

The Legal Ethics in Financial Technology: How is it Regulated?

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Abstract. *The FinTech sector in ASEAN has grown dramatically. Southeast Asian FinTechs like GoJek and Grab grew from early roots to become digital economy behemoths. New players enter the fray on a regular basis, drawn in by their success and the region's market potential for the people. The purpose of this research is to find out the regulations and ethics of financial law that are used for the welfare of the people. The approach method used was a normative juridical approach, the results of the research result state that: Regulations or laws provide a level of trust, security, and comfort for the community and are something that the state must do without exception as a state of law. One form of protection is the establishment of laws or regulations relating to lending activities, specifically to protect users' rights. To ensure that this process is successful, the state intervenes in the contractual relationship between consumers and business actors, aiming to create a balanced relationship between users and business actors. Funder protection is concerned with protection. Law provided in an effort to obtain goods and services from potential losses due to their use.*

Keywords: Ethics; Financial; Technology.

1. INTRODUCTION

A nation's development must prioritize the interests of its citizens¹. As a continual process, development must always be responsive and attentive to societal dynamics, including those in the political, economic, technological, social, and cultural spheres, among others. Modern society lives in the information technology era, also known as the informative society, which is also known as the "disruptive era" or the industrial revolution 4.0². The current digital era is known as the Digital Disruption Era. The term "digital disruption" refers to a significant shift from being offline to being online³. The

¹ Batunanggar S. *Fintech Development and Asian Development Bank Institute*. 2019;(1014), p.1-12

² Ulya, N.U. and Musyarri, F.A, Reformulasi Pengaturan Mengenai Financial Technology Dalam Hukum Positif Di Indonesia. *Arena Hukum*, Vol 13, No 3 (Dec. 2020), p.479–500.

³ Qisthi Fauziyyah Sugianto, Widhi Handoko, Peluang dan Tantangan Calon Notaris Dalam Menghadapi Perkembangan Disrupsi Era Digital, *Notarius*, Volume 12 No. 2 (2019), p.656-668

application of IT innovation in the learning process has become an effective driving tool for improving learning outcomes and achieving educational goals as the function of IT in the field of education.⁴ This means that the globalized world has put human life in the midst of a rapidly developing technological flow while also posing a threat to humans. Technological advancements are the result of human intellectual work, which has resulted in extraordinary changes in the human life today.⁵

Indonesia is the country with the highest growth rate of e-commerce users, which was 78% in 2018. The high number of e-commerce users in Indonesia is the potential target market.⁶ The global advancement and development of information technology has had a wide impact on national and international community life.⁷ These advancements have not only created electronic commerce (e-commerce), thereby eliminating the traditional concept of buying and selling, but they have also raised public concerns and fears about the negative excesses of this technology, such as credit card fraud.

2. RESEARCH METHODS

The approach method used was normative juridical, namely legal research that places law as a norm system building. The norm system in question was about the principles, norms, rules of legislation and doctrine. Normative juridical research examines the rule of law as a system building related to certain legal events. The type of data used in this research was secondary data which consists of primary legal materials, secondary legal materials, and tertiary law materials obtained from books, literature, papers, laws and regulations, and other data sources.

3. RESULTS AND DISCUSSION

3.1. Financial Technology (Fintech) as a Forerunner for Modern Enterprises

Fintech, or financial technology, refers to businesses that provide cutting-edge financial technology.⁸ Since 2010, such enterprises have arisen as a trend-setting.⁹ Fintech

⁴Saripudin, As'Ari Djohar, Dedi Rohendi, Ade Gafar Abdullah, Developing Information Technology in OpenCourseWare: From Movements to Opportunities in Asia, *Indonesian Journal of Science & Technology*, Volume 5 Issue 3, December 2020, p.308-320

⁵ Hayder M. Kareem Al_Duhaidahawi, Jing Zhang, Mustafa S. Abdulreza, Meriem Sebai, Sinan Abdullah Harjan, Analysing the effects of FinTech variables on cybersecurity: Evidence form Iraqi Banks, *International Journal of Research in Business and Social Science*, Vol 9 No (6)(2020), p.123-133

⁶ Sarli Rahman, Fadrul Fadrula, Yusrizal Yusrizala, Robert Marlyna, Mujtaba M Momin, Improving the Satisfaction and Loyalty of Online Shopping Customers Based on E-Commerce Innovation and E-Service Quality, *Gadjah Mada International Journal of Business*, Vol. 24, No. 1 (January-April 2022), p.56-81

⁷ OECD (2020), Digital Disruption in Banking and its Impact on Competition <http://www.oecd.org/daf/competition/digital-disruption-in-financial-markets.htm>

⁸ Oti Handayani, Adi Sulistiyono, Pembadanan Hukum Fintech Sebagai Instrumen Pengaturan Persaingan Usaha Yang Sehat, *Masalah-Masalah Hukum*, Jilid 49 No.3, July 2020, p.244-255

companies are typically micro, small, or medium-sized enterprises with a clear vision for introducing new or building better financial services. All those are normally fintech start-ups, the number of which is increasing all the time (by various estimates, their number has already exceeded ten thousand firms). The rise of fintech companies is due to two primary factors. First, the global financial crisis of 2008 exposed to customers the flaws in the old banking system that contributed to the crisis.¹⁰ Second, new technologies have enabled to deliver financial services with greater mobility, simplicity of use (visualization of data), speed, and cheaper costs. Fintech is gaining popularity in modern financial services among innovative financial firms seeking to maintain and strengthen their market leadership by providing modern, high-quality services to their clients in a simple and effective way, anywhere and at any time.

The FinTech sector in ASEAN has grown dramatically. Southeast Asian FinTechs like GoJek and Grab grew from early roots to become digital economy behemoths. New players enter the fray on a regular basis, drawn in by their success and the region's market potential. Fintech activities in financial services can be classified into five categories, as follows.¹¹ Firstly, it is payment, transfer, clearing, and settlement (payment, clearing and settlement). This activity is closely related to mobile payments (either by banks or non-bank financial institutions), digital wallets, digital currencies and the use of distributed ledger technology (DLT) for infrastructure. Secondly, it could be deposits, loans and additional capital (deposits, lending and capital raising). The most common fintech innovations in this area are crowd-funding and online P2P (peer-to-peer) lending platforms, digital currencies and DLT. This application is closely related to financial intermediation.

Next, it is related to risk management. Fintech companies participating in the insurance sector (InsurTech) have the potential to influence not only insurance marketing and distribution, but also underwriting, risk pricing and claim settlement.¹² Also, it is deal with market support. Fintech technology departments can provide simpler or more efficient processes, such as e-aggregators, big data, digital ID verification, data storage and processing (cloud computing), or execution of orders through "smart" contracts. Information exchange and transparency is a critical topic. Then, it is such as investment management. This includes e-trading platforms that allow consumers to invest directly through computers in all types of assets, "smart" contracts (smart contracts), and Fintech innovations that offer automated advice (robo-advice) on financial advisors, including investment and portfolio management.

⁹ Svetlana Saksonova, Irina Kuzmina-Merlino, Fintech as Financial Innovation-The Possibilities and Problems of Implementation, *European Research Studies Journal*, Volume XX, Issue 3A, 2017, p.961-973

¹⁰ PWC. *Financial Services Technology 2020 and Beyond: Embracing Disruption.*; 2020. www.pwc.com/fstech2020

¹¹ Financial Stability Board. *Financial Stability Implications from FinTech: Supervisory and Regulatory Issues That Merit Authorities' Attention.*; 2017

¹² Johannes Ehrentraud, Denise Garcia Ocampo, *FSI Insights on Policy Implementation Policy Responses to Fintech: A Cross-Country Overview.*; 2020

In Indonesia, the model of Fintech includes (i) Peer-to-peer (P2P)/market place business lending; (ii) Peer-to-peer (P2P)/market place consumer lending; (iii) Peer-to-peer (P2P)/market place real estate lending; (iv) Donation-based crowdfunding; (v) Equity-based crowdfunding; (vi) Reward-based crowdfunding; (vii) Revenue-sharing/profit-sharing crowdfunding; (viii) Debentures (debt-based securities); dan (ix) Balance sheet consumer lending.¹³

COVID-19 has contributed significantly for digitalization, because enterprises rapidly adapt their interventions to respond to changing buyer behaviour.¹⁴ A massive shift in commerce and financial services, as well as a global pandemic, have various innovation in strategic plans and IT operational processes. The vigorous rate of globalization digitalization has also prompted governments around the world to investigate new Fintech opportunities such as the need for nationalized instant payment systems, the distribution of government subsidies through digital payments, and the growth of central-bank issued digital currencies for cross-border trade. The pandemic has also contributed to the development of new cyber threats and attacks centered on COVID-19 government subsidies and remote working.

The fintech industry is driving ASEAN's economic development, with estimates for the region's digital economy rising from USD 100 billion in 2019 to USD 300 billion in 2025. Despite a general downturn in startup funding due to the COVID-19 pandemic in 2020, Southeast Asian fintech startups raised \$1.25 billion in total across 125 transactions. Therefore, fintech firms have played a significant, if not dominant, role in the digitalization of Asia's financial services industry. Digital payments are one of fintech's fastest-growing sections, particularly in ASEAN, where digital payment acceptance is on the rise. Fintech provides convenience in using and utilizing various financial services digitally, including payments, loans, investments, and insurance.¹⁵

3.2. The Urgency of Legal Ethics in FinTech Sectors

The fintech industry in Indonesia is growing very rapidly, this is indicated by growing number of startups in fintech sector. When companies fail to meet the hedge accounting criteria for their financial derivatives contracts, any changes in the fair value of such financial derivatives instruments would be immediately recognized in their income statements.¹⁶ Even in payment system, can now be done via internet using an electronic wallet application which is considered easier and more practical than

¹³ Syena Idfilandu, Saripudin, Financial Performance Analysis of Bank Companies Before and After the Fintech Era, *Journal Accounting and Finance*, Vol. 5, No. 2, September 2021, p.89-101

¹⁴ Winnie Yamashita Rolindrawan, Asri Rahimi and Callista Putri Mayari, Review L. *Financial Technology Financial Technology Law Review*. 2021, p.138-147

¹⁵ Mochammad Fajar, Cintia Widya Larasati, Peran Financial Technology (Fintech) dalam Perkembangan UMKM di Indonesia: Peluang dan Tantangan, *Humanis*, Vol. 1 No. 2 June 2021, p.702-715

¹⁶ Oktavia, Sylvia Veronica Siregar, Ratna Wardhani, and Ning Rahayu, The Effects of Financial Derivatives on Earnings Management and Market Mispricing, *Gadjah Mada International Journal of Business*, Vol. 21, No. 3 September-December 2019, p.289-307

payment systems with cash, cards, and so on.¹⁷ Each year, it is estimated that cybercrime costs approximately USD 608 billion – nearly 1% of global GDP. The Asia-Pacific region accounts for nearly a third (32.9%) of that total. The COVID-19 spread has boosted dependency on the internet for crucial services, allowing fraudsters to commit cybercrime via phishing and social media scams. Six major cyber security threats are progressively being used against individuals and businesses in the ASEAN region.

Firstly, it is phishing. It is a cyber-threat in which malicious actors send fraudulent messages to users in order to trick them into disclosing personal and sensitive information. Then, botnets are cyber-criminal-controlled networks of compromised computers and devices that can be used to target financial firms and their clients. Ransom ware is a type of malware that infects a device and then encrypts files, preventing the user from accessing them unless a ransom is paid. Crypto jacking is illegal. A new threat has emerged: the unauthorized use of a victim's computer to secretly mine crypto currency. Although the above mentioned reports highlight the emerging threats about crypto jacking, little has been discussed about its severeness, infrastructure, and technical characteristics.¹⁸ Malware is any malicious software program that masquerades as legitimate and causes harm to the user once installed on the user's computing device. Configuration flaws or vulnerabilities in web and mobile applications enable cybercriminals to exploit them for data exfiltration and other nefarious purposes.

Too since insecure interfaces increase the risk of unauthorized access, cyber-security is the most significant barrier to Internet of Things (IoT) technology adoption. Through an IoT device, hackers can gain access to a corporate network. Seeing as IoT technology is based on cloud-based services, implementing effective perimeter defenses will be difficult. The pervasiveness of IoT data collection, combined with advanced analytic capabilities, has the potential to violate consumer privacy.

As the usage of fintech grows, policymakers should continue to examine the effectiveness of their existing regulations with the goal of maximizing benefits while minimizing risks.¹⁹ The extent to which regulators respond to fintech activities could be determined by whether current regulatory frameworks adequately address relevant emergent concerns. Most ASEAN countries have national cyber security laws or policies or are in the process of developing their own, which is a crucial necessity for business transparency. Many IoT devices do not really support the adoption of strong security controls, and keeping a security baseline will only get more difficult as the number of IoT devices grows.

¹⁷ Lilies Anisah, Juridical Analysis of Fintech Business Dispute Settlement Through Online Dispute Resolution (ODR), *International Journal of Social Science Research and Review*, Vol 5, Issue 8 August, 2022 Pages: 344-348

¹⁸ G. Hong, Z. Yang, S. Yang, L. Zhang, Y. Nan, Z. Zhang, M. Yang, Y. Zhang, Z. Qian and H. Duan, "How You Get Shot in the Back: A Systematical Study about Cryptojacking in the Real World," 2018

¹⁹ Setyo Utomo, Tantangan Hukum Modern di Era Digital, *Jurnal Hukum Media Bhakti*, Vol 1 No 1 2017, p.74-81

In Indonesia, the Financial Technology (fintech) regulates in article 7 No.40/PP/2018 on Tax Administration System Update.²⁰ The regulation focuses on information technology and database implemented to develop information systems that can be trusted and reliable for processing tax data accurately technology-based according to the main business process. Additionally, the Financial Services Authority (Indonesian: *Otoritas Jasa Keuangan* (OJK)) and Bank Indonesia (BI), as monetary authorities, have enacted regulations that serve as the basis in law for Fintech activity in Indonesia. Fintech operations are governed by three regulations established by the Financial Services Authority, as follows.

- OJK Regulation No.77/POJK.01/2016 on Information Technology-based Lending.

The policy is intended to encourage the expansion of fintech peer-to-peer (P2P) lending platforms as new financing options for areas that have yet to receive optimal service from traditional financial institutions. Other financial services institutions classify P2P platforms. Customer protection is also required under this regulation.

- OJK Regulation No.12/POJK.03/2018 on the Implementation of Digital Services by Commercial Banks.

This governs how information technology is used in financial services. All financial institutions that want to issue electronic/digital products must first ask OJK for authorization. To provide better services to clients and effective risk management, institutions must prioritize product innovation, collaboration with partners, and digital procedures.

- OJK Regulation No.13/POJK.02/2018 on Digital Financial Innovation in the Financial Services Sector.

This is a fintech umbrella regulation. Fintech companies that have not yet been licensed by other authorities must apply to OJK to be registered in the regulatory sandbox. Responsible finance innovation, the deployment of a robust security system and excellent governance, as well as client protection and anti-money laundering/combating compliance are all important aspects of this regulation.

- OJK Regulation No.37/POJK.04/2018 on Equity Crowd Funding

The purpose of this law is to regulate equity crowdfunding. Its goal is to improve Indonesia's economic growth by allowing small businesses and start-ups to raise financing digitally for company's growth.

- Bank of Indonesia Regulation No.19/10/PBI/2017 on Fintech Companies.

²⁰ Regulation of the President Republic of Indonesia Number 40 Year 2018 About Pembaruan Sistem Administrasi Perpajakan

The regulation aims to help the fintech ecosystem as well as the Indonesian economy, particularly payment companies. Fintech companies must register with the Bank of Indonesia and are prohibited from using digital money. They will spend about a year in the regulatory sandbox before applying for a license.

- Bank of Indonesia Regulation No.20/6/PBI/2018 on Electronic Money (E-money).

The regulation is built to support the advancement of the e-money business model. E-money issuers' institutional capacity is strengthened, along with capital and ownership composition.

To support digital financial innovations in Indonesia, OJK employs five strategies: holistic and balanced strategies, agile regulatory framework, market conduct supervision, regulatory sandbox, and digital innovation¹. OJK ensures the resilience or safety and soundness of fintech while also encouraging innovation and competition. To build and maintain trust in the industry, fintech must ensure customer protection in its operations. OJK establishes principle-based regulations for digital financial innovation while acknowledging the fintech industry's dynamic nature. It gives the industry the flexibility and responsibility to define codes of conduct and operating standards that are appropriate for their business. OJK is in charge of fintech regulation and control. Meanwhile, fintech companies are responsible for running their businesses through business ethics, risk management, and compliance. OJK established a Fintech Association to facilitate the growth of fintech. The regulatory sandbox is an OJK verification system that evaluates the dependability of the business operations, business model, financial instruments, and the innovator's governance based on predefined criteria. The regulatory sandbox enables OJK to broaden the knowledge of fintech business models and risks, as well as to help financial institutions improve their business models and governance.

The Electronic Information and Transaction Law explains several things in its legal considerations¹⁰. Globalization of information has positioned it all as part of the world digital age, requiring the establishment of laws regarding information security and Electronic Transactions at the national level until it can be handled out maximally, evenly, and distributed to all levels of society in order to enlighten the nation's life. The advancement and development of information and communication causes changes in human life activities in a variety of fields, which has directly influenced the emergence of new forms of legal action. Based on laws and regulations, the use and utilization of technology must continue to be developed in order to maintain, maintain, and strengthen national unity and integrity.²¹ The use of technological advances plays a vital role in trade and national economic growth in order to realize welfare of the people, the government must assist the technological advancement through legal and regulatory framework and regulation so that the use of technology is executed efficiently in order to avoid its malpractice by giving attention to religious and socio-cultural values.

²¹ Yoyon M. Darusman, Bambang Wiyono, *Teori dan Sejarah Perkembangan Hukum*, Unpam press, Tangerang Selatan, 2019, p.57

Legal protection is meant to provide legal certainty for the entities so that potential customers feel safe and secure when completing transactions, particularly those involving information technology.²² The issue of legal protection has always been directly related to the advancement of science and technology, as well as the growth of consumers themselves, both of which are in perpetual flux. The funder has a very high level of risk in Indonesian lending because the funder provides money for financing without any collateral or guarantee and does not directly know the beneficiary; the funder only knows the borrower's information based on available information. The law was designed to serve several purposes, one of which is to prevent conflicts. As a result, the rights and duties of human beings are controlled in the legal system so that each human being understands his rights and duties, with the hope that there will be no violations of rights. Radbruch argues that the Legal Systems must consist of: 1) The principle of legal certainty (*rechtmatigheid*) 2) the principle of legal justice (*gerechtigheit*) 3) the principle of legal benefit (*zwechmatigheit or doelmatigheid*).

The law is protective, which means that the nature of the law provides protection. Substantively, the principle of protecting the nation and the homeland is stated in the preamble to the 1945 Constitution. One of the points that becomes the basic reference for determining the meaning of law and is one of the fundamental values of our legal system is that the law is protective. In this case, legal protection in general refers to the protection provided by law, which is also related to the rights and obligations possessed by humans as legal subjects. Legal protection, on the other hand, is a right that every citizen must obtain and an obligation that the state must provide to its citizens. Legal protection is an acknowledgement of its citizens' dignity as both human beings and legal subjects. Everyone has the right to recognition, guarantees, protection, fair legal certainty, and equal legal treatment.

The Indonesian government is attempting to monitor and simultaneously support the development of fintech activities that have yet to be formally regulated, owing to the exponential growth of the fintech sector in the country. Bank Indonesia and the OJK provide sandbox facilities to accomplish this. The sandboxes of each body address different areas, with Bank Indonesia focusing on fintech payment systems and the OJK on fintech financial services. Banking, capital markets, insurance, pension funds, and financing institutions are all examples of its use. Because legal and regulatory measures relating to financial technology are hardly publicly disclosed, it is hard to forecast what the government will do next. Typically, authorities will only send draft laws to certain sector groups for suggestions and to let representatives to hedge their business decisions.

4. CONCLUSION

The regulations or laws provide a level of trust, security, and comfort for the community and are something that the state must do without exception as a state of law. One form of protection is the establishment of laws or regulations relating to

²² Gika Asdina Firanda, Paramita Prananingtyas, Sartika Nanda Lestari, Debt Collection of Financial Technology Lending, *Proceedings of the 1st International Conference on Science and Technology in Administration and Management Information, ICSTIAMI 2019*, p.1-12

lending activities, specifically to protect users' rights. To ensure that this process is successful, the state intervenes in the contractual relationship between consumers and business actors, aiming to create a balanced relationship between users and business actors. Funder protection is concerned with protection. Law provided in an effort to obtain goods and services from potential losses due to their use. The purpose of legal protection is to provide legal certainty. The purpose of legal protection is to provide legal certainty for the parties, so that they feel safe and secure when performing transactions, particularly those using information technology, and no party is harmed or benefited.

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