VOLUME 2 ISSUE 4 (2024)

E-ISSN 2988-5345

THE ROLE OF CIVIL LAW IN REALIZING PERSONAL DATA SECURITY IN THE ERA OF DIGITAL TRANSFORMATION IN INDONESIA

Aip Piansah¹

¹ UIN Sunan Gunung Djati Bandung

E-mail: 1) aippiansah45@gmail.com

Abstract

This study discusses the role of civil law in realizing personal data security in Indonesia in the midst of the digital transformation era. With the rapid development of information technology, personal data has become very vulnerable to leakage and misuse, so legal protection is crucial. This study uses a normative juridical approach with a descriptive-analytical method to examine related laws and regulations, including the Civil Code (KUHPer) and the Personal Data Protection Law, as well as the challenges in their implementation. The results of the study show that although civil law provides an important legal framework, challenges such as lack of public awareness, suboptimal law enforcement, and complicated legal procedures hinder the effectiveness of personal data protection. Cases of personal data breaches reveal the potential for civil law mechanisms to provide protection, but they are often insufficient to effectively prevent breaches. Recommendations include increasing public awareness, strengthening law enforcement, simplifying legal procedures, and collaboration between the government, the private sector, and the public to strengthen personal data protection in Indonesia. This research is expected to provide insights and recommendations to improve personal data protection regulations in the digital era.

Keywords: Civil Law, Data Security, Digital Transformation

1. INTRODUCTION

In the era of digital transformation, personal data security is a very crucial issue in Indonesia, especially in line with the rapid development of information and communication technology. The digitalization process that touches almost all sectors of life—including the economy, education, health, and government—has created a new ecosystem that relies heavily on the collection, storage, and processing of personal data. Digital services such as social media, e-commerce, mobile apps, and fintech platforms are increasingly integrating personal data into their operations. This data includes sensitive information such as personal identity, consumer preferences, transaction history, and biometric data. With the increasing volume and variety of data managed by both private and public entities, risks to the security and privacy of personal data are increasing (Poernomo, 2023).

However, behind the convenience and efficiency offered by digital technology, there is a real threat to data leakage and misuse. Personal data leaks can occur due to weaknesses in the cybersecurity system, either due to negligence on the part of the data manager, hacking attacks, or irresponsible third-party actions. In Indonesia itself, data leak cases involving large corporations and government institutions have become a serious concern, given their widespread impact on individual security and potential misuse of information. The inability

to protect personal data can lead to financial losses, identity theft, and even extortion of affected individuals (Nainggolan, 2022).

Weak regulations and law enforcement related to personal data protection in Indonesia have further exacerbated the situation. Although the government has passed the Personal Data Protection Law (PDP Law), its implementation still faces many challenges, including a lack of a strong legal infrastructure and low public awareness of the importance of safeguarding personal data. Thus, the protection of personal data in Indonesia depends not only on technology and regulatory policies, but also on collaboration between the government, the private sector, and the public in creating a stronger awareness and culture of privacy protection (Monica & Saputra, 2022).

Ultimately, the security of personal data in the digital era is not only an individual responsibility, but also a collective obligation involving various stakeholders. Without serious and coordinated efforts, the risk of data leakage and misuse will continue to increase as technology develops. This shows the importance of the role of civil law in providing protection, compensation for victims of violations, and sanctions for violators, so that public trust in the use of digital services can be maintained and risks that arise can be minimized (Pratama et al., 2024).

The role of law, especially civil law, is very important in realizing the security and protection of personal data in Indonesia. Civil law provides the basis for regulating the rights of individuals regarding their personal data, as well as mechanisms for holding parties accountable for violating privacy or misusing such data. Although Indonesia already has several regulations governing the protection of personal data, such as the Personal Data Protection Law, challenges in implementation and enforcement remain a major problem. In this context, civil law plays a key role in providing effective legal protection through mechanisms of civil liability, compensation, and sanctions for violators (Datau et al., 2023).

The civil law approach to personal data security in the digital era focuses not only on prevention, but also on enforcing the rights of victims whose data has been misused. With the existence of civil lawsuits, aggrieved parties have access to compensation and redress for privacy violations they experienced. Therefore, the protection of personal data within the framework of civil law not only provides a sense of security for the public, but also becomes an important instrument in maintaining public trust in the use of digital services in Indonesia. In this article, we will discuss further the role of civil law in realizing personal data security, the challenges faced, and the steps that can be taken to strengthen legal protection in Indonesia in the midst of rapid digital transformation (Hidayat et al., 2022).

2. IMPLEMENTATION METHOD

This study uses a normative juridical approach to analyze the role of civil law in realizing personal data security in Indonesia in the era of digital transformation. This approach focuses on the study of laws and regulations, legal doctrines, and legal principles relevant to personal data protection. Descriptive-analytical methods are applied to provide a

Volume 2 ISSUE 4 (2024)

E-ISSN 2988-5345

comprehensive overview of the role of civil law in protecting personal data as well as the challenges and opportunities in its application in Indonesia. The data used in this study is secondary data, including primary legal materials such as the Personal Data Protection Law, the Civil Code (KUHPer), and other related regulations. In addition, secondary legal materials such as books, journals, and scientific articles are also studied to delve deeper into this topic, along with tertiary legal materials such as legal encyclopedias and dictionaries. This study adopts several approaches, including a legislative approach to review related regulations, a conceptual approach to understand relevant legal concepts, and a case approach to analyze cases of personal data violations that occur in Indonesia. Data collection techniques are carried out through literature studies, where various legal sources are systematically collected, studied, and analyzed. The collected data is then analyzed qualitatively with a descriptive-analytical approach, to describe and assess the role of civil law and the effectiveness of legal mechanisms in handling personal data violations. This study aims to provide a comprehensive overview of how civil law can play an optimal role in the protection of personal data, and provide recommendations for future regulatory improvements (Sugiyono, 2018).

3. RESULTS AND DISCUSSION

Result

The Role of Civil Law in Personal Data Protection

Based on a study of laws and regulations, civil law in Indonesia, which includes the Civil Code (KUHPer) and the Personal Data Protection Law (PDP Law), plays a vital role in providing protection for personal data. As part of the legal system that governs civil relations between individuals, civil law provides a juridical basis that establishes the rights of citizens over their personal data. These rights include the right to privacy, which is recognized as a fundamental human right, and the right to security of personal data that they entrust to third parties, be it governments, companies, or digital service providers. Civil law provides a mechanism that allows individuals to hold individuals accountable in the event of a violation of their rights regarding personal data. For example, if a person's data is accessed unauthorised, disseminated without permission, or misused, the individual has the right to file a civil lawsuit to seek compensation for the losses incurred. This includes both material and immaterial losses, such as financial losses due to identity theft or psychological disorders due to privacy violations. The Criminal Code, with its provisions on civil liability and compensation, provides a way for victims to obtain recovery through legal proceedings (Kumalaratri & Yunanto, 2021).

Furthermore, the relatively new Personal Data Protection Law (PDP Law) in Indonesia strengthens the protection of personal data by establishing more specific standards regarding data processing, storage, and use. The PDP Law also emphasizes the importance of individual consent before their personal data can be used by other parties, and requires data managers to maintain data security and confidentiality. In the event of a violation, the PDP Law gives legal power to individuals to sue the responsible party through civil mechanisms, apart from administrative and criminal sanctions that are also regulated. Thus, civil law serves not only as an instrument of passive protection, but also as a tool for individuals to actively enforce their rights. The civil lawsuit mechanism allows the public to

obtain justice and compensation for the losses experienced, as well as providing incentives for parties who process personal data to be more responsible in maintaining the privacy and security of the information. This shows that civil law, especially in the context of personal data protection in the digital era, has an essential role in maintaining a balance between individual rights and the interests of the rapidly developing economy and technology.

Challenges in the Implementation of Personal Data Protection

Although there are regulations governing personal data protection in Indonesia, such as the Personal Data Protection Law (PDP Law), its implementation still faces a number of significant challenges. One of the main challenges is the low awareness and understanding of the public regarding their rights related to personal data protection. Many individuals do not fully understand the importance of keeping their data confidential or how their personal data can be misused by third parties. This is compounded by a lack of knowledge of the rights provided by the PDP Law, such as the right to know how personal data is used, the right to delete data, or the right to give or withdraw consent regarding data processing. This lack of awareness results in a lack of individual efforts to assert their rights when their personal data is violated. People tend not to report personal data breaches, either because of ignorance, distrust of the legal system, or the assumption that the legal process that must be passed will take a long time and be expensive. This condition creates an opening for offenders to continue to carry out their actions without worrying about serious consequences (Intani et al., 2024).

In addition, law enforcement that has not been maximized is also a big challenge in realizing effective personal data protection. Although regulations have provided for administrative, civil, and criminal sanctions for personal data protection violations, their implementation is often weak. Many cases of personal data leaks are not followed up with strict legal processes. Even in some cases that have reached the legal realm, the sanctions given are often not severe enough to provide a deterrent effect to the perpetrator. Civil sanctions, such as fines or damages, may only be considered as operational costs by the infringing company or individual, while the losses suffered by the victim are often much greater, both material and immaterial in terms of damages. In addition, the legal infrastructure in Indonesia related to personal data protection is still in the development stage. Institutions responsible for the supervision and enforcement of personal data protection laws, such as data protection authorities, have not been fully able to function optimally. This is due to limited resources, lack of coordination between institutions, and delays in adapting to rapidly changing technological developments.

The cases of data leaks that have been exposed, such as massive data leaks from several technology companies and digital platforms, show how vulnerable the personal data protection system is in Indonesia. These cases also highlight the weak oversight of data management and the lack of accountability from those who are supposed to be responsible for keeping the data secure. While regulations such as the PDP Law have the potential to strengthen the protection of personal data, their success depends heavily on the extent to which law enforcement can be carried out effectively and consistently. Without serious efforts to improve law enforcement and increase public awareness, these challenges will continue to hamper efforts to protect personal data across the board in the era of digital transformation.

ZONA LAW AND PUBLIC ADMNISTRATION INDONESIA (ZLPAI) E-ISSN 2988-5345

VOLUME 2 ISSUE 4 (2024)

Effectiveness of Civil Law Mechanism

An analysis of a number of cases of personal data breaches in Indonesia shows that civil law mechanisms, such as civil lawsuits and compensation claims, have great potential in protecting the rights of individuals harmed by misuse or leakage of personal data. Civil lawsuits allow individuals who feel aggrieved to sue the party deemed responsible for the violation, whether in the form of companies, digital service providers, or other third parties. Through this mechanism, victims of violations can file a claim for compensation to recover material and immaterial losses experienced, such as financial losses due to identity theft or emotional losses due to privacy violations. However, the effectiveness of this mechanism is often hampered by a number of factors. First, the civil law procedures that apply in Indonesia tend to be complex and convoluted. The litigation process in court can take a long time, with stages involving evidence collection, preparation of legal documents, and various trials that are often burdensome for the plaintiff. For many individuals who have fallen victim to personal data breaches, facing this complicated legal process is a challenge in itself, especially for those who do not have adequate legal knowledge or easy access to legal assistance (Setiawan et al., 2024).

Second, the high cost is often a barrier for individuals to file civil lawsuits. Civil courts require a lot of costs, including lawyer fees, evidence collection, and court administration. For victims of personal data breaches who are generally individuals or ordinary consumers, these costs can far exceed the potential damages they may obtain. This condition makes many victims hesitant to continue with the lawsuit, even though they have a strong basis to sue the violator. Third, the uncertainty of the outcome of the civil process is also a factor that often makes victims reluctant to involve themselves in litigation. In many cases, the outcome of a civil lawsuit cannot be predicted with certainty. Judges have broad discretion in interpreting facts and law, and the final outcome of a case can differ depending on the complexity of the facts, the quality of the evidence presented, and the legal interpretation used. This uncertainty adds to the psychological burden for victims who have already suffered losses due to personal data breaches.

However, the cases that have been successfully won by victims of personal data breaches give an idea that civil law has the potential to be an instrument for the protection and restoration of individual rights. In some cases, courts have decided to provide significant compensation to victims, which not only helps recover their losses, but also serves as a warning to data management entities to take more responsibility for maintaining data security and privacy. With a ruling in favor of the victim, the civil law mechanism can also serve as a tool to encourage parties involved in the management of personal data to be more transparent and pay attention to strict security standards. These cases show that civil law in Indonesia actually has a strong enough framework to provide legal protection for victims of personal data breaches. However, in order for this mechanism to function more effectively, reforms are needed in various aspects, such as simplifying legal procedures, reducing litigation costs, and increasing access to legal aid for the wider community. In addition, the legal system also needs to provide more certainty guarantees for victims that the legal process they undergo will provide fast and adequate justice. Thus, civil law can play a more optimal role in protecting individual rights and maintaining privacy in the digital era.

Recommendations for Regulatory Improvements

To strengthen the protection of personal data in Indonesia, strategic steps need to be taken both at the regulatory and implementation levels. First, increasing public awareness of the importance of personal data protection must be a top priority. Many individuals do not fully understand their rights regarding privacy and personal data, making them vulnerable to misuse of information. Through systematic education campaigns and continuous socialization, both by the government, non-governmental organizations, and the private sector, people need to be equipped with sufficient knowledge about data protection rights, risk of leakage, and ways to protect their personal data. This education is not only aimed at digital users, but also institutions and companies that manage large amounts of data. Second, law enforcement must be strengthened with more effective mechanisms to deal with personal data protection violations. Currently, many cases of violations do not receive serious treatment or are not accompanied by adequate sanctions. For this reason, law enforcement authorities must be equipped with sufficient resources and broader authority to conduct investigations into personal data breaches. In addition, the imposition of heavier sanctions, both in administrative, civil, and criminal forms, will provide a stronger deterrent effect to violators. Personal data managers, including technology companies and digital service providers, must take full responsibility for the security of the data they manage, with periodic audits and strict supervision from the authorities (Khoirunnisa & Jubaidi, 2021).

Third, there needs to be reform in legal procedures related to civil lawsuits regarding personal data violations. Simplifying legal procedures will provide easier access for individuals who want to assert their rights, so that victims of violations are not hampered by the complexity of the litigation process. In addition, reducing the cost of filing civil lawsuits is crucial, especially for people who do not have enough resources to be involved in long and expensive legal proceedings. The provision of pro bono legal aid or lawyer subsidies for victims of personal data breaches will also be very helpful in expanding access to justice.

Fourth, collaboration between the government, the private sector, and community institutions needs to be increased to create a more comprehensive and effective personal data protection ecosystem. Governments, as key regulators, must work closely with technology companies and service providers to ensure high data security standards are implemented consistently. The private sector must be more proactive in implementing clear and transparent privacy policies and investing in capable cybersecurity technologies. Meanwhile, non-governmental organizations can act as independent watchdogs who help ensure that individuals' rights to privacy are properly protected, as well as provide advocacy for those who experience violations. With close cooperation between all parties, Indonesia can build a more resilient personal data protection system, especially in the era of increasingly complex digital transformation. In addition, adaptive and flexible regulations need to be implemented to face the challenges that continue to evolve along with the rapid advancement of technology, so that personal data protection can continue to be relevant and effective in the future.

Discussion

The results of the study show that civil law in Indonesia plays a crucial role in providing protection for personal data, by providing a clear legal framework and mechanism

VOLUME 2 ISSUE 4 (2024) E-ISSN 2988-5345

that allows individuals to hold individuals accountable for violations that occur. Through the Civil Code (KUHPer) and the Personal Data Protection Law (PDP Law), individuals have the right to demand compensation and obtain recovery if their personal data is misused. However, although civil law provides a path to justice, its implementation still faces a number of significant challenges that need more attention in the context of personal data protection in the digital era. One of the main challenges faced is the lack of public awareness and understanding of their rights related to personal data protection. People generally do not fully understand the importance of safeguarding personal data or how to protect their sensitive information in the digital world. This ignorance often makes individuals hesitant to report when their data is violated or not exercising their legal rights to the fullest. In addition, companies and entities that manage data also do not always provide adequate transparency or education to consumers regarding their rights and data management responsibilities, which further exacerbates the situation (Frendistya & Fakrulloh, 2024).

On the other hand, the effectiveness of civil law mechanisms in handling personal data breaches is often limited by procedural complexity and high litigation costs. Legal proceedings in civil courts, which involve lawsuits, evidence gathering, and other administrative procedures, are often time-consuming and costly. For many individuals who experience personal data breaches, especially those from the lower middle class of society, this challenge makes civil lawsuits an unattractive option. They may be reluctant to engage in lengthy and expensive legal proceedings, even though they are entitled to compensation. This reinforces the impression that access to justice in the field of personal data protection is far from ideal, as few victims have the resources to demand their rights. In addition, while civil law allows for prosecution of violators, the sanctions imposed are often not severe enough to provide a significant deterrent effect. Many violators, especially large corporations, prefer to pay compensation or fines as "operational costs," rather than making substantial improvements in their data security systems. This suggests that the existing civil sanctions system may need to be strengthened, both through an increase in the amount of damages that can be claimed by victims and through the imposition of harsher additional sanctions against repeat offenders (Wahyuni et al., 2024).

Thus, while civil law in Indonesia has a strong foundation for protecting personal data, there is an urgent need to improve its implementation to make it more effective. These efforts include increasing public awareness of data protection rights, simplifying legal procedures, reducing litigation costs, and stricter enforcement of laws against breaches. In addition, cooperation between the government, the private sector, and the public needs to be increased to create a legal ecosystem that is more responsive and accommodating to the challenges of personal data protection in the era of digital transformation. Only with this holistic approach can civil law function optimally as an instrument for the protection of people's privacy rights in Indonesia. The cases of personal data breaches analyzed in this study provide a clear picture of the potential of civil law in protecting individual rights. On the one hand, civil law mechanisms allow victims to obtain compensation and recovery for the losses they have suffered as a result of personal data breaches. However, on the other hand, these cases also highlight significant weaknesses in the implementation and effectiveness of the existing legal system. The increasing use of digital technology in various aspects of Indonesia's life has brought new challenges that have not been fully overcome by existing regulations. Therefore, urgent improvements are needed to ensure that the civil law

framework remains relevant and able to provide adequate protection in the face of new risks that arise in the digital era. The rapid development of technologies, such as big data, artificial intelligence, and the Internet of Things (IoT), has increased the volume and complexity of collecting, processing, and storing personal data. This makes people's personal data increasingly vulnerable to leakage and misuse by irresponsible parties. While civil law provides a basic framework for protecting individuals from privacy violations, existing regulations need to be updated in order to effectively address these new challenges. The new Personal Data Protection Law (PDP Law) in Indonesia is a step forward, but its implementation needs to be accompanied by other regulatory updates and strengthening the law enforcement framework (Martitah et al., 2023).

One of the important recommendations is to increase public awareness of their rights related to personal data protection. The public needs to be equipped with knowledge about the importance of protecting their personal data, as well as understanding the rights guaranteed by the PDP Law. Through education, public campaigns, and wider socialization, people can become more proactive in protecting their privacy and reporting violations if they occur. This will encourage more lawsuits against data breaches, which in turn increases the accountability of companies and organizations in managing personal data. In addition, law enforcement must be improved to be more effective in handling cases of personal data breaches. Strengthening law enforcement institutions and stricter supervision of companies or entities that manage data are essential to prevent future breaches. Responsible authorities must be equipped with adequate resources, as well as have the authority to impose heavier sanctions on violations, so as to provide a greater deterrent effect (Alfiani, 2024).

Simplification of legal procedures is also an important step to ensure wider access for victims of personal data breaches in filing civil lawsuits. Faster litigation procedures and more affordable costs will provide greater opportunities for individuals to assert their rights without being constrained by the cost factor or complexity of the legal process. Thus, the civil lawsuit mechanism can function more optimally as a tool to protect people's privacy rights. Ultimately, increased cooperation between the government, the private sector, and civil society is essential to create a more comprehensive personal data protection ecosystem. Governments must regulate regulations that are progressive and relevant to technological developments, while the private sector must ensure that strict data security standards are implemented in every aspect of their operations. Community institutions also have a role in advocating for privacy rights and providing education to the public. With the proper implementation of these recommendations, it is hoped that personal data protection in Indonesia can be strengthened. Individual rights will be more protected, and existing regulations will be more responsive to the dynamics of the digital era, thus creating more solid data security in the future (Famudin, 2023).

4. CONCLUSION

The results of this study show that civil law in Indonesia has an important role in protecting personal data in the era of digital transformation. Civil law, through the provisions of the Civil Code (KUHPer) and the Personal Data Protection Law, provides a legal framework that establishes individual rights to personal data as well as a mechanism to hold

VOLUME 2 ISSUE 4 (2024)

E-ISSN 2988-5345

individuals accountable for violations. However, significant challenges such as lack of public awareness, suboptimal law enforcement, and complicated legal procedures hinder the effectiveness of personal data protection. Cases of personal data breaches reveal that civil law mechanisms can provide protection and compensation for victims, but are often inadequate to effectively prevent breaches. To improve the protection of personal data, efforts are needed to increase public awareness of their rights, strengthen law enforcement with stricter sanctions, and simplify legal procedures to make them more accessible. Collaboration between the government, the private sector, and the public is also key to creating a more comprehensive personal data protection system. Overall, although existing regulations provide an important legal foundation, there is still an urgent need for reform and improvement so that civil law can play a more effective role in facing the challenges of personal data protection in the digital era.

REFERENCES

- Alfiani, F. R. N. (2024). Regulation And Literacy Must Strengthen Digital Transformation. *Asian Journal of Engineering, Social and Health*, 3(1), 94–108. https://doi.org/10.46799/ajesh.v3i1.213
- Datau, S. Y., Fauza Mayana, R., & Amirulloh, M. (2023). Harmonization of Notary Office Law With ITE Law Related to Electronic Notary Protocol. *Legal Brief*, *12*(3), 2722–4643. https://doi.org/10.35335/legal.Harmonization
- Famudin, F. (2023). Discourse Of Electronic Evidence-Based Police Investigation In The Era Of Digital Transformation. *Jurnal Legalitas*, 16(2), 198–216. https://doi.org/10.33756/jelta.v16i2.20901
- Frendistya, D., & Fakrulloh, Z. A. (2024). Legal Reform of Restrictions on the Use of Artificial Intelligence (AI) in Order to Maintain Public Law in Indonesia. https://doi.org/10.4108/eai.25-5-2024.2349444
- Hidayat, A., Sugiarto, L., & Pujiono, P. (2022). Restoring Social Justice Through Legal Literacy and Digital Ethics after Covid-19 Pandemic in Indonesia. 1–13. https://doi.org/10.4108/eai.8-6-2021.2314377
- Intani, A. A., Annisa, F., & Salim, A. (2024). *Legal Analysis : Accountability on Developing Artificial Intelligence in Healthcare Industry in Indonesia*. *I*(1), 1–19.
- Khoirunnisa, & Jubaidi, D. (2021). Optimizing Democracy: The Political Law of Digitization Policy for the Prevention of Election Disputes in Indonesia. *Ilomata International Journal of Social Science (IJSS)*, 2(1), 41–49.
- Kumalaratri, G., & Yunanto. (2021). Urgency of the Personal Data Protection Bill on Privacy Rights in Indonesia. *Jurnal Hukum Unissula*, *37*(1), 1–13. https://doi.org/10.26532/jh.v37i1.13604
- Martitah, M., Hidayat, A., Anitasari, R. F., Rahman, M. A. M., & Aini, T. R. (2023). Transformation of the Legislative System in Indonesia Based on the Principles of Good Legislation. *Journal of Indonesian Legal Studies*, 8(2), 545–594. https://doi.org/10.15294/jils.v8i2.69262
- Monica, D. R., & Saputra, R. A. (2022). Legal Policy In Handling Cyber Crime For Creating Personal Data Security. *Ijcrt*, *10*(9), 984–990.
- Nainggolan, B. (2022). *Legal Dynamics in the Digital Era: Navigating the Impact of Digital Transformation on Indonesian Society*. *x*(225), 714–728.

- Poernomo, S. L. (2023). Transformative Justice, Protection of Consumer Personal Data in Online Loan Business in Indonesia. *Russian Law Journal*, 11(3), 559–570. https://doi.org/10.52783/rlj.v11i3.1196
- Pratama, R. A., Rachmawati, S. L., & Mahendra, D. F. (2024). Morality in Public Policy and Law Enforcement: Preventing Human Trafficking and Protecting Personal Data in Indonesia 's Digital Era. 1(3).
- Setiawan, H., Handayani, I. G. A. K. R., Guntur Hamzah, M., & Tegnan, H. (2024). Digitalization of Legal Transformation on Judicial Review in the Constitutional Court. In *Journal of Human Rights, Culture and Legal System* (Vol. 4, Issue 2). https://doi.org/10.53955/jhcls.v4i2.263
- Sugiyono. (2018). Metode Penelitian Kualitatif. Alfabeta.
- Wahyuni, Y., Alam, A. P., & Heryanto, Y. (2024). Digital Transformation: Optimizing Digital Population Identity Activation Services (IKD) in Kuningan Regency. 3(7), 975–986.