

The Law And Digital Revolution In Financial Technology (Fintech) Present Significant Opportunities To Accelerate Digital Financing Of The Sdgs

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Abstract: The Sustainable Digital Finance Is The Interaction Between Technology And Sustainability, Assessing Its Potential To Contribute To Environmental Sustainability. The Law And Digital Revolution In Financial Technology (Fintech) Present Significant Opportunities To Accelerate Digital Financing Of The Sdgs. This Study Highlights The Significant Opportunities To Accelerate Digital Financing Of The Sdgs By Digital Revolution In Financial Technology (Fintech), And How To Redesign Fintech Law After The Covid-19 Pandemic Regarding The Implementation Of Sdgs In Indonesia.

Keyword: Law, Digital Revolution, Financial Technology (Fintech), Digital Financing, The Sustainable Development Goals (Sdgs)

1. Introduction

The Industrial Revolution 4.0 has had a positive impact on progress the whole field. One of the fields is the digital economy which indirectly directly able to provide many opportunities for the whole community to get quick access related to finance. Fintech is present as an industry which is relatively new. Therefore, the government should be able to make laws and regulations that are able to provide comfort to the customers in transactions.

FinTech, a word that comes from the combination of "Financial" and "Technology." Currently, the term refers to new business in the Indonesian financial and banking industry, a technological innovation that is attracting public attention. The purpose of this research is to develop a FinTech mechanism model for technological innovation in the Indonesian Financial and Banking Industry. The Indonesian banking and financial industry sector is a sector that has an important role in the

economy and continues to develop according to the needs of the people in Indonesia. Today, new business models and information technology concepts provide the basis for innovative solutions in finance.

Innovation in the financial sector is known as Financial Technology (FinTech). According to a working paper circulated by Bank Indonesia, one type of FinTech that is believed to change the future of the global financial industry is "Blockchain", which later became the basis for the development of the concept of "digital currency"¹.

In the current state of the COVID-19 pandemic, financial technology or fintech is one of the keys to accelerating national economic growth. There are not completely reliable 2021 economic predictions. The crisis caused by Covid-19 is unprecedented so it is impossible to predict with certainty how the government and society will react to this crisis. However, some things have been proven. One of them is about the importance of Fintech during economic uncertainty.

With the characteristics of Fintech, which are low-touch economy, customer-based, based on social capital, using data science, and being driven by young professionals, the development of Fintech during the pandemic is still positive. Referring to the statistical data of the Financial Services Authority (OJK), the total distribution of Fintech grew 113.05% to Rp128.7 trillion until the third quarter of 2020. Accumulated borrower accounts grew 103.46% to 29.21 million. Meanwhile accumulated lender accounts grew 21.99% to 681,632 entities. This means that public interest in making loans through Fintech in 2021 will still grow, despite the pandemic. Nevertheless, 2021 will be a year of change with an unprecedented adaptation scheme².

There are four important transformations that will occur in 2021. First, the effects of Covid-19 will continue to influence consumer behaviour. Covid-19 is forcing people to switch to digital transactions. Statistical data shows that transactions in e-commerce rose to 400% per month during the pandemic (OJK, 2020).

¹ V. R. Wulan, "Financial Technology (FinTech) A New Transaction In Future," J. E lect. Eng. Comput. Sci. , vol. 2, no. 1, pp. 177- 182, 2017

² Media Wahyudi Askar, Tantangan Pertumbuhan Industri Fintech 2021, Koran SINDO Selasa, 12 Januari 2021,, <https://nasional.sindonews.com/read/297820/18/tantangan-pertumbuhan-industri-fintech-2021-1610370094>

In a combination of digitalization, new entrants (especially BigTechs) and financial platformization or called FinTech 4.0 in 2019-2020 have a great influence on risk and add value for wider sustainable development³.

Indonesia as one of the countries that have agreed on the implementation of the sustainable development goals (SDGs) is committed to the successful implementation of the SDGs through various activities and has taken strategic steps. A number of steps that have been taken by Indonesia until the end of 2016 include (i) mapping between SDGs goals and targets with national development priorities, (ii) mapping the availability of SDGs data and indicators for each target and goal including proxy indicators, (iii) preparing operational definitions for each SDGs indicator, (iv) drafting presidential regulations related to the implementation of sustainable development goals, and (v) preparing national action plans and regional action plans related to SDGs implementation in Indonesia⁴.

The sustainable digital finance is the interaction between technology and sustainability, assessing its potential to contribute to environmental sustainability. The law and digital revolution in Financial Technology (Fintech) present significant opportunities to accelerate digital financing of The SDGs. This study highlights the significant opportunities to accelerate digital financing of The SDGs by digital revolution in Financial Technology (Fintech), and how to redesign Fintech law after the COVID-19 pandemic regarding the implementation of SDGs in Indonesia.

2. Method

The research method used in this research is a descriptive analysis technique qualitative. Overview of research results Data collection techniques using a literature study approach. Literature used for reference include textbooks, mass media articles, and online literature searches related to this research.

3. The Significant Opportunities To Accelerate Digital Financing Of The Sdgs By Digital Revolution In Financial Technology (Fintech)

³ Arner, Douglas W. and Buckley, Ross P. and Charamba, Kuzi and Sergeev, Artem and Zetzsche, Dirk Andreas, BigTech and Platform Finance: Governing FinTech 4.0 for Sustainable Development (September 1, 2021). Available at SSRN: <https://ssrn.com/abstract>.

⁴ Badan Pusat Statistik, Potret Awal Tujuan Pembangunan Berkelanjutan (Sustainable Development Goals) Di Indonesia, Katalog BPS, 2016

In the new economy, information in the form of digital. When information goes digital and communicated through digital networks, a new world may be revealed. Amount large amount of information can be squeezed or compressed and transmitted at the speed of light. The quality of information can be much better than analog transmission. Various forms of information can be combined, information can be stored and picked up instantly from around the world, on finally giving instant access to much information recorded by human civilization. New digital equipment can be customized needs and impact on most aspects of business and personal life⁵.

Digital financial inclusion is central to how to ensure that people who are at the lower levels of the pyramid become financially active. Bank and non-bank institutions then expand access to finance with a digital finance approach financially excluded and underserved populations⁶.

In the modern era, financial economic activities are carried out by the financial services industry. In building socio-economic resilience in times of crisis, many parties prioritize the financial service system, which has been the main driver. The financial industry has experienced many revolutions in the form of advances in information and communication technology (ICT), resulting in access to efficient and innovative services. Digital financial innovation helps vulnerable communities, especially in developing countries, to access financial resources. Financial technology (FinTech) providing the financial industry and consumers with advances that make their transactions cheaper, more comfortable, and safer⁷. More and more financial institutions and technology companies invest in FinTech technology, which attracted a global investment of \$40 billion in 2019⁸. However, the FinTech maturing process is still challenging and requires more time and effort to do so. Long-term success and public acceptance are urgently needed, especially for retail financial services⁹. The challenge of balancing the potential benefits and risks in this FinTech innovation is more acute in developing countries. Mobile services have an important role for financial services to the non-banking

⁵ Nizar, N. I., & Sholeh, A. N. (2021). Peran Ekonomi Digital Terhadap Ketahanan dan Pertumbuhan Ekonomi Selama Pandemi COVID-19. *Jurnal Madani: Ilmu Pengetahuan, Teknologi, Dan Humaniora*, 4(1), 87-99.

⁶ Peric, Kosta. 2015. Digital financial inclusion. *Journal of Payments Strategy & Systems* 9: 212-14.

⁷ Puschmann, T. *Fintech. Bus. Inf. Syst. Eng.* **2017**, 59, 69-76.

⁸ KPMG. *The Pulse of Fintech 2019—Biannual Global Analysis of Investment in Fintech*; KPMG: Zurich, Switzerland, 2019; p. 80.

⁹ Gomber, P.; Kau_man, R.J.; Parker, C.; Weber, B.W. On the Fintech revolution: Interpreting the forces of innovation, disruption, and transformation in financial services. *J. Manag. Inf. Syst.* **2018**, 35, 220-265.

population in developing countries. although, a lot of research has been done on aspects of adoption and FinTech, in developing countries.

The economic activity for especially in supply and demand for sustainable financing has grown as in some of the (new) providers of products and services defined in the new sustainability paradigm. for example, new products and services with an eye on ecology transition processes and linkages between sustainability and economics and finance activity. another example of a product that is oriented towards more sustainable product and service design and improvement transparency and public information. for example, Fundación Ecología y Desarrollo, or ECODES (Foundation for Ecology and Development), in its products has a risk assessment model that enables the financial sector to measure propensity to risk and its credit and investment portfolio opportunities. on Services adopted in the banking sector, but can be used in other financial sector entities, for example funds responsible managers, investment advisors, insurance companies and public sector entities socio-economic planning and development¹⁰.

The fintech revolution, which is the digital financial revolution, is currently transforming the financial services industry with innovative factors. while the financial sector is one of the main pillars of all economic transactions in general and sustainability. The digital innovation in financial services converts financial resources that can be accessed, distributed, and managed effectively and efficiently¹¹.

All countries in the world bring two important impacts in the order of state life, namely: first, there is an increase in prosperity or standard of living achieved by the world community, second, new job opportunities are increasingly proportional to the growth rate high population. Overall, this statement shows that growth the economy can provide opportunities accompanied by greater economic equity. The digital economy in Indonesia is experiencing very rapid development, especially in financial technology (fintech).

Significant opportunities to accelerate digital financing of the SDGs by digital revolution in financial technology (fintech) is to transform the financial services industry with innovative factors in the financial revolution, especially in Fintech.

¹⁰ Vergara, Cristina Chueca, and Luis Ferruz Agudo. "Fintech and Sustainability: Do They Affect Each Other?" Sustainability (Switzerland), 2021. <https://doi.org/10.3390/su13137012>.

¹¹ Thomas, Howard, and Yuwa Hedrick-Wong. "How Digital Finance and Fintech Can Improve Financial Inclusion." In Inclusive Growth, 2019. <https://doi.org/10.1108/978-1-78973-779-020191004>.

This is because the financial sector is one of the main pillars of all general and sustainable economic transactions.

4. The Redesign Fintech Law After The Covid-19 Pandemic Regarding The Implementation Of Sdgs In Indonesia

The existence of industry, especially Financial Technology, aims to make it easier for the public to access financial products, facilitate transactions and improve financial literacy. Not surprisingly if in its evolution, this industry is increasingly attracting many good businesspeople within the scope of the financial and financial industry, as well as those outside the industry. However, along with the increasing number of users of people who use financial technology-based applications, overlap Regulatory overlap is crucial currently.

Today, the Indonesian people have been faced with a revolution technology that fundamentally changes the way we view the role of technology, both from the pattern of life to the form of interaction with other people. It is undeniable that this development can bring a major change, especially in the industrial sector, especially in the economic and banking industries. The current fintech industry continues to evolve and long term, able to form an ecosystem of an economy that can have a big impact on business actors, especially start-up businesses in Indonesia.

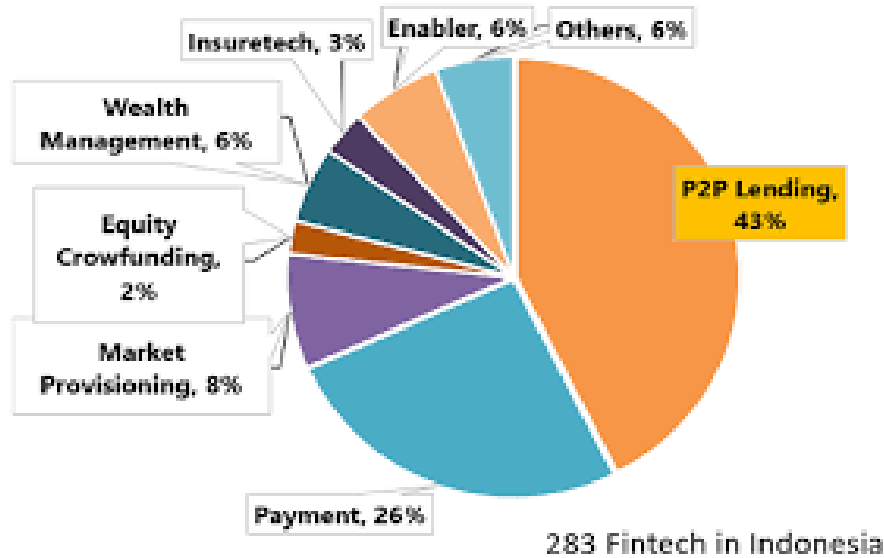
Setting and monitoring become very important for the sustainability of Fintech in Indonesia. This is related to the legality of the business being run because in the implementation fintech development has potential risk, which is related to consumer protection, stability financial system, payment system and economic stability¹².

The supporting theory used to analyze the regulation and supervision of Fintech is the legal system theory from Lawrence M. Friedman. According to Friedman, there are three elements in the legal system, namely structure, substance, and legal culture. Further quoted by Achmad Ali as Friedman's opinion expressed, the legal system consists of legal structure (legal structure), legal substance/material, and legal culture (legal culture)¹³. The development of Fintech makes many Start-Ups

¹² Santi, E., Budiharto, B., & Saptono, H. (2017). Pengawasan otoritas jasa keuangan terhadap financial technology (peraturan otoritas jasa keuangan nomor 77/pojk. 01/2016). *Diponegoro law journal*, 6(3), 1-20.

¹³ Lawrence M. Friedman, *American Law An Introduction* (second edition), translated by Wishnu Basuki, Hukum Amerika Sebuah Pengantar, Jakarta: PT. Tatanusa, 2011, page 9

look at this field. In Indonesia, Fintech products usually refer to m-payment products (mobile payments). All major e-commerce platforms or online shopping systems have developed unique versions of this Fintech product in their business¹⁴. According to CBNC Indonesia, payment products are Fintech products with the largest percentage in Indonesia of all fintech products in Indonesia, this is as shown shown in Figure¹⁵.



Picture 01. fintech development in 2021

In general, financial technology can be interpreted as a technological innovation in financial transaction services. According to Bank Indonesia regulation Number 19/12/PBI/2017 regarding the implementation of financial technology, financial technology is the use of technology in the financial system that produces products, services, technology, and/or business models and may have an impact on monetary stability, financial system stability, and/or efficiency, smoothness, security, and reliability of the payment system. More according to Bank Indonesia regulation Number 19/12/PBI/2017 concerning the implementation of financial technology, the purpose of implementing financial technology is to encourage innovation in the financial sector by implementing consumer protection as well as risk management and prudence to while maintaining monetary stability, financial

¹⁴ . Teja, "Indonesian Fintech Business : New Innovations or Foster and Collaborate in Business Ecosystems ? Literature Study and Hypothesis Development," *Asian J. Technol. Manag.*, vol. 10, no. 1, pp. 10–18, 2017

¹⁵ Kharisma, Dona Budi. "Urgency of financial technology (Fintech) laws in Indonesia." *International Journal of Law and Management* (2020).

system stability, and a stable payment system efficient, smooth, safe, and reliable. The scope of financial technology that must be followed by business entities are starting from registration, regulatory sandbox, licensing, and approval, to monitoring and supervision.

Fintech regulations regulated in Indonesia include Bank Indonesia Regulation No. 18/40/PBI/2016 Regarding the Implementation of Payment Transaction Processing, Bank Indonesia Regulation No 19/12/PBI/2017 Concerning the Implementation of Financial Technology, Regulation of Members of the Board of Governors No 19/14/PADG/2017 Regarding Financial Technology Regulatory Sandbox, Regulation Member of the Board of Governors No. 19/15/PADG/2017 concerning Procedures for Registration of Submission of Information and Monitoring of Financial Technology Implementation.

The fintech is a business that use an electronic system to run a service system finance to consumers. Therefore, the Fintech business in Indonesia is regulated and supervised by BI (Bank Indonesia) and OJK (Financial Services Authority) as the regulator of the financial services system. Financial Services Authority Regulation No. 13/POJK.02/2018 about Digital Financial Innovation in the financial services sector, it can be concluded that OJK regulates and supervises Fintech operators in Indonesia by Fintech coverage consists of transaction settlement, capital accumulation, investment management, collection and distribution of funds, insurance, market support, other digital financial support, and financial service activities other.

In the United Nations Sustainable Development Goals, the UN publishes the 2030 Agenda, which is to harmonize economic, social, and environmental sustainability. based on the List of 17 SDGs, that such as: zero poverty, quality education, affordable and clean energy, industry, innovation and infrastructure, and climate action are just a few examples. In total, the five main areas of the SDGs that are of great importance to humankind are people, planet, prosperity, peace, and partnership. These areas are often part of a social enterprise. corporate responsibility¹⁶.

Indonesia is one of the 192 member states of the United Nations adopting the Development Goals Sustainable or Sustainable Development Goals (SDGs) as agenda new global development for 2016-2030 period. SDGs endorsement which consists of 17 goals and 169 targets a new milestone of commitment international

¹⁶ Franco-Riquelme, J. N., & Rubalcaba, L. (2021). Innovation and SDGs through Social Media Analysis: Messages from FinTech Firms. *Journal of Open Innovation: Technology, Market, and Complexity*, 7(3), 165.

community on the agenda global development to continue the achievement of development goals millennium (MDGs)¹⁷.

There are several the focus of the SDGs goals that are in line with nine priority agendas (Nawacita) can be a reference or guide national development, such as¹⁸:

1. Sustainability of the agenda human development such as poverty, hunger, justice gender, and fulfillment of access on water and sanitation as issues which is always strategic.
2. Improved welfare and education according to the agenda priority to improve quality of life people through social security, education, health, and agrarian reform.
3. Economic development sustainability is a new issue which will be focused on inclusive economic growth, as well as the industrialization sustainable and development residence and city sustainable with implementation production and consumption patterns sustainable.
4. Access to affordable energy, as the new focus combined with infrastructure development such as power plant construction, use of biofuels, dams, as well as transportation routes. Diversion to renewable energy sources and management transparency the energy sector is also a focus important and social responsibility as part of a wider effort to implement governance sustainable resources.
5. Climate change that Indonesia has volunteered expressed its commitment to reduce greenhouse gas emissions. This commitment is embodied in National Action Plan for Reduction Greenhouse Gases through Perpres No. 61/ 2011 and 33 Action Plans Areas defined through governor's regulations. Step emission reduction is accompanied by adaptation step.

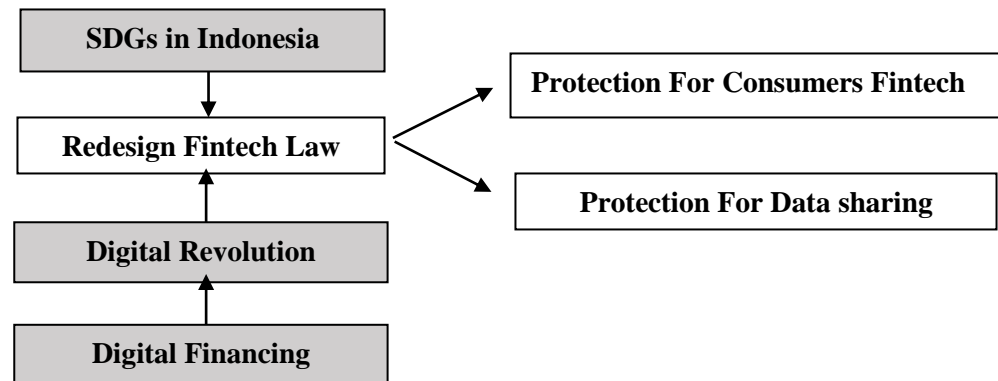
Redesign Fintech Law After The Covid-19 Pandemic Regarding The Implementation Of SDGs In Indonesia. The Adopting the Development Goals Sustainable or Sustainable Development Goals (SDGs) would be Economic development sustainability country,

The Indonesian government implements the Development Goals Sustainable or Sustainable Development Goals (SDGs) which prioritizes Economic development sustainability. The Fintech business in Indonesia is regulated and supervised by BI (Bank Indonesia) and OJK (Financial Services Authority) as the regulator of the

¹⁷ Laporan UNDP Indonesia. (2015). Konvergensi Agenda Pembangunan: Nawa Cita, RPJMN, and SDGs. Jakarta: UNDP Indonesia.

¹⁸

financial services system. Financial transactions can be easily carried out using fintech (financial technology). Fintech plays an important role in economic transactions in Indonesia in the middle of a pandemic. Fintech technology that continues to improve and develop which is very significant.



Picture 02. Redesign Fintech Law

Implementing fintech regulations in Indonesia requires legal reform so that the goals of the SDGs are to achieve sustainable economic development. In the discussion of post-pandemic fintech redesign in Indonesia, we can focus on two things, such as Protection For Consumers Fintech and Protection For Data sharing. In the aim of accelerating the digital revolution, especially in digital finance.

5. Conclusion

- a. Significant opportunities to accelerate digital financing of the SDGs by digital revolution in financial technology (fintech) is to transform the financial services industry with innovative factors in the financial revolution, especially in Fintech. This is because the financial sector is one of the main pillars of all general and sustainable economic transactions.
- b. Implementing fintech regulations in Indonesia requires legal reform so that the goals of the SDGs are to achieve sustainable economic development. In the discussion of post-pandemic fintech redesign in Indonesia, we can focus on two things, such as Protection For Consumers Fintech and Protection For Data sharing. In the aim of accelerating the digital revolution, especially in digital finance.

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