



Asosiasi FinTech Indonesia
(AFTECH)

FinTech Industry Insights:
**Annual Member
Survey 2018**



fintech
indonesia



Niki Santo Luhur

- Chairman of Asosiasi FinTech Indonesia (AFTECH)
- Founder of Indonesia Digital Identity
- Appointed as a Special Advisor by the Ministry of Communication and Information Technology (Kemenkominfo, Republic Indonesia) (2018)
- Was the President Commissioner of Kartuku
- Listed as Tech-InAsia's Southeast Asia Top 30 tech founder (2015)
- Selected as Indonesia's first Endeavour High Impact Entrepreneur (2012)

Our Chairman's Note

About Asosiasi FinTech Indonesia (AFTECH)

The Indonesian FinTech Association (AFTECH) is an association that brings together companies and institutions in the financial services sector that adopt technological advances in running their businesses. AFTECH was established in 2016 with a vision to encourage financial inclusion through digital financial services, and the mission of supporting financial inclusion targets through increasing access, usage and quality of financial services.

As of December 2018, AFTECH has more than 200 members that includes: startups, financial institutions, and technology companies. More than 175 of AFTECH members are FinTech startups with wide ranging business model, including: payments, digital lending, wealth management, equity crowdfunding, market provisioning, and insuretech. AFTECH plays a role in advocating policies and encouraging the professional development of its members. The association serves as a Self-Regulatory Organization (SRO) incubator for all fintech verticals, preparing them to reach maturity level and scale to become an independent SRO.

FinTech for Financial Inclusion

President Joko Widodo announced that he wants 75% of Indonesians included in the financial services sector by 2019. However, as per World Bank 2017 Findex data, only 48.9% of Indonesians are financially included. And given the 26.1% gap persists, it is equivalent to including 52 million Indonesians in financial services industry.



Dewy Fadjarsarie Handajani, Senior Executive Analyst of Quality Control and Sectoral Supervision's Monitoring, APU PPT, Otoritas Jasa Keuangan (OJK) talking about Money Laundering and Terrorism Financing in AFTECH's Expert Gym

Currently, there are 1.5 million financial touchpoints of conventional channels. Moreover, one-third of the unbanked cites distance as the biggest barrier to access and usage of financial products and services.

Indonesia has a great potential to leverage digital technology to expand financial inclusion. Given the rapidly growing mobile and digital market in Indonesia, fintech can play a key role in accelerating financial inclusion. Close to 70% of the unbanked population own mobile phones (SNKI Website, 2017), who can be included in the financial space through 3 million fintech payment agents (AFTECH Annual Member Survey, 2017).

Amongst the notable contribution of fintech to financial inclusion are: increase in e-money transaction by 70% (from Mar-Dec 18) and increase in loan disbursement by 289% over the same period; and significant growth of financing provided by fintech lending to approximately 4.35 million borrowers. In order for fintech to speed-up the financial inclusion growth further, there is a need for more coherent and supportive regulatory framework.

Regulatory framework in Indonesia's FinTech sector continues to improve, particularly on clarity and transparency thus attracting more players to enter the industry. In undertaking advocacy effort to create regulatory certainty, AFTECH through it's working groups is working closely with key government agencies that regulate and supervise different areas of financial services technology sector, namely: *Sekretariat Dewan Nasional Keuangan Inklusif (SDNKI)*,



AFTECH and OJK Digital Financial Innovation (IKD) Heads on the day of announcement of Batch I clusters for the Regulatory Sandbox

Bank Indonesia (BI), as well as *Otoritas Jasa Keuangan (OJK)*. In addition, AFTECH is also engaging with other relevant government agencies, such as: Ministry of Communications and Information Technology (KEMENKOMINFO), Ministry of Trade (KEMENDAG), National Development Planning Agencies (BAPPENAS), as well as National Cyber Agency (BSSN) on various relevant issues, including on digital identification.

As a part of the policy advocacy effort, AFTECH conducts an Annual Member Survey at the end of every year with an objective to gain a better understanding of how FinTech industry has been evolving in general and how regulations and policies are shaping up in particular. This year the focus of the survey is on various topics: regulations, infrastructure, talent, financial inclusion & literacy in Indonesia.

I would like to thank all FinTech companies who have taken out time and filled up the survey. And to all our members for providing their support to AFTECH through participation in our events, talk shows and working groups. We look forward to the continued support of our fintech members, financial institutions, knowledge partners and tech partners in helping us shape the best practices for the industry.

**Niki Santo Luhur,
Chairman,
Asosiasi FinTech Indonesia (AFTECH)**

Methodology



01

Definition

Asosiasi FinTech Indonesia (AFTECH) defines FinTech as institutions in the financial services sector that adopt technological advances in running their businesses.

There are three main category of FinTech in this survey: (i) Digital Payments, which includes E-money/mobile wallet, remittance, payment gateway, POS solutions, payment agent network, bill payment, payment issuer support; (ii) Online Lending, which includes, off-balance sheet lending for consumers and businesses and on-balance sheet lending for consumers; and (iii) Other Verticals.

Other Verticals include: (i) Market Provisioning, (ii) Capital Markets, (iii) Financial Management, (iv) Crowdfunding, (v) Insuretech, (vi) Data Analytics & Artificial Intelligence, as well as (vii) Sector agnostic, such as, online gold platform, e-KYC provider, software-as-a-service (SaaS) advocacy engagement platform, online tax administration platform, and consumer debt advisory.



02

Survey Design

AFTECH conducts an Annual Member Survey at the end of every year to understand the opinion of its members on the progress of policy and regulatory framework in Indonesia.

The questionnaire consists of 5 sections:

- FinTech Profiling provides a summary profile of the respondents
- Regulatory Outlook provides an insight into the speed of approvals and regulatory hurdles faced by respondents
- Financial Inclusion focuses at current programs/initiatives adopted by respondents to mitigate financial inclusion and financial literacy issues
- Infrastructure for FinTech focuses on understanding issues to build a responsible and sustainable fintech ecosystem
- Talent explores prominent gaps in skills faced by FinTech industry

The Financial Inclusion and Infrastructure for FinTech sections are newly added to understand the initiatives and programmes undertaken by various fintech players. As well as to gain a perspective on the regulatory barriers, which if overcome would help our members achieve these objectives.



03

Data Collection

AFTECH circulated to members a 66 items questionnaire. This questionnaire included compulsory and non-compulsory questions. The non-compulsory questions were mainly investment related, whereas compulsory questions were opinion-related.

The questionnaire was circulated online on December 2018. A total of 73 respondents participated. However, the responses varied for non-compulsory questions depending on the comfortableness of the respondents in revealing the data.

Kindly note: A number of questions across the survey that were asked to the respondents had multiple-options i.e. a respondent could choose more than one option for that question. Those percentages if added are more than 100%.



04

Research Analysis

AFTECH has used a mix of primary and secondary research for analysis. The first section on Industry Overview is compiled using secondary research. However, the other sections of the report used the data collected from the survey.

Analysis of the survey also shows insight and wide ranging experience that AFTECH has gained over the years representing the FinTech industry.

Overall insight in this report is classified in to three major categories: (i) Digital Payments, (ii) Online Lending, and (iii) Other Verticals. However, where a consistent trend of the entire industry is observed, an aggregate data is shown.

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FinTech in Indonesia: An Industry Overview

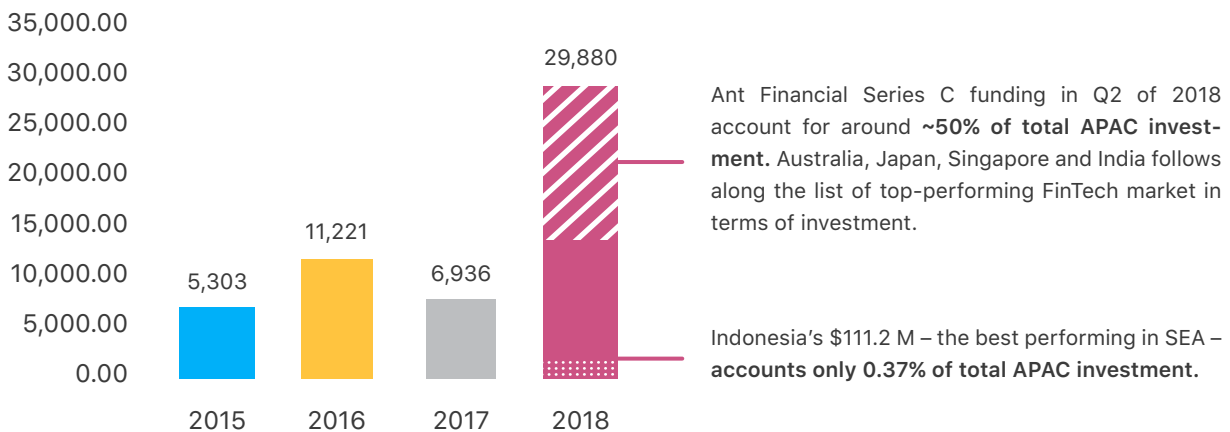
Since the establishment of AFTECH, three years ago, the FinTech industry has evolved and AFTECH members too have increased. As of December 2018, AFTECH FinTech members have increased to 178 from six co-founding members. The industry has proven that it can offer complementary financial services for a wider and more diversified segment of market. With its digital reach and agility to innovate, FinTech is best positioned to provide tailored financial services/product to underserved and underbanked population and hence push for financial inclusion.

Growing Investment in FinTech

A Tryb Group Survey indicates that investors are bullish in the FinTech sector in Southeast Asia – and **Indonesia is seen as the most attractive market**. Accenture survey revealed that within 2018, FinTech investment in Indonesia increases by **93%** reaching a total of **US\$111.2 Million**.

Investment Activity Overall

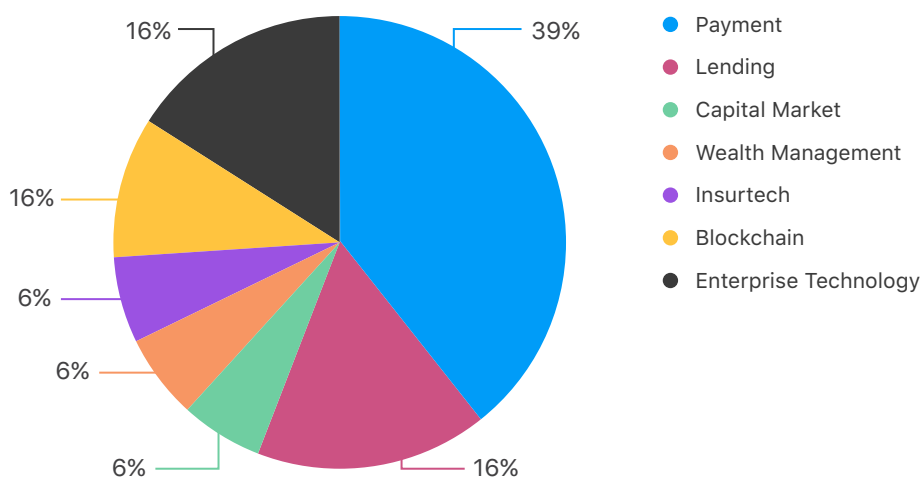
FinTech Investment APAC (in \$M)



Source: Accenture Research Analysis on CB Insights Data 2018

Investment Trend by Business Model

2018 Tryb Group Limited Partner Survey reveals that within Southeast Asian Nations (ASEAN), these are among the most attractive sectors:



The Rapid Adoption of FinTech

Digital Payment FinTech

70%
Increase in e-money transaction from Mar-Dec '18

Total Transaction
In Value – 2018 (entire year) **IDR 47 Trillion**
In Volume – 2018 (entire year) **2.9 Billion**

48%
Increase in e-money volume from Mar-Dec '18

Total e-money inst.
As of Dec 2018 – cumulative **167 Million**

Although the e-money sector in FinTech has matured, it continues to provide various value proposition to its customers. This can range from online and offline purchase transaction; bill payments; charity (zakat) payments; and even PayLater zero-interest small ticket size installments feature.

Aside from the various features Digital Payment players offer, rapid adoption is also driven by e-money players that has successfully acquire transaction intensive use-cases (transportation, food, etc.).

Online Lending FinTech

567%
Increase in Loan Disbursement from Feb-Dec '18

Total Loan Disb.
Dec '18 – cumulative **Rp 22.6 Trillion**
of Lender
Dec '18 – cumulative **207,507**

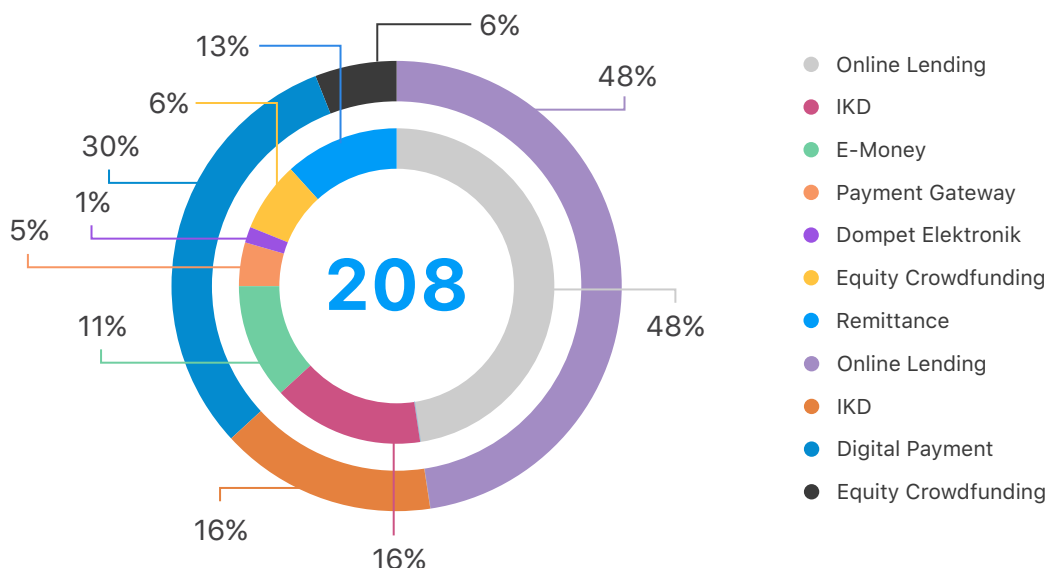
251%
Increase in Loan Disbursement from Feb-Dec '18

of Borrower
Dec '18 – cumulative **4.35 Million**

Out of the total number of Online Lending borrowers, OJK statistics has revealed that: 84% are from Java, while the other 16% is from outside Java. As for lenders, it is revealed that 75% are from Java, 24% is from outside Java (but still within Indonesia), while the other 1% are international lenders.

Online Lending continues to experience growth over the period of February to December 2018. With numbers of borrowers growing at 251% rate and total loan disbursed across all 88 (Dec 2018 data) active players reaching IDR 22.6 Trillion in Dec 2018. Despite this, Online Lending players have managed to keep NPL rate quite low, as of December 2018, NPL is recorded to be 1.45%.

Development of FinTech Startups in Indonesia



As per 2018, the total number of licensed/registered FinTech players (counted to mirror the number of possible FinTech licenses/registration issued by the Indonesian government) has reached 208. 178 of which are members of AFTECH (as of Dec 2018).

Digital Financial Innovation (IKD - Inovasi Keuangan Digital) is a segment of FinTech outside the payment and lending verticals, governed under POJK 13/2018 on Digital Financial Innovation. It comprises of FinTech players that come from verticals such as: wealth management, investment, insuretech, Data & Artificial Intelligence, alternate credit scoring, open marketplaces, and others. It is noteworthy that the implication of IKD regulation is that members of such verticals are tested within OJK's regulatory sandbox which are still on progress as of December 2018.

Development of FinTech Startups in Indonesia

Category	License	Number of License Holder	Issuer	Notes
Online Lending	Online Lending	88 (as per Dec 2018)	OJK IKNB (Institusi Keuangan Non Bank– <i>Financial Institution other than Bank</i>) Department	Governed under POJK 77/POJK.01/2016
Inovasi Keuangan Digital (Digital Financial Inovation)	IKD Listing & Registration	34	OJK IKD	Governed under POJK 13/POJK.02/2018 All FinTech verticals outside Online Lending, Digital Payments, Equity Crowdfunding falls under this licensing category
Digital Payment	Payment Gateway	11	Bank Indonesia	Governed under PBI 18/40/PBI/2016
	E-Wallet	3	Bank Indonesia	Governed under PBI 18/40/PBI/2016 One way to differentiate between E-Money and E-Wallet is the source of fund for top-up, in E-Wallet you are able to use debit/credit card in addition to bank transfer/offline top-up
	E-Money	22	Bank Indonesia	Governed under PBI 20/6/PBI/2018
	Remittance		Bank Indonesia	Governed under PBI 19/12/PBI/2017
Equity Crowdfunding	Equity Crowdfunding	OJK has not issued any license under this vertical given the novelty of the regulation. Count of ECF players thus originated from AFTECH member database	OJK Capital Market Supervisory Department	Governed under POJK 37/POJK.04/2018

FinTech Regulation

Verticals	Regulations	Notes
Online Lending	POJK 77/POJK.01/2016	The implementation of this regulation is managed by OJK DP3F (Departemen Pengaturan, Perizinan, dan Pengawasan Teknologi Finansial). The regulation specifically relevant for FinTech Lending Players.
Inovasi Keuangan Digital (Digital Financial Innovation)	POJK 13/POJK.02/2018	Managed by OJK GIKD (Digital Financial Innovation Group). The regulation set the provisions for Indonesia's FinTech Regulatory Sandbox . It aims to provide regulatory clarity for FinTech categories that has not yet been specifically regulated by BI/OJK/other line ministries.
Payment Gateway	PBI 18/40/PBI/2016	PBI PTP are managed by BI DKSP (Departemen Kebijakan Sistem Pembayaran–Payment System Policy Department). The policy covers provisions (licensing and beyond) that apply to all Payment System Operators (including payment gateway, e-wallet, switching, clearing, etc.)
E-Wallet	PBI 18/40/PBI/2016	
E-Money	PBI 20/6/PBI/2018	The implementation of this regulation is largely overview by BI DKSP (Departemen Kebijakan Sistem Pembayaran). The regulation specifically regulated e-money operation, including licensing, legal & capital requirements, provisions for floating funds & transactions, etc.
Remittance	PBI 19/12/PBI/2017	PBI Remittance is monitored by BI DKSP .
Equity Crowdfunding (ECF)	POJK 37/POJK.04/2018	POJK 37 is the latest FinTech regulation published. The responsible body is OJK Capital Market Supervisory Department. It essentially regulates three main stakeholder involved in ECF business model: the ECF platform, the equity issuer, and retail investors.

Other government bodies & ministries whose regulatory oversight affected FinTech's operationale in Indonesia:

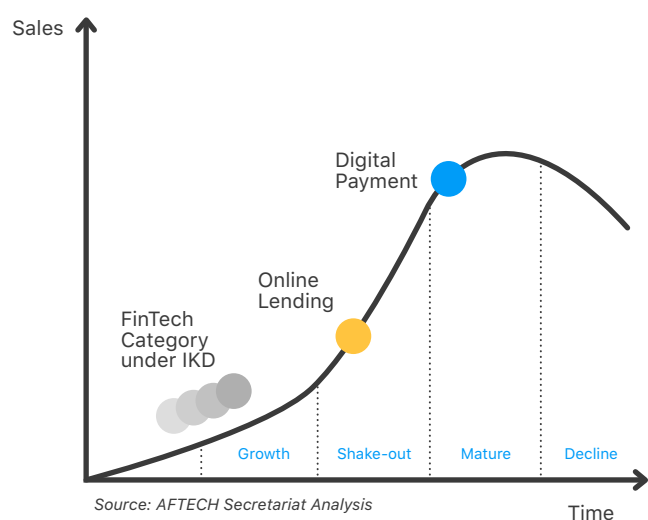
	<ol style="list-style-type: none"> 1. Payment policies 2. LKD Agent Network 3. Open API (Banks x FinTech) 4. E-KYC/Digital Identity 5. Fraud Sharing Database 		E_KYC/Digital Identity
	<ol style="list-style-type: none"> 1. Digital Financial Innovation 2. Equity Crowdfunding 3. Online mutual funds agents transaction 4. Fraud Sharing Database 		FinTech Taxation Clarity & Incentives
	<ol style="list-style-type: none"> 1. Financial Inclusion 2. Agent Network 3. E-KYC/Digital Identity 		Equity Crowdfunding: IDX as appointed body for ECF platform assessor
	E_KYC/Digital Identity		Financial Inclusion
	Financial Inclusion (G2P Payments)		<ol style="list-style-type: none"> 1. Financial Inclusion (MSME initiatives) 2. Equity Crowdfunding: potential issuer database
	Equity Crowdfunding: potential issuer database		Financial Inclusion (G2P Payments)
	Equity Crowdfunding: potential issuer database		

Maturity of the FinTech Sector

FinTech start-up across categories experience different dynamics in the market. In this case, industry maturity is analyzed using two main qualitative indicators: growth figures (growth of volume or value of transaction, user acquisition, etc.) as well as number of players operating within the sub-sector. Ranked according to maturity, Digital Payment sector leads the industry, followed by Online Lending. Other categories of FinTech generally fits into the “growth” phase, with varying degree of growth level across different verticals.

Categories	Maturity Phase	Notes
Digital Payment	Mature	Payment is a sub-sector that has achieved considerable maturity in comparison to others. This is apparent by how market competition between payment players have consolidated (through collaboration, merger & acquisition) into a few big names. Growth figures are still generally positive, but comparatively lower than Online Lending sector.
Online Lending	Shake-out	Given the market size and demand, is it not uncanny that online lending has enjoyed sharp and rapid growth. OJK’s pipeline of license registration (as of Feb 2019 - 99 registered, 11 in process, and ~100 more outstanding application) shows fragmentation that characterizes a growth-phase industry. Although, later stage shake-out is looming near as big players start to consolidate.
Others (including Financial Marketplaces, Financial Planning, Insuretech, Equity Crowdfunding, Wealth Management, etc.)	Growth	<ul style="list-style-type: none"> ● OJK’s IKD regulation is enabling a more diverse fintech business model to emerge in the market. POJK 37 is also set to jumpstart growth of number of ECF players in Indonesia. ● Fintech investment trend start to shift to wealth management, capital market (investment tech), and other financial enterprise solution. OJK IKD Cluster announcement (12 Clusters) as well as OJK Capital Market Supervisory Department’s licensing application revealed an addition of around 10 FinTech start-ups operating within the capital market dimensions since late 2018 to early 2019. ● Consumer financial literacy is a key enabler to push for more fintech adoption.

Graph



Growth

In this phase, various FinTech categories/business model are slowly starting to garner market attraction. In overall, Depending on the extent of the growth phase, start-up experiences range from increase/rising revenue to even increase in profitability.

Shake-out

The shake-out phase is both characterize by high fragmentation of players at its early stage and a subsequent consolidation of players during its later stage. As the sector move forward to reach maturity, smaller and less developed players naturally lose out to bigger and more developed players through numerous exit strategy.

Maturity

Market consolidation to few big players and declining growth rate are few features of sub-sector within the maturity phase. At this stage, the sector has reach considerable saturation and new entrants to market often face significant challenge in acquiring market share.

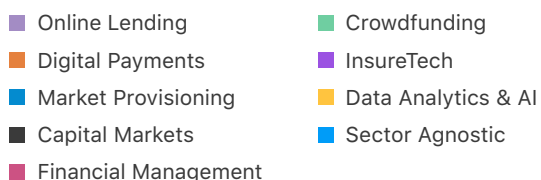
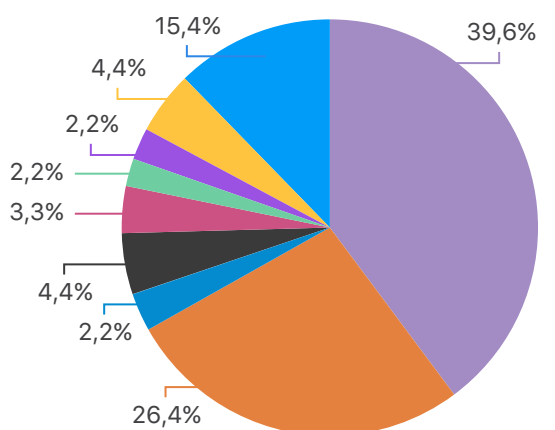
FinTech Profiling

Among the respondents of the AFTECH Annual Member Survey, majority of them are Online Lending, Digital Payments and Market Provisioning fintech players. Within the Online Lending category, ~95% are practicing off-balance sheet lending, whereas, within Digital Payments category there is a fair distribution of business models.

A small percentage of respondents as of now (16.4%) but we see more number of players in future expanding to other fintech business models. This expansion is not only vertical but also horizontal in the sense of regional penetration. As ~50% or more fintech respondents have mentioned that they exist in other regions in Java, beside Jabodetabek, as well as in regions outside Java.

The technologies that are mainly used by fintech respondents are: E-KYC, payment gateway, big data, and cloud infrastructure. Hence, there is a dire need to have 'light-touch and safe harbor' regulations around these technologies.

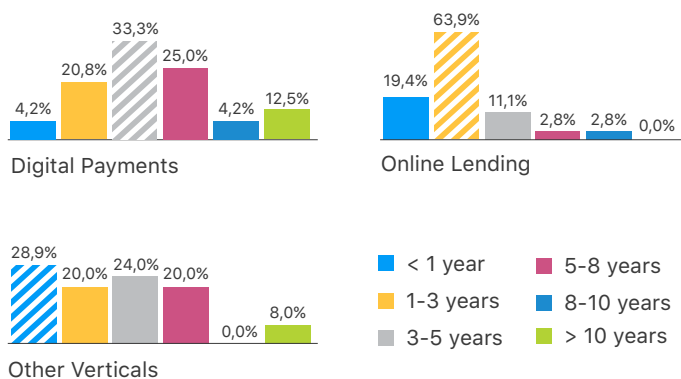
Types of FinTech Company



The top 3 category of respondents in our survey are:

(1) Online Lending (2) Digital Payments and (3) Market Provisioning.

Age of the Companies (since its establishment)



In aggregate, 42.5% of the fintech respondents are 1-3 years old.

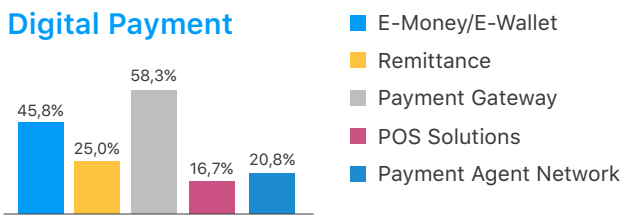
Digital Payment is the most mature based on years of operations where **33.3% of the companies have been operating for 3-5 years and 17.50% operating for more than 10 years.**

Based on the profile of fintech respondents, most of the **Online Lending** FinTech has been established for **1-3 years.**

The remaining fintech are categorized as 'Other Verticals'. For Other Verticals, the maturity level based on years of operations varies across categories. However the most prominent count shows 28% being in their first operating year.

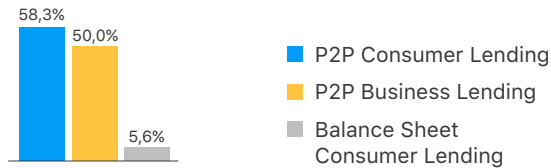
Sub-Segment of FinTech Company

Digital Payment



While Digital Payments respondents have showcased a **fair distribution** of business models, with **Payment Gateway** being the **most common type**, followed by E-Money/E-Wallet.

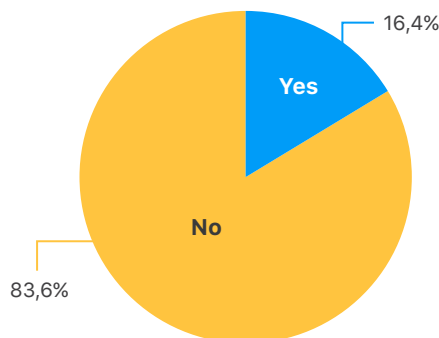
Online Lending



Among the online lending fintech respondents, off-balance sheet lending is the most prominent one.

Overall, **P2P Consumer Lending**, which is the platform model connecting investors with potential consumer borrowers, and **Business Lending**, which is platform model connecting investors with potential MSME borrowers are the two main categories of Online Lending with **58%** and **50%** of Online Lending respondents having these business models respectively.

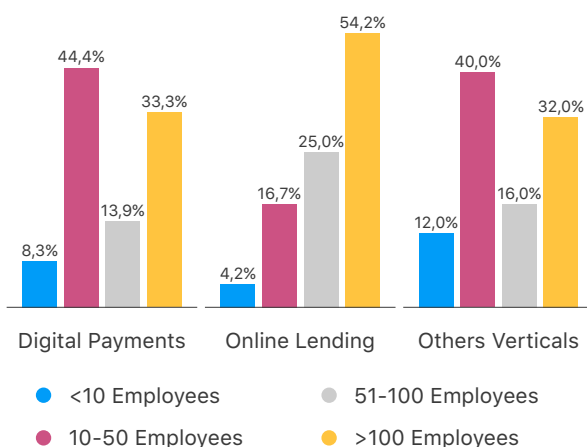
Has your company changed/expanded its business model?



16.4% of FinTech respondents claim to have **changed/expanded to other business model** and **83.6%** claim that they have **never changed/expanded their business model**.

However, with OJK's new regulation on Regulatory Sandbox that promotes innovation, we believe more and more FinTech players will be encouraged to experiment, try and expand their business model to other categories.

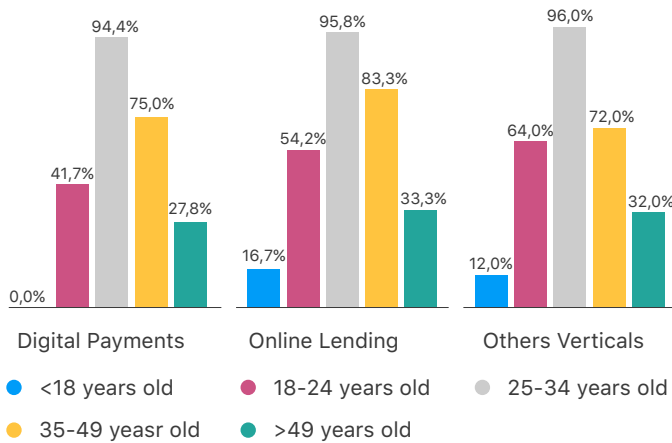
Number of Employees



Mirroring the age of the companies, majority of Online Lending companies (**54.2%**) and Other FinTech respondents (**40%**) seem to indicate small-sized companies (10-50 employees).

While Digital Payments, which are relatively more mature, majority of companies (**44.4%**) have more than 100 employees (**large-sized companies**).

Primary Target Market by Age Range



The target market seems to be uniform across FinTech category with the most to least targeted market as follows, 25-34 years old, 35-49 years old, 18-24 years old, >49 years old and <18 years old.

One way to interpret this data is, there may be a link between age group, **financial capacity** and **tech-savvy**.

As an example, the most targeted age range is 25-34 years old (millennials) as the age range that is financially capable and relatively more tech-savvy.

Main Market Penetration

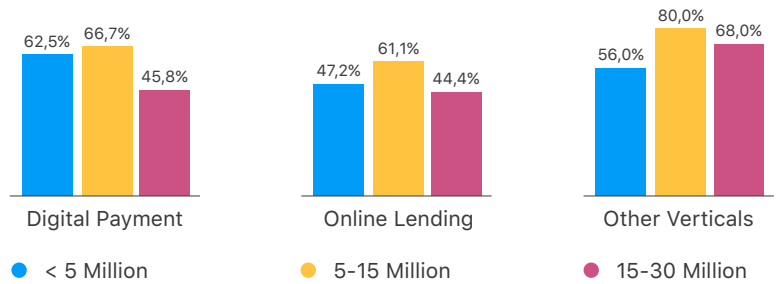


FinTech penetrates to different locations in Indonesia in varying extent. The highest level of penetration happens in Jakarta (with 95.9% of FinTech respondents operating in Jakarta), followed by Jabodetabek area (82.2%).

Outside Jakarta and Jabodetabek area, FinTech players mostly penetrate: Bandung, Surabaya, DI Jogjakarta and Bali.

Although penetration are still concentrated in major cities, our survey result has also shown that more than half of FinTech respondents (56.2%) admit to having operation in areas outside Java. Moreover, 11% of respondents claim to operate overseas outside Indonesia, indicating that Indonesian FinTech do seek out to be regional players.

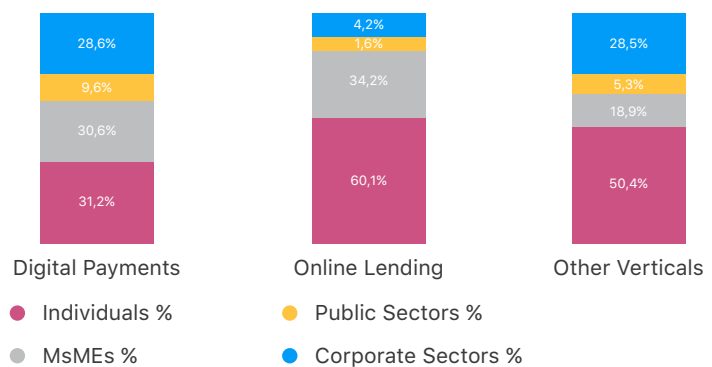
Primary Target Market by Income



FinTech respondents are shown to primarily target consumer segment with monthly income that ranges from IDR5-15 million rupiah. This funding suggest that FinTech mostly caters to **low-middle income segment of the society**. World Bank Data suggest that there are around 44 million Indonesians included in that category.

This data supports the notion that the type of financial product/service offered by FinTech is well-positioned to capture the low-middle income segment, given the high frequency & small ticket size transactions that individual belonging in this income bracket often conduct.

Primary Target Market by Consumer Segment



Digital Payments

As a digital payment provider, they have a relatively equal percentage of target market for Individuals, SMEs and Corporate Sector, with **31.2%**, **30.6%** and **28.58%** respectively. The least targeted is **Public Sector** (government entities, nonprofit organizations) with **9.63%**.

Online Lending

Their target market on consumer segment consists of **60% Individuals** and **34% MSMEs**. The rest 6% consists of Public Sector (government entities, nonprofit organizations) and Corporate Sector.

Key Technology Used by Fintech Company



70,8%
E-KYC



56,9%
Payment Gateway



48,6%
Big Data



48,6%
Cloud Infrastructure

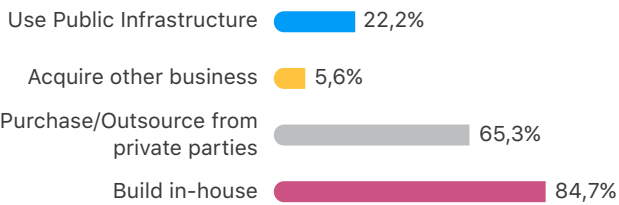


38,9%
AI/Machine-Learning Based



36,1%
Digital Signature

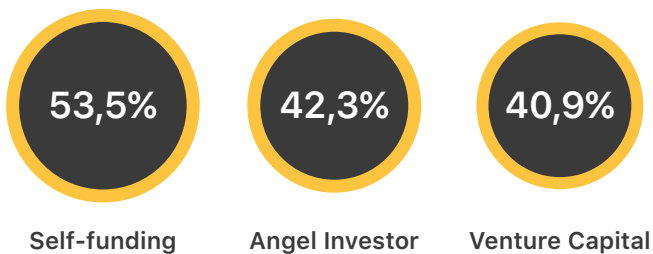
Technology Procurement by Fintech Companies



Factors/variables that may contribute to technology procurement decisions favouring Build in-house are as follows (but not limited to):

- (1) The necessity to customize infrastructure;
- (2) Pricing or Procurement Cost
- (3) Market Availability

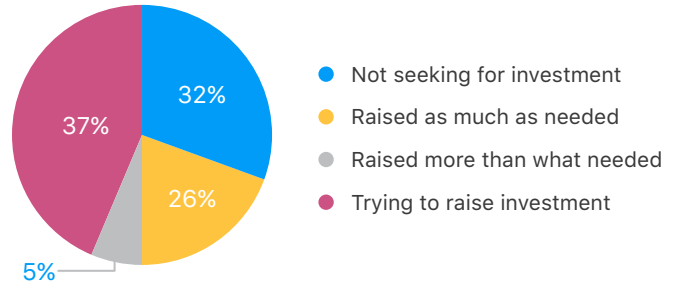
Main Source of Investment



In overall, the top 3 main sources of investment for fintech start-ups in Indonesia are: self-funding, angel investor, and venture capital.

It is maybe worth noting that investment sources/option may differ as fintech start-up move onto different rounds of funding.

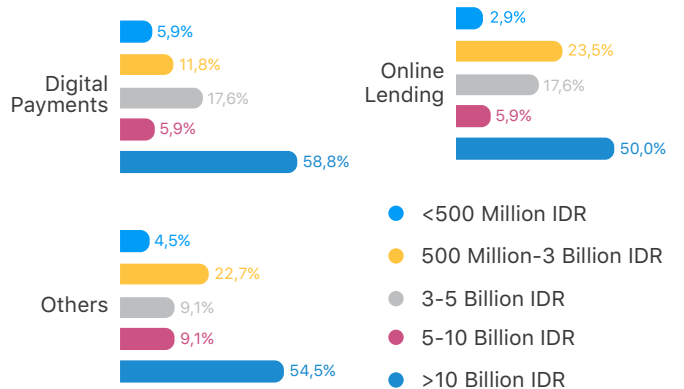
Current Investment Status



Current investment status of fintech respondents in Indonesia are as follows,

- (1) 37% of fintech respondents are currently trying to raise investment
- (2) 32% are not seeking for investment currently
- (3) 26% raised as much as needed
- (4) While only 5% raise more than needed

Total Amount of Investment Raised



There is a **consistent pattern** across all categories on the level of investment received by fintech respondents. As shown in the graph, the **majority of investment made are more than Rp10 Billion category.**

To put this into a better perspective it may be worth noting the usual value range of start-up funding series.

In Pre-seed, funding ranges from Rp500 Mio to Rp2 Bio. In Series A, it ranges from Rp10 Bio to Rp33 Bio. Series B ranges from Rp22 Bio to Rp80 Bio.

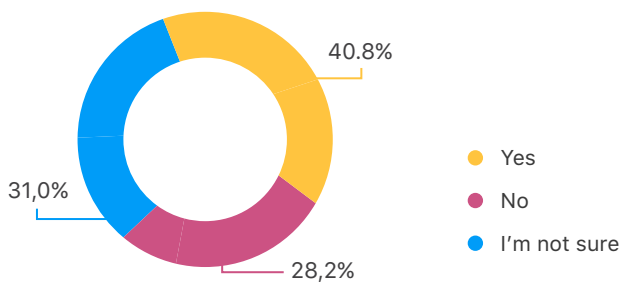
Referring to that, it can be said that majority of FinTech Respondents can be classified into Series A above category.

03 Regulatory Outlook

Regulatory Outlook is a key determinant that enables industry robustness, growth and sustainability. FinTech respondents have been fairly satisfied with the investment support provided by the government. However, with respect to the speed of the regulatory process for licensing or approvals across the three categories respondents mentioned that the duration has been longer than expected i.e. currently it takes 3-6 months to get license and 1-3 months for approvals. Particularly, for digital payments players it may even take more than 3 months to get an approval.

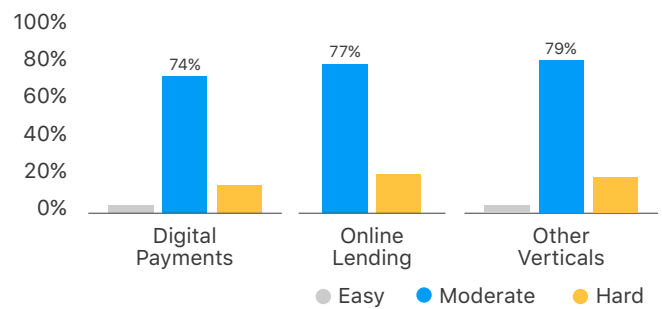
Across all categories, E-KYC was a common key policy that the respondents mentioned that they want to see improved. Within online lending and other vertical categories, Open Banking API regulations is another policy that they look forward to be developed, whereas, for digital payment players it is QR code and e-money regulation.

Do you think government has provided sufficient investment support for FinTech players?



40.85% of FinTech players think that the government has provided sufficient investment support for FinTech players. While 28.17% disagrees and 30.99% admit being unsure.

Your experience in complying with government regulations:



Across all verticals of FinTech, an almost identical response pattern is observed. Majority of FinTech (77%, 74% and 79% in Online lending, Digital Payment and Others respectively) admit to having moderate (neither hard nor easy) experience in complying with government regulations.

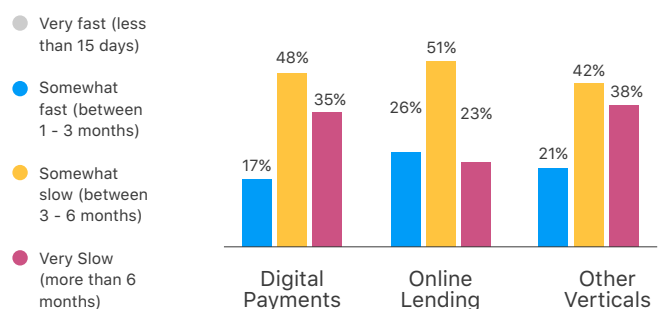
How do you think the government can support and boost investment in Indonesia's FinTech industry?

Top 3 answers

- Regulatory easing on FinTech investment
- Provide alternative support scheme
- Incentives for FinTech investors

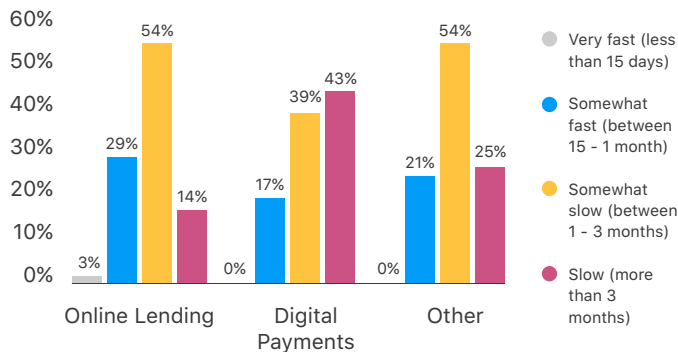
Alternative support scheme are government led initiatives on focusing on fintech's (or startup's) access to private investments. A good example of this would be NEXICORN, a program championed by Kementerian Komunikasi dan Informatika (Kemenkominfo).

How would you describe the speed of the regulatory process for licensing?



Different FinTech verticals are governed under different regulating bodies, however majority of Fintech across categories (51%, 48% and 42% in Online lending, Digital Payment and Others respectively), admit experiencing somewhat slow (3-6 months) regulatory process for licensing.

How would you describe the speed of the regulatory process for approvals?



Outside of licensing, FinTech needs to submit approval documents for all partnership and product/feature development.

Experience across fintech verticals shows slight differences. In digital payment and others category, majority describe the speed of regulatory process for approval to be somewhat slow. However in P2P lending, experience are more varied – despite 54% of P2P lending companies describing a somewhat slow process, 29% describe a somewhat fast approval process.

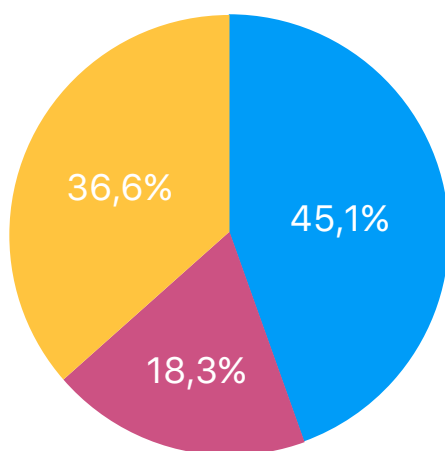
What are the main challenges in complying with the government regulations?

Top 3 answers

- Lack of clarity of requirement and procedure of implementation
- Slow speed of regulatory process
- Requirements hurt core business

Top answer indicate **a need for further socialization of regulations' implementation requirement and procedure**. Where as a more efficient regulatory process follows as second priority concern. These top 3 answers are almost entirely consistent within all categories of FinTech, **but for Digital Payment, difficulty in having a discussion with the regulator** is also among the top challenges.

Do you think the government has provided adequate support to the FinTech industry's growth?



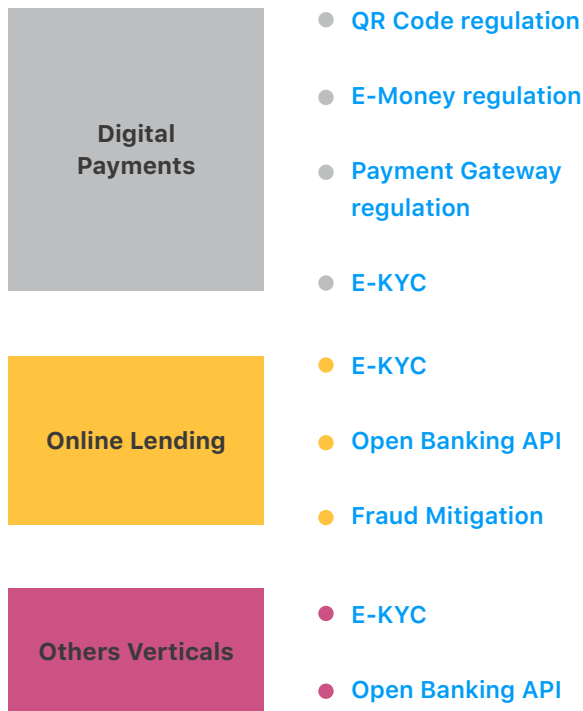
● Yes ● No ● Yes, but can be improved by...

Majority of FinTech respondents think that **the government has provided adequate support for industry growth**.

With 45.1% saying yes and 36.6% saying yes but believes support can be improved. Improvement/support that FinTech respondents expect are in the form of:

- Faster, easier and more transparent regulations and guidelines
- More intensive public dialogues and greater industry participation in decision making process
- Provisions of government's incentives
- Promotion of financial literacy on fintech
- Government resource allocation to help fintech set up offices/working space

What key policy imperatives/regulations that you would want to see improved/developed?



Among all segments, E-KYC is a policy/regulation that fintech respondent feel needs improvement.

Within online lending and others FinTech category, other than E-KYC, Open Banking API regulations is also the top regulatory development that FinTech respondents look forward to.

Other than that, online lending players are also concerned with fraud mitigation regulations – especially in relation to the establishment of shared fraud mitigation infrastructure.

Digital payment players are mostly concerned with regulatory aspects that correlates exclusively to payment industry: including QR code standardization, as well as e-money & payment gateway regulation.

In which areas would you like to see standardized regulation for better implementation of policies?*



Across Online Lending & categories, **e-KYC and tax are consistent answer** that reflects the need for greater clarity & standardization of regulation.

Zooming in further to see sector specific response, **Online Lending are mostly concerned with credit risk assessment and interest cap provisions.**

While within the **digital payment category**, the priority issue is **standardization of interoperability regulations**, including **QR code**.

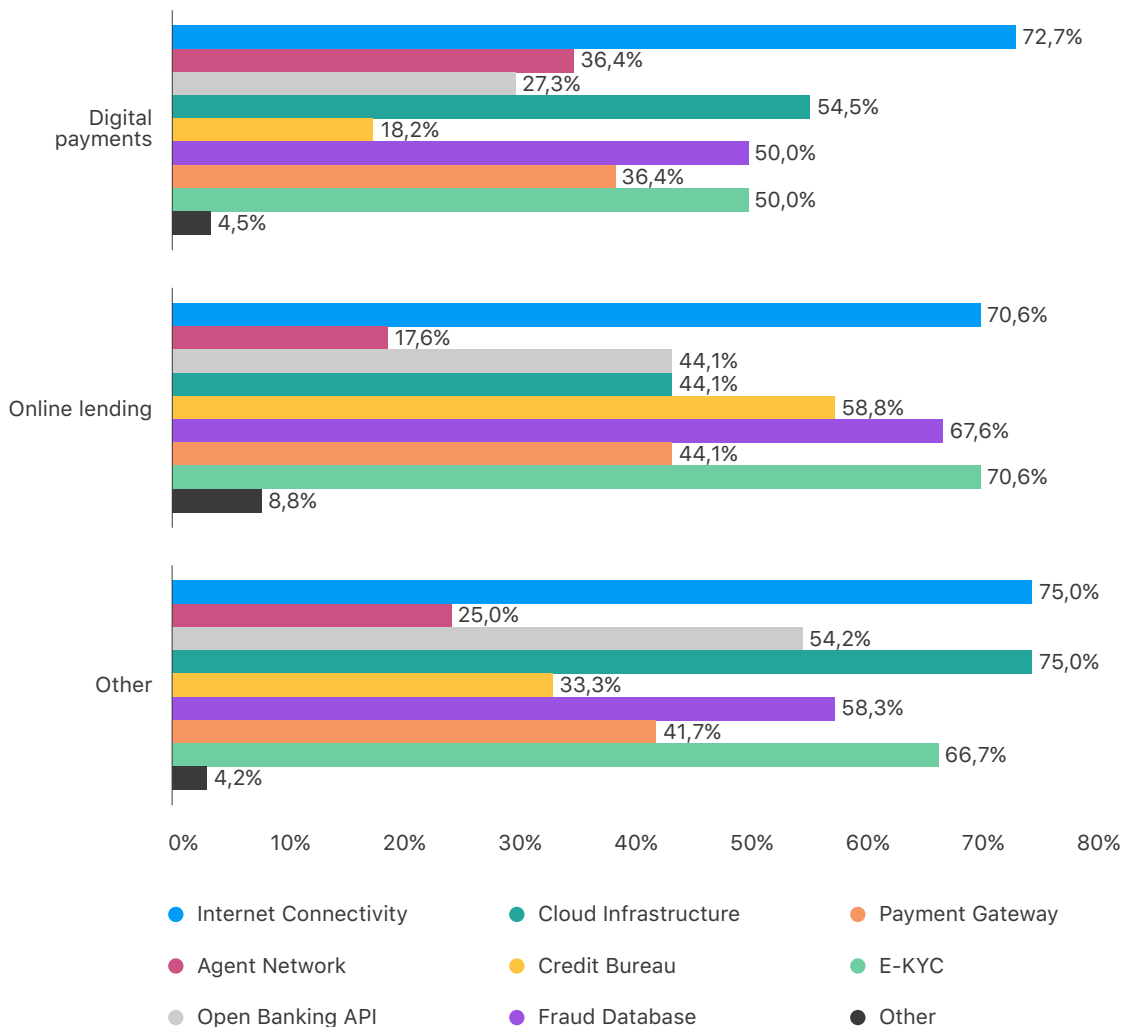
04 Infrastructure of FinTech Industry

Infrastructure is the backbone of any industry and plays a crucial role in FinTech industry in Indonesia as well. For our respondents, internet connectivity, E-KYC, fraud database and cloud infrastructure are the key infrastructure which is crucial to fintech’s core business. The difficulties the FinTech players are facing in accessing or procuring these infrastructure are regulatory hindrances and unreliable basic public infrastructure.

Although majority of fintech companies are following the international standards, there continues to be a low adoption of good corporate governance standards. Moreover, consumer protection principles are recognized by FinTech players of high importance, particularly data privacy and data security and transparency. Also, various measures have been adopted for customer complaint resolution and grievance redressal mechanism.

FinTech players, while protecting customers, are themselves also exposed to frauds. The key ones being not credible data assessment, account theft, and unusual transaction.

What infrastructure is crucial to your core business?

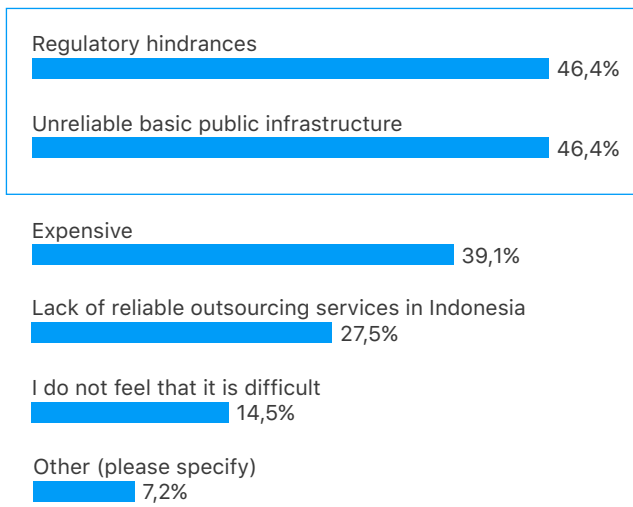


Infrastructure needs differ only slightly among different FinTech categories.

1. In the Online Lending sub-category: **internet connectivity (70.6%), e-KYC (70.6%) and fraud database (67.6%) are the listed as most crucial.**
2. In digital payments: **Internet connectivity (72.7%), cloud infrastructure (54.5%), e-KYC (50%) and fraud database (50%) are considered as vital for payment players.**
3. In the others FinTech category: **Internet connectivity (75%), cloud infrastructure (75%), e-KYC (66.7%)**

In overall, we are able to conclude that, internet connectivity, e-KYC, fraud database and cloud infrastructure are the main infrastructure that needs to be put in place to support FinTech industry.

What are the difficulties in accessing/procuring for these infrastructure?



Regulatory Hindrances and Unreliable Basic Public Infrastructure are the top two difficulties in accessing/procuring infrastructure.

- This data strengthen the importance of infrastructure development especially internet connectivity by government
- Regulatory hindrances impede various technology implementation that can otherwise help FinTech companies to operate seamlessly.



Indonesian FinTech are well-equipped with the following infrastructure



24,6%
Mentorship



34,8%
Founder
Communities



59,4%
Co-Working
Spaces



43,5%
Incubators/
Accelerators

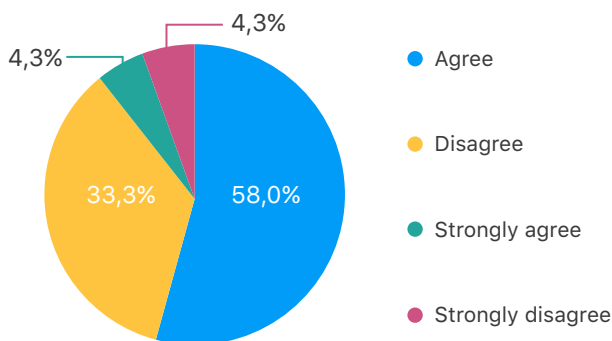


17,4%
None of the
Above

Co-working spaces and incubators/ accelerators are the top two community infrastructure as believed by 58.42% and 43.48% of fintech respondents respectively.

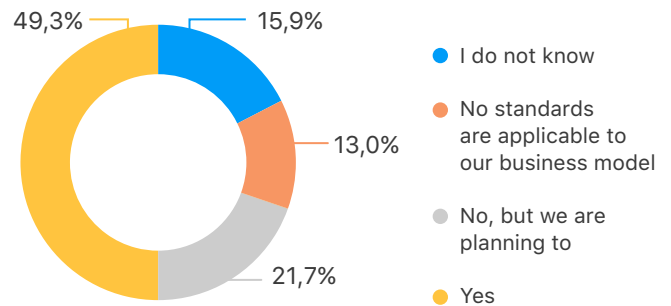
Whereas founder communities and mentorship is following with 34.78% and 24.64%.

There is a widespread understanding and acceptance of international standards within Indonesian FinTech



58.0% of the FinTech respondents agree that international standards are accepted and understood by Indonesian fintech counterparts, whereas, 33.33% disagree.

Does your company follow current international standards and regulations?



Almost half (49.3%) of FinTech respondents follow current international standards and regulations. Moreover, 21.74% answered no, but they are planning to.

This indicates awareness among fintech respondents in Indonesia to follow international standards and regulations.

What international standards does your company follow?

Top 3 answers

- International Organization for Standardization (ISO)
- Payment Card Industry Data Security Standard (PCIDSS)
- Financial Planning Standard Board (FPSB)

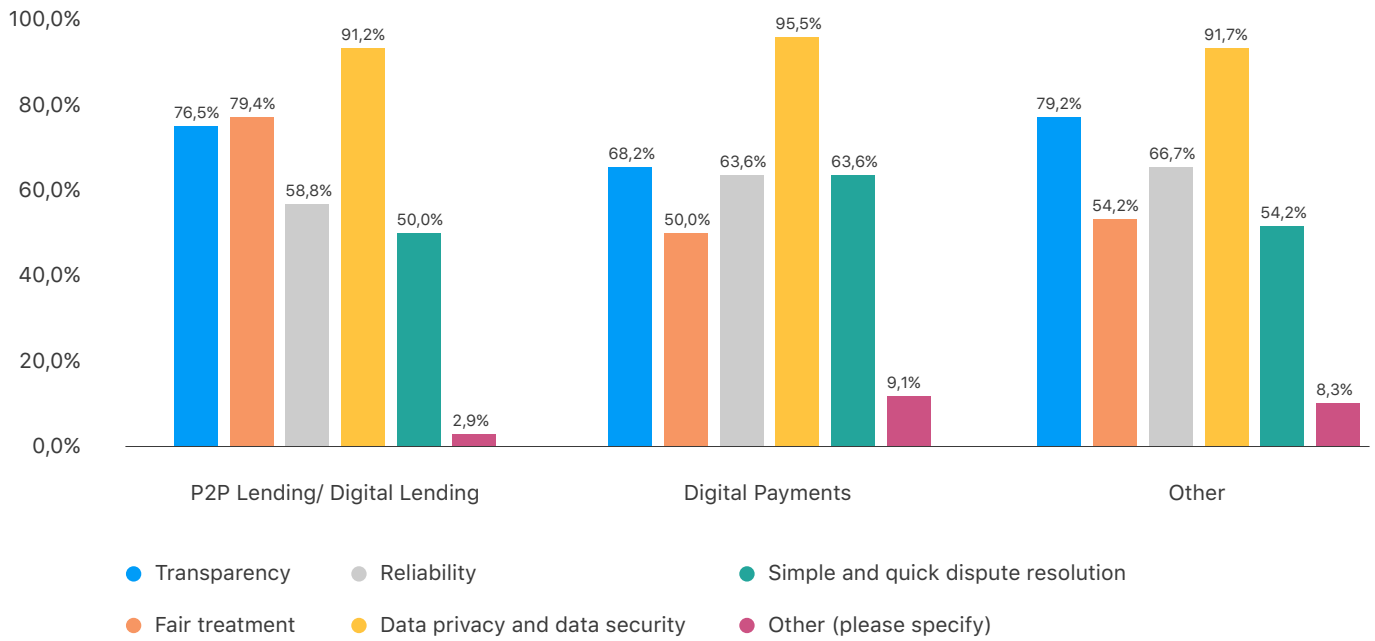
Are there any good corporate governance standards that your company follows?

Top 3 answers

IFC Sustainable Guidelines	75.25%
UN Global Compact	8.70%
Other	17.39%
None	75.36%

75.36% of respondents do not follow any good corporate governance standards.

Which of the Consumer Protection Principles are most important?



Despite, consumer protection principles slightly varying across the board, **Data privacy, transparency, security** are consistently considered important across all verticals. For Digital payment and others category of FinTech, reliability follows as third most important principle. However, in online lending, fair treatment is listed as among the top three.



What channels do you use for complaint resolution? Is there a documented policy on complaint resolution and grievance redressal?

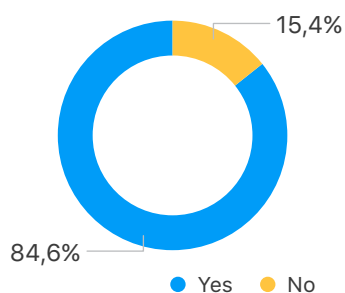
Top three answers on complaint resolution channels

Call Center/Hotline	49.3%
Email	43.5%
Social media	29.0%

Call Center is the most used channel for customer complain handling (49.3%). Followed by email with 43.5%.

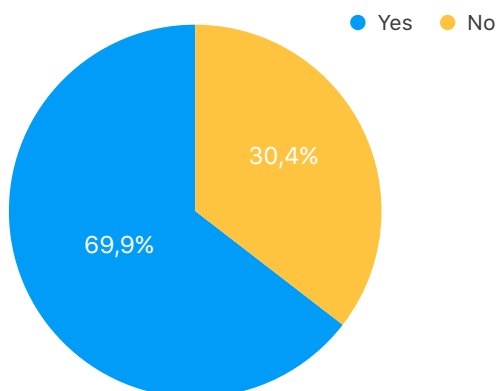
Although social media is the third most used channel, the percentage is quite wide compared to email.

Documentation on Complain Resolution and Grievance Redressal



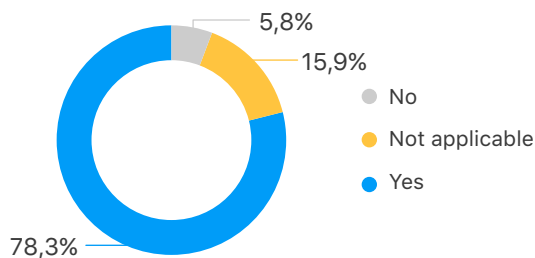
Of all FinTech company that handle complains, 84.6% of them have documented policy on the complain and resolution.

Do you have a position of grievance redressal officer/department in your organization?



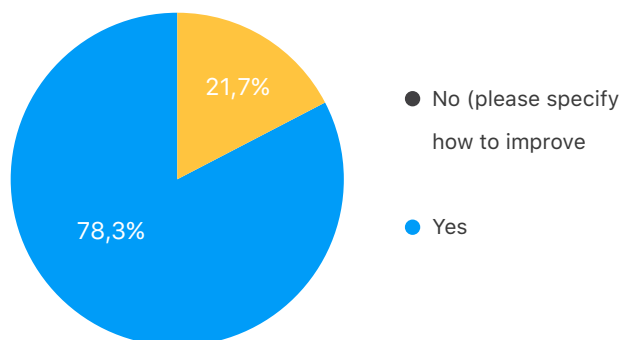
Majority of FinTech respondents in Indonesia have grievance redressal officer/department in their organization as 70% of them answer yes.

Have you implemented industry code of conduct in your organization?



Majority of fintech company in Indonesia have implemented industry code of conduct, where 78.3% answers yes while 5.8% said no and it is not applicable to 15.9% of the companies.


Are consumer protection regulations optimal at the moment, or can / should be improved and clarified?



Majority of FinTech respondents in Indonesia agrees that consumer protection regulations are optimal at the moment, 78.3%.

Currently issues concerning consumer protection are governed in at least three way. Firstly, through the original mandate of OJK (as stipulated in Law No. 21 2011 on OJK) where OJK is given the responsibility to carry out consumer protection provisions that includes: loss prevention actions, complaints submission and handling, lawsuit assistance, and related policy making.

Secondly, in all FinTech related regulations (Online Lending, IKD, and Equity Crowdfunding), OJK allocate specific provisions on consumer protection relevant to different business model.



For example, through the sets of Online Lending regulation, OJK is setting specific provisions on debt collection.

Thirdly, formally appointed partner association is also mandated by OJK to established sets of market conduct rule (code of ethics, code of conduct, etc.) that governs consumer protection SOP. Including details such as agreed standards for complaints submission and handling.

For 'No' answers, **top 3 improvement areas** are as follows,

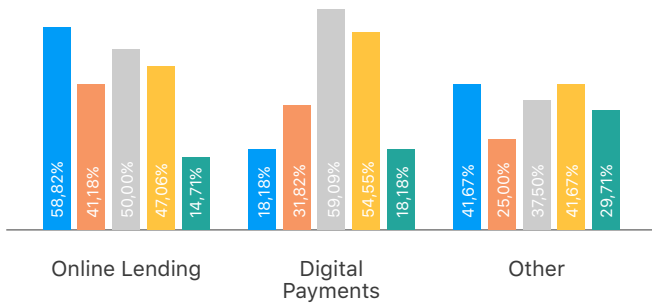
- Financial Literacy
- Data Protection
- Regulation & Standardization

What support do you require from AFTECH to enhance consumer protection protocols?

Top four Answers on Support Required from AFTECH

- Financial Literacy Initiatives**
More financial literacy initiatives help companies by unlocking market potential.
- Working Group Sessions**
Working group is the platform to consolidate collective regulatory and non-regulatory pain points of different sub-sector or policy agenda, and a platform to strategize on advocacy efforts.
- Regulatory Engagement**
Companies need an increased engagement and interaction between fintech companies and regulatory bodies, allow companies to also participate in regulatory process or decision making.
- Market Conduct**
AFTECH to be a patron/guide for FinTech companies in Indonesia.

What type of fraud is your company most concerned with?



- Uncredible data assessment
- Duplicate transaction
- Account theft
- Unusual transaction
- Other (please specify)

- Online lending's most concern fraud is **uncredible data assessment, 58.8%**
- For digital payment, the most concern fraud is **account theft, 59.1%**
- For other, the most concerned fraud are **uncredible data assessment and unusual transaction, both 41.57%**

What technology do you use to mitigate fraud risk?

Technology has opened the door to new and **more pervasive forms** of fraud to **prevent and mitigate potential fraud** that may cause great loss to FinTech companies.

Top 3 Answers on Technology Used

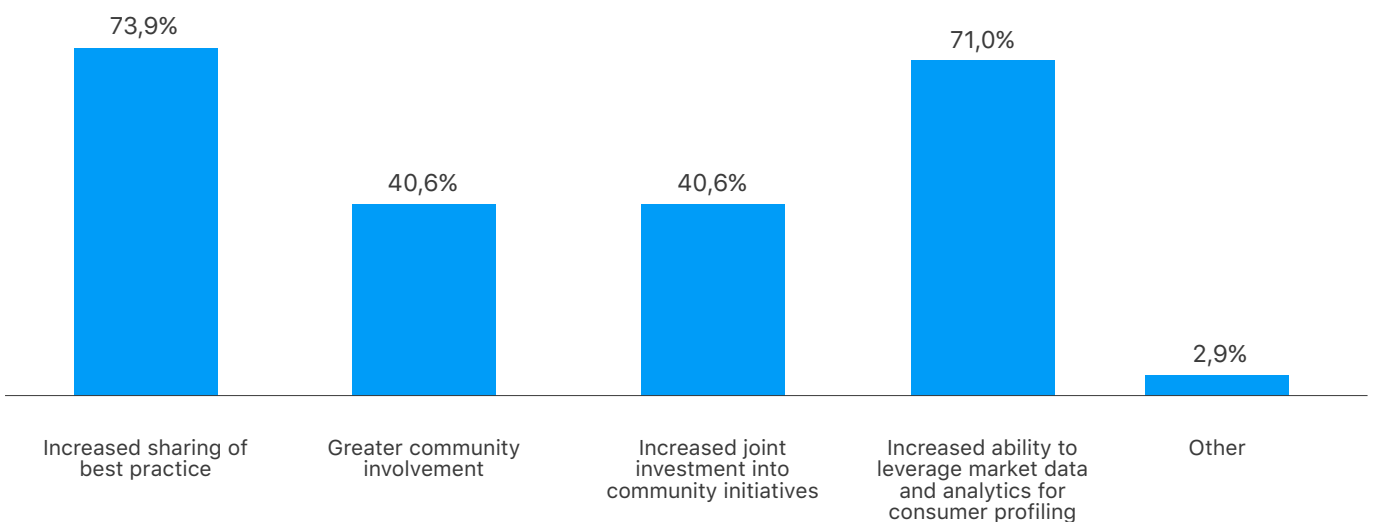
- Fraud Prevention and Detection System
- E-KYC
- Data Analytics

Which external stakeholders do you collaborate most?

Top 3 External Stakeholders

- Local Financial Institution **59.42%**
- Local Tech Start-up **49.28%**
- Local Fintech Companies **46.38%**

What do you feel would be the biggest benefit of increased future collaborations within the FinTech community?



Majority of Fintech respondents in Indonesia agree that the biggest benefit of increased future collaborations within the FinTech community would be **(1) Increased sharing of best practices, 73.9%; and (2) Increased ability to leverage market data and analytics for consumer profiling, 71.0%.**

05 Talent

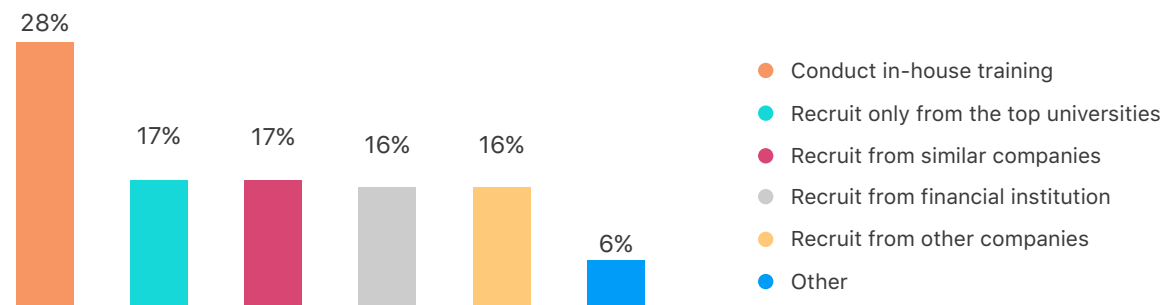
Talent is one of the key area of concern for FinTech companies in Indonesia. Two major skills gaps being faced are: Data and Analytics, and Programming. To bridge these gaps, FinTech respondents mentioned that they most commonly conduct in-house training. Despite the huge talent gap that persists, approximately two-third of fintech respondents do not hire foreign talents. This is due to problems related to cost, immigration policy and language barrier.

Key Skills Gap in the Current Talent Landscape



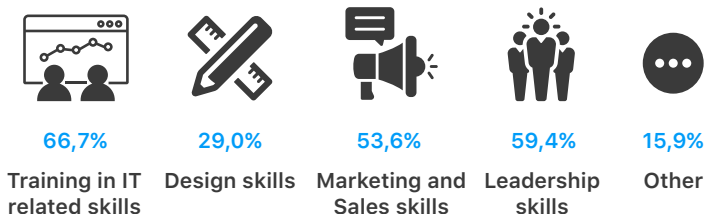
Two highest key skills gap across FinTech companies in Indonesia are **Data & Analytics and Programming.**

How do the Companies deal with the Talent Gap?



Top way to deal with talent gap is by **conducting in-house training (28%)**. But roughly equal in percentage are other options such as recruiting from top university, recruiting from similar companies or recruiting form other companies

Types of in-house training provided to employees



Align with top key skills gap in the industry, fintech respondents claim to provide prioritize **training in IT-related skills first**, followed by leadership skills and marketing and sales skills.

Do you recruit more men than women?



23,2%

Yes, I generally recruit more men



27,5%

Yes, but only for IT positions

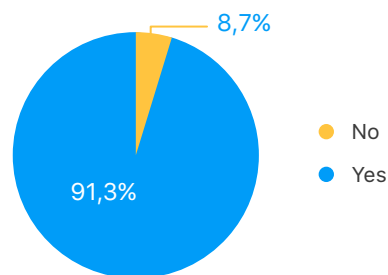


49,3%

No, I have a balanced ratio

Almost half of the respondents claim to hire a balanced ratio of men and woman. While, 27% claim that while they do hire more men than women, this is only the case when it is IT position recruitment.

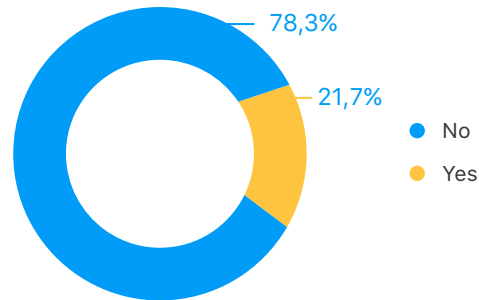
Is it easier to find IT male talents?



Despite of the previous data that shows 49% FinTech respondents have a balanced ration for men and women, 91% of them agrees that it is easier to find IT male talent compared to female talent.

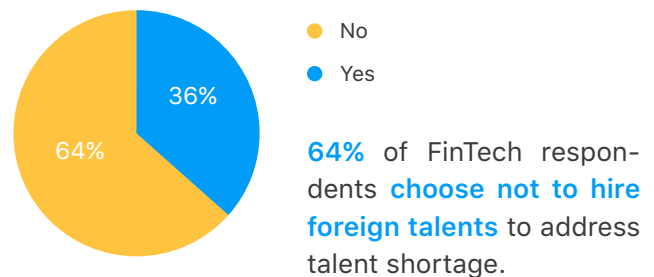


Has the regulatory environment been accommodating in addressing the talent gap?



78.3% of FinTech respondents think that the regulatory environment **does not** accommodate in helping companies address their current talent gap. It is likely that the current government programs/initiatives related to talent/human resource might provide a longer term solution to the talent shortage issue.

Do you hire foreign talents to address talent gap?



Main Challenges in Recruiting Foreign Talents

- (1) **Cost of Acquiring Foreign Talent**
- (2) **Immigration Policy & Administration**
- (3) **Language and Cultural Barrier**

Recruiting foreign talent as a mean to address talent gap faces three prominent barriers:

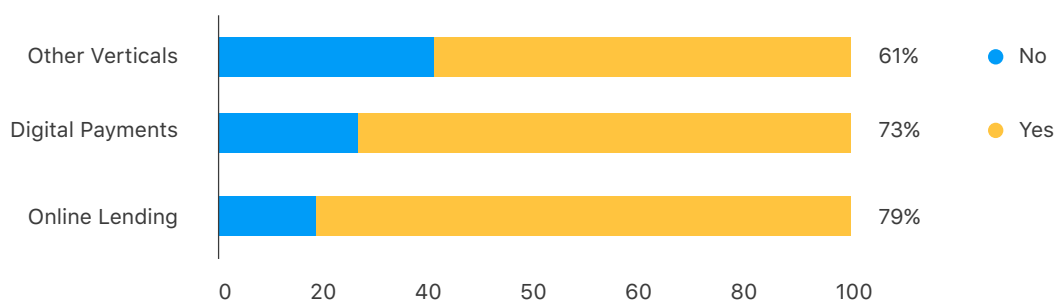
- Acquisition cost, which includes payroll expectation, specific taxation schemes, and travel costs for visa runs, etc.;
- Immigration & administration (KITAS) that is cumbersome, as well as;
- Language and cultural barriers.

06 Financial Inclusion Initiatives

Financial inclusion is one of the critical issues faced by every developing country, including Indonesia. However, fintech players have the ability to bridge the financial inclusion gap through their unique selling proposition of accessibility and they are doing so. Based on the aggregate responses, currently 71% of the FinTech players are directly targeting the unbanked and underbanked segment. However, these respondents also face problems with respect to E-KYC and mentioned it as the top regulatory issue to achieve higher financial inclusion.

Moreover, in order to continue working on financial inclusion initiatives, fintech players mentioned that they want to liaise closely with Bank Indonesia (BI), Ministry of Home Affairs (Kementerian Dalam Negeri), Ministry of Small & Medium Enterprises (*Kementerian Koperasi dan Usaha Kecil dan Menengah*), Ministry of Education (*Kementerian Pendidikan dan Kebudayaan*) and Secretariat of Financial Inclusion Board (*Sekretariat Dewan Nasional Keuangan Inklusif - SDNKI*).

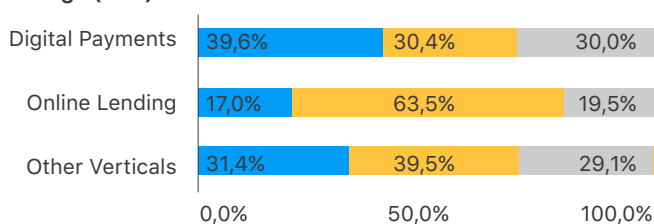
Does your service/product directly targets unbanked segment or underbanked segment?



Overall, 71% of fintech respondents in Indonesia **directly targets unbanked and underbanked segment**. Looking into the percentage breakdown across verticals, online lending can be seen as the FinTech category that most targets the aforementioned segment.

Break-up of customer segment targeting Unbanked segment or Underbanked segment?

Average (in %)

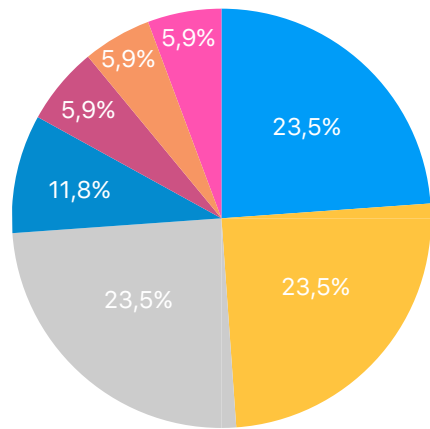


● Unbanked ● Underbanked ● Banked

Consistent across all verticals, FinTech players claim that more than 70% of the product/service that they offer directly targets unbanked and underserved (with percentage point of 80.5%, 70%, 70.9% for online lending, digital payment and FinTech from others category respectively)



What changes do you need to undertake to meet the needs of financially excluded people



- Partnership with stakeholders
- Adjustment in product market fit
- Procurement of specific technology
- Regulatory changes
- Process-related changes
- Change in human resource
- Better risk management

- (1) Partnerships with various stakeholders/parties
- (2) Adjustment in product market fit
- (3) Procurement of specific technology

are **top three adjustments/change/and customization** that enables FinTech to cater to the financially excluded segment.

Do you conduct/develop initiatives with an objective to address financial inclusion challenge?



73,9%

Collaboration with other financial institution (Banks)



43,5%

Strategic partnership with government



18,8%

CSR focused on financial inclusion

- Majority of fintech players' initiatives meant to address financial inclusion are conducted in the form of **collaboration with other financial institutions and strategic partnerships with government institutions.**
- Collaboration often takes shape in form of event/programs (e.g. OJK FinTech Days event), financial inclusion seminar, etc.

Are there any government agencies that you would like to work with for financial inclusion initiatives?

These agencies are **government bodies** that within their jurisdiction oversee regulations that are related to **facilitating greater role of fintech to accelerate financial inclusion**.



Bank Indonesia (BI)

BI is directly involved in agent network of LKD products regulation.



Ministry of Home Affairs (Kementerian Dalam Negeri)

Access to DUKCAPIL data for easier consumer onboarding.



Ministry of Small Medium Enterprises (Kementerian Koperasi dan UMKM)

Help to promote fintech adoption among MSMEs.



Ministry of Education and Culture (Kementerian Pendidikan dan Kebudayaan)

Help to increase the awareness and education in financial literacy.



Sekretariat Dewan Nasional Keuangan Inklusif (SDNKI)

Government body coordinating financial inclusion effort.

Do you conduct/develop initiatives with an objective to address financial/Digital literacy challenge?

- Top three initiatives to address financial/digital literacy are 1. (56.5%) CSR that is aimed towards financial inclusion;
- 2. (31.9%) Conduct strategic partnership with government;
- 3. (27.5%) Collaborate with other financial institutions such as Banks to enable market reach
- Initiatives includes programs such as general financial literacy campaign, campus roadshow, working directly

What regulatory changes is required to encourage Fintech industry to address financial inclusion?

Digital Payments

- E-KYC
- Payment Gateway regulation
- E-Money regulation

Online Lending

- E-KYC
- Fraud Mitigation
- Credit Assessment

Others

- E-KYC
- Open Banking API
- Competition/level playing fields

E-KYC appear to be the top issue that fintech across category believes will help them address & drive greater financial inclusion.

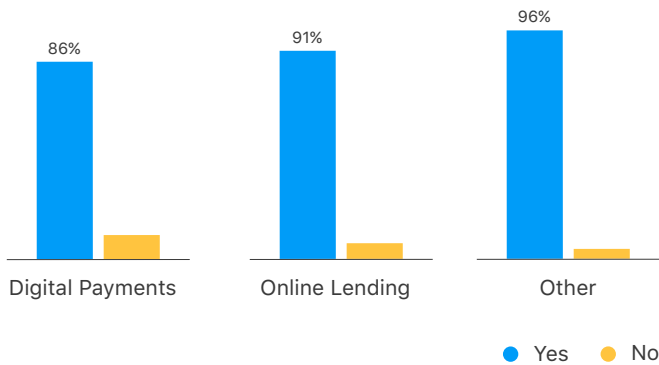
As for online lending further penetrating into underserved/unbanked market would require them to rely on improved fraud mitigation & credit assessment infrastructure/solutions.

Digital payment players describe payment gateway and e-money regulation as top priority for financial inclusion. It is perhaps worth noting that within the e-money regulation (PBI 20/6/PBI/2018) there is a specific provision on digital financial services agent that currently prohibits payment fintech to partner with individual agent as access point for their products.

Within FinTech from others category, regulatory provisions on Open Banking and ensuring level playing fields is considered as topmost priorities.

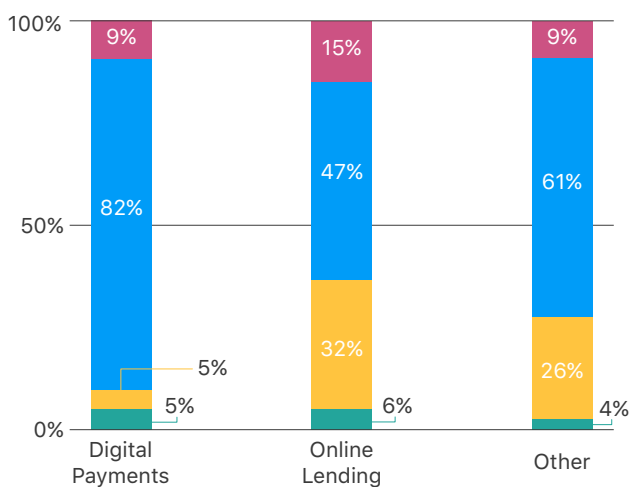
- With Open Banking greater collaboration between financial institution and fintech will lead to a greater opportunity to innovate within the financial sector.
- Level playing field is also vital as unhealthy competition, either because of extreme market monopoly or regulatory barriers, may impede on innovation within the fintech or financial sector generally.

Do you see rural areas in Indonesia as a prospective market?



At least 85% of FinTech players respondents claim to see **rural areas** in Indonesia as a **prospect market**. This is consistent across verticals.

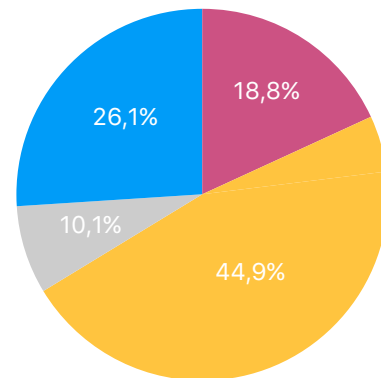
Do you find it difficult to penetrate to other regions in Indonesia?



- I find it difficult to expand to other Indonesian regions outside DKI Jakarta
- I find it difficult to expand to other Indonesian regions outside Java
- I only find it difficult to expand to the rural areas of Indonesia
- I'm not expanding to other Indonesian regions

Consistent across fintech verticals, **rural areas are the most difficult region** to reach or penetrate, followed by regions outside Java. However these two show a wide margin, which implicate it is relatively much tougher to enter rural areas compared to regions outside Java.

Do you agree that more men use your product than women?



- No
- Yes
- Don't know
- Not Applicable

44.9% FinTech respondents claim to have a **comparable percentage of men and women users**, while 26.1% answer yes. This shows that both men and women have been fairly accessing and using FinTech products. Technology is not restricting and excluding women from adopting financial services, except in some cases.

What is your biggest challenge in penetrating to other regions within Indonesia?

Top three answers

- Basic Infrastructure Problem**
Basic infrastructure in Indonesia such as **internet connectivity, accessibility of geographic region, etc.** make it challenging for fintech companies to penetrate to wider market across Indonesia.
- Low Financial Literacy or Target Market**
Financial literacy is a dominant factor as well, as literacy is one way to determine whether a market has a potential for fintech adoption or not.
The lower the financial literacy, the less attractive the market is, despite of its size and mobile phone penetration.
- Limited Capital or Resources**
To increase the market penetration, FinTech companies need to increase their brand awareness and promote their products/services which may result in higher **FinTech adoption. These initiative is relatively capital intensive** and most companies in Indonesia do not have the scale yet.



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