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FRAMEWORKS FOR DATA PROTECTION IN INDONESIA'S
DIGITAL ECONOMY**Fitriani Rahmadia^{1*}, Aulia Putri Maulida², Dinda Kurneliasari³¹ Department of Law, Universitas Muria Kudus, Indonesia
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DOI: 10.35631/IJLGC.1040050**This work is licensed under** [CC BY 4.0](https://creativecommons.org/licenses/by/4.0/)**Abstract:**

The rapid growth of the digital economy in Indonesia significantly changed the industrial landscape and people's lives. It makes us realize the importance of regulations to protect personal data, which has encouraged the implementation of stricter personal data protection regulations. Indonesian society does not yet fully understand the importance of personal data protection and the potential risks associated with data misuse. This research uses a normative legal research method, which focuses on the study of laws and regulations, legal doctrines, and other relevant legal sources in the context of personal data protection and the digital economy in Indonesia. This approach will analyze how existing regulations such as Law Number 27 of 2022 concerning Personal Data Protection can create a balance between encouraging innovation and protecting individual privacy in the digital economy. The existence of Law Number 27 of 2022 concerning Personal Data Protection provides a clear legal basis in efforts to maintain consumer privacy in the digital economy era. This law strictly regulates how personal data is collected, used, and processed by third parties. The regulation requires every party that manages personal data to be responsible for the security and use of the data transparently. This also allows room for data-based innovation, but with proper controls, this balance will not only protect society from potential data misuse, but also encourage the development of more ethical and responsible technology.

Keywords:

Regulatory Frameworks, Data Protection, Digital Economy

Introduction

The rapid growth of the digital economy in Indonesia has significantly changed the industrial landscape and people's lives. With more than 200 million internet users, Indonesia is the largest market in Southeast Asia in terms of the number of digital users. (We Are Social & Hootsuite, 2020) This development has driven sectors such as e-commerce, fintech, and other technology-based services to grow rapidly. On the other hand, the widespread use of personal data in digital transactions poses a risk to the protection of individual privacy, which is increasingly a major concern in the development of digital technology.

The Indonesian government has begun to realize the importance of regulations to protect personal data, which has encouraged the implementation of stricter personal data protection regulations. In 2016, Indonesia issued Law Number 11 of 2008 concerning Electronic Information and Transactions, which was later updated by Government Regulation Number 71 of 2019 concerning the Implementation of Electronic Systems and Transactions. In addition, in 2020, Indonesia also began preparing a more comprehensive personal data protection law through the Law Number 27 of 2022 concerning Personal Data Protection which is expected to strengthen regulations related to the collection, use, and distribution of personal data in the digital space.

However, although the regulation aims to regulate and protect personal data, major challenges remain in creating a balance between digital innovation that drives economic growth and adequate personal data protection. Policies that are too strict in regulating data use can limit the potential for innovation in sectors that depend on data processing, such as Artificial intelligence (AI), big data analytics, and financial technology. Conversely, regulations that are too loose or ineffective in law enforcement can endanger individual privacy and lead to data leaks that can harm society and companies. Furthermore, the biggest challenge faced by Indonesia in building a data protection regulatory framework is the limited digital awareness and data literacy among the public. Indonesian society does not yet fully understand the importance of personal data protection and the potential risks associated with data misuse. Therefore, a holistic approach is needed that includes not only better regulations but also education and awareness about privacy in the digital space.

The government began actively issuing regulations meant to govern the digital economy after 2010 when the rapid growth of local e-commerce and ride-hailing startups began disrupting conventional businesses. (Nandini, 2019) As of December 2020, the Indonesian digital economy is regulated by at least 14 government entities. While coordination efforts between these entities exist under the National Development Planning Agency (Bappenas) and the Coordinating Ministry of Economic Affairs (CMEA), this has not resulted in comprehensive or coherent policies. For example, despite this coordinating body, the E-commerce Roadmap 2017–2019 was discontinued without any replacement, and the release of the National Cyber Security Strategy has been delayed. The number of regulations affecting the digital economy has increased with the growth of the digital economy. There are over 60 laws and regulations governing the four key policy areas in Indonesia's digital economy, and even more ministerial regulations, such as the Ministry of Transportation Regulation Number 118 of 2019 on Special Rental Transportation, which regulates popular on-demand transportation platforms. Despite the large number of laws and regulations, some areas remain unregulated, specifically in the areas of data privacy and cybersecurity.

Law Number 27 of 2022 concerning Personal Data Protection (UU PDP) emerged in response to the increasingly rapid development of information and communication technology. In this digital era, personal data has become a very valuable commodity. Many companies and other entities collect, store, and utilize personal data for various purposes, from marketing to product development. However, without clear protection, personal data can be misused, creating concerns regarding individual privacy. Law Number 27 of 2022 concerning Personal Data Protection is here to provide legal guarantees and ensure that personal data is well protected from potential misuse.

However, on the other hand, the presence of this regulation also has the potential to challenge the world of innovation, especially in the technology and digital business sectors. Innovation driven by the use of personal data often requires access without strict restrictions. For example, in the health technology sector, personal data can be used for research or development of more sophisticated health applications. Therefore, it is important to find a balance between privacy protection and freedom of innovation. Too many restrictions can hinder potential progress, while lack of oversight can pose a risk of privacy violations.

The importance of this balance is increasingly clear when you see that innovation often relies on the collection and processing of personal data to optimize services. Technology companies, for example, use data to improve user experience or create products that better suit consumer needs. However, without adequate protection, this can lead to excessive data collection or misuse of data by irresponsible parties. Law Number 27 of 2022 concerning Personal Data Protection serves as a reminder that while innovation is key to progress, it should not come at the expense of basic individual rights, such as privacy.

With Law Number 27 of 2022 concerning Personal Data Protection, it is hoped that an environment conducive to technological development will be created, while still maintaining individual privacy. The regulation requires every party that manages personal data to be responsible for the security and use of the data transparently. On the other hand, this regulation also allows room for data-based innovation, but with proper controls. In the long run, this balance will not only protect society from potential data misuse, but also encourage the development of more ethical and responsible technology. This article aims to analyze how Indonesia formulates and implements personal data protection policies in the context of the digital economy, as well as the challenges and opportunities that arise in achieving a balance between encouraging innovation and protecting individual data privacy.

Literature Review

Regulatory Frameworks of Data Protection in Indonesia

The rapid growth of Indonesia's digital economy has been driven by widespread internet penetration, the rise of e-commerce platforms, and the integration of financial technology in everyday life. This digital transformation has fueled innovation and economic opportunity, but it has also raised significant concerns regarding the collection, storage, and use of personal data. In this context, balancing innovation and privacy becomes a central concern, especially in light of increased data breaches and consumer mistrust.

Studies examining Indonesia's regulatory landscape indicate that prior to the enactment of the Law Number 27 of 2022 concerning Personal Data Protection, the country relied on a fragmented set of regulations spread across various sectors, including telecommunications, finance, and e-commerce. These disjointed rules lacked clarity and enforcement mechanisms, limiting their effectiveness. Comparative studies with the European Union's General Data Protection Regulation (GDPR) show that comprehensive, centralized laws enhance both accountability and trust, suggesting that Indonesia's new law could play a similar role if effectively implemented.

The results of this study will produce conclusions regarding how Indonesia can create a regulatory framework that can maintain a balance between personal data protection and encourage innovation in the digital economy sector. Recommendations will also be provided regarding improvements or adjustments to existing regulations to ensure the sustainability and success of these policies in the future. With this approach, it is hoped that this research can contribute to the understanding and development of legal policies related to effective personal data protection in the context of the digital economy in Indonesia.

Methodology

This research uses a normative legal research method, which focuses on the study of laws and regulations, legal doctrines, and other relevant legal sources in the context of personal data protection and the digital economy in Indonesia. This approach will analyze how existing regulations such as Law Number 27 of 2022 concerning Personal Data Protection can create a balance between encouraging innovation and protecting individual privacy in the digital space. Normative Legal Approach means research method will focus on the study of legal norms governing personal data protection, both those contained in national laws and regulations and those regulated in international legal instruments that influence Indonesian policy, such as the European Union regulation (GDPR). This approach aims to understand how applicable legal norms can provide personal data protection while supporting the growth of the digital economy.

This normative legal approach utilizes primary legal sources, namely the text of laws and related regulations, to understand the intent of legislation in protecting individual rights, especially regarding personal data. In addition, this study also examines secondary legal sources, such as legal literature, journals, and expert opinions, in order to provide a more comprehensive perspective on personal data protection regulations in the context of technological developments. This analysis aims to assess the extent to which Law Number 27 of 2022 concerning Personal Data Protection creates the right balance between the need for innovation in the digital sector and the right to privacy that must be respected.

This method will also highlight the provisions in the law regarding the obligations and rights of data controllers and processors in using personal data. Researchers will identify the norms that regulate the rights of personal data subjects, as well as the procedures that must be followed by the parties managing the data. In this way, it can be seen whether Law Number 27 of 2022 concerning Personal Data Protection has provided sufficient space for innovation and technological development, or conversely, hindered it with excessive restrictions.

Innovation and Privacy for Data Protection

In the context of the digital economy, innovation and data protection privacy are intertwined, and both play an important role in the development of the digital industry. Innovation in the digital economy sector, such as e-commerce, fintech, or health technology, relies heavily on the use of personal data. Data is a valuable asset in driving the development of more relevant products and services and personalizing consumer experiences. For example, companies can use consumer transaction data to predict market trends and create more targeted offers. However, this must be balanced with strong protection of individual privacy to avoid data misuse that can harm consumers. In the digital age, privacy law stands as a critical guardian of individual rights amidst the relentless advancement of technology. The significance of privacy laws has never been more pronounced, as personal information becomes increasingly commodified and pivotal to the digital economy. This era of big data, artificial intelligence (AI), and the Internet of Things (IoT) has ushered in unprecedented capabilities for data collection, analysis, and use, challenging traditional notions of privacy and personal space. (Singla, 2024) While being a psychological need, privacy has a real and significant economic impact. Economists have long been interested in understanding the economic value and consequences of the disclosure of personal information and the decision process for sharing personal data. (Wang et al., 2021) With the development of Internet applications, researchers expanded the concept of information privacy as the degree to which an Internet user is concerned about the practices related to the collection and use of personal information. (Naresh et al., 2004)

The law grants data subjects several rights, including: (Ayman Falak Medina, 2024)

- Right to be Informed: Awareness of who is processing their data and for what purpose.
- Right to Rectification: Ability to correct inaccuracies in their data.
- Right to Access: Obtain access to their personal data and supplementary information.
- Right to Erasure and Restriction of Processing: Terminate the processing or request deletion of their data.
- Right Concerning Automated Decision-Making and Profiling: Object to decisions made solely on automated processing.
- Right to Object: Oppose the processing of their data.
- Right to Claim Compensation: Seek redress for damages resulting from data misuse.
- Right to Data Portability: Transfer their data across different services.

If we look at the rapid development of technology in the current era, there will always be a question whether the latest technologies that we adopt will be considered as an innovation in the digital economy or whether the rapid development of technology will result in the privacy of users between each other being easily disturbed? The high growth of the population by using the internet in the Southeast Asian region forms a potential to realize innovation in the world of commerce. This growth can drive the economic growth of the region. Because, as the time goes by, the high population growth, the high potential of human resources, and the high development of technology will be impacted the succeeded in making the use of social media and the internet high. A sign of a change in trend or digital transformation in the trade sector in Southeast Asia is the emergence of start-up businesses or companies such as Shopee, Tokopedia, Lazada, Traveloka, and others. Along with the development of technology, it is increasingly encouraging digital transformation, especially in the trade sector. (Alfujri, 2019)

When it comes to innovation, it is relevant to keep the focus on the interrelationship between privacy, data protection, and measures and tools that promote or hinder the development of new data-driven products and services. With advanced technologies like AI taking off, the need for data is greater than ever and much of it comes from consumers. (Bachlechner et al., 2020) At the same time, the collection and usage of digital personal data and their negligent handling by online platforms endanger privacy. Privacy violation incidences are frequently reported and debated, causing significant privacy concerns and anxiety among consumers of digital services. Therefore, there is an urgent need for proper management systems and regulatory policies to govern privacy-related practices in the big data era. (Wang et al., 2021)

Data protection frameworks typically require that processing of personal data be carried out lawfully, meaning that the basis for processing is expressly authorized by law. The consent of the data subject is frequently relied upon as a lawful basis. Consent should be voluntary, freely given, and evidenced by an affirmative action of the data subject, so it should not be enough to give the data subject pre-checked boxes or default settings. Consent is also typically considered narrowly. For example, consent given for collection and storage of personal medical records cannot be viewed as consent to generation and receipt of unrelated marketing emails. Consent has some weaknesses as a means of legitimizing data processing. Individuals cannot realistically read all of the disclosures made by controllers, and they may not understand the implications of consenting to personal data processing. People may also give consent because the only alternative is to forego the service, meaning they may not have any real choice. Nevertheless, consent remains the only basis for processing in which the data subject has some control over processing of his or her personal data, and efforts are being made to enable consent to be more meaningful, so it remains an important feature of a data protection framework. (Keck et al., 2021) Governments, organizations and individuals increasingly generate, collect and process personal data. A strong data protection framework helps foster consumer trust and increased use of digital tools, which in turn can incentivize investment, competition and innovation in the digital economy.

Data protection frameworks typically require that data processing be fair and transparent, requiring mandatory disclosures to data subjects when data about them is collected, regardless of the legal basis for such collection and processing. Some frameworks require such disclosures to be made to the data subject even if the personal data is obtained from a third party or from publicly available sources. These must typically disclose the identity of the controller, the purpose of collecting the personal data, any third parties to whom it may be disclosed, and individual rights available to the data subject. Fair and transparent notification requirements are closely related to consumer protection, as discussed in our brief on Consumer Protection.

Indonesia's Regulatory Frameworks and Challenges for Data Protection of the Digital Economy

In today's digital era, the phenomenon of market manipulation has evolved beyond its traditional understanding. Initially, market manipulation was conceptualized as referring to how companies exploit consumers' cognitive weaknesses. However, with the advancement of technology, this form of manipulation has changed radically. The high threat is partly triggered by the high level of consumer goods trading activity in Indonesia, where in 2022 to early 2023, more than 178 million Indonesians purchased consumer goods via the internet, with an estimated total annual expenditure on consumer goods purchases reaching US\$ 55.97 billion.

(Prayuti, 2024) Digital trade has become both an essential foundation for the growth of the “digital economy,” and a beneficiary of it. This further involves progressively advancing digitization of economies and societies as a whole. Advanced digitization brings with it a number of notable new trends in trade. (Burri & Chander, 2023)

The challenges faced in digital era business also refer to the dishonest behavior carried out by irresponsible individuals. This fraudulent behavior does not pay attention to digital era business activities so that it can create unfavorable business competition. The impact is that there can be an inequality that can be felt by small business actors so that it is difficult to develop their business. The biggest risk is that they could experience major losses that could make business actors stop marketing their products. The losses from this problem are also felt by consumers as the target market. This is because digital businesses are very vulnerable to fraudulent practices that are mostly experienced by consumers. Therefore, law is needed as an umbrella of protection to minimize or prevent these problems.

An effective regulatory framework for consumer protection is important not just for consumers, but also for the growth of e-commerce businesses. Between January 2019–May 2020 there were 5,826 cases of online fraud reported to the Indonesian National Police. (Directorate of Cyber Crime (n.d.) Many Indonesian consumers do not trust online shopping. More than half of Indonesians associate online shopping with fraud (56%) and more than a third believe that product quality is not reliable (34%) or that payment is not safe or convenient (35%). (Damuri et al., n.d.) Effective consumer protection regulations protect consumers and help them feel more comfortable conducting online transactions, supporting the growth of e-commerce businesses. (Aprilianti & Dina, 2021)

In several countries, including Indonesia, have enacted laws governing the protection of personal information in e-commerce transactions. These regulations empower consumers to manage their personal data, set security benchmarks for e-commerce service providers, and enforce penalties for violations of privacy and data security. The 1945 Constitution provides a constitutional guarantee to protect personal data, as stated in Article 28G Paragraph (1). (Situmeang, 2021)

Indonesia’s enactment of Law Number 27 of 2022 on Personal Data Protection (PDP Law) in October 2022 marked a significant advancement in the nation’s data protection landscape. This legislation consolidates previously fragmented regulations into a unified framework, drawing inspiration from the European Union’s General Data Protection Regulation (GDPR) to ensure comprehensive protection of personal data. The existence of Law Number 27 of 2022 concerning Personal Data Protection (PDP) provides a clear legal basis in efforts to maintain consumer privacy in the digital economy era. This law strictly regulates how personal data is collected, used, and processed by third parties. This provides a sense of security to consumers that their personal data will not be used carelessly or sold to irresponsible parties. Thus, this regulation is an important part of building trust in the digital ecosystem, which in turn will encourage more participation in digital transactions.

The regulatory framework of e-payments is more advanced. In this area, the Indonesian government has established a clear policy blueprint and more innovative regulatory approaches, including a regulatory sandbox. The central bank of Indonesia (BI) and the

Indonesian government's financial services industry regulator (OJK) maintain a continuous dialogue with businesses, which creates and maintains a regulatory environment conducive to innovation. However, problems with e-payments remain in the areas of cybersecurity and data privacy. (Aprilianti & Dina, 2021) While Cash-On-Demand still dominates payment methods in e-commerce, making up almost 84% of payments, the e-payment sector in Indonesia is growing and innovative; between 2018 and 2020, electronic money transfers grew by 307% to IDR 47.2 trillion (USD 3.31 billion). (Statistics Indonesia, 2019, 2020) This growth needs to be accompanied by a regulatory framework that supports innovation while maintaining payment safety. (Aprilianti & Dina, 2021) Supervision and enforcement by governments and authorities are also crucial to ensure that personal data protection standards are implemented properly. Compliance with these rules is essential to ensure security and privacy in online transactions, as well as building consumer trust, which is vital to the sustainable growth of e-commerce businesses. (Suleiman et al., 2022)

The common approach to personal data protection is to protect the tangible elements of personal data and enforce regulations to ensure privacy in its use. Currently, at least 107 countries have enacted laws relating to personal data protection. Strong legal protection provides consumers with a high sense of security and assurance when conducting e-commerce transactions. Individuals have the right to obtain information about how their personal data is used and to ensure its confidentiality. (Army, 2020) However, it is important to acknowledge that technology is constantly evolving, and that legal protection needs to be updated and modified periodically. In addition, the importance of consumer awareness and education regarding personal data protection is a critical element in upholding their security and privacy in the ever-changing e-commerce landscape. (Ginting et al., 2021)

Law Number 8 of 1999 concerning Consumer Protection and Law Number 19 of 2016 concerning Information and Electronic Transactions are two main legal frameworks that have a significant role in protecting consumers and are the foundation of regulations regarding consumer data protection in Indonesia. Where Law Number 8 of 1999 concerning Consumer Protection provides an understanding of the consumer's right to obtain honest and correct information about goods/services, including in digital transactions, and provides the right to privacy in the collection, use, and processing of personal information by providers of goods/services. In addition, the law also recognizes electronic transactions, Law Number 8 of 1999 concerning Consumer Protection regulates consumer rights in this context, including providing clear and comprehensive information about electronic transactions, including privacy policies implemented by service providers. (Devi & Simarsoit, 2020) However, while personal data protection is essential, overly stringent regulation risks stifling innovation. For example, if personal data collection is a very complicated process or requires excessive permission from consumers, companies may feel burdened and less able to innovate. On the other hand, the highly dynamic digital sector requires flexibility in utilizing data to create new technologies, innovative products, and better user experiences. Therefore, there needs to be a wise balance between protecting privacy and allowing room for innovation.

The role of law in digital era business provides legal protection for actors, both business actors and consumers. This is because the law has a dynamic nature where the law can adjust to the development of society which absolutely requires changes in the legal basis during its historical journey to achieve justice. (Sulastriyono & Pradhani, 2018) The many digital business

activities have provided an opportunity for the law to play a role in it, especially in Indonesia which is a country of law. (Alifia Fisilmi Kaffah & Siti Malikhatun Badriyah, 2024) While personal data protection is essential, overly stringent regulation risks stifling innovation. For example, if personal data collection is a very complicated process or requires excessive permission from consumers, companies may feel burdened and less able to innovate. On the other hand, the highly dynamic digital sector requires flexibility in utilizing data to create new technologies, innovative products, and better user experiences. Therefore, there needs to be a wise balance between maintaining privacy and providing space for innovation.

This balance also includes the importance of mechanisms that can protect consumers without hindering the development of the digital market. Adequate policies should encourage companies to innovate in ways that respect privacy rights, such as using encryption technology or anonymization techniques to protect individual identities. In addition, companies can also be given incentives to comply with strict data protection standards, such as certification or recognition for those who successfully implement data management with high transparency and responsibility. This can encourage the creation of a safer and more sustainable ecosystem in the digital economy. Co-regulation would help bring about these improvements, beginning with an agreement between regulators and firms that they have a mutual interest in promoting innovation while ensuring reliable business practices that protect users. (Johns, 2015)

In terms of the digital economy, innovations that are born from utilizing personal data can provide competitive advantages for companies, improve operational efficiency, and open up new market opportunities. However, without adequate data protection, this innovation can have a negative impact if there is a data leak or misuse of information that leads to losses for consumers. Therefore, personal data protection regulations, such as those stipulated in Law Number 27 of 2022 concerning Personal Data Protection, are important to maintain a balance between encouraging innovation and the need for privacy protection.

In a Press Release with the theme "Government Encourages an Inclusive Digital Economic Ecosystem and Prioritizes User Data Privacy Security", Coordinating Minister for Economic Affairs Airlangga Hartarto in a virtual keynote speech at the Launch of the East Ventures Report - Digital Competitiveness Index 2023, in Jakarta (5/4) stated that the Indonesian Government is encouraging the optimization of digital transformation that can be an enabler for the creation of input efficiency to support high productivity in various economic and business sectors. This is based on the condition that last year around 40% or US\$77 billion of the total value of ASEAN digital economic transactions came from Indonesia. In 2025, this value is predicted to double to US\$130 billion, and will continue to increase to reach around US\$360 billion in 2030. (Kementrian Koordinator Bidang Perekonomian Republik Indonesia, n.d.) One of the efforts is to expand access to digital financial services through regulations and policies that can trigger the birth of various innovations that can optimally protect fintech service users and their ecosystems. And guarantee the security and privacy of public data through Law Number 27 of 2022 concerning Personal Data Protection. The law is a legal umbrella that encourages reform of personal data processing practices, both in the public and private sectors, as an effort to improve industry standards.

We can find out how key stakeholders under Law Number 27 of 2022 concerning Personal Data Protection include: (Ayman Falak Medina, 2024)

- Personal Data Subjects: Individuals to whom the personal data pertains, endowed with rights concerning their data.
- Personal Data Controllers: Entities or individuals that determine the purposes and means of processing personal data.
- Personal Data Processors: Parties that process personal data on behalf of controllers.
- Data Protection Officers (DPOs): Appointed to oversee data protection strategies and ensure compliance.

The success of personal data protection policies depends not only on strict implementation of the law, but also on public education and corporate awareness. Consumers need to understand their rights regarding data privacy and companies need to increase their capacity in ethical and secure data management. With collaboration between the government, the private sector, and the community, the digital economy can develop healthily, where innovation can continue to grow rapidly without sacrificing individual privacy protection.

Conclusion

The Indonesian government has begun to realize the importance of regulations to protect personal data, which has encouraged the implementation of stricter personal data protection regulations. The existence of Law Number 27 of 2022 concerning Personal Data Protection (PDP) provides a clear legal basis in efforts to maintain consumer privacy in the digital economy era. This law strictly regulates how personal data is collected, used, and processed by third parties. The success of personal data protection policies depends not only on strict implementation of the law, but also on public education and corporate awareness. Consumers need to understand their rights regarding data privacy and companies need to increase their capacity in ethical and secure data management. The regulation requires every party that manages personal data to be responsible for the security and use of the data transparently. On the other hand, this regulation also allows room for data-based innovation, but with proper controls. In the long run, this balance will not only protect society from potential data misuse, but also encourage the development of more ethical and responsible technology.

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