

Identity Theft In Peer-To-Peer Lending Platform

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Abstract

This research aims to determine the mode of data theft in the pinjol or peer to peer lending platform. Peer to peer lending became popular during the pandemic and is an alternative to fulfill temporary financial needs due to the access and convenience offered by fintech providers, so that people prefer fintech over other financial entities. The method used in writing this article is a literature study of identity theft on peer to peer lending platforms. The main data in the library study method is secondary data sourced from books, the internet, articles, laws and other documents related to this research. The research results show that with the emergence of fintech as a manifestation of the industrial revolution 4.0, especially during the pandemic, fintech is using this opportunity to expand its scope by involving more customers. However, the difficulty for customers or fintech users to differentiate between legitimate and illegal loans provides opportunities for illegal loans to exploit as many victims as possible. One of the modus operandi of illegal loans is to insert spyware through smartphone access permits, which are then used to register or apply for financing with loans.

Keywords: *Identity theft; Pinjol; Pandemic Period; COVID-19*

1. Introduction

Technological developments in Indonesia are increasingly rapid thanks to the Industrial Revolution 4.0. This revolution opens up opportunities for various sectors to take advantage of the speed and ease of accessing data and information, which is now available without limits, not bound by distance or location. (Rohida, 2018). This

echnological development is evidenced by the increase in users of information and communication technology which has continued to increase over the last five years which is presented in the following figure:

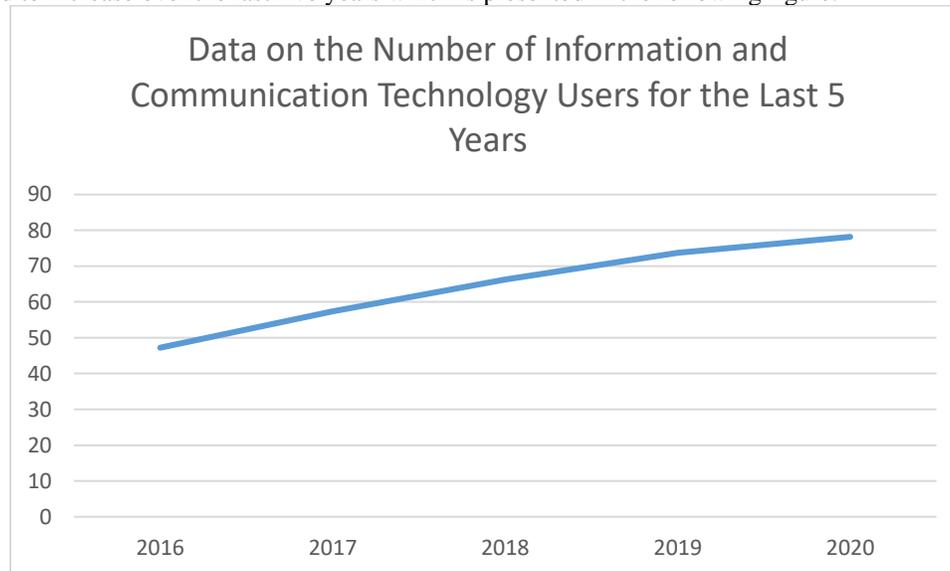


Figure 1. Use of Information and Communication Technology over the last 5 years
Source: (Statistik, 2020)

Based on the data above, it should be noted that the highest increase was in 2020 with the number of users amounting to 78.18%, this number was caused by the Covid-19 pandemic (Nimrod, 2020). The COVID-19 pandemic prompted entities and individuals to avoid in-person or outdoor activities to prevent the spread of the virus. In response, the government issued work from home regulations and imposed restrictions on community activities. (PPKM) (M. Rizal et al., 2021). The implementation of this regulation has had quite a significant impact on the country's business and economic activities, such as layoffs and the closure of several private companies due to poor business circulation (Nasution et al., 2021).

The chaos in society's economy inadvertently increases the crime rate, this is in accordance with the 1990 UN congress which stated that difficult circumstances/conditions can cause crime (Arief, 2011). According to the analysis carried out (Culea & Constantin, 2020) it is stated that the Covid-19 pandemic Covid-19 can provide opportunities to commit crimes. One example of crime that is currently on the rise during the Covid-19 pandemic is cybercrime or digital crime (S. M. T. Situmeang, 2021). (Abidin, 2015) classifies cyber crimes into three categories, namely based on the type of activity carried out, the motive behind the activity, and the target of the crime itself. (Okutan & Çebi, 2019) states that there are 17 types of cybercrime, one of which is identity theft. (Setiawan & Wahyudi, 2023) explains that identity theft is a crime that involves taking someone's personal information without permission, with the aim of using that identity illegally, usually for financial gain or gaining access to other resources related to the victim's identity.

(ACFE, 2017) classifies personal data theft as consumer fraud, this type of fraud focuses more on individuals than organizations. Identity theft has become trending during the Covid-19 pandemic along with the growth of the population of internet users who are more vulnerable, such as children (S. M. Situmeang, 2021). One of the big cases related to identity theft occurred in 2020, when data from 91 million users of Tokopedia, an e-commerce company, was leaked and sold on the dark web. (Stephanie, 2021). The next case came from the social security administration body (BPJS) regarding leakage of user data from BPJS. The cause of the data leak was due to a weak digital security system so that someone could hack and steal BPJS user identity data (A. Rizal, 2021). This data leak was exploited by perpetrators to buy and sell for the sake of making a profit. Selling this personal data will result in losses for the data owner, the data can be used for crimes such as fraud, money laundering, and illegal transactions with the aim of making a profit (Mahira et al., 2020).

Another case comes from the financial sector with digital transformation called fintech (financial technology). The proliferation of fintech with minimal supervision from the government can give rise to cases of data theft

(Wijayanto et al., 2020). Fintech which is currently on the rise is online loans (pinjol). Pinjol is an alternative choice for people to survive during the pandemic with the ease of providing and disbursing loans to the public compared to other financial industries. However, the level of public literacy regarding pinjol is low so they cannot differentiate between official/legal and illegal loans (Sugangga & Sentoso, 2020). An example of a case regarding pinjol that occurred in 2019 was a driver who hanged himself to death as a result of being chased by a debt collector for pinjol (Jannah, 2019), then from Sukabumi a man who claimed to be a victim of pinjol stated that his identity as a customer had been misused and spread expand loan contacts with provocative sentences that embarrass customers (Muhammad, 2021).

From 2018 to October 2021 (Financial Services Authority, 2021) released a new report regarding illegal lending that was stopped by the OJK as many as 3,516 entities with a total of 19,711 public complaints consisting of 10,441 minor violations and 9,270 serious violations. The distribution of pinjol is a potential risk of misuse of personal data, where when applying for financing users are required to upload personal photos and KTP photos on the pijol application (Wijayanto et al., 2020). (Tansen & Nurdiarto, 2020) states that when installing Android applications on the Play Store, smartphone users must provide permission or access rights to the Android system so that the application owner can read, find out, and even download the data on the user's smartphone.

Based on data from (Federal Trade Commission, 2021) it is stated that loan fraud is a type of identity theft which is included in the list of five types of identity theft based on reports and is in position number 4 with a total of 99,667 reports. Empirically, digital data theft has been widely carried out, such as research conducted (Geeta, 2011) regarding digital data theft, especially from the perspective of Indian society, shows that this kind of crime can seriously erode the trust of customers or users of related services. This research also confirms that digital data theft is a very serious problem. Meanwhile (Reyns & Henson, 2016) stated that posting personal information online is quite a high risk. (Marshall & Tompsett, 2005) calls the internet a method to provide new opportunities or motives for data theft. The rise of e-commerce has had negative influences such as identity theft with consumers as the main contributors (Hille et al., 2015).

1.1 Objectives

This research is aimed at providing an overview of identity theft on peer to peer lending platforms, the impact of data theft activities on peer to peer lending platforms and recommending peer to peer lending platforms that comply with the OJK's criteria. This research needs to be carried out considering that people's digital and financial literacy is still low and it is urgent to do this on peer to peer lending platforms, their growth continues to develop in line with the era of digitalization. This research is a continuation of a study (Setiawan & Wahyudi, 2023) on cybercrime in the financial sector, especially banking. This study aims to analyze peer-to-peer lending platforms more deeply, in order to identify data theft activities by individuals or groups aimed at seeking personal gain and harming other parties. Based on the phenomena and theoretical studies above, the author is interested in studying further regarding data theft in the Pinjol application which is currently being widely discussed during the Covid-19 pandemic. This identity theft research is limited and focuses on peer to peer lending platforms by outlining data theft activities in fintech pinjol. This research contributes to two things, namely: 1) increasing public digital and financial literacy regarding identity theft on peer to peer lending platforms, and 2) helping OJK to socialize legal and illegal fintech to the public.

2. Literature Review

2.1 Identity Theft

(Milne et al., 2004) define identity theft, as the role of another person's or financial identity to commit fraud or theft. (ACFE, 2017) calls identity theft a common type of fraud that is non-discriminatory. This means that anyone can be the target of this crime; the victims are as diverse as students, retirees, school teachers, or successful lawyers. Even businesses or companies are vulnerable to identity theft. Identity theft is a crime in which someone wrongfully obtains and uses another person's personal data in some way that involves fraud or deception, usually for economic gain. There are several ways for someone to get information, including: 1. Sort the trash that is thrown away. This method is often used to obtain financial information or personal information on financial records or identity copies that are no longer used 2. Shoulder surfing. A direct observation method in which a person enters passwords, identities and other secrets by looking over the target's shoulder 3. Look for information through the work desk drawer. Some people leave important files in drawers or office desks and this is an opportunity to obtain important information 4. Using the internet. This method is a popular method currently used to obtain detailed information about a person.

(Federal Trade Commission, 2021) states that there are several types of identity theft including: credit card fraud, employment-related fraud, government documents or benefits fraud, telephone or utility fraud, bank fraud, attempted identity theft, loan fraud, and other identity theft .

2.2 Fintech

Bank Indonesia defines Financial Technology (Fintech) in Article 1 Number 1 1 of Bank Indonesia Regulation Number 19/12/PBI/2017 concerning the Implementation of Financial Technology that Financial Technology is the use of technology in the financial system that produces service products, technology and/or models. new business and can have an impact on monetary stability, financial system stability, and/or the efficiency, smoothness, security and reliability of the payment system. According to (Indonesian Fintech Association, 2020) fintech consists of several types including: 1. Digital Payment, is the payment of bills or transfer of funds (transfer) which is done digitally via e-money platforms such as OVO, GoPay, Dana, Flip, Shoppe Pay and other platforms 2. Online Landing, is a lending transaction to a third party (non-bank institution) which is carried out digitally through peer to peer lending platforms such as Kredivo, Akulaku, Adakami and others 3. Crowdfunding, is an application-based platform that aims to raise funds. Examples of platforms that are widely used include We Can, Rumah Zakat, Quick Response Action 4. E-Aggregator, is a digital platform used by the public to search for information on the financial products they will choose. Examples of platforms that are often used by people include: be careful and be careful.

3. Methods

This study is a qualitative study using the literature study or literature review method. The library study method is a research method where the main data is secondary data or the data comes from libraries and the internet (Oktaviana Dewi et al., 2023; Parinata & Puspaningtyas, 2022; Setiawan, 2023; Setiawan & Wahyudi, 2023). The sources that can be used in the library study method include books, laws, official news, government data, articles, and so on. Literature study is also referred to as research where data can be collected without going to the field. This research presents data obtained from publish or publish version 8 with the keywords identity theft; pinjol; peer to peer lending with time span data submitted for the last 5 years, namely from 2018-2022. So that the initial data obtained was 100 articles, from this data the articles deemed relevant and in accordance with the theme of this research were 11 articles which are presented in table 1. The data analysis process consisted of data theft activities in peer-to-peer lending platforms, digital literacy analysis and public finances, and the impact of identity theft through peer-to-peer lending platforms. This analysis was carried out to describe peer to peer lending platforms and outline data theft activities in fintech pinjol.

4. Data Collection

Table 1. Article data used

No	Article Title	Publication Year	Index
1	The Peer-to-Peer Lending Phenomenon: A Review from Islamic Economic Perspective	2022	Sinta 2
2	Review of Sharia Economic Law on Billing Online Loans: Adakami Top Fintech Study	2022	ISSN
3	Black-or-White of Online Lending in Indonesia: Conventional Platform or Sharia Scheme (A Netnography Study)	2022	Sinta 2
4	Online Loans during the Covid-19 Pandemic for the Batam Community	2021	ISSN
5	Cyber Crime And Privacy Right Violation Cases Of Online Loans In Indonesia	2021	ISSN

6	Debt Collection Violations in Financial Technology in a Cyber-ethic and Legal Perspective	2021	Sinta 2
7	Characteristic Of Illegal Online Loans In Indonesia	2022	ISSN
8	Analisis Penyalahgunaan Data Pribadi Dalam Aplikasi Fintech Ilegal Dengan Metode Hibrid	2020	Sinta 4
9	Analisis Dan Deteksi Malware Dengan Metode Hybrid Analysis Menggunakan Framework Mobsf	2020	Sinta 5
10	Fintech firms and banks sustainability: Why cybersecurity risk matters?	2021	International
11	E-integrated corporate governance model at the peer to peer lending fintech corporation for sustainability performance	2021	International

5. Results and Discussion

The results of this research are based on qualitative methods, using the library research approach described previously. So at this stage the author extracts the data that has been obtained from the publish or perish software which is presented in table 2.

Table 2. Data interpretation results

No	Article Title	Focus
1	The Peer-to-Peer Lending Phenomenon: A Review from Islamic Economic Perspective	The impact of illegal P2P lending on customers
2	Review of Sharia Economic Law on Billing Online Loans: Adakami Top Fintech Study	Problems related to the distribution of personal information by online lenders without the owner's consent
3	Black-or-White of Online Lending in Indonesia: Conventional Platform or Sharia Scheme (A Netnography Study)	Negative impact in online loan transaction schemes
4	Online Loans during the Covid-19 Pandemic for the Batam Community	The impact of online loans during the Covid-19 pandemic on customers
5	Cyber Crime And Privacy Right Violation Cases Of Online Loans In Indonesia	The phenomenon of illegal online loans and its relationship to government policy
6	Debt Collection Violations in Financial Technology in a Cyber-ethic and Legal Perspective	The impact of illegal P2P lending on customers
7	Characteristic Of Illegal Online Loans In Indonesia	main characteristics of illegal online loans in Indonesia
8	Analisis Penyalahgunaan Data Pribadi Dalam Aplikasi Fintech Ilegal Dengan Metode Hibrid	Data theft activities
9	Analisis Dan Deteksi Malware Dengan Metode Hybrid Analysis Menggunakan Framework Mobsf	Data theft activities
10	Fintech firms and banks sustainability: Why cybersecurity risk matters?	Risks of collaboration between P2P lending and banking
11	E-integrated corporate governance model at the peer-to-peer lending fintech corporation for sustainability performance	Integration of P2P lending governance systems

Theft is synonymous with criminal acts such as theft of cash and other valuables, up to murder. This kind of crime is called blue collar crime and is easier to uncover than white collar crime. This crime is synonymous with corruption, misuse of assets, manipulation of financial reports, disclosure of white collar crime is quite difficult because it often takes cover from positions and policies that are made for disclosure (Kamasa, 2014). Changing times have had an influence on crime, so far cyberspace has become the main topic in the crime index known as cybercrime. (Wijayanto et al., 2020). (Suwiknyo et al., 2021) describes forms of cybercrime including identity theft, carding, theft of company data, cyber extortion, and cyber espionage. (Arief, 2011; Culea & Constantin, 2020) stated that identity theft increased

rapidly during the pandemic, this is revealed from the development of reports regarding identity theft which are presented in the following graph:

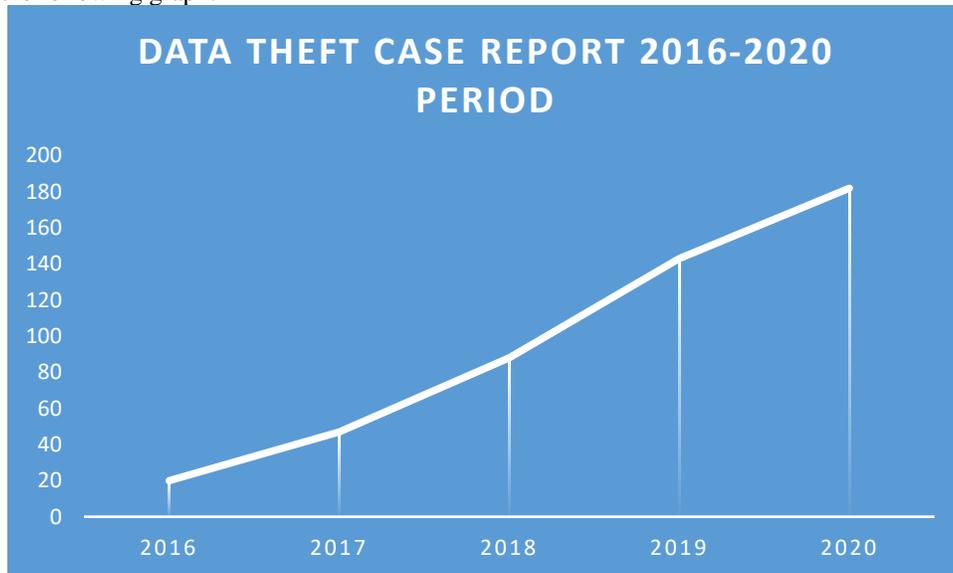


Figure 2. Data theft index for the last 5 years

Source: (Siber, 2021)

The cause of high data theft in 2020 is due to digital and financial literacy (Financial Services Authority, 2021; Situmorang et al., 2020), (Tansen & Nurdiarto, 2020) adding that along with the increase in internet users, the emergence of fintech has become the main cause of data theft . Fintech, as a company in the financial sector that adopts technology to improve the efficiency of the financial system and the provision of financial services (Afifah, 2018). The ease and speed of access provided by fintech providers makes people more comfortable carrying out credit transactions or applying for loans through peer to peer lending or online lending (financial services authority, 2021). Please note that the rapid development of fintech in 2019 is presented in the following data:



Figure 3. Rapid development of fintech in Indonesia 2019

Sources: (Indonesia & Otoritas Jasa Keuangan, 2019)

Based on the picture above, P2P lending remains the public's main choice. However, it is important for the public or potential fintech users to understand the difference between official and illegal loans (Samad & Bukido, 2022). In fact, fintech was created to make financial matters easier regardless of distance and time, but some individuals and groups take advantage of this to gain advantage over the weak literacy and inclusion of society (P & Acharya, 2019; Spulbar et al., 2020). OKJ revealed that through OJK regulation Number 77/PJOK.01/2016 concerning Financial Technology-Based Money Lending and Borrowing Services (Financial Services Authority, 2016) it is explained in articles 2 and 3 that fintech providers must take the form of a limited liability company or cooperative with a legal entity. Based on data from (Financial Services Authority, 2021) there is the fact that as many as 3,516 loan entities have had their operations stopped from 2018 to 2021. On the other hand, only 106 loan entities have been registered and received official permission from the OJK. Common violations committed by illegal pinjol include theft of user data, selling data, and spreading fake news or hoaxes. (Revelia & Irwansyah, 2020)

Personal identity security is very crucial because various forms of identity theft crimes occur. According to (ACFE, 2017) identity theft is called consumer fraud. (ACFE, 2017) also revealed that the targets of identity theft are non-discriminatory, meaning anyone can become a victim. (ACFE, 2017) states that there are several methods used to obtain information or someone's identity: 1. Sorting Through Discarded Trash: Most people do not destroy personal financial data but simply throw it away 2. Shoulder Surfing: another popular way identity thieves get information. The person looks up from a nearby location and listens to a person's telephone conversation or sees the number dialed for a calling or credit card, thereby obtaining sufficient information to use or obtain a credit card 3. Searching Through Coworkers' Desk Drawers: Many people also leave personal items in desk drawers, such as bank statements and monthly bank statements—all of which have information that is useful to identity thieves. 4. Soliciting Identifiers Through False Job Application Schemes: Soliciting someone to fill out a job application may also be a source of information for identity thieves. People believe they are filling out a job application, when in reality they are just providing personal information to thieves. 5. Checking Utility Companies, Health Clubs, and Schools: Utility company, health club, and school records all carry identifiers that fraudsters can use to steal someone's identity. Government identification numbers, such as Social Security numbers, are used in many applications and play an important role in obtaining other information. 6. Examining Certifications and Licenses Placed On Workplace Walls: Something as innocent as a diploma, professional certification, or license can be identifying information that fraudsters use to obtain a fake identity. 7. Using Pretext, Ruse, or Gag Calls: Pretexting: is the act of impersonating someone else or making a false or misleading statement to persuade the target to release information or take some action. Pretexting can occur in person, over the phone, or through some other form of communication. 8. Looking at Rental and Loan Applications: Almost without exception, rental and loan applications yield enough information that can be used to establish a false identity. The applicant's name, government identification number, previous address, employment history, telephone number, and credit history are required to complete the application. Once the thief has that information, it's usually fairly easy to establish an identity. 9. Consulting Public Records: Public records generate a lot of personal data for identity thieves. Real estate records, tax liens, licenses, litigation records, and, in some areas, driver's license numbers all reveal enough information that can be used to steal someone's identity or at least give the fraudster a head start. 10. Using the Internet: the internet offers many opportunities for identity thieves. This has made a lot of information available to more people at a small cost. It's also an attractive place for identity thieves to find their victims.

Based on analysis by (Wijayanto et al., 2020) there are various types of data theft in digital technology related to fintech. Illegal online loan applications or fintech are known to provide easy transactions by using a lot of personal data which is required during registration. Furthermore, the removal of the Video Call requirement as a direct verification method, which should be in accordance with the provisions of the Financial Services Authority (OJK), makes fintech applications vulnerable to misuse of personal data. Another weakness lies in the ease with which vendors or fintech administrators can access customer data beyond the information entered during registration. This is evident from the permissions requested by fintech applications on the Android platform, where all sample applications provide READ_PHONE_STATE and READ_CONTACTS permissions. This permission allows fintech application providers to freely monitor all contact activities on customer smartphones.

(Samad & Bukido, 2022) added that recently cases of peer to peer lending have become increasingly common. This rise is due to the ease of access and speed of disbursement of funds provided by peer to peer lending platforms. (Maghfirah & Husna, 2022) attribute the rise in illegal peer to peer lending cases to weak government regulations and policies. The negative impacts caused by illegal peer to peer lending platforms include: despair, suicide, and triggering an increase in crime rates (Qadri et al., 2022; Sahputra et al., 2020)

(Tansen & Nurdiarto, 2020) explained that malicious application developers exploit loopholes in the Android platform by inserting malicious programs in the form of source code in Android applications. They spread this application through blogs and the Android application market. Ordinary users' lack of awareness and negligence in installing Android applications makes them the main targets of malicious application developers. It is important for users to know the function of Android applications and the permissions granted to the Android system. This research uses Bouncing Golf and Riltok Banking Trojan malware samples. The goal is to identify the characteristics and behavior of both malware by applying static and dynamic analysis simultaneously, known as hybrid analysis using the MobSF framework. The analysis results show that Bouncing Golf commits information theft and effectively takes over infected Android devices. Meanwhile, the Riltok Banking Trojan has the ability to take over smartphones to steal credit card information through phishing techniques.

(Najaf et al., 2021) stated that banks collaborating with fintech trigger high levels of cyber security risks. (Mutamimah & Robiyanto, 2021) argue that business processes in financial technology companies are interconnected systems, so both corporate governance must be integrated with information technology, in order to improve sustainability performance. With this model, asymmetric information between the three parties (depositors/investors, financial technology corporations, and small-medium enterprises) and all stakeholders can be eliminated, risks can be reduced, business processes and financial and non-financial information for the three parties are more transparent and reliable, accessible to all stakeholders.

The method used by the Pinjol platform is to infiltrate spyware and malware to gain access to read, change and store data on the user's smartphone. Usually this happens when users without looking at and re-reading the terms of the offer from the Pinjol platform will result in data theft carried out by illegal Pinjols. Since May 2018, LBH Jakarta has received around 3000 complaints regarding online loan problems. Based on these complaints, LBH Jakarta found many legal and human rights violations experienced by victims of online loan application users, most of whom experienced criminal acts committed by online loan application organizers and parties who collaborated with online loan application organizers, this includes, but is not limited to (Law, 2019): 1. Dissemination of personal data via electronic media (Violation of Article 32 in conjunction with Article 48 of the ITE Law), 2. Threats (Article 368 of the Criminal Code), 3. Fraud (Article 378 of the Criminal Code), 4. Slander (Article 311 paragraph (1) of the Criminal Code), 5. Sexual harassment via electronic media (Article 27 paragraph (1) in conjunction with Article 45 paragraph (1) of the ITE Law)

This has become a concern for the government as the regulator of business and business operations so that to overcome this, the government issued a policy, namely (Law of the Republic of Indonesia Number 11 of 2008 concerning Information and Electronic Transactions, 2008) to tackle criminal attempts that can damage public trust in service provider. (Subagiyo et al., 2022) stated that the main characteristic of illegal lending in Indonesia is often associated with the word illegal because peer to peer lending has not or has not received permission from the OJK. (Jasman et al., 2021) added that other characteristics of illegal loans are high interest rates, acts of terror and defamation of the loan customers. OJK also introduced how to find out whether official or illegal loans are in the following table:

Table 3. differences between illegal and legal online loans

No	Regarding	Pinjol Legal	Pinjol Ilegal
1	Status at OJK	Carry out registration and licensing with OJK	Not registered and not licensed by OJK
2	Application	The application is available on the Play Store and has the OJK logo	<ul style="list-style-type: none"> The application is not available in the Play Store, there is no OJK logo. Users install using APK
3	Bidding method	Promotion, official advertisement	Using broadcast WhatsApp messages, SMS
4	Credit application	Pay attention to the completeness of the application documents	Tends to be very easy
5	Domicile	Company address and contact details are clear	Company address and contact details are clear

(Faridhun, 2022) revealed that debt collectors from illegal peer to peer lending platforms in billing consumers are not in accordance with the rules of the Consumer Protection Law, namely (Law of the Republic of Indonesia Number 8 of 1999 concerning Consumer Protection, 1999) . This law aims to improve the welfare of the consumer community

by providing legal protection for consumer rights. Its contents regulate provisions that protect consumers from detrimental business practices, guarantee legal certainty, and provide a basis for resolving consumer disputes.

6. Conclusion

The development of technology in the 4.0 era has helped overcome difficulties during the pandemic, where access to outdoor activities is very limited, especially in terms of work, education, business and financial transactions which are now carried out online. Fintech as a non-bank financial service provider provides solutions to the problems faced by society in the pandemic era, but its presence is expanding with the number of customers reaching 17,244,998 as of November 2019 based on developments in fintech lending published by the OJK. OJK, as an independent institution, helps people avoid illegal fintech. Unfortunately, the existence of illegal fintech is used to steal personal data or user identities through online loan platforms which can be freely downloaded on the Play Store. Thus, many people with minimal literacy become victims of loan applications. When the user allows the application access to open, save, change and read what is on the user's smartphone, at that time the user's identity has been stolen. OJK provides firmness for cybercrime actions through (Law of the Republic of Indonesia Number 11 of 2008 concerning Information and Electronic Transactions, 2008). Apart from that, the OJK advises that official loans are only those that are registered and licensed with the OJK through Financial Services Authority Regulation Number: 77 /POJK.01/2016 concerning Information Technology-Based Money Lending and Borrowing Services (Financial Services Authority, 2016). The public can understand and comprehend official and safe fintech lending. Suggestions for further research could be to carry out direct testing regarding the level of each pinjol APK that is not registered with the OJK, or retesting the level of community literacy and community financial inclusion after the pandemic.

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Biography

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