

INTEGRATION OF PHILOSOPHY OF SCIENCE IN THE REFORM OF NOTARY LAW IN THE DIGITAL AGE

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ABSTRACT

The development of digital technology has driven fundamental changes in notarial practices, which were previously conventional, relying on physical documents and the direct presence of notaries. However, the existing regulation, Law No. 2/2014 on Notary Position, has not comprehensively accommodated this digital transformation. This research aims to analyze the importance of the integration of philosophy of science in the reform of notarial law, so as not only to adjust the technical aspects, but also to uphold the basic values of law. This research uses a literature study method with a juridical-normative and philosophical approach. The study was conducted by reviewing legal documents, theories, and the results of previous research. The results show that the integration of philosophy of science through epistemology, ontology, and axiology approaches is able to provide a strong conceptual basis for the renewal of digital notarial law. The epistemology aspect highlights the importance of scientific verification of electronic deeds, ontology demands legal recognition of the existence of digital documents, while axiology emphasizes justice, professional ethics, and social usefulness. With the integration of the three branches of philosophy of science, it is hoped that legal policies will be created that are not only responsive to technological developments, but also based on the basic principles of the notary profession: legal certainty, expediency, and protection of the interests of the wider community. With this framework, the reform of notary law can run effectively and sustainably, not merely as a response to technological trends, but as a form of commitment to a fair, valid, and responsive legal system.

Keywords: Axiology, Epistemology, Philosophy of Science, Kenotariatan Law, Ontology.

INTRODUCTION

The development of digital technology has brought significant impacts in various fields of life, including the legal field. Digital transformation drives the efficiency and speed of legal services. The use of technology in legal systems and services - whether in courts or other legal institutions - has helped speed up work processes and reduce

bureaucratic obstacles that have been a classic problem in the legal sector. But on the other hand, this digital transformation also creates new challenges that require regulatory adaptation. One area of law that has been affected is notarial law, which has relied on the principles of legality and document authentication as the core of its services.

One of the major challenges is how *notarial* law can adapt to technological developments such as electronic signatures, *blockchain*, and the concept of *cyber notary* without losing its fundamental values¹. This requires legal reform that is not only responsive to technology, but also based on solid values, which can be obtained through philosophy of science. Philosophy of science provides a systematic, critical, and reflective approach to changes that occur in the field of law, including notarial law.

So far, notarial practice in Indonesia has been based on Law Number 30 of 2004 concerning the Office of Notary which has been amended by Law Number 2 of 2014². This law regulates aspects of the authority, duties, and responsibilities of notaries. However, the provisions in the law are more oriented towards conventional processes that require the physical presence of the parties in document authentication. With the development of technology today, the relevance of this concept has been questioned. The regulation is considered no longer relevant and further adjustments need to be made to accommodate the use

of technology, for example in terms of electronic signatures, online identity verification, and digital document storage.

Despite the urgency of regulatory reform, the role of philosophy of science in the process of notarial law reform is often overlooked. In fact, the philosophical foundation allows policy makers to formulate the concept of "digital notary" which is not only formally legal, but also ethical and humanist³. This thinking is in line with the view that law must be understood in an interdisciplinary manner, integrating sociological, historical, and philosophical aspects, so as not to fall into too narrow positivism. As stated by Bernard Arief Sidharta, laws that are based on a comprehensive understanding of science will be more adaptive and not only become formal instruments, but also maintain the moral and ethical interests of society⁴. Bernard's description emphasizes the importance of the reflective dimension in law, that legality is not enough without moral legitimacy. Therefore, legal reform, including in the realm of digital notaries, should not only be about technology but

¹ Dian Puji N. Simatupang. *Hukum dalam Era Digital..* (Jakarta: Kencana, 2018). p. 90

² Republic of Indonesia, *Undang-Undang Nomor 2 Tahun 2014 tentang Jabatan Notaris*.

³ Bernard Arief Sidharta. *Refleksi tentang Struktur Ilmu Hukum*. (Bandung: Mandar Maju, 2009). p. 72

⁴ Bernard Arief Sidharta. *Ilmu Hukum Indonesia: Upaya Pengembangan Ilmu Hukum Sistematis*. (Bandung: PT Alumni, 2013), p. 45

also about how the law remains on the side of justice and human values...

According to Satjipto, philosophy of science is able to guide humans to understand the nature of change and the function of science in society, including legal science which is adapting to technological disruption⁵. This statement emphasizes that the philosophy of science has a fundamental role in providing direction and a critical framework for thinking about the development of science, including legal science, which is now facing pressure due to digital transformation. Philosophy of science is not only positioned as a theoretical study, but also as a reflective instrument capable of capturing the dynamics of social change and its impact on the legal system. In other words, the philosophical approach is not merely oriented towards the technical aspects of regulation, but also considers the ethical and social consequences of any legal innovation.

This concept is in line with the idea of progressive law which emphasizes the need for sensitivity to the context of the times and the needs of society, in addition to compliance with formal juridical rules⁶

. This means that the law must not only be normatively valid, but must also be relevant and responsive to the changing social reality. In the context of notarization, this has its own urgency given the role of notaries as public officials who are in the midst of the digitalization of legal services. Therefore, as emphasized by Achmad Ali, the integration of philosophy of science in the reform of notarial law is important to ensure that the reform is not only pragmatic, but also based on values such as justice, legal certainty, and expediency⁷. It is not enough for the reform of notarial law to only answer technical or administrative challenges, but it must also be supported by a philosophical orientation that ensures the sustainability of basic values in the practice of law itself.

In this context, philosophy of science plays a role in providing a conceptual framework that can help answer these challenges, because philosophy of science views science - including legal science - as not just a set of positive rules, but a process of searching for truth that considers aspects of epistemology, ontology, and axiology⁸.

⁵ Satjipto Rahardjo. *Membedah Hukum Progresif*. (Jakarta: Kompas, 2009). p. 11

⁶ Tundjung Herning Sitompul. *Refleksi Filsafat Hukum dalam Digitalisasi Kenotariatan*. (Indonesian Legislation Journal 17, No. 2, 2021), p. 133

⁷ Achmad Ali. *Menguak Teori Hukum dan Teori Peradilan*. (Jakarta: Kencana, 2015). p. 32

⁸ Satjipto Rahardjo, *Op.Cit.*

By using the philosophy of science, the reform of the law of notaries can produce solutions that are not only in accordance with technological needs, but also maintain the basic principles of law. In other words, the philosophy of science is able to support the reform of notary law so that it is not only oriented towards procedural efficiency or simply following technological trends, but also considers aspects of justice, certainty, and legal benefits for the wider community.

Based on the description above, the researcher is interested in conducting research with the aim of understanding in depth the important role of philosophy of science as the basis for legal reform and how the integration of philosophy of science in the reform of notarial law in the digital era.

Research Methods

This type of research uses a *library research* method, with a juridical-normative approach and a philosophical approach. *Library Research* is a research conducted by collecting library materials, reading books, literature, and examining various kinds of theories that have a relationship with the problem under study⁹

. So it can be understood that library research is a study that makes library material the main data source.

While juridical-normative is an approach method using library data, namely legal research conducted by examining or studying problems in terms of legal rules, examining library materials or secondary data¹⁰. In the context of this research, it is used to analyze laws and regulations relevant to notarial law and digitization, such as Law Number 2 of 2014 concerning Amendments to Law Number 30 of 2004 concerning Notary Positions, Law Number 11 of 2008 concerning information and Transactions (UUITE), and other related regulations. Secondary data is obtained from textbooks, articles or scientific journals.

Meanwhile, this philosophical approach is used to examine the reform of notarial law from the perspective of epistemology, ontology, and axiology. This approach explains how notarial law can adapt to technological developments without ignoring the basic values of law¹¹. The data is then analyzed using a qualitative analysis method through inductive reasoning, as well

⁹ Mardalis. *Metode Penelitian*. (Jakarta: Bumi Aksara, 2009), p. 28

¹⁰ Soerjono Soekanto and Sri Mamudji. *Penelitian Hukum Normatif: Suatu Tinjauan*

Singkat. (Jakarta: Raja Grafindo Persada, 2003). p. 13

¹¹ Jujun S. Suriasumantri. *Filsafat Ilmu: Sebuah Pengantar Populer*. (Jakarta: Pustaka Sinar Harapan, 2003). p. 15

as philosophical interpretation to understand the challenges, opportunities, and values that must be maintained in the reform of notarial law.

Discussion

1. The important role of philosophy of science as a foundation for reform

Legal reform is a dynamic process that requires a scientific foundation to answer various social, economic and technological challenges. According to Hartono¹², without a strong conceptual foundation, the law risks becoming reactive and losing legitimacy in the eyes of society. Philosophy of science offers a systematic framework for analyzing and formulating legal policies, ensuring that any changes have a valid knowledge base, recognition of the regulated entities, and clear objectives for the common good.

Philosophy of science has 3 (three) main aspects, namely epistemology, ontology and axiology. The epistemology aspect addresses the sources, limits and validity of knowledge. In the context of legal

reform, epistemology ensures that the process of formulating regulations is based on data, research and scientific methods that can be accounted for. Legal innovation efforts, such as the adoption of digital technology, require scientific standards so that policies are not just pragmatic responses, but have academic and legal legitimacy.¹³

While the ontological aspect questions the nature of the existence (*being*) of an entity. In legal reform, a deep understanding of the parties and objects regulated is needed. For example, the importance of recognizing the existence of digital entities (such as *cyber notaries*, *online platforms*) as legal subjects or objects¹⁴. Thus, legal norms can be designed in line with the characteristics of these new entities.

The last is the axiological aspect, which examines the *value* (*value*) and purpose (*telos*) of a legal system. Legal reform should not only pursue legal certainty, but must also be oriented towards justice and humanity¹⁵. This means that new regulations need to guarantee respect for human rights and

¹² Hartono, B. *Filsafat Hukum dan Teknologi di Era Digital*. (Yogyakarta: Gadjah Mada University Press, 2020). p. 28

¹³ Nugroho, R. *Cyber Law dan Reformasi Notaris*. (Jakarta: Rajawali Pers, 2022). p. 100

¹⁴ Rahman, A. *Aksiologi Hukum dan Teknologi*. (Surabaya: Airlangga University Press, 2024). pp. 206-207

¹⁵ Hartono. *Op.Cit*, p. 45

protection of vulnerable groups. Because axiologically, the law aims to provide benefits to the wider community. These three aspects of the philosophy of science cannot stand alone. Synergy between epistemology, ontology, and axiology is needed as a whole conceptual framework so that it can become the basis for legal reform.

2. Integration of the philosophy of science in the reform of the law of notaries in the digital era

The integration of epistemology, ontology, and axiology in the reform of notary law in the digital era is very important to create a legal system that is not only efficient and modern, but also has a solid philosophical foundation. These three aspects complement each other in shaping legal reform that is relevant to the needs of the times, remains based on legal principles, and is oriented towards the benefits of society.

a. Epistemological Aspects: Legal Knowledge in the Digital Age.

Epistemology is defined as a branch of philosophy of science that focuses on the source, nature, and validity of knowledge¹⁶, so it plays

an important role in the reform of notarial law in the digital era. Through the epistemological framework, every form of legal knowledge regarding the creation and validity of electronic deeds must be based on verification and validation procedures that can be scientifically accounted for

There are several points discussed in the epistemological aspect, namely, first regarding the verification of digital documents which is a central issue. In the conventional legal tradition, authentic deeds require wet signatures and physical recording. However, in the digital era, the validity of electronic documents depends on electronic signatures, digital certificates, and adequate encryption¹⁷. Using the principle of *verifiability*, as proposed by Popper, the authenticity of digital documents can be tested through measurable and repeatable mechanisms¹⁸. This ensures that the process of creating electronic deeds takes place according to the standards of scientific truth.

¹⁶ Jujun S. Suriasumantri. *Op.Cit.*

¹⁷ S. Irianto, & Shidarta. *Metode Penelitian Hukum: Konstelasi & Refleksi*. (Jakarta: Yayasan Obor Indonesia. 2013), p. 115

¹⁸ Karl R. Popper. *Conjectures and Refutations: The Growth of Scientific Knowledge*. (London: Routledge, 1972). p. 58

The enactment of Law No. 11/2008 on Electronic Information and Transactions (ITE) has also paved the way for the recognition of electronic signatures. Electronic signatures, according to Articles 5 and 6 of the ITE Law in Indonesia, are recognized as valid legal documents if they meet certain conditions¹⁹. In this case, the ITE Law in Indonesia provides legitimacy to electronic signatures through digital certificates issued by Certification Providers. This shows a transformation in the Indonesian legal system that seeks to adapt to the development of digital technology, especially in the context of authentication and validity of legal documents. The legal recognition of electronic signatures reflects the commitment of national legislation to accommodate digital dynamics without neglecting the principles of legality and administrative reliability.

In addition, *blockchain* is also one of the innovations used to record digital legal transactions. This technology enables data

transparency, security, and accuracy. The advantages of blockchain lie in its decentralized and difficult to manipulate nature, so it has great potential to increase trust in the digital legal recording system. However, the validity of *blockchain* as legal evidence still requires an in-depth epistemological study to ensure its compatibility with the traditional legal system²⁰. A normative and philosophical analysis is needed to test whether the mechanisms offered by technologies such as blockchain are truly in line with established principles of evidentiary law. Therefore, technological innovation must always be accompanied by critical legal reflection so that digital transformation is not only technically efficient, but also normatively and philosophically valid.

Secondly, the methodology for drafting a digitally-based notarial regulation should rely on empirical research and comparative studies. Good legal research combines normative approaches

¹⁹ Republic of Indonesia, Undang-undang (UU) Nomor 1 Tahun 2024. Perubahan Kedua atas Undang-Undang Nomor 11 Tahun 2008 tentang Informasi dan Transaksi Elektronik.

²⁰ D. Santoso. *Etika Digital dalam Profesi Hukum*. (Jakarta: Gramedia Pustaka Utama, 2021). p.78

with empirical data to ensure that the resulting policies remain relevant and effective²¹. Epistemological principles encourage policymakers to test the effectiveness and efficiency of new rules through comparative studies (*best practices* of other countries) or *pilot projects*, as well as empirical studies. This is done to obtain tested knowledge²². The results of the study then become the basis for solid legal arguments in adjusting the Notary Position Law to the challenges of the digital era (Law No. 2 Year 2014).

Third, the testing of electronic evidence in court underscores the importance of legal epistemology. In Soekanto's view, electronic evidence must be verifiable through transparent and reliable evidentiary procedures²³. With such, judges and parties to disputes can assess the validity of electronic documents based on scientifically recognized verification methods, such as metadata examination, or encryption.

Finally, the development of notarial competencies also requires an epistemological foundation. According to Adjie, notaries must understand how to verify digital documents, use cybersecurity systems, and proper authentication techniques to keep their legal knowledge relevant²⁴. This is in line with the principle of epistemology, namely that knowledge is dynamic and needs to be updated as social conditions and technology change. Therefore, the notarial education curriculum needs to include digital technology lessons as a new knowledge base, so that prospective notaries can master the technology relevant to their profession in accordance with current technological developments. Even if necessary, notaries who are already serving are currently required to participate in training or workshops on this technology.

Overall, the application of epistemology in the reform of notarial law in the digital era emphasizes scientific proof, valid

²¹ Peter Mahmud Marzuki. *Penelitian Hukum*. (Jakarta: Kencana, 2014) p. 65

²² Soerjono Soekanto. *Pokok-Pokok Sosiologi Hukum*. (Jakarta: Raja Grafindo Persada, 2014). p. 87

²³ *Ibid.* p. 91

²⁴ Habib Adjie. *Hukum Notariat: Teori dan Praktik*. (Bandung: Refika Aditama, 2017). h. 50

research methodology, and information disclosure. Thus, the process of making and recognizing electronic deeds can be accounted for, thereby increasing legal certainty and public trust in digital notary institutions.

b. Ontological Aspects: The Existence and Nature of the Law of Kenotariatan in the Digital Age.

Ontology, in general, discusses the nature of *being* and the reality of an entity²⁵. The digital era has introduced the concept of *cyber notary*, where notaries can perform their duties and authorities online without physical presence. This concept opposes the conventional and traditional concept of a notary which is physical and personal, and bound to a certain jurisdiction. Notarial law reform must consider whether the presence of technology replaces, complements, or creates a new form of notarial existence. This reform is not only a procedural change, but also an ontological change to the role and function of the notary as the guardian of authentication.²⁶

There are several points that are discussed from an ontological perspective. First, the shifting meaning of documents. In conventional notarial practice, an "authentic deed" is synonymous with a physical document signed before a notary²⁷. Physical documents in the form of paper are treated as the most basic evidence in civil and criminal law. However, in the digital era, documents are no longer physical, but consist of electronic data sets in various formats (PDF, *blockchain ledger*, etc.). These digital documents have different ontological dimensions and properties from physical documents. Although they do not have a physical form, they have the same legal value. This reform demands the recognition that digital documents have the same *legal status* as paper deeds, provided that the procedures for their creation and verification are carried out in accordance with the rules of law and information technology

Second, the redefinition of authentic deeds. Authentic deeds, in conventional notarial practice,

²⁵ Kaelan. *Filsafat Pancasila*. (Yogyakarta: Paradigma. 2014). p. 21

²⁶ Nugroho, R. *Op.Cit.* p. 123.

²⁷ Satjipto Rahardjo. *Kapita Selektta Filsafat Hukum*. (Bandung: Citra Aditya Bakti, 2009). p. 72

emphasize the physical presence of the parties before the notary²⁸. This process aims to ensure the validity and authenticity of the contents of the statement affixed with wet signatures. However, with the shift of the process to the digital realm, the concept of "presence" has also undergone a metamorphosis. Video conferencing technology, electronic signatures and *online* platforms change the concept of time and space. Notaries can verify the identity of the parties virtually, as long as they meet the required standards of *security* and procedural validity

This is supported by Adjie, who asserts that electronic deeds must be recognized as "*authentic deeds*" if they meet the elements of *authenticity* and notarial authority²⁹. This statement reflects a normative recognition that the validity of a deed does not solely depend on its physical form, but rather on the fulfillment of the substantive elements that characterize an authentic deed. In the digital context, authenticity and authority can be guaranteed through a

certified electronic signature system and digital authorization attached to the notary's identity as a public official.

This digital reality that transcends the boundaries of physical space requires an ontological update that the law should be able to consider and recognize digital encounters as authentic as physical encounters, as long as all legal requirements are met³⁰. This view shows that digitalization requires the law to not only keep up with technological developments, but also to reformulate its basic assumptions about space, presence, and legal interaction. Virtual presence facilitated by information technology should no longer be considered a "less valid" form of presence, if it can be proven that all legal procedures and authenticity are maintained. Thus, legal reform is not only technical-procedural, but also touches on the ontological dimension of the law itself - namely how the law understands and recognizes new realities as a

²⁸ *Ibid.*

²⁹ Habib Adjie. *Op.Cit.*

³⁰ Kaelan. *Op.Cit.* p. 26

legitimate part of modern legal practice.

Third, the implications for notary authority. In the conventional legal order, notary authority is closely related to the domicile area and notary office. However, digitalization breaks down geographical and time boundaries (*borderless*). Notaries can now handle clients across regions without the need for face-to-face meetings. This triggers an ontological debate: where exactly is the "place" where electronic deeds are made. Does the physical notary office remain the reference, or is a new definition of "virtual office" needed³¹. Regulatory updates need to clarify how the status of notary authority is applied when deed-making takes place in the cyber world, which is not bound by traditional geographical locations.

Fourth, digital reality and legal validity. Digital documents are often integrated with encryption technology, digital signatures, and even *blockchain*, which enables transparent and decentralized transaction tracking. This

technology presents an opportunity to increase trust and transaction security, given that *blockchain* records every data change permanently and cannot be changed unilaterally. From an ontological point of view, this mechanism positions digital documents as legal entities that have an "*existence trail*", just like the paper trail in conventional documentation³². For example, when a digital deed is stored in a *blockchain*, it is necessary to establish that the "data block" also has the status of legal existence equivalent to a conventional repertory book.³³

Fifth, the consequences for legal protection. Once recognized, digital documents must be treated the same as paper documents in the legal evidence system. In the event of a dispute, litigation in court requires evidentiary procedures capable of assessing the integrity, authenticity and validity of electronic deeds³⁴. Thus, civil and criminal procedural laws must adjust to ensure that digital entities have a clear *status* and are treated equally in the judicial process

³¹ Soerjono Soekanto. *Op.Cit.* p. 90

³² S. Irianto & Shidarta. *Op.Cit.* p. 115

³³ Habib Adjie. *Op.Cit.* p. 52

³⁴ *Ibid.* p. 53

This requires the reconstruction of legal concepts that previously only applied to physical documents to be applied to digital documents. This shift in meanings requires conceptual and regulatory revisions to adapt notarial practices to digital realities. For example, the redefinition of authentic deeds in the Notary Position Law (Law No. 2 Year 2014) states that digital documents will be recognized if:

1. Made by an authorized official (notary)
2. Uses a legitimate digital authentication mechanism
3. Stored and registered according to established procedures

Overall, the ontological aspects of notarial law reform in the digital era imply that the legal system needs to recognize and facilitate the existence of digital documents as legitimate entities with legal consequences. The redefinition of authentic deeds, the shifting boundaries of notary authority, and the utilization of digital verification technology shift the traditional paradigm. With this ontological

understanding, notarial practice can go hand in hand with technological innovation without neglecting the principles of validity and legal order that are its main foundation.

c. Axiological Aspects: Values, Ethics, and Benefits in Digital Kenotarians.

Axiology addresses issues of *values*, ethics, and goals to be achieved in a field of knowledge. In the context of legal reform in the digital era, axiology plays an important role in directing change so that it remains based on the principles of justice, expediency, and professional and social responsibility. Axiology focuses on the question of what is considered good, fair, and beneficial for humans and society³⁵. There are several important points related to the axiological aspects in this discussion.

First, the value of justice is a key cornerstone in digital notarial law reform. Fairness includes not only legal protection for the parties involved in the transaction, but also equal access to notarial services. If the signing of the deed is done

³⁵ K. Bertens. *Etikas*. (Jakarta: Gramedia, 2001). p. 33

online, then this process must be designed so that every individual - including those in remote areas - still has the same opportunity to utilize the service. This is because justice is measured by the extent to which the law is able to provide equitable benefits to all levels of society³⁶. In the digital context, this is related to technological infrastructure, digital literacy, and the establishment of standard procedures so that legal gaps do not arise.

Second, professional ethics is a key element in maintaining the integrity of notaries in the digital era. Notaries hold the moral responsibility to ensure data accuracy, protect client privacy, and guarantee document confidentiality. Violation of professional ethics will not only hurt public trust, but also harm the parties who depend on the deed.³⁷ Therefore, the utilization of digital technology must be accompanied by a relevant code of ethics, including *cyber security* protocols and *data protection* policies. Actions such as forgery of electronic signatures or leakage of

confidential information have the potential to eliminate the moral values that should be upheld by the notary profession.

Third, socio-economic benefits are the main goal to be achieved from the reform of the law of notaries. In the axiological perspective, regulatory changes must have a positive impact on the progress of society at large³⁸. Digitalization of the notarial process can reduce operational costs, speed up administrative processes, and improve service efficiency for the community. In addition, the ease of *online* services opens up opportunities for business actors, both local and international, to transact more safely and transparently. Thus, digital-based reforms can strengthen national competitiveness, given that *foreign investment* will also be helped by a modern and efficient notarial system.

Fourth, legal and social responsibility is the main focus. Axiology demands that the law not only be a collection of rules, but also contains moral responsibility for the

³⁶ Soerjono Soekanto. *Op.Cit.* p 92

³⁷ Habib Adjie. *Op.Cit.* p.53

³⁸ K. Bertens. *Op.Cit.* p. 55

perpetrators³⁹. When a notary creates an electronic deed, he or she must be responsible for the validity of the data entered, ensuring that all procedures are followed, and avoiding conflicts of interest. This concept of responsibility also includes the possible impact on third parties.

Finally, the protection of human rights and privacy. Along with the utilization of digital technology, personal data of notary clients is stored electronically. If the security of such data is jeopardized, then individual rights are also potentially violated. The implementation of Pancasila values in the Indonesian legal system mandates the protection of every citizen, including in the digital realm⁴⁰. Therefore, the development of regulations must guarantee data *protection* to prevent misuse or theft of information.

Overall, the axiological aspects of notarial law reform in the digital era emphasize the integration of the values of justice, professional ethics, socio-economic benefits, legal responsibility, and protection of human rights. Every regulatory

change must be framed in the spirit of benefit for all stakeholders—from clients, notaries, to the wider community. Thus, notarial reform based on axiology will create a legal environment that is fair, dignified, and ready to face challenges in the digital revolution era.

Conclusion

Philosophy of science provides a crucial conceptual foundation in the process of legal reform in general. The integration of the philosophy of science in the reform of law in the digital era demands a thorough adjustment in three main aspects: epistemology, ontology, and axiology. In terms of epistemology, the validity and truthfulness of digital documents need to be supported by scientific verification mechanisms and careful legal research, so that electronic deeds can be recognized as valid evidence in court.

In the ontological aspect, it helps to formulate the existence of legal subjects and objects clearly. Due to the shift of medium from paper to digital, it requires redefinition of the concept of "authentic deed" as well as expansion of notary authority in the virtual realm. Digital documents must be recognized as legal entities that are as strong as physical

³⁹ Satjipto Rahardjo. *Op.Cit.* p. 72

⁴⁰ Kaelan. *Op.Cit.* p. 26

documents, provided that the procedures for making them meet the standards of legal validity and information technology.

Meanwhile, in axiology, the values of justice and professional ethics need to be prioritized to maintain the integrity of notarial institutions. The socio-economic benefits of notarial digitalization are also a focus, with an emphasis on accelerating services and protecting human rights, especially related to privacy and data security. Axiology also ensures that new norms are oriented towards justice and common welfare.

By comprehensively applying the principles of philosophy of science, the reform of the law of notaries in the digital era can be effective, equitable, and in line with the dynamics of technological development. With the synergy of these three aspects, the law not only functions as a means of social control, but also an instrument of justice that is able to respond to the challenges of the times.

This comprehensive integration between epistemology, ontology, and axiology will shape legal reform that is sustainable, remains relevant, and legitimate in the eyes of society. Overall, the reform of law in the digital era requires not only technical innovation, but also a deep philosophical approach to be in line

with the principles of justice, certainty, and benefit for society.

Advice

The preparation of comprehensive regulations is an important step in dealing with the digitalization of notaries. The revision of the Notary Position Law (UUJN) needs to contain detailed provisions regarding *cyber notaries*, electronic signatures, and the legal status of digital documents. Relevant ministries and the Indonesian Notary Association (INI) also play a role in issuing technical regulations related to data security, encryption, and privacy protection, in order to strengthen the legitimacy and legal certainty of digital services.

In addition to regulation, strengthening the digital competence of notaries is also crucial. The notarial education curriculum needs to include digital technology and cyber law materials, along with continuous training for active notaries. Professional organizations can also develop a digital code of ethics that regulates the protection of client data, prohibits the manipulation of electronic documents, and sanctions for ethical violations.

As a realistic implementation step, a phased approach through *pilot projects* can be applied in certain areas. This trial is important to evaluate obstacles and

improve policies, so that future regulations are responsive, measurable, and according to community needs.

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