Legal Protection for Problem Debtor Related to the use of the Artificial Intelligence System in Peer to Peer Lending

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Abstract
In the era of digital economic development, the community continues to innovate in terms of providing lending and borrowing services. One form of development of Financial Technology (fintech) is the distribution of funds through the Peer to Peer (P2P) Lending system. Where this system has more or less the same role as banks, namely as an organizer; from parties who have funds (investors) to those who need funds (debtors) whose methods are carried out online. The distribution of funds through the P2P Lending system has developed rapidly in Indonesia. In carrying out its business, the loan and loan service provider uses an electronic system that is a series of electronic devices and procedures that function to disseminate information in the field of financial services. The electronic system can also be referred to as Artificial Intelligence (AI). By using AI, loan and loan service providers can find out all the debtor's personal data, where in the end the debtor becomes disadvantaged because his personal rights are violated. On the other hand there are no legal provisions in Indonesia that can protect debtors in this regard. So that in this study later will discuss about the extent of legal arrangements related to the protection of debtors in the P2P Lending system using AI. This research uses the statute approach method; namely the approach through legislation and conceptual approach, namely the legal approach through the concepts and opinions of legal experts.
Keywords: Artificial Intelligence; P2P Lending; Fintech; Legal Protection for Debtors.

Introduction

This era is the era of digitalization which is part of the industrial revolution 4.0. The term Industry 4.0 was born from the idea of the fourth industrial revolution, the European Parliamentary Research Service said that the industrial revolution happened four times. The first industrial revolution took place in England in 1784 where the invention of steam engines and mechanization began to replace human work. The second revolution took place at the end of the 19th century in

which production machines powered by electricity were used for mass production activities. The use of computer technology for manufacturing automation starting in 1970 marked the third industrial revolution. At present, the rapid development of sensor technology, interconnection and data analysis has led to the idea of integrating all of these technologies into various fields of industry.[1]

The term Industry 4.0 itself was officially born in Germany precisely when the Hannover Fair was held in 2011. The German state has a great interest in this matter because Industry 4.0 is part of its development plan policy called the High-Tech Strategy 2020. The policy aims to maintain Germany in order to always be at the forefront of the manufacturing industry.

By definition, Angela Merkel, the German Chancellor believes that Industry 4.0 is a comprehensive transformation of all aspects of production in the industry through the merger of digital and internet technology with conventional industries. However, technically, Industry 4.0 is the integration of the Cyber Physical System (CPS) and the Internet of Things and Services (IoT and IoS) into industrial processes that include manufacturing and logistics and other processes. CPS according to Lee is a technology to combine the real world with the virtual world. This integration can be realized through integration between physical processes and close loop computation.[2]

The Industrial Revolution 4.0 not only offers a positive side but also at the same time gives a negative side. Indonesia will be "swallowed" by a revolution supported by 21st century technologies such as machine learning, AL, internet of things, to 3D printing. So it is hoped the community must be able to prepare themselves, plan, and formulate strategies at the country level to deal with them. However, many people in Indonesia still do not understand what is meant by the industrial revolution and the aim of the Indonesian government to launch the fourth industrial revolution (4.0).

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[1] Hoedi Prasetyo and Wahyudi Sutopo, 'Industri 4.0: Telaah Klasifikasi Aspek Dan Arah Perkembangan Riset' (2018) 13 J@ti Undip : Jurnal Teknik Industri <https://ejournal.undip.ac.id/index.php/jgti/article/view/18369>.[17-26].

[2] *ibid.*

Almost all industrial sectors in Indonesia are offered with new innovations that can change the business models of each industry to be more effective and efficient,[3] one of which is the financial sector. The financial sector is a sector that has a stake in national economic growth. According to the Department for International Development (DFID), the financial sector is part of all macro and micro companies or can be said to be part of an economy that focuses on financial services related to transactions that exist in financial institutions. Currently, new technological innovations that are developing in the financial sector are known as financial technology (fintech).[4]

The term fintech, which if translated in Indonesian means Information Technology, which is simply the utilization of the development of information technology to improve services in the financial industry.[5] Various innovations of the fintech model[6] have also begun to develop in Indonesia such as e-money, payment gateways, crowdfunding, and P2P. E-money and payment gateway are payment service providers between one party and another, such as the go-pay, paypal and paytren applications. Companies engaged in the field of crowdfunding are more focused on raising funds from the community such as the Kitabisa.com platform which is a service provider for donations.[7] Whereas P2P lending companies carry out funding and lending as banks have functions as intermediary institutions, but technology-based P2P lending companies are only intermediaries or liaison providers.

AI technology works by combining identity number (KTP) data with alternative data, such as social media, e-commerce, on-demand services and telecommunications

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[3] Song Yee Leng, 'Financial Technologies: A Note on Mobile Payment' (2018) 22 Jurnal Keuangan dan Perbankan <http://jurnal.unmer.ac.id/index.php/jkdp/article/view/1993>.[51-62].

[4] Nofie Iman, *Financial Technology Dan Lembaga Keuangan* (Gathering Mitra Linkage Bank Syariah Mandiri 2016).[6].

[5] Nurul Rahmayani, 'Tinjauan Hukum Perlindungan Konsumen Terkait Pengawasan Perusahaan Berbasis Financial Technology Di Indonesia' (2018) 2 Pagaruyuang Law Journal <https://jurnal.umsb.ac.id/index.php/pagaruyuang/article/view/887/0>.[25].

[6] Meyer Aaron, 'Fintech: Is This Time Different? A Framework for Assessing Risks and Opportunities for Central Banks' (*Bank of Canada Qanque Du Canada*, 2017) <https://www.bankofcanada.ca/2017/07/staff-discussion-paper-2017-10/> accessed 11 February 2020.

[7] Immanuel Adhitya Wulanata Chrismantianto, 'Analisis SWOT Implementasi Teknologi Finansial Terhadap Kualitas Layanan Perbankan DiIndonesia' (2017) 20 Jurnal Ekonomi dan Bisnis <https://ejournal.uksw.edu/jeb/article/view/641>.[134].

data. The various data is used to find out the condition and character of the real person, because it is able to provide a picture of a person's overall behavior in the digital world. AI technology is considered to be able to select prospective borrowers with a track record according to character and prevent bad credit.

To solve the problem of non-performing loans by debtors, creditors often abuse AI Technology by hijacking social media accounts. The hijacking of social media accounts by the AI system will be carried out to find out personal matters from the debtor, which can later be used for creditors in billing unpaid credit installments. This is certainly a particular concern because the actions taken by creditors violate someone's privacy rights.

To anticipate or minimize the foregoing it is necessary to have good regulations to compensate for the rapid development of fintech in Indonesia.[8] So that issued the Financial Services Authority Regulation Number. 77/POJK.01/2016 Regarding Information Technology Based Lending and Borrowing Services. Other provisions that also govern fintech are Bank Indonesia Regulation No. 19/12/PBI/2017 Regardingthe Implementation of Information Technology. But on the other hand, Indonesia does have a Minister of Communication and Information Regulation No. 20 of 2016 concerning the Protection of Personal Data and Electronic Systems, however this is not enough to underlie legal certainty for parties related to artificial intelligent systems.

Based on the background that has been outlined, it can be drawn some formulation of the problem namely;

1. Legal arrangements in Indonesia related to P2P lending and the use of an artificial intelligence system as a tool to analyze P2P lending credit;
2. Legal protection for troubled debtors over P2P lending loans.

Application of Artificial Intelligence Systems in Peer to Peer Lending

According to H.A.Simon (1987), AI is a place of research, applications and instructions related to computer programming to do things that in human

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8 Rinitami Njatriajani, 'Perkembangan Regulasi Dan Pengawasan Finansial Technology Di Indonesia' (2019) 4 Diponegoro Private Law Review Journal.

view are intelligent. Meanwhile, according to the Encyclopedia Britannica, AI is a branch of computer science that represents more knowledge in the form of symbols rather than numbers, and processes information based on heuristic methods or based on a number of rules.[9] So it can be concluded that AI is a system and technology in computers that perform certain activities with the aim of facilitating human work.

With the development of technology will bring a very good impact in various sectors of human life. AI is a technological development formed for the following purposes:

Forming smarter technology or machines

The main goal of developing an AI system is to make a technology or machine smarter so that it is hoped that it will facilitate human work. One of the simplest examples is the existence of a computer. In addition to typing, computers are now developed to be smarter so they can count numbers, play music, play games, edit videos and photos, and can be used for many other useful activities.

Understanding intelligence

The scientific objective of the formation of an intelligence technology is to create a machine that is able to understand intelligence as it can solve problems faster, more precisely, more thoroughly, more effectively, and efficiently. The existence of AI is certainly easier for humans to carry out activities or activities.

Making technology more useful

In terms of entrepreneurial AI is able to make an effort to get maximum results because technology with AI will simplify the work. A job will feel light and can be

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[9] Seputar Pengetahuan, 'Pengertian Artificial Intelegence, Tujuan, Kelebihan & Kekurangannya' (*Seputar Pengetahuan*) <https://www.seputarpengetahuan.co.id/2018/09/pengertian-artificial-intelegence-tujuan-kelebihan-dan-kekurangan-terlengkap.html> accessed 10 April 2020.

completed quickly. AI is also able to collect and analyze data so that later it can find out the latest opportunities for business and prospectus in the future.

The ideal characteristic of AI is its ability to rationalize and take actions that have the best chance of achieving certain goals. AI objectives can include learning, reasoning, and perception. As technology advances, AI continues to evolve to benefit many different industries. The machine is transferred using an interdisciplinary approach based on mathematics, computer science, linguistics, psychology, and a variety of other sciences.[10]

AI has 2 categories: weak and strong. Weak AI, also known as narrow AI, is an AI system that is designed and trained for a specific task. Virtual personal assistants, such as Apple Siri, are a weak form of AI. Whereas strong AI, also known as general artificial intelligence, is an AI system with human cognitive abilities in general. When presented with a specific task, a powerful AI system can find solutions without human intervention.[11]

AI is categorized into 4 types, from the types of AI systems that exist today to living systems, which do not yet exist. The categories are as follows:[12]

a) AI Type reactive engine. For example, Deep Blue, the IBM chess program that defeated Garry Kasparov in the 1990s. Deep Blue can identify the parts on the chessboard and make predictions, but it has no memory and cannot use past experience to tell the next step. It analyzes the opponent's possible steps and himself and selects the most strategic step. Deep Blue and GoogleGOGO are designed for narrow purposes and cannot be easily applied to other situations.;
b) AI Memory Type is limited. This AI system can use past experience to inform future decisions. Some decision-making functions in self-driving cars are designed this way. Observations inform actions that occur in the not too distant future, such as a car replacement lane. This observation is not stored permanently.;
c) AI Type theory of mind. This psychological term refers to the understanding that other people have their own beliefs, desires and intentions that influence the decisions they make.;
d) AI Type Self-awareness. In this category, AI systems have a sense of self, have

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[10] Farras Bernhart, 'Mengenal Artificial Intelligence Dan Cara Kerjanya' (*CNBC Indonesia*, 2019)<https://www.cnbcindonesia.com/tech/20190513130056-37-72069/mengenal-artificial-intelligence-dan-cara-kerjanya> accessed 18 December 2019.
[11] *ibid.*
[12] *ibid.*

awareness. Self-aware machines understand their current situation and can use information to infer how others feel.

The use of AI Technology in finance and banking in the industrial revolution 4.0 is the beginning of the formation of the era of high-tech industry, where all industries compete to create, use and develop technologies that can help the industry in facilitating, accelerating and generating more revenue. One of the industries which is aggressively using high-tech such as AI is the financial and banking industry. This is commonly referred to as Financial Technology (Fintech).

One of the developments of fintech in the financial and banking industry is P2P Lending.[13] P2P Lending is a fintech offering direct loans to debtors, with fixed interest rates and without asking collateral to the debtor. P2P Lending is an alternative for people who need funds to obtain loans with a simpler administrative process and credit analysis.[14]

The use of AI in the financial and banking industry, including in this case the P2P Lending system includes:[15]

a. Chatbot and Virtual Assistant
   The bank uses chatbots (a kind of text service) and voice bots (with sound) to solve problems. Usually the technology involved here is Natural Language Processing.
b. Customer Profiling
   Banks can communicate and make decisions based on each customer's detailed profile. Decisions are taken without human intervention. AI uses both structured and unstructured data to view customer profiles. With this technology the Bank is able to measure their risk to customers and this will bring up many products that can be offered such as loans and credit cards.
c. Simplify the process
   Processes that are "low value" and repetitive can be left to AI because AI is equipped with knowledge related to applicable laws and regulations. Furthermore, AI can be used to predict the possibility of failure of a system, this opens the possibility for unnecessary preventive maintenance.

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[13] Meline Gerarita Sitompul, 'Urgensi Legalitas Financial Technology (Fintech) : Peer To Peer (P2P) Lending Di Indonesia' (2018) 1 Jurnal Yuridis UNAJA.[73].
[14] *ibid*.[72].
[15] R&D Teknologibank, 'Artificial Intelligence Untuk Perbankan' (*Teknologibank*, 2018) <http://teknologibank.com/detailpost/artificial-intelligence-untuk-perbankan> accessed 18 December 2019.

d. Detect pattern

AI can detect patterns and anomalies related to transactions that are indicated fraud or money laundering. Face and Voice recognition can be used to detect fraud perpetrators. Data can also be used to find new use cases and business insights related to risk and investment opportunities. The technology used is Machine learning that can clean unstructured data from noise that occurs in the data. Complex image recognition can be used to identify people and goods.

To be able to use AI technology in banking, the following things need to be considered:[16]

a. Building a digital backbone that is safe and fast

AI requires large amounts of data and good quality to be able to function appropriately, conduct analysis and make correct decisions. This data must be able to move safely and quickly from one collection point to the point of analysis and vice versa. This large amount of data can utilize Enterprise Data Warehouse (EDWH) or big data that is already owned by the bank.

b. Transforming human resources

AI functioned to do repetitive work and "low value" related to regulations and regulations. But AI does not replace the role of humans. AI is a human complement. Humans are enabled for jobs that require more complex analytical skills that AI cannot handle. However, banks need to improve their resource capabilities, employees need to be given appropriate training related to the use of AI in their daily work.

c. Comply with privacy and security laws

Regarding data, respecting customer privacy while maintaining high security standards is very important. AI uses a large amount of customer data to "learn" and do its work. However, the use of this data needs to follow regulations that have been set nationally by Bank Indonesia or the Financial Services Authority. Utilization of this data must be accompanied by protection of customer data security to minimize the risks that AI data might pose.

d. Stay in touch directly with customers

AI helps banking customer service to interact with customers for needs such as estimating things that will happen in the future or providing personal recommendations to customers. AI is also used to solve problems quickly and efficiently. But AI does not have the emotional and empathetic abilities, which is a very important part of Customer Service. So banks need to balance AI with humans so they can still be in touch with customers in the context of human relations.

The use of AI is very helpful in transaction and administrative activities, with the use of AI time can be shortened, able to know things related to consumers so that they can fulfill what they want precisely and quickly. Although the application

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[16] *ibid.*

of AI has several advantages for the financial and banking industry, it is important to consider several risks of implementing AI such as the threat of viruses in the system, damage to software and networks, and the risk of leakage of consumer data due to hackers. Another risk that may occur in the failure of the AI system is the misuse of data by internal and external elements.

Legal Regulations Regarding Peer to Peer Lending in Indonesia

In connection with the use of information technology and innovation in the financial services sector in Indonesia, there are a variety of financial services offered by fintech companies, both offered by financial institutions overseen by the FSA (such as services at banks, insurance, or other registered financial institutions) as well as those offered by start-up companies (companies that have not been registered and supervised by OJK). In general, financial products from the fintech business are dominated by loans (lending), crowdfunding, aggregators, payment (payment service), and financial planning (financial planning). According to statistical data from the OJK as of September 30, 2019, the accumulated number of lending sector fintech lending in Indonesia reached Rp 60,407.31 billion with a total accumulation of borrower transactions totaling 53,161,240 accounts. Examples of online fintech loan companies that are quite attractive to the public include Amartha, Investree, and Danamas.

The fintech business is no stranger and is a legal activity to do. Based on Article 7 POJK Number 77/POJK.01/2016 that fintech companies that provide online loan services must be registered and obtain prior permission by OJK. Establishing an online financial business, especially in information technology-based loan services, requires a number of special conditions that must be met by the organizer. These special requirements are related to business registration and licensing that has been regulated in Article 8-12 POJK Number 77/POJK.01/2016. If these requirements can be met, the information technology-based lending and borrowing services are legal and registered with OJK. Therefore OJK and Bank Indonesia are authorized to carry out supervision of online lending activities carried out by fintech companies.

Other provisions in POJK Number 77/POJK.01/2016 that this business must be established by 2 or more members, and the form of business has also been determined, namely a limited liability company or cooperative. The provisions in force in this POJK state that the establishment of a business entity does not have to be established by Indonesian citizens, but can also be established by collaborating with Foreign Citizens, where the maximum shareholding is 85%.

This regulation also discusses the maximum lending limit of Rp. 2 billion. The loan can be given by various parties; domestic/foreign, individuals (Indonesian Citizens/Foreign Citizens) or business entities (national/international) that have funds, in this case have been regulated in Article 16 POJK Number 77/ POJK.01/2016. In addition, it also discussed technical issues such as standard agreements made by the organizer, electronic documents, risk mitigation, security systems and electronic signatures.

When POJK Number 77/POJK.01/2016 was published, in 2017 Bank Indonesia Regulation came out. 19/12/PBI/2017. In Article 2 PBI Number. 19/12/ PBI/2017, that Bank Indonesia regulates the implementation of financial technology by applying the principles of consumer protection, the principle of prudence, and risk management to maintain monetary stability. Like OJK, Bank Indonesia also carries out a supervisory function on financial technology providers so that in carrying out their activities, they remain in compliance with the provisions of PBI and POJK while protecting the interests of debtors. The PBI also regulates the requirements and procedures for fintech company registration and licensing with Bank Indonesia. This needs to be further analyzed, related to the differences and urgency of fintech company registration with OJK and with Bank Indonesia.

Another provision in this PBI is the existence of a Regulatory Sandbox which is a safe limited trial space for testing financial technology providers related to its products, services, technologyand business modes. By using this Regulatory Sandbox, Bank Indonesia can decide whether the system testing from this fintech technology provider is successful or not. In addition, Bank Indonesia established the Fintech Office. This section was established as a fintech development center

in Indonesia. The Fintech Office is a catalyst or facilitator for the exchange of innovative ideas for the development of fintech in Indonesia. Another task is to provide information to the public on business development, monitor and map the potential of the business and the products offered. In addition, the other main task is as an institution that encourages harmonization of regulations across existing institutions.[17] For fintech companies that violate the provisions contained in PBI Number. 19/12/PBI/2017, Bank Indonesia has the right to impose sanctions in the form of written warnings, temporary termination of business until giving a recommendation to OJK to close a business from a fintech company.

After the promulgation of POJK Number 77/POJK.01/2016, in 2018 OJK issued POJK Number 13/POJK.02/2018 concerning Digital Financial Innovation in the Financial Services Sector (hereinafter referred to as POJK No. 13/POJK.02/2018). In Article 7 POJK No. 13/POJK.02/2018, regulating the Regulatory Sandbox; as already in PBI Number. 19/12/PBI/2017. Nevertheless, this POJK is a bit late because, therefore, the fintecht companies that were registered by the OJK before this provision was made cannot follow the Regulatory Sandbox and must immediately submit to POJK Number 77/POJK.01/2016. Through the Regulatory Sandbox, OJK will oversee new model fintech actors who have not been facilitated by any legal framework, for example insurtech or smart contract. If there is a specific regulation that regulates, then the fintechactor will leave the Regulatory Sandbox and must comply with a more specific legal framework.

In addition to the provisions regarding Regulatory Sandbox, POJK No. 13/POJK.02/2018 also regulates registration, monitoring (both conducted by OJK and the organizers themselves) and reporting that must be carried out by the organizers to OJK periodically. Other arrangements are related to data protection and confidentiality as well as consumer education and protection. Regarding consumer protection, there are no clear sanctions in this provision.

The National Sharia Council of the Indonesian Ulema Council also issued

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[17] Fajrina Ea Wulandari, 'Peer to Peer Lending Dalam POJK, PBI Dan Fatwa DSN MUI' (2018) 6 Jurnal AHKAM <http://ejournal.iain-tulungagung.ac.id/index.php/ahkam/article/view/1460>.[247].

a fatwa regarding information technology-based financing services in accordance with sharia principles. It has been mentioned in the MUI DSN Fatwa Number 117/DSN-MUI/II/2018 that information technology-based financing services based on sharia principles are financial services based on sharia principles that connect financing providers with financing recipients to conduct financing agreements through electronic systems with the help of the internet network. Understanding of information technology-based financing services with sharia principles means that in financing it must be adjusted to sharia principles so as to avoid usury or covering losses that are not in accordance with sharia.

Legal Protection for Debtors in Peer to Peer Lending Using the Artificial Intelligence System

Information technology based lending and borrowing services receive special attention from the government. This can be seen from 2016 to 2018, there are at least 3 regulations related to fintech institutions. The government continues to improve, especially by providing direct regulations from OJK as the supervisor in the activities carried out by financial institutions. This is proven by the provisions regarding consumer education and protection. Legal protection for consumers, organizers and partners of other fintech institutions must consider several principles mentioned in POJK Number 77/POJK.01/2016.

Preventative action as a form of legal protection for debtors carried out by the OJK is to provide very detailed requirements related to licensing and registration of fintech companies in Indonesia, as stipulated in the POJK and PBI. Thus only fintech companies that meet the requirements can have an operating license while being registered with the OJK.

Fintecht Company Status	Quantity
Registered	127
Licensed	33
Conventional	149
Sharia	11
Sum	160

Source: Statistict's OJK Fintech Lending Period June 2020

Through this table it can be seen that for the period June 2020, fintech companies that have registered with OJK are 127. There are also 33 fintech companies that have obtained permission from OJK and must immediately register no later than 6 months after the permit is issued. If not done, the permit is declared invalid. For fintecht companies that have been registered with OJK, in carrying out their activities, they must report periodically to OJK. This is a form of oversight function carried out by the OJK. So it is expected that with good supervision makes the company grow (credible) and all activities, especially in the case of P2P Lending, comply with existing laws and regulations.

Another form of legal protection provided by the government to the public in the area of fintech is through electronic documents (using AI systems). The electronic document in question constitutes an agreement on the operation of information technology-based loan services between the organizer and the lender and between the lender and the loan recipient. The contents of the electronic documents are the same as the contents of the agreement in general; is a standard agreement. The electronic documents contain at least the number, date, identity of the parties, rights and obligations of the parties, loan amount, interest rates, installment value, time period, collateral object, details of related costs, provisions regarding fines if any and regarding the mechanism dispute resolution. This is regulated in Article 19 and Article 20 POJK Number 77/POJK.01/2016. Electronic documents must be maintained by the parties as well as other written agreements because they can be used as legal evidence in the event of default. For the organizers, this electronic document is stored with correct information technology-based governance. The management can use data centers and disaster recovery centers. Not only that, the organizer must pay attention to the minimum standard of information technology systems and other technological risks that may occur in the future. To find out this, the organizer also uses an AI system so that the data obtained can be more effective, efficient and accurate. In addition, the confidentiality of an electronic document must also be maintained properly so that none of the secrets of the recipients of loans that come out or leak. Nevertheless in Article 25-Article 28 POJK Number

77/POJK.01/2016, the organizer is permitted to exchange information with parties invited to cooperate with the organizer. The party is an "information technology-based support service provider". Examples of information technology-based support service providers include big data analytics, aggregators, robo advisors or blockchain.[18] Where in this case, the process and mechanism of action remains based on AI.

In P2P Lending, the funder also has the risk of losing all funding or part of the default (wanprestasi) of the debtor, causing failure to pay. Fund recipients are basically not asked to provide collateral or collateral that is controlled by the funder, or the organizer of Fintech. Investors need to realize from the beginning that the risk of default will be fully borne by the investor. The organizer is not responsible for defaults experienced by funders/investors. It's just that, at the time of the request for borrowing funds by prospective borrowers, the organizers must carry out the principle of prudence for the funds to be distributed or given to prospective borrowers. The principle of prudence carried out by the organizer is certainly not too complicated as the bank does to prospective borrowers, this is because the bank channeled loan funds in the form of loans using public savings funds.[19]

The process of lending and borrowing money based on this information technology, begins with the filing of a loan request made by the recipient of the loan/debtor to the organizer. The loan recipient only fills out the form provided by the organizer, then the organizer (as an intermediary) is obliged to analyze the request.[20] The way for the organizer to analyze the situation of the prospective debtor is not the same as that of the banking party, by visiting the prospective debtor to his home or place of business, but by utilizing the AI system or program or application. Through the AI system, the organizer only needs to input the name,

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[18] Pasal 23 POJK Nomor 77/POJK.01/2016.

[19] Rachmadi Usman, *Aspek-Aspek Hukum Perbankan Di Indonesia* (Gramedia Pustaka Utama 2003).[18].

[20] Ernama Santi, [*et.,al.*], 'Pengawasan Otoritas Jasa Keuangan Terhadap Financial Technology (Peraturan Otoritas Jasa Keuangan Nomor 77/POJK.01/2016)' (2017) 6 Diponegoro Law Journal <https://ejournal3.undip.ac.id/index.php/dlr/article/view/19683>.[11].

KTP number and/or address of the prospective debtor, then the debtor's personal data will be read by the organizer; including family, work, hobbies, graduates and levels of education as well as more details such as telephone contacts that are on the cell phone of the prospective debtor. Then the organizer will process the personal data of the prospective debtor, to be assessed for eligibility in relation to the loan of funds being requested.[21]

The mechanism of analysis or assessment in the distribution of funds carried out by the organizer is what causes a lot of problems in the fintech industry, especially P2P Lending.[22] This is because in practice, telephone contact obtained by the organizer using the AI system, in some cases there is used for billing, if in this case the debtor experiences default. Through the AI system will be recorded, telephone contacts who are often contacted by the debtor, the more often contacted or contact the debtor, the AI system will record and conclude that the party is the "closest person" to the debtor. So of course this is detrimental to the debtor, in this case the debtor feels the service provider has violated or misused the debtor's personal data and the service provider using the AI system also entered into the information on the debtor's mobile phone without permission from the debtor itself. So that the debtor's personal data held by the service provider, as if made as "collateral" when the debtor defaults (default).

Debtor protection can also be seen from the provisions in Law Number 11 Year 2008 Regarding Information and Electronic Transactions (UU ITE), which regulates information technology in general. In the provisions of the ITE Law, debtors who feel disadvantaged because of their association with AI can file a lawsuit against the fintecht company. Until now, the POJK and PBI related to fintech, have not yet regulated more deeply related to the use of debtor's personal

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[21] Anisa Rahma Dita Dwinanda, 'Penerapan Prinsip Kehati-Hatian Dalam Layanan Pinjam Meminjam Uang Berbasis Teknologi Pada Situs Uangteman.Com' (2019) 2 Jurist-Diction <https://e-journal.unair.ac.id/JD/article/view/14350>.[829].

[22] CNBC Indonesia, 'Fintech Salahgunakan Data Konsumen, Siap-Siap Kena Denda' (*CNBC Indonesia*, 2019) <https://www.cnbcindonesia.com/tech/20190705141712-37-82978/fintech-salah-gunakan-data-konsumen-siap-siap-kena-denda> accessed 1 April 2020.

data. But on the other hand, to accommodate debtors in general, through POJK Number 18/POJK.07/2018 Concerning Consumer Compliance Services In The Financial Services Sector, provides facilities so that debtors can complain about problems related to their savings and loans in the financial services sector. So that the OJK will become a mediator between banks/fintecht companies with debtors to solve the problem.

Apart from POJK and PBI provisions, there are provisions of the Regulation of the Minister of Communication and Information of the Republic of Indonesia Number 20 of 2016 concerning Protection of Personal Data in Electronic Systems (hereinafter referred to as Permenkominfo No.20/2016). In Article 8 Permenkominfo No. 20/2016, regulates that in obtaining and collecting personal data, the organizer must respect the owner of personal data, for personal data that is privacy. This means that in terms of obtaining, managing, using or utilizing such personal data, the organizer must obtain the approval of the private data thinker. This is regulated in Article 24 Permenkominfo No. 20/2016.

For the obligations of the organizer according to Permenkominfo No. 20/2016, one of them is as follows:

> "Article 28 (f)
> The Obligation of the Provider is to provide an option to the Owner of Personal Data regarding the Personal Data that he manages may/or cannot be used and/ or displayed by/to a third party upon approval as long as it is still related to the purpose of obtaining and collecting Personal Data".

Through these provisions, the organizer is required to obtain approval from the owner of personal data related to the collection, management, transfer and so forth. A simple example is in conducting an analysis related to the request for a loan of funds, the organizer must obtain approval from the owner of the personal data related to the collection of personal data using the AI system. Later the personal data obtained is not allowed to be used for other purposes. If in this case, the organizer does not get approval from the owner of personal data for collection, management, transfer and so on, but is still carried out by the organizer, it means that the organizer is considered to have misused the debtor's personal data.

If the above happens, then in accordance with Article 29 (1) of the Ministry of Communication and Information No. 20/2016, the Owner of Personal Data has the right to submit complaints in the context of resolving personal data disputes regarding the failure to protect the confidentiality of his personal data by the organizer to the Minister. Settlement of disputes between the organizer and the owner of personal data, will be facilitated by deliberation or using other alternative resolution efforts.

In 2019, the KOMINFO Application Information Control Directorate explained that a study will be made related to the payment of fines by a fintech company if it is known to misuse the debtor's personal data. But until now, it is still in the discussion stage. As a comparison, regulations for protecting personal data of consumers already exist in the European Union (EU), namely the General Data Protection Regulation (GDPR). In general, the issue of these provisions is to impose sanctions in the form of payment of a fine of 4% of the revenue or profits obtained by the fintech company that year.[23]

Conclusion

The role of the AI system in the process of analyzing requests for funding in P2P Lending is very important. With the AI system, the organizer will find it easier to find out the personal data of prospective debtors (borrowers of funds). AI system is an "AI system" that was created to facilitate human activities, and can work effectively and efficiently. AI system is able to provide all personal data related to prospective debtors, including information about social media and telephone contacts that are on the prospective debtor's handphone. The government issued regulations related to P2P Lending in Indonesia beginning with the presence of POJK Number 77/POJK.01/2016, Permenkominfo No. 20/2016, PBI Number. 19/12/PBI/2017, POJK No. 13/POJK.02/2018 and the existence of MUI DSN Fatwa Number 117/DSN-MUI/II/2018. By looking at these provisions, during

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[23] *ibid.*

the 2016-2018 time span, the Government has actually given much attention to the use of AI systems, in this case for fintech companies engaged in the Peer to Peer Lending industry. Considering the progress of the fintech industry which is growing from year to year. The advice that can be given is that the government should immediately make a law regarding the use of the AI system in the protection of personal data law in relation to Peer to Peer Lending.

With the advancement of the fintech industry, it provides several negative impacts where one of them is the misuse of personal data by the organizer. Personal data recorded by the AI system during the process of analyzing requests for submission of loan funds by the debtor, is used to carry out billing when the debtor defaults. This is according to the provisions of POJK, PBI and Perkominfo of course violating the principle of electronic transactions. So that the debtor in this case becomes the party that feels disadvantaged. But from the regulations that have been issued by the government, there are no strict legal sanctions for the organizers who do so. The absence of strict sanctions against the organizer who misuse the debtor's personal data using the AI system. Suggestion that can be given is Perkominfo No. 20/2016 which regulates personal data in electronic transactions, sanctions should be added for organizers who misuse personal data not in accordance with their objectives in the form of administrative sanctions and civil sanctions namely compensation for debtors whose personal data is stolen using the AI system. For example sanctions such as, adding a fine with a certain nominal value and compensation for a certain amount to the debtor. In addition, criminal sanctions need to be given to organizers who still abuse the AI system to obtain prospective debtor personal information in the interests of the organizer illegally. So that prospective debtors who will apply for loans with the Peer to Peer lending system are legally protected. Thus the organizer will be more careful in maintaining the confidentiality of personal data of the debtor.

Bibliography

Anisa Rahma Dita Dwinanda, 'Penerapan Prinsip Kehati-Hatian Dalam Layanan Pinjam Meminjam Uang Berbasis Teknologi Pada Situs Uangteman.Com' (2019) 2 Jurist-Diction <https://e-journal.unair.ac.id/JD/article/view/14350>.

CNBC Indonesia, 'Fintech Salahgunakan Data Konsumen, Siap-Siap Kena Denda' (*CNBC Indonesia*, 2019) <https://www.cnbcindonesia.com/tech/20190705141712-37-82978/fintech-salahgunakan-data-konsumen-siap-siap-kena-denda> accessed 1 April 2020.

Ernama Santi,[*et.,all.*], 'Pengawasan Otoritas Jasa Keuangan Terhadap FinancialTechnology (Peraturan Otoritas Jasa Keuangan Nomor 77/POJK.01/2016)' (2017) 6 Diponegoro Law Journal <https://ejournal3.undip.ac.id/index.php/dlr/article/view/19683>.

Fajrina Ea Wulandari, 'Peer to Peer Lending Dalam POJK, PBI Dan Fatwa DSN MUI' (2018) 6 Jurnal AHKAM <http://ejournal.iain-tulungagung.ac.id/index.php/ahkam/article/view/1460>.

Farras Bernhart, 'Mengenal Artificial Intelligence Dan Cara Kerjanya' (*CNBC Indonesia*, 2019) <https://www.cnbcindonesia.com/tech/20190513130056-37-72069/mengenal-artificial-intelligence-dan-cara-kerjanya> accessed 18 December 2019.

Hoedi Prasetyo and Wahyudi Sutopo, 'Industri 4.0: Telaah Klasifikasi Aspek Dan Arah Perkembangan Riset' (2018) 13 J@ti Undip : Jurnal Teknik Industri <https://ejournal.undip.ac.id/index.php/jgti/article/view/18369>.

Immanuel Adhitya Wulanata Chrismantianto, 'Analisis SWOT Implementasi Teknologi Finansial Terhadap Kualitas Layanan Perbankan DiIndonesia' (2017) 20 Jurnal Ekonomi dan Bisnis <https://ejournal.uksw.edu/jeb/article/view/641>.

Meline Gerarita Sitompul, 'Urgensi Legalitas Financial Technology (Fintech) : Peer To Peer (P2P) Lending Di Indonesia' (2018) 1 Jurnal Yuridis UNAJA.

Meyer Aaron, 'Fintech: Is This Time Different? A Framework for Assessing Risks and Opportunities for Central Banks' (*Bank of Canada Qanque Du Canada*, 2017) <https://www.bankofcanada.ca/2017/07/staff-discussion-paper-2017-10/> accessed 11 February 2020.

Nofie Iman, *Financial Technology Dan Lembaga Keuangan* (Gathering Mitra Linkage Bank Syariah Mandiri 2016).

Nurul Rahmayani, 'Tinjauan Hukum Perlindungan Konsumen Terkait Pengawasan Perusahaan Berbasis Financial Technology Di Indonesia' (2018) 2 Pagaruyuang Law Journal <https://jurnal.umsb.ac.id/index.php/pagaruyuang/article/view/887/0>.

R&D Teknologibank, 'Artificial Intelligence Untuk Perbankan' (*Teknologibank*, 2018) <http://teknologibank.com/detailpost/artificial-intelligence-untuk-perbankan> accessed 18 December 2019.

Rachmadi Usman, *Aspek-Aspek Hukum Perbankan Di Indonesia* (Gramedia Pustaka Utama 2003).

Rinitami Njatriajani, 'Perkembangan Regulasi Dan Pengawasan Finansial Technology Di Indonesia' (2019) 4 Diponegoro Private Law Review Journal.

Seputar Pengetahuan, 'Pengertian Artificial Intelegence, Tujuan, Kelebihan & Kekurangannya' (*Seputar Pengetahuan*) <https://www.seputarpengetahuan.co.id/2018/09/pengertian-artificial-intelegence-tujuan-kelebihan-dan-kekurangan-terlengkap.html> accessed 10 April 2020.

Song Yee Leng, 'Financial Technologies: A Note on Mobile Payment' (2018) 22 Jurnal Keuangan dan Perbankan <http://jurnal.unmer.ac.id/index.php/jkdp/article/view/1993>.