

The Validity of E-Signature in Authentic Deeds as Digital Transformation of Notaries

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Abstract. *This study aims to analyze: 1) The validity of e-signature in authentic deeds according to the prevailing laws and regulations in Indonesia. 2) Challenges and solutions in the application of e-signature in authentic deeds by notaries. This type of research is included in the scope of normative legal research. The approach method in this research is legislation (statue approach). The type of data in this research is secondary data sourced from primary, secondary and tertiary legal materials. The data collection method uses library techniques (study document). The analysis in this research is qualitative analysis. The results of the research concluded: 1) The validity of e-signature in authentic deeds according to the prevailing laws and regulations in Indonesia is still at the conceptual stage and does not yet fully have strong normative legitimacy. In positive law, Law Number 1 of 2024 concerning the Second Amendment to the ITE Law has provided a basis for recognizing electronic signatures as valid evidence, as regulated in Article 11 paragraph (1) and Article 5 paragraph (1). However, this recognition has not been harmoniously accommodated in Law Number 2 of 2014 concerning the Position of Notary, which still requires physical presence and manual signature as stated in Article 16 paragraph (1) letter m. The lack of synchronization between the two laws creates legal uncertainty regarding the authenticity of deeds made electronically. 2) The implementation of e-signatures in authentic deeds by notaries still faces various challenges that are normative, technical, and sociological. The disharmony between the ITE Law, PP No. 71 of 2019, and the Notary Position Law is the main obstacle that causes the lack of legal certainty regarding the validity of electronic deeds. On the other hand, limited digital infrastructure and low technological literacy among notaries and the public also slow down the process of notarial digitalization. Nevertheless, solution efforts in the form of regulatory harmonization, strengthening cybersecurity systems through Electronic Certification Providers (PSrE), and increasing notary digital competence are strategic steps that must be implemented*

immediately to ensure that electronic deeds have the same legal force as conventional authentic deeds. Thus, the success of the digital transformation of notaries can only be achieved if law, technology, and the ethics of the notary profession work in harmony to ensure legal certainty, justice, and legal protection for the parties.

Keywords: E-Signature; Notarial; Validity.

1. Introduction

Advances in information and communication technology have brought about significant changes in almost every aspect of human life. The Fourth Industrial Revolution, characterized by digitalization, automation, and internet-based connectivity, has driven transformation in various sectors, including public services and legal administration.¹ Digital technology enables the exchange of information quickly, efficiently, and across geographical boundaries, and changes the way individuals, institutions, and countries interact.

The development of digital technology has brought significant changes to various aspects of life, including the legal and notarial fields. One innovation that has become increasingly popular due to technological developments is the use of e-signatures (electronic signatures) as a document authentication tool. In practice, e-signatures have been widely used in electronic transactions, including in Indonesia, as regulated by Law Number 11 of 2008 concerning Electronic Information and Transactions (UU ITE) as last amended by Law Number 1 of 2024 and Government Regulation Number 71 of 2019 concerning the Implementation of Electronic Systems and Transactions.

E-signature has advantages over conventional signatures (wet ink signatures), including time efficiency, remote signing, and encryption features that provide security against data manipulation. Internationally, e-signatures have been widely recognized in the laws of various countries, including through instruments such as the Electronic Signatures in Global and National Commerce Act (E-SIGN Act) in the United States and the eIDAS Regulation in the European Union, both of which regulate the legal equality of electronic signatures with traditional signatures.²

The authority to create authentic deeds is exercised only by a Notary Public to the extent that the creation of certain authentic deeds is not specifically assigned to other public officials. It can be concluded that a Notary Public is the only public official with this authority. Knowing the importance of the duties and position of a Notary Public in society and the evidentiary power of the authentic deeds they

¹Rifandy Ritonga, 2021, Document Digitalization and Legal Challenges in the Era of Industry 4.0, Journal of Law and Technology, Vol. 5 No. 2, p. 110

²Andika Dwi Prasetya, 2020, Legal Protection Against the Use of Electronic Signatures in Electronic Transactions, Jurnal Rechts Vinding: Media for National Legal Development, Vol. 9 No. 2, p. 202.

create, it can be said that the position of Notary Public is a position of trust. This position of trust granted by law and society requires a Notary Public to be responsible for carrying out this trust to the best of their ability and upholding legal ethics, the dignity, and the nobility of their position.³In carrying out their duties, notaries provide the best possible service to those who require their services. Notaries also provide legal counseling to their clients to achieve a high level of legal awareness, enabling them to recognize and internalize their rights and obligations as citizens and members of society.⁴

The concept of cyber notary in Indonesia seems to be still under debate. Although technology allows the role of notary online and remotely, legally this is not yet possible because the paradigm underlying UUJN is built on a conventional concept. The latest development is the inclusion of cyber notary in UUJN as stated in Article 15 paragraph (3), which states: "Other authorities regulated in statutory regulations include, among others, the authority to certify transactions conducted electronically (cyber notary), make deeds of waqf pledges, and mortgage aircraft." Although still seemingly narrow, the inclusion of cyber notary in these statutory regulations is a breath of fresh air for the future development of cyber notary.⁵

The use of e-signatures as a form of electronic document authentication has also driven changes in the practices of legal institutions directly involved in document verification and legalization, including notaries. As public officials, notaries have a responsibility to guarantee the authenticity, legal certainty, and protection of parties involved in agreements or legal statements. Therefore, there is a push to integrate e-signatures into the process of creating authentic deeds as a form of digital transformation in notarial practice. However, this digitalization effort has not yet fully gained strong legal legitimacy. There are no provisions explicitly recognizing the validity of e-signatures in authentic notarial deeds. This raises legal issues, particularly regarding authenticity and evidentiary power. To be considered an authentic deed, the document must meet strict formal and substantive requirements, including a signing procedure by the parties before a notary.

2. Research Methods

This research is normative legal research. The approaches used are the statute approach and the conceptual approach. The data used in this study are secondary

³Habib Adjie, 2009, Indonesian Notary Law (Thematic Interpretation of Law Number 30 of 2004 Concerning the Position of Notary, Refika Aditama, Bandung. p. 40

⁴Ndaru Satrio, 2016, Legal Analysis of the Criminal Act of Providing False Information in an Authentic Deed as Referred to in Article 266 Paragraph (1), LEX Certa Journal, Volume 1 Number 1, p. 97

⁵Edmon Makarim, 2020, Notaries and Electronic Transactions, Legal Study on Cyber Notary or Electronic Notary, 3rd Edition, Rajawali Pers, Depok, p. 14.

data sourced from primary, secondary, and tertiary legal materials. The data collection method used is a literature study. The analysis in this study is qualitative.

3. Results and Discussion

3.1 The Validity of E-signatures in Authentic Deeds According to the Laws and Regulations in Force in Indonesia

The Indonesian legal system, which adheres to the civil law tradition, places authentic deeds as one of the primary instruments of evidence in civil law. Evidence is one of a series of court proceedings that plays a crucial role in assisting judges in determining the law and rendering decisions. The Civil Code defines the types of valid evidence, each with its own probative force.⁶

According to Article 1868 of the Civil Code (KUHPerdota), an authentic deed is a deed made in a form prescribed by law by or before a public official authorized to do so. An authentic deed not only serves as evidence, but also provides legal certainty for acts, agreements, and legal determinations made before a notary, who is authorized by law to record them.⁷ Habib Adjie explained that an authentic deed is a concrete form of the principle of *pacta sunt servanda*, where every agreement stated in a notarial deed binds the parties like a law.⁸ Furthermore, authentic deeds have three main legal powers, namely:

- 1) Formal evidentiary force, proving that the deed was made before a notary and signed by an authorized party;
- 2) The power of material evidence, proving the truth of the contents written in the deed; and
- 3) Executorial power, where the deed can be executed directly without going through a court decision.

Due to its authentic nature, the presence of a deed becomes the main instrument in guaranteeing legal certainty, order, and protection of the civil rights of the community.⁹

The current rapid development of information and electronic technology has an impact on humans as legal subjects, where the influence of the development of information and electronic technology makes it easier for humans to carry out legal acts with each other even though they do not meet each other

⁶Dini Sukma, 2014, The Evidential Power of Electronic Signatures as Valid Evidence from the Perspective of Procedural Law in Indonesia and the Netherlands, *Verstek Journal*, Vol. 2 No. 2, p. 148

⁷Subekti, 2002, *Law of Evidence*, Pradnya Paramita, Jakarta, p. 45.

⁸Habib Adjie, 2018, *Indonesian Notary Law: Thematic Interpretation of Law No. 2 of 2014*, Refika Aditama, Bandung, p. 72.

⁹Rachmat Trijono, 2007, *Contract Law: The Principle of Proportionality in Contracts*, Prenada Media, Jakarta, p. 112.

physically.¹⁰ Advances in information and communication technology have brought significant changes to the legal administration and notary systems. Previously manual legal activities are now shifting to electronic and online systems. Digital transformation in the legal sector has emerged as an adaptation to the need for efficiency and transparency in public legal services, including the preparation and archiving of deeds. The digitization of legal documents offers convenience in terms of speed, security, and accessibility, thus supporting the principles of effective and measurable modern legal services.¹¹ In the context of notary, this change is known as "cyber notary", namely the concept of applying information technology in the process of making notarial deeds, starting from data recording, communication with the parties, to signing the deed electronically.¹²

The development of the digital legal system in Indonesia officially began with the enactment of Law Number 11 of 2008 concerning Electronic Information and Transactions (ITE Law). This law broadens the legal concept by introducing the terms "electronic information," "electronic documents," and "electronic signatures" as part of valid evidence. According to Article 5 paragraph (1) of the ITE Law in conjunction with Law No. 1 of 2024, electronic information and electronic documents, as well as their printouts, constitute valid legal evidence. Meanwhile, Article 11 paragraph (1) emphasizes that electronic signatures have legal force and legal consequences as long as they meet certain requirements, such as identity authentication, data control, and the ability to detect changes. From these provisions, it is clear that the Indonesian legal system has recognized the equality between electronic signatures and manual signatures, provided they are carried out through mechanisms regulated and guaranteed by the government. To strengthen this implementation, Government Regulation Number 71 of 2019 concerning the Implementation of Electronic Systems and Transactions was issued, which stipulates that electronic certification organizers (PSrE) as institutions authorized to issue electronic certificates.

The electronic certificate serves to identify the signatory, verify the authenticity of the signature, and ensure that the document has not been altered after it has been signed. Furthermore, Minister of Communication and Informatics Regulation Number 11 of 2022 strengthens PSrE governance and provides digital security standards to guarantee the validity of certified electronic signatures in Indonesia. Based on these developments, the transformation from conventional deeds to authentic electronic deeds is an unavoidable legal necessity. According to Sinta Pangesti, this transformation is part of the evolution of notarial law to

¹⁰Jenny Divia Fitcanisa, 2023, The Validity of Electronic Signatures in Notarial Deeds, *Sibatik Journal*, Volume 2 No. 5, p. 1449

¹¹Ranti Fauza Mayana and Tisni Santika, 2021, Legality of Electronic Signatures: Possibilities and Challenges of Notary Digitalization in Indonesia, *ACTA Diurnal Journal of Notary Law*, Faculty of Law, Padjadjaran University, Bandung, p. 250.

¹²Sinta Pangesti, 2020, The Regulatory Concept of Cyber Notary in Indonesia, *Rechtsidee Journal*, Volume 7, Muhammadiyah University of Sidoarjo, p. 40.

accommodate technological advances while maintaining the principle of deed authenticity.¹³This transformation includes several important aspects:

- 1) Digitalization of deed formats;
- 2) Use of certified electronic signatures;
- 3) Storage of deeds in the form of electronic documents; And
- 4) Integration of electronic-based supervision and authentication systems by the Ministry of Law and Human Rights.

However, before this transformation can be fully implemented, a revision of notarial law norms is needed to align with the principles of digital law and personal data protection.¹⁴The paradigm shift in notarial law towards the digital era requires not only technological infrastructure, but also legal reconstruction so that the principles of presence, reading, and signing can be carried out electronically while still guaranteeing the authenticity of the deed.¹⁵

The affixing of a signature is one of the series of deed formalization (*verlijden*). Article 44 paragraph (1) UUJN explains that the affixing of a signature on a deed must be stated explicitly in the deed section, this statement is given at the end of the deed. The affixing of a signature on a deed means providing written information and statements, namely what is written above the signature.¹⁶*Verlijden* is a verb derived from the word "*Verleden*," meaning "to make." This latter word originates from Old Dutch and is no longer used in everyday language, except in legal fields, specifically the world of notaries.¹⁷

The application of electronic signatures is closely related to the validity of authentic deeds. One of the requirements for an authentic deed, according to Article 1868 of the Civil Code, is that it must be executed before an official, indicating that the deed was executed at the request of an individual. In other words, the signature on the deed must be executed before an official.¹⁸Electronic signatures are a fundamental element in the formation of electronic deeds, as they serve as a digital authentication tool and guarantee the integrity of documents. In the legal system, electronic signatures not only replace manual signatures but also digitally represent the legal presence and agreement of the parties. The existence of electronic signatures certified by the PSrE marks a new era in notarial services,

¹³Sinta Pangesti, 2020, *The Regulatory Concept of Cyber Notary in Indonesia*, Rechtsidee Journal, Volume 7, Muhammadiyah University of Sidoarjo, p. 42.

¹⁴Habib Adjie, 2020, *Cyber Notary and the Urgency of Notary Law Reform in Indonesia*, Refika Aditama, Bandung, p. 91.

¹⁵Ranti Fauza Mayana, *Op.cit.* p. 133.

¹⁶GHS Lumban Tobing, 1999, *Regulations on the Position of Notary*, Erlangga, Jakarta, p.202.

¹⁷Tan Thong Kie, 2007, *Notary Studies: Several Subjects and All About Notary Practice*, Book I, 2nd Edition, Ichtiar Baru Van Hoeve, Jakarta, p. 159.

¹⁸Iqbal Anshri, *Op.cit.*, p.367

where notaries can sign deeds electronically without compromising the authenticity of the document, as long as they meet applicable legal requirements.¹⁹

The validity of electronic signatures (e-signatures) in authentic deeds cannot be separated from the synchronization between Law Number 1 of 2024 concerning the Second Amendment to Law Number 11 of 2008 concerning Electronic Information and Transactions (ITE Law) and Law Number 2 of 2014 concerning Amendments to Law Number 30 of 2004 concerning the Position of Notary (UUJN).

Normatively, the ITE Law recognizes electronic signatures as valid and have the same legal consequences as manual signatures if they meet the requirements of authentication and data integrity. This is emphasized in Article 11 paragraph (1) of the ITE Law which states that electronic signatures have legal force and valid legal consequences as long as they meet certain elements, including: the relationship between the data of the signer and the signatory, control over the data at the time of signing, and the ability to detect changes to the document after it is signed. Thus, electronic documents signed electronically can be considered valid as legal evidence as regulated in Article 5 paragraphs (1) and (2) of the ITE Law, as long as the electronic system used can guarantee the authenticity and security of the data. However, in the context of authentic notarial deeds, these regulations cannot be directly enforced without considering the provisions of the Notary Law. According to Article 16 paragraph (1) letter m of the UUJN, a notary is obliged to read the deed before the parties and witnessed by at least two witnesses, then signed by the parties, witnesses, and the notary at the same time.

This provision contains two essential elements: physical presence and a manual (wet) signature, which are formal requirements for authenticity. This means that if these two elements are not met, the deed in question loses its authenticity and remains merely a private deed.²⁰

Normative analysis indicates a disharmony or vertical conflict between the ITE Law and the UUJN. The ITE Law legitimizes electronic documents and electronic signatures as legal evidence, while the UUJN still requires a physical deed and in-person signing before a notary.

Although the ITE Law provides a legal basis for the validity of electronic signatures, electronically executed notarial deeds cannot yet be categorized as authentic deeds because they are not explicitly regulated in the UUJN. Changing the signing format without changing the norms in the UUJN has the potential to reduce the evidentiary value of the deed to a private deed.²¹ Habib Adjie also emphasized that

¹⁹Jenny Divia Fitcanisa, 2023, The Validity of Electronic Signatures in Notarial Deeds, Sibatik Journal, Volume 2 No. 5, p. 1449

²⁰Habib Adjie, 2018, Indonesian Notary Law: Thematic Interpretation of Law No. 2 of 2014, Refika Aditama, Bandung, p. 72.

²¹Jenny Divia Fitcanisa, Op.cit., p. 1449

an authentic deed that is not signed by the parties and the notary physically at the same time cannot be called an authentic deed, because it loses the element of face-to-face authenticity which is the characteristic of a notarial deed.²² Thus, the ITE Law recognizes e-signatures in general, but the UUJN is restrictive in the context of authentic deeds, because its formal requirements have not been adapted to developments in information technology. In empirical practice, some notaries have begun to utilize certified electronic signatures from government-recognized Electronic Certification Providers (PSrE). However, research results indicate that there are no explicit legal provisions guaranteeing the validity of these deeds as authentic.

The evidentiary power of an e-signature in a legal document is conditional validity, meaning it depends on the electronic system's ability to guarantee identity and data integrity. If the electronic system fails to meet the security standards stipulated in Government Regulation Number 71 of 2019 and Minister of Communication and Information Regulation Number 11 of 2022, the validity of the electronic signature can be challenged, and the document loses its evidentiary power. In notarial practice, this poses a dilemma because an authentic deed has perfect evidentiary value (*volledig bewijskracht*), while an e-signature that fails to meet the standards only provides the same evidentiary power as a private deed.

The concept of cyber notary is an alternative solution to the conflict between digital norms and notarial norms. Cyber notary is an information technology-based notarial system that allows notaries to create, sign, and store deeds electronically with a certified digital signature. However, its implementation in Indonesia remains limited because it has not been technically regulated by law. The legality of electronic signatures in notarial practice will only be effective if there is harmonization between the ITE Law, Government Regulation No. 71 of 2019, and the Notary Law. This means that without changes to the norms in the UUJN that regulate electronic signature mechanisms and procedures for reading deeds online, e-signatures in authentic deeds do not yet have a strong legal basis. Legally, the validity of a notarial deed includes the form, content, authority of the official who made it, and its creation must meet the requirements stipulated by applicable law. Therefore, if a deed does not meet these requirements, it cannot be categorized as an authentic deed and its evidentiary force is very weak.²³ and cannot guarantee legal certainty.

The requirements for the validity of an electronic signature are regulated in Article 11 paragraph (1) of Law Number 11 of 2008 as last amended by Law Number 1 of 2024, which stipulates that an electronic signature is considered valid if:

²²Habib Adjie, 2020, *Cyber Notary and the Urgency of Notary Law Reform in Indonesia*, Refika Aditama, Bandung, p. 88.

²³Sjaifurrachman and Habib Adjie, 2011, *Aspects of Notary Responsibility in Making Deeds*, Mandar Maju, Bandung, p. 109

- 1) Electronic signature creation data is only related to the signatory;
- 2) The data for creating an electronic signature is only in the power of the signatory during the signing process;
- 3) Any changes to the electronic signature after the time of signing can be identified;
- 4) Any changes to the electronic information related to the electronic signature can be known;
- 5) There are certain ways to identify who the signatory is; and
- 6) There are certain ways to show that the signatory has given consent to the related electronic information.

Thus, the validity of an electronic signature is based on the authentication of the signatory's identity, data integrity, and the principle of non-repudiation as a legal guarantee of the authenticity of an electronic transaction.

The implementation of electronic signatures in authentic deeds is essentially part of the legal transformation towards the digital era. However, the success of its implementation depends heavily on the clarity of norms and the readiness of legal institutions governing notarial practice. In this context, Indonesian positive law still exhibits regulatory fragmentation. On the one hand, the ITE Law and Government Regulation No. 71 of 2019 have regulated the reliability of electronic systems and the validity of digital signatures, while on the other hand, the Notary Law has not explicitly regulated the mechanism for electronic deed creation. This disharmony creates legal uncertainty for notaries who wish to implement an electronic signature system.

3.2 Challenges and Solutions in the Implementation of E-signatures in Authentic Deeds by Notaries

Electronic signatures must comply with Article 11 of the ITE Law so that their legal force and legal evidence are equivalent to authentic deeds as regulated in the UUJN. The legal benefit of electronic or electronic signatures is that they will guarantee the legal force of sent electronic documents, thus having Authenticity, Integrity, Non-Repudiation and Confidentiality. Asymmetric cryptography is one form of electronic signature, and it has two keys, namely the public and private keys. A Certification Authority (CA) is one of the institutions that if we want a signature to have strong legal force and legal evidence, must register it with the

institution. So it can be said that the Certification Authority (CA) is a public official.²⁴

Although the legal basis for electronic signatures, or e-signatures, exists, their application in the context of authentic notarial deeds still faces several challenges. Notarial deeds have different legal characteristics than ordinary electronic documents because they require the presence of a public official, verification of the parties' identities, and responsibility for authenticity.²⁵ Therefore, the application of electronic signatures cannot be done simply without paying attention to the notarial principles as regulated in the Notary Law (UUJN).

Conceptually, the implementation of e-signatures by notaries has the potential to provide significant benefits in terms of efficiency in legal administration, time savings, and ease of access for the wider community, especially in situations that limit physical meetings such as the pandemic.²⁶ However, the success of such implementation is largely determined by the synchronization between law and technology. If regulatory, technical, and ethical aspects are not comprehensively addressed, the implementation of e-signatures can actually create new problems, such as uncertainty about the status of deeds, doubts about the authenticity of data, and even violations of notary professional responsibilities.²⁷

The implementation of electronic signatures (e-signatures) in authentic deeds by notaries in Indonesia still faces major challenges of a normative, technical, and sociological nature. Normatively, the absence of explicit regulations in the Notary Law regarding cyber notaries creates a gap and disharmony of norms with the ITE Law and Government Regulation No. 71 of 2019, thus giving rise to uncertainty regarding the evidentiary power of electronic deeds. From a technical perspective, limited digital infrastructure, uneven system integration with Electronic Certification Providers (PSrE), and low verification capacity and data security in some notary offices are obstacles to implementation. Sociologically, legal culture and levels of public trust that are still oriented towards conventional practices also slow down the adoption of technology. From the perspective of Philipus M. Hadjon's legal protection theory, this condition indicates that preventive and repressive legal protection are not optimal due to the lack of certainty of norms and strong dispute resolution mechanisms. Therefore, the digital transformation of notaries requires harmonization of regulations, the establishment of national

²⁴Eman Sulaiman, Nur Arifudin, and Lily Triyana, 2020, "The Legal Power of Digital Signatures as Valid Evidence from the Perspective of Civil Procedure Law," *Legal Treatise*, Volume 16, Number 2, p. 05

²⁵R. Yuliani, 2023, The Position of Authentic Deeds in the Indonesian Evidence Law System, *Jurnal Ius Quia Iustum*, Vol. 30 No. 1, p. 87.

²⁶S. Maharani & D. Hapsari, 2022, The Effectiveness of Cyber Notaries in the Covid-19 Pandemic Era: A Notary Practice Perspective, *Journal of Law and Economic Development*, Vol. 14 No. 2, p. 133.

²⁷Rahmawati, 2023, Legal Responsibilities of Notaries in the Implementation of Electronic Deeds, *Jurnal Mimbar Hukum Aktual*, Vol. 11 No. 1, p. 52.

standards for electronic signatures, strengthening of digital security and certification systems, and increasing notary technological literacy and competence so that e-signatures on authentic deeds can provide certainty, fairness, and legal protection equivalent to conventional deeds.

4. Conclusion

The validity and application of electronic signatures (e-signatures) in authentic deeds in Indonesia still lack strong normative legitimacy because although the ITE Law and its amendments and Government Regulation No. 71 of 2019 have recognized electronic signatures as valid evidence, the Notary Law has not explicitly accommodated the creation of electronic deeds and still emphasizes physical presence and manual signatures. This regulatory disharmony creates legal uncertainty as well as normative, technical, and sociological challenges, which are exacerbated by limited digital infrastructure and low technological literacy among notaries and the public. Therefore, in order for electronic deeds to have the same evidentiary force as conventional deeds, harmonization of laws and regulations, strengthening of electronic security and certification systems through PSrE, and increasing the digital competence of notaries are needed so that the digital notarial transformation can proceed in line with the principles of legal certainty, justice, and legal protection for the parties.

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