THE EVALUATION OF THE INDONESIAN FINTECH LAW FROM THE PERSPECTIVE OF REGULATORY TECHNOLOGY PARADIGMS TO MITIGATE ILLEGAL FINTECH

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Abstract

Illegal fintech is one of the main issues not fully addressed in the digital finance sector in Indonesia despite various legal regulations. This condition shows that the fintech legal framework in Indonesia still needs to be entirely relevant to the concept of Regulatory Technology (regtech). This study aims to analyze the position of the fintech legal framework in Indonesia in overcoming illegal fintech with a regtech approach chosen as an analytical instrument—a basic concept that combines law and digital financial technology to create an orderly platform and comply with all applicable laws. This article uses normativelegal research methods and a conceptual approach, indicating that the legal framework governing fintech in Indonesia fragments, with rules spreading across the civil, administrative, and criminal sectors. This legal framework still needs to be reinforced as a legal tool to overcome the problem. Based on the regtech approach, increased transparency and accountability in fintech implementation are essential as legal support for dynamic supervision and law enforcement and to allow for wider access to cooperation between stakeholders in handling illegal fintech. Such measures will help create a more effective legal environment and align with the regtech paradigm in addressing illegal fintech practices in Indonesia.

Fintech ilegal merupakan salah satu isu utama yang belum sepenuhnya tertangani di sektor keuangan digital di Indonesia, meskipun telah diterbitkan berbagai peraturan hukum. Kondisi ini menunjukkan bahwa kerangka hukum fintech di Indonesia memerlukan evaluasi berdasarkan paradigma Regulatory Technology (RegTech). Penelitian ini bertujuan untuk menganalisis posisi kerangka hukum fintech di Indonesia dalam mengatasi permasalahan fintech ilegal dengan pendekatan RegTech. RegTech dipilih sebagai instrumen analisis karena merupakan konsep dasar yang menggabungkan hukum dan teknologi keuangan digital untuk menciptakan platform yang tertib dan mematuhi semua hukum yang berlaku. Penulisan artikel ini menggunakan metode penelitian hukum normatif dengan pendekatan konseptual. Hasil penelitian menunjukkan bahwa kerangka hukum yang mengatur fintech di Indonesia masih terfragmentasi dengan aturan yang tersebar di sektor perdata, administrasi, dan pidana. Kerangka hukum ini masih perlu diperkuat sebagai alat hukum untuk mengatasi masalah fintech ilegal. Berdasarkan pendekatan RegTech, diperlukan peningkatan transparansi dan akuntabilitas dalam implementasi fintech, sebagai dukungan hukum atas pengawasan dan penegakan hukum yang dinamis serta dukungan hukum untuk membuka saluran kerja sama antar pemangku kepentingan dalam penanganan fintech ilegal. Langkah-langkah tersebut akan membantu menciptakan lingkungan hukum yang lebih efektif dan selaras dengan paradigma RegTech dalam menangani praktik fintech ilegal di Indonesia.

Keywords: Indonesian fintech law, illegal fintech, regulatory technology

Introduction

Previous studies have confirmed that illegal fintech requires resolut in the sector of financial technology¹. Despite the positive contributions economic digitalization to the growth of the ecosystem of fintech lending, t advancement still leaves concern, considering that illegal lending practices

¹ Deni Kamaludin Yusup, "Law Enforcement Efforts For Illegal Online Investment Ent In Indonesia," *Baltic Journal Of Law & Politics* 15, No. 2 (November 11, 2022): 890–904.

unethical, thereby putting people as the aggrieved party². This issue is growing worse, triggering the state to immediately respond to the problem by enacting the Regulation of Financial Services Authority (henceforth referred to as POJK) Number 77 of 2016 under the Financial Services Authority. This regulation is to ensure that no more people are harmed by this illegal fintech.³ However, this enactment could not be fully reliable in guaranteeing compliance while the unethical conduct committed by fintech seems unstoppable, involving intimidation, threat, personal data disclosure, and unreasonable loan interest rates.⁴ The problem seemed to culminate following the outbreak of COVID-19, putting the majority in financial problems. This situation was seen as an opportunity by fintech to provide legal and illegal platforms offering lending services benefitting the companies without considering the losses by which customers are affected.⁵

The state has been seeking ways to deal with these illegal and increasingly uncontrollable fintech problems in Indonesia. Some regulatory provisions have been amended. In 2022, the Financial Services Authority enacted POJK Number 6 of 2022 as a legal protection to set the follow-up that responds to the problem affecting fintech customers. The authority also issued POJK Number 77 of 2016 to strengthen the regulation concerning the guidelines governing fintech practices in Indonesia. In 2023, Law Number 4 of 2023 concerning Financial Sector Development and Reinforcement to

² Angkasa Angkasa Et Al., "Illegal Online Loans In Indonesia: Between The Law Enforcement And Protection Of Victim," *Lex Scientia Law Review* 7, No. 1 (May 30, 2023): 119–178, Https://Doi.Org/10.15294/Lesrev.V7i1.67558.

³ In 2016, the Financial Services Authority for the first time passed a regulation to accommodate non-banking digital financial services as the legal basis to regulate fintech lending services in Indonesia. the Regulation of the Financial Services Authority Number 77 of 2016 concerning Information-Based Technology Lending Services was to ensure legal certainty. Fintech businesses started to grow massively and were unstoppable, operating with unconvincing guidelines and rules and disadvantaging their customers under unreasonable business schemes. This Regulation was intended to regulate the platforms and set the standards of fintech services in Indonesia according to the schemes set by the Financial Services Authority. See Abdul Aziz And Iis Nur'aisyah, "Role Of The Financial Services Authority (Ojk) To Protect The Community On Illegal Fintech Online Loan Platforms," Ssrn Scholarly Paper (Rochester, Ny, August 28, 2021), Https://Papers.Ssrn.Com/Abstract=3912984.

⁴ Aditya Prastian Supriyadi, "An Islamic Spirit For Business Ethics And Legal Framework Of Fintech Peer To Peer Lending: Why Does Indonesia Need It?," *Jurisdictie: Jurnal Hukum Dan Syariah* 13, No. 2 (2022): 294–321, Https://Doi.Org/10.18860/J.V13i2.17876.

⁵ Nurharsya Khaer Hanafie, Andika A. Gani, And Virmansyah Virmansyah, "Ilegal Financial Technology Loans Amid The Covid-19 Pandemic Problem," *Unnes Law Journal* 8, No. 2 (October 19, 2022): 313–330, Https://Doi.Org/10.15294/Ulj.V8i2.56455.

accommodate digital finance (fintech) was passed. All these reforms are expected to shift compliance of fintech providers to the next level.⁶

Despite all these transformations, illegal fintech practices have harmed people and they seem unstoppable. The Financial Services Authority of Indonesia has recently reported that there were 429 illegal fintech businesses in September 2023.⁷ Some illegal fintech services have even disembarked on new and cutting-edge methods to trap more people. The identification conducted by the Eradication of Illegal Financial Activities (PAKI) also reported that illegal fintech set people up as if they were wrong recipients while they never made any application for loans. This new unfair method often leads to threats and blackmailing, forcing the customers to settle the instalments or make full payment of the debt with an amount far above the agreed one.⁸

The above case indicates that the new regulations have not managed to settle illegal fintech practices in Indonesia, and illegal fintech seems to be getting more resistant to solutions. Research conducted by Istanti et. al reported that the losses affecting customers were due to disproportional regulations which caused poor legal protection. This creates another problem where it is difficult to ensure transparency to stop illegal fintech. ⁹ Such disproportion is contrary to the Regulatory Technology (RegTech) which puts the support for services of digital finances to the fore to guarantee imperative nature for the sake of better compliance the implication that complies with

⁶ In 2022, the Regulation of Financial Services Authority Number 10 of 2022 replacing the Regulation of Financial Services Authority Number 77 of 2016 is intended to improve the fintech rules in Indonesia. This new regulation also aims to accommodate Sharia-based fintech provisions. In addition, the enactment of Law Number 4 of 2023 concerning the Development and Reinforcement of Financial Sector regulates the provisions regarding fintech services to guarantee legal certainty for online lending services.

⁷ "Bahaya! Daftar 429 Pinjol Ilegal Terbaru 2023 Yang Perlu Kamu Tahu!," Ok Bank, Accessed October 10, 2023, Https://Kta.Okbank.Co.Id/Id/Blog/Article/Bahaya-Daftar-429-Pinjol-Ilegal-Terbaru-2023-Yang-Perlu-Kamu-Tahu.

⁸ Grahanusa Mediatama, "Inilah Modus Baru Pinjol Ilegal, Cek Daftar Pinjol Legal Dan Ilegal Terbaru Juli 2023," Kontan.Co.Id, August 7, 2023, Https://Keuangan.Kontan.Co.Id/News/Inilah-Modus-Baru-Pinjol-Ilegal-Cek-Daftar-Pinjol-Legal-Dan-Ilegal-Terbaru-Juli-2023.

⁹ Rizki Zahra Istanti, Suraji Suraji, And Yudho Taruno Muryanto, "Factors Affecting The Unoptimized Arrangements For Legal Protection Of Borrower In Information Technology Based Loan-Lending Services Transactions In Indonesia," *International Journal Of Multicultural And Multireligious Understanding* 10, No. 3 (March 23, 2023): 268–72, Https://Doi.Org/10.18415/Ijmmu.V10i3.4513.

the principle of RegTech to guarantee the administration of licit financial services that safeguard consumers.¹⁰

Fintech regulations in Indonesia have not been capable of enforcing fair fintech practices and this circumstance certainly contravenes the concept of RegTech. The disproportional fintech regulations indicate poor attention to the relevance between RegTech and fintech. This condition fails to represent the birth of RegTech back in 2009 which several countries have adhered to for ensuring proper regulations of fintech practices that significantly contribute to the economic recovery of the state.¹¹ World Economic Forum bringing the theme "Regulatory Technology for the 21st Century" set the definition of RegTech and boosted the utilization of the instrument to guarantee compliance to organizational governance and the responsibility of risk management in digital financial industries.¹²

The fast-growing fintech serves as the basis of necessary and contextual evaluations of fintech practices in Indonesia with the RegTech paradigm. The frequent participation of Indonesia in the World Economic Forum should give it the capacity to respond to the advice of RegTech being campaigned to be further internalized into a more proportional scope of fintech regulations. The urgency for such internalization in fintech will back up the regulations with comprehensiveness to help with the betterment of compliance and curtail risks across all modern financial sectors, including fintech.¹³ Fintech regulations that accommodate the principle of RegTech are playing an instrumental role as a proactive legal tool to watch fintech practices to

¹⁰ Dan Murphy And Jackson Mueller, "Regtech: Opportunities For More Efficient And Effective Regulatory Supervision And Compliance," *Milken Institute, July* 11 (2018), Https://Milkeninstitute.Org/Sites/Default/Files/Reports-Pdf/Regtech-Opportunities-White-Paper-Final-_2.Pdf.

 ¹¹ "Growing Regulatory Complexities – Regtech To The Rescue," Accessed November 11, 2023, Https://Www.Prove.Com/Blog/Growing-Regulatory-Complexities-Regtech-To-Rescue.

¹² Gudula Deipenbrock, "Digital Finance And Beyond In The Third Decade Of The 21st Century - Observations With A Focus On The Eu Policy And Legal Perspective," *European Business* Law Review 33, No. 3 (May 1, 2022), Https://Kluwerlawonline.Com/Api/Product/Citationpdfurl?File=Journals\Eulr\Eulr2022 014.Pdf.

¹³ Fabian Teichmann, Sonia Boticiu, And Bruno S. Sergi, "Regtech – Potential Benefits And Challenges For Businesses," *Technology In Society* 72 (February 1, 2023): 102150, Https://Doi.Org/10.1016/J.Techsoc.2022.102150.

guarantee compliance with the law with the aim to avert any potential violations that harm customers. $^{\rm 14}$

Studies regarding RegTech challenges affecting illegal fintech ecosystems carry considerable potential for the future. D. Broby holds that RegTech has been instrumental in the innovation of forming a fintech legal framework, as well as in risk management and fraudulence prevention.¹⁵ The ideal legal framework of RegTech as studied by A.G. Martinez serves as the instrument influential to Fintech Regulatory Sandbox Singapore 2016 in reinforcing and supervising platform compliance to avert any illegal fintech activities.¹⁶ The urgency of RegTech is also highlighted by S. Andrae, holding that the internalization of RegTech into financial regulations should be able to respond to individual challenges and cover macro aspects that set the barrier for all stakeholders to fintech practices.¹⁷ A study conducted by Gomber P. et. al analyzed the essence of RegTech development to regulate digital finances and mitigate illegal fintech practices.¹⁸ Another study by Douglas W. Arner et. al indicates that issues presented by RegTech in adjusting to fintech vast development are instrumental in suppressing potential threats arising from illegal fintech practices to the ecosystems of the digital economy.¹⁹

Some researchers have studied and understood the urgency of the concept of REgTech in the fintech sector to ensure this problematic illegal fintech. Considering novelty, this research topic is to establish the basis of this

¹⁴ Xiangrui Chao Et Al., "Regulatory Technology (Reg-Tech) In Financial Stability Supervision: Taxonomy, Key Methods, Applications And Future Directions," *International Review Of Financial Analysis* 80 (March 1, 2022): 102023, Https://Doi.Org/10.1016/J.Irfa.2022.102023.

¹⁵ Daniel Broby, Angela Daly, And David Legg, "Towards Secure And Intelligent Regulatory Technology (Regtech):: A Research Agenda," *Technology And Regulation* 2022 (October 27, 2022): 88–99, Https://Doi.Org/10.26116/Techreg.2022.009.

¹⁶ Aurelio Gurrea-Martínez, "Disruptive Technologies And Digital Transformation Of The Financial Services Industry In Singapore: Regulatory Framework And Challenges Ahead," Ssrn Scholarly Paper (Rochester, Ny, December 3, 2020), Https://Doi.Org/10.2139/Ssrn.3741759.

 ¹⁷ Silvio Andrae, "Fintech Regulation: A Macro-Structural Approach," In *Fintech Research And Applications*, Vol. Volume 5, Transformations In Banking, Finance And Regulation, Volume 5 (World Scientific (Europe), 2022), 93–139, Https://Doi.Org/10.1142/9781800612723_0002.

¹⁸ Peter Gomber, Jascha-Alexander Koch, And Michael Siering, "Digital Finance And Fintech: Current Research And Future Research Directions," *Journal Of Business Economics* 87, No. 5 (July 1, 2017): 537–680, Https://Doi.Org/10.1007/S11573-017-0852-X.

¹⁹ Douglas W Arner, "Fintech, Regtech, And The Reconceptualization Of Financial Regulation," *International Law*, 2017.

research, particularly regarding RegTech relevance to the legal norms of fintech in Indonesia, thereby guaranteeing proportional regulatory practices for fintech and curtailing illegal fintech practices. This research is expected to make a valuable contribution in the academic sphere to help understand the standing of RegTech as an instrument to strengthen the legal framework of fintech in Indonesia. The internalization of RegTech into the legal framework shows its essential urgency of forming a proportional legal framework to back up the growth of financial sectors as in China.²⁰ The proportional legal construction for fintech should serve as the basis for the establishment of a strong legal framework to support the growth of fintech in a digital epoch under the principle that safeguards consumers from illegal fintech practices. Departing from the above issue, this research focuses more on the study of the paradigm of regulatory technology in fintech regulation in Indonesia to mitigate and encounter illegal fintech practices.

Research Methods

This research employs a normative method as the research fundamental response to the legal problem as discussed in this article. A normative method is used to set the legal framework, legal principle, and legal doctrine to construct legal argumentation to resolve the legal problem.²¹ This research is considered relevant to the analysis of the concept of regulatory technology (RegTech) within the legal landscape of fintech practices in Indonesia to deal with illegal fintech. Statutory and conceptual approaches are used to profoundly analyze the problem.²² The principle of RegTech will serve as the basis of the analysis to delineate the fintech law that holds transparency and accountability for law enforcers in creating room for collaborations among stakeholders to cope with the problematic illegal fintech practices in Indonesia. The analysis of this article is based on a content analysis method. Holsti argues that this method draws a new horizon that helps discover, identify, and process materials. This research specifically analyzes a more dynamic issue with the reference to varied conceptual literature on the

²⁰ Tadiwanashe Muganyi Et Al., "Fintech, Regtech, And Financial Development: Evidence From China," *Financial Innovation* 8, No. 1 (January 28, 2022): 29, Https://Doi.Org/10.1186/S40854-021-00313-6.

²¹ Theresia Anita Christiani, "Normative And Empirical Research Methods: Their Usefulness And Relevance In The Study Of Law As An Object," *Procedia-Social And Behavioral Sciences* 219 (2016): 203, Https://Doi.Org/10.1016/J.Sbspro.2016.05.006.

²² Robert Elliott And Ladislav Timulak, "Descriptive And Interpretive Approaches To Qualitative Research," *A Handbook Of Research Methods For Clinical And Health Psychology* 1, No. 7 (2005): 147–157.

REgTech paradigm presented in each argumentation of the analysis performed by the author. $^{\rm 23}$

Discussion

The Legal Framework of Fintech in Indonesia to Mitigate and Cope with the Violations of Law Concerning Illegal Fintech

Several regulations regarding fintech are enacted but none comprehensively regulates fintech, particularly in the case of peer-to-peer lending (henceforth referred to as P2P lending) or online loan services. The comprehensive regulation in this context requires a regulatory system governing fintech that is authorized to follow and predict the advancing technology and guarantee legal certainty and protection.²⁴ None of the existing regulations equal to the statute regulates the legality, general provisions, violations, and sanctions of illegal fintech services. Sundry problems of online loan services (fintech) have been linked to interest rate transparency, unauthorized use of consumers' personal data misuse by companies providing loan services and inappropriate debt collection contravening the applicable legal systems.²⁵ Some fintech service providers are also not registered and operating without a license, leaving concern among the members of the public.

Born from technological advancement, fintech began to exist without compatible laws capable of encountering the issues commonly arising. Illegal fintech services are often unregistered, involving, among others, inhuman debt collection, threats, terrors, and personal data disclosure. People are deeply concerned and not a few have been depressed due to the threats posed by fintech services. All these circumstances indicate the essence of laws capable of giving solutions to the issue, but none has protected those concerned and provided legal certainty, parallel to the adage "*het recht hink achter de feiten aan*" law staggers right behind the occurrence. Fintech is left without any legal umbrella equal to a statute. Fundamentally, the regulation concerning P2P lending has solely adhered to the regulation enacted by the Financial Services Authority. The regulatory provisions concerning this matter

²³ Ole R. Holsti, "Content Analysis For The Social Sciences And Humanities," Reading. Ma: Addison-Wesley (Content Analysis), 1969, 14.

²⁴ Inda Rahadiyan, "Perkembangan Financial Technology Di Indonesia Dan Tantangan Pengaturan Yang Dihadapi," *Mimbar Hukum* 34, No. 1 (2022): 215.

²⁵ Helena Toshely Sasmita Et Al., "Analisis Faktor Perlindungan Konsumen Dalam Urgensi Pembentukan Undang-Undang Pinjaman Online (Peer To Peer Lending)," *Media Iuris* 5, No. 1 (2022): 39, Https://Www.Academia.Edu/Download/88773771/Pdf.Pdf.

remain interspersed among private and criminal law, the protection of financial service consumers, and other laws relating to fintech services, including Electronic Information and Transactions, Personal Data Protection Law, and Consumer Protection Law.

The regulation concerning fintech is specified in the POJK Number 10 of 2022 concerning Technology-Based Crowdfunding. At the start of P2P lending by fintech, the Financial Services Authority enacted POJK Number 77 of 2016 concerning Information Technology-Based Loan Services, specifying the necessity of periodical supervision by the OJK. Fintench service administration must be registered and operate under license. The industry is also required to submit monthly and annual reports and present auditing track records.²⁶ This regulation delineates simplified substance and is more focused on only the licensing requirements; this regulation is intended to gather and entice fintech peer-to-peer lending providers into registering with the Financial Services Authority for reachable supervision.

POJK Number 10 of 2022 specifies the matter better than that of the previous one, covering sanctions albeit restricted to only administrative ones, including license revocation. In other words, the platforms failing to comply with the rule will not get the license extended following the revocation. This revocation, however, is deemed incapable of deterring the parties running illegal fintech services because those with the revoked license still have the chance to initiate P2P-lending fintech platforms while attracting people needing such services. This happens simply because there are no specified regulations governing the Financial Services Authority that can forcibly impose sanctions on unregistered platforms. This seems to be the problem causing the uncontrollably growing illegal fintech services. It is also important to highlight that the Financial Services Authority is not the only institution with the authority to impose criminal sanctions.

To guarantee the legal protection of consumers, all P2P fintech providers must abide by POJK Number 6 of 2022 concerning the Protection of Consumers and the Members of the Public in Financial Service Sectors, considering that P2P lending is a non-banking institution under the supervision of the Financial Services Authority. The amendment of POJK Number 77 of 2016 to POJK Number 6 of 2022 has made no difference in curtailing illegal fintech practices. Juridically, no regulations equal to a statute are capable of criminalizing illegal fintech service providers and no deterring

²⁶ Hari Sutra Disemadi And Regent Regent, "Urgensi Suatu Regulasi Yang Komprehensif Tentang Fintech Berbasis Pinjaman Online Sebagai Upaya Perlindungan Konsumen Di Indonesia," *Jurnal Komunikasi Hukum (Jkh)* 7, No. 2 (2021): 610.

effects can be imposed. POJK is inadequate, recalling that no criminalization is specified therein. The solution might be that online lending services regulated by POJK are made equal to the relevant statute.

The regulation set by the Financial Services Authority applies only to fintech services registered under the authority. The supervision given should also be within the purview of imposing sanctions on fintech services violating the rules by revoking the licenses. In terms of illegal fintech practices, the Financial Services Authority established an Investment Alert Task Force (IAT) responsible for handling illicit conduct in crowdfunding and investment management according to the Decree of the Board of Commissioners of the Financial Services Authority Number 01/KDK.01/2016 on 1 January 2016.

The IAT was initiated by the collaboration involving several related institutions, including the Financial Services Authority, the Ministry of Trade of the Republic of Indonesia, the Capital Investment Coordination Body, the Ministry of Cooperatives and Small and Medium Enterprises of the Republic of Indonesia, the Ministry of Communication and Information of the Republic of Indonesia. This organization periodically performs cyber patrol to discover illegal fintech P2P lending practices still in operation followed by closure. The organization also submits the list of illegal fintech to the police department for further legal action. The regulations on fintech are not interconnected as the Civil Code consists of Book I concerning Persons, book II concerning Objects, Book III concerning Contracts and Book IV concerning Expiration, while fintech is regulated in Book III concerning contracts.

A P2P lending fintech practice involves an agreement between a loan provider and a loan applicant. The administrator in this lending setting serves as a mediator between the loan provider and the applicant. This stage further requires the existence of a contract that causes an agreement to take place. Such an agreement is left without any legal protection in an illegal fintech practice. The contract that binds the two parties concerned under an electronic contract does not necessarily take into effect, but an investigation to validate the contract according to Article 1320 of the Civil Code remains important.²⁷

The violations committed by P2P lending practices are closely related to criminal law as the fundamental instrument that proscribes such violations and imposes criminal sanctions (capital punishment, imprisonment,

²⁷ Surya Dewangga Putra, "Analisis Hukum Terhadap Keabsahan Perbuatan Pembobolan Pinjaman Online Ilegal," *Al Yasini: Jurnal Keislaman, Sosial, Hukum Dan Pendidikan* 6, No. 2

detention, fines, or substituting punishment). Such illegal practices of P2P lending harm people; debt collectors are hired to intimidate, terrorize, and threaten consumers before their data are disclosed. Criminal law is known to impose strict sanctions on whoever violates the law and commits a crime, while the regulations concerning fintech P2P lending do not establish such strict imposition with which law enforcers should eradicate illegal fintech practices violating consumers' rights.²⁸ The absence of such sanction imposition gives no deterrence, allowing fintech practices to keep growing massively. The penal code has been the primary guideline according to which sanctions have been imposed on these illicit practices. To date, the Penal Code serves as the basis for legal remedies in case of violations of consumer's rights due to unfair conduct by irresponsible parties involved in P2P lending systems.

Criminal sanctions, however, could serve as effective solutions to encourage fintech P2P lending service providers to register with the Financial Services Authority. With this approach, all technology-based lending activities can be duly controlled, particularly those of P2P lending practices.²⁹ The presence of this P2P lending as the product of the development of information technology is also congruous with Law Number 19 of 2016 concerning the Amendment of Law Number 11 of 2008 concerning Electronic Information and Transactions (henceforth referred to as UU ITE). The UU ITE is currently serving as a legal protection that legitimises agreements made electronically. P2P lending agreements are made within the cyber purview, requiring no physical meeting of the parties involved. This law acts as the basis for fulfilling the legal certainty and protection for fintech service users.

Unfair conduct by fintech P2P lending providers involving humiliation, intimidation, and phone number hacking of consumers violates UU ITE and can be categorized as cybercrime. This provision is further specified in Article 45 Paragraph (4) in conjunction with Article 27 Paragraph (4) of Law Number 19 of 2016 concerning Electronic Information and Transactions³⁰ and Law Number 27 of 2022 concerning Personal Data

²⁸ Disemadi And Regent, "Urgensi Suatu Regulasi Yang Komprehensif Tentang Fintech Berbasis Pinjaman Online Sebagai Upaya Perlindungan Konsumen Di Indonesia," 606.

²⁹ Otniel Yustisia Kristian, "Perlindungan Hukum Pengguna Layanan Fintech P2p Lending Dari Tindak Pidana Ekonomi Dan Terhadap Penyedia Layanan Fintech P2p Lending Ilegal," *Majalah Hukum Nasional* 52, No. 2 (2022): 315.

³⁰ Deny Guntara, Muhamad Abas, And Farhan Asyahadi, "Perlindungan Hukum Nasabah Atas Kerugian Transaksi Pinjaman Online Ilegal Dihubungkan Dengan Undang-Undang Informasi Dan Transaksi Elektronik," *Binamulia Hukum* 12, No. 1 (2023): 109.

Protection (henceforth referred to as UU PDP) which also governs personal data control and processing. The administration of fintech specified in UU PDP is categorized as personal data controlling, considering fintech as corporate. Personal data processing is performed by a fintech provider which must work under the principle of personal data protection as governed by Article 16 Paragraph (2) of UU PDP.

Principally, personal data processing performed by providers must involve the consent of personal data owners. This consent must also be made in writing and appropriately recorded on an electronic or non-electronic basis with equal legal force. This obligation is outlined in Article 22 of UU PDP. This agreement can be declared null and void. It is also compulsory for the provider to ensure that the authentication, verification, and validation for personal data processing are duly applied. Article 35 of UU PDP specifies the obligation of personal data controllers to protect and ensure the security of the personal data processed.

Dispute settlement is further outlined in Article 64 Paragraph (1) of UU PDP, confirming that personal data dispute settlement can involve arbitration, court, or another possible institution. In case of a breach committed by providers, data subjects could make further reports to an institution responsible for personal data protection, file a claim according to Article 1365 of the Civil Code, and report the case as criminal conduct under Articles 67, 68, 69, and 70 of Personal Data Protection Law.³¹

Fintech P2P lending is also regulated by Law Number 8 of 1999 concerning Consumer Protection as the manifestation of the state with a developing economy in which the rights of consumers must be guaranteed and protected for the sake of economic democracy. Consumer Protection Law currently serves as a legal umbrella covering all the interests of consumers especially when they are aggrieved by the providers.

Disintegrated regulations as above accommodate fintech in Indonesia but there are no specific regulations governing fintech but the POJK, while the POJK is not integrated into the structure of the legislation, leaving loopholes in the legal frameworks, particularly concerning illegal fintech. In other words, no more space is left for such integration. Thus, fintech control only complies with the initiation of the institution concerned.

The absence of comprehensive fintech regulations capable of accommodating the decentralization phenomena of the financial system is

³¹ Ian Dharsono Wijaya Pane And Christine St Kansil, "Tanggung Jawab Penyelenggara Pinjol Terhadap Data Pribadi Dalam Layanan Fintech," *Cakrawala Repositori Imwi* 6, No. 4 (2023): 1160.

likely to weaken the guarantee of legal certainty and protection.³² It is essential to further review the effectiveness of the law, particularly the legal effectiveness of the regulations governing fintech. A regulation established should be capable of resolving the issues growing in society, while the existing regulations regarding this case have not guaranteed any fair legal protection. The absence of comprehensive regulations may result in weak legal protection affecting fintech customers. Optimal supervision over fintech services is intended to ensure that consumers feel secure and their rights are protected. The Financial Services Authority has not guaranteed any maximum supervision while the growing trend of illegal fintech practices seems unstoppable.³³

To guarantee protection for people, preventive settings should be guaranteed by the government and related institutions through education and information on fintech P2P lending. Public literacy should be improved to ensure that no one is involved in illegal fintech practices. Regulations must be set to cope with illegal fintech issues while supervision and legal action must also be taken into account to ensure that those violating the regulations are sanctioned. However, the Financial Services Authority does not hold any authority to conduct supervision over and impose sanctions on illegal fintech. Illegal fintech is handled by IAT, a task force involving multi-institutions. This organization serves as a backup in the supervision and sanction regarding illegal fintech as a repressive action. This repressive legal protection also imposes maximum sanctions on those running illegal fintech. Regulatory provisions under the law equal to a statute with a binding force are required to ensure that criminal sanctions are imposed. These sanctions are expected to deter violators and curtail the uncontrolled growth of illegal fintech practices.

The IAT has taken the following strict measures to prevent and cope with illegal fintech: 1) publicly announcing the existence of illegal fintech; 2) regularly submitting application to block certain websites and applications to the Minister of Communication and Information Technology of the Republic of Indonesia; 3) blocking financial access of illegal fintech; 4) encouraging banks to reject the opening of bank account without any recommendation of the Financial Services Authority and to make a confirmation with the authority for existing accounts suspected to be accessed for illegal fintech

³² Rahadiyan, "Perkembangan Financial Technology Di Indonesia Dan Tantangan Pengaturan Yang Dihadapi," 210.

³³ Arifin Et Al., "Peran Otoritas Jasa Keuangan Dalam Pengawasan Jasa Layanan Keuangan Berbasis Financial Technology Peer To Peer Lending," 711.

services; 5) requiring Bank Indonesia to forbid Fintech Payment System from facilitating illegal fintech practices; 6) passing the information report to Criminal Investigation Unit of Indonesian National Police for further legal enforcement process; 7) enhancing the role of Crowdfunding Fintech Association Indonesia (AFPI) to deal with illegal fintech; 8) providing education and regular information encouraging people to join only legal fintech.³⁴

The Paradigm of Regulatory Technology in Fintech in Indonesia to Mitigate and Cope with Violations of Law Concerning Illegal Fintech Lending

RegTech holds a vital role in setting the rules in fintech industries. In the sector of financial technology, RegTech integrated into fintech serves as the instrument ensuring that the applicable regulatory provisions manifest the compliance of fintech entities for appropriate services to avert any likelihood of loss in digital financial sectors³⁵ (see Figure 1). The study conducted by Abufara, dkk. indicates that fintech law adhering to RegTech principles holds an essential role in supporting companies to run safe and reliable fintech activities.³⁶

³⁴ Zaenal Arifin Et Al., "Peran Otoritas Jasa Keuangan Dalam Pengawasan Jasa Layanan Keuangan Berbasis Financial Technology Peer To Peer Lending," *Jurnal Usm Law Review* 6, No. 2 (2023): 720.

³⁵ Ioannis Anagnostopoulos, "Fintech And Regtech: Impact On Regulators And Banks," *Journal Of Economics And Business*, Fintech – Impact On Consumers, Banking And Regulatory Policy, 100 (November 1, 2018): 7–25, Https://Doi.Org/10.1016/J.Jeconbus.2018.07.003.

³⁶ Yusuf Abufara Sharif Abu Karsh, "The New Era Of Financial Technology In Banking Industry," *Journal Of Southwest Jiaotong University* 55, No. 4 (2020), Http://Www.Jsju.Org/Index.Php/Journal/Article/View/699.

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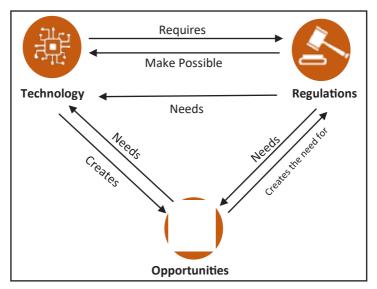


Figure 1. RegTech in integrated regulations and technology to give opportunities and benefits in the regulations of modern financial services

Source: Https://Www.Fintica.Com/Regtech/

Another study by Meiryani dkk highlights the competence of RegTech in strengthening the financial security system, particularly in detecting suspicious transactions, and preventing the involvement of terrorists in financial services.³⁷ That is, the integration of RegTech within the regulatory structure of Fintech in Indonesia is deemed relevant to the resolution of the problem concerned. Not only will this approach set the regulatory guidelines, but more effective, secure, efficient, and reliable regulations will be manifested to help implement legal fintech services.³⁸ The presence of proportional regulations is instrumental to the state and just and fair legal protection for all citizens.³⁹ Well-prepared and appropriate regulations will lead to just fintech

³⁷ Meiryani Meiryani, Gatot Soepriyanto, And Jessica Audrelia, "Effectiveness Of Regulatory Technology Implementation In Indonesian Banking Sector To Prevent Money Laundering And Terrorist Financing," *Journal Of Money Laundering Control* 26, No. 4 (January 1, 2022): 892–908, Https://Doi.Org/10.1108/Jmlc-04-2022-0059.

³⁸ Ellinor Johansson Et Al., "Regtech-A Necessary Tool To Keep Up With Compliance And Regulatory Changes," *Acrn Journal Of Finance And Risk Perspectives, Special Issue Digital Accounting* 8 (2019): 71–85.

³⁹ Anastasia E. Semyonovykh, "Legal Protection And Legal Defense: Approaches To The Study Of Concepts," Ed. F.V. Fetyukov, *Shs Web Of Conferences* 134 (2022): 00122, Https://Doi.Org/10.1051/Shsconf/202213400122.

practices. Measures taken to provide legal protection are intended to avert illegal conduct⁴⁰ for the protection of individuals, people, and the state.⁴¹ From this point, the RegTech principle is expected to complete the proportionality of fintech law not only as the basis of fintech practices but also as an instrument of the state in preventing criminal conduct in fintech services for the sake of the protection of individuals, people, and the state.

The concept of RegTech has broader coverage in terms of the development of digital financial industries, including fintech.⁴² To date, there has not been any formal model delineating the legal construction to avoid illegal fintech practices through a RegTech approach.⁴³ Some references on the enhancement of RegTech components in the legal structure of fintech were garnered to resolve illegal fintech issues. This research concludes that the following components of RegTech should be more emphasized in the establishment of fintech law to tackle the issue: (1) transparency and accountability,⁴⁴ (2) supervision and law enforcement,⁴⁵ and (3) networking and collaborations.⁴⁶ The Regtech components studied are instrumental to this research to help analyze whether the legal framework for fintech in Indonesia adequately serves as the legal basis to set the law that deals with illegal fintech practices.

First, the accountability and transparency aspects in Regtech hold a central role in strictly supervising fintech companies, including management background, compliance with the law, and business models applied.⁴⁷ With

⁴⁰ L.N. Berg, "Legal Protection: The Basis Of Classification, Types, Legal Science And Law Enforcement Practice" 3 (2017): 22–27.

⁴¹ I. Ya Kozachenko And G. P. Novoselov, "Criminal Law. General Part: Textbook For Universities" (Yurayt Publishing House, Moscow, 2021).

⁴² Laura Grassi And Davide Lanfranchi, "Regtech In Public And Private Sectors: The Nexus Between Data, Technology And Regulation," *Journal Of Industrial And Business Economics* 49, No. 3 (September 1, 2022): 441–79, Https://Doi.Org/10.1007/S40812-022-00226-0.

⁴³ Emmanuel Schizas Et Al., "The Global Regtech Industry Benchmark Report," Ssm Scholarly Paper (Rochester, Ny, June 30, 2019), Https://Doi.Org/10.2139/Ssrn.3560811.

⁴⁴ Greg Buchak Et Al., "Fintech, Regulatory Arbitrage, And The Rise Of Shadow Banks," *Journal Of Financial Economics* 130, No. 3 (December 1, 2018): 453–483, Https://Doi.Org/10.1016/J.Jfineco.2018.03.011.

⁴⁵ Andrea Oconitrillo Rojas, "Towards The Creation Of The Regulatory Framework For Fintech In Costa Rica," *Revista Nacional De Administración. Volumen* 14, No. 1 (2023): 11–22.

⁴⁶ Majid Bazarbash, *Fintech In Financial Inclusion: Machine Learning Applications In Assessing Credit Risk* (International Monetary Fund, 2019).

⁴⁷ Ahmad Alaassar, Anne-Laure Mention, And Tor Helge Aas, "Exploring A New Incubation Model For Fintechs: Regulatory Sandboxes," *Technovation* 103 (May 1, 2021): 102237, Https://Doi.Org/10.1016/J.Technovation.2021.102237.

regard to improving accountability, some countries like Britain, Columbia, Australia, Mexico, Singapore, and others set the rules, temporarily allowing the services to start operating. However, this license can be revoked unless the companies concerned comply with the requirements or are involved in lawful fintech services.⁴⁸ In Singapore, for example, temporary licensing is given for fintech services as governed by the law equal to the local statute. To support transparency, fintech law in Singapore implements the know-your-customer principle, aiming to verify the identities of customers and avert the likelihood of suspicious transactions, particularly regarding the practices of illegal fintech.⁴⁹

Indonesia has set the rules governing fintech legality. Law Number 4 of 2023 concerning the Development and Reinforcement of the Financial Sector has accommodated fintech-based crowdfunding, but this matter is only regulated under Articles 8 and 9 of POJK Number 10 of 2022 concerning Technology-Based Crowdfunding Services, not under the statute to allow for the verification of management background of a company. This regulation does not govern the provision concerning temporary licensing, unlike other laws applied in other countries. As mentioned earlier, Singapore has a regulation regulating fintech licensing within the legal framework equal to an Act, while the legal consequences resulting from fintech services are likely to be tenuous. This is because the POJK is more administrative and more focused on technical aspects, failing to set the legal fundament to encourage fintech companies to apply the know-your-customer principle.

The transparency aspect also plays a crucial role in dealing with illegal fintech practices. Britain, for example, has managed to develop blockchain technology as an instrument to help increase transparency in the supervision of fintech practices.⁵⁰ The transparency aspect in blockchain significantly helps supervise unchangeable transactions, allowing for the detection of illegal fintech activities to be further given follow-up in either technical or legal scopes.⁵¹ To enhance transparency, Britain utilizes big data as an advanced analytical instrument to detect suspicious transactions for more reliable

⁴⁸ Baker Mckenzie, "A Guide To Regulatory Fintech Sandboxes Internationally," 2020.

⁴⁹ "Regulating Fintech: The Perspectives Of Law, Economics, And Technology - Proquest,"AccessedOctober23,2023,

Https://Www.Proquest.Com/Openview/8711e02872f9ad7e357970b75ee71928/1?Pq-Origsite=Gscholar&Cbl=2026366&Diss=Y.

⁵⁰ Carlo R. W. De Meijer, "The Uk And Blockchain Technology: A Balanced Approach," *Journal Of Payments Strategy & Systems* 9, No. 4 (January 1, 2016): 220–229.

⁵¹ "Uk-Fintech-State-Of-The-Nation.Pdf," N.D.

fintech services.⁵² This also indicates the commitment to ensuring the protection of personal data governed under the General Data Protection Regulation (GDPR) in Britain. This legal instrument is integrated into blockchain technology, thereby ensuring that fintech companies abide by the regulations concerning personal data and no inappropriate use of the data of fintech users takes place.

The Indonesian government highlights the essence of the development of economic and financial ecosystems by maintaining the balance between innovation, consumer protection, and integrity. This is intended to ensure openness and foster information transparency in businesses.⁵³ Nevertheless, within the fintech sector, the transparency aspect in RegTech still presents a problem that needs immediate action. For a better transparency level, legal support in the development of blockchain technology integrated into big data is required as an instrument to supervise and analyze suspicious transactions, thereby improving transparency in the fintech sector. Article 101 of POJK Number 10 of 2022 regulates the transparency of appropriate administration that should be integrated into blockchain development. A study conducted by Zabelina et. al. implies that insightful regulation of RegTech has adopted big data technology that is capable of storing countless data, allowing for easy and integrated access, processes, and analyses of documents.⁵⁴ Indonesia enacted Law Number 27 of 2022 concerning Personal Data Protection which should foster the transparency aspect in RegTech to develop blockchain integrated into big data and to give follow-up to the problems of personal data disclosure common in illegal fintech services.

Second, the supervisory and law enforcement aspects in RegTech are considered efficient tools for official authorities in analyzing administrative documents to verify suspicious data accurately, efficiently, and sustainably and to avert any likelihood of fraud in transactions.⁵⁵ The main issue lies in the broadened role of an institution authorized to supervise every transaction taking place in both legal and illegal fintech services. The order performed by

⁵² Fernando Restoy, *Fintech Regulation: How To Achieve A Level Playing Field* (Financial Stability Institute, Bank For International Settlements London, 2021), Https://Www.Piie.Com/Sites/Default/Files/Documents/Restoy-03-11-2021ppt.Pdf.

⁵³ Bank Indonesia, "Blueprint Sistem Pembayaran Indonesia 2025 Bank Indonesia: Menavigasi Sistem Pembayaran Nasional Di Era Digital," *Jakarta: Bank Indonesia*, 2019.

⁵⁴ Zabelina O. A, Vasiliev A. A, And Galushkin S. V, "Regulatory Technologies In The Aml/Cft," *Kne Social Sciences*, February 15, 2018, 394–401, Https://Doi.Org/10.18502/Kss.V3i2.1569.

⁵⁵ A, A, And V. (Zabelina)

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the institution is paramount, considering that it plays a primary role in the verification processes of transactions in an effort to avert fraud. 56

The law in Singapore regarding this case authorizes the Monetary Authority of Singapore (henceforth referred to as MAS). MAS is obliged to supervise the entities of fintech and other finance companies to ensure that all companies are licensed according to the applicable law and to verify companies still operating illegally.⁵⁷ MAS is also juridically authorized to enable it to take legal action in case of violations of law as detected. The sanctions imposed by MAS include fines and license revocation. MAS also holds the authority to give order and cease illegal fintech activities and even dismiss the businesses.⁵⁸

Unlike MAS, the regulatory supervision set by an independent institution in Indonesia cannot go any further than MAS does. The authority to supervise is held by the Financial Services Authority under Law Number 21 of 2011. According to Article 8 paragraphs (2), (4), and (6) of POJK Number 10 of 2022, supervision conducted by the Financial Services Authority is restricted only to legal and registered fintech. Considering that administrative sanctions are the only consequences imposable according to Article 15, this legal basis cannot guarantee the authority of the Financial Services Authority to take strict measures to cope with illegal fintech in Indonesia. That is, the position of the Financial Services Authority is weaker than that of MAS which may reach legal domain. The follow-up regarding illegal fintech practices in Indonesia is only restricted to platform blocking through the Task Force of Eradication of Illegal Financial Activities (henceforth referred to as SATGAS PAKI), which is ineffective to hamper illegal financial platforms.⁵⁹

⁵⁶ Cheng-Yun Tsang, "From Industry Sandbox To Supervisory Control Box: Rethinking The Role Of Regulators In The Era Of Fintech," University Of Illinois Journal Of Law, Technology & Policy 2019 (2019): 355.

⁵⁷ Anton N. Didenko, "Cybersecurity Regulation In Singapore's Financial Sector: Protecting Fintech 'Ants' In A Jungle Full Of 'Elephants," Ssrn Scholarly Paper (Rochester, Ny, 2020), Https://Doi.Org/10.2139/Ssrn.3679678.

⁵⁸ Didenko.

⁵⁹ Although illegal fintech services have been blocked, it does not stop illegal fintech activities. SATGAS PAKI monthly announces illegal fintech data blocked. In September, it was reported that there were 288 illegal fintech platforms blocked. See : Grahanusa Mediatama, "288 Tawaran Pinjol Ilegal Diblokir, Cek Daftar Pinjol Legal & Ilegal September 2023," Kontan.Co.Id, September 7, 2023, Https://Keuangan.Kontan.Co.Id/News/288-Tawaran-Pinjol-Ilegal-Diblokir-Cek-Daftar-Pinjol-Legal-September-2023.

All three aspects of networking and collaborations in RegTech also hold a vital role in tackling illegal fintech practices. This application requires further collaborations and partnerships for transparent and standardized fintech practices that comply with the law. The RegTech concept with a focus on information technology can improve compliance with the law to help companies manage and reduce risks in fintech businesses in the context of the obligation to report.⁶⁰ For example, the legal provision pertaining to initial consultation before the application for licensing is made can provide an opportunity for dialogue for both the fintech company and regulator. This dialogue enables the company to better understand the expectations of the regulator regarding the requirements that have to be met, which may give elaborate information and help improve moral obedience to ensure that companies will comply with the regulations applied.⁶¹

However, the provision specified in Law Number 4 of 2023 and POJK Number 10 of 2022 in Indonesia has not comprehensively set the legal framework that supports partnerships as mentioned above. The fintech law in Indonesia is more focused on the process of fintech services on an individual basis. Therefore, the need to further make contextual legal provisions is paramount to spare room for discussion for both regulators and fintech companies. This opportunity serves as part of the information educating fintech companies in providing fintech services and setting more effective collaborations to maintain the regulations applied.

Within the fintech framework in Indonesia, legal support is necessary to ensure the opportunity for more effective interaction between fintech companies and official authorities in an attempt to deal with illegal fintech practices. With this support, fintech companies can get involved in educating consumers to ensure that they are not involved in illegal fintech practices and to give information to official authorities on suspicious activities and transactions. Thus, official authorities can take immediate action in response to the grievances registered.⁶² To improve supervisory quality, innovation is

⁶⁰ Yueh-Ping Yang And Cheng-Yun Tsang, "Regtech And The New Era Of Financial Regulators: Envisaging More Public-Private-Partnership Models Of Financial Regulators," *University Of Pennsylvania Journal Of Business Law* 21 (2019 2018): 354.

⁶¹ Andrew P. Scott, "Fintech: Overview Of Financial Regulators And Recent Policy Approaches," *Congressional Research Service Report* R46333, 2020, Https://Www.Everycrsreport.Com/Files/20200428_R46333_19f1ed5392343333e617b3ff0 0f188e518b2e6bc.Pdf.

⁶² Lauren A. Fahy, "Fostering Regulator–Innovator Collaboration At The Frontline: A Case Study Of The Uk's Regulatory Sandbox For Fintech," *Law & Policy* 44, No. 2 (April 2022): 162–84, Https://Doi.Org/10.1111/Lapo.12184.

essential for both official authorities and fintech companies. Legal support for fintech companies is necessary to help develop the technology in supervision and control run according to data analysis and artificial intelligence (AI) effective to detect suspicious activities that lead to illegal transactions for quick handling by official authorities.⁶³

Table 1	l.
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The Analysis of the Growing Relevance of RegTech to Cope with Illegal Fintech Services Against Fintech Law in Indonesia

No.	The Ideal Concept of the	Legal Circumstances in
110.	RegTech Principle	Indonesia
1.	Accurate data verification	- The absence of temporary
	 The application of temporary licensing to measure the commitment of fintech entity towards compliance with the law and in the prevention of poor company backgrounds The application of the know-your-customer principle in companies for their clients to reduce unfair transactions and prevent illegal activities 	 licensing provisions in fintech law in Indonesia. Ideal identification of a company can only be performed by the Financial Services Authority during the registration process Technical regulations in place regarding the know-your- customer principle although not compulsory. The measurement of the know- your-customer principle is unconvincing and triggers
		varied criteria among fintech companies
2.	Active Identification of	- The development of
	Suspicious Transactions	Blockchain technology is still
	- Legal support to help	in the planning stage.
	develop blockchain	Convincing framework
	integrated into big data to	integrated into big data is
	control and detect suspicious transactions in	absent

⁶³ Fahy.

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	illegal fintech services for	
3.	further legal follow-up Active Supervision from Official Authorities - Active official authorities in controlling legal and illegal fintech practices	- The fintech law in Indonesia is limited by the role of the Financial Services Authority in supervising illegal fintech activities. The technical regulations embedded in the POJK only allow the Financial Services Authority to control the registered fintech providers.
4.	 Imposable Proportional Sanctions The technical authority holds the authority to take legal action in response to illegal fintech practices as identified 	 The fintech law in Indonesia does not directly authorize the Financial Service Authority to take legal actions against illegal fintech practices but its authority is only restricted to imposing administrative sanctions on legal fintech services. The follow-up given upon the identification of illegal fintech only involves blocking the financial platforms by the Financial Services Authority and SATGAS PAKI
5.	 Powerful Synergy between the authorities and companies Opening the opportunity for discourse to support the understanding of fintech for the sake of raising obedience. Building interactions and collaborations between the authorities and fintech companies intended to give 	- The fintech law in Indonesia has not provided any reliable legal support to allow for interactions between official authorities and fintech companies to discuss challenges and chances for safer and more proportional fintech activities for customers.

Source: Processed Data (2023)

The above Table and RegTech paradigm indicate that there are some steps to consider as the basis for revising fintech law in Indonesia. First, stricter licensing regulations are required to ensure that fintech platforms are duly registered. Such strict regulations are intended to guarantee that the fintech services comply with regulations and that no illegal fintech activities are operating.⁶⁴ Furthermore, the development of blockchain technology integrated into big data can be a vital instrument to watch suspicious transactions and detect illegal fintech activities. All these aspects are relevant, considering that blockchain technology has been applied in some countries to supervise and prevent illegal fintech activities.⁶⁵ Proportional legal support in this sector is deemed to be a measure to create a legal ambience in enforcing the law in technology. The study conducted by M. Hidebrandt implies that the notion of legal ambience is a way of re-enforcing the "rule of law" as legal protection to ensure that intelligent surroundings manage to create beneficial values through the utilization of technology.⁶⁶

Second, legal support must be given to support the establishment of supervisory technology that helps the Financial Services Authority to supervise obedience to law and the authority to impose sanctions as a followup of findings regarding illegal fintech practices. This concept is parallel to the findings in the study conducted by S. Zeranski, explaining that the presence of a supervisory agency embedded with a supervisory technology component can serve as an additional supervisory tool to guarantee the protection of

⁶⁴ Geniusee, "Fintech Regulation: Legal Issues And Regulatory Compliance - Our Cto's Article On Forbes," Geniusee, Accessed October 24, 2023, Https://Geniusee.Com/Single-Blog/Fintech-Regulation-Legal-And-Regulatory-Aspects.

⁶⁵ Victor Chang Et Al., "How Blockchain Can Impact Financial Services – The Overview, Challenges And Recommendations From Expert Interviewees," *Technological Forecasting And Social Change* 158 (September 2020): 120166, Https://Doi.Org/10.1016/J.Techfore.2020.120166.

⁶⁶ Mireille Hildebrandt And Bert-Jaap Koops, "The Challenges Of Ambient Law And Legal Protection In The Profiling Era," *The Modern Law Review* 73, No. 3 (2010): 428–460, Https://Doi.Org/10.1111/J.1468-2230.2010.00806.X.

financial systems and reduce risks.⁶⁷ Such legal support indicates that the legal norm must be applied at an infrastructure level because legal certainty, in accommodating the infrastructure, contributes to the effectiveness of embodying the objectives of the law.⁶⁸

Third, legal support is essential in creating an opportunity for more effective collaborations between official authorities and fintech companies. Within this framework, both can collaborate in watching suspicious transactions and providing education to consumers to guarantee that no illegal fintech practices still operate in Indonesia. With strong legal support, the collaborations can serve as a strategic measure to maintain compliance and reduce the likelihood of illegal fintech practices. The active involvement of the stakeholders will provide benefits for people in enforcing substantive justice.⁶⁹ The capacity of fintech industries to take part will come as an aspect to enforce justice in the legal sector of fintech as a modern lending instrument which is safe and beneficial for consumers.

Conclusion

Since the initial operation of fintech services in Indonesia, Indonesia has issued regulations to bring about more managed fintech entities. Although the law governing fintech in Indonesia tends to fragment into some private, administrative, and criminal sectors, this legal framework does not have adequate capacity to cope with illegal fintech services. Many users have been harmed by disproportional and illegal fintech practices. According to the paradigm of regulatory technology, some revisions need to be taken into account regarding the legal landscape in Indonesia to tackle illegal fintech practices. The legal provisions concerning fintech in Indonesia require the presence of supporting regulations that help improve transparency and accountability in fintech practices. Legal support is also needed to supervise and enforce the law dynamically and to guarantee an opportunity for collaboration between stakeholders in dealing with illegal fintech practices. All these measures are expected to lead to a more effective environment relevant to RegTech's paradigm in dealing with illegal fintech practices in Indonesia.

⁶⁷ Stefan Zeranski And Ibrahim Ethem Sancak, "Digitalisation Of Financial Supervision With Supervisory Technology (Suptech)," *Ssrn Electronic Journal*, 2020, Https://Doi.Org/10.2139/Ssrn.3632053.

⁶⁸ Mireille Hildebrandt, "Legal Protection By Design: Objections And Refutations," *Legisprudence* 5, No. 2 (October 1, 2011): 223–248, Https://Doi.Org/10.5235/175214611797885693.

⁶⁹ Heather Leawoods, "Gustav Radbruch: An Extraordinary Legal Philosopher," *Washington* University Journal Of Law & Policy 2 (2000): 489.

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