



Indonesia Fintech Report

2021



ADVANCE.AA

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Summary

Indonesia began to implement large-scale social restrictions (PSBB) in April 2020 to curb the COVID-19 spread, putting a damper on urban mobility and socioeconomic activities. Various economic indicators have been under pressure since then, with the open unemployment rate (TPT) expected to jump from 5.28% in 2019 to over 8.1%. The country posted a -5.32% economic growth for Q2, which was attributed by the Coordinating Ministry for Economic Affairs to, among other things, the cut of government spending in the quarter.

Since June, Indonesia has been lifting its PSBB measures in many cities, where economic activities were on pace for recovery, and imports and exports also rebounded slightly. Jakarta implemented expansionary fiscal policies to stimulate the economy, such as increasing fiscal deficit and launching the National Economic Recovery (PEN) program. It has set aside Rp 695.2 trillion in funds for social security, tax incentives, interest subsidies, business incentives, etc., including a low-cost capital allocation for credit restructuring, and working capital loans for micro, small, and medium-sized enterprises (MSME) and labor-intensive industries to resume their operations. According to data released by the Coordinating Ministry for Economic Affairs, the economy was expected to continue to shrink by 1% in Q3, but many industries have fared better and the consumer confidence index has risen to 83.8. The department predicts that the Indonesian economy will grow by 1.38% in Q4.



The Financial Services Authority (OJK) said the financial services industry remains in a relatively healthy state due to well-controlled prudential indicators. During the COVID-19 pandemic, there was a huge funding shortage in the Indonesian market, where fintech loans were playing an important role. As of July, accumulated loans reached Rp 116.97 trillion (approximately US\$7.849 billion), an increase of 134.91% year-on-year, indicating continued rapid growth. In response to the impact of COVID-19, fintech companies have begun to selectively expand business channels and shift loan services to MSMEs with good prospects or related to daily necessities. Financing for the healthcare sectors remains on the fast growth track; industries such as grain, agricultural and sideline products, and packaged food show a positive outlook; the telecoms & digital industry and online ecosystem industry also display a growth potential. It is worth noting that Indonesian digital services are gathering pace, and more people are making major transactions via digital platforms. During the COVID-19 pandemic, the number of Indonesia's online businesses increased to more than 300,000. To serve new customer groups, fintech companies must tailor their funding source solutions in line with customers' needs and characteristics.

Fintech companies should be on the alert for MSMEs and workers with weak risk resistance, which are their main borrowers who are more vulnerable to COVID-19. The non-performing ratio of fintech loans (TWP90) rose to 5.10% in May and then to 6.13% in June. According to Indonesia's Fintech Lenders Association (AFPI), the fintech TWP90 is still within a moderate range with reference to current economic conditions and loan recipients. Despite the governmental efforts to stop the economic recession, financial institutions will still face risks such as borrowing from multiple lenders and overdue payment in the second half of the year. Fintech companies have begun to take risk control measures such as improving credit rating, screening borrowers, and paying constant attention to the development of fund-receiving companies. Some companies also help delinquent borrowers develop solutions.

Amid the rapid fintech development, OJK is leveraging data collection and analysis tools to monitor industries and predict potential risks. As of August 4, 142 (nearly 90%) of the 158 fintech companies in AFPI have been connected to the Fintech Data Center (FDC). By using FDC services, fintech companies can check potential borrowers' credit history and whether they have received loans from multiple lenders before taking preventive measures.





In the next 10 years, Asia will become a technology-driven innovation hub, and financial institutions will face greater uncertainties, including new risks such as cyber-attacks, cloud security, changes in competitors, geopolitical crises, and pandemics. OJK has begun to draft the Indonesian Financial Services Sector Master Plan and asked financial institutions to step up probe into the governance, risk, and compliance (GRC).

With extensive experience in operating in the Indonesian market and a vast store of expertise and innovative R&D capabilities in risk control, ADVANCE.AI will provide fintech companies with more efficient and advanced data and anti-fraud risk control services.

Chapter 1

Fintech: risks and opportunities in crisis



Indonesia's large-scale social restrictions (PSBB) measures have dampened social and economic activities and weighed on various economic indicators. Against this backdrop, the government has allocated low-cost capital for credit restructuring and offered working capital loans for MSMEs and labor-intensive industries to resume their operations, as part of the PEN program.

During the COVID-19 pandemic, there was a huge funding shortage in the Indonesian market, where fintech loans were playing an important role. As of July, accumulated loans have reached Rp 116.97 trillion (approximately US\$7.849 billion). Fintech companies need to focus on industries that were still growing during the pandemic, such as healthcare, daily life services, and e-commerce, and stay alert to the rising non-performing loan ratio. Fintech companies have begun to take prudent risk control measures, with some even trying to help delinquent borrowers develop solutions.



1. Indonesia: statistics and government policies

1.1 Economic growth

According to data released by Statistics Indonesia (BPS) in August, the economic growth for Q2 2020 was -5.32%. Affected by the COVID-19 pandemic, the industrial sector saw a growth of -6.19%, due largely to a sharp tumble in non-food industries, such as textiles and clothing, electronic products, and automobiles. In addition, the transportation, trade, and catering industries were also battered. Encouragingly, there are also some industries bucking the recession to grow: information and communications (up 10.88%), financial services (up 1.03%), healthcare services (up 3.71%), and agriculture (up 2.19%).

According to the Coordinating Ministry for Economic Affairs, the 6.9% cut in government expenditures partly led to a national economic downturn in Q2. The Fiscal Policy Agency (BKF) said that the government had revised its 2020 economic growth forecast to -1.1% to 0.2%, and remained confident in economic growth in Q3 and Q4.

According to data from the Coordinating Ministry for Economic Affairs, the economy will continue to shrink by 1% in Q3, while many industries will fare better. In Q3, the manufacturing PMI was 46.9; the auto industry index rose from -82 to -54; the consumer confidence index also grew to 83.8. In Q4, the national economy is expected to grow by 1.38%. Throughout 2020, the Indonesian economy is projected to shrink by 0.49%.

The World Bank forecast a zero growth of Indonesian GDP in 2020, compared with the estimation of -3.9% to -2.8% by the Organization for Economic Co-operation and Development.

1.2 Imports and exports

Ravaged by the global COVID-19 pandemic, Indonesia's imports and exports are expected to remain sluggish throughout 2020.

According to BPS, Indonesia had a trade surplus of US\$2.09 billion in May. Exports fell by 28.95% year-on-year to US\$10.53 billion, the lowest level since July 2016, due to the decline in exports of coal, coffee, palm oil, petroleum, and natural gas. At the same time, amid weak domestic demand for consumer goods, raw materials, and capital goods, global social distancing restrictions, and supply chain disruptions, imports dropped faster than exports. Specifically, the imports fell by 42.2% year-on-year to US\$8.44 billion, the lowest level since 2009.

Imports and exports for June saw a slight rebound from the previous month, resulting in a trade surplus of US\$1.27 billion. Exports edged up 2.28% year-on-year to US\$12.03 billion, the first growth in four months, due largely to higher shipments of manufactured goods and agricultural products. Imports amounted to US\$10.76 billion, down 6.36% year-on-year, albeit in a narrower drop than May.

The trade surplus in July was US\$3.26 billion. Exports increased by 14.33% month-on-month to US\$13.73 billion, but declined by 9.90% year-on-year.

Imports slipped by 32.55% year-on-year to US\$10.47 billion.



1.3 Open unemployment rate (TPT)

In February 2020, Indonesia reported a TPT of 4.99% and an unemployed population of 6.88 million. According to the National Planning and Development Agency (Bappenas), COVID-19 has put about 3.7 million people out of jobs, sending the total unemployment figures up to around 10.58 million.

Data from the Chamber of Commerce and Industry (Kadin) shows worse unemployment. As of May 2020, more than 6 million workers had lost their jobs, including 2.1 million in the textile industry, 1.4 million in the land transportation industry, and 400,000 in the shopping mall industry.

Bappenas predicted TPT to jump from 5.28% in 2019 (unemployed population: 7.05 million) to 8.1%-9.2% in 2020. Bappenas aims to keep TPT in the range of 7.7%-9.1% in 2021.



1.4 Government policies during the COVID-19 pandemic

PSBB

In April 2020, Indonesia launched PSBB. Since then, except for basic service departments such as healthcare, finance, energy, logistics, and communications, all other public places such as office facilities and shopping malls have been closed. Meanwhile, public transportation and access-restricted areas have been put under strict control. The social and economic activities ground to a near standstill. In June, the country began to phase out of PSBB, with many cities having worked out plans to list the restrictions for

multiple industries. However, Jakarta was pressurized to bring PSBB back on September 14 due to the second COVID-19 outbreak.

Proactive fiscal policy

To put a brake on the economic recession, the Indonesian government is pressing ahead with proactive fiscal policies to stimulate economic recovery. Indonesia slashed the state revenue target from Rp 1,760.88 trillion to Rp 1,699.94 trillion, and raised the state financial expenditure target from Rp 2,613.81 trillion to Rp 2,739.16 trillion. It estimated a fiscal deficit of Rp 1,039.2 trillion, equivalent to 6.34% of the national GDP.

PEN program

The Indonesian government raised the budget for the PEN program to Rp 695.2 trillion limited the budget use by the end of December 2020.

As of the first week in August 2020, only 21.9%, or Rp. 151.25 trillion, of the total PEN budget ceiling was used, specifically, Rp 95.5 trillion for social security, Rp 32.5 trillion for supporting MSMEs, Rp 16.6 trillion for business incentives, Rp 7.1 trillion for healthcare incentives, and Rp 8.6 trillion for expenditures of ministries, bureaus, and local governments.



2. Fintech industry statistics

2.1 Licenses for fintech lending companies



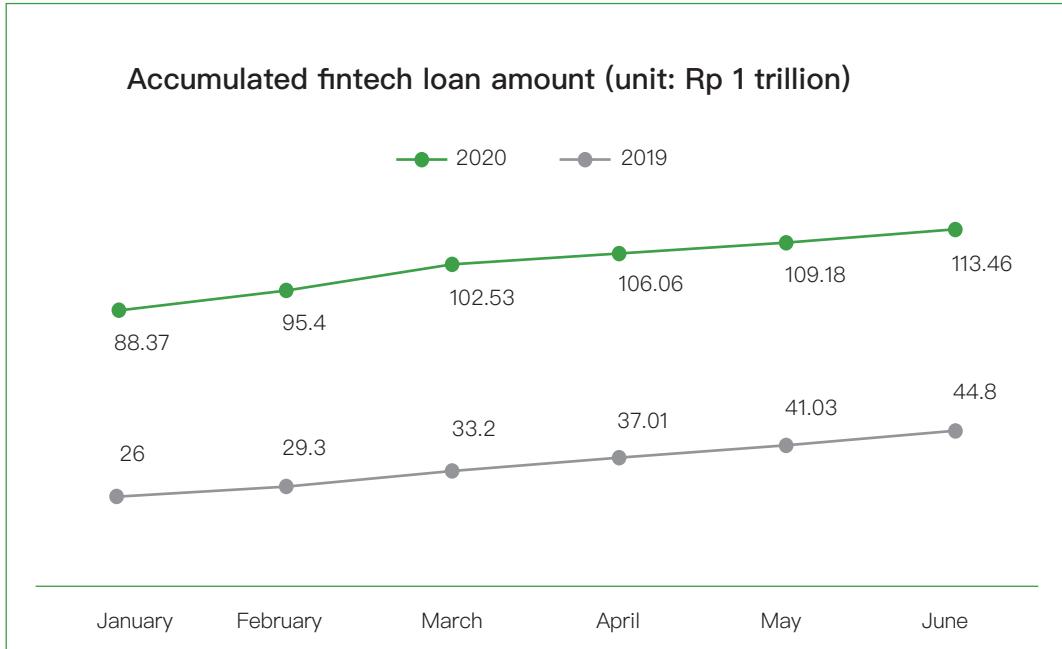
As of August 5, 2020, a total of 158 fintech lending companies in Indonesia have officially registered with OJK. These companies were also registered as AFPI members, 33 of which had obtained operating licenses from OJK. Due to the COVID-19 pandemic, OJK once suspended issuing licenses to fintech companies.

2.2 Accumulated fintech loans

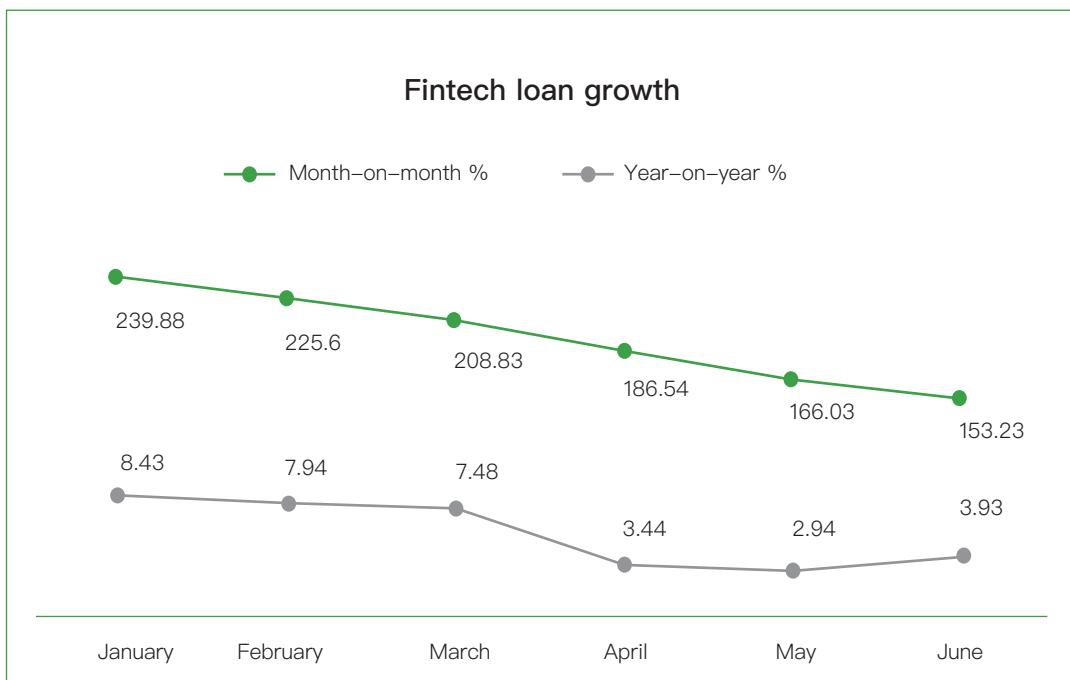
During the COVID-19 pandemic, fintech lending companies were playing their roles. According to monthly data released by OJK, accumulated fintech loans increased month by month in the first seven months of 2020, reaching Rp 116.97 trillion (approximately US\$7.849 billion) by July, an increase of 134.91% year-on-year. At the same time, the number of lenders/investors reached 663,865, up about 28% year-on-year.

Both year-on-year and month-on-month growth slowed down, heralding a stable growth stage for the industry. In April and May, when the country was hardest-hit by COVID-19, the month-on-month growth saw a sharp slowdown, from 7.48% in March to 3.44% in April and then to 2.94% in May. This was largely because of some fintech companies' plan to screen borrowers. Thanks to the relaxed PSBB and the recovery policies, the month-on-month growth rose slightly to 3.93% in June, signaling a positive outlook for Q3 statistics.

Accumulated fintech loan amount (unit: Rp 1 trillion)

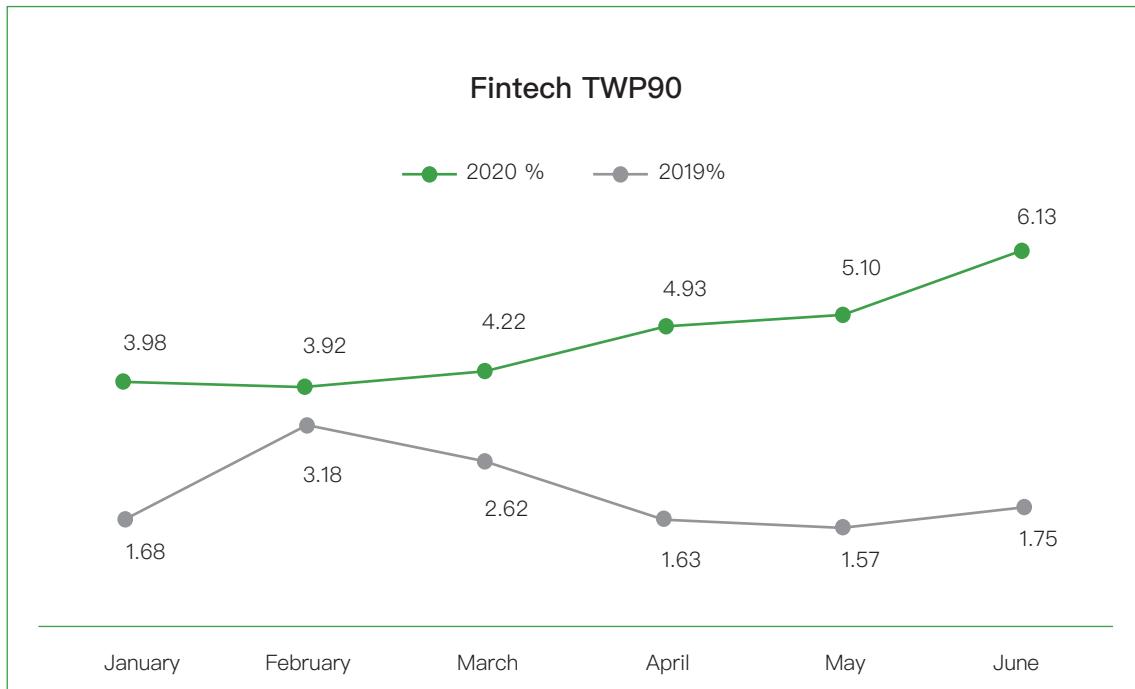


Fintech loan growth



Accumulated fintech loan statistics are as follows: In January: Rp 88.37 trillion, up 8.43% month-on-month and up 239.88% year-on-year. In February: Rp 95.4 trillion, up 7.94% month-on-month and up 225.6% year-on-year. In March: Rp 102.53 trillion, up 7.48% month-on-month and up 208.83% year-on-year. In April: Rp 106.06 trillion, up 3.44% month-on-month and up 186.54% year-on-year. In May: Rp 109.18 trillion, up 2.94% month-on-month and up 166.03% year-on-year. In June: Rp 113.46 trillion, up 3.93% month-on-month and up 153.23% year-on-year. In July: Rp 116.97 trillion, up 3.09% month-on-month and up 134.91% year-on-year.

Fintech TWP90



2.3 Non-performing loan ratio (TWP90)

According to OJK's monthly data, in March 2020, the beginning of the COVID-19 pandemic, the non-performing loan ratio/90-day delinquency rate (TWP90) for fintech companies in Indonesia was 4.22%, compared with the 2.77% for traditional banks. With the spread of the COVID-19 pandemic, fintech TWP90 reached 5.10%, 6.13%, and 7.99% in May, June, and July respectively, a significant increase from the same period in 2019. AFPI said that borrowers are difficult to repay debts or restructure their debts in the current economic recession, so the fintech TWP90 stays at a healthy level. In addition, it is reasonable for fintech companies to have a higher non-performing loan ratio than traditional banks because their borrowers are different.



3. Risks and strategies

3.1 Risks and challenges

Non-performing loan ratio higher than that of traditional banking

As major customers of fintech companies, UMKMs/MSMEs and workers were most vulnerable to the COVID-19 pandemic.

According to Markus Rahardja (BRI Ventures/Bank Rakyat Indonesia), most fintech companies provide small- and medium-sized borrowers with small loans to fill gaps that banks cannot reach, but such borrowers were the most affected population of the pandemic.

Tumbur Pardede, head of Public Relations and Institutional Affairs of AFPI, said fintech P2P is designed for cash-strapped customers with weak anti-risk abilities, so it is an all-new approach rather than a market segment of traditional financial services. Therefore, it is normal that fintech borrowers have a higher risk and fintech companies have a higher non-performing loan ratio, Tumbur added.

Restricted financing restructuring

During the COVID-19 pandemic, OJK allowed financial institutions to restructure loans affected by the COVID-19. Borrowers might be exempted from fines or interest, while fintech lending (P2P) companies were only allowed to forward applications for restructuring from UMKMs/MSMEs affected by COVID-19 to the lenders. Sunu Widyatmoko, vice chairman of AFPI, said fintech companies are different from traditional financial institutions and cannot decide on loan restructuring by themselves. Approximately 10% of the applications for restructuring forwarded by platforms to lenders were rejected. As of September 10, fintech companies have restructured loans of Rp 300 billion. With PSBB measured relaxed, the demand for loan restructuring has been decreasing as loan terms are relatively short.

Industry investment outlook

Amid the COVID-19 pandemic, fintech companies needed more funds to maintain their operations. However, in the first five months of 2020, venture capital funds invested only US\$388 million in online lenders (P2P and micro-finance) in Asia, a greater decline in investment than that made by fintech companies as a whole.

3.2 Trends and opportunities

Industries still growing amid the COVID-19 pandemic

Amid the COVID-19 pandemic, fintech companies have begun to selectively expand business channels and shift loan services to MSMEs with good prospects or related to daily necessities. According to AFPI, financing for the healthcare sectors (such as pharmaceutical MSMEs and medical support equipment providers) is still on the rise, industries such as grain, agricultural and sideline products, and packaged food show a positive outlook; the telecoms & digital industry and online ecosystem industry also display a growth potential in line with changes in consumer behaviors.

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Case study:

KoinWorks recorded a 67.2% growth in the production-oriented loan allocated to KoinBisnis. The growing demand for loans was driven by the development of digital MSMEs, such as those in the healthcare industry (up 44%), clothing, food, and beverages (up 41.78%), sports and enjoyment (up 19.61%), and mobile phones and electronic products (up 11.50%).

New customer groups

According to data from BPS, in 2019, Indonesia's online businesses accounted for 15.08% of the total number of businesses. The Indonesian Ministry of Economic Affairs pointed out that during the COVID-19 pandemic, the number of online businesses increased to more than 300,000. Indonesian digital services are gaining momentum, and more people are shopping and making major transactions via digital platforms. Fintech lending companies must tailor funding sources based on the needs and characteristics of online businesses (such as small size and no guarantee).

Case study:

Modalku partnered with four e-commerce platforms (Bukalapak, Shopee, Tokopedia, and Zelingo) to tap into this market segment. As of June 2020, Modalku had issued loans totaling Rp 15 trillion.

Risk monitoring and joint solutions

During the COVID-19 pandemic, all financial institutions improved their credit standards, screened borrowers, and conducted regular monitoring on them, or communicated with borrowers on a regular basis to ensure the business can go on wheels.

Case study:

Koinworks and Modalku optimized their credit rating and applied regular inspections to ensure that the business funded by lenders is feasible. When borrowers defaulted on payment or had difficulties in operations, Modalku will help them develop solutions and took multiple measures to keep its TWP90 below 1.5%.

Recovery trend

OJK estimated that the national economy has bottomed out and its destructive impact on the financial services is expected to recede.

Wimboh Santoso, chairman of the Board of Supervisors of the OJK, said that the improvement in indicators was reflected in the year-on-year growth of bank credit, which was only 1.49% in June but stood at 2.27% as of July 23.



Chapter 2

A new regulatory framework in the works

New technologies are applicable not only to financial institutions, but also to financial regulators. With the fintech boom, OJK is leveraging data collection and analysis tools to monitor industries and predict potential risks, rather than just order them to make rectifications after problems occur. At the same time, the Investment Risk Warning Team (SWI) also cooperated with multiple departments to investigate and crack down on various illegal fintech lenders.

OJK has implemented a series of policies for financial stability to support financial institutions and MSMEs in response to COVID-19, and issued the Digital Finance Innovation Road Map & Action Plan 2020-2024 to boost the development, integration, and talent training of the fintech industry.



1. AFPI and FDC database

FPI is an official association appointed by OJK to oversee and guide all activities of fintech loan service providers. Before applying for a loan or fundraising, the public shall check whether the fintech lender is already an AFPI member through AFPI's official website (www.afpi.co.id).

In response to COVID-19, AFPI required its members to join the FDC. As of August 4, 2020, 142 (nearly 90%) of AFPI's 158 members have been connected to FDC.

FDC has important information about more than 25 million Indonesian companies. Fintech companies can use this information to take preventive measures, such as checking the credit status of borrowers and whether they have received loans from multiple lenders. As more and more members are connected to FDC, relevant data will help fintech companies to reduce their non-performing loan ratio.

On September 14, Jakarta resumed PSBB. AFPI suggested that members continue to offer loans to sectors that were still growing amid the COVID-19 pandemic, in order to quickly adapt to these industries and emerging ecosystems.

2. Illegal fintech loans

In the past decade, public losses caused by illegal investments and funds (including illegal fintech loans) have reached Rp 92 trillion. According to the Indonesian government, illegal fintech loan companies will hinder the growth of Indonesian SMEs and indirectly undermine economic growth.

SWI teamed up with the Indonesian Ministry of Communication and Informatics (Kominfo) and National Police's Criminal Investigation Department (Bareskrim) in the crackdown upon illegal fintech websites. SWI set up investment warning desks where the public can directly lodge complaints and consult on various issues related to investment, fintech loans, and illegal private pawn.

In June 2020, SWI shut down 105 illegal P2P fintech companies and will continue to investigate hundreds of fintech websites and applications. From 2018 to June 2020, SWI has closed 2,591 illegal or unlicensed P2P fintech companies. Among all illegal fintech servers, 22% are located in Indonesia, 14% in the United States, 8% in Singapore, 6% in the Chinese mainland, 2% in Malaysia, and 1% in Hong Kong (China).



3. Financial and monetary policies during the COVID-19 pandemic

3.1 OJK's financial stability policies

During the COVID-19 pandemic, OJK has issued 11 stimulus policies targeting banks, capital markets, and non-banking financial industries. Such policies involve delayed implementation of Basel III, interest subsidies, loosened banking regulations to provide more room for liquidity and bank capital, and stimulate banks and financial companies to carry out credit and financing restructuring to keep the financial sector stable. Meanwhile, OJK supported the government's issuance of credit guarantee plans for MSMEs and investment in the banking industry, so as to facilitate lending to MSMEs and labor-intensive employers.

Regarding non-bank financial institutions, financial reform is still in progress. OJK cracks down on illegal fintech institutions through SWI and supports AFPI to build FDCs, in a bid to mitigate potential risks and forecast future challenges.

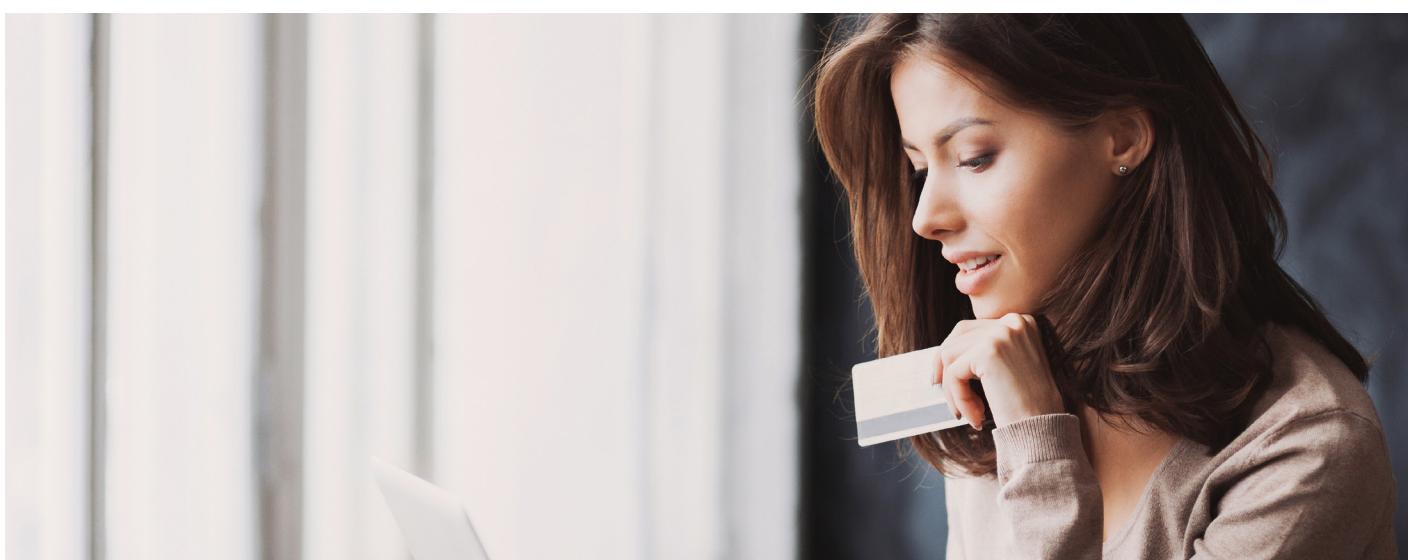
3.2 Indonesian financial services sector master plan

On August 20, OJK reviewed the digital bank license terms and incorporated them into the draft of the Indonesian Financial Services Sector Master Plan. OJK said that the digitization represents a general trend of the development of financial services, but it had not disclosed whether the licenses can be obtained by non-bank institutions. In terms of financing expansion, banks can cooperate with fintech companies to expand into the lucrative SME market, including online markets, transportation services, tourism, online stores, entertainment, and digital payments.

3.3 Digital finance innovation road map & action plan 2020-2024

On August 24, OJK and the Indonesia Fintech Association (AFTECH) jointly held the Virtual Innovation Day 2020, with an aim to promote economic recovery through fintech innovation and encourage fintech companies to continue to contribute to the growth of the financial services industry and the national economic recovery.

OJK promulgated the Digital Finance Innovation Road Map & Action Plan 2020-2024 to expedite the development, integration, and talent training of the fintech industry.



3.4 OJK mulls new regulations for regions other than Java

On September 3, according to Riswinandi, CEO of OJK's Non-Bank Financial Industry (IKNB), OJK is planning to introduce new regulations to balance the credit distribution and increase lending outside of Jakarta or Yabotabek, as current fintech loans were concentrated in Java. The plan is expected to bring new opportunities for fintech companies to expand business in regions outside of Java.

3.5 AFPI assists in PEN implementation

On September 7, AFPI announced that it would assist in the allocation and payment of funds for the PEN program. AFPI said it can help MSMEs solve any problems related to loan payment through its data center.

3.6 Bank Indonesia (BI) policies

In response to COVID-19, Bank Indonesia (BI) has introduced a series of monetary policies to stabilize the foreign exchange rate, promote the synergy of monetary expansion, facilitate the government's fiscal stimulus, and bolster the national economic recovery through market mechanisms or direct payment of medical expenses and social security. BI has also been dedicated to accelerating the digitization of payment systems and the construction of a digital economy and finance. It has facilitated the cooperation between banks and fintech companies to widen the access of MSMEs and the public to financial services.



Chapter 3

New business model and technological change

As technology advances and the industry evolves, the sharing economy will be involved in every part of the financial system. The boom in funding and innovation will continue as fintech shifts from primarily retail to more institutional uses.

For Southeast Asia, technology-driven innovation can lead to national economic growth, and fintech has the potential to support national economic recovery. Financial institutions will face new risks in the new normal and will need to update their operating models to focus more on institutional GRC, as well as industry trends such as public cloud and AI.





1. Industry outlook

1.1 Asia will remain an important hub for technology-driven innovation

The middle class worldwide is expected to grow by 180% between 2010 and 2040, with some 1.8 billion people migrating into cities in the 30 years, most of them in Africa and Asia. By 2020, Asia's middle class has surpassed that of Europe, creating one of the most important new opportunities for financial institutions.

These trends are directly related to technology-driven innovation. Advances in computer and telecommunication technologies make it possible for mainstream companies to relocate certain support functions to places such as Southeast Asia and India, thereby creating high-paying jobs.

1.2 Fintech has the potential to support Indonesia's national economic recovery

During COVID-19, more individuals and MSMEs have been using digital payments for transactions, and P2P lending continues to provide access to finance. Fintech has the potential to support national economic recovery.



Fintech companies have offered a variety of initiatives to help MSMEs and communities through the epidemic. An AFTECH survey has documented 55 initiatives implemented by 52 fintech companies, including lower interest rates for MSMEs, free digital signatures, discounts on monthly bills, and a zero merchant discount rate (MDR). Financing is also facilitated through the provision of low interest rates, liberalized loans, and free financial advice for various projects, especially in the health sector.



1.3 Financial institutions update their operating models to embrace the "New Normal" in the post-epidemic era

GRC of financial institutions

Financial institutions are facing greater uncertainty, including a variety of new risks such as cyber-attacks, cloud security threats, changes in competitors, geopolitical crises, and disease pandemics. In order to identify and anticipate these new risks, OJK has asked financial institutions to step up probe into the GRC. The fundamental changes in life and business modeling systems in the digital age require organizations to continuously innovate in managing their business and operation, and the integration of GRC applications is an important prerequisite for responsible and quick decision making. OJK and GRC Forum Indonesia have prepared the Guideline on GRC Excellence Model to answer typical questions on GRC implementation in Indonesia.

Public cloud-led infrastructure model

The shift to cloud computing is significant. Many financial institutions use cloud-based Software-as-a-Service (SaaS) applications only for non-core business processes such as CRM, HR, and financial accounting, and some institutions turn to SaaS for some operational solutions, including security analysis and Know Your Customer (KYC) verification. As application offerings improve, cloud technology is quickly becoming the way to handle core activities. In 2020, core services in areas such as consumer payments, credit rating, and basic current account functionality for asset managers are all likely to be available through the public cloud.



AI-powered higher productivity of financial institutions

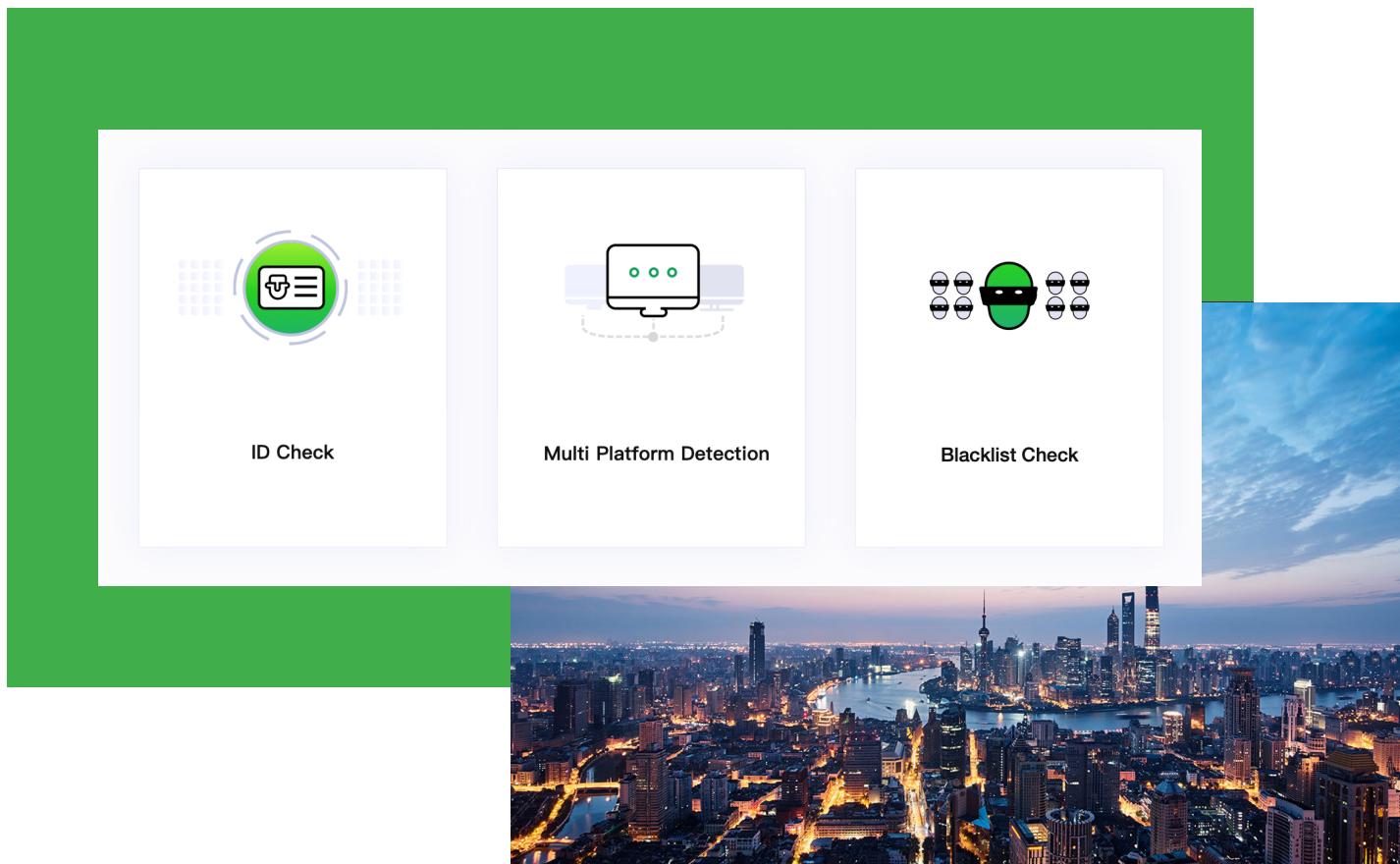
Customer intelligence and the ability to act on that intelligence in real time are two major trends that affect the financial services industry and will drive revenue and profitability more directly in the future. AI is a key technology that banks, credit companies, and other financial institutions need for risk avoidance and compliance assurance. It can indirectly help them analyze the "invisible credit" customers, who are unbanked or underbanked. The increase in compliant users can further enhance financial institutions' performance.

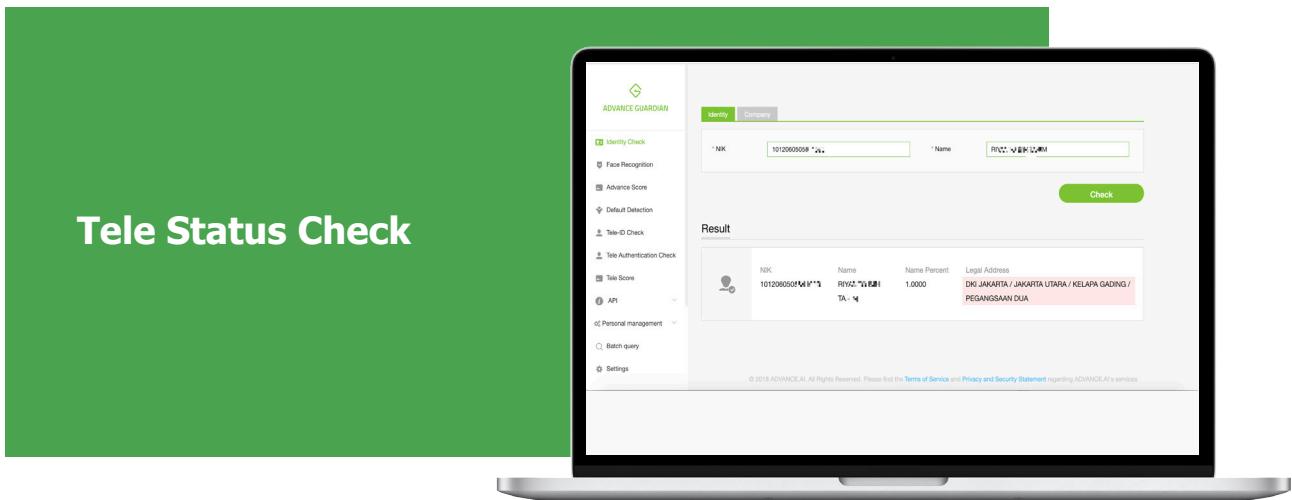
2. More efficient, smarter risk control

ADVANCE.AI has extensive experience in the Indonesian market, with profound accumulation and innovative R&D capabilities in the risk control technology field. Its services apply to many areas such as Internet finance, banking, e-commerce, and ride-sharing. Its ADVANCE Data Services and ADVANCE Fraud Faces provide fintech companies with more efficient and smarter access to risk control data and anti-fraud technology services.

2.1 ADVANCE Data services

ADVANCE.AI provides a variety of data services that can help customers take necessary precautions before taking loans. For example, ID Check is a basic service that verifies the validity of identity information and covers about 92% of Indonesia's population. Multi-Platform Detection uses massive data to screen out high-risk people who are applying for loans on multiple platforms, so that customers can better predict the likelihood of default. Blacklist Check data, accumulated by tracking post-loan performance, helps customers quickly identify individual risks to reduce non-performing loans. The blacklist time periods include M1+, M2+, and M3+. Tele Status Check detects the current status of mobile numbers online in real time. Based on the detected status, it can prevent applications with false information so as to avoid pre-loan risks, warn loan risks, and appropriately allocate manpower for the collection of overdue loans.

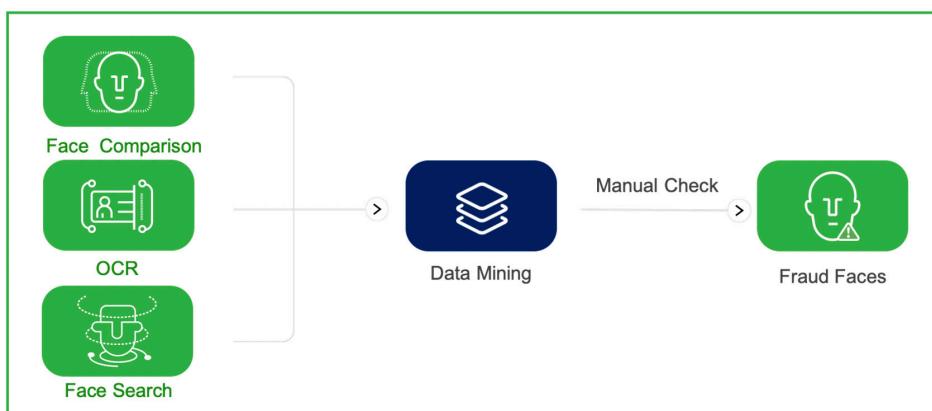




2.2 ADVANCE Fraud Faces

ADVANCE.AI Fraud Faces is an AI analysis product that can quickly detect a person's fraud records by reading his or her face. The service will be more reliable if used with ADVANCE Liveness Detection, a bioassay product that makes facial information falsification harder. The returned information includes the time of fraud, total number of used IDs, number of different IDs used in the past 30, 60, and 90 days, etc. Based on the reliable data (hundreds of millions face images) mined by ADVANCE.AI's big data platform, ADVANCE Fraud Faces can continuously analyze and mine multiple identity fraud records. ADVANCE Fraud Faces has a daily updated database, and AI-based and manual verification guarantees the data reliability. The product features a higher matching accuracy than 99% of facial recognition technologies in real-life scenarios, as well as the rapid response and easy-to-integrate APIs.

Fraud Faces working process





About ADVANCE.AI

ADVANCE.AI is a leading big data and AI company in Asia. Providing customers with **digital transformation, anti-fraud, and process automation solutions.**

The company has attracted investment from Silicon Valley and well-known Asian venture capital firms. Headquartered in Singapore and with offices in other Asia Pacific countries such as Indonesia, India, China, the Philippines, and Vietnam, the company targets industries including **banking, financial services, fintech, payment, retail, and e-commerce.**

It is committed to transforming and reshaping the business world with AI technology, and providing users with better information, products, and services.

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