



Evaluation of Legal and Policy Issues in Consumer Protection in Indonesian Fintech Transactions

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Abstract: Indonesia's fintech industry has grown rapidly, with transactions reaching more than IDR 15 trillion by 2023, but this growth has also brought significant challenges such as fraud and data leaks that highlight weaknesses in consumer protection. Regulations such as OJK Regulation No. 77/POJK.01/2016 and Government Regulation No. 71 of 2019 have been implemented to balance innovation and consumer protection, but still require further evaluation for their adequacy. The study aims to assess the effectiveness of these regulations in identifying, preventing, and addressing fraud and privacy violations, as well as supporting the continued growth of the fintech industry. Using juridical-normative methodology with statutory, comparative, and conceptual approaches, this study seeks to map weaknesses in the existing legal framework and propose possible improvements. The results of this study are expected to provide practical recommendations to strengthen fintech regulation in Indonesia, support the growth of the digital economy while protecting consumer rights.

Keywords: Fintech; Effectiveness; Consumer Rights

1. Introduction

In Indonesia, the growth of the fintech industry has achieved a significant increase, based on data from the AFTECH AMS Report 2022/2023, until the third quarter of 2022, Indonesia became the dominant player in the Southeast Asian fintech industry by contributing around 33% of the total funding of fintech companies in the region. This position makes Indonesia the country with the second largest amount of fintech funding in Southeast Asia, after Singapore which obtained 43% of the total funding (Katadata, 2023). However, amid these rapid developments, there have been various cases that show weaknesses in consumer protection, including fraud and data leaks (Anggen Suari & Sarjana, 2023).

Throughout the period 2019 to May 14, 2024, the Ministry of Communication and Information Technology has managed 124 cases that allegedly violated personal data protection, with 111 of these cases falling under the category of personal data leakage (Mediana, 2024). These issues highlight the need for an in-depth evaluation of existing policies and regulations. The development of financial technology has changed the way people access financial services, providing convenience but also posing new risks related to privacy and security.

This rapid growth has led to challenges in regulatory updates in line with market dynamics. Several regulations have been implemented to regulate the fintech industry in Indonesia, including OJK Regulation No. 77/POJK.01/2016 concerning Information Technology-Based Money Lending and Borrowing Services and Government Regulation No. 71 of 2019 concerning the Implementation of Electronic Systems and Transactions, which seeks to maintain a balance between innovation and consumer protection. However, it clearly lacks specificity and adaptiveness to rapid technological developments.

Despite the regulation, the question of its adequacy remains relevant and urgent. The exponential growth in fintech transactions shows tremendous potential but also raises

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important questions about how resilient the surveillance and protection systems that have been put in place are. Evaluation of these policies and regulations is not only important to assess their effectiveness in preventing fraud and protecting data, but also to ensure that they can adapt to rapid technological change.

In this case, the Financial Services Authority (OJK) plays a crucial role in overseeing and enforcing regulations in the financial technology (Fintech) sector in Indonesia. As a regulator, OJK is tasked with ensuring that Fintech companies operate in accordance with applicable regulations, protect consumer rights, and maintain financial system stability. It has developed a dynamic regulatory framework to keep pace with the rapid development of technology, covering everything from registration to supervision of operations to risk management.

Reviewing existing policies and regulations, it is important to note that while regulations such as FSA Regulations and Government Regulations have established a solid foundation for fintech operations, there is significant room for improvement, particularly in terms of responses to evolving fraud cases and more robust data protection strategies. Regulations must evolve dynamically not only to address growing cybercrime but also to support unhampered innovation in the fintech sector, which is a key driver of digital economy growth in Indonesia.

Therefore, the evaluation of existing regulations in the context of fintech consumer protection becomes very relevant. This includes an assessment of the effectiveness of policies in identifying, preventing, and addressing fraud and privacy violations as well as their ability to support the healthy and sustainable growth of the fintech industry. The research aims to not only map weaknesses in existing legal frameworks but also to propose improvements that might be adopted to optimize consumer protection as financial technology advances.

Related to legal issues and consumer protection policies on fintech transactions in Indonesia, there have been two research results that have relevance or relevance to the research to be carried out, namely First, research by Ulya (2022) which examines the integration between fintech regulation and broader consumer protection policies. They found that there are often overlaps and vacancies in regulations that negatively impact consumer protection efforts. For example, the vagueness in the division of responsibilities between fintech service providers and traditional banks often makes it difficult for consumers to obtain compensation or protection in the event of a service failure.

Second, research by Rustam et al., (2023) Discusses the role and responsibility of consumers in fraudulent practices in online transactions and fintech in preventing them. This shows that the role and responsibility of consumers are clear in terms of protection by preventive or repressive methods, as well as temporary legal frameworks may already exist, but their effectiveness is still limited by implementation capacity.

These studies provide a solid foundation for current studies, but also show that more needs to be done to achieve effective consumer protection in the fintech industry. Deficiencies identified in previous research, such as the lack of regulatory resources illustrated by how far successful regulation is in legal issues that are still evolving, and overlapping regulatory frameworks spelled out in the analysis of policy weaknesses that can reduce the effectiveness of consumer protection, are the focus of this study to propose more integrative and effective solutions.

Thus, the formulation of the problem in this study revolves around evaluating the adequacy of applicable regulations in the fintech industry, especially in the context of consumer protection. *First*, how far have existing regulations been successful in protecting consumers from issues such as fraud and privacy violations?; *Second*, what are the weaknesses in the current policy that can reduce the effectiveness of consumer protection in fintech transactions. Thus, this study aims to assess the effectiveness of current fintech regulations in protecting consumers from fraud and privacy violations. A key focus is to evaluate the extent to which regulations are adequate and identify weaknesses in existing policies that could reduce the effectiveness of consumer protection. These questions are

important to understand the adequacy of the legal framework and suggest improvements in the face of growing challenges in the fintech industry.

To expedite the objectives of the description above, this study uses juridical-normative research methods with legal, comparative and conceptual approaches. Then, the conclusion of this study is expected to provide recommendations to policy-makers to improve regulatory effectiveness and ensure that the adaptation of online agreements can run smoothly, supporting the growth of the digital economy while protecting consumer rights.

2. Materials and Methods

This research uses a juridical-normative method, with a statutory and conceptual approach. To ensure the validity and reliability of the data, a data triangulation technique was used. Studied and described in a qualitative descriptive manner to explain and analyze various related legal aspects, using primary legal materials in the form of relevant laws and regulations, secondary legal materials in the form of expert opinions and literature, as well as tertiary legal materials in the form of legal references and abstracts. Data analysis uses qualitative techniques through content analysis to identify key themes and quantitative analysis using inferential statistics to test hypotheses related to the effectiveness of existing regulations. These techniques allow this research to identify and explain the factors that influence regulatory effectiveness, as well as provide insight into potential ways to improve the existing legal framework (Rizkia & Fardiansyah, 2023). The results of this integration of qualitative and quantitative analysis are expected to reveal the dynamics of consumer protection and identify weaknesses in existing policies, which can then form the basis for formulating stronger policy recommendations.

3. Results and Discussion

3.1 *Evaluation of the Role of Regulation in the Protection of Fintech Consumers from Fraud and Privacy Breaches*

In 2023, Indonesia's Financial Services Authority recorded a significant increase in the number of fintech-related scams, with losses reaching hundreds of billions of rupiah (Departemen Perlindungan Konsumen, 2023). This phenomenon highlights the urgency of increasing consumer protection in the fintech sector, which is now an important part of many people's financial lives. Effective regulation plays a crucial role in ensuring that fintech services are not only innovative, but also safe and trusted for consumers (Fachrurazi et al., 2023).

Fraud and privacy violations in the fintech sector in Indonesia are serious issues that demand deep attention from various parties, including regulators, fintech companies, consumers, and the general public (Riskiyadi et al., 2021). In recent years, the exponential growth of the fintech industry has brought many benefits, such as easier access to financial services for different walks of life. However, along with such growth, the risk of fraud and privacy violations also increases.

Fraud in fintech transactions often involves sophisticated schemes, where criminals use technology to manipulate or steal consumer data (Hartanto, 2022). For example, phishing is still a common method, where fraudsters try to gain access to consumers' personal and financial information through emails or messages disguised as official communications from banks or other financial institutions. In addition, there are also investment scams, where victims are tricked into investing money in fraudulent investment schemes that promise high returns with low risk.

In the context of fintech, privacy violations often occur when consumers' personal data is not properly guarded by fintech companies. This could be a data leak due to a weak security system or the use of consumer data for inappropriate purposes without adequate consent (Nugroho et al., 2021). For example, some fintech apps may collect more personal data than is necessary for the services they offer, or that data is shared with third parties without explicit permission from consumers.

To address this issue, Indonesia has introduced several regulations aimed at protecting consumers in the fintech ecosystem. Law Number 19 of 2016 concerning Amendments to Law Number 11 of 2008 concerning Electronic Information and Transactions (ITE Law) is one of the legal foundations governing electronic transactions, including fintech, to protect consumer rights and ensure transaction security (Prayuti, 2024).

The Financial Services Authority (OJK) also actively regulates and supervises the fintech industry, setting various guidelines and regulations that must be followed by fintech companies. For example, the FSA requires fintech companies to obtain operating licenses before they can offer financial services to the public, and those companies must adhere to strict data security standards.

While there are serious efforts on the part of regulators and the industry to reduce the incidence of fraud and privacy violations, consumers also need to be proactive in protecting themselves. This includes watching for warning signs of fraud, using good security practices such as not sharing personal information carelessly, and only using trusted and legitimate fintech platforms. With cooperation between the government, industry, and consumers, it is expected that integrity and security in the Indonesian fintech ecosystem can continue to be improved.

Fintech consumer protection involves policies and regulations designed to protect user rights and ensure transparency and fairness in transactions. According to Howard Beales, former Director of the Bureau of Consumer Protection at the U.S. Federal Trade Commission, good regulation should enable innovation while eliminating risks that could harm consumers (Beales & Muris, 2022).

In Indonesia, regulations such as OJK Regulation No. 77/POJK.01/2016 have been established to regulate the implementation of information technology-based lending and borrowing services. However, challenges remain, especially in adapting existing regulations to rapid technological developments. Peter L. Bernstein in his theory of risk, states that risk management must adapt to a changing environment to be effective (Soekarto, 2019). This reflects the need for periodic evaluation and regulatory updates to respond to changing market dynamics.

Furthermore, the theory of risk society by Ulrich Beck explains that in the modern era, social and technological risks are central to public policy, including in the fintech sector (Damayanti & Fathihani, 2023). This demands the implementation of a regulatory framework that is not only reactive, but also proactive in preventing potential fraud and privacy violations before harming consumers.

Therefore, in the face of fraud and privacy violations in fintech, there needs to be a joint effort between regulators, industry, and the public to strengthen existing regulations and ensure effective implementation. This evaluation is not only important to protect consumers, but also to maintain trust in the growing fintech sector. This shows that the role of regulation in consumer protection is not only important in the legal context, but also in maintaining the dynamics of a healthy and sustainable digital economy.

In an effort to improve effective fintech regulation, Indonesia can learn from international models that have successfully implemented a strict and flexible legal framework. For example, the European Union through GDPR (General Data Protection Regulation) has set high standards for data protection and privacy which also impacts the fintech sector (Tsamara, 2021). The implementation of similar regulations can strengthen consumer protection in Indonesia by ensuring that all fintech service providers adhere to strict data privacy and security standards.

Furthermore, to respond to the rapid dynamics of technological change, regulations need to be designed to be adaptive enough to enable the development of innovation while minimizing the risk of misuse of technology that can harm consumers (Y. H. Putri, 2022). This could include more specific arrangements related to the use of artificial intelligence and big data in fintech, both of which offer great potential but also significant risks, particularly related to data privacy and security.

Adopting a risk-based regulatory approach, as suggested by risk theory, is also vital. This approach demands regulations that not only address problems that are already occurring, but are proactive in identifying and managing potential new risks before they become problems. This demands close collaboration between regulators, technology experts, and fintech service providers to continuously assess and update security and privacy protocols in line with the latest technological developments.

Active consumer engagement is also an important component in strengthening consumer protection (Fista et al., 2023). Educating consumers about their rights and how fintech technology works can help them make more informed and careful decisions in choosing services. Initiatives like these can reduce fraud risk and add an additional layer of protection, in line with consumer protection theory that underscores the importance of information and transparency in the relationship between service providers and users.

Finally, ongoing evaluation of regulatory effectiveness, supported by robust data collection and analysis, will ensure that policies remain relevant and effective in protecting consumers in this dynamic and often unpredictable market. With this comprehensive approach, regulation can not only answer current challenges, but also anticipate problems that may arise in the future.

To optimize regulatory effectiveness in the fintech sector, it is imperative for regulators to consider implementing a layered regulatory framework (Cahyani & Putra, 2024). This means that in addition to general regulations governing the entire industry, there needs to be specific rules designed to address specific issues arising from the use of new technologies in financial services. For example, regulations specific to blockchain and cryptocurrencies could address specific issues such as money laundering and transaction security, while regulations for peer-to-peer lending platforms could focus on aspects of credit scoring and debt collection.

Furthermore, international cooperation is also an important factor in fintech regulation as many financial services cross national borders. Building a cooperative body with regulatory bodies in other countries can help create global standards that not only protect consumers but also encourage innovation. This kind of cooperation can take the form of exchanging information related to risks, fraud trends, and best practices in fintech regulation.

The application of the latest technology in supervision and regulatory application can also increase the effectiveness of consumer protection. For example, the use of big data and machine learning can help regulators more quickly identify suspicious patterns that might indicate fraud or other illegal activities (Anggen Suari & Sarjana, 2023). The technology can enable real-time surveillance, which increases the ability to act quickly and effectively against violations.

In addition, regulations should be designed to encourage transparency and compliance among fintech service providers. This can be achieved through the implementation of provisions that force fintechs to publish periodic reports on their activities, the security risks they face, and the steps they take to address those risks. This kind of transparency not only increases consumer trust but also encourages fintech companies to maintain high standards in their operations.

Integrating consumer views and needs in the policy-making process is crucial to creating regulations that are not only effective but also inclusive. Open dialogue between regulators, service providers, and service users paves the way for a deeper understanding of the issues consumers face and how best to address them. It also strengthens the basis for more transparent and accountable policy implementation.

The consumer council forum, which is held regularly, is a step forward in listening to and incorporating input from users of fintech services. In addition, this approach can be extended through the use of technology and digital platforms to reach a wider consumer base. For example, online surveys and feedback platforms can be operated continuously to collect real-time consumer data, which can then be analyzed to find trends and problems that often arise.

In addition, the implementation of an efficient and responsive consumer complaint system is also important. The system should be designed in such a way that it is easily accessible to all consumers and provides a quick and fair resolution. Upgrading these systems could involve using artificial intelligence to effectively manage and respond to complaints, as well as algorithms that can prioritize cases that require immediate intervention.

Through these efforts, the policies developed will not only be more responsive to actual needs and problems faced by consumers, but will also support the creation of a safer and more conducive fintech environment for growth. This, in turn, will strengthen consumer confidence in the fintech sector and spur wider adoption of financial technology among the public. By ensuring that regulations adapt to the pace of innovation, governments and regulators can reduce risks associated with digital financial transactions, while also encouraging innovation through a more flexible and inclusive framework.

Furthermore, this strengthened policy should support education initiatives for consumers, which focus on raising awareness about their rights to use fintech services. Effective consumer education will enable users to make more informed and informed decisions when using fintech services, thereby reducing the likelihood of misuse or misunderstanding (Novita & Santoso, 2021). This educational program can involve cooperation between the government, non-governmental organizations, universities, and fintech industry players themselves.

In addition, policies should include efficient and transparent grievance resolution mechanisms. An adequate system to quickly manage and resolve consumer complaints will further increase user trust and satisfaction, as well as provide valuable feedback for future improvements to fintech services. This will not only reduce conflict between service providers and consumers, but also help in formulating more targeted policies based on inputs from real consumer experiences.

Finally, the establishment of international cooperation in fintech regulation can also provide an additional dimension in consumer protection. By collaborating and sharing best practices, countries can build a global framework that supports innovation while reducing risk. This will create a global standard that not only enhances consumer protection but also facilitates cross-border growth of fintech services. In this way, regulatory initiatives are not only limited to national scales but also take a more universal form, driving safer and more inclusive reforms on a global scale.

3.2 Current policy weaknesses that can reduce the effectiveness of consumer protection in fintech transactions

Consumer protection in fintech can be defined as a set of policies, regulations, and practices designed to safeguard the security and interests of consumers in conducting digital financial transactions (Sofian, 2024). These policies should ideally protect consumers from fraud, data leaks, and other unfair practices that can harm consumers.

One of the major weaknesses in current policy is the lack of specificity and adaptation to rapid technological development. Consumer Protection Theory (Widiarty, 2022) suggests that policies should proactively involve a wide range of stakeholders, including consumers, in the regulation-making process. This not only raises awareness about consumer rights but also ensures that regulation reflects the real needs and concerns of those most affected.

The fintech sector in Indonesia, despite growing rapidly, still faces some significant challenges in terms of consumer protection (Forgiving & Priest, 2023). Weaknesses in current policies can reduce the effectiveness of these protections, which in turn can compromise consumer trust and security in using fintech services. The following are some of the weaknesses in the consumer protection policy currently in force in Indonesia.

First, regulations that have not been fully integrated, although the Financial Services Authority (OJK) and Bank Indonesia have issued various regulations to regulate the fintech sector, there are still shortcomings in integration and coordination between reg-

ulating institutions. This sometimes creates a legal vacuum where fintech companies operate without sufficiently strict oversight related to consumer data protection and data collection practices.

Second, the application of policies is inconstant, although regulations exist, often their application in the field is still inconsistent, different fintech companies may have different interpretations of how policies should be implemented, which can result in uneven protection for all consumers.

Third, data security and privacy, existing policies often do not adequately address data security and privacy issues in an evolving digital world. Although there are laws such as the ITE Law that regulate personal data protection, real implementation in the fintech sector is often inadequate to protect consumers from data leakage and misuse of personal information.

Fourth, lacunae in consumer protection of innovative products, fintech continues to evolve with new product innovations that may not be explicitly regulated by existing regulations. For example, products such as cryptocurrencies and peer-to-peer investing are not yet fully regulated under existing consumer protection laws, leaving consumers vulnerable to risk.

Fifth, consumer education and awareness, there is a lack of education and increasing consumer awareness about their rights in fintech transactions. Many users of fintech services are not fully aware of their rights or ways to protect themselves from fraud and abuse.

Sixth, transaction supervision and enforcement, oversight of fintech transactions and law enforcement relating to fraud and other violations are often not strong enough. A lack of resources, both in terms of finance and expertise, means that many violations may go undetected or not acted upon decisively.

Addressing these weaknesses requires a coordinated effort between regulators, the fintech industry, and consumer groups. Strengthening the legal framework, increasing supervisory capacity, and effective education campaigns can help improve the effectiveness of consumer protection in Indonesia's fintech sector. The current policy framework, including OJK Regulation No. 77/POJK.01/2016, has been designed to regulate technology-based lending and borrowing practices, but there are still loopholes that reduce its effectiveness in protecting consumers.

The reason is, many policy studies say that the current policy needs to be revised to include stricter provisions related to transparency, consumer concentration, and data security (Abubakar & Handayani, 2022). The addition of tougher sanctions for violations could also further enhance prevention and protection against risks facing consumers.

First, by strengthening legal and regulatory frameworks and integrating views from legal theory and experts, we can achieve more effective consumer protection and ensure that the fintech industry continues to thrive as a safe and fair sector for all users.

Second, with growing concerns over issues such as fraud and data leakage in fintech transactions, more in-depth policy research and development is essential. The importance of regulatory revision lies not only in regular updates, but also in the effective integration of feedback from users of fintech services. A concrete example of this need can be seen from the increase in phishing incidents and online fraud that have had a significant impact on consumer trust in fintech platforms.

In response to this issue, more adaptive and inclusive regulations can be designed based on the principles of Consumer Protection Theory proposed by Iain Ramsay, which emphasizes the importance of a consumer-oriented approach in designing policies. One important aspect is ensuring that consumers have easy access to information about their rights and effective and expeditious dispute resolution mechanisms. The policy must also provide strict data security guarantees, which is the main foundation for maintaining consumer confidence in using fintech services.

From a legal perspective, these theories support the development of policies that are not only reactive but also proactive in protecting consumers. This requires cooperation between regulatory agencies, the fintech industry, and consumer protection agencies to

jointly develop and update adequate regulations. Greater legal awareness and well-designed policies can reduce the frequency and impact of fraud and data breaches, while supporting continuous innovation within the fintech sector.

Finally, effective policy implementation requires a commitment to consumer education and advocacy. This education involves teaching consumers on how to recognize and report fraud, as well as how to use fintech technology safely and responsibly. Thus, the expansion and strengthening of consumer protection regulations must go hand in hand with efforts to increase digital financial literacy among the public.

In Indonesia's fintech industry, efforts to improve consumer protection regulations require a holistic approach, which combines legal, conceptual, and comparative elements to achieve maximum effectiveness (Jones, 2020). First, from the point of legislation, there is an urgent need to revise and update the Law on Information and Electronic Transactions and Financial Services Authority regulations related to fintech. These changes should take into account new technological developments such as artificial intelligence and big data processing that are not yet fully regulated. Furthermore, there needs to be closer synergy between various sectoral regulations to eliminate loopholes that may be exploited by rogue actors in the fintech industry.

Conceptually, the adoption of principles '*Legal Certainty*' or legal certainty is vital (K. D. A. Putri & Arifin, 2019). This principle emphasizes the importance of transparency in the use of consumer data, ensuring that all parties clearly understand their rights and obligations. It supports the concept of '*Privacy by Design*' (Rahayu & Astuti, 2022), which encourages fintech companies to integrate data privacy and security into their system designs from the start, ensuring that data security becomes central to business operations, not just a later addition.

Adopting a comparative approach, drawing lessons from the implementation of regulations in the European Union such as GDPR, can provide valuable insights. The GDPR sets high standards in data protection and gives consumers greater rights over their data, including the right to be forgotten. Indonesia can consider these elements of GDPR to strengthen its national regulations. In addition, studying how countries with mature fintech ecosystems, such as Singapore and the UK, face similar challenges can provide examples of adaptable best practices and mistakes to avoid.

This approach, which combines legislative improvements, conceptual clarity, and lessons learned from international experience, will not only improve consumer protection but will also support greater trust and security in the fintech industry. This will directly contribute to the stability and growth of the digital financial sector in Indonesia, strengthening the foundation for continuous innovation and economic growth in the digital age.

The multidimensional approach to improving fintech consumer protection regulations in Indonesia discussed earlier requires coordinated and continuous implementation to address the various challenges faced. In continuing this discussion, the focus can be broadened to include aspects such as improving compliance and law enforcement, as well as international collaboration.

Effective enforcement is key in ensuring that existing regulations don't just exist on paper. The Financial Services Authority (OJK) and the Ministry of Communication and Information Technology should strengthen their supervisory mechanisms to ensure that all fintech companies comply with established standards. This may involve using the latest technology to monitor fintech transactions and activities in real time, so that potential fraud and violations can be detected and responded to quickly.

In addition, to address the problem of data leakage, regulations must include stricter provisions regarding cybersecurity (Isroqunnajah et al., 2024). The implementation of cybersecurity standards that conform to international best practices will improve defenses against cyberattacks, which are becoming increasingly sophisticated. This approach should be followed by a comprehensive training program to ensure that all stakeholders, including employees and management in fintech companies, are equipped with the necessary knowledge and skills to comply with the standard.

International collaboration is also important in formulating and implementing effective policies (Renaldy, 2023). Indonesia could benefit from further cooperation with international organizations such as the Financial Action Task Force (FATF) or the World Bank, which can provide technical support and knowledge on global best practices. In this regard, adapting the recommendations of these bodies can help in formulating policies that are not only comprehensive but also responsive to global market dynamics.

Integrating this view, improved consumer protection policies in the fintech sector must continue to be improved through better supervision, tough law enforcement, and close international cooperation. Thus, Indonesia will not only increase consumer confidence in using fintech services, but also position its fintech industry as a strong and innovative leader on the global stage.

In addition, it is important for Indonesia to implement a stricter supervision mechanism involving advanced technology for real-time monitoring and analysis of transactions. This will help relevant authorities in detecting and responding quickly to suspicious activities that could potentially harm consumers. Such increased analytical capacity can also be integrated with early warning systems that provide immediate notifications to consumers about unusual activity within their accounts, enabling quick action to prevent losses. Furthermore, the implementation of harsh law enforcement should be supported by adequate penalties and heavy fines for violations, which will serve as an effective deterrent against illegal and unethical activities in the fintech sector.

4. Conclusions

This research reveals that consumer protection regulations in the fintech industry in Indonesia still require significant improvement to address weaknesses in current policies that reduce their effectiveness. Although OJK Regulation No. 77/POJK.01/2016 and Government Regulation No. 71/2019 have been enacted in response to the growth of fintech, this evaluation shows that they have not been fully effective in protecting consumers from fraud and data leakage. There are shortcomings in the practical application of the regulations, as well as overlapping issues and unclear division of responsibilities. This research exists to drive home the urgency of the need for reforms in the regulatory framework, particularly in consumer protection in the fintech sector, that are inclusive of all relevant institutions. Hence, this study recommends more adaptive and responsive regulatory enhancements, better integration between various regulations, and a more inclusive approach in incorporating consumer views in policy-making, to ensure that safety and trust can be enhanced in this evolving fintech ecosystem.

References

- Abubakar, L., & Handayani, T. (2022). Penguatan Regulasi: Upaya Percepatan Transformasi Digital Perbankan Di Era Ekonomi Digital. *Masalah-Masalah Hukum*, 51(3), 259–270. <https://doi.org/10.14710/mmh.51.3.2022.259-270>
- Anggen Suari, K. R., & Sarjana, I. M. (2023). Menjaga Privasi di Era Digital: Perlindungan Data Pribadi di Indonesia. *Jurnal Analisis Hukum*, 6(1), 132–142. <https://doi.org/10.38043/jah.v6i1.4484>
- Beales, J. H., & Muris, T. J. (2022). *How Not To Write A Regulation*. American Enterprise Institute: Washington.
- Cahyani, A., & Putra, M. (2024). Relevansi Perlindungan Konsumen Melalui Pemulihan Regulasi Di Era Transformasi Digital. *Jurnal Kertha Wicara*, 13(3), hlm. 148-157. <https://doi.org/KW.2024.v13.i3.p5>
- Damayanti, S., & Fathihani, F. (2023). Analisis Pengaruh Kemudahan Penggunaan, Pengaruh Sosial Dan Risiko Terhadap Minat Penggunaan Financial Technology (Fintech) (Studi Kasus Pada Generasi Milenial Mahasiswa Universitas Dian Nusantara). *Jurnal Ekonomi Manajemen Sistem Informasi*, 4(6), 1014–1023. <https://doi.org/10.31933/jemsi.v4i6.1632>
- Departemen Perlindungan Konsumen. (2023). *Kajian Perlindungan Konsumen Sektor Jasa Keuangan: Perlindungan Konsumen Pada Fintech*. Otoritas Jasa keuangan (OJK). www.ojk.go.id
- Fachrurazi, Rukmana, A. Y., Supriyanto, Syamsulbahri, & Iskandar. (2023). Revolusi Bisnis di Era Digital: Strategi dan Dampak Transformasi Proses Teknologi terhadap Keunggulan Kompetitif dan Pertumbuhan Organisasi. *Jurnal Bisnis dan Manajemen West Science*, 2(03), 297–305. <https://doi.org/10.58812/jbmws.v2i03.563>

- Fista, Y. L., Aris Machmud, & Suartini, S. (2023). Perlindungan Hukum Konsumen Dalam Transaksi E-commerce Ditinjau dari Perspektif Undang-Undang Perlindungan Konsumen. *Binamulia Hukum*, 12(1), 177–189. <https://doi.org/10.37893/jbh.v12i1.599>
- Hartanto, H. (2022). Karakteristik Penipuan Sebagai kejahatan Siber Tertinggi Di Indonesia. *Diktum: Jurnal Ilmu Hukum*, 10(2), 219–233. <https://doi.org/10.24905/diktum.v10i2.210>
- Indonesia, Otoritas jasa keuangan (2016). Peraturan Otoritas Jasa Keuangan Nomor 77/POJK.01/2016 Tahun 2016 tentang Layanan Pinjam Meminjam Uang Berbasis Teknologi Informasi. LN.2016/NO.324, [Jdih.ojk.go.id](http://jdih.ojk.go.id).
- Isroqunnajah, I., Hawabi, A. I., & Khoirot, U. (2024). Legal Capacity and Legal Authority of Adult Age in Indonesia: Medical, Psychological and Islamic Law Perspectives. *Samarah: Jurnal Hukum Keluarga Dan Hukum Islam*, 8(1), Article 1. <https://doi.org/10.22373/sjhk.v8i1.19834>
- Jones, T. (2020). *A Student-centred Sociology of Australian Education: Voices of Experience*. Springer International Publishing. <https://doi.org/10.1007/978-3-030-36863-0>
- katadata. (n.d.). *Fintech Indonesia Annual... | Databoks*. Retrieved May 30, 2024, from <https://databoks.katadata.co.id/index.php/publikasi/2023/07/27/fintech-indonesia-annual-members-survey-20222023>
- Mediana. (2024). *Kemenkominfo Tangani 111 Kasus Kebocoran Data Pribadi Sepanjang 2019-2024*. [kompas.id](https://www.kompas.id/baca/ekonomi/2024/06/03/111-kasus-kebocoran-data-pribadi-ditangani-kemenkominfo-pada-2019-14-mei-2024). <https://www.kompas.id/baca/ekonomi/2024/06/03/111-kasus-kebocoran-data-pribadi-ditangani-kemenkominfo-pada-2019-14-mei-2024>
- Novita, Y. D., & Santoso, B. (2021). Urgensi Pembaharuan Regulasi Perlindungan Konsumen di Era Bisnis Digital. *Jurnal Pembangunan Hukum Indonesia*, 3(1), 46–58. <https://doi.org/10.14710/jphi.v3i1.46-58>
- Nugroho, I. I., Pratiwi, R., & Az Zahro, S. R. (2021). Optimalisasi Penanggulangan Kebocoran Data Melalui Regulatory Blockchain Guna Mewujudkan Keamanan Siber di Indonesia. *Ikatan Penulis Mahasiswa Hukum Indonesia Law Journal*, 1(2), 115–129. <https://doi.org/10.15294/ipmhi.v1i2.53698>
- Pengampun, D., & Imam, S. (2023). *Analisa Deskriptif Industri Fintech Di Indonesia*. Sekar Gading Faradiba. Universitas Muhamadiyah Surabaya: Surabaya.
- Prayuti, Y. (2024). *Dinamika Perlindungan Hukum Konsumen Di Era Digital: Analisis Hukum Terhadap Praktik E-Commerce Dan Perlindungan Data Konsumen Di Indonesia*. 5(1). <https://doi.org/10.55637/juinhum.5.1.8482.903-913>.
- Putri, K. D. A., & Arifin, R. (2019). Tinjauan Teoritis Keadilan Dan Kepastian Dalam Hukum Di Indonesia (The Theoretical Review of Justice and Legal Certainty in Indonesia). *MIMBAR YUSTITIA*, 2(2), 142–158. <https://doi.org/10.52166/mimbar.v2i2.1344>
- Putri, Y. H. (2022). *Perlindungan Hukum Dalam Transaksi Melalui E-Commerce Di Indonesia*. 10(5).
- Rahayu, S. K., & Astuti, W. A. (2022). Disruption Of Financial Technology (Fintech) In Indonesia. *Jurnal Riset Akuntansi*, 14(1), 95–115. <https://doi.org/10.34010/jra.v14i1.6708>
- Renaldy, F. (2023). Pentingnya Kolaborasi Dengan Organisasi Internasional Dalam Mencapai Sustainable Developmen. *Academia.Edu*. https://www.academia.edu/98500008/PENTINGNYA_KOLABORASI_DENGAN_ORGANISASI_INTERNASIONAL_DALAM_MENCAPAI_SUSTAINABLE_DEVOLOPMEN_GOALS_Studi_Kasus_Implementasi_Agenda_2023_di_Indonesia
- Riskiyadi, M., Anggono, A., & Tarjo. (2021). Cybercrime dan Cybersecurity pada Fintech: Sebuah Tinjauan Pustaka Sistematis. *Jurnal Manajemen dan Organisasi*, 12(3), 239–251. <https://doi.org/10.29244/jmo.v12i3.33528>
- Rizkia, N., & Fardiansyah, H. (2023). *Metode Penelitian Hukum (Normatif Dan Empiris)* (Cetakan Pertama). Widina Media Utama: Bandung.
- Rustam, M. H., Hamler, H., Marlina, T., Handoko, D., & Alamsyah, R. (2023). Peran Dan Tanggung Jawab Konsumen Untuk Mencegah Praktik Penipuan Dalam Transaksi Online Dari Perspektif Hukum Perlindungan Konsumen. *Riau Law Journal*, 7(1), 1. <https://doi.org/10.30652/rlj.v7i1.8050>
- Soekarto. (2019). *Manajemen Risiko dan Asuransi* (Edisi kedua). Universitas Terbuka: Tangerang.

- Sofian, R. (2024). *Perlindungan Hukum Bagi Konsumen Dalam Transaksi Cash On Delivery (Cod) Online Marketplace Atas Kasus "Ghosting Order."* 12(5).
- Tsamara, N. (2021). Perbandingan Aturan Perlindungan Privasi Atas Data Pribadi Antara Indonesia Dengan Beberapa Negara. *Jurnal Suara Hukum*, 3(1), 53. <https://doi.org/10.26740/jsh.v3n1.p53-84>
- Ulya, W. (2022). Perlindungan Konsumen Dalam Perkembangan Financial Technology Di Indonesia. *Perwira Journal of Economics & Business*, 2(1), 31–45. <https://doi.org/10.54199/pjeb.v2i1.80>
- Widiarty, W. S. (2022). *Hukum Perlindungan Konsumen*. Publika Global Media: Jakarta.