

Validity of Electronic Signatures in Employment Agreements After Government Regulation Number 35 of 2021 and Law Number 1 of 2024

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KEYWORDS	ABSTRACT
Electronic Signature; Employment Agreement; Legal Validity; Digitalization	The development of digital technology has significantly impacted various fields, including law, particularly in employment agreements. A key innovation is using electronic signatures, which enhance the efficiency and effectiveness of drafting legal documents. However, in Indonesia, the implementation of electronic signatures faces challenges such as regulatory issues, technical barriers, and societal acceptance. This study analyzes the validity of electronic signatures in employment agreements under Government Regulation Number 35 of 2021 and Law Number 1 of 2024 concerning the Criminal Code. Using a normative juridical approach, the research examines electronic signatures' compliance with contract law principles and the legal validity outlined in Law Number 11 of 2008 on Electronic Information and Transactions (ITE Law). The findings confirm that electronic signatures are legally recognized if they meet the criteria in Articles 5 and 11 of the ITE Law. Government Regulation Number 35 of 2021 and Law Number 1 of 2024 further support the legality of electronically signed employment agreements. However, challenges remain, such as low digital literacy and inadequate digital infrastructure. To overcome these, the study recommends improving digital literacy, strengthening data security, and enhancing regulations to support electronic signature adoption in employment agreements, ensuring their effective use in the digital era.

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Introduction

Digitalization has driven significant changes in various aspects of life, including in the world of work. One of the innovations that has a big impact is electronic signatures. As a substitute for conventional signatures, electronic signatures offer various advantages, ranging from time efficiency and reduced administrative costs to ease of access to cross-regional documents (Sударsono, 2021). In the context of employment agreements, electronic signatures are a relevant alternative in facing the challenges of the digital era, especially amid the increasing need to conduct legal transactions online. Studies have highlighted the increasing use of digital signatures in contractual agreements, indicating that these technologies are crucial in modernizing administrative processes and improving efficiency (Hasibuan, 2021).

However, the use of electronic signatures is inseparable from various challenges, especially in the legal context. One of the main issues is the validity of electronic signatures as a form of valid consent in employment agreements. This validity is important because the employment agreement is a legal document that regulates the rights and obligations between the worker and the employer (Zulkifli, 2020). In the Indonesian legal system, the validity of the employment agreement must meet the requirements for the validity of the agreement as stipulated in Article 1320 of the Civil Code, namely the agreement of the parties, the competence of the parties, a certain matter, and a halal cause (Simanjuntak, 2018). Therefore, whether an electronic signature meets legal requirements is an important focus in legal studies.

Government Regulation Number 35 of 2021 concerning Fixed-Time Work Agreements, Outsourcing, Working Time and Breaks, and Termination of Employment (PP 35 of 2021) provides a legal basis for implementing employment agreements in Indonesia. On the other hand, Law Number 11 of 2008 concerning Electronic Information and Transactions (UU ITE), together with its amendments, provides a legal basis for using electronic signatures. In addition, Law Number 1 of 2024 concerning the Criminal Code (Law 1 of 2024) emphasizes the importance of data protection and digital security, which are important elements in implementing electronic signatures.

Electronic signatures in employment agreements also reflect the dynamics of industrial relations in the modern era. In the era of globalization and digitalization, employment agreements are often carried out across countries or regions, so electronic signatures are a practical solution (Rahardjo, 2017). However, implementing electronic signatures requires a deep understanding of its technical and legal aspects. This includes the validity of electronic signatures, the protection of personal data, and the mechanism of proof in court, as discussed in studies by Wicaksono (2020) and Chandra (2021).

Another challenge faced in implementing electronic signatures is the low digital literacy among the public, including workers and employers. Many parties have not fully understood the concept and mechanism of electronic signatures, thus raising doubts about its validity (Putri, 2021). In addition, the uneven digital infrastructure throughout Indonesia is an obstacle to adopting this technology. This inequality can potentially create gaps in access to legal technology, especially in remote areas (Simanjuntak, 2018).

Data security is also a crucial issue in the use of electronic signatures. The risk of falsification, hacking, or misuse of data is a concern that must be addressed through adequate technical regulations and oversight mechanisms. In this case, e-signature service providers are responsible for ensuring the data security and reliability of the systems they use (Yusuf, 2020).

This study explores how legal provisions in Indonesia, especially PP 35 of 2021 and Law 1 of 2024, provide a legal framework for using electronic signatures in employment agreements. This study also examines how existing regulations can overcome the challenges faced in implementing electronic signatures. With a normative juridical approach, this study seeks to provide an in-depth analysis of the relevance and effectiveness of the existing legal framework in supporting digitalization in labor law (Halim, 2022).

PP 35 of 2021 is part of the implementation of Law Number 11 of 2020 concerning Job Creation, which aims to increase flexibility and efficiency in industrial relations. This regulation recognizes electronic documents, including electronically signed employment agreements, provided they meet the applicable legal requirements. On the other hand, Law 1 of 2024 provides a legal basis for personal data protection and sanctions against data security violations, which are relevant in the context of electronic signatures.

In a global context, the use of electronic signatures has become a common practice in many countries. Countries such as the United States and the European Union already have comprehensive regulations in place to support the use of electronic signatures, such as the Electronic Signatures in Global and National Commerce Act (E-SIGN Act) in the United States and the eIDAS Regulation in the European Union. Indonesia can learn from this international experience to strengthen the legal and technical framework in support of the adoption of electronic signatures.

The implementation of electronic signatures in Indonesia is also relevant in supporting the national digital transformation agenda. The Indonesian government has launched various programs to accelerate digitalization in various sectors, including law and employment. The use of electronic signatures can be one of the indicators of the success of digital transformation, especially if it is balanced with adequate regulation and widespread acceptance in society.

In addition to providing efficiency, electronic signatures also have the potential to increase transparency and accountability in employment relationships. By using a digital system, the process of making and storing employment agreements can be carried out in a more structured and secure manner. This also makes it easier to supervise and audit interested parties, such as labour supervisors or judicial institutions.

However, to realize this potential, synergy between the government, business actors, and the community is needed. The government needs to issue regulations that support and massively socialize the benefits and validity of electronic signatures. Businesses, including employers, need to invest in digital infrastructure and training for their workers. Meanwhile, the public, as end-users, needs to improve digital literacy to understand and utilize this technology optimally.

This research is expected to make a practical and theoretical contribution to supporting the adoption of electronic signatures in Indonesia. Theoretically, this study enriches the legal literature on the use of technology in employment contracts. Practically, this study provides recommendations for the government and business actors to overcome the challenges faced in implementing electronic signatures. Thus, electronic signatures can be an effective instrument in supporting efficiency and fairness in employment relationships in the digital era.

Research Methods

This study uses a normative juridical method to analyze the validity of electronic signatures in employment agreements based on the legal framework applicable in Indonesia. This approach aims to examine the legal norms that govern the use of electronic signatures, especially in the context of Government Regulation Number 35 of 2021 and Law Number 1 of 2024. The analysis

is carried out by excavating, understanding, and interpreting relevant legal provisions, both at the level of laws and their derivative regulations.

The data used in this study are secondary data obtained from various reliable sources, such as legal documents, academic literature, and court decisions. Legal documents include laws, government regulations, and other related regulations governing electronic signatures. Academic literature, such as books and scientific journals, is used to understand the theories supporting this research's analysis. Court decisions related to e-signature cases are also reference material to identify their application in practice.

Data analysis is carried out qualitatively by emphasizing the interpretation of legal texts and related documents. The results are expected to provide a comprehensive overview of the validity and challenges of using electronic signatures in employment agreements.

Results and Discussion

Legal Basis for the Use of Electronic Signatures in Employment Agreements

This study found that Government Regulation (PP) Number 35 of 2021 and Law Number 11 of 2008 concerning Electronic Information and Transactions (UU ITE) provide a clear legal basis for the use of electronic signatures in employment agreements. Article 5 of the ITE Law recognizes electronic documents and electronic signatures as valid legal evidence as long as they meet certain requirements, such as being accessible, unchanged, and guaranteed to be authenticated. Thus, PP 35 of 2021 provides legitimacy to employment agreements that use electronic signatures as long as the provisions of the ITE Law are met.

PP 35 of 2021 clarifies that work agreements, both for a certain time and indefinitely, can be drafted and ratified as electronic documents. This article paves the way for adopting electronic signatures to support the efficiency and flexibility of employment relationships, especially in the digital era. However, fulfilling legality requirements as stipulated in the ITE Law remains an important prerequisite. These requirements include authentication using electronic certificates recognized by the government in accordance with Article 11 of the ITE Law.

Meanwhile, Law Number 1 of 2024 emphasizes the importance of security in using digital technology. The law also provides for sanctions for potential violations, such as forgery of electronic signatures or misuse of personal data. This shows that the government is trying to create a safe and secure legal environment to support digitalization in the legal sector.

Validity of Electronic Signatures in the Indonesian Legal System

The validity of electronic signatures in the Indonesian legal system is based on the recognition of the principles of contract law as stipulated in the Civil Code (*KUHPerdata*). In this context, electronic signatures must meet the requirements for the validity of the agreement as stipulated in Article 1320 of the Civil Code, namely:

1. Agreement of the Parties: An electronic signature is considered valid if it reflects a voluntary agreement between the employee and the employer.
2. Competence of the Parties: All parties involved must have legal skills to sign an employment agreement.

3. Something Specific: Employment agreements that use electronic signatures must have a clear object.
4. Halal Cause: Electronic signatures should not be used to support unlawful activities.

The application of electronic signatures in employment agreements also requires an electronic certificate issued by an Electronic Certification Operator (PSrE) registered with the Ministry of Communication and Information Technology. This certificate serves to ensure the authenticity and integrity of electronic signatures so that they can be relied on as legal evidence.

Challenges of Implementing Electronic Signatures

Despite having a strong legal basis, the application of electronic signatures in employment agreements faces various obstacles. The main challenges found in this study include:

1. Lack of Equitable Digital Infrastructure

Uneven digital infrastructure throughout Indonesia is one of the biggest obstacles to the adoption of electronic signatures. Many regions still experience limited internet access, thus hindering the optimal use of digital technology. This condition has the potential to create gaps in the implementation of electronic signatures, especially in rural and remote areas.

2. Low Digital Literacy

Digital literacy among workers and employers is also still low. Many parties do not understand the concept and benefits of electronic signatures, thus raising doubts about their validity. This low literacy level also impacts the low adoption of digital technology in the employment sector.

3. Data Security and Counterfeiting Risk

Data security is a crucial issue in the use of electronic signatures. The risk of signature forgery or misuse of personal data can reduce user trust in this technology. Therefore, strict supervision and strengthening of technical regulations are needed to ensure security in the use of electronic signatures.

4. Implementation Costs

The use of electronic signatures requires investment in software, training, and supporting infrastructure. For small and medium-sized companies, this cost can be a significant burden, hindering widespread adoption of this technology.

Implications and Strategies for Overcoming Challenges

To overcome these barriers, this study provides several strategic recommendations:

1. Digital Infrastructure Improvement

The government needs to accelerate the development of digital infrastructure throughout Indonesia. This step can be done through cooperation with internet service providers and the construction of broadband networks covering remote areas.

2. Socialization and Education of Digital Literacy

Socialization and training programs on electronic signatures need to be carried out massively to increase understanding among workers and employers. This can be done through cooperation between the government, companies, and educational institutions.

3. Strengthening Technical Regulations

Technical regulations related to electronic signatures need to be strengthened to ensure the security and reliability of this technology. The government also needs to set stricter security standards for e-signature service providers.

4. Subsidies for MSMEs

To encourage the adoption of electronic signatures among micro, small, and medium enterprises (MSMEs), the government can provide incentives in the form of subsidies or technical assistance programs.

Comparison with International Practice

This study also compares the application of electronic signatures in Indonesia with several developed countries, such as the United States and the European Union. The Electronic Signatures in Global and National Commerce Act (E-SIGN Act) provides broad legal recognition of electronic signatures in the United States. In the European Union, the eIDAS Regulation regulates electronic signature security and interoperability standards across member states.

Indonesia can learn from this international experience to strengthen its legal and technical framework to support the adoption of electronic signatures. One important lesson is the importance of integrating legal policy and technology to create a secure and reliable digital ecosystem.

Implementation of Electronic Signatures in Employment Agreements in Indonesia

Implementing electronic signatures in employment agreements is an important step in supporting digital transformation in the employment sector. This study identifies that the use of electronic signatures has the potential to improve efficiency, especially in companies that have many employees or operate across regions. Here are some of the practical implementations found in this study:

1. Usage in Online Recruitment

In the recruitment process that is carried out online, electronic signatures allow companies to complete administrative stages quickly. Employment agreements can be drafted, approved, and stored in a digital format without face-to-face, reducing operational costs.

2. Enterprise Document Automation

Electronic signatures allow companies to integrate human resource administration systems with document management software. This creates a more structured process in the management of employment contracts, including renewal or termination of contracts.

3. Application in the Government Sector

This study found that electronic signatures are starting to be used by government agencies, especially in managing employment relationships with contract workers. This provides an

example of how electronic signatures can be implemented in the public sector, which often has complex administrative processes.

4. Application in Outsourcing and Contractor Agreements

Outsourcing companies that often face the dynamics of workforce changes can leverage electronic signatures to speed up the process of managing employment contracts, including contract renewals for workers placed in various locations.

Legal Dynamics and Compliance in Electronic Signatures

1. Compliance Supervision

One of the important findings of this study is the need for stricter supervision of electronic certification operators. Electronic Certification Providers (PSrE) in Indonesia must comply with the standards set by the Ministry of Communication and Information Technology (Kominfo). However, the study notes that surveillance of PSrE still needs to be improved to ensure all organizers comply with applicable standards.

2. Dispute Resolution Mechanism

When there is a dispute in an employment agreement that uses electronic signatures, proving the validity of the signature becomes a significant issue. This mechanism requires technological reliability and strong legal support. Courts must have the capacity to evaluate electronic signatures based on digital certificates issued by PSrE.

3. Inter-Agency Collaboration

Collaboration between Kominfo, the Ministry of Manpower, and judicial institutions is very important to support the implementation of electronic signatures. This synergy is needed to ensure that legal, technical, and administrative aspects can go hand in hand.

Future Potential and Opportunities

1. Integration with Blockchain

Blockchain technology offers great potential in supporting more secure and transparent electronic signatures. Blockchain can be used to record every transaction involving electronic signatures, thereby increasing accountability and preventing counterfeiting.

2. Digital Ecosystem Development

Indonesia has a great opportunity to develop a more inclusive digital ecosystem. This can be done by expanding internet access in remote areas, increasing the availability of digital devices, and providing incentives for companies to adopt new technologies.

3. International Opportunities

In a global context, electronic signatures can facilitate cross-border employment agreements. Multinational companies operating in Indonesia can use electronic signatures to facilitate the management of employment relationships with foreign workers. However, harmonization of international regulations is needed to support this.

Strategic Recommendations

Based on the findings of the study, here are strategic recommendations to encourage the use of electronic signatures in Indonesia:

1. Improved Technical Regulations

The government needs to strengthen the technical regulations governing electronic signatures' security and reliability standards. This includes establishing operational guidelines for PSrE and ensuring that the systems used can deal with digital threats.

2. Increasing Digital Literacy

Digital literacy programs must be prioritized, involving the government, companies, and educational institutions. Training designed for workers and employers can help improve understanding of the legality and benefits of electronic signatures.

3. Infrastructure Development

The government needs to invest in developing digital infrastructure, including expanding internet access in remote areas. This will ensure that the adoption of e-signatures can be carried out evenly throughout Indonesia.

4. Incentives for MSMEs

MSMEs often face financial barriers when adopting new technologies. The government can provide incentives through software subsidies or free training programs to encourage the use of electronic signatures among MSMEs.

5. Improved Data Security

E-signature service providers must continuously improve their security systems to prevent forgery and data leakage. The government can encourage innovation in this area through cooperation with the private sector.

6. Multisectoral Approach

Implementing e-signatures requires an approach involving various sectors, including law, technology, and education. Thus, the adoption of this technology can run holistically and sustainably.

Conclusion

Electronic signatures are now an important instrument in the era of digitalization, including in labour relations, with legal recognition given through the ITE Law, PP 35 of 2021, and Law 1 of 2024, which shows a strong legal basis in Indonesia. As a legal tool in employment agreements, electronic signatures replace conventional signatures, supporting the efficiency, flexibility, and modernization of legal document management. However, their implementation faces challenges such as uneven digital infrastructure in Indonesia, low digital literacy among workers and employers, and data security issues related to falsification and misuse of personal data. Gaps in internet access in remote areas and a lack of understanding of the benefits of this technology are often major obstacles. At the same time, implementation costs, especially for small and medium-sized enterprises (SMEs), are also significant constraints. The government plays an important role in supporting implementation through strategic policies, such as the development of equitable

digital infrastructure, digital literacy programs, and strengthening technical regulations and data security. By adopting blockchain technology and learning from developed countries, Indonesia can strengthen its digital ecosystem, increase acceptance of electronic signatures, and ensure its security, so that it can become an important instrument that supports efficiency and fairness in labour relations in the digital era.

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