

Regulating Digital Notaries in Indonesia: A Normative Analysis of the Notary Office Act in the Startup Era

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Abstract

The rapid expansion of Indonesia's digital economy, driven by the increasing role of startup companies, demands a legal system that is adaptive, efficient, and technology-oriented. However, notarial practices regulated under the Notary Office Act (UUJN) remain grounded in physical presence and conventional procedures. This condition reveals a significant regulatory gap between the need for digital legal services and the existing legal framework. This study aims to analyze the urgency of regulating digital notaries within the framework of the UUJN and to formulate appropriate directions for legal reform. The research employs a normative juridical method using statutory and conceptual approaches, supported by comparative analysis of jurisdictions that have implemented digital notary systems. The findings indicate that the UUJN does not yet accommodate key technological mechanisms such as electronic signatures, digital identity verification, and remote authentication, resulting in inefficiencies, administrative barriers, and legal uncertainty for startup companies. As a main contribution, this study proposes a reform model that includes the explicit recognition of electronic signatures in notarial deeds, the legalization of remote authentication through secure video conferencing, and the establishment of cybersecurity and digital archiving standards. The novelty of this research lies in the conceptualization of regulatory lag within the notarial domain and its integration with the needs of the digital startup ecosystem. The implications of this study are both practical and theoretical, providing a foundation for reforming the UUJN to become more adaptive to technological developments while also contributing to the discourse on legal modernization in the digital era.

INTRODUCTION

The rapid evolution of digital technology has significantly transformed the global business landscape, particularly with the rise of startup companies that rely heavily on speed, efficiency, and innovation.¹ Startups operate in a highly competitive environment characterized by fast time-to-market, lean operational structures, and the need to adapt quickly to technological advancements. In Indonesia, this phenomenon is reflected in the continuous growth of the digital economy, where startups across various sectors such as financial technology, e-commerce, education, and health play an increasingly important role in driving economic expansion.² As these companies scale and formalize their business processes, the need for timely and efficient legal services, including the preparation and authentication of notarial deeds, becomes crucial. However, the traditional framework governing notarial practice in Indonesia remains rooted in physical, manual, and conventional procedures, resulting in a significant mismatch between the legal framework and the operational needs of modern digital enterprises.

The Notary Office Act (Undang-Undang Jabatan Notaris or UUJN), which regulates the profession and responsibilities of notaries in Indonesia, was designed in an era when digital transformation had not yet become a dominant force.³ Its provisions emphasize physical presence, face-to-face verification, and the manual execution of deeds. Key processes such as the identification of parties, the signing of documents, and the reading of deeds must be conducted in person before a notary. Although these requirements aim to ensure the authenticity and legal certainty of notarial deeds, their rigidity poses substantial challenges for startups requiring swift legal compliance. For instance, corporate actions such as establishing a company, amending articles of association, securing investment, issuing shares, or conducting mergers and acquisitions often require notarial services.⁴ When the legal framework mandates physical presence and traditional procedures, these processes can become time-consuming and inefficient, potentially hindering the agility that is central to startup success.

¹ Oyeyemi, Oluwaseun Peter, et al. "Entrepreneurship in the digital age: A comprehensive review of start-up success factors and technological impact." *International Journal of Science and Research Archive* 11.1 (2024): 182-191.

² Moroni, Isabela, Amilton Arruda, and Kátia Araujo. "The design and technological innovation: how to understand the growth of startups companies in competitive business environment." *Procedia Manufacturing* 3 (2015): 2199-2204.

³ Rina et al. "Globalization and Notary Authority In Making Agreements in The Era Industrial Revolution 4.0." *Ultimate Journal of Legal Studies* 1.1 (2023): 27-39.

⁴ Chaerunnisa, Julianne, and Mella Ismelina Farma Rahayu. "The Role of a Notary in the Procedure for Implementing a Share Acquisition of a Limited Liability Company." *INTERNATIONAL JOURNAL OF SOCIAL, POLICY AND LAW* 4.3 (2023): 82-90.

In contrast to regulatory stagnation, the digitalization of legal services has rapidly advanced in various jurisdictions. Many countries already recognize digital or remote notaries, supported by electronic authentication technologies, video conferencing, and blockchain-based verification.⁵ These mechanisms enable legal documents to be executed efficiently while retaining high standards of authenticity and evidentiary validity. Indonesia has taken steps toward digital transformation through the enactment of the Electronic Information and Transactions Act (UU ITE) and the development of regulations on electronic signatures, digital certificates, and cyber infrastructure.⁶ However, these advancements have not been fully incorporated into the notarial sector. As a result, a legal vacuum persists, wherein technological solutions exist but are not permitted or are insufficiently regulated within the formal practice of notaries governed by UUJN.

This regulatory gap is particularly problematic for the startup ecosystem, which depends on the ability to conduct legal processes remotely, flexibly, and without unnecessary delays. Startups often involve founders, investors, or stakeholders located in different cities or countries.⁷ The requirement for physical attendance before a notary creates logistical barriers that can delay corporate transactions. For instance, a fundraising round may involve multiple signatories across different jurisdictions, and the inability to execute documents electronically through a notary could slow down investment flows. Furthermore, the COVID-19 pandemic demonstrated the necessity of remote legal services. Despite the temporary shift toward online processes, the absence of a clear and permanent legal basis for digital notaries has led to inconsistencies, uncertainties, and varied interpretations among practitioners.⁸ This situation underscores the urgent need for a comprehensive regulatory framework that harmonizes technological advancements with the formal requirements of notarial practice.

The concept of a "digital notary" encompasses more than merely replacing physical procedures with virtual ones. It involves a broader transformation of the legal service delivery system, incorporating secure electronic signatures, digital identity verification,

⁵ Koos, Stefan. "The Digitization of Notarial Tasks-A Comparative Overview and Outlook of 'Cyber Notary' In Indonesia and Germany." *The Indonesian Journal of Socio-Legal Studies* 2.2 (2023): 1.

⁶ Dahlan, Dahlan, Anza Ronaza Bangun, and Taruna Prakarsa. "The Binding Power Of Electronic Signatures In Civil Agreements: A Comparative Study Of The Civil Code And Electronic Information And Transactions Law." *Pranata Hukum* 20.2 (2025): 131-140.

⁷ Prashantham, Shameen. "Partnering with startups globally: Distinct strategies for different locations." *California Management Review* 63.4 (2021): 123-145.

⁸ Dutton, Christina. "The Judicial Responses to COVID-19 in Africa: Mapping & analysing the accessibility of justice and the use of technology in court systems during the 2020 global pandemic." *British Journal of Criminology* 63.3 (2021): 588-607.

remote authentication, encrypted communication, and real-time recording of notarial acts.⁹ In an era where digital platforms facilitate business operations, legal services must also evolve to maintain efficiency and relevance. Without regulatory reform, Indonesia risks lagging behind other countries that have successfully integrated digital notary systems, creating barriers for both local and international investors seeking certainty and ease of doing business. A modern legal system should not only uphold legal certainty and authenticity but also embrace technological developments to support economic growth.

From a legal perspective, the urgency of regulating digital notaries is grounded in the principles of legal certainty, efficiency, accessibility, and fairness. Legal certainty requires that regulations keep pace with technological and economic developments, ensuring that citizens and businesses understand their rights and obligations. Efficiency emphasizes the need for streamlined procedures that reduce unnecessary bureaucratic burdens without compromising legal integrity. Accessibility ensures that legal services are available to all citizens including those in remote areas through digital platforms. Fairness demands that all stakeholders, including startups, investors, and notaries, operate within a clear and consistent regulatory environment. The absence of regulations governing digital notaries threatens these principles by creating ambiguity, limiting innovation, and disadvantaging industries that depend on fast-paced legal processes.

In the context of the Indonesian startup ecosystem, regulatory reform is not merely a matter of convenience but a necessity for national economic development. Indonesia aspires to become a major digital economy in Southeast Asia, supported by government programs such as Making Indonesia 4.0, digitalization initiatives, and investment incentives. However, this aspiration must be matched with a modern legal infrastructure.¹⁰ Without updated regulations, procedural inefficiencies in notarial services could impede the formation of new companies, delay investment cycles, and reduce Indonesia's competitiveness compared to countries with more advanced digital legal frameworks. Additionally, legal modernization aligns with global trends toward digital governance, where governments adopt technological innovations to improve public services, reduce costs, and promote transparency.

Despite the clear need for change, the transition toward digital notaries must be approached cautiously to ensure the protection of legal values central to notarial practice,

⁹ Koos, Stefan. "The Digitization of Notarial Tasks-A Comparative Overview and Outlook of 'Cyber Notary' In Indonesia and Germany." *The Indonesian Journal of Socio-Legal Studies* 2.2 (2023): 1.

¹⁰ Beschorner, Natasha. "The digital economy in Southeast Asia: Emerging policy priorities and opportunities for regional collaboration." *New dimensions of connectivity in the Asia-Pacific* (2021): 121-156.

such as authenticity, impartiality, confidentiality, and evidentiary strength. Digital mechanisms must be secure, verifiable, and tamper-proof to prevent fraud, identity theft, or manipulation of documents. Therefore, regulatory reform should include detailed provisions on technical standards, cybersecurity requirements, procedural guidelines, and the responsibilities of notaries in a digital environment.¹¹ A balanced approach is essential one that embraces innovation while safeguarding the core functions of notarial institutions.

Given this complex interplay between technological advancements, the needs of startup companies, and the limitations of the current legal framework, this study seeks to analyze the urgency of regulating digital notaries within the framework of the Notary Office Act. By examining the gaps in existing regulations, evaluating the requirements of the startup ecosystem, and comparing international best practices, the research aims to provide a comprehensive understanding of why legal reform is essential and how it can be effectively implemented. Ultimately, the goal is to contribute to the development of a more adaptive, efficient, and future-oriented notarial system that supports Indonesia's digital economic transformation while preserving legal certainty and integrity.

METHODS

This study employs a normative juridical research method, focusing on the examination and interpretation of legal norms related to notarial practice in Indonesia, particularly the provisions of the Notary Office Act (UU Jabatan Notaris) and their interaction with technological developments in digital legal services. The research utilizes a statutory approach to analyze primary legal materials, including legislation, government regulations, and related authoritative documents, alongside a conceptual approach to explore theoretical perspectives on digitalization, legal modernization, and the role of notaries in contemporary business ecosystems.

Secondary sources such as scholarly articles, legal commentaries, and comparative studies from jurisdictions that have adopted digital or remote notary systems are also examined to provide a broader analytical framework. Through qualitative analysis, this study aims to identify regulatory gaps, assess the legal implications of digital notary practices, and formulate recommendations for developing an adaptive and coherent regulatory framework that aligns with the needs of startup companies in the digital era.

¹¹ GULYAMOV, Said, and Ilyosbek ODILKHUJAEV. "Legal Basis for Information Security Risk Management in the Notarial Sector." *Young Scholar's Academic Journal* 3.1 (2024): 6-11.

RISULT AND DISUSSION

1. Alignment Between the Need for Digital Notary Services by Startup Companies and the Notary Office Act's Emphasis on Physical Presence and Conventional Formalities.

The emergence of startup companies as major actors in the modern digital economy has significantly influenced the structure, expectations, and operational methods within Indonesia's business ecosystem. Unlike traditional enterprises that often operate within predictable and bureaucratic frameworks, startups require a high degree of speed, flexibility, and efficiency. These characteristics shape their approach to governance, financing, decision-making, and compliance, including their interaction with legal services such as notarial functions. As rapid scaling, remote collaboration, and digital transactions have become the norm within startup culture, the demand for digitalized legal processes including digital notary services has become increasingly urgent. However, the current legal framework governing notarial practices in Indonesia, particularly the Notary Office Act (Undang-Undang Jabatan Notaris or UUJN), remains rooted in traditional requirements of physical presence, in-person verification, and strictly formalized procedures.¹² This section discusses the alignment or more precisely, the misalignment between the needs of startup companies and the limitations imposed by the existing notarial legal framework in Indonesia.

At the core of Indonesian notarial law lies the principle of *verba volant, scripta manent* words may fly, but written documents remain. Because notarial deeds serve as authentic instruments with the highest evidentiary value, the UUJN requires stringent procedures to ensure the integrity, identity verification, voluntariness, and legal certainty of the parties involved.¹³ Central to these procedures are the obligations of physical appearance before the notary, manual or physical witnessing, and the traditional reading of the deed. These requirements, codified in articles such as Article 16 paragraph (1), emphasize direct face-to-face interaction. They were designed to ensure accuracy, eliminate fraud, and maintain the solemnity of the process.¹⁴ While these aims remain relevant today, the rigid

¹² Basoeky, Unggul. "Juridical Analysis of the Authenticity of Notary Deed after Apostille is Implemented in Indonesia." *Budapest International Research and Critics Institute (BIRCI-Journal): Humanities and Social Sciences* 4 (2021).

¹³ Tanuwidjaja, Adella, and Siti Hajati Hoesin. "Responsibility of Notaries in The Inclusion of The Names of Instrumentary Witnesses Who Were Not Present at The Signing of Authentic Deeds (Study of The Decision of The Rantau Prapat District Court Number 26/Pdt. G/2020/PN RAP)." *Legal Brief* 11.4 (2022): 2304-2314.

¹⁴ Raditya, Ami, Regina Resentia, and Alicia Shafa Azzahra. "Ius Constituendum Principle of Facing Notary in Making Authentic Deed In the Perspective of Virtual Electronics (Cyber Notary)." *Journal of Law, Politic and Humanities* 4.5 (2024): 1706-1714.

mechanisms by which they are operationalized present challenges in an era where digital alternatives such as electronic signatures, remote identification technologies, and virtual meeting platforms have proven capable of providing comparable, if not superior, security and verification capabilities.

Startup companies, by contrast, thrive in environments where remote collaboration is essential. Many startups operate with founders, investors, or employees located in multiple cities or even countries.¹⁵ Venture capital processes, for instance, frequently involve foreign entities that expect legal procedures to be conducted swiftly and without unnecessary logistical barriers. For startups seeking investment, delaying a corporate action because parties must travel to meet a notary is not only inefficient but can also jeopardize funding opportunities. In industries such as fintech or e-commerce, where time-to-market determines competitiveness, procedural delays even those caused by outdated legal requirements may translate into lost market advantages. Hence, the dependency on physical presence as mandated by UUJN is inconsistent with the operational realities and expectations of startups.

Moreover, the technology ecosystem that underpins startup operations already utilizes advanced digital verification tools. Electronic Know-Your-Customer (e-KYC), biometric authentication, secure digital signatures, and encrypted documentation are commonplace.¹⁶ These tools are not only fast but also secure, traceable, and capable of generating digital audit trails that, in many respects, surpass the evidentiary reliability of handwritten signatures or manual verification. The Indonesian government has formalized some of these mechanisms through regulations under the Electronic Information and Transaction Law (UU ITE), including the legal recognition of certified electronic signatures. Yet, despite the availability of such technologies, the UUJN does not explicitly permit their use as substitutes for physical presence, thereby restricting notaries from modernizing their practices in accordance with technological advancements.

This disjunction between legal capability and operational necessity creates what legal scholars often describe as a *regulatory lag* a situation where law fails to keep pace with innovation. In Indonesia's case, while the legal system has embraced certain aspects of digitalization, the notarial sector remains largely insulated from reform.¹⁷ This not only

¹⁵ Del Bosco, Barbara, et al. "Innovative startup creation: The effect of local factors and demographic characteristics of entrepreneurs." *International Entrepreneurship and Management Journal* 17.1 (2021): 145-164.

¹⁶ Fitriyanti, Fadia, et al. "SECURING PERSONAL DATA IN E-KYC: VITAL FOR DIGITAL ECONOMY GROWTH." *Diponegoro Law Review* 9.1 (2024): 104-120.

¹⁷ Basoeky, Unggul, et al. "Law and Technology: Legal Technology Model under the Authority of the Indonesian Notary Position in the Industrial Revolution Era 4.0." *Legal Brief* 11.1 (2021): 353-365.

results in inefficiencies but also generates inconsistencies. For example, digital signatures are legally valid in commercial transactions, yet they cannot be fully used within notarial procedures. Similarly, remote meetings are recognized for corporate governance purposes, but remote authentication before a notary is not. Such inconsistencies undermine legal certainty, creating ambiguity for practitioners and businesses alike.

The consequences of this regulatory lag are particularly significant for startups, whose business models require agility and seamless operational flows. The inability to utilize digital notary services can hinder essential activities such as incorporation, share issuance, capital injection, and restructuring. Consider a scenario in which a startup seeks to close a funding round with investors located in different jurisdictions. Under the current UUJN regime, all relevant parties must appear physically before a notary in Indonesia.¹⁸ If one investor is overseas, the process becomes delayed, costly, and procedurally complex. In many cases, startups resort to temporary workarounds such as granting powers of attorney or using offshore structures yet these solutions introduce legal risks, inconsistencies, or potential non-compliance issues. Thus, the inability of the UUJN to accommodate digital processes generates both operational and legal inefficiencies.

The COVID-19 pandemic further exposed the limitations of conventional notarial procedures.¹⁹ During the pandemic, physical mobility was restricted, and in-person interactions were discouraged or prohibited. This forced many sectors to adopt remote technologies, accelerating digital transformation across industries. Yet, notarial services faced significant barriers because the legal basis for remote authentication was unclear or nonexistent. Some temporary relaxations were introduced in practice, yet they lacked formal legal grounding and were subject to different interpretations by practitioners and regulators. The pandemic therefore illustrated the critical importance of digitalizing notarial services while simultaneously revealing the absence of an adequate regulatory framework. For startups, which continued to operate and transact digitally throughout the crisis, the inability to access digital notary services became a glaring obstacle, demonstrating the urgency of reform.

From an economic perspective, digital notary services could significantly enhance Indonesia's competitiveness as a digital hub. Ease of doing business is a major factor

¹⁸Hussy, Maharani Millenia, and Benny Djaja. "Comparison of Notary Law in Indonesia and Singapore." *Interdisciplinary Social Studies* 2.7 (2023): 2157-2163.

¹⁹ Alkatiri, Naurah Humam, Mohamad Fajri Mekka Putra, and Kyle Ongko. "A Legal Perspective: Implementing an Electronic Notarization System in Indonesia in the Post-Pandemic Era." *Jambura Law Review* 5.2 (2023): 332-355.

influencing foreign investment and entrepreneurial activity. Countries such as Singapore, the United States, and several European jurisdictions have already implemented remote or electronic notary systems that support cross-border transactions and digital entrepreneurship.²⁰ By contrast, Indonesia's adherence to manual procedures creates friction in the investment process, potentially discouraging investors accustomed to modern digital legal environments. In a globalized digital economy, maintaining outdated procedures can push startups to incorporate companies in jurisdictions with more flexible legal frameworks, thereby limiting domestic legal activity and reducing Indonesia's attractiveness as a startup destination.

Nevertheless, it is important to acknowledge that the UUJN's emphasis on physical presence and conventional procedures stems from legitimate concerns related to authenticity, identity verification, fraud prevention, and the protection of legal integrity. Notarial deeds hold strong evidentiary weight, and any form of digitalization must ensure that this integrity is preserved. However, modern technology offers tools capable of satisfying or even enhancing these protections. For instance, biometric verification can reduce the risk of impersonation; blockchain technology can secure document integrity; digital certificates can ensure authentication; and encrypted platforms can provide confidentiality. These advancements challenge the assumption that physical presence is inherently superior to digital presence.

To achieve alignment between startup needs and notarial regulation, a comprehensive reform is necessary one that modernizes the UUJN to incorporate digital procedures while safeguarding fundamental legal values. This reform could take several forms: explicit recognition of electronic signatures for notarial deeds; authorization for remote authentication through secure video platforms; standards for digital identity verification; integration of digital certificates; and guidelines for maintaining digital archives. Such reforms would not only accommodate the needs of startups but also enhance the efficiency of legal services across all sectors, reduce administrative burdens, and promote inclusivity for individuals in remote regions.

In summary, the alignment between the needs of startup companies for digital notary services and the requirements imposed by the UUJN is currently weak, characterized by a structural mismatch that creates legal, operational, and economic barriers. Startups require speed, flexibility, and remote accessibility, while the UUJN mandates physical presence and conventional procedures rooted in a pre-digital era. This mismatch creates

²⁰ Lubis, Ikhsan, et al. "Exploring the Potential of the Cyber Notary Concept in the Framework of International Transaction Settlement." *Acta Law Journal* 3.1 (2024): 1-13.

a regulatory lag that hinders innovation, reduces efficiency, and weakens Indonesia's competitiveness in the global digital economy. Modern technological tools offer robust mechanisms for ensuring authenticity and legality, demonstrating that digital notary systems are not only feasible but also necessary. To promote legal certainty, support economic growth, and align with global trends, Indonesia must update its notarial legal framework, integrating technology into its core processes while preserving the essential values that underpin the credibility of notarial deeds.

2. The Need for Regulatory Reform to Enable Digital Notaries for Efficiency, Speed, and Legal Accessibility for Startup Companies in Indonesia.

The rapid growth of Indonesia's digital economy has positioned startup companies as key drivers of innovation, employment, and technological advancement.²¹ As these companies expand, their operations increasingly rely on fast-paced decision-making, remote collaboration, and seamless digital workflows. However, legal and regulatory infrastructures including notarial services, which play a critical role in validating corporate actions have not kept pace with this transformation. The existing Notary Office Act (UU Jabatan Notaris or UUJN) emphasizes traditional procedures rooted in physical presence, manual verification, and on-site execution of deeds.²² This structural rigidity limits the ability of startups to complete essential legal processes efficiently. Therefore, regulatory reform aimed at enabling digital notarial practices has become an urgent necessity to support Indonesia's evolving business landscape.

The primary rationale for reform lies in addressing the inefficiencies inherent in conventional notarial procedures. Corporate activities common to startups such as company incorporation, capital injections, shareholder resolutions, intellectual property arrangements, and investment agreements often require speedy execution. Under the UUJN, all parties must appear in person before a notary, even in cases where signatories reside abroad or operate remotely. This requirement leads to logistical delays, increased transaction costs, and procedural bottlenecks that can impede a startup's strategic momentum. Given the time-sensitive nature of venture capital funding, partnership deals, and mergers or acquisitions, such delays can affect a startup's competitive position. By reforming regulations to allow remote authentication, electronic signatures, and

²¹ Farliana, Nina, Indri Murniawaty, and Hanif Hardianto. "Sustainability of the Digital Economy in Indonesia: Opportunities, Challenges and Future Development." *Review of Business and Economics Studies* 11.4 (2023): 21-28.

²² Raditya, Ami, Regina Resentia, and Alicia Shafa Azzahra. "Ius Constituendum Principle of Facing Notary in Making Authentic Deed In the Perspective of Virtual Electronics (Cyber Notary)." *Journal of Law, Politic and Humanities* 4.5 (2024): 1706-1714.

virtual meetings before notaries, Indonesia could dramatically enhance the speed of legal processes without compromising their validity.

Efficiency is closely linked to accessibility. Many startups operate in geographically dispersed environments, with founders, investors, or employees located across Indonesia or even internationally. A regulatory framework that continues to require physical presence creates barriers not only for metropolitan startups but also for innovative enterprises emerging from smaller cities or rural areas. Digital notary services would democratize access to legal processes, allowing businesses across the country to benefit from equal treatment and faster bureaucratic interactions. At a national level, such accessibility aligns with Indonesia's initiatives to foster inclusive digital transformation, support small and medium enterprises, and strengthen regional economic development.

Technological readiness further supports the necessity of reform. Indonesia has already recognized electronic signatures, digital certificates, and electronic documentation through the Electronic Information and Transactions Act (UU ITE).²³ Certified electronic signatures (TTD elektronik tersertifikasi) provide strong authentication using cryptographic keys, ensuring document integrity and identity verification. Additionally, advancements in digital identity verification, such as biometric authentication, e-KYC (electronic Know-Your-Customer), and digital population databases, equip Indonesia with the technological infrastructure required to implement secure digital notarial practices. These tools offer levels of accuracy and security that are often superior to traditional face-to-face checks, challenging the assumption that physical presence is the only reliable method for establishing authenticity.

Furthermore, the COVID-19 pandemic highlighted the necessity of digital legal systems. When mobility restrictions limited physical interactions, many legal processes were temporarily adapted to remote formats, though without permanent or explicit legal recognition. This experience demonstrated that remote legal transactions are feasible, practical, and widely accepted by businesses. However, the absence of a clear regulatory basis created inconsistencies and uncertainties among notaries and their clients. By formalizing digital notary mechanisms, Indonesia would not only safeguard legal certainty but also ensure resilience in future crises that disrupt physical mobility.

International legal developments provide valuable models for reform. Jurisdictions such as the United States, Singapore, Estonia, and several European Union member states

²³ Lahangatubun, Nurjana, and Andi Mulyono. "Public Trust and the Legal Validity of Electronic Signatures in Indonesia." *Jurnal Ilmu Hukum Kyadiren* 7.1 (2025): 499-516.

have already implemented remote online notarization (RON).²⁴ These systems allow notaries to verify identities through video conferencing, authenticate documents electronically, and maintain secure digital records. The adoption of such systems has increased cross-border transaction efficiency and enhanced investor confidence. Indonesia risks falling behind in global competitiveness if it does not modernize its notarial laws to match international standards. Startups, particularly those engaging with foreign investors, often face misalignments between international expectations and domestic procedures. Updating Indonesia's regulatory framework would create a more attractive environment for global investment, strengthen legal interoperability, and support Indonesia's ambition to become a leading digital economy in the region.

Despite these compelling reasons for reform, concerns remain regarding the protection of legal integrity. Notarial deeds are considered authentic instruments with high evidentiary value, and any digital mechanism must preserve this integrity. Therefore, regulatory development should be approached with caution and precision. A comprehensive reform agenda should include detailed provisions addressing: (1) technical standards for digital identity verification; (2) cybersecurity protocols to prevent document tampering or unauthorized access; (3) procedural guidelines for remote authentication; (4) requirements regarding the storage and management of electronic notarial records; and (5) mechanisms for auditing digital notarial processes. These safeguards ensure that digital notaries maintain the same reliability and trustworthiness as conventional ones.

Additionally, reform must include capacity-building for notaries, many of whom may lack familiarity with digital tools and emerging technologies. The government, professional associations, and academic institutions should collaborate to provide technical training, certification programs, and standardized digital platforms. Without such initiatives, the transition to digital notary services may create disparities among practitioners and inhibit uniform implementation.²⁵ Moreover, clear regulatory guidance from the Ministry of Law and Human Rights is critical to prevent varied interpretations and ensure compliance across jurisdictions.

Reform should also consider the broader socio-economic benefits. Digital notary services would significantly reduce administrative burdens, lower transaction costs, and

²⁴ Alkatiri, Naurah Humam, Mohamad Fajri Mekka Putra, and Kyle Ongko. "A Legal Perspective: Implementing an Electronic Notarization System in Indonesia in the Post-Pandemic Era." *Jambura Law Review* 5.2 (2023): 332-355.

²⁵ Begichev, Alexander V. "The role of digitalization on the interaction of judicial and notarial authorities in conciliation procedures." *RUDN Journal of Law* 26.2 (2022): 485-500.

expedite corporate actions, ultimately contributing to economic growth. For the government, digitalization enhances transparency, minimizes opportunities for misconduct, and facilitates real-time oversight. For businesses, particularly startups, streamlined legal processes foster agility, enabling rapid innovation and responsiveness to market demands.

In conclusion, the development of regulatory frameworks for digital notaries is essential for Indonesia's legal modernization and economic competitiveness. Startups require efficient, fast, and accessible legal processes that align with the digital nature of their operations. The current notarial system, which relies heavily on physical presence and manual procedures, no longer meets these demands. By reforming regulations to incorporate remote authentication, electronic signatures, and secure digital documentation, Indonesia can create a notarial system that is not only technologically advanced but also aligned with global best practices. Such reform would enhance legal certainty, support startup growth, and strengthen Indonesia's position as a leading digital economy in Southeast Asia.

CONCLUSION

This study confirms that there is a fundamental misalignment between the operational needs of startup companies and the regulatory framework governing notarial practices in Indonesia. The Notary Office Act (UUJN), with its strong emphasis on physical presence, face-to-face verification, and conventional formalities, is no longer compatible with the realities of a rapidly evolving digital economy. As demonstrated in the discussion, startups require speed, flexibility, and remote accessibility in executing legal actions, while the current system imposes procedural rigidity. This gap not only creates inefficiencies and delays but also undermines legal certainty and hampers Indonesia's competitiveness in attracting investment and fostering innovation. Therefore, the urgency of regulatory reform is not merely normative but structurally necessary to align legal infrastructure with technological and economic developments.

From a theoretical perspective, this research contributes to the development of legal scholarship by highlighting the concept of *regulatory lag* within the notarial sector. It demonstrates how legal norms fail to keep pace with technological advancements, creating inconsistencies between legally recognized digital tools (such as electronic signatures under UU ITE) and their limited applicability within notarial practices. This study expands the discourse on legal modernization by positioning notarial law as a critical domain affected by digital transformation, emphasizing that authenticity and legal certainty can coexist with technological innovation. Thus, the research offers a

conceptual framework for understanding how traditional legal institutions must evolve in response to digital disruption.

Practically, this study provides concrete recommendations for reforming the UUJN to accommodate digital notary practices. These include the explicit legal recognition of electronic signatures in notarial deeds, the authorization of remote authentication through secure digital platforms, the implementation of standardized digital identity verification mechanisms, and the establishment of cybersecurity and digital archiving protocols. In addition, capacity-building initiatives for notaries and the development of unified technical guidelines are essential to ensure consistent and secure implementation. Such reforms would enhance efficiency, reduce transaction costs, and improve access to legal services, particularly for startups operating across different regions and jurisdictions.

Finally, this study opens avenues for future research. Further empirical studies are needed to assess the readiness of notaries and institutions in adopting digital systems, as well as the effectiveness of existing electronic verification technologies in ensuring legal reliability. Comparative research examining best practices from jurisdictions that have successfully implemented digital notary systems would also provide valuable insights for Indonesia. Moreover, interdisciplinary studies integrating law, technology, and cybersecurity are crucial to designing a robust and trustworthy digital notarial framework. Through these continued efforts, Indonesia can move toward a more adaptive, efficient, and future-oriented legal system that fully supports its digital economic transformation.

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