. Some businesses, especially small and medium-sized enterprises, are still reluctant or unable to integrate information technology into their contractual systems. This certainly has the potential to cause legal uncertainty and harm the parties involved, especially consumers who are often in a weaker position. In the long-term, this phenomenon can affect the integrity and credibility of the Indonesian legal system, which in turn can hinder the development of the digital economy in the country.

One of the main problems faced in the validity of electronic contracts in Indonesia is the lack of clarity regarding the recognition of TTE as valid evidence and can be accounted for before the legal system. While the ITE Law provides a legal basis, in practice, there is no regulation that details the verification procedures of TTE that can guarantee the validity of the contract. This is important considering that TTE are often considered less strong evidence than physical signatures. This perception is influenced by conventional legal customs and a lack of education on the validity and security of digital signature systems. The public's limited understanding of this technology also worsens the condition, so that often the parties involved cannot ensure the validity of the contracts they sign. The lack of digital literacy among the public and business actors has a significant impact on the validity of electronic contracts.

Another problem that arises is the lack of adequate legal protection for injured parties in electronic transactions. While regulations related to consumer protection exist, such as those stipulated in Law Number 8 Year 1999 concerning Consumer Protection, effective application of the legal system in electronic contract disputes is still limited. The indirect and cross-border characteristics of electronic transactions make consumers' position more vulnerable, especially when there is a violation of the agreement or misuse of personal data. Many consumers are unaware of their rights in electronic contracts, and find it difficult to access appropriate legal protection in the event of a breach. The existence of more detailed rules and stricter application of consumer rights in the digital world needs to be a major concern, so that the legal protection system in Indonesia can be more adaptive to the rapid development of technology.

Given the rapid development of electronic transactions in Indonesia, as well as the increasing potential for conflicts relating to electronic contracts, an assessment of the validity and effectiveness of these electronic contracts is essential. This is not only relevant to maintain public confidence in digital transactions, but also to ensure that Indonesia's legal system can compete on a global level, where consumer protection and legal certainty are crucial. Without an understanding of these issues, Indonesia risks losing out on the huge potential of the digital economy, which in turn could affect the country's competitiveness in the global digital economy.

This research aims to explore and analyze the validity and effectiveness of electronic contracts in providing legal protection in Indonesia, by assessing the extent to which existing regulations can guarantee the rights of parties in digital transactions, as well as identifying legal barriers that still exist in their application in society.

## RESEARCH METHOD

This research uses a literature study approach by analyzing various written sources related to the validity and effectiveness of electronic contracts and legal protection in Indonesia. This literature study approach was chosen to explore information related to regulations, legal theories, and previous studies that discuss existing problems in the application of electronic contracts in Indonesia. The literature used includes books, scientific journals, research reports, and relevant legal regulations (Waluyo, 2002; Sugono, 2001). This approach enables researchers to assess diverse perspectives on electronic contract regulation to evaluate the effectiveness of Indonesia's legal system in governing and protecting electronic transactions. It employs a normative juridical approach to assess the validity and implementation of electronic transaction regulations in Indonesia, particularly concerning creditor protection and electronic contract validity (Ibrahim, 2006; Rodli, 2021).

To analyze the validity and effectiveness of electronic contracts, this research also reviews literature that discusses TTE, electronic transaction evidence, and consumer protection regulations. The researcher will collect various data related to the development of regulations, especially those contained in the ITE Law as well as other regulations related to electronic transactions. This research will analyze previous studies that discuss the weaknesses and challenges in the application of electronic contracts. With this approach, the research is expected to provide a comprehensive picture of how effective the existing regulations are in regulating electronic contracts and their protection for the parties involved.

## **RESULT AND DISCUSSION**

The rapid development of information and communication technology has changed various aspects of human life, especially in the economic and transaction fields. This digital improvement has created various conveniences, including in terms of transactions that no longer depend on physical interaction between the parties involved. Electronic transactions, which were previously only used by a handful of parties, have now become an integral part of daily activities, both in business transactions, government, and individual transactions. The speed and efficiency offered by these technology-based transactions make them increasingly popular, but also pose new challenges in terms of legal regulation and protection (Kalesaran, 2022).

One of the main elements in electronic transactions is the electronic contract, which serves as a tool to bind the agreement between the parties involved. This contract allows parties who are not face-to-face to have a legal basis for their transactions. In response to this need, Indonesia through Law Number 11 Year 2008 concerning ITE provides regulations regarding the enforceability of electronic contracts. This law was later updated with Law Number 19 Year 2016, with the aim of adjusting to the dynamics of technological development. Through this regulation, electronic contracts are legally recognized in Indonesia and can be used to legally bind contracts.

The legitimacy of TTE in business transactions in Indonesia has been recognized, although there are still challenges in implementation that require further socialization (Suwarno, 2017). These are mainly related to its validity and effectiveness still frequently arise. Adequate legal protection for parties involved in electronic transactions, both in terms of consumers and service providers, is not yet fully guaranteed. Many aspects need to be considered, ranging from TTE authentication, data security, to dispute resolution that can arise due to uncertainty in regulations. It is important to continue to study how electronic contracts can provide more effective and optimal protection for all parties involved (Syidik & Jaelani, 2022).

The validity of electronic contracts in Indonesia is generally regulated in Article 1320 of the Civil Code (KUHP), which explains the conditions for the validity of a contract, namely the existence of an agreement, the competence of the parties, a certain matter, and a lawful cause. In relation to electronic contracts, this agreement can be reached even if there is no physical interaction between the parties involved, as Indonesian legal system has recognized TTE as a substitute for manual signatures (ITE Law Article 11).

While electronic contracts have been recognized as legally valid, the biggest challenge faced is verifying the authenticity of the TTE itself. This is due to the diversity of methods used in TTE systems and their different levels of security, which can raise doubts regarding their validity in court (Novel, 2018).

One of the reasons why the validity of electronic contracts is often questioned is the lack of clarity regarding the verification standards that must be carried out in the electronic signing process. The ITE Law does mention that TTE have the same legal force as signatures on paper, but does not in detail regulate the procedures or tools used to ensure the identity and integrity of the parties in electronic transactions. Article 12 paragraph (1) of the ITE Law states that protecting TTE from being accessed by unauthorized persons by applying the precautionary principle so that TTE data is not used unlawfully and notifying parties deemed trustworthy if they know TTE data has been breached. Thus, a valid TTE is a signature that meets certain technical and procedural requirements. This regulation still leaves room for uncertainty, especially regarding the use of various verification tools and their potential misuse.

In practice, the implementation of electronic contracts in Indonesia often encounters obstacles in terms of implementing TTE verification. The varying quality of digital infrastructure in each region, as well as the low level of awareness among the public and business actors regarding legal verification procedures and tools, add to the complexity of this issue. The variety of types and formats of TTE used by service providers, ranging from PIN codes, passwords, to biometrics, means that there is no clear standardization in the verification process, increasing the potential for forgery or disputes in the future (Torong, 2021). This can certainly reduce the effectiveness of electronic contracts in providing maximum legal protection for the parties involved.

One of the other challenges related to the effectiveness of electronic contracts is the application of applicable legal sanctions against violations that occur in electronic transactions. While the ITE Law provides a legal basis for electronic contracts, in terms of implementation and legal enforcement, there are still shortcomings in terms of consumer protection, especially in business transactions between business actors and consumers (Ranto, 2019). Law Number 8 Year 1999 concerning Consumer Protection regulates consumer rights, but has not fully accommodated the characteristics of electronic transactions, which can lead to legal uncertainty for consumers in the event of a dispute. This is especially true in relation to online transactions,

where consumers often do not have direct access to assert their rights, as the transacting parties may be located outside the jurisdiction of Indonesia.

In terms of the effectiveness of electronic contracts to protect consumer rights, another issue that arises is the lack of transparency in privacy policies and personal data protection. Article 26 of the ITE Law provides for the protection of personal data in electronic transactions, but the implementation of this article is often inadequate. Many companies involved in electronic transactions have not adopted personal data protection procedures that comply with the standards set by the regulation. Supervisory institutions tasked with overseeing the implementation of this regulation also still have limitations in terms of resources and infrastructure to conduct comprehensive monitoring of all electronic transactions that occur.

One of the steps that can be taken to improve the effectiveness of electronic contracts is to strengthen the role of regulatory and supervisory bodies that have the authority to oversee electronic transactions and ensure that every contract made meets applicable legal standards. Strengthening regulations regarding TTE, along with stricter security standards, will go a long way in increasing public trust in electronic transactions (Rizky et al., 2019). The trust aspect in electronic contracts is one of the main obstacles, especially in cross-border transactions that can harm creditors. Creditors are often at risk of non-conformity in the execution of electronic contracts due to limited direct interaction and reliance on digital devices (Rodli, 2021). Click-wrap contracts are often risky because many users agree to the contract without reading the terms thoroughly. In cases where creditors are involved in contracts that fail to provide complete information, the risks are greater, especially if there is no guarantee of additional protection for creditors (Agustin & Kurniawan, 2017). Creditors may experience obstacles in demanding fulfillment of obligations, especially when there is default or non-compliance from the debtor, so additional regulations are needed to ensure that creditors get rights equivalent to conventional contracts (Salsabil et al., 2022). Indonesian regulations can clarify the protection for these electronic contracts, especially by creating a control system that ensures that creditors are protected in the event of an electronic contract breach (Sunaryo & Nuraini, 2020). The development of a more universal verification system that can be accepted by all legal institutions in Indonesia will be very important in creating legal certainty for parties involved in electronic contracts.

The existence and development of a legal system that is more adaptive to electronic transactions must also be supported by more intensive education to the public and business actors regarding the rights and obligations contained in electronic contracts (Novel, 2018). This education will be very important to reduce potential disputes that occur due to ignorance of the parties involved in electronic agreements. Improving digital infrastructure in Indonesia is also a key factor in increasing the effectiveness of electronic contracts. With safer and more standardized technology, as well as increased supervisory capabilities from the authorities, legal protection for parties involved in electronic transactions will be more secure (Adelina, 2020).

Apart from the technical and regulatory aspects, there are also social aspects that need to be considered in an effort to improve the legal protection of electronic contracts. In many cases, consumers often do not fully understand their rights in electronic contracts, especially in terms of dispute resolution. This knowledge gap creates inequality in the legal relationship between consumers and business actors, and opens up opportunities for practices that are detrimental to consumers. There needs to be greater efforts from the government and related institutions to improve digital literacy among the public, so that they can better understand the importance of electronic contracts and how to protect their rights in digital transactions. Counseling on consumer rights in electronic transactions can be done through various platforms, including social media and educational campaigns in schools. This understanding will help the public become more legally aware and more cautious in conducting digital transactions.

Along with the development of technology, Indonesia needs to continue to update and adjust existing regulations to be more effective in regulating electronic contracts. Regulatory reform is to increase protection for parties involved in electronic contracts and to support international trade (Wardani & Afriansyah, 2020). Indonesia still needs more specific regulations to ensure consumer protection in electronic transactions, especially in the case of disputes related to electronic contracts (Agustin & Kurniawan, 2017). This is important to keep the Indonesian legal system relevant to the evolving dynamics of the global digital economy. One action that can be taken is to issue more detailed regulations regarding technical procedures for TTE verification and personal data protection in electronic transactions. With more detailed regulations and firmer legal enforcement, electronic contracts can be more effective in providing better legal protection for all parties involved.



Along with the rapid development of technology, Indonesia's legal system must be able to adapt quickly to remain relevant in the face of emerging challenges, especially in terms of electronic transactions (Meliala, 2015). Indonesia faces challenges in resolving disputes involving offshore entities, highlighting the need for a more robust legal framework to effectively manage these cross-border agreements (Salsabil et al., 2022). While electronic contracts have been legally recognized, the current reality shows that the effectiveness of existing legal protections still needs improvement. In this regard, a more comprehensive and detailed regulatory update is urgently needed in order to address various issues related to electronic transactions, ranging from signature authentication to personal data protection. This process requires collaboration between policymakers, business actors and the public to ensure that the legal system is able to keep pace with the rapid development of technology.

Improving legal understanding among the public and business actors is also an important step in creating a safer and more reliable electronic transaction system. Limited legal and digital knowledge is often a major barrier to ensuring fairness and transparency in electronic transactions. This ignorance can lead to unintentional violations of the law, and make parties who do not understand the law in a more vulnerable position to abuse or fraud in electronic transactions. This situation creates an imbalance that threatens public trust in digital transactions and the legal system that governs them. There needs to be educational programs that can introduce the public to their rights and obligations in digital transactions. Increased legal and digital literacy makes the public more prepared and critical when participating in electronic transactions. By doing so, there will be a higher collective awareness of the importance of legal protection in every transaction conducted electronically.

With these steps, it is expected that electronic contracts can function more optimally and provide a balanced guarantee of protection for every party involved in the world of digital transactions. The main function of the contract as a legally binding instrument must be strengthened through a system that is able to guarantee validity and legal certainty for all parties. The combination of clearer regulations and comprehensive education will form a solid legal foundation, thus realizing a safe, transparent, and fair transaction environment for all parties in Indonesia. In the future, with stronger regulations and wider understanding, electronic contracts will become a legal tool, and can increase confidence in the digital transaction system in Indonesia.

## CONCLUSION

Based on the analysis of the validity and effectiveness of electronic contracts in Indonesia, it can be concluded that although electronic contracts are legally recognized, there are still various challenges that affect the legal protection of the parties involved in such transactions. TTE, as an important element in electronic contracts, often raise doubts regarding their authenticity, especially due to the lack of standardized technical standards for verification. While the ITE Law provides a strong legal basis, the implementation and enforcement of the law on electronic transactions and consumer protection in this regard is still not fully effective. This indicates the need to update regulations, improve digital infrastructure, and increase legal and digital literacy among the public and business actors.

The implication of these findings is that the Indonesian legal system needs to make adjustments to be more responsive to the rapid development of digital technology. This is important to keep electronic transactions functioning properly and provide adequate protection, especially for consumers. Updating regulations related to electronic contracts and personal data protection, as well as standardizing TTE verification tools, are urgently needed to create a safe and reliable legal environment for parties involved in digital transactions. Strengthening the capacity of supervisory institutions and increasing education on rights and obligations in electronic transactions will increase public confidence in the use of electronic contracts.

As a follow-up step, it is recommended that the government and relevant institutions immediately formulate more detailed regulations regarding TTE verification procedures and personal data protection in electronic transactions. Education to the public and business actors regarding consumer rights in electronic transactions needs to be improved through various media and platforms to increase legal awareness. Stricter legal enforcement against abuse of electronic transactions and violations that occur is also needed to create a better guarantee of legal certainty for all parties involved in electronic contracts.

## REFERENCES

- Agustin, E., & Kurniawan, F. (2017). Consumer Protection in Electronic Contracts: The Case of Indonesia. *Journal of Nusantara Studies*, 2(1), 159-169.
- Ardhiansyah, R., & Nugraha, S. (2020). Implikasi Hukum pada Kontrak Elektronik dalam Transaksi E-Commerce. *Jurnal Hukum & Teknologi*, 4(1), 22-35.

- Achsan, U. R. P., Purwiyantiningsih, E., & Suyadi, S. (2020). Tinjauan Yuridis terhadap Penerapan Pasal 18 Undang-Undang Nomor 8 Tahun 1999 tentang Perlindungan Konsumen Mengenai Pencantuman Klausula Eksonerasi Dalam Kontrak Elektronik. *Soedirman Law Review*, 2(3), 64-72.
- Adelina, K. (2020). Analisa Yuridis terhadap Kontrak Digital pada E-Commerce Ditinjau dari Teori Pembuktian Hukum Acara Perdata *Theses*, Universitas Islam Negeri Sultan Syarif Kasim Riau.
- Biondi, G. (2016). Analisis Yuridis Keabsahan Kesepakatan Melalui Surat Elektronik (E-mail) Berdasarkan Hukum Indonesia. *Premise Law Journal*, 19, 1-20.
- Hasibuan, S., & Rahmania, N. (2020). Tinjauan Yuridis Wanprestasi Atas Perjanjian Jual Beli Online. *Jurnal Dimensi*, 9(1), 87-98.
- Meliala, A. S. (2015). Analisis Yuridis terhadap Legalitas Dokumen Elektronik sebagai Alat Bukti dalam Penyelesaian Sengketa. *Jurnal Wawasan Yuridika*, 32(1), 99-111.
- Novel, R. M. (2018). Tinjauan Yuridis terhadap Keabsahan Tanda Tangan Elektronik dalam Kontrak Elektronik (E-Contract) sebagai Alat Bukti (Dalam Pandangan Pembaharuan Hukum Acara Perdata Indonesia) *Theses*, Universitas Islam Riau.
- Kalesaran, F. (2022). Analisis Yuridis terhadap Meterai Elektronik Ditinjau dari Undang-Undang Nomor 10 Tahun 2020. *Lex Privatum*, 10(4), 48-58.
- Ranto, R. (2019). Tinjauan Yuridis Perlindungan Hukum terhadap Konsumen dalam Transaksi Jual Beli Melalui Media Elektronik. *Jurnal Ilmu Hukum: ALETHEA*, 2(2), 145-164.
- Rizky, A., & Gorda, A. A. A. N. S. R. (2019). Tinjauan Yuridis Hukum Pidana Indonesia dalam Mengatur Perlindungan Hukum terhadap Transaksi Online (E-Commerce). *Jurnal Analisis Hukum*, 2(1), 130-147.
- Syidik, M. Z. R., & Jaelani, E. (2022). Perlindungan Hukum terhadap Para Pihak yang Menggunakan Kontrak Elektronik. *Jurnal Hukum Positum*, 7(2), 248-269.
- Ibrahim, J. (2006). *Teori dan Metodologi Penelitian Hukum Normatif*. Banyu Media.
- Prastya, K. F. I., Adnyani, N. K. S., & Ardhya, S. N. (2021). Tinjauan Yuridis tentang Pelaksanaan Perjanjian Jual Beli Online Melalui E-Commerce Menurut Pasal 1320 KUHPERdata dan Undang-Undang Nomer 19 Tahun 2016 Tentang Informasi dan Transaksi Elektronik. *Jurnal Komunitas Yustisia*, 4(2), 617-625.
- Purnamasari, L. (2021). Aspek Hukum dan Keamanan Kontrak Elektronik dalam Era Digitalisasi. *Jurnal Studi Hukum*, 8(3), 99-112.
- Rodli, A. (2021). Rekonstruksi Pengaturan Hukum Transaksi Elektronik di Indonesia. *Lex Renaissance*, 6(2), 280-297.
- Salsabil, R., Faqih, M. N., & Pahlevi, R. (2022). Penyelesaian Sengketa Internasional dalam Kontrak Elektronik. *Jurnal Notary*, 5(3), 455-468.
- Sugono, B. (2001). *Metode Penelitian Hukum*. Raja Grafindo Persada.
- Sunaryo, S., & Nuraini, H. (2020). Electronic Commerce: Validity of the Digital Contract Based on Indonesia Legislation Perspective. *International Journal of Innovative Science and Research Technology (IJISRT)*, 5(9), 1111-1115.
- Suwarno, S. (2017). Keabsahan Tanda Tangan Elektronik pada Perjanjian Kontrak Bisnis di Indonesia. *Jurnal Hukum Bisnis*, 4(1), 10-15.
- Torong, D. C. (2021). Analisis Yuridis Wanprestasi oleh Penjual dalam Jual Beli Melalui Media Internet. *Jurnal Perspektif Hukum*, 2(1), 178-191.
- Wardani, N., & Afriansyah, A. (2020). Electronic Contracts and Legal Challenges in the Global Marketplace. *Advances in Economics, Business, and Management Research*, 128, 123-130.
- Republik Indonesia. (2016). *Undang-Undang Nomor 19 Tahun 2016 tentang Informasi dan Transaksi Elektronik (ITE)*. Lembaran Negara Republik Indonesia Tahun 2016 Nomor 251. Sekretariat Negara, Jakarta.
- Republik Indonesia. (1999). *Undang-Undang Nomor 8 Tahun 1999 tentang Perlindungan Konsumen*. Lembaran Negara Republik Indonesia Tahun 1999 Nomor 22. Sekretariat Negara, Jakarta.
- Waluyo, B. (2002). *Penelitian Hukum dalam Praktik*. Sinar Grafika.