

Research Article

Notarial Reform in the Digital Age: Addressing Legal Certainty and Document Authenticity

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ABSTRACT: Within the ongoing digital transformation of legal services, the notarial profession in Indonesia faces a fundamental tension between statutory formalism and emerging technological practice. This study examines the legal uncertainty arising from the partial recognition of cyber notary functions, where notarial authority is acknowledged in principle but remains procedurally constrained by requirements of physical presence and manual authentication. The analysis focuses on whether Indonesia's current legal framework, specifically the Law on Notary Position (UUJN-P), the Limited Liability Company Law (UUPT), the Electronic Information and Transactions Law (ITE Law), and Financial Services Authority (OJK) Regulations No. 15/2020 and No. 16/2020 provides a coherent and sufficient basis for digitally mediated notarial acts. Employing a normative juridical and descriptive-analytical approach, this study examines statutory provisions and regulatory practices governing electronic transactions and remote corporate governance. The findings reveal a regulatory paradox in which cyber notary authority operates within a hybrid legal model that lacks full legal certainty due to fragmented regulation and inconsistent procedural standards. This article contributes conceptually by framing Indonesia's cyber notary not merely as a technological extension of traditional practice, but as a distinct legal construct. It argues for the legal notions of presence, authenticity, and evidentiary force as a necessary step toward regulation harmonization and the continued relevance of the notarial profession in the digital era.

KEYWORDS: Cyber notary, Legal certainty, Information and Communication Technology (ICT), Notarial authority, Regulatory reform.

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Submitted: 11 August 2025 | Reviewed: 20 November 2025 | Revised: 2 December 2025 | Accepted: 22 December 2025

I. INTRODUCTION

The legal profession, particularly the notarial profession, plays a vital role in supporting social and economic activities by providing authentic deeds that serve as legally valid evidence. In this context, the increasing use of information and communication technology (ICT) has begun to influence how legal services are delivered, including notarial practices.¹ The position of Notary is formally regulated under Law Number 30 of 2004 and Law Number 2 of 2014, which designates Notaries as public officials authorized to draw up authentic deeds and other legal obligations as prescribed by law.² As key institutional actors, Notaries ensure the formal validity and legal certainty of private and commercial transactions, functions that remain central to the Indonesian legal system, even as rapid technological developments continue to challenge and reshape traditional methods of preparing and authenticating legal documents.³

Notaries in Indonesia have functional equivalents in many legal systems, although their titles and scopes of authority vary. In common law jurisdictions such as the United States and the United Kingdom, these functions are typically carried out by a *notaries public* or specially authorized solicitors, whose roles are generally limited to witnessing signatures and administering oaths. In contrast, civil law countries such as France, Germany, and Spain employ *notaires* or *Notare who*, much like Indonesian notaries, possess broad authority to draft and authenticate legally binding instruments. Despite these institutional differences, the notarial profession across jurisdictions shares a common purpose: ensuring the legal authenticity, formal validity, and legal certainty of important legal documents.

This study examines the legal certainty of notarial duties and authorities in the context of rapidly evolving information and communication technology (ICT). It focuses on how Indonesia's existing laws governing notarial practice, such as the Law on Notary Office (UUJN-P), interact with and respond to an increasingly digital legal environment, in which many transactions, including the drafting of

¹ David Tan, *Cyber-Notaries From A Contemporary Legal Perspective: A Paradox In Indonesian Laws And The Marginal Compromises To Find Equilibrium Indonesia Law Review* (2020) at 114-115.

² Putu Sekarwangi Saraswati, I Nengah Susrama & I Nengah Saraswati, "Cyber Notary Juridical Review In The Legal System In Indonesia" (2023) 11:8 Russian Law Journal at 583.

³ Ridwan Sidharta & Putu Eka Trisna Dewi, *The Role Of Cyber Notary In The Field Of Digital International Trade In Indonesia NOTARIIL: Jurnal Kenotariatan* (2023) at 2-3.

legal documents, are carried out electronically and remotely.⁴ The central question addressed is how legal certainty can be maintained for notarial acts in an era where physical presence is no longer a universal requirement as a result of the digitization of legal practices.⁵

The rapid expansion of ICT has transformed numerous sectors, including legal services, by automating previously manual processes and improving institutional efficiency.⁶ As Indonesia advances into the era of Industrial Revolution 4.0, both private and public sectors have integrated digital technologies into their operations.⁷ Within the evolving landscape, the notarial profession assumes a redefined role as custodians of legal authenticity, tasked with ensuring that digitally mediated transactions remain firmly grounded in the normative legal order despite ongoing technological disruption.

Notaries in Indonesia are public officials mandated under Law No. 30 of 2004, as amended by Law No. 2 of 2014 (UUJN-P), to draft authentic deeds that function as legally binding evidence.⁸ Nevertheless, despite the widespread digitization of legal interactions such as online contracts and electronic shareholders' meetings, the execution of notarial deeds continues to require physical presence. This requirement raises important questions in contemporary ICT-based legal environments.⁹

Previous studies have highlighted the growing importance of adapting ICT within legal practice, while also identifying the challenges of reconciling traditional legal formalities with digital modes of interaction.¹⁰ Existing research has recognized

⁴ Stefan Koos, "The Digitization Of Notarial Tasks-A Comparative Overview And Outlook Of 'Cyber Notary' In Indonesia And Germany" (2023) 2:2 Indonesian Journal Of Socio-Legal Studies at 3-4.

⁵ Fahrul Ramadan, Reka Dewantara & M Sudirman, *Legal Certainty For The Reading And Signing Of The Deed Through Teleconferencing Media During The Covid 19* Jurnal Hukum Prasada (2022) at 8-9.

⁶ Dewa Gede Wibhi Girinatha, Ridwan Sidharta & Johannes Ibrahim Kosasih, "The Validity Of The Cyber Notary In Supporting Government Indonesia In The Field Of International Trade" (2023) 06:05 International Journal Of Multidisciplinary Research And Analysis at 2-3.

⁷ Kurnia Khafidhatur Rafiah Et Al, "Digital Readiness Of Smes: An Insight From Indonesia" (2022) 7:1 AFEBI Management And Business Review at 12.

⁸ Yuli Endah Wardantik, Khoidin & Wahyu Prawesthi, *Legal Liability For Notaries Due To The Issuance Of Authentic Deeds Resulting In State Losses* Journal Of Social Sciences And Humanites (2023) at 4-5.

⁹ Tatiana V Larina, "Notarization Of Electronic Transactions: Digital Technologies" In *Revista Gestão Inovação E Tecnologias* 3 (2021) at 2093.

¹⁰ Patrizia Anesa & Louise Kulbicki, "Impact Of Digitalization On Legal Communication: Introduction" (2022) 10:2 The International Journal Of Law, Language & Discourse at 5-6.

the role of Electronic Information and Transactions Law (UU ITE) and provisions of the Company Law (UUPT) that permit the conduct of electronic General Meetings of Shareholders (RUPS). Notably, Financial Services Authority (OJK) Regulation No. 16/POJK.04/2020 requires that notarial minutes of electronic RUPS be legally recognized without the participants' physical signatures.¹¹ However, much of the literature has yet to critically examine how these emerging digital norms create regulatory gaps when set against notarial procedures under UUJN-P, which continue to require face-to-face interaction and physical document signing.¹² As a result, there remains a limited in-depth legal analysis of how such inconsistencies affect the scope of notarial authority and the evolving role of notaries in the digital legal environment.¹³

To address this gap, the present study critically examines the intersection between notaries' statutory duties and the evolving legal framework shaped by ICT developments. It seeks to clarify how notarial roles can be reconciled with electronic legal processes, such as digital contracts and virtual RUPS, through an evaluation of current legislation and the formulation of adaptive legal interpretations or reforms.¹⁴ The scientific novelty of this research lies in its effort to construct a harmonized legal perspective that preserves notarial authority while accommodating technological innovation. It positions the notary not as an impediment to progress, but as an adaptive institutional actor essential to ensuring digital legal certainty in Indonesia. By exploring these dynamics, this study offers recommendations for legal reform aimed at enhancing the effectiveness of notarial services in a digital context, while maintaining legal certainty alongside technological advancement.¹⁵

¹¹ Iwan Erar Joesoef Et Al, "General Meeting Of Shareholders Based On Notary Rules And Electronic Evidence" (2023) 6:Specialissues Veteran Law Review at 29-30.

¹² Financial Services Authority (Otoritas Jasa Keuangan/OJK) Is Indonesia's Independent Regulatory Body Mandated To Supervise And Regulate The Financial Services Sector, Including Capital Markets, Banking, And Non-Bank Financial Institutions, Established Under Law No. 21 Of 2011.

¹³ Siti Malikhatun Badriyah, Marjo, R Suharto, & Mas'ut, "Legal Consequences Of Making Of Electronic Notary Deeds On The Authenticity Of The Deed" (2023) 18:3 World J Adv Res Rev at 316-317.

¹⁴ Absori Absori Et Al, "Problematic Of Implementation Of Electronic GMS On Deeds Made By Notaries" (2022) 10:3 Jurnal IUS Kajian Hukum Dan Keadilan at 615.

¹⁵ Olga V Belyanskaya & Albert A Chomaev, *The Impact Of Digitalization On The Process Of Legal Activity Current Issues Of The State And Law* (2022) at 492.

In light of the foregoing discussion, this study is significant in its effort to bridge the regulatory disjunction between notarial law and emerging digital legal practices. In legal and business transactions, it is essential to ensure that the roles and responsibilities of notaries are neither rendered obsolete nor left legally ambiguous.¹⁶ Through a detailed legal analysis and the formulation of responses to existing legislative inconsistencies, this research contributes meaningfully to broader discussions on legal modernization in Indonesia and the future of the notarial profession in the digital era.¹⁷ The findings are expected not only to deepen understanding of the current legal landscape but also to offer a conceptual framework for integrating ICT into notary practice, thereby ensuring that notaries remain relevant, effective, and legally certain in their functions. Ultimately, this study seeks to support the development of a more robust legal environment that balances innovation with the integrity of notarial services in Indonesia.

The scientific contribution of this study lies in its proposal of a harmonized legal model that reconceptualizes the notary's role, not as a procedural obstacle, but as a legally adaptive actor within ongoing digital transitions.¹⁸ By examining Indonesian legal instruments alongside emerging ICT applications in notarial practice, the study develops a normative framework for integrating digital tools into notarial services without undermining the authenticity or legal validity of notarial deeds.¹⁹ In doing so, it contributes to broader debates on regulatory modernization and the institutional resilience of legal actors in the digital age.²⁰

Accordingly, this study addresses the following research questions: (1) How does the current legal framework under UUJN-P accommodate or constrain the use of ICT in notarial practices? (2) What regulatory gaps arise from the coexistence

¹⁶ Tengku Yusuf Hanafiah Yovinanda, Adi Mansar, & Ferry Susanto Limbong, *The Role Of A Notary In The Establishment Of A Limited Partnership After The Entry Into Force Of The Electronically Integrated Business Licensing Service System According To Government Regulation Number 24 Of 2018* *Jurnal Multidisiplin Madani* (2022) at 4308.

¹⁷ Alexander V Begichev, "Remote Digital Technologies For Notary Protection Of The Rights Of Economic Activities Participants" In *Smart Innovation, Systems And Technologies* Smart Innovation, Systems And Technologies (Singapore: Springer Singapore, 2022) at 166.

¹⁸ Mirabel Rahma Nesiabila Et Al, "Legal Implementation Of Cyber Notary Regulation: Implementation Opportunities And Legal Challenges In Indonesia" (2025) 2:9 *Abdisci* at 465-466.

¹⁹ Panca O Hadi Putra Et Al, "A Framework For Integrated E-Notary Services Based On Blockchain For Civil Law Notaries: The Case Of Indonesia" (2025) 9:1 *JOIV : Int J Inform Visualization* at 158-159.

²⁰ Tengku Yusuf Hanafiah Yovinanda, Adi Mansar, & Ferry Susanto Limbong, *supra* note 16.

of traditional notarial procedures and digitally mediated legal mechanisms? (3) What legal reforms or interpretative approaches could enhance the adaptability of notarial functions while preserving legal certainty? The responses to these questions provide the analytical framework of the article and serve as the basis for its policy and legislative recommendations.

II. METHODOLOGY

This study adopts a normative juridical approach, focusing on the examination of legal norms within the system of positive law to identify, interpret, and address legal issues arising from the digital transformation of notarial practice.²¹ Employing a descriptive-analytical design, the research not only maps the existing regulatory framework but also critically assesses its coherence and adequacy in responding to challenges posed by ICT.²² The doctrinal orientation of the study allows for an in-depth analysis of statutory provisions, legal principles, and scholarly interpretations relevant to notarial authority in the digital era.²³ The research relies primarily on secondary data, comprising legislation and regulatory instruments as primary legal materials, academic literature and peer-reviewed journals as secondary legal materials, and supplementary sources, such as legal dictionaries and supporting articles, as tertiary materials.²⁴ Data are collected through a comprehensive literature review, complemented by limited expert interviews conducted to contextualize legal interpretation and enrich the doctrinal analysis.²⁵ The collected materials are analyzed qualitatively using deductive reasoning, linking general legal doctrines to specific issues affecting notarial functions under ICT-driven disruption.²⁶ Through this methodological framework, the study seeks to produce a coherent legal analysis that contributes to the refinement of notarial regulations and supports the development of

²¹ Lutsky, “Doctrinal Features Of Positive Law” (2020) 11:11 Al’manah Prava at 56.

²² Matthew Mitchell, “Analyzing The Law Qualitatively” (2023) 23:1 Qual Res J at 102–113.

²³ Tatiana V Larina, “Notarization Of Electronic Transactions: Digital Technologies” (2021) 11:3 Rev Gest Inov Tecnol 2089–2097 at 291.

²⁴ Tunggul Ansari Setia Negara, “Normative Legal Research In Indonesia: Its Originis And Approaches” (2023) 4:1 Audito Comparative Law Journal (ACLJ) at 4.

²⁵ Patrizia Anesa & Louise Kulbicki, *supra* note 10.

²⁶ Alexander V Begichev, “The Role Of Digitalization On The Interaction Of Judicial And Notarial Authorities In Conciliation Procedures” (2022) 26:2 Rudn J Of Law at 488-489.

normative solutions capable of maintaining the relevance, effectiveness,²⁷ and legal certainty of notarial duties in an increasingly digital legal environment.²⁸

III. THE CONCEPT OF CYBER NOTARY AND NOTARIAL AUTHORITY IN THE DIGITAL ERA

The digital transformation of legal services has necessitated a re-examination of traditional legal frameworks, particularly in professions governed by strict procedural formalities. As key legal actors, notaries are tasked with preserving legal certainty while simultaneously adapting to an increasingly digital legal environment.²⁹ In this context, the legal foundations of notarial authority, especially within the Indonesian legal system, become central to understanding how notaries can operate effectively and respond to technological disruption without undermining the formal and evidentiary functions that define their role.

In contrast to Indonesia's still-developing regulatory framework, other jurisdictions have already established robust mechanisms governing the use of cyber notary practices. In Common Law systems such as the United States, Remote Online Notarization (RON) has gained broad acceptance, enabling notaries to perform their functions as digital witnesses through secure audio-visual communication technologies. By comparison, Civil Law countries, many of which share Indonesia's Latin Notary tradition, have pursued a model of 'secure digitization'. For instance, France employs the Authentic Act on Electronic Media (AAE) to preserve the evidentiary value of notarial deeds while storing them in a centralized electronic registry (*Minutier Central Electronique des Notaires de France*). Similarly, Estonia has reconceptualized the notion of 'presence' through its Remote Authentication regime, allowing notaries to authenticate deeds via state-managed video platforms supported by secure digital identification systems. These comparative experiences demonstrate that effective

²⁷ Agung Aditya, Cahya Wulandari & Loso Loso, "Cyber Notary: Between Notary Opportunities And Challenges In Facing The Era Of Digital Disruption 4.0 Towards 5.0" (2022) 2:1 International Journal Of Law Society Services at 8-9.

²⁸ Elena Agibalova & Angelina Ryzhova, "Modern Notary In The Era Of Digital Transformation" (2022) 1 Legal Concept at 167-168.

²⁹ E L Sidorenko, L L Arzumanova & O N Amvrosova, "Adaptability And Flexibility Of Law In The Context Of Digitalization" In *Lecture Notes In Networks And Systems* (2021) at 523.

digital transformation in notarial practice requires more than the adoption of technology; it necessitates a deliberate legislative redefinition of concepts such as 'physical presence' and 'authenticity' as an evolution that Indonesia is only beginning to undertake.

The Indonesian Cyber Notary paradigm thus operates as a "legal paradox" where the Notary Law formally recognizes notarial authority in relation to electronic transactions, yet is practically restricted by the mandatory requirement for physical presence to maintain deed authenticity. Consequently, this tension produces a condition of functional hybridization, in which notaries adopt digital systems to improve administrative efficiency and support electronic processes, yet remain bound by traditional face-to-face procedural formalities at the core of deed execution.

The advancement of legal services in the digital era necessitates a comprehensive re-evaluation of traditional legal frameworks, particularly within professions governed by strict procedural formalities. As core legal actors, notaries are required to preserve legal certainty while adapting to the increasingly digital character of legal transactions. Although OJK and other regulatory bodies have introduced electronic procedures, such as those governing electronic General Meetings of Shareholders (RUPS) and certain fiduciary instruments, these developments have not been consistently accompanied by corresponding procedural reforms within the Law on Notary Office (UUJN-P). For the latter continues to mandate physical presence for essential stages of deed authentication, including the reading and signing of deeds. This divergence reveals a clear regulatory lag between statutory notarial obligations and existing technological capabilities.³⁰ Unlike earlier studies that tend to treat the cyber notary as a conceptual or aspirational response to digitalization, this study underscores the urgency for harmonization between UUJN-P and sectoral regulations, particularly those issued by the Financial Services Authority (OJK).³¹

³⁰ John W Bagby & Nizan Geslevich Packin, "Closing The Regtech Lag Between Prospective Regulated Activity And Regulation" (2020) SSRN Electronic Journal at 6-8.

³¹ Jenny Divia Fitcanisa & Busyra Azheri, "Keabsahan Tanda Tangan Elektronik Pada Akta Notaris" (2023) 2:5 Sibatik Journal: Jurnal Ilmiah Bidang Sosial, Ekonomi, Budaya, Teknologi, Dan Pendidikan at 1452-1453.

In contrast to traditional approaches that rely heavily on physical presence and rigid procedural formalities, contemporary expectations of legal services are increasingly oriented toward speed, efficiency, and digital accessibility.³² Drawing on Clayton Christensen's theory of disruptive innovation, as further elaborated by Rhenald Kasali, disruption should be understood not merely as a technological shift but as a broader market-driven transformation.³³ Within the legal services sector, including notarial practice, this transformation has given rise to online legal platforms that target lower or underserved market segments, many of which have traditionally fallen outside the reach of conventional notarial services.³⁴

In the digital era, the notarial function has shifted from predominantly conventional practices toward increasingly digitized forms of services, although its core mandate to ensure legal certainty and security remains unchanged. This change has given rise to the concept of the cyber notary, which entails the integration of technology to support the notary's essential role in producing authentic deeds that are legally valid, secure, and efficient. Accordingly, notaries must understand the operational dimensions of cyber notarial practice, including digital authentication mechanisms, cloud-based document storage, and standardized electronic signatures. These deficiencies raise concerns regarding the legal validity of documents executed or certified electronically, an issue that directly implicates the notary's traditional role as a guarantor of authenticity and legality.³⁵ While much of the existing literature emphasizes the urgency of adopting digital tools, this study underscores that technological disruption requires not only innovation but also legal adaptability. Cyber notary, therefore, should be understood not merely as a technological solution, but as a strategic legal transformation to sustain the relevance and institutional integrity of the notarial profession in a rapidly evolving legal environment.³⁶

³² Anastasia Selkova, *Would Online Legal Services Guarantee The Availability Of Justice And Legal Aid? SHS Web Of Conferences* (2022) at 3-4.

³³ Chakunnath Madhusudan & Ramasamy Panneerselvam, "Can The Theory Of Disruptive Innovation Be Considered Complete?" (2022) 50:1 *IEEE Engineering Management Review* at 158-159.

³⁴ Kang Ning Zhou, Jian Zhang & Jiaqi Wang, "Research And Design Of Cloud-Based Smart Legal Service Platform" In *IEEE 6th Information Technology And Mechatronics Engineering Conference, ITOEC 2022* (2022), at 2017.

³⁵ Putu Sekarwangi Saraswati, I. Nengah Susrama & Saraswati, *supra* note 2.

³⁶ Amanda Hasna Nadhya, "Pengaruh Disrupsi Era Digital Terhadap Akta Notaris Sebagai Alat Bukti Autentik" (2022) 2:1 *Jurnal Officium Notarium* at 5-6.

Therefore, to preserve the integrity of the notarial profession and ensure that electronic documents retain their legal validity, it is essential to develop adaptive regulatory frameworks capable of accommodating technologies such as blockchain-based verification, certified electronic signatures, and secure digital archiving systems.³⁷ These instruments can enable notaries to operate more efficiently and respond to evolving societal needs without compromising their constitutional mandate or the evidentiary value of notarial deeds. From this perspective, technological disruption is not a threat but an opportunity to enhance the quality and accessibility of legal services in the digital age. By embracing appropriately regulated technological innovation, notaries can navigate the complexities of the digital legal landscape while maintaining to uphold the core principles of legal certainty.³⁸ By embracing these advancements, notaries can more effectively navigate the complexities of the digital legal landscape while preserving their essential role within the legal system.³⁹ Such a proactive approach not only protects the integrity of notarial services but also strengthens public trust in the legal framework as it evolves in response to contemporary technological demands. These findings, therefore, highlight the urgent need for a cohesive and harmonized regulatory framework that facilitates the integration of digital technologies into notarial practice. Ultimately, such integration has the potential to promote more efficient legal processes that meet the expectations of an increasingly digital society, while continuing to ensure the security and authenticity of notarial transactions.

IV. DISRUPTION OF NOTARIAL AUTHORITY IN FIDUCIARY REGISTRATION AND OTHER LEGAL FUNCTIONS

Against the growing demand for efficiency in digital legal services, one of the most significant applications of ICT in Indonesian notarial practice is the digitalization of fiduciary registration, which has transitioned from a manual to an electronic system under Government Regulation No. 21 of 2015. Although

³⁷ Shinya Haga & Kazumasa Omote, “Blockchain-Based Autonomous Notarization System Using National Eid Card” (2022) 10 IEEE Access 87477–87489, p.87480-87483.

³⁸ M Dubnyak & V Solovyova, “Digital Transformation Of Legal Services” (2022) 2(41) Information And Law at 54-55.

³⁹ Karolina Mania, “The Digital Transformation Of Legal Industry: Management Challenges And Technological Opportunities” (2022) 13:3 DANUBE Law Econ Rev at 214-215.

Article 5(1) of the Fiduciary Security Law (UUJF) continues to require fiduciary security to be established by notarial deed, the legal effect of registration are now fully administered online, with fiduciary certificates issued and electronically signed by the competent authority.⁴⁰ Despite this procedural shift, the authenticity of the underlying notarial deed remains strictly tied to physical presence, manual reading, and wet signatures as mandated by the Law on Notary Office (UUJN-P). Consequently, Indonesia operates a fragmented cyber notary model in which digital registration mechanisms are not normatively aligned with notarial procedural law. By contrast, civil law jurisdictions such as France and Estonia have integrated electronic registration with a redefined notion of authenticity through legally recognized electronic deeds, remote authentication, and state-managed digital identity systems. Indonesia's partial digitalization thus raises unresolved concerns regarding evidentiary coherence, procedural accountability, and the long-term enforceability of electronically registered fiduciary rights within its evolving cyber notary framework.

This regulatory shift, while formally supporting digitalization, has produced a form of partial disruption within the notarial system.⁴¹ Although fiduciary registration has been fully digitized, the creation of the fiduciary deed itself remains governed by conventional procedures that require the physical presence of the parties at the notary's office.⁴² From an administrative standpoint, the electronic fiduciary registration system offers significant efficiency gains, enabling registration to be completed within minutes following payment and allowing notaries to issue fiduciary certificates.⁴³ At the same time, however, this operational efficiency conceals a deeper legal inconsistency.⁴⁴ The transition to an online system has redefined the identity and role of the fiduciary applicant: whereas under the manual regime, registration could be submitted by the creditor or an authorized proxy, the electronic system limits access exclusively to certified

⁴⁰ Martua Eka Wijaya Tambunan Et Al, *The Executorial Title Of Fiduciary Guarantee In The Digitalization Era For Business Needs Notaire* (2023) at 34-35.

⁴¹ Henry Lbn Toruan Donald, *The Importance Of Using Electronic Deeds To Facilitate The Service And Storage Of Notary Archives*, 22 (Storage Of Notary Archives.Jurnal Penelitian Hukum De Jure, 2022) at 484.

⁴² *Ibid.*

⁴³ Abdul Hasim, Siti Rodhiyah & Aryani Witasari, "Role & Responsibilities Of Notary In Implementation Of Association Registration Through The Online Legal Entity Administration System" (2022) 4:1 Sultan Agung Notary Law Review at 164-165.

⁴⁴ Donald, *supra* note 41.

notaries. As a result, full responsibility for data entry, submission, and legal compliance is shifted to the notarial office.⁴⁵ A similar pattern can be observed in corporate registration practices, where Article 9(3) of Law No. 40 of 2007 on Limited Liability Companies (UUPT) permits founders to delegate online company incorporation to notaries through the Ministry of Law's and Human Rights' electronic legal entity system (AHU).

Despite the expansion of digital responsibility placed on notaries, their professional practice remains procedurally constrained by traditional authenticity requirements under the UUJN-P, which do not recognize remote presence or electronic execution as functional equivalents of physical formalities. This asymmetry gives rise to a normative imbalance: notaries are positioned as central digital gatekeepers within public registration systems, yet are not granted corresponding legal authority to carry out core notarial functions through fully digital means. As a result, Indonesia's cyber notary framework has developed into an administratively digitized but doctrinally conservative model, one of that perpetuates fragmentation between technological capacity and the scope of legally recognized notarial authority.

The Online Single Submission (OSS) system, established under Government Regulation No. 24 of 2018 further reinforces the notary's role within an ICT-driven legal and administrative environment by integrating company registration with business licensing services.⁴⁶ As a centralized electronic platform for the issuance of business permits, the Online Single Submission (OSS) system builds upon the earlier One-Stop Service (PTSP) model and has been in operation since October 2017. Its implementation is grounded in Presidential Regulation No. 91 of 2017 on the acceleration of business processes, reflecting the state's broader commitment to regulatory simplification and digital governance.⁴⁷

⁴⁵ Mokhammad Hussain Adillah, "The Protection on Notary in Criminal Cases Related to Authentic Fiduciary Deeds" (2023) 3:1 IJLSS at 11-12.

⁴⁶ Yulia Eka Susanty, *Offline Consultation Needs On Online Licensing Services Through Online Single Submission (OSS) System Kne Social Sciences* (2022) at 214-215.

⁴⁷ Widhayani Dian Pawestri et al, "Investment In Infrastructure: A Comparative Study Of The Regulation Of Online Single Submission In Indonesia, Canada, And New Zealand" (2024) 11:1 Eur J Comp Law Gov at 138-139.

This study from much of the existing literature, which often discusses notarial disruption in abstract terms. By contrast, these findings identify concrete legal mechanisms such as fiduciary and corporate registration, where notarial duties are being transformed operationally, even though procedural law has yet to fully adapt to these changes.⁴⁸ Beyond registration processes, several technical reporting obligations have also been digitalized. These include monthly reporting of notarial deeds to the regional Office of the Ministry of Law and Human Rights in the Special Capital Region of Jakarta, as well as electronic testamentary reporting, which must be conducted regardless of whether a will is executed. Although largely administrative in nature, these digital reporting systems constitute an integral part of the broader structural disruption reshaping notarial practice. They impose additional responsibilities on notaries that require digital proficiency and system integration.⁴⁹

Table 1. The Impact of ICT Disruption on Notarial Authority in Indonesia

Aspect	Previous Regulation (Manual)	Change (Digitalization)	Impact on Notaries
Fiduciary Registration	Under Government Regulation No. 86 of 2000, fiduciary registration was conducted manually at the Fiduciary Registration Office and could be submitted either by the fiduciary recipient or through an authorized proxy.	Government Regulation No. 21 of 2015 fundamentally transformed fiduciary registration by shifting the process to an electronic platform known as Sisminbakum (Sistem Administrasi Badan Hukum), administered by the	Simplifies and accelerates fiduciary registration (within approximately seven minutes). Registration access is limited to notaries through personal accounts (username and password).

⁴⁸ V Barankova, *Notary Public As Subject Of Notarial Process*, 1 (Visnik Užgorods'kogo Nacional'nogo Universitetu, 2023) at 77-78.

⁴⁹ Madina Karimova, *Digital Notary: Current Status And Prospects Jurisprudence* (2022) at 45-46.

		Ministry of Law and Human Rights, with certificates issued through digital signatures.	
Limited Liability Company (PT) Registration	Under the Company Law (UUPT), company incorporation requires the preparation of a notarial deed in the Indonesian language, with submission carried out manually by the founders or their authorized proxy.	Under Government Regulation No. 24 of 2018, registration is conducted through the Online Single Submission (OSS) system, with applications submitted electronically by the founders or an authorized notary.	Notary becomes a mandatory proxy if the founders do not apply directly. This arrangement increases efficiency in the registration of legal entities.
Notarial Deed Reporting	Deed reports are submitted manually to the relevant authorities.	Electronic reporting via websites such as jakarta.kemenkumham.go.id/lbn (deeds) and ahu.go.id (wills).	This reduces the manual administrative burden and enhances transparency in deed reporting.
General Meeting of Shareholders (GMS/RUPS)	Physical attendance is required, and the notary drafts the General Meeting of Shareholders (GMS) minutes conventionally.	Under POJK No. 15/2020 and 16/2020, GMS may be conducted electronically (e-GMS) via teleconference. GMS minutes are drafted as electronic notarial deeds without the	Notaries must adapt deed formats to incorporate electronic records. However, they are still required to operate within their territorial jurisdiction for <i>relaas</i> deeds. This situation gives rise to legal

		participants' physical signatures.	uncertainty regarding the status of transcript attachments as official meeting minutes.
Cyber Notary	There was no integration technology in notarial duties and all deeds were prepared and stored conventionally.	Application of ICT in deed creation, registration, and reporting (fiduciary, PT, GMS). The basic concept of cyber notary is emerging, but not comprehensively regulated in UUJN.	The notarial role has expanded within the digital domain, accompanied by regulatory challenges in validating electronic documents and managing digital notarial protocols.

This table demonstrates how ICT has transformed legal administrative processes that were previously conducted manually into more efficient, electronic-based systems. At the same time, it illustrates how these developments have reshaped the role of notaries, positioning them as key facilitators and authenticators within an increasingly digital legal environment.⁵⁰

The digital transformation of legal administrative processes in Indonesia through information and communication technology (ICT) has significantly reshaped the authority, functions, and procedural practices of notaries.⁵¹ As summarized in Table 1, these changes are evident across multiple areas of notarial activity, including fiduciary registration, company incorporation, deed reporting, shareholders' meetings, and the emergent concept of cyber notary.

In the area of fiduciary registration, the transition from manual procedures under Government Regulation No. 86 of 2000 to the electronic system mandated by Government Regulation No. 21 of 2015 reflects a clear process of procedural

⁵⁰ Volgograd Institute Of Management, Branch Of The Russian Presidential Academy Of The National Economy And Public Administration Et Al, "Modern Notary In The Era Of Digital Transformation" (2022) 1 LC at 167-168.

⁵¹ Sulistyani Eka Lestari Et Al, "Navigating Legal Transformation: Challenges And Prospects Of Cybernotary In Enhancing Public Service Efficiency In Indonesia" (2024) 11:4 AKTA at 1227-1228.

modernization. The introduction of the *Sisminbakum* platform (*Sistem Administrasi Badan Hukum* or Legal Entity Administration System), an online system administered by the Ministry of Law and Human Rights for legal entity administration and deed-related registration, has significantly streamlined fiduciary registration through the issuance of digitally signed certificates and rapid processing times.⁵² However, this change also centralizes access exclusively through notarial accounts, thereby reinforcing the notary's role as a procedural gatekeeper while simultaneously imposing heightened demands for digital competence and accountability.⁵³

In the regulations of limited liability company (PT) registration, the Indonesian government's integration of the Online Single Submission (OSS) system under Government Regulation No. 24 of 2018 has altered the procedural framework established by the Company Law (UUPT). Although notaries remain essential, particularly where founders choose not to submit directly, the shift toward electronic submission has significantly improved the efficiency of the incorporation process. At the same time, it has redefined the notary's role as a procedural intermediary within Indonesia's digital legal infrastructure,⁵⁴ reinforcing the notary's strategic importance in ensuring legal compliance within technology-driven regulatory systems.

In terms of notarial deed reporting, the introduction of electronic submission through official portals such as jakarta.kemenkumham.go.id/lbn and ahu.go.id marks a significant departure from traditional manual practices.⁵⁵ The automation and

⁵² *Sisminbakum (Sistem Administrasi Badan Hukum) Is A State-Administered Electronic Legal Entity Administration System Operated By The Directorate General Of General Legal Administration (Direktorat Jenderal Administrasi Hukum Umum – AHU) Under The Ministry Of Law And Human Rights Of The Republic Of Indonesia. The Platform Functions As A Legally Mandated Instrument For The Registration, Legalization, Approval, And Recording Of Corporate Legal Entities And Their Amendments, Whereby Notaries Are Authorized Users Acting As Gatekeepers Of Data Accuracy And Formal Legality In Accordance With Prevailing Statutory Regulations.*

⁵³ Lyubov B Sitdikova, Nikita A Galkin, & Lecturer Of The Legal Department Of The Institute Of Economics, Management And Law Of The Moscow City University, "Contemporary Tendencies Of Carrying Out Notarial Actions In The Digital Format" (2024) N at 41-42.

⁵⁴ Chelsya Manik & Pieter E Latumeten, "Legal Review Of The Effect Of Technological Developments On Notary Services In Making Authentic Deeds" (2024) 3:11 AJESH at 2574-2575.

⁵⁵ The Jakarta Regional Office portal of the ministry of law and human rights (jakarta.kemenkumham.go.id) is routinely accessed by notaries in jakarta to obtain administrative guidance, procedural updates, and official announcements related to legal entity registration, fiduciary services, and notarial obligations, serving as a practical reference point in the day-to-day implementation of electronic legal administration.

digital traceability of deed submissions have reduced the administrative burden on notaries while enhancing institutional transparency.⁵⁶ Nevertheless, this transition also requires a consistent level of digital literacy and continuous compliance with platform-specific technical requirements, which may not yet been fully standardized across jurisdictions.⁵⁷

The regulation of the General Meeting of Shareholders (RUPS), particularly following the issuance of OJK Regulations No. 15/2020 and 16/2020, has introduced substantive changes in both the conduct and documentation of shareholder meetings.⁵⁸ The legal recognition of electronic RUPS (e-RUPS) conducted via teleconference challenges the conventional framework in which physical presence and handwritten signatures were considered essential for notarial authentication. Although notaries remain responsible for preparing minutes in electronic form, significant legal ambiguities persist, particularly regarding the status of digital transcripts, territorial jurisdiction in *relaas* deeds, and the evidentiary value of unsigned minutes.⁵⁹ These unresolved issues highlight a clear disjunction between technological capabilities and the constraints imposed by the existing statutory framework, most notably the UUJN-P.

Finally, the emerging concept of cyber notary represents the most transformative yet underregulated dimension of ICT-driven disruption in notarial practice. Although digital technologies have increasingly been applied to deed creation, registration, and reporting, these developments remain unsupported by a coherent regulatory framework. The UUJN-P has yet to articulate substantive provisions governing the legal status of electronic deeds, digital notarial protocols, or remote authentication mechanisms.⁶⁰ As a result, while the notary's

⁵⁶ Ahu online (ahu.go.id) is the official electronic platform of the directorate general of general legal administration under the ministry of law and human rights of the republic of indonesia, through which notaries routinely perform online registration, verification, and submission of legal documents related to Corporate Entities, Fiduciary Security, And Other Civil Law Matters.

⁵⁷ Latifah Latifah & Suprpto Suprpto, "Electronic Notarial Deed Register Book (Repertorium) In The Digital Era" (2024) 10:2 Jhs at 557-558.

⁵⁸ Sufiarina Sufiarina Et Al, "The Organization Of The General Meeting Of Shareholders Based On Court Determination From The Perspective Of Shareholder Rights' Protection" (2022) 9:2 PJIH at 178-179.

⁵⁹ Agung Laksono, Abdul Aziz Nasihuddin, & Siti Kunarti, "Notary Authority In Making Auction Minutes As Authentic Deed In The Implementation Of Voluntary Auctions" (2025) 5:4 JLPH at 2386-2387.

⁶⁰ Ardiansyah Fahmi & Anas Luthfi, "Legal Study On The Validity Of Electronic Notarial Deeds In Indonesia: Regulatory Analysis And Practical Implications" (2025) 5:2 JPRSP at 401-402.

role is continues to expand into digital domains, the absence of clear legal recognition for cyber notarial functions generates considerable uncertainty regarding the validity, enforceability, and evidentiary value of electronic notarial acts.

The foregoing analysis demonstrates that while ICT has improved procedural efficiency and broadened the operational scope of notarial services, the underlying legal framework has not evolved proportionally. Without harmonized regulations and clearly defined legal concepts, notarial authority remains exposed to interpretative inconsistencies and jurisdictional constraints.⁶¹ Accordingly, comprehensive reform of the UUJN-P and related legal instruments is necessary to strengthen legal certainty and to ensure the effective integration of notaries within Indonesia's digital legal infrastructure.

The key finding of this study reveals that, although ICT has been progressively integrated into notarial processes such as fiduciary registration, company incorporation, and electronic shareholders' meetings, the prevailing legal framework, particularly the UUJN-P, has not evolved sufficiently to accommodate these technological advancements. This regulatory inertia generates legal uncertainty, especially in the authentication and evidentiary value of electronically created and submitted notarial acts. The novelty of this research lies in its identification of a structural regulatory disharmony between the UUJN-P and digital-era regulations, such as the ITE Law, the UUPT, and POJK 15/2020 and 16/2020. Furthermore, this study proposes a reinterpretation of "physical presence" to encompass "electronic presence."⁶² By advancing this approach, this study offers a forward-looking legal framework for integrating cyber notary practices into Indonesia's statutory system, thereby promoting legal certainty and institutional continuity within an increasingly digital legal environment.

⁶¹ Pande Ketut Natalia Desintha Et Al, "The Development Of Technology And Information And Its Impact On Notarial Practice In Relation To Legal Certainty" (2024) 6:3 Sanlar at 118-119.

⁶² Shinta Pangesti, Grace I Darmawan & Cynthia P Limantara, "The Regulatory Concept Of Cyber Notary In Indonesia" (2021) 7 Rechtsidee at 6-7.

V. LEGAL AUTHORITY OF NOTARIES IN THE CONTEXT OF ELECTRONIC SHAREHOLDERS' MEETINGS

Beyond the technical and administrative functions discussed above, a core notarial authority, the drafting of *relaas* deeds (*akta relaas*),⁶³ has also encountered procedural challenges as a result of digital transformation, particularly in the context of electronic General Meetings of Shareholders (RUPS).⁶⁴ Although electronic RUPS is not expressly regulated under the Notary Position Law (UUJN-P), it is legally recognized under Article 77(1) of the Company Law (UUPT), which permits shareholder participation through teleconference, video conference, or other electronic means.

These digital provisions aim to enhance accessibility for shareholders who are unable to attend meetings in person. However, empirical findings indicate that their practical implementation remains inconsistent. According to Erny Kencanawati, a notary in Bandung, many notaries prefer drafting Statements of Meeting Resolutions or *Pernyataan Keputusan Rapat* (PKR) rather than full *relaas* deeds when General Meeting of Shareholders or *Rapat Umum Pemegang Saham* (RUPS) are conducted electronically.⁶⁵ The PKR, classified as a *partij deed*, reflects the agreement among parties and is executed using conventional notarial procedures.⁶⁶ As a precautionary measure to mitigate legal risk, notaries

⁶³ *Relaas* Deeds (*Akta Relaa*s) Are Notarial Deeds that record facts, events, or procedural actions directly witnessed or performed by the notary in the exercise of public authority, rather than statements declared by the parties. Their evidentiary strength derives from the notary's firsthand observation and contemporaneous documentation of the recorded event, which traditionally presupposes physical presence and immediate recording, distinguishing them from *partij* deeds that reflect the parties' legal intentions.

⁶⁴ Satwika Anindya Sarathi Smara Putri, Edith Ratna Mulyaningrum & Bastian Chris Daren, "The Validity Of The Notary Deed Based At The Online General Meeting Of Stakeholders" (2022) 8:3 Law Research Review Quarterly at 281-282.

⁶⁵ Elok Sunaringtyas Mahanani & Iswi Hariyani, "The Urgency Of The Indonesian Notary Association (INI) In Development And Supervision Of Notary" (2023) 4:1 Jurnal Ilmu Kenotariatan at 6-7; *Pernyataan Keputusan Rapat* (PKR) Is a notarial deed that records the resolutions of a meeting based on statements provided by the parties, and is classified as a *partij deed* rather than a *relaas deed*, as the notary does not directly witness the conduct of the meeting; *Rapat Umum Pemegang Saham* (RUPS) Refers to the general meeting of shareholders (GMS), the highest corporate organ in a limited liability company, vested with authority not delegated to the board of directors or commissioners, as regulated under Law No. 40 Of 2007 On Limited Liability Companies.

⁶⁶ *Partij* Deeds (*Akta Partij*) are notarial deeds that record statements of intent, agreements, or declarations made by the appearing parties before a notary, rather than facts directly observed by the notary. In such deeds, the notary functions as an impartial public official who formalizes the legal will of the parties, ensures compliance with statutory requirements, and confers authenticity upon the deed through proper formality and procedure. The evidentiary value of *partij* deeds is primarily derived from the conformity of the deed

frequently require shareholders to sign these documents through a circular signing process, even though the meeting was conducted virtually.⁶⁷ Several terms require further explanation in the footnotes to provide clearer context and deeper insight for readers.

This conservative approach underscores a critical operational gap. Although electronic RUPS is legally permissible, the absence of clear notarial procedures governing virtual participation under the UUJN-P has resulted in divergent practices among notaries. This situation contrasts sharply with more integrated legal systems, where documentation generated from digital meetings is seamlessly recognized as an integral part of the notary's formal function.

Despite persistent procedural constraints within Indonesian notarial law, the permissibility of hybrid General Meetings of Shareholders or *Rapat Umum Pemegang Saham (GMS)* under Article 77(1) of Law No. 40 of 2007 reveals a structural opening for the development of a distinctly Indonesian cyber notary concept. While corporate law has progressively accommodated electronic participation, notarial law remains firmly anchored to requirements of physical presence, particularly in relation to *relaas* deeds as regulated under Article 18 of the Law on Notary Position (UUJN-P).

This normative dissonance has given rise to a pragmatic adaptation in practice, whereby notaries predominantly document electronic or hybrid GMS through Statements of PKR, classified as *partij* deeds; these instruments rely on the declarations of the parties rather than the notary's direct observation of the events. In contrast to jurisdictions such as the United States, where Remote Online Notarization (RON) fundamentally reconceptualizes notarial presence through audiovisual verification, or Estonia, which legally redefines "presence" through state-managed digital identity systems, Indonesia's cyber notary paradigm has developed as a hybrid legal construct rather than a fully virtualized model.

with prescribed legal formalities, including the presence of the parties, the reading of the deed, and the signing process, rather than from the notary's direct observation of factual events.

⁶⁷ Sesaria Arimbi & Widhi Handoko, "Analisis Yuridis Permasalahan Pembuatan Akta Otentik Oleh Notaris/PPAT (Analisis Terhadap Putusan Nomor 210/Pid.B/2018/Pn.Smg)" (2022) 15:1 Notarius at 371-372.

This study advances the novel argument that the Indonesian cyber notary should not be understood merely as a technological transplant, but rather as a normatively adaptive institution operating within a dual legal logic: one that combines digital administrative efficiency with the preservation of formal safeguards of authenticity. This model reflects a transitional regulatory configuration in which notarial authority is exercised through the careful interpretation of existing statutory norms, allowing for limited digital accommodation while maintaining the formal structure and legal certainty required under positive law. Accordingly, the Indonesian cyber notary emerges as a context-specific legal innovation, rooted in civil law formalism yet responsive to digital transactional realities, whose legitimacy depends not on eliminating physical presence, but on legislatively redefining its legal meaning.

This study departs from much of the existing scholarship, which often assumes a binary distinction between digital and conventional modes of deed execution.⁶⁸ In practice, hybrid models have emerged, making the doctrinal distinction between *relaas* and *partiiij* deeds central to assessing the procedural feasibility of cyber-notarial functions.⁶⁹ It also reveals a regulatory vacuum within notarial law concerning standards for virtual witnessing and participation, an area that requires urgent harmonization to ensure coherence between notarial practice and the realities of digital corporate governance.

Recent regulations governing electronic General Meetings of Shareholders (RUPS), notably OJK Regulations No. 15/POJK.04/2020 and No. 16/POJK.04/2020, formally acknowledge the role of notaries within the architecture of digital corporate governance by mandating that minutes of electronic RUPS be embodied in notarial deeds, even without participants' signatures. However, these provisions expose a regulatory inconsistency, as they assign notaries authenticating duties without specifying how core notarial formalities, such as physical presence, the reading of deeds, and execution

⁶⁸ Maryanto Roberto Sihotang, *Juridical Analysis Of Criminal Accountability To Distribute Electronic Documents That Contain Decent Violations (Case Study, Decision No. 133/Pid.Sus/2021/PN Jkt.Sel) Sosioedukasi Jurnal Ilmiah Ilmu Pendidikan Dan Sosial* (2023) at 14-15.

⁶⁹ Uly Elizabeth Saragi & Winanto Wiryomartani, *Penerapan Cyber Notary Dalam Pembuatan Akta Notariil Tanpa Berhadapan Secara Fisik Di Saat Pandemi Covid 19 (Studi Kasus Pembuatan Akta Oleh Notaris R Pada Tahun 2021) Palar | Pakuan Law Review* (2022) at 96-97.

through signatures, are to be satisfied in a fully electronic meeting environment. This normative gap places notaries in a state of legal uncertainty, requiring them to validate digital corporate actions pursuant to sectoral regulations that remain insufficiently harmonized with the mandatory procedural standards of the Law on Notary Position (UUJN-P). The results are an unresolved conceptual tension at the core of Indonesia's cyber notary framework.

The regulations further require e-RUPS platform providers to submit electronic attendance lists, quorum calculations, and complete interaction transcripts to the notary for attachment to the meeting minutes.⁷⁰ This obligation, however, it remains unclear whether such digital records can be recognized as valid annexes to a notarial deed, especially in light of Article 5(4) of the ITE Law, which expressly excludes notarial deeds from the category of electronic documents. This exclusion raises a fundamental question as to whether digital data may legally constitute part of *minuta akta*, which must be preserved within the notarial protocol pursuant to Article 16(1) (g) of the UUJN-P.

This study demonstrates that, while notaries may incorporate certain elements of cyber-notarial practice through the use of ICT, the scope of their authority remains significantly constrained by the absence of clear and coherent legal guidelines.⁷¹ Article 15(3) UUJN-P refers, in general terms, to notarial authority in relation to electronic transactions, yet it provides no operative standards or implementing mechanisms, thereby giving rise to divergent interpretations in practice. Moreover, as long as Article 5(4) of the ITE Law continues to exclude the validity of electronic records for notarial acts, the formal institutionalization remains structurally impeded.

⁷⁰ Marina V Goncharova Et Al, *Electronic Notary: The Development Of Juridical On-Line Services In Modern Russia Studies In Computational Intelligence* (2019) at 401-402.

⁷¹ Divia Fitcanisa & Azheri, *supra* note 31.

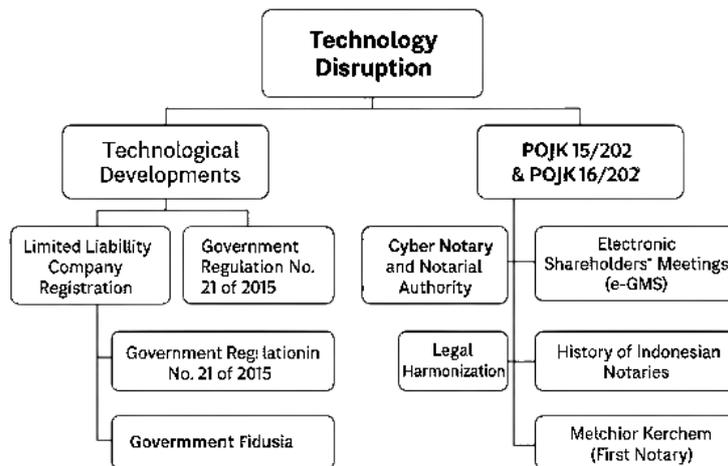


Figure 1 key findings in Disruption of Notarial Authority

These findings depart from much of the existing literature, which tends to frame the cyber notary primarily as a technological opportunity, often without fully engaging with the regulatory contradictions.⁷² This study instead demonstrates that the absence of legal harmonization among the UUJN-P, ITE Law, and OJK regulations generates substantial uncertainty in notarial practice. Although scholars may argue for a *lex specialis derogat legi generalis* approach, according priority to specific instruments such as OJK over general statutes, such reasoning risks further eroding the legal certainty that notaries are institutionally mandated to safeguard when applied in a fragmented normative environment.

The introduction of electronic RUPS must also be understood in its historical context as a direct response to the COVID-19 pandemic, which forced rapid and sudden digitization in corporate governance.⁷³ This shift represents a disruption-driven adaptation rather than the outcome of a deliberate and coherent legal reform.⁷⁴ While the transition has proven technologically feasible, it exposed the fragmented and reactive nature of Indonesia's legal architecture governing

⁷² Kus Rizkianto, Kanti Rahayu & Mukhidin Mukhidin, *Cyber Notary Kepastian Hukum Penyimpanan Dokumen Notaris*, 10 (Cyber Notary Kepastian Hukum Penyimpanan Dokumen Notaris.Diktum, 2022) at 3-4.

⁷³ Mohammad Q Alshhadat & Krayyem Al-Hajaya, "Corporate Governance In The COVID-19 Pandemic: Current Practices And Potential Improvement" (2023) 23:7 Corp Gov at 1612-1613.

⁷⁴ LN Berg, "Transformation Of Legal Impact In The Context Of The Modern Information And Technological Structure (Case Study Of The Relations Connected With Genomic Information)" (2022) 134 SHS Web Of Conferences at 117.

notarial functions in the digital space.⁷⁵ As notaries continue to operate within this evolving landscape, comprehensive and systematic legal reform becomes imperative to address inconsistencies and ambiguities. Only through such harmonization can the notary meaningfully integrate digital practices while preserving its foundational role in ensuring legal certainty, authenticity, and public trust in transactional processes.

Therefore, legal harmonization is indispensable, not only to preserving procedural coherence but also for safeguarding the evidentiary value and integrity of notarial acts.⁷⁶ As stated by Danrivanto Budhijanto, legal harmonization refers to the process of ensuring consistency and alignment among legal principles and regulatory systems, resulting in a coherent and unified legal framework.⁷⁷ Within the sphere of notarial regulation, such harmonization would provide a normative foundation for the secure and authoritative use of digital technologies, restoring public trust in notarial functions within an increasingly digital legal environment.⁷⁸

VI. LEGAL HARMONIZATION AND REGULATORY REFORM IN THE ERA OF ICT DISRUPTION

This study underscores an urgent need for legal harmonization within the legal framework governing notarial authority, particularly as ongoing technological disruption continues to reshape legal interactions and documentation practices. Although the concept of cyber notary is formally acknowledged in Article 15(3) of the UUJN-P, the provision lacks concrete procedural guidance, resulting in significant ambiguity at the level of implementation. Whereas existing literature often frames the cyber notary as a technological advancement, this study shifts the analytical focus toward the institutional and normative vacuum produced by

⁷⁵ Bong Hendri Susanto Et Al, “The Evidentiary Power Of The Deed Made Electronically By The Land Deed Officials” (2023) 06:02 International Journal Of Social Science And Human Research at 234-235.

⁷⁶ Yuni Setiawati Et Al, *Notaries At Risk: Urgent Need For Legal Protection Against Criminal Acts Rechtsidee* (2023) at 8-9.

⁷⁷ Sidi Ahyar Wiraguna, Faisal Santiago & Ahmad Redi, *Harmonization Of Law On Transactions E-Commerce In Order To Support Indonesia’s Economic Development Journal Of Social Research* (2023) at 512-513.

⁷⁸ Donald, *supra* note 41.

overlapping and inconsistently aligned regulations, most notably among the UUJN-P, the UUPJ, ITE Law, and the OJK regulations.

According to Danrivanto Budhijanto, legal harmonization is essential to ensure that each regulation operates as an integrated component of a coherent legal system.⁷⁹ Such harmonization must extend beyond mere textual consistency and be grounded in juridical, philosophical, sociological, and economic considerations.⁸⁰ In the Indonesian legislative context, this process formally begins at the academic draft stage, proceeds through the National Legislative Program (*Prolegnas*), and culminates in regulatory drafting, as stipulated in Presidential Regulation No. 87 of 2014, which mandates inter-institutional coordination to prevent normative overlap. The absence of effective harmonization has produced legal uncertainty in the execution of electronic notarial functions. Although RUPS may be conducted electronically pursuant to Article 77(1) UUPJ and POJK 15/2020–16/2020, notarial procedures remain formally anchored to face-to-face requirements, leaving unresolved questions regarding the legal status of digital transcripts attached to notarial protocols.

Furthermore, Article 5(4) of the ITE Law expressly excludes notarial deeds from recognition as electronic documents, thereby weakening the legal foundation of cyber notary practices and exposing a persistent regulatory contradiction. Whereas prior studies have largely focused on the technical feasibility and efficiency of e-notarization, this research emphasizes the normative tension between regulatory efforts to accommodate digital innovation and to preserve authenticity and evidentiary reliability in notarial acts.⁸¹

To address the legal challenges arising from digital transformation, this study proposes a phased legal modernization strategy spanning short-, medium-, and long-term horizons.⁸² In the short term (0–5 years) priority should be given to the

⁷⁹ Elena Orlova, *The Role Of Harmonization Of Legal Regulation In The Process Of Global And Regional Integration Journal Of Foreign Legislation And Comparative Law* (2022) at 34-35.

⁸⁰ Guan Xiujuan, *Harmonization In Translation Cultural Context: On The Material Of Translations From Chinese And In Chinese Vestnik Sankt-Peterburgskogo Universiteta Vostokovedenie I Afrikanistika* (2022) at 412-413.

⁸¹ Siti Malikhatun Badriyah, Marjo, R Suharto, & Mas'ut, "Legal Consequences Of Making Of Electronic Notary Deeds On The Authenticity Of The Deed" (2023) 18:3 World Journal Of Advanced Research And Reviews at 317-318.

⁸² Roberth Ulloa & Pablo Gallegos, "Design Of A Blockchain Architecture And Use Of Smart Contracts To Improve Processes In Notary Office" In (2022) at 469.

formal recognition and widespread adoption of digitally certified signatures and electronic documents as partial substitutes for paper-based instruments. This incremental approach aims to enhance administrative efficiency while preserving the formal validity and evidentiary value of official documents.

In the medium term (3–7 years), the strategy advances the development of structured e-notarization mechanisms supported by secure video-conferencing technologies and reliable digital authentication systems. Such a measurement would allow certain notarial acts to be performed remotely, provided that core procedural requirements and safeguards of legal formality are maintained.

In the long term (5–15 years), the study envisions the integration of blockchain-based infrastructure for recording and verifying notarial acts through decentralized, immutable, and transparent digital ledgers. The adoption of this technology has the potential to strengthen accountability, reduce the risk of document manipulation, and enhance public trust in the digital evolution of Indonesia's legal system.

The harmonization of the UUJN-P and the ITE Law is essential to ensure legal certainty in the implementation of electronic notarial protocols. This objective can be achieved by expressly codifying the definition, scope, and procedural requirements of a cyber notary within the substantive provisions of the UUJN, rather than confining such recognition to explanatory notes.⁸³ From a theoretical perspective, this approach is supported by constitutional theory, legal development theory, and *lex informatica*, which shapes modern legal systems.⁸⁴

Drawing on Gustav Radbruch's four elements of legal certainty, this study finds that Indonesia's current regulatory framework falls short of several fundamental benchmarks.⁸⁵ While the requirement of positivity is formally satisfied, the remaining elements, such as clarity, precision, and non-ambiguity, are insufficiently realized due to fragmented and overlapping aligned norms.⁸⁶

⁸³ Mutiaratu Astari Rafli, *Legality Of Authentic Deed With Cyber Notary Basis According To Legal Assurance Principles*, 6 (Cyber Notary Basis According To Legal Assurance Principles), (UNRAM Law Review, 2022) at 4-5.

⁸⁴ O Baranov, "Transformation Of Legal Systems As A Fundamental Condition For Sustainable Development" (2023) 2(45) Information and Law at 15-16.

⁸⁵ Zaka Firma Aditya, "Does The Judiciary Support Legal Certainty? An Indonesian Perspective" (2023) 2 Frontiers In Law at 18-19.

⁸⁶ Karimova, *supra* note 49.

Particularly, the ambiguous role of notaries in authenticating virtual RUPS and the multifaceted interpretations of cyber notary authority reflect a systemic deficiency in legal certainty.⁸⁷

Unlike earlier studies that approach digital transformation from a technological perspective, this research contributes a distinct normative insight by underscoring the urgency of legal-system synchronization.⁸⁸ Legal certainty cannot be grounded merely in the existence of legislation; it also requires that legal norms be coherent, interpretable, and stable, where documents with strong evidentiary value, such as notarial deeds, are concerned.⁸⁹ The lack of regulatory coherence consequently weakens the role of notaries as guarantors of legal certainty. Legislative reform must therefore bridge these normative gaps to enable notaries to transition confidently toward digital practice while preserving the authenticity, enforceability, and public trust attached to their acts.⁹⁰ Without such harmonization, the transformative potential of ICT will remain underutilized, and the legal validity of digital notarial acts will continue to be subject to doubt.

VIII. RETHINKING DIGITAL AUTHENTICATION MODELS IN THE CONTEXT OF NOTARIAL DISRUPTION

The digitalization of document authentication represents a paradigm shift in notarial practice.⁹¹ Whereas traditional wet signatures have long functioned as the primary mechanism of legal validation, emerging models of digital authentication, particularly those based on Public Key Infrastructure (PKI) and electronic signatures, offer notable gains in both security and efficiency. This study advances a dual-framework model of authentication: first, digital authentication

⁸⁷ Noval Dwi Kurnia, Muhammad Sood & Hirsanuddin Hirsanuddin, *Juridical Study Of Arrangements For Authentic Deeds Through Cyber Notary: Comparative Study With Japan Path Of Science* (2023) at 89-90.

⁸⁸ Roman R Gabrilyan, Aminat K Kardanova & Artem A Serdyukov, “Renewal Of Legal Systems In The Member States Of The European Union Amidst Digital Transformation” In *Business 40 As A Subject Of The Digital Economy* (Cham: Springer International Publishing, 2022) at 1059.

⁸⁹ Jana Janderová & Petra Hubáľková, *Legal Certainty – Protected Values And Partial Objectives: The Case Of The Czech Republic Central European Public Administration Review* (2021) at 23-24.

⁹⁰ Bong Geun Shin, “Civil Liability Of Artificial Intelligence (AI) - Focusing On EU Legislation” (2023) 105 *The Korean Association Of Civil Law* at 228-229.

⁹¹ Budya Prabujangga & Hari Purwadi, “Application Of Notarial Deed In E-Commerce Transaction” (2023) 02:09 *International Journal Of Innovative Research In Multidisciplinary Education* at 4-5.

grounded in cryptographic encryption and certified digital certificates, and second, electronic authentication employing multifactor mechanisms such as biometrics and personal identification numbers (PINs).⁹² By distinguishing these two modalities, the model introduces adaptive flexibility into legal validation systems, especially under the constraints of remote legal services.

The rapid disruption brought about by ICT has intensified the need for legal modernization within notarial practice. Nevertheless, key regulatory instruments, most notably Law No. 30 of 2004 on Notary Office (UUJN-P), remain rigid, having been formulated before the emergence of digital legal ecosystems. While earlier studies have largely emphasized the transformative potential of digital notarial technologies, the findings of this study demonstrate that regulatory inflexibility, rather than technological incapacity, constitutes the primary obstacle to effective implementation.⁹³

Although in Indonesia Law No. 11 of 2008 on Electronic Information and Transactions (UU ITE) formally recognizes the legal validity of electronic signatures,⁹⁴ their practical application within notarial practice remains uneven due to the absence of procedural integration and technical differentiation. The ITE Law provides only an abstract acknowledgement of electronic signatures without establishing gradations of reliability or identifying qualified trust service providers specifically authorized to support notarial acts. By contrast, the European Union's eIDAS Regulation establishes a structured hierarchy of electronic signatures, culminating in the qualified electronic signature, which is legally equivalent to a handwritten signature and issued by accredited providers. Estonia further strengthens this framework through a mandatory national digital identity system that enables consistent notarial authentication. This comparative perspective underscores that the lack of institutional infrastructure and technical standardization under the ITE Law creates a structural gap, thereby constraining the effective integration of electronic signatures into Indonesian notarial

⁹² Dwi Tubagus, Raffles Raffles & Syamsir Syamsir, *Kekuatan Hukum Terhadap Akta Yang Dibuat Secara Elektronik (Cyber Notary) Dalam Prespektif Peraturan Perundang-Undangan*, 5 (Dalam Prespektif Peraturan Perundang-Undangan. Recital Review, 2023) at 6-7.

⁹³ Rehan Syed, Wasana Bandara & Rebekah Eden, *Public Sector Digital Transformation Barriers: A Developing Country Experience Information Polity* (2023) at 312-313.

⁹⁴ Fadhlur Rahman Al-Kausar, "Pendaftaran Tanah Secara Elektronik Untuk Pertama Kalinya Dalam Konteks Hukum Pertanahan Nasional" (2024) 1:1 SAMLON: Samudra Law Journal at 66-67.

workflows when measured against more comprehensive foreign regulatory models.

Public Key Infrastructure (PKI), based on digital signatures play a critical role in ensuring the authenticity and the integrity of documents within digital legal systems. However, the coexistence of digital and electronic authentication methods, each carrying distinct risk profiles, necessitates nuanced and carefully calibrated regulatory standards.⁹⁵ While hybrid authentication systems can enhance security, they also introduce operational complexity and require a higher level of technical expertise from notaries and supporting institutions.⁹⁶ A key contribution of this study lies in highlighting the socio-regional inequalities in the adoption of digital notarial practices. Unlike prior research that predominantly approaches legal reform from a national or urban-centered perspective, this study incorporates empirical observations of rural infrastructure gaps, which continue to restrict notarial access to secure ICT platforms.⁹⁷ The lack of technical capacity and digital readiness among notaries in these regions further delays the implementation of remote RUPS procedures and authenticating digital deeds.

Despite the formal recognition of electronic signatures under Law No. 11 of 2008 on Electronic Information and Transactions (UU ITE), the practical implementation of the cyber notary in Indonesia remains structurally fragmented. National data from Statistics Indonesia (BPS) indicate that, as of 2023, internet penetration in rural areas stands at approximately 62–65%, markedly lower than urban coverage, which exceeds 85%, with persistent disparities in broadband stability and access to secure networks.⁹⁸ This infrastructural gap has direct implications for notarial practices, a concern acknowledged by the Ministry of Communication and Informatics and reinforced by public statements from national authorities. For instance, reporting by *ANTARA News* notes that the

⁹⁵ Aushof Albaaits & Bambang Eko Turisno, “Efektivitas Tanda Tangan Elektronik Pada Akta Yang Dibuat Oleh Notaris” (2023) 16:3 Notarius at 1748-1749.

⁹⁶ Jian Chen et al., “Cross Trust: A Decentralized MA-ABE Mechanism For Cross-Border Identity Authentication” (2024) 44 International Journal Of Critical Infrastructure Protection at 6-7.

⁹⁷ Retno Catur, “Comparison Of Legal System Related To Implementation Of Cyber Notary In Indonesia With Common Law And Civil Law System” (2023) Jurnal Hukum Bisnis Bonum Commune at 47-48.

⁹⁸ Badan Pusat Statistik Indonesia, “Statistik Telekomunikasi Indonesia 2023”, Online: <<https://www.bps.go.id/id/publication/2024/08/30/f4b846f397ea452bdc2178b3/statistik-telekomunikasi-indonesia-2023.html>>.

Chairperson of the Indonesian People's Consultative Assembly (MPR RI) has publicly encouraged the adoption of cyber notary mechanisms, including electronic signatures, while simultaneously acknowledging that earlier stagnation resulted from the absence of a clear and comprehensive legal foundation.⁹⁹ Other studies similarly confirm that the development of cyber notary in Indonesia is constrained by regulatory ambiguity and legal uncertainty, notwithstanding Article 15(3) of the Notary Act (UUJN-P), which implicitly recognizes notarial authority in certifying electronic transactions.¹⁰⁰ These concerns are echoed in doctrinal analyses of digital signatures, which observe that Indonesian positive law still prioritizes handwritten signatures as a core element of legal certainty, thereby diminishing the evidentiary strength of electronically executed notarial deeds.¹⁰¹

From an institutional perspective, the Directorate General of General Legal Administration (AHU) has emphasized that the effective implementation of cyber notary requires more than formal legal recognition. It also depends on the availability of reliable technological infrastructure and sufficient human resource capacity, including the use of certified digital signatures and secure, encrypted document storage systems.¹⁰² This situation contrasts sharply with jurisdictions such as Estonia and France, where state-managed digital identity frameworks and centralized electronic archives enable the full operationalization of remote notarization. Consequently, Indonesia's cyber notary framework represents a form of *asymmetric digital legalization*, in which normative acknowledgment has

⁹⁹ "Ketua MPR RI Ajak Notaris Terapkan "Cyber Notary" Pada Era Digital - ANTARA News", Online: <<https://www.antaraneews.com/berita/3761025/Ketua-Mpr-Ri-Ajak-Notaris-Terapkan-Cyber-Notary-Pada-Era-Digital>>.

¹⁰⁰ Shinta Pangesti, Grace I Darmawan & Cynthia P Limantara, "The Regulatory Concept Of Cyber Notary In Indonesia" (2021) 7 Rechtsidee, Online: <<https://rechtsidee.umsida.ac.id/index.php/rechtsidee/article/view/701>>.

¹⁰¹ Wanda Tri Astuti & Mohamad Fajri Mekka Putra, "Efektivitas Peran Notaris Dalam Dipalsukannya Tanda Tangan Oleh Notaris Dalam Pembentukan Akta" (2023) 7:2 JISIP (Jurnal Ilmu Sosial Dan Pendidikan) at 1341-1342.

¹⁰² "Transformasi Hukum Dimulai Dirjen Ahu Tegaskan Pentingnya Cyber Notary Di Era Digital - Direktorat Jenderal Administrasi Hukum Umum - Kementerian Hukum Dan HAM RI", Online: <<https://portal.ahu.go.id/id/detail/75-Berita-Lainnya/5630-Transformasi-Hukum-Dimulai-Dirjen-Ahu-Tegaskan-Pentingnya-Cyber-Notary-Di-Era-Digital>>.

advanced more rapidly than supporting infrastructural and institutional readiness.¹⁰³

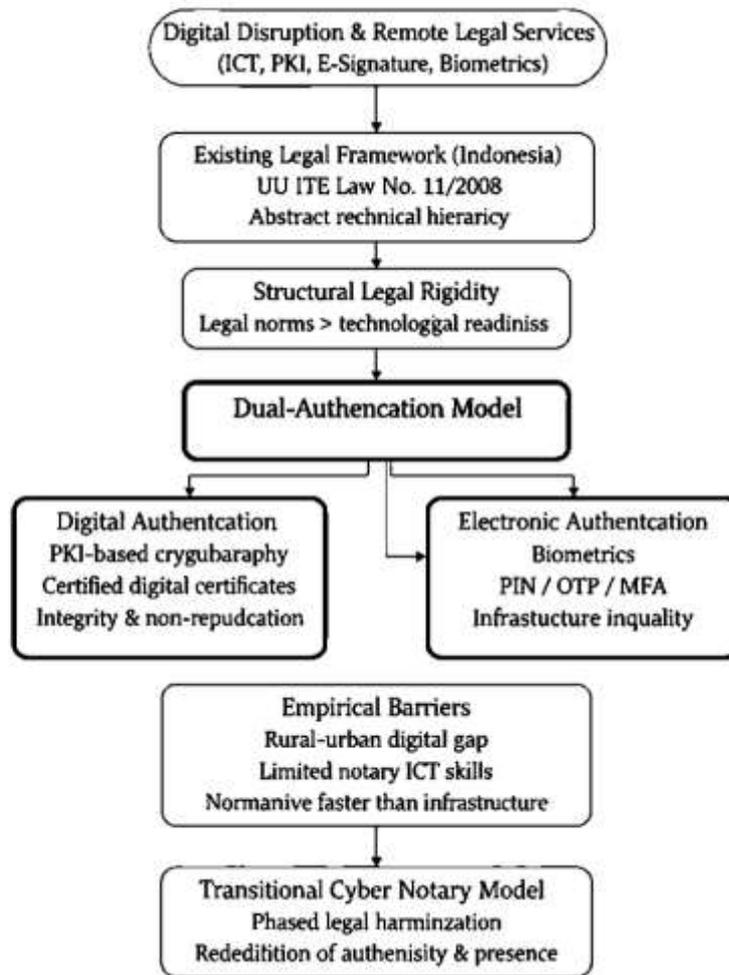


Figure 2 Framework Reframing Cyber Notary in Indonesia: Dual Authentication and Asymmetric Digital Legalization

This framework illustrates how digital disruption has expanded the scope of remote legal services, while Indonesia's legal framework, still characterized by abstract norms and structural rigidity, has struggled to keep pace with technological developments. The principal contribution of this study lies in its articulation of a dual-authentication model that combines PKI-based digital authentication with electronic authentication mechanisms, such as biometrics and multifactor verification, thereby allowing security standards to adapt to

¹⁰³ Gustianus Fernando & Gunawan Djajaputra, "Cyber Notary In The Indonesian Legal System: Its Urgency And Implementation" (2025) 4:6 JOSR at 1036-1037.

diverse practical conditions.¹⁰⁴ Nonetheless, empirical constraints, including persistent digital divides and uneven notarial capacity, underscore the need for a transitional cyber notary model. Such a model should prioritize phased legal harmonization and a doctrinal reconceptualization of “presence” and “authenticity” in notarial practice.

This study advances a novel conceptual contribution by framing the Indonesian cyber notary not as a mere technological deficiency, but as a transitional legal model that requires phased regulatory harmonization, regionally differentiated implementation, and an infrastructurally grounded redefinition of authenticity and presence in notarial law.¹⁰⁵ In addition, the findings identify cybersecurity vulnerabilities as an emerging threat to the reliability of electronic authentication, alongside regulatory gaps and the risk of forgery as serious and interrelated concerns.¹⁰⁶ These challenges are further compounded by limited professional training and ambiguous cross-jurisdictional recognition of digital signatures, resulting in persistent legal uncertainty for electronically signed documents.¹⁰⁷ In contrast to much of the existing literature focusing on the theoretical benefits of legal technology, this study adopts a practice-oriented perspective and proposes a concrete roadmap to reform.¹⁰⁸ It argues that secure digital notarization depends not only on regulatory clarity, but also on coordinated innovation involving state policy, technical support, and sustained professional capacity-building to enable widespread and legally valid adoption.

¹⁰⁴ Phat T Tran-Truong et al., “A Systematic Review Of Multi-Factor Authentication In Digital Payment Systems: NIST Standards Alignment And Industry Implementation Analysis” (2025) 162 *Journal Of Systems Architecture* at 24-26.

¹⁰⁵ Muh Akbar Fhad Syahril & Nurhaedah Hasan, “Legal Analysis Of The Application Of Cyber Notary In The Notary Profession In Indonesia” (2024) 11:3 at 355-356.

¹⁰⁶ Suci Amalia, H Djumardin & Aris Munandar, “Juridical Analysis Of Rejection Of Cancellation Of The Deed Of Sharing Collective Rights Based On Ruling Number:803K/AG/2017” (2024) 9:1 *RESEARCH REVIEW International Journal Of Multidisciplinary* at 92-93.

¹⁰⁷ Sergey S Shestopal, Dmitriy V Lobach & Evgeniia A Smirnova, *The International Legal Regulation Of A Digital Signature: Asia-Pacific Region Experience* (2022) at 849-850.

¹⁰⁸ Ade Irawan, M Ryan Bakry & Frengki Hardian, “Eksistensi Aspek Teknologi Dalam Pembuatan Akta Autentik Secara Elektronik Pada Pengaturan Jabatan Notaris Di Era Industri 5.0” In *COMSERVA Indonesian Jurnal Of Community Services And Development* 08 (2022) at 1517-1518.

IX. CONCLUSION

This study concludes that although notarial practices in Indonesia remain firmly grounded in the formal requirements of the UUJN-P, the existing legal frameworks have not kept pace with the transformations brought about by information and communication technology. The absence of an explicit legal foundation for cyber notary practices, combined with normative inconsistencies among the UUJN-P, UUPT, ITE Law, and OJK regulations, has generated persistent legal uncertainty regarding the duties and authority of notaries. Addressing this condition requires comprehensive regulatory reform, that including the codification of electronic notarization and a principled reinterpretation of “physical presence” to encompass verifiable forms of virtual interactions.

The findings underscore the urgency of aligning Indonesia’s notarial regulatory framework with contemporary digital practices to ensure legal certainty and maintain institutional relevance. Through targeted legal amendments supported by clear implementing regulations, notarial functions can evolve alongside technological developments without undermining the authenticity or evidentiary value of notarial acts. Collectively, these recommendations offer a forward-looking framework to assist policymakers and legal practitioners in systematically modernizing notarial law for the digital era.

ACKNOWLEDGMENTS

None.

COMPETING INTEREST

The authors confirm that there are no conflicts of interest associated with this publication.

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