Vol. 22 No. 2 September 2026

YURISDIKSI

Jurnal Wacana Hukum dan Sains

Universitas Merdeka Surabaya

ISSN print 2086-6852 **and ISSN Online** 2598-5892

Settings On The Search Index Deletion Mechanism In Order To Ensure Legal Certainty

Anas Rafi Prakasya[1*], Rachmi Sulistyarini[1], Patricia Audrey Ruslijanto[1]

[1]Faculty of Law, Brawijaya University Malang, Indonesia

*Corresponding Author Email:nsrfprksy089@student.ub.ac.id

Article History: Received: March 10, 2026; Accepted: May 07, 2026

ABSTRACT

The digital transformation in Indonesia has triggered fundamental changes in social and economic structures, but in parallel, it has given rise to the risk of permanent negative digital footprints that are destructive to human dignity, as confirmed in the case of the online loan data leak (the case of Indra and Aishah). The main legal problem lies in the existence of incomplete norms and regulatory disharmony between the judicial approach in the ITE Law (PP PSTE 71/2019), which requires a court ruling, and the administrative-autonomous paradigm in the PDP Law 27/2022. This study uses a normative legal method through a statute approach, a conceptual approach, and a comparative approach with prescriptive-analytical analysis techniques. The results show that the current judicial mechanism triggers "Absolute Segregation of Justice" due to cost barriers reaching 16 months of the minimum wage (UMP) and systemic delays (WJP score of 0.52). This study formulates a reconstruction of the mechanism through the transfer of authority from the judiciary to an independent PDP Supervisory Agency. This reconstruction is based on the ethical justification of data subject sovereignty and the application of the Balancing Test procedure through a transparent variable combination matrix. The study's conclusion confirms that the transformation to an administrative pathway is a legal imperative to address the compliance trap for ESOs and ensure legal certainty and the effective and efficient rehabilitation of data subjects' reputations in the era of surveillance capitalism.

Keywords:personal data, data deletion, index deletion, legal certainty, personal data protection.

1. INTRODUCTION

The internet revolution in Indonesia since the mid-1990s has been more than a technological leap, but a fundamental overhaul of social structures through e-commerce, economic transformation through fintech, and bureaucratic modernization through e-government. However, the advancements brought by this digital ecosystem have brought serious structural consequences: Digital Permanence, a condition in which information, especially negative information, tends to be eternal, accessible indefinitely, and spread across jurisdictions without effective control by the individual concerned. This poses an existential threat to individual dignity and honor, as experienced by victims like Indra Kreibel and Aishah, who suffered permanent reputational damage, intimidation, and psychological trauma due to the theft and misuse of their personal data for illegal online lending (pinjol) purposes operating without consent.

Constitutionally, privacy protection and personal data protection are guaranteed in Article 28G paragraph (1) of the 1945 Constitution of the Republic of Indonesia, which states that everyone has the right to protection for themselves and their families regarding their dignity, honor, and personal rights under their own authority. Furthermore, Article 28F guarantees

YURISDIKSI
Jurnal Wacana Hukum dan Sains
Universitas Merdeka Surabaya

ISSN print 2086-6852 **and ISSN Online** 2598-5892

everyone's right to communicate and obtain information. However, there is a sharp legal gap between this constitutional guarantee and the reality of implementing its derivative regulations.

Law Number 27 of 2022 concerning Personal Data Protection (PDP Law) represents a significant step forward in harmonizing Indonesia's data protection legal framework with global standards. The PDP Law recognizes the right to data erasure as a subjective right that can be exercised independently by data subjects against data controllers. However, Article 17 of Government Regulation Number 71 of 2019 concerning the Implementation of Electronic Systems and Transactions (PP PSTE), the implementing regulation of the ITE Law, still requires a "court order" for the implementation of the right to delisting, namely the removal of hyperlinks or search results that refer to negative content in search engines and digital platforms.

These procedural hurdles create a serious paradox: on the one hand, the PDP Law grants data subjects the administrative right to request deletion; on the other hand, the PP PSTE requires costly and slow judicial intervention to realize this right in the context of searchable indexing. This situation creates legal uncertainty for data subjects seeking digital rehabilitation; a compliance trap for Electronic System Operators (ESOs) who lack clarity regarding the procedural path to follow; and economic discrimination, where only individuals or entities with financial capabilities are able to access the deindexing mechanism through the courts.

Therefore, it is necessary to formulate an ideal index deletion mechanism to guarantee legal certainty, procedural efficiency, and data sovereignty of subjects in Indonesia.

2. RESEARCH METHODS

This research is a normative legal research conducted by examining secondary data in the form of laws and doctrinal literature. The approaches used include a statute approach, a conceptual approach, and a comparative approach by examining the legal frameworks in the European Union (GDPR), the United Kingdom (ICO), and South Korea (PIPA/KISA). The legal material collection technique was carried out through library research. All legal materials were analyzed using prescriptive-analytical techniques, namely not merely describing legal gaps (das sein), but using the analytical tools of legal certainty and privacy theories to formulate the form of an ideal data governance mechanism (das sollen).

YURISDIKSI
Jurnal Wacana Hukum dan Sains
Universitas Merdeka Surabaya

ISSN print 2086-6852 and ISSN Online 2598-5892

3. RESULTS AND DISCUSSION

Analysis of the Regulations on Deletion of Indexes in the Current Indonesian Positive Legal System

Before addressing the specific regulatory issues, the right to delisting must first be placed within the evolving framework of Indonesia's positive legal system. Technical recognition of this right began to be accommodated through Government Regulation No. 71 of 2019 concerning the Implementation of Electronic Systems and Transactions (PP PSTE 71/2019). This regulation initially introduced significant innovation by distinguishing between two protection mechanisms: "Data Erasure," which focuses on eliminating data on servers, and "Delisting," which focuses on controlling link visibility in search engines.

However, in practice, this terminological innovation has actually given rise to complex legal problems. Indonesia's current positive legal situation is experiencing acute regulatory disharmony at the intersection of the old PP PSTE system and the new paradigm of data protection. This stems from the construction of the norm in Article 17 paragraph (1) of PP PSTE 71/2019, which radically closes administrative channels and requires a "court ruling" as an absolute requirement for executing delisting. Table 1 below presents the key elements of this judicial mechanism, which is now the main locus problematicus (problem point) in privacy enforcement in Indonesia:

Table1. Analysis of Legal Elements of Article 17 of PP PSTE 71/2019

Legal Elements	Existing Condition Analysis
Initiative Actor	District Court (Judicial) as a single door.
Procedure	Formal civil lawsuit/application mechanism.
Data Subject Position	Weak party with burden of proof and information asymmetry.
Execution Requirements	It is mandatory to attach a "Court Order" to process the delisting.

Source: Processed by Researchers

The construction of Article 17 of the PP PSTE directly positions the district court as the sole gatekeeper for data subjects. This highly formalistic judicial approach places the burden of proof entirely on the applicant, who is in an asymmetrically weak position when challenging global technology corporations. Without a court order, delisting requests cannot be processed by search engines at all, thus crippling individual autonomy. This legal disharmony is particularly stark when contrasted with the protection paradigm of PDP Law 27/2022, which promotes an autonomous administrative compliance mechanism:

YURISDIKSI
Jurnal Wacana Hukum dan Sains
Universitas Merdeka Surabaya

ISSN print 2086-6852 and ISSN Online 2598-5892

Table2. Paradigm Comparison of the ITE Law/PP PSTE vs PDP Law

Component	ITE Law System / PP PSTE 71/2019	PDP Law System 27/2022
Mechanism	Judicial (Litigation)	Administrative (Autonomous)
Nature of Rights	Limited Rights (Judicial Authority)	Subjective Autonomy Rights
Efficiency	Low (6-12 Months)	High (Administrative SOP)
Cost	Rp. 10-35 Million (Including Advocate)	Free (Authority Service)

Source: Processed by Researchers

German legal philosopher Gustav Radbruch (1878–1949) in his work "Gesetzliches Unrecht und übergesetzliches Recht" (1946) formulated that every legitimate legal system must fulfill three fundamental values simultaneously: (1) Gerechtigkeit (Substantive Justice), (2) Zweckmäßigkeit (Usefulness/Utility), and (3) Rechtssicherheit (Legal Certainty). The current index removal mechanism, as regulated in Article 17 of the PP PSTE, fails to fulfill these three values simultaneously.

From a Justice perspective, the requirements for court rulings create serious structural discrimination. The 2026 Provincial Minimum Wage (UMP) projection shows sharp economic disparities between regions, with a figure of Rp5,729,876 for Jakarta and only Rp2,317,601 for West Java. Comparing the minimum litigation cost of Rp10 million to the West Java UMP reveals "structural discrimination," where a worker must sacrifice nearly five months' salary just to restore their digital dignity. From a Benefit perspective, the 6-12 month duration for resolving a case loses its relevance compared to data transmission speeds that reach fractions of a millisecond. From a Legal Certainty perspective, the inconsistency between the PDP Law and the PP PSTE creates a normative vacuum, where rights are substantially guaranteed but cannot be realized procedurally. Based on the World Justice Project (WJP) Rule of Law Index 2025, Indonesia scored only 0.52 (scale 0–1) on sub-factor 7.5 (“Civil justice is free from unreasonable delays”) and ranked 69th out of 143 countries, confirming that Indonesia’s civil justice does face structural challenges in terms of delays.

The failure to fulfill Radbruch's three values due to the complexity of the judiciary ultimately leads to a fundamental deprivation of the right to privacy. Alan F. Westin (1967) in Privacy and Freedom formulated privacy as an individual's capacity to determine when, how, and to what extent information about him or her is communicated to others. Of the four privacy statuses proposed by Westin, the mechanism of Article 17 of PP PSTE 71/2019 directly disables the Reserve status (the ability to withdraw from the public information catalog) and Control status of data subjects. Without the ability to withdraw negative information quickly, efficiently, and

YURISDIKSI
Jurnal Wacana Hukum dan Sains
Universitas Merdeka Surabaya

ISSN print 2086-6852 **and ISSN Online** 2598-5892

cheaply, individuals are trapped in information asymmetry. Electronic System Providers (PSEs) are also trapped in a Compliance Trap: complying with the PDP Law to delete data risks civil lawsuits, but refusing to delete data risks administrative fines. This condition is doctrinally classified as an Incomplete Norm, where rights are recognized at the legal level, but the implementation procedure is technically paralyzed.

Reconstruction of the search index deletion mechanism in accordance with the principles of justice, certainty and utility.

The prescriptive solution proposed by this research is based on Immanuel Kant's categorical imperative: "Treat man... always as an end in himself and never merely as a means." (Grundlegung zur Metaphysik der Sitten, 1785). In the context of personal data, this means that personal data is a manifestation of human personality (Menschheit), processing data without the subject's control is degrading humans to means/commodities, and the Right to Delisting is an instrument of Moralische Umkehr (Moral Transformation) that allows individuals to erase "die alte Menschheit" (the old version of man recorded in digital archives) in order to start a new life (Wiedergeburt / rebirth). Therefore, the reconstruction of the mechanism must shift completely to an administrative path under the control of an independent, professional, and having teeth (having teeth) enforcement agency.

Table3. Fundamental Comparison of Existing System vs. Proposed Reconstruction

Aspect	PP PSTE System 71/2019 (Existing)	Ideal Administrative Reconstruction (Proposal)
Executive Authority	District Court Judge (Judicial)	Commissioner of the PDP (Independent Administrative) Supervisory Agency
Total Processing Time	6 – 12 months (or even more)	±21 working days (SLA: 72 hours + 14 days + 7 days)
Costs for Data Subjects	Rp. 10–35 million (+ indirect costs)	Free (state-funded/self-funding)
Institutional Funding Sources	APBN (through MA)	Self-Funding (UK Tiers ICO model)
Decision Standards	Judge discretion (varies between courts)	Standardized Balancing Test (objective matrix)
Sanctions for Naughty PSE	There is nothing explicit	Progressive: Warning → Admin Fine → Suspension → Criminal (Ultimum Remedium)
Accessibility	Must be in Jakarta/domiciled district court	National online portal (from anywhere)
Technical Capacity	General (not IT/cyber specific)	Digital forensic audit unit (KISA model)

Source: Processed by Researchers

To ensure the independence of the PDP Institution from the annual political budget cycle, this study recommends adopting a self-funding model that has proven successful in the United

YURISDIKSI
Jurnal Wacana Hukum dan Sains
Universitas Merdeka Surabaya

ISSN print 2086-6852 **and ISSN Online** 2598-5892

Kingdom through the ICO. Under this model, all organizations processing personal data in Indonesian jurisdiction, from large corporations to sole traders, are required to register and pay an annual data protection fee to the PDP Institution, except those that meet minor exceptions. Referring to the UK ICO model, the Indonesian PDP Institution could implement a registration fee system based on Tiers (£52, £78, £3,763) to fund its operations independently and remain independent from executive budget intervention.

The concrete manifestation of this authority reform is embodied through a 4-Stage Administrative Standard Operating Procedure (SOP) that adopts global jurisdictional efficiency: Stage 1 is the Initial Request to the Data Entity (PE). The data subject submits a direct request. Adopting the strictness of South Korea's PIPA, the PSE is required to respond within an absolute 72 hours. This fast-track deadline is imperative to prevent viral reputational damage. Stage 2 is the Escalation of the Report to the PDP Institution. If the PSE misses the deadline, the dispute is escalated to the PDP Institution's online portal. Adopting the UK Information Commissioner's Office (ICO) model, this process is free of charge to eliminate the economic discrimination of the old court system. Stage 3 is the Balancing Test. The PDP Institution has a maximum of 14 working days to execute a holistic evaluation based on parameters inspired by the European Article 29 Working Party (WP225) guidelines. Stage 4 is the Final Deletion Order. The PDP Agency issues a binding Final Administrative Order (equivalent to an Enforcement Notice in the UK). The PSE is required to execute the removal within a maximum of 7 working days.

To ensure objectivity and prevent arbitrary censorship, PDP institutions are required to use combinatorial logic that integrates variables such as subject status, data type, impact level, and, crucially, temporal variables (age/data). The following matrix is adapted from the 13 Criteria of the European Union's WP29 and adapted to the Indonesian context:

Table 4. Temporal-Based Balancing Test Decision Matrix

Case Scenario	Temporal Relevance	Ideal Decision
Ordinary people	Sensitive Data (>5 Years)	Presumption Removed (Fresh Start)
Public Figure	Corruption/Performance Related	Rejected (Public Interest)
Childhood	Digital Footprint < 18 Years	Absolute Delete (Minor Protection)
Minor Crime Data	2-5 Years Range	Casuistry (Rehabilitation Test)

Source: Processed by Researchers

The successful implementation of the Balancing Test instrument will have no legal significance if it is not balanced by a robust law enforcement capacity. Therefore, in terms of

YURISDIKSI
Jurnal Wacana Hukum dan Sains
Universitas Merdeka Surabaya

ISSN print 2086-6852 and ISSN Online 2598-5892

enforcement, the sanction architecture must be designed in an escalatory and progressive manner to overcome the power asymmetry between state sovereignty and global technology giants. Referring to the framework of the PDP Law 27/2022, this study formulates sanctions that are orchestrated hierarchically and in stages. Administrative fines are positioned as the primary coercive weapon, while corporate criminal sanctions are localized exclusively as the final artillery or final bullet (Ultimum Remedium), as illustrated in the following hierarchy:

Table 5. Sanction Levels and Triggers

Types of Sanctions	Trigger	Form of Sanction
Written Warning	First administrative default (SLA >72 hours without valid reason)	Official warning letter; published on the PDP Institute website
Administrative Fine	Systemic defiance of the Final Delete Order	Up to 4% of global turnover or 10% of annual revenue in Indonesia
Temporary Suspension	Repeat offense after fine	Temporary blocking of services in Indonesia
Corporate Criminal Penalty	Mens rea: Intentional manipulation of the algorithm to prevent the execution of commands	Criminal fines + additional penalties; directors are personally responsible

Source: Processed by Researchers

The implementation of this pyramidal hierarchy of sanctions is designed to create a devastating deterrent effect on Electronic System Operators (ESOs) globally. This approach undermines the classic doctrine of societas delinquere non potest, allowing corporate directors to be prosecuted for exploiting citizens' data. However, corporate criminal sanctions are strictly positioned as the ultimate measure (Ultimum Remedium), which may only be executed if absolute intent (mens rea) is proven to sabotage the PDP Institution's decision. As the primary coercive instrument, administrative fines up to a percentage of revenue have proven far more effective, as confirmed by the South Korean authorities' enforcement precedent (PIPC) against platform giant Coupang:

YURISDIKSI
Jurnal Wacana Hukum dan Sains
Universitas Merdeka Surabaya

ISSN print 2086-6852 **and ISSN Online** 2598-5892

Table 6. Coupang Case Parameters in South Korea

Parameter	Detail
Reported	Coupang, Inc. (Korea's largest e-commerce platform, listed on the NYSE)
Regulator	Personal Information Protection Commission (PIPC /개인정보보호위원회)
Final Fine	624–625 billion won (~USD 409–410 million), the HIGHEST RECORD in Korean history
Component	• 423.6 M won: Data breach • 201.1 M won: Illegal data collection without consent
Number of Victims	• 33,222,472 registered customers • + 4,338,368 non-customers (recipients of shipments) • Total: ~37.56 million (±65% of Korea's population)
Legal Reasons	• "Deficiencies in basic safety management" (not sophisticated hacking) • Failed breach notification within 72 hours • Poor authentication key management • 4x PIPC warning letters ignored
Official Statement from the Chairman of PIPC	"This accident occurred due to Hickey's lack of safety measures and systems, not sophisticated hacking" — Song Kyung-hee

Source:*Reuters (June 11, 2026); BBC News (11 Jun 2026); The Record (June 12, 2026); Wall Street Journal (Jun 11, 2026)*

This case demonstrates that an independent and "teeth" administrative authority is far more effective in enforcing compliance than a protracted civil litigation process that lacks the technical capacity to understand the complexities of data breaches.

Philosophically, the reconstruction of the 4-Stage SOP administrative mechanism and its sanction architecture reconciles three major ideologies. In Gustav Radbruch's view, the 72-hour time limit provides legal certainty, non-judicial settlement provides benefits, and free access subsidizes justice. From Immanuel Kant's perspective, this transfer of authority destroys the corporate objectification of human data, restoring the dignity of the individual as an End-in-Itself. Ultimately, referring to Alan Westin, the Balancing Test instrument returns the lever of control (reserve) to the data subject, ensuring they are once again the sovereign architects of the circulation of their own digital footprints in cyberspace.

YURISDIKSI
Jurnal Wacana Hukum dan Sains
Universitas Merdeka Surabaya

ISSN print 2086-6852 and ISSN Online 2598-5892

4. CONCLUSION

Based on the comprehensive analysis conducted, this study draws two fundamental conclusions. First, the current regulation of the index removal mechanism in Indonesia's positive legal system is experiencing acute disharmony and a serious state of incomplete norms. The requirement for a "court ruling" in Article 17 of PP PSTE 71/2019, although enacted before the PDP Law 27/2022, is outdated and inconsistent with the spirit of data protection reform. This requirement creates economically discriminatory barriers to access to justice (litigation costs reaching 5–16 times the provincial minimum wage), procedural legal uncertainty, and a failure to simultaneously fulfill the values of justice (Radbruch), benefit (Westin), and legal certainty. This condition also creates a Compliance Trap for Electronic System Providers (PSEs) who lack clear, secure procedural pathways.

Second, the ideal form of regulation for the index deletion mechanism for Indonesia is a fundamental transformation from a judicial mechanism to a purely administrative mechanism operated by an independent Personal Data Protection Supervisory Agency (PDP) with technical and digital forensic capacity, funded through a self-funding mechanism, and equipped with a dispute mediation panel. This mechanism must implement a four-stage Standard Operating Procedure (SOP) with a Service Level Agreement (SLA) totaling ±21 working days (compared to 6–12 months of litigation), implement a standardized Balancing Test through a matrix of variable combinations including a temporal dimension (priority deletion for data >5 years old) and a progressive sanction architecture that adopts international standards (up to 4% of global turnover or 10% of annual revenue) with corporate criminal prosecution as the ultimum remedium. This reform will return data sovereignty to the hands of legal subjects, guarantee substantive and procedural legal certainty, and position Indonesia as a credible and responsive country in global data governance in the era of surveillance capitalism.As a concrete step to realize this reform, the Ministry of Communication and Digital (Komdigi) is urged to immediately ratify the implementing Government Regulation of the PDP Law which adopts this 72-hour time limit, and the legislative body needs to revoke the requirement of a 'court ruling' in Article 17 of PP PSTE 71/2019 to definitively end the disharmony.

REFERENCES

Adachi, H. (Ed.). (2023). Handbook of the history of the philosophy of law and social philosophy. Springer Nature.

Admiral, A., & Pauck, M. A. (2023). Unveiling the dark side of fintech: Legal analysis of illegal online lending in Indonesia. Lex Scientia Law Review, 12(1).

YURISDIKSI
Jurnal Wacana Hukum dan Sains
Universitas Merdeka Surabaya

ISSN print 2086-6852 **and ISSN Online** 2598-5892

Article 29 Working Party. (2014). Guidelines on the implementation of the Court of Justice of the European Union judgment on "Google Spain SL and Google Inc. v. Agencia Española de Protección de Datos (AEPD) and Mario Costeja González" (Case C-131/12) (WP225). https://www.law.kuleuven.be/citip

BBC News. (2026, June 11). South Korea fines e-commerce giant $400m over massive data breach. https://www.bbc.com

Bradford, A. (2020). The Brussels effect: How the European Union rules the world. Oxford University Press.

CEPA. (2025). Mapping the Brussels effect: The GDPR goes global. https://cepa.org

Chambers and Partners. (2026). Data protection & privacy 2026: South Korea. https://practiceguides.chambers.com

CMS Law. (2026). GDPR enforcement tracker report 2025/2026. https://cms.law

Court of Justice of the European Union. (2014). Judgment in Case C-131/12, Google Spain SL and Google Inc. v. Agencia Española de Protección de Datos (AEPD) and Mario Costeja González. https://curia.europa.eu

European Data Protection Board. (2024). Annual report 2023. https://edpb.europa.eu

European Union. (2016). Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data (General Data Protection Regulation). Official Journal of the European Union, L119, 1–88.

Harvard Law Review. (2014). Google Spain SL v. Agencia Española de Protección de Datos. Harvard Law Review, 128, 283–290.

Huda, N. I. I. (2024). Personal data, citizen rights, and the rule of law. Widina Publishing.

Information Commissioner's Office. (2023). Annual report and financial statements 2022/23 (HC 1440). https://ico.org.uk

Kim & Chang. (2023). Amendments to the PIPA passed by the National Assembly. https://www.kimchang.com

Mayer Brown LLP. (2024). UK GDPR and the price of non-compliance: ICO issues new guidance on calculating fines. https://www.mayerbrown.com

MBM Commercial. (2024). Data protection: What are the ICO's enforcement powers? https://www.mbmcommercial.co.uk

Microsoft. (2024). Korea K-ISMS compliance. Microsoft Learn. https://learn.microsoft.com

Personal Information Protection Commission. (2025). Annual report 2024/25. https://www.pipc.go.kr

YURISDIKSI
Jurnal Wacana Hukum dan Sains
Universitas Merdeka Surabaya

ISSN print 2086-6852 **and ISSN Online** 2598-5892

Republic of Korea. (2023). Personal Information Protection Act (PIPA) (Act No. 16930, as amended). National Law Information Center. https://www.law.go.kr

Reuters. (2026, June 11). South Korea fines Coupang $409 mln in country's largest data breach penalty. https://www.reuters.com

Thales Group. (2023). Achieve Korea ISMS-P compliance: Korean personal information and information security management system certification. https://www.thalesgroup.com

The Record. (2026, June 12). South Korea hits Coupang with record $409 million fine over data breach. https://therecord.media

United Kingdom. (2018). Data Protection Act 2018. https://www.legislation.gov.uk

Wall Street Journal. (2026, June 11). South Korea fines Coupang $410 million over data-law breaches. https://www.wsj.com

World Justice Project. (2025). Rule of Law Index 2025. World Justice Project. https://worldjusticeproject.org

Zuboff, S. (2019). The age of surveillance capitalism: The fight for a human future at the new frontier of power. PublicAffairs.

Indonesian Legislation

Government Regulation of the Republic of Indonesia Number 71 of 2019 concerning the Implementation of Electronic Systems and Transactions. (2019). State Gazette of the Republic of Indonesia of 2019 Number 185, Supplement to State Gazette Number 6400.

Law of the Republic of Indonesia Number 11 of 2008 concerning Electronic Information and Transactions. (2008). State Gazette of the Republic of Indonesia of 2008 Number 58, Supplement to State Gazette Number 4843.

Law of the Republic of Indonesia Number 19 of 2016 concerning Amendments to Law Number 11 of 2008 concerning Electronic Information and Transactions. (2016). State Gazette of the Republic of Indonesia of 2016 Number 251, Supplement to State Gazette Number 5952.

Law of the Republic of Indonesia Number 27 of 2022 concerning Personal Data Protection. (2022). State Gazette of the Republic of Indonesia of 2022 Number 196, Supplement to State Gazette Number 6820.

The 1945 Constitution of the Republic of Indonesia.