

Digital Contracts: Legal Protection and Validity of Agreements

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Abstract

The Covid-19 pandemic has changed life inextricably linked to digitalization, made it a crucial part of human life. Known as the era of digital transformation. Digital transformation has become a phenomenon that has significantly transformed the global business landscape, including the shift from paper-based to paperless data. It's provided all kinds of convenience to the global community, resulting in faster daily activities. However, various problems have arisen. How is the legal protection afforded to the parties in creating digital contracts? Can these contracts serve as the basis for authenticating the parties' agreements? This study aims to analyze the opportunities, challenges, and innovation strategies required for companies to address changes triggered by advances in digital technology. This study uses a library research method derived from various digital Open Source sources and expert theories. This study use a qualitative method with case study analysis of companies which have successfully and unsuccessfully adapted to digital transformation. The findings of this study indicate the need for a contract model within the existing legal framework to guarantee legal protection, which is a manifestation of legal transformation in Indonesia.

Keywords: *Contracts, Digital, Legal, Parties, Transformation.*

INTRODUCTION

The business world is an intermediary for trade traffic, thus giving rise to legal relations between business actors which are outline in agreement. These day, the form of the contracts and agreements have undergone rapid change. This is a logical consequence of the development of business collaboration between business actors[1]. Generally, business partnership between entrepreneurs are formalized in the form of written contracts or agreements. In fact, in business practice, there has been a growing understanding that partnership in business must be in written. This will serve as the basis for the parties or business actors to file a lawsuit when one party fails to fulfill its promises in the contract or agreement. Interaction, as the origin of an agreement, extends between one member of society and another, with reference to the expected benefits, which are clearly only realized when the interaction that occurs has a nuance of cooperation. Because if the interaction is filled with the color of conflict, then the hoped-for good will not be realized. The nuance of cooperation between the parties involved in the interaction causes each to become bound by it. Inevitably, the creation of a bond between them results in each party shouldering an obligation that must be carried out. In fact, this obligation is nothing more than a promise sworn to fellow associates, while a promise in accordance with the nature of life must be kept so that the value as a human being remains superior and dignified[2]. Global business developments prioritize the acceleration of technology and information, leading on business action between business actors using the internet as a transactional medium, namely written contracts conducted electronically, in this

case e-contracts. This shifts the paradigm of paper-based media usage to electronic media or paperless based also has an impact on the paradigm of the birth of contracts, namely through electronic transactions. The definition of Electronic Transaction in Article 1 number 2 of ITE (Information and Electronic Transactions) law is categorized as legally protected acts carried out using Computers, Computer Networks, and/or other electronic media, in this case called e-commerce, while the definition of Electronic Contracts is carried out through electronic systems. Electronic agreement, in general, created entirely or partially with the assistance and facilitation of an interconnected internet network. Then stored in electronic document storage and other electronic media. This type of agreement can be made via email, websites, electronic data interchange (EDI), or other online means of technologies. In this example, a consumer visits a distributor's website. They scroll down the online catalog, which lists the goods and services offered. They then place an order by filling out and submitting an online order form displayed on their monitor. Once the distributor accepts the order, an agreement is formed. The ordered goods or services may be delivered physically. Alternatively, delivery may be electronic, meaning directly from the manufacturer's or distributor's computer, if the goods or services sold are computer programs or other digital content[3].

Digital contracts are born without the parties meeting face-to-face, but rather transactions occur via the internet. R. Setiawan also put forward his theories related to the formation of agreements between parties who do not meet in person [4]:

a. Theory of Oral Agreement

This theory explains that an agreement occurs when the person receiving an offer prepares a written response indicating their acceptance of the offer. The downside is that it is difficult to determine the time of the agreement, and furthermore, the response can be changed at any time.

b. Theory of Delivery

According to several scholars, agreement occurs when the written response is sent. They further explain that by sending the letter, the sender loses control over it, and the exact time of delivery can be determined.

c. Theory of Knowledge

This theory states that agreement occurs after the offeror knows that their offer has been accepted. This raises the question: would agreement not have occurred if the letter had not been opened or lost? Furthermore, it is difficult to determine when the contents of the letter were known.

d. Acceptance Theory

According to this theory, acceptance occurs when the offeror receives a written response accepting the offer. This theory is widely supported, including by the Hoge Raad. Pitlo proposed a fifth theory, namely that acceptance occurs when the sender of the letter reasonably suspects that the offeror is aware of the contents of the letter.

Legal issues in digital contracts are resolved through mediation and litigation, as well as choice of forum and choice of law in international civil law. Considering that digital contracts are agreements with special characteristics, as they are a compilation of civil law and legal systems. In case a dispute arises, legal complexity will arise. Therefore to prevent this, special provision must be made in the contract law as regulated in civil law, thus giving rise to problems in legal development at the theoretical and practical levels.

METHOD

The method used is normative legal research which contains 3 main approaches: comparative, conceptual, and legislative. The comparative approach is used to compare legal aspects of various cases or legal systems. Using a conceptual approach, the concepts related of research topic are developed, while data will be analyzed descriptively and qualitatively using a descriptive-analytical approach[5]. The objective is to provide a comprehensive overview of specific legal events in society. This includes using a descriptive-analytical approach. The information obtained will be used to describe the legal event to gain a comprehensive understanding. The application of relevant rules is also analyzed, allowing researchers to describe and examine legal aspects related to the research topic. This method ensures that researcher obtain a comprehensive and fundamental overview of the legal issues being studied[6].

Table 1. The difference between a physical paper contract and a digital contract

Aspect	Paper-based Contract	Digital Contract
Media	Printed on paper with ink as a physical mark .	Electronic documents are created, sent and stored in digital format .
Signing	Manual signatures are made with a pen on paper.	Electronic signature use technology such as digital certificates or biometrics .
Process	Requires physical printing, distribution, and signature collection .	It is done through a digital platform that allows for one editing, sending and signing.
Security	Vulnerable to physical damage (water/fire) and document theft .	Equipped with encryption, authentication and access control to protect documents from digital threats .
Storage	Requires physical space , such as an archive or storage cabinet, which can be expensive .	Storage in the cloud or on a server , saving space and making it easy to access at any time.
Accessibility	Only accessible from the physical storage location , making it more time-consuming to find specific documents.	Accessible anytime, anywhere with any internet-connected device.
Time Efficiency	Manual processes slow down document creation, distribution and management.	Automated processes speed up document creation, signing and management.
Operational Costs	Involves cost for paper, ink, printing, shipping and physical storage .	Significantly reduces operational costs by eliminating the need for physical media.

Aspect	Paper-based Contract	Digital Contract
Legal Validity	Validity is based on a manual signature and direct approval before a notary or witness.	Legally recognized if it meets the requirements for a valid electronic signature.
Revision and Updates	Requires printing for each revision , which can be time-consuming and costly .	Can be updated in real time without the need for reprinting , which is more flexible and saves time.
Risk of Loss	High . Physical documents can be lost or damaged due to human error or natural disasters.	Low . Digital documents can be automatically backed up and protected by cloud systems.
Transparency	It can be difficult to track who accessed or edited a particular document.	Audit trails allow tracking of user activity on a document, increasing transparency .
Environmental Impact	Uses paper, ink and other resources that contribute to deforestation and waste .	More environmentally friendly . Reduces paper and energy use associated with producing physical documents.

RESULTS AND DISCUSSION

The transformation of digital technology has significantly transformed various business sectors worldwide. It has not only impacted operational processes but also changed strategies, business models, and the way companies interact with consumers. Some of today's technological advances, including artificial intelligence, big data, the Internet of Things and cloud computing, enable business to increase efficiency, expand market reach, and create more personalized customer experiences[7]. Rapid changes in consumer preferences and technology put pressure on companies to continuously innovate. Other challenges include cybersecurity risks, the need to develop the digital skills of the workforce, and internal resistance to organizational change[8]. Successful digital transformation requires visionary leadership, cross-functional collaboration, and sustained investment in digital capabilities. An effective strategy involves proactive change management and partnerships with the broader innovation ecosystem, including startups and the technology community[9]. For some companies that cannot adapt and adjust to this situation, there is a high risk of losing their company's competitive advantage and even experiencing business failure. In this context, an innovation strategy is needed that focuses not only on technology adoption but also integrates organizational culture change, human resource development, and holistic risk management[10].

These adaptations include transforming paper-based business contracts into digital ones. This, of course, relates to contract law. Contract law is the primary foundation of every business transaction and agreement, including in Indonesia. The development of digital technology has driven significant transformations in the way contracts are created and agreed upon. One such transformation is the adoption of electronic signatures. Digital platforms have transformed the contract law landscape, raising questions about the validity and security of digital agreements.

Legal Basis for Digital Contracts in Indonesia

Digital transformation has changed the way we create and enter into legal agreements. In Indonesia, digital contracts have a clear and valid legal basis provided they comply with regulations established by law. The validity of digital contracts is stipulated in Law Number 11/2008, which recognizes contracts created and agreed to electronically. Article 1, number 17 which defines electronic agreement as those made and stored in an electronic system, whether between individuals or legal entities. Article 46, paragraph 2, states that electronic information and electronic documents have the same legal force as physical documents as long as they meet the specified requirements. Digital contracts must comply with Article 1320 of the Civil Code, which stipulates 4 requirements as valid agreement[11]:

1. Agreement of the Parties: A contract must involve free consent without pressure or coercion. In the digital context, this consent is usually manifested through an electronic signature or the "I Agree" click method used on digital platforms.
2. Capacity of the Parties: Parties entering into an agreement must have legal capacity, that is, be at least 21 years old or married, and not be under guardianship.
3. Specific Matters: The object of the contract must be specific, clear, and enforceable. In digital contracts, this is translated into a description of the product, service, or other agreed-upon provisions.
4. Lawful Cause: The purpose of the contract/agreement must not violate the law, morality, or public order, whether in physical or digital format.

Electronic Signatures (E-Sign): Validity and Legal Recognition

Electronic signatures play a crucial role in digital contracts. The regulation recognizes electronic signatures as valid legal evidence provided that 1. Verifiable: The signer's identity must be verifiable through a digital certificate issued by an Electronic Certification Provider, 2. Authentic and Immutable: The signature must demonstrate the authenticity of the document, ensuring no modifications can be made after the document is signed. Government Regulation Number 71 of 2019 ITE also sets standards for electronic systems used, ensuring that platforms facilitating digital contracts are secure and reliable.

Digital Contracts as Evidence in Court

One of the key questions regarding digital contracts is their status as evidence in court. Under Article 5 of ITE, electronic documents that meet the requirements for electronic information are recognized as valid legal evidence.

The digital era has given rise to new, more efficient and globally connected business practices. Business contracts are no longer limited to conventional forms that require physical signatures or face-to-face meetings between parties. Instead, with the advent of technologies such as online platforms, email, and mobile applications, many commercial contracts are being formed, executed, and finalized digitally. While the digital era brings many benefits, it also presents various legal obstacles that must be overcome. Legal uncertainty, data and privacy protection, the validity of electronic contracts, and questions regarding jurisdiction and dispute resolution are some of the many complex issues that arise in digital business contracts. This is why legal analysis of commercial contracts is crucial in the digital age. By understanding various legal aspects, both

lawyers and entrepreneurs can identify risks and opportunities and take appropriate action to protect their interests[12].

Definition of a Business Contract

A contract is an agreed promise made by two or more parties that can create, change, or revoke a legal relationship. According to the Civil Code, an electronic contract is defined as an agreement between one party that binds the other party (Article 1313 of the Civil Code). Edmon Makarim and Deliana define an electronic agreement as a legal relationship electronically realized through a computer information system network connection to a communications system based on telecommunications networks and services, which is further facilitated by the presence of global computers[13]. Article 1, paragraph 18 of the Electronic Information Law defines an electronic contract as a contract made in electronic media. Thus, an electronic contract is a legal relationship created electronically, realized with the aid of information tools and/or technology, and can take

the form of an electronic document or other data carrier. Digital contracts are divided into two categories:

- a. Digital contracts involve tangible goods or services, for example, books or private tutoring services. In this type, the parties get into a contract over the internet. Once the agreement is made, the seller will ship the goods or services designated as the object of the transaction to the buyer's address. In the case of a sale, the seller will typically provide the goods once payment has been verified.
- b. Electronic contracts involve information or non-physical services. In this type of agreement, known as a digital contract, the parties will first correspond online before signing the contract electronically. Once it's reached, seller will deliver the goods or information using the internet (cyber delivery).

Legal Implications of Electronic Contracts According to Indonesian Law

Technological developments mean that trade has also evolved over time, both in terms of goods traded and their mechanisms. Technological developments have resulted in various new business system mechanisms, one of which is e-commerce. The agreements made by the parties are subject to the following legal requirements, as outlined in Article 1320 of the Civil Code:

- a. Agreement; agreement means that the person making the contract must agree to the main points of the contract to be made. One party also desires what the other party desires, and therefore expects compensation.
- b. Competence of the parties involved in making an agreement; those who do so must comply with the law. In principle, every adult and of sound mind is legally competent. According to Article 1320 of the Civil Code, those who are considered legally competent are those who have 21 years of age or older, or under 21 years of age but married or having children.
- c. A specific thing. A specific thing means the type of object specified in the agreement. Whether the object already exists or is in the hands of the interested parties at the time the agreement is made is not required by law, and the quantity need not be specified.
- d. A lawful reason or grounds. The term "lawful purpose" refers to the actual substance of the agreement. It must not contain an agreement that is unlawful or counterproductive to

applicable law. An unlawful reason is an unacceptable reason because it does not comply with general agreements as stipulated in Article 1337 of the Civil Code.

The conditions of an agreement divided into 2 groups:

Subjective conditions;

Subjective conditions relate to the subjects of the agreement, or in other words, the conditions that must be met by those entering into the agreement, which include:

- a. A binding obligation,
- b. The capacity of the parties entering into the agreement.

Objective conditions;

Objective conditions are statements that emphasize the subject matter of the research itself, which include the following:

- a. A specific matter, and
- b. A lawful cause or reason.

If the subjective requirements cannot be met, one party has the right to request that the agreement be annulled. The party who can request annulment is the incompetent party. Therefore, the agreement that has been made will remain binding on the parties as long as it is not annulled (by a judge) by the party entitled has right to request the annulment. If the objective conditions cannot be met, the agreement is null and void by law or automatically void.

Force Majeure & Its Legal Consequences.

Force majeure, often translated as "force majeure," refers to a situation in which the debtor's performance is hampered by unforeseen circumstances or events at the time of the contract's termination, unless that party is within the specified timeframe. In this case, the event constituting Force Majeure could never have been foreseen by the parties. If the parties could have foreseen such an event, then this issue should have been negotiated between them. Force majeure events are not included in the basic assumptions of the parties entering into a contract. Article 1244 in Civil Code: If the party cannot prove that the failure to perform the contract or the unreasonable timing of the contract's performance was caused by unforeseen events, they are subject to compensation for costs, losses, and interest. Even if there is no malice against them, they cannot be held responsible for this. Article 1245 in Civil Code stipulates the following: There is no compensation for costs, losses, and interest if the debtor is prohibited from doing something or committing a prohibited act due to unavoidable circumstances or coincidences. Force majeure in sales contracts, specifically the risks arising from force majeure, is listed in Article 1460 in Civil Code. According to Article 1460, "If the goods sold are specific, even if delivery has not yet been completed, the goods become the responsibility of the buyer from the time of purchase, and the seller has the right to claim the price." The risk transfers to the seller upon termination of the sales contract, even if the goods have not been delivered or are not scheduled for delivery.

Legal Consequences of a Contract

The terms for an agreement recognized in the Civil Code are *verbintenis* refers to a legal bond or relationship and *overeenkomst*. means to agree or consent. Thus, *overeenkomst* implies agreement, in accordance with the principle of consensualism in Article 1320 in conjunction with Article 1338 in Civil Code.

Article 1313 Civil Code states that "An act by which one or more persons bind themselves to one or more other persons." The relationship between these two persons is a legal relationship, where the rights and obligations of the parties are guaranteed by law. A contract is an agreement between one or more persons, expressed in written or oral form, to carry out a legal act. An agreement must be deemed to have been formed when an agreement is reached between the two parties. Those entering into an agreement must express their will and willingness to bind themselves.

An agreement is an event that occurs between one party making a promise to another party, or 2 persons promising to perform each other to do things. From this moment, a bind arises between the 2 persons, known as an obligation. This establishes a bond one to another parties. In its formal form, an agreement is a written or verbal promises or commitments. An agreement is a legal act in which one party promises other party to perform something. From this agreement, an event arises in the form of a legal relationship between the two parties to this relationship which is called an engagement.

In the legal regime of contracts applicable abroad, it is generally stated that the object of the contract is everything (product or service) agreed upon by the parties, or in other words, what is offered and what is accepted by the parties. Meanwhile, in Indonesia, it is generally stated that the object of a contract is the performance of goods or services. Performance for goods is the delivery of goods, and performance for services is the performance of work [14]. According to Minter Ellison Rudd Watts in Rosa Agustina, an electronic contract is "...a contract formed by transmitting electronic messages between computers". Meanwhile, Edmon Makarim and Deliana define an electronic contract as: An agreement or legal relationship carried out electronically by combining a network of computer-based information systems with a communication system based on telecommunication networks and services which is further facilitated by the existence of a global computer internet.

Several parties involved in electronic contracts based on electronic business transactions or e-commerce include:

- 1) Seller (merchant);
- 2) Buyer;
- 3) Certification Authority (CA);
- 4) Account issuer (e.g., credit card);
- 5) Payment network, e.g., Visa and Mastercard in SET;
- 6) Internet service provider (ISP);
- 7) Internet backbone.

E-commerce, which in this case is understood as electronic contracts based on electronic business transactions, has the following elements:

- a. There are mixed contracts (*contractus sui generis*) relating to the sale and purchase or provision of goods and services or the transfer of rights;
- b. The contract is made and executed through an electronic system or electronic media;

- c. The creation and execution of the contract do not require the physical presence of the parties making and executing it;
- d. The electronic contract occurs in a public system or network;
- e. A public system or network where contracts are entered into electronically within a public system or network;

The contract is independent of national borders or jurisdictions and local requirements. Furthermore, it is important to understand that an electronic contract is an anonymous contract, which is basically the same as a contract in general, but the act is through an electronic system or using electronic media[15]. Therefore, the creation and implementation of electronic contracts, in addition to being subject to Law No. 11 of 2008 as a special legal rule, are also subject to the Civil Code Book III on Contracts, specifically Chapters I to IV and several relevant articles in the Commercial Code as general legal rules. This argument is not entirely accurate, which places Law No. 11 of 2008, as amended by Law No. 19 of 2016 concerning Amendments to Law No. 11 of 2008 concerning Electronic Information and Transactions, as the *lex specialis* for e-contract regulations. The problem is that Law No. 19 of 2016 concerning Amendments to Law No. 11 of 2008 concerning Electronic Information and Transactions is a compilation of legal acts of a public and private nature.

The legal consequences of commercial contracts stem primarily from the legal relationship of agreement, which consists of rights and obligations. Fulfillment of these rights and obligations is one form of legal consequence of a contract. In this case, rights and obligations are merely a reciprocal relationship between the parties. The obligations of the first party constitute rights towards the second party, and conversely, the obligations of the second party constitute rights towards the first party. Therefore, the legal consequence is none other than the fulfillment of the contract itself. According to Article 1339 of the Civil Code, a contract is binding not only on matters expressly stated in the contract, but also on all matters stipulated in the contract. The nature of a contract, as required by common sense, custom, and tradition, is law. Therefore, every contract contains rules contained in laws and customs (in certain places and within certain circles), which must also be adhered to, along with obligations required by etiquette.

Based on the theory and concept of *lex specialis*, it refers to laws and regulations within the same legal scope. The enactment of Law Number 19 of 2016 concerning Amendments to Law Number 11 of 2008 concerning Electronic Information and Transactions, known as the ITE Law, cannot yet be considered *lex specialis* for contract law, specifically e-contracts. This is because it fails to meet the principle of *lex specialis derogat legi generalis*, as explained above.

Therefore, theoretically, there is confusion in the ITE Law's use of the term "legal act." Article 2 states that this Law applies to any person who commits a legal act as regulated in this Law, whether within or outside Indonesian jurisdiction, that has legal consequences within Indonesian jurisdiction and/or outside Indonesian jurisdiction and is detrimental to Indonesia's interests. Upon reflection, the definition of a legal act is broad, namely, an act that gives rise to legal consequences and gives rise to rights and obligations. Legal acts are divided into two forms: one-sided legal acts and two-sided legal acts, both of which are private legal acts. According to the principle of *eiusdem generis*, as proposed by Philipus M. Hadjon and Tatiek Sri Djatmiati, a legal act is defined according to its genus, meaning that a word is limited to a specific meaning within its group. For example, the meaning of a legal act in civil law differs from that in criminal law[15]. The purpose of establishing laws and regulations is to enforce law in the information and

technology sector. Three elements must always be considered and are prerequisites for law enforcement: legal certainty, expediency, and justice.

CONCLUSION

From a legal analysis of business agreements in the digital era, it can be concluded that developments in information technology have significantly changed the business landscape. The digital revolution brings new opportunities but also complex challenges in the formation, implementation, and enforcement of business contracts. The digital era enables business transactions are conducted electronically through various online platforms, email, and mobile applications, influencing how commercial contracts are formed, executed, and settled. Emerging legal challenges include legal uncertainty, data protection and privacy, the validity of electronic contracts, and jurisdictional issues and dispute resolution. It is crucial for businesspeople and lawyers to understand these legal aspects to identify potential risks and opportunities and take appropriate steps to protect their interests. A thorough understanding of digital business contract law is expected to provide a strong foundation for business development in this digital era. The right legal strategy can help address the complexities and challenges that arise, enabling businesses to continue to grow and compete in an increasingly competitive and globally connected business environment.

DECLARATION OF GENERATIVE AI (if any)

During the preparation of this work the author(s) used Google Search in order to obtain digital library data from discussions and research that have been carried out, accompanied by relevant and reliable sources. After using this tool/service, the author(s) reviewed and edited the content as needed and take(s) full responsibility for the content of the publication.

REFERENCES

- [1] M. Syaifuddin, *Hukum Kontrak(Memahami Kontrak dalam Perspektif Filsafat, Teori Dogmatik dan Praktik Hukum(seri Pengayaan Hukum Perikatan)*. Bandung: Mandar_Maju, 2016.
- [2] Moch. Isnaeni, *Perjanjian Jual Beli*. Surabaya: Revka_Petra_Media, 2015.
- [3] R. Agustina, "Kontrak Elektronik (e-contract) dalam Sistem Hukum Indonesia," *Gloria_Juris*, vol. 8, pp. 6–6, Jan. 2008.
- [4] R. Setiawan, *Pokok-Pokok Hukum Perikatan*. Bandung: Bina_cipta, 1999.
- [5] Amirudin and Z. Asikin, *Pengantar Metode Penelitian Hukum*, Revision., vol. 10. Gramedia, 2018.
- [6] S. Soekanto and S. Mamudji, *Penelitian Hukum Normatif: Suatu Tinjauan Singkat*. Rajawali.
- [7] E. Brynjolfsson and A. McAfee, *The Second Machine Age: work, progress, and prosperity in a time of brilliant technologies*. WW Norton & Company, 2014.
- [8] G. Vial, "Understanding Digital Transformation: A Review and a Research Agenda. The Journal of Strategic Information Systems, 28," *The Journal of Strategic Information Systems*, vol. 28, no. 2, pp. 118–144, 2019.
- [9] T. H. Davenport and G. Westerman, "Why So Many High-Profile Digital Transformations Fail," *Harvard Business Review*.
- [10] Asrul, "Transpormasi Bisnis Di Era Digital: Peluang, Tantangan, Dan Strategi Inovasi," *Jurnal Minfo Polgan*, vol. 13, no. 2, Jan. 2025.
- [11] Subekti, *Hukum Perjanjian*. Jakarta: Intermasa, 2008.
- [12] A. D. Sidauruk, B. Purba, J. Karo-Karo, S. A. Siregar, and T. Yani, "Analisis Hukum atas Perjanjian Bisnis dalam Era Digital," *INNOVATIVE: Journal Of Social Science Research*, vol. 4, no. 3, 2024.
- [13] E. Makarim, *Pengantar Hukum Telematika: Suatu Kompilasi Kajian*. Jakarta: Raja_Grafindo, 2005.
- [14] G. Puspaningrum, "Konseptualisasi Pengaturan E-Contract di Indonesia," *ResearchGate_Publication*, 2018.

- [15] P. M. Hadjon and T. S. Djatmiati, *Argumentasi Hukum*. Yogyakarta: Gadjah Mada University Press, 2005.