February 2018

2018 Indonesia Banking Survey Technology shift in Indonesia is underway





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Technology, technology, technology. This is the recurring theme coming out of our 8th Indonesia Banking Survey. Respondents said technology is the #1 driver of business transformation and the top risk to the industry. Transactions through digital channels are surpassing traditional branches in Indonesia for the first time. The war for talent is strongest for technology specialists.

Indonesia Banks are trying to keep pace with this change: only 8% of respondents said their bank has the same strategy as they did 18 months ago. Almost half have significantly changed their strategy in that time period. 9 out of 10 are undergoing some form of a cost reduction program, and the most common approach to reducing operational risk is automation.

The outlook is improved for 2018 over last year, but cautiously so. Concerns about credit risk and net interest margins are subsiding, and there are improved expectations for profitability.

There will be winners and losers in this rapidly changing environment. We see areas where Indonesia banks need to take more action – clarity of strategy, a greater focus on customer centricity, driving strategies through to execution, and investing further in systems and risk management to move from a moderate to high level of preparedness.

We thank all of our respondents to our 2018 survey and trust it will be a helpful catalyst to stimulating dialogue for the betterment of Indonesia banks and the industry as a whole.

Areas of Insight

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Outlook	Transformation	Risk
Conditions and Profitability	Drivers of Transformation	State of Play
Margins	Disruption	Preparedness and Response
Credit Risk and Loan Growth	Strategy Considerations	PSAK 71
Opportunities	Customer Experience	Opportunities

Outlook

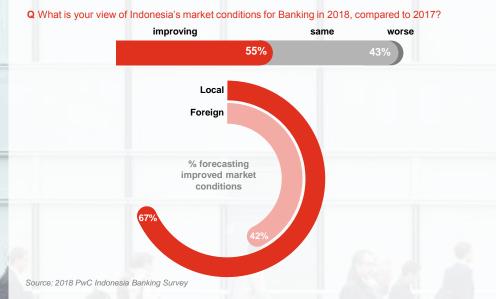




Cautious optimism	Expected NPL decline, but concerns on credit risk are still high	Net Interest Margin optimism may be overestimated
Loan growth driven by consumer lending	More merger & acquisition activity expected	More effective steps to improve competitiveness are needed

Cautious optimism

Mixed views on extent of improvement in 2018, with those from local banks again being the most positive



The outlook is improved, with most bankers feeling conditions will be the same or better than in 2017. This is similar to a year ago, however that was coming off a difficult 2016. Given that profitability already improved across the sector in 2017, this new outlook could be viewed as an overall improvement year-on-year. Like last year, respondents from foreign banks do not share the same level of optimism as from local banks, who are 50% more likely to expect better conditions. Having said that, we see almost no views that conditions will worsen.

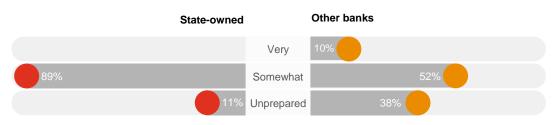
Measures to improve competitiveness falling short of expectations

In 2015, the government launched a series of new initiatives to stimulate the economy and improve the ease of doing business. Last year, respondents felt the actions were positive but views were mixed on the likely direct impact to their business. Bankers now feel the actual impact did not meet expectations. Only 3% felt a significant impact (compared to 18% expected), and 60% in fact reported no noticeable impact at all. Where there was benefit, it appears to be felt more strongly among state-owned banks: 67% feeling a moderate or significant impact compared to only 29% of other banks.

This is an important component of Indonesia building its competitiveness for an open ASEAN market. On the positive side, two-thirds of respondents feel banks are "somewhat prepared" for an open market. Those from foreign banks are perhaps most well positioned to reflect on this question, given they have operations across the region they were less optimistic with 42% feeling that Indonesia banks were unprepared.

Few bankers believe Indonesia banks are very prepared for an open ASEAN market

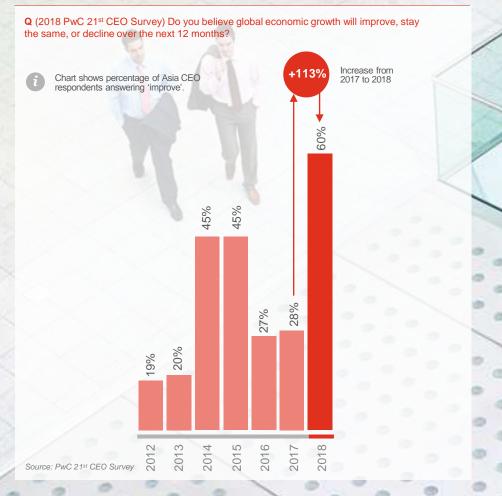




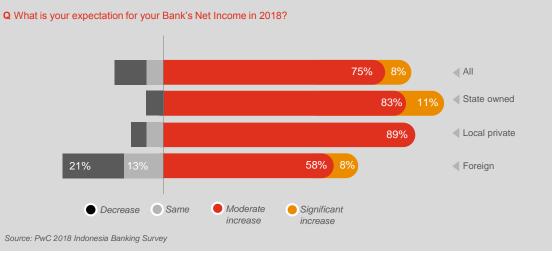
Source: 2018 PwC Indonesia Banking Survey

Moderate profit improvement expected in 2018

CEOs across Asia are optimistic about global economic growth



Following the trend in 2017, respondents from local banks are much more optimistic than foreign bank counterparts.

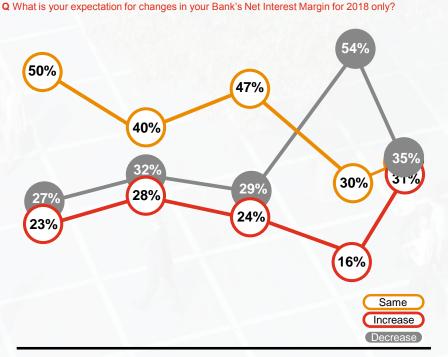


83% of bankers surveyed expected at least a moderate increase in net income in 2018. With loan growth falling below expectations in 2017, the improvement in profitability for many banks last year was largely driven by a reduction in provisions for loan losses. In our conversations with CEOs, we note an improved sentiment on credit risk and a confidence on continued profitability in 2018, albeit not a significant increase for most players.

Respondents from foreign banks are less optimistic with more than one-third not expecting an improvement in profitability for 2018.

Most banks expect a stable or increasing NIM in 2018

Only one-third of Indonesia bankers expect a Net Interest Margin ("NIM") decrease in 2018



2011 2012 2013 2014 2015 2016 2017 2018

Source: PwC Indonesia Banking Survey (2011, 2013, 2015, 2017, 2018) Base: All respondents

Will NIM hold steady in the short and mid-term?

Last year there was a clear shift towards an expectation of declining NIM, and in fact it did decline on average about 30 – 50 basis points. For 2018, concerns on NIM decline have subsided with only one-third of bankers expecting a relatively small decline. Even more, one-third expect a NIM *increase* in the coming year.

When viewed over a longer horizon of the next 4 years, 63% expect some decline, but again, mostly for a mild decline of 1-50 basis points. A further 20% expect an *increase* in NIM over the next 4 years. Foreign banks and larger BUKU 3&4 banks are less optimistic but most still view the 4-year decline as being less than 50 bps.

37% of respondents do not expect NIM to decrease through 2021, and most of those are smaller banks that are more exposed to a NIM decline due to smaller economies of scale and higher cost-income ratios. We continue to highlight that this is a risk to the overall sector, particularly if there is a convergence of negative cycles at the same time – NIM decline, slower loan growth, increased credit risk and higher operating costs.

Larger banks were more likely to expect a decline in NIM in the mid-term

Q What is your expectation for changes in your Bank's Net Interest Margin for the Cumulative NIM change over next 4 years 2018-2021?



Source: 2018 PwC Indonesia Banking Survey

We see a downward direction for NIM over the mid and long term

PwC View

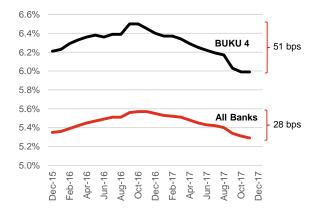
Over the mid-term we expect a further decline in NIM across the sector due to a range of factors:

- Increased competition
- Government focus on lowering the cost of banking to consumers, and increasing economic growth
- Stable or declining inflation
- Improved country risk
- Inelastic deposit rates
- Growth in consumer loans, particularly mortgage loans
- Increased focus by banks on cost management and cost-income ratios

NIM trends on their own do not give the full picture of bank profitability. Banks with higher risk in their asset portfolio – and who have priced in that risk - will necessarily have higher NIM. Nevertheless, we believe that while there will be smaller ups and downs over the next 5 years, the 'bouncing ball' is in a downward direction..

NIM 12 month rolling average

Net interest margin - rolling 12 month average (all banks)



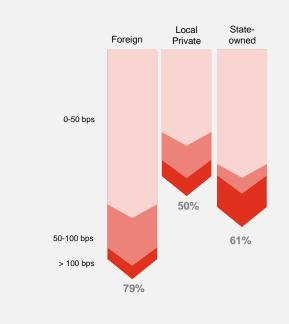
Source: OJK statistics, PwC Analysis

Given the growth environment, our advice to most banks in Indonesia is to focus on cost and a lean environment – however, not solely for cost sake, but for using those savings to invest in other areas. "Cut 10 to spend 10" and a *Fit for Growth* strategy will position banks to take advantage of the market potential while not sacrificing on profitability

Mild mid-term NIM decline expected

Q What is your expectation for changes in your Bank's Net Interest Margin for the cumulative NIM change over the next 4 years 2018 to 2021?

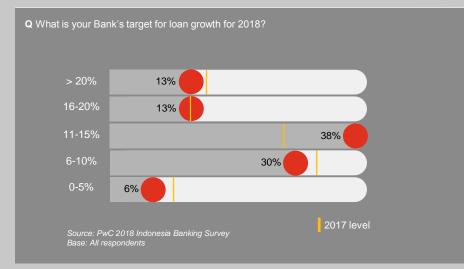




Source: 2018 PwC Indonesia Banking Survey

Overall loan growth improved, but sluggish

Small increase in overall estimated loan growth in 2018



Based on responses, we estimate an increase in loan growth of between 2 to 3 percentage points. While there are clearly more robust plans for growth in the mid-range of 10 to 15% (38% in 2018 vs 27% in 2017), there were also fewer bankers at the top end of the range (loan growth greater than 20%).

Additionally, credit risk is still very high on the list of challenges to growth, hardly moving from its top position from last year. We also see some increased concern about weak demand. Overall 30% of bankers noted this as a Top-3 concern last year, and this is now up to 47%. This is especially higher amongst the larger BUKU 3 and BUKU 4 banks (60%) that drive a lot of the nominal loan growth. It was only a few years ago that fewer than half of respondents even put credit risk in the top-3 list of challenges. That grew steadily until 2017 when almost all bankers had it in their list of top challenges. This has not changed significantly in 2018.

While concern on credit risk has slightly subsided, concerns on Margin Pressure have increased. In 2017, Margin Pressure was the #1 challenge to growth by 18% of bankers. This is now up to 29%. As margins decline, more pressure is put on profitability and the efficiency of the organisation becomes a bigger factor in the bank's ability to be competitive on pricing or to invest for growth.

In fact, for respondents from larger BUKU 3&4 banks Margin Pressure was equal to Credit Risk as the overall #1 challenge to loan growth (35% each). As noted earlier, the larger banks are 70% more likely to expect a decline in NIM in both 2018 and beyond.

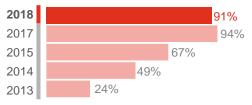
Smaller BUKU 1&2 banks were instead more concerned about Credit Risk as the main challenge (52%).

Source: PwC Indonesia Banking Survey (2013, 2014, 2015, 2017, 2018) Base: All respondents, composite calculation on respondent views on commercial and consumer lending growth

Credit risk still the top challenge to growth

Q What are the top 3 challenges for achieving your loan growth in 2018?

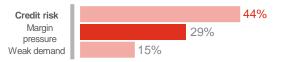
Chart shows % of respondents noting Credit Risk as a top-3 concern



Margin pressure is increasingly a top challenge

Q What are the top 3 challenges for achieving your loan growth in 2018?

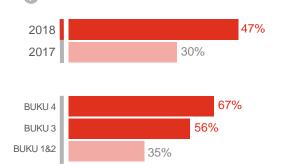
Chart shows the highest rated challenge to growth noted by respondents



Concern about weak demand is also higher

Weak Demand is increasingly noted by bankers as a Top-3 challenge

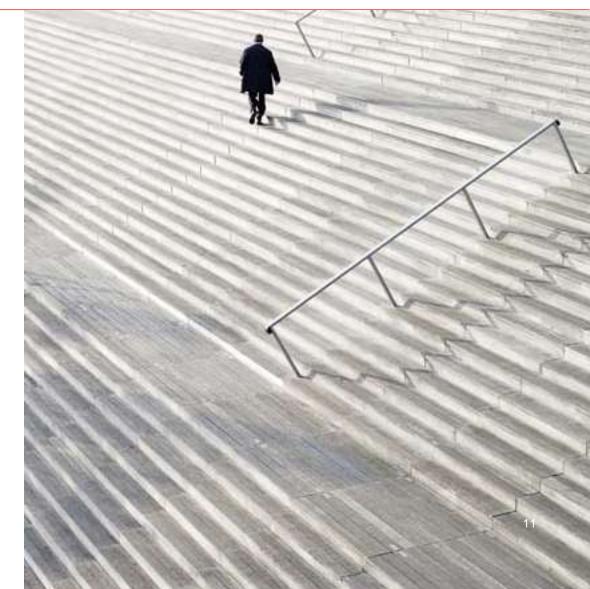
Chart shows % of respondents noting Weak Demand as a top-3 concern



Concerns about weak demand are also higher year-on-year, noted now as a top-3 challenge by 47% of banks. BUKU 3&4 respondents were more likely to note weak demand as the #1 challenge compared to smaller banks (22% vs 8%).

This may be a reflective of overall weaker demand in the economy, but may also reflect tightened loan underwriting standards by banks over the last 18 months.

Source: PwC Indonesia Banking Survey (2017, 2018) Base: All respondents, composite calculation on respondent views on commercial and consumer lending growth



Stronger, consistent expectations of NPL decline

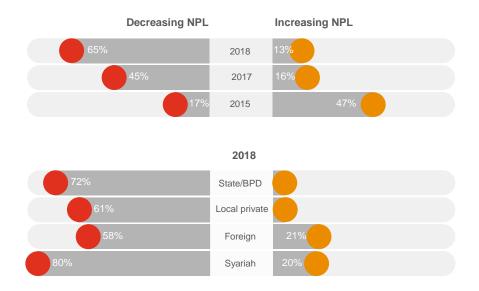
Our 2015 survey revealed significant concern about rising NPLs at that time. This began to reverse in 2017, but with a large number of bankers still unsure about whether NPLs had bottomed out. The outlook for 2018 is a growing confidence, with now two-thirds of respondents forecasting NPLs to decrease. Of those expecting a decrease, one-third expect it to decline by more than 25%.

Local banks continue to be slightly more optimistic than foreign banks, but we did not note the same degree of disparity in views we noted last year. The most significant year-on-year change in views is from foreign banks. Last year only 28% were expecting a decrease in NPLs, and that has now more than doubled to 58%.

Overall the respondents believe that the worst is behind Indonesia banks in terms of NPLs. However, with credit risk still first and foremost on the minds of bankers when it comes to loan growth, the challenge will be whether credit risk management has improved to a level better able to manage risk as loan growth slowly increases. This is a point that we noted in our prior year survey and believe it is equally applicable to 2018 economic stress clearly plays its part in the cost of credit, but is the industry better prepared now than it was 2 years ago to manage risk? We explore this further in later sections of our survey.

Another significant shift downward in expected NPLs for 2018

Q What is your expectation on the overall level of non-performing loans in your Bank in 2018

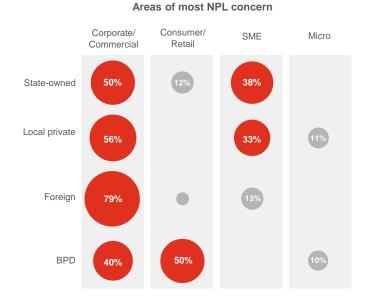


Source: PwC Indonesia Banking Survey (2016, 2017, 2018)

Most NPL concern is concentrated on corporate loans and large SME

Corporate loans by-far still the area of most concern to Indonesia banks

Q Which area provides the most concern to your Bank in terms of potential NPLs in 2018?



There is no significant change in the main driver of NPLs – it remains corporate lending. Consumer lending is much less of a concern, with the exception of smaller BPD banks.

Among bank groups:

SOE banks – results are consistent with our 2017 survey.

Local private – concern over SME lending has grown slightly, with it being now the #1 concern among one-third of respondents.

Foreign – As we can see, foreign banks continue to be wary of the NPL risk in corporate loans disproportionately to other banks. This may partly be due to the fact that many foreign banks, particularly foreign branches, have a higher proportion of such loans compared to local banks.

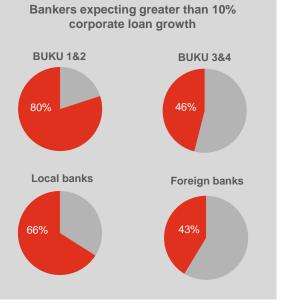
BPD – there is a much larger concern noted on consumer/retail loans, but this is reflective also of the nature of the BPD portfolios in comparison to larger banks. Apart from BPD banks, the concern regarding consumer lending NPLs is comparatively very low, even more than in 2017.

NPL ratios in the consumer segment are low by comparison to other emerging markets, and we expect over time to see more sensitivity to the credit risk in this segment as activity and growth intensifies.

No significant change in corporate lending growth expectations

Little change in expectation for year-on-year corporate loan growth. Smaller banks are more bullish.

2017 2018 2017 20% 9% 12% 16-20% 13% 32% 11-15% 37% 32% 6-10% 38% 11% 0-5% 3% 1% Negative



Q What is your Bank's target for loan growth in 2018 for commercial/corporate/large SME?

Source: PwC Indonesia Banking Survey (2017, 2018)



And challenges continue in terms of credit risk

On the whole, estimates for corporate loan growth are essentially flat year-on-year. While there was a slight increase noted among some respondents, statistically it was insignificant. We believe this is driven by continued concerns about loan quality and tightened credit underwriting standards. 2017 was below expectations for many bankers, and therefore although the survey result is essentially the same year-on-year, this is indicative of a view that there will be some slight increase comparative growth in 2018.

Estimated corporate loan growth is much higher among smaller banks, with 80% expecting growth in excess of 10% compared to only 46% of larger banks. It is not clear what is driving that optimism.

Foreign banks are also more cautious compared to local banks where 50% more local bank respondents expect corporate loan growth in excess of 10%. Last year we noted that there was very little correlation between expectations of loan growth and expectations of NPL levels. This is still the case for those expecting lower levels of growth – in fact, 65% of respondents who have more moderate expectations for Corporate loan growth (less than 10%) actually also expected NPLs to decrease in 2018.

For those expecting higher growth (greater than 15%), there was indeed some correlation in that 71% of those bankers also expected NPLs to decline. However, we note that this is influenced by state-owned banks who are bullish on loan growth and positive on NPL decline for each of the last 2 years.

Consumer lending expected to lead loan growth in 2018

Consumer loan growth is projected to be stronger in 2018 than in 2017. Last year 57% of respondents expected loan growth in excess of 10%. This year, that has expanded to 71%.

In 2017 the broad increase in NPLs had the effect of putting a premium on collateralized lending such as mortgages. We now see an increased interest in all consumer categories for 2018. Clearly mortgages is still the main focus, but overall we expect a higher level of competition across all consumer segments. As the market heats up in consumer lending – particularly unsecured lending – our question for the industry is whether banks have the necessary robust systems and data analytics to price and monitor risk appropriately. While that was not the focus of our survey, we believe there is a risk that many banks have growth ambitions in consumer lending that are not equally matched by their investment in risk management preparedness.

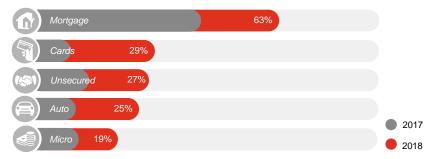
Sharp increase in bankers expecting more than 10% growth in consumer lending

Q What is your Bank's target for loan growth in 2018 for Consumer?



Q Which product(s) are you principally targeting to drive growth in consumer loans at your Bank in 2018?

Products targeted to drive growth



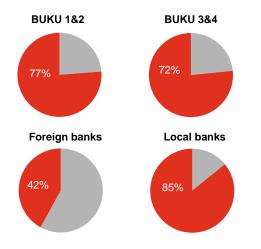
Source: PwC Indonesia Banking Survey (2017, 2018)

Local banks in particular are focused on growth in retail lending

Both large and small banks plan strong growth in consumer lending

Q What is your Bank's target for loan growth in 2018 for Consumer?

Bankers expecting greater than 10% consumer loan growth



When we additionally analyse the respondents who expect particularly high growth – defined as greater than 15% we see that 43% of smaller BUKU 1&2 banks expect such growth. That is twice the level of larger banks that expect high growth. Smaller banks tend to be less advanced in their data analytics and we highlight that the new requirements of PSAK 71 ("incurred loss" provisioning model to "expected loss" model) will add additional burden in this respect.

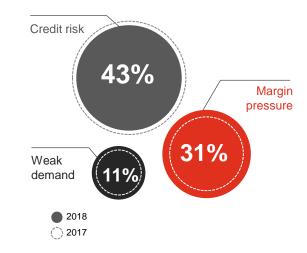
We note again that the challenge in a high growth environment for consumer lending will be whether banks are prepared not only on the front-end sales channel, but also with respect to robust lending scorecards, data-analytics, collection and overall risk management systems. As corporate loan NPLs grew in the last 2 years, many Indonesia banks realized that there was more to be done in improving their credit risk management of corporate lending. During that time, NPLs on consumer lending have also increased but are still comparatively very low. The question to be asked is whether Indonesia banks have applied lessons learned, and invested or will invest more heavily into their credit risk management in terms of retail lending as well.

Credit risk is still a challenge to growth but margin pressure is on the rise.

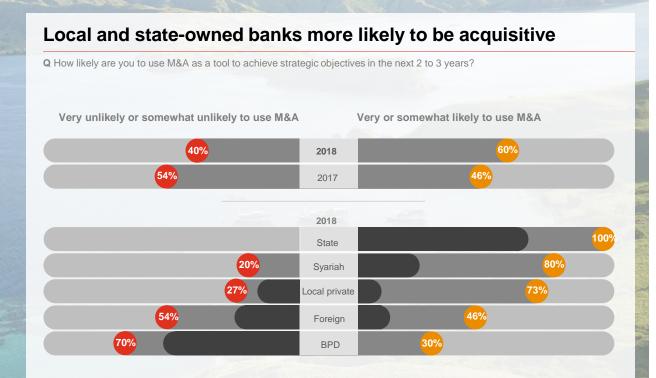
Q What are the top 3 challenges for achieving your loan growth in 2018?

Chart shows the top challenge to growth noted by respondents

#1 challenge to Consumer loan growth



Growth through M&A: Increased likelihood over next 2-3 years



Source: PwC Indonesia Banking Survey (2017, 2018)

What we see this year is an increase in the number of bankers considering M&A as a tool for growth, moving up from 46% to 60%.

Among the large SOE banks and local banks, the likelihood is even stronger with between 70% and 100% expecting M&A. However, one should note that the number of bankers in the "Very likely" category is still relatively low at 14% of all respondents.

The drivers for M&A also vary among bank groups: State-owned banks look more to the opportunity for corporate synergies, while Foreign and Local private banks focus more on expanding business channels.

In the prior year we noted that M&A activity was sluggish and this may have been due to many willing buyers but not many willing sellers. While it is still to early to extrapolate, we see many banks having re-evaluated their strategies in the last 18 months, seeking to focus on their core strengths. This may be a catalyst for further M&A in the future.

Key differences in drivers for M&A by type of bank

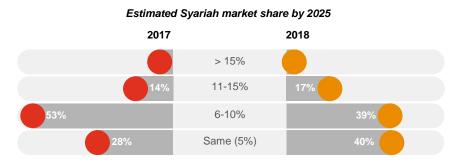
Q If somewhat or very likely, what is the primary driver to use M&A?



Growth through Syariah and Infrastructure: Little perceived change year on year

Less optimism on future Syariah market share growth than in 2017

Q Syariah banking is currently approximately 5% of banking sector assets in Indonesia. What is your forecast for this percentage in the industry by 2025?



The same expectation on involvement in infrastructure finance as in 2017

Q What is your expectation for your bank's lending or involvement with infrastructure finance in Indonesia in the next year?



Syariah banking assets stand at approximately 5% of total banking assets in Indonesia. With the largest Muslim population in the world, many are looking at the opportunity to grow Islamic finance at a faster rate than the conventional market. However, in our survey most bankers felt that the Syariah banking share over the next 8 years would either stay the same or just slightly higher. Only 22% of respondents expected it to reach the levels equal to the government's 2023 ambition of 15%, of which two-thirds were from state-owned banks. Plans for infrastructure finance were relatively unchanged from 2017. There is still a strong interest to participate.

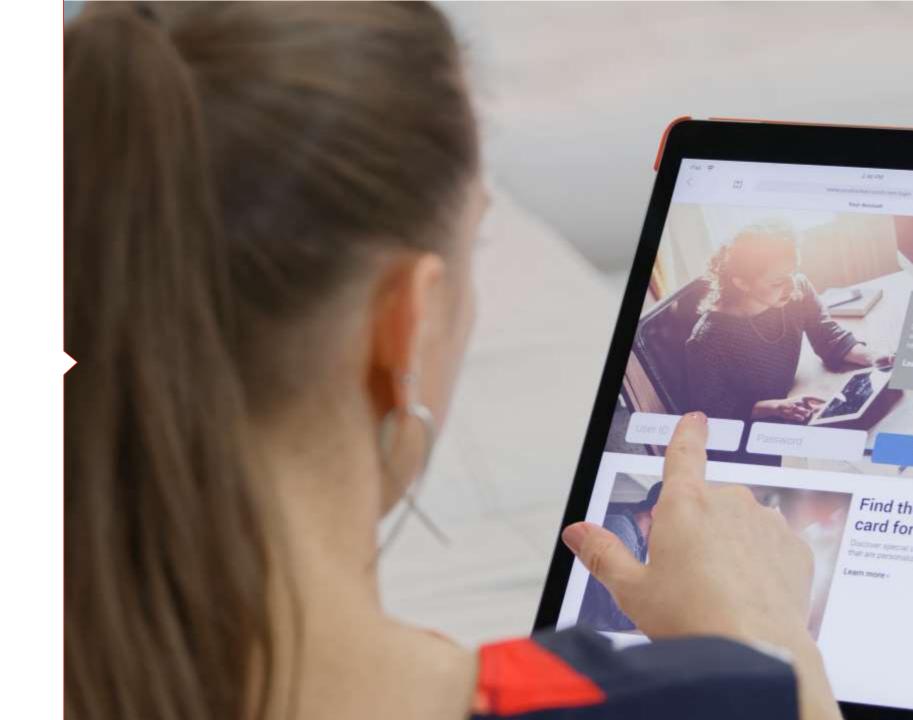
We noted that the expected involvement is significantly higher for state-owned banks than for foreign banks. Given that the government has acknowledged that foreign investment is essential to meet the country's needs, especially in infrastructure development, we believe this gap is something that will need to be addressed by the government, the industry and stakeholders.

Is there a level playing field in infrastructure finance?

Q What is your expectation for your bank's lending or involvement with infrastructure finance in Indonesia in the next year?



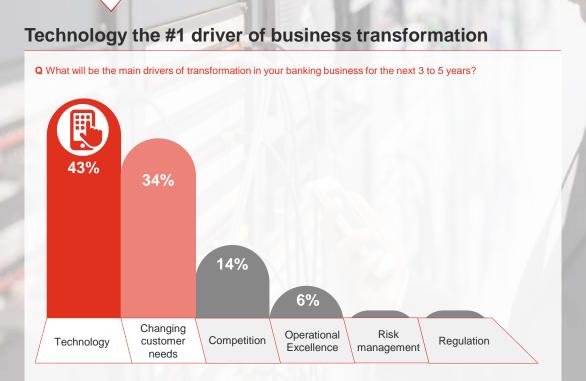
Transformation





Technology still the main driver of business transformation	Technology spending is focused on the customer front-end	Many digital strategies lack sufficient clarity
State-owned bank footprint is getting bigger, and bigger	Transactions through digital channels are surpassing traditional branches	Opportunities to improve Customer Analytics

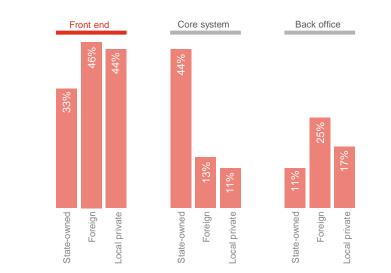
Technology continues to drive business transformation in 2018 Focus is on front-end customer platforms



In our prior year survey, 84% of bankers surveyed were likely to invest in technology transformation in the next 18 months. The priority on technology continues with it still being the #1 driver of business transformation in Indonesia banks.

Source: PwC Indonesia Banking Survey (2017, 2018)

Tech spending is most focused on front-end systems



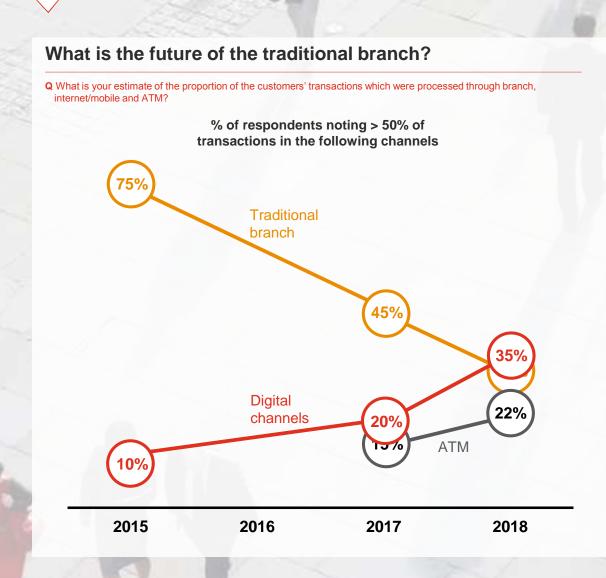
What is noteworthy for 2018 is the rising importance of changing customer needs, which is driving banks to rethink how they do business. This was noted as the #1 driver for transformation by one-third of respondents, up from 17% in 2017. The customer-centric focus is evident also in that most banks are directing their tech spending to frontend web/app/e-banking systems.

Q What is the primary focus of your technology spending?

Apart from front-end technology, state-owned banks are also focused on core systems, while other banks more on the back-office. Foreign bankers were also more likely to invest in risk management systems (42% noting it as a top-3 priority vs 22% from state-owned banks).

Source: PwC 2018 Indonesia Banking Survey

Transactions through digital channels surpassing traditional branches



For the first time in our survey, mobile and internet has taken over the top channel spot for customer transactions. Traditional branches no longer dominate the transactional landscape as it did only 3 years ago.

In 2015, only 10% of respondents noted that more than 50% of their transactions are processed via mobile or internet banking. This is now more than one-third of respondents. In 2015, 27% from our survey said at least one-fourth of transactions were via mobile & internet. This is now up to 67% of respondents. In fact, even ATM transactions are approaching the level of traditional branches (though a difficult measure given that many ATMs are 'in-branch').

This migration to mobile and internet is nothing new. But the pace of the change in Indonesia is significant to note. That change is most swift among the larger BUKU 3&4 banks. In last year's survey, 53% of those bankers estimated that more than onequarter of their transactions are via mobile and Internet. That number is now up to 75%. The shift among smaller banks is occurring but more slowly (42% to 52%).

It is true that for many banks even though the volume of transactions is lower, the value of transactions through the branch is still high. However, we believe that the pace of technology change and move to a more cashless society will drive change in that respect as well.

Expected Fintech disruption is mild for 2018 but picks up substantially over the next 5 years

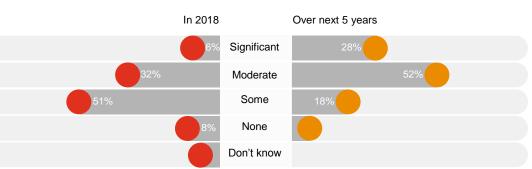
For 2018, only 6% of respondents anticipate a significant disruption from Fintech. However, when viewed over a 5 year horizon that number jumps to 28%, with a further 52% expecting a moderate disruption. Respondents from larger banks feel even stronger that disruption is coming: 41% expect significant disruption over the next 5 years compared to only 19% from smaller banks.

Our survey did not differentiate the types of Fintech: peer to peer lending, blockchain, process automation, etc. However, there is clearly a recognition that technology is a game changer.

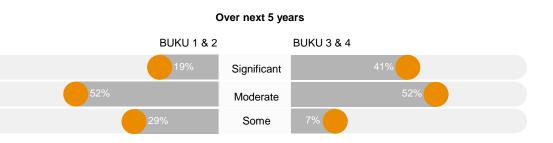
Despite the views on Fintech disruption over the next 5 years, Fintech investment was still relatively low among technology investment for Indonesia banks in 2018. Only 22% of bankers listed Fintech in their top-3 areas for investment in the coming year.

Fintech disruption anticipated over the next 5 years

Q What is the level of risk that your bank's business will be disrupted by new Fintech competition in the market in 2018 and over the next 5 years?



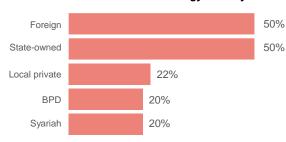
Expected disruption to business from Fintech



However, challenges remain in terms of needed clarity on strategy

Digital strategies are in need of further clarity

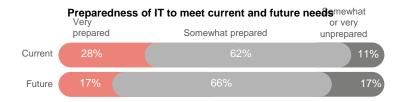
Q How clear is your bank's digital strategy for reaching and transacting with customers on digital platforms such as mobile, internet, smart phone, etc?



% who feel their tech strategy is "Very Clear"

Moderate feeling of technology preparedness

Q How well prepared is your Bank's technology to meet the needs of your current, and future, banking business and customers in Indonesia?



Half of respondents from foreign and larger SOE banks felt their digital strategies were 'very clear'. This compares to only 21% for all other respondents, indicating much room for improvement across the sector. On the other hand, only 11% felt their strategies were unclear. Results were almost identical to those in our 2017 Survey.

We noted a strong correlation between the clarity of the digital strategy and the extent to which a respondent felt their bank was prepared for the future. Among those that felt 'very prepared', 73% also felt the strategy was very clear. Among those that felt only 'somewhat prepared', the level of strategy clarity dropped to 30%.

These results can be reflective of a lack of strategy, or a good strategy that is simply not well understood across the organisation. We note also that our survey respondents are from among top management of banks. A wider selection of bank employees may have any even lower level of clarity on strategy, making it difficult to implement effectively. One interesting result is that despite the rapidly changing environment in terms of technology, mobile banking, Fintech, robotic process automation, AI, etc, most bankers in Indonesia feel their current technology is as ready to meet future needs as it is to meet the current needs. This does not seem consistent with the views expressed about clarity of digital strategies.

Respondents also noted that technology skills were the hardest to find in the market (43% noting as scarce or limited). Therefore at a time when it is critical to have sharp strategies and implementation, skills are also difficult to find and retain.

State-owned banks are getting bigger...and bigger

Who is growing or shrinking their footprint?

		Expansion			Reduction				
In 2018, what following area		for growth in the							
Reduction	No growth	Growth		State- owned	Foreign	Local private	State- owned	Foreign	Local private
25% <u>කකකකක</u> <u>කකකකක කකකකක කකකක</u>	31% <u>m</u> <u>m</u> <u></u>	44% <u><u><u><u><u></u></u><u><u><u></u><u><u></u><u><u></u><u><u></u><u><u></u><u></u><u><u></u><u><u></u></u><u></u><u></u><u></u><u><u></u><u></u></u></u></u></u></u></u></u></u></u></u></u>	Branches	67% 血血血 血血血 血血 血血 血血 血血 血血 血 血 血 血 血 血 血	12% <u>血血</u> 血血血血 血血血血	61% <u>而</u> 血血血血血 血血血血血血血 血血血血血血血 血血血血血 血血血血 血血 血血	5% <u>面面面</u> 面	50%	17% <u>血血 血血血血 血血血血</u>
23%	26%	51%	Employees		33%	50%	6%	42%	17%

State-owned banks are most optimistic about conditions for 2018, and this shows in their plans for expansion - more than two-thirds are expanding both branches and employees, while almost none indicate plans for reduction. This is particularly the case with respondents from BPD banks, of which 90% expect growth. Respondents from local private banks were also bullish, albeit not quite to the degree of stateowned banks.

On the opposite end of the spectrum were Foreign bank respondents – half are expecting a reduction in the number of branches and only 12% expected the number to increase. These trends were noted in our 2017 Survey: stateowned banks and local banks are more aggressively growing their footprint and getting bigger in the process.

There appear to be two very different strategies at play. Among respondents from state-owned and local private banks expecting higher loan growth (more than 10%), only 11% expect a reduction in branches. This number is 69% from Foreign banks expecting the same growth. Foreign banks are less bullish on loan growth, but where they are, they are seeking to do so with a smaller branch footprint, and are investing in automation and digital capabilities.

Fit for Growth: "Cut 10 to spend 10"

There are a number of reasons why banks may take different strategies in terms of growing their physical branch network: knowledge of the local market, region or customer base; different product focus (e.g., affluent vs mass market); ambitions to grow market share vs a more short-term focus on profitability, etc.

However, as we can see from the survey, there are two dynamics impacting all banks in Indonesia: a growth environment, and a rapid takeup of digital channels requiring new investment and a reconfigured cost base. This is driving banks across the market to be sharper on cost to free up investment capital. This is the case for many bankers more aggressively expecting branch expansion as well: e.g., 61% of respondents from Stateowned banks expect cost reduction. In fact an overwhelming 93% of respondents to our Survey said their organization is undergoing a review of costs or a program to improve efficiency.

In other words, to be successful, Indonesia banks are not only addressing investment for growth, but also how to reduce cost to make as much of that investment as possible

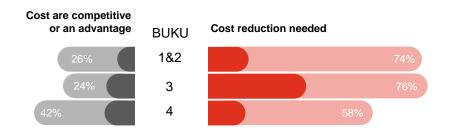
In our *Fit for Growth* approach, we recommend organisations to focus on doing three things consistently and continuously:

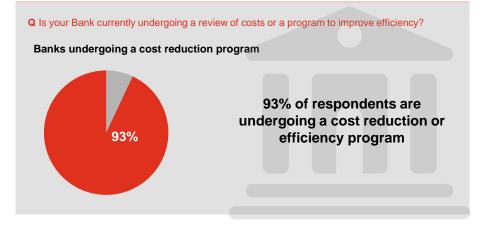
- 1. Focus on a few differentiating *capabilities*
- 2. Align their *cost structure* to these capabilities
- 3. Organize for growth

It means to have resources, and thus cost structure, aligned to the company's overall strategy – deployed toward the right businesses, initiatives, and capabilities to execute the growth agenda effectively. *Fit for Growth* companies have the right amount of resources they need to compete effectively – no more, no less – at the right places.

A strong perceived need for cost reduction within growth environment

Q How do you feel about your Bank's cost levels in order to be able to compete in the market and meet your Bank's growth and/or profitability goals?



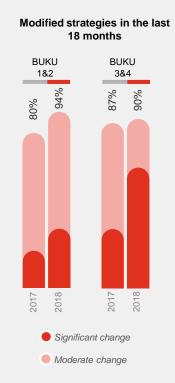


Significant change in strategies over the last 18 months, needing more clarity

Strategies are changing: 45% of respondents noted a significant change in strategy during the last 18 months. In fact, only 10% of respondents have the same strategy as they did only 18 months ago.

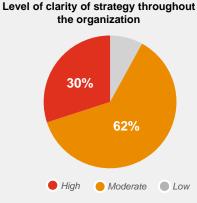
However, overall only 30% of bankers felt their strategy was well understood throughout the organization. This varies from a high of 63% among larger SOE banks down to only 10% among BPD bankers. Indonesia bank strategies are actively being re-evaluated

Q How has your strategy changed over the last 18 months?

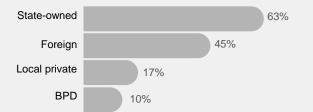


Strategies need more clarity in the organisation

Q What do you feel is the level of clarity and understanding of your strategy to people in your organisation?

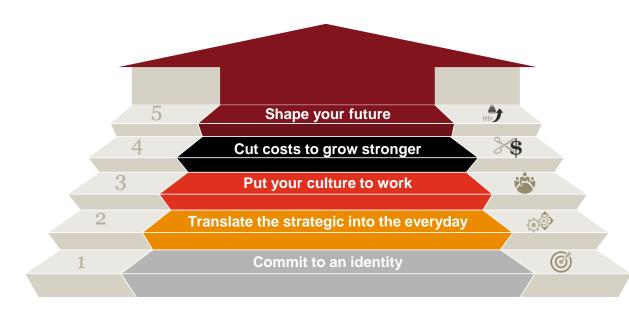


Extent to which there is a high level of clarity of strategy



Insights: How can Indonesia banks be more successful in driving their strategies to execution?

Winning companies close the strategy-to-execution gap with five acts of unconventional leadership



Source: Strategy& analysis

Commit to an identity: You are what you do, not what you sell

Translate the strategic into the everyday: Build your own distinctive greatness

Put your culture to work: Make it your greatest asset

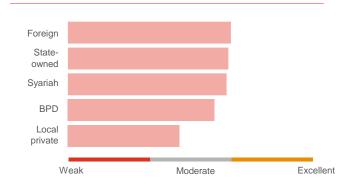
Cut costs to grow stronger: Stop cutting across the board. Invest in unique capabilities

Shape your future: Focus on what you do best to own your own future

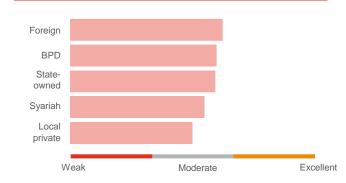
Companies that commit to the 5 acts, grow 3X faster and achieve 2X profit

> Source: Coherence profiler with 4,400+ respondents, Strategy& analysis

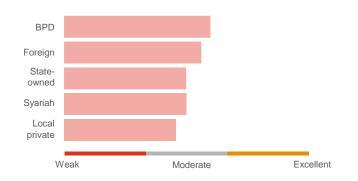
Where are Indonesia banks in terms of the 6 *Customer Experience Imperatives*?



Well defined customer messages across touch points

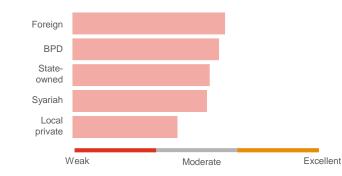


Structured feedback gathering and improvement process

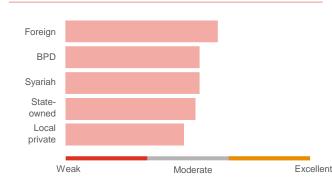


Consistent experience across channels

Right channel and customer mix



Digitalisation and innovation to retain and acquire customers



Most bankers had a moderate view on their response to the 6 Customer Experience Imperatives. Only 3% of respondents felt their bank was 'excellent' in these areas. On average Foreign banks were most confident, and Local private banks were consistently the least confident. However, we note that there was not a substantial difference across the range of responses.

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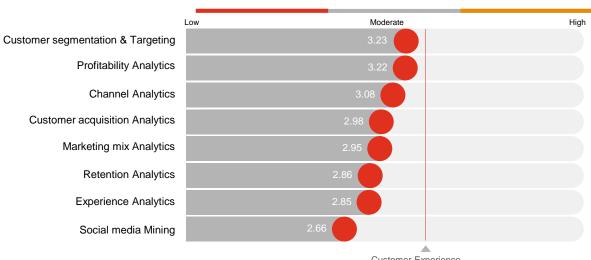
Customer Analytics capabilities lagging behind views on *Customer Experience Imperatives*

As noted earlier, changing customer needs was seen as the #1 driver of business transformation by one-third of respondents, only surpassed by technology. Spending on technology is also most directed towards front-end web/app/ebanking investment.

What then is the maturity of Indonesia banks in terms of analysing customers in order to be most effective in the delivery of a customer-centric strategy? 72% of responses were moderate or less, with 27% indicating a lower level of maturity. Overall we see that the confidence on Customer Analytics is not quite to the level of confidence about the respective bank's approach to Customer Experience overall. A strong Customer Analytics capability is the foundation for ensuring that limited resources are focus in the right direction with the most benefit.

The most mature areas were in terms of customer segmentation and overall profitability analytics. Least mature were customer retention analytics, measurement of the customer experience itself, and social media mining. Bankers are less confident about Customer Analytics capability than with overall approach to Customer Experience

Q What is the level of maturity of your Bank's Customer Analytics capability?



Maturity of Customer Analytics capability

Customer Experience Imperatives midpoint



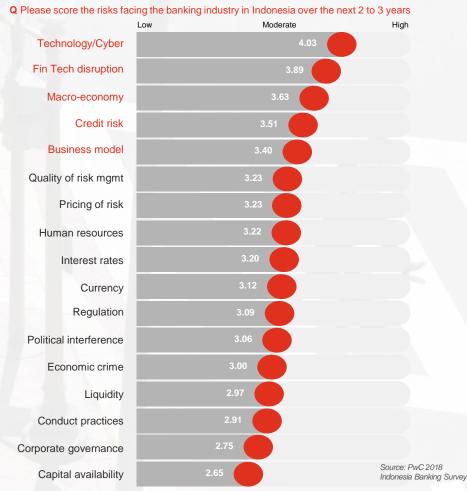
Risk



Technology and FinTech disruption seen to be #1 and #2 risks to Indonesia banking	Only moderate satisfaction with management of risks	Capital adequacy and corporate governance are felt to be strong and not a concern
Impact of PSAK 71 to loan provisioning potentially underestimated	Underinvestment in Cyber Risk Management	Opportunities to improve Risk Culture and Integrated Risk Management strategies

Technology now at the forefront of risk in the industry

Cyber risk and FinTech disruption are challenging bankers to rethink strategies and response to risk



For the first time we see technology related risks at the top of banker concerns for the industry in Indonesia. Both Technology/Cyber Risk and FinTech disruption were a clear #1 and #2. By comparison, technology risk was #6 in 2017 and #7 in 2015. FinTech disruption was #12 last year.

Business Model risk has risen sharply up the list from #11 in 2017 to #5 for 2018. Given the extent to which technology is rapidly changing the entire financial services sector, bankers are concerned whether the current business model is appropriate. Blockchain, payments, peerto-peer lending, cryptocurrency, digital channels – new risks are emerging.

Risk in the macro-economy had been the top risk since 2015, and this has fallen to a distant #3 as many concerns about the Indonesia economy have subsided and global optimism is much improved. In our recent PwC Global CEO Survey released at the World Economic Forum in Davos, 60% of CEO's in Asia expect improving global economic growth. That compares closely to the 57% of Indonesia bankers in our survey who expected improved conditions for the sector in 2018. Credit risk was the #2 risk in 2017, and is now #4. This reflects a more positive sentiment on NPLs, and a better overall outlook, but bankers are still cautious about the credit risk that is inherent in the sector. Only respondents from the large state-owned banks did not note credit risk in their top-5 risks (#6).

At the bottom of the list, capital availability is the least of concerns to bankers in Indonesia. Capital adequacy levels are generally high and banks do not feel this is a risk. That is an overall positive factor for the industry as a whole, however we see that the challenge for Indonesia banking is not currently constraint in terms of capital and finance, but rather one of competitiveness, agility and ability to manage risk. The one exception here is among respondents from smaller regional BPD banks where capital availability tied for #6 in their ranking of industry risk.

Foreign banks are most confident in their ability to manage top risks relative to the market as a whole

While technology risk is noted by many, bankers have diverse views on other risks

Q Please score the risks facing the banking industry in Indonesia over the next 2 to 3 years

State-owned	Foreign	Local private	BPD
Technology	Technology	Fin Tech disruption	Credit risk
Fin Tech disruption	Fin Tech disruption	Technology	Fin Tech disruption
Business model	Credit risk	Macro-economy	Macro-economy
Macro-economy	Macro-economy	Credit risk	Liquidity
Interest rates	Regulation	Business model	Technology

Respondents from foreign Banks are much more sensitive to regulation than other bankers. While they noted regulation at #5, other banks rank it only as #14. Of particular concern is dataonshoring, IFRS 9 and KYC/AML.

BPD banks note liquidity as the #4 risk and capital adequacy as #6. This points to potential challenges unique to these smaller banks. They are generally less diversified and have a smaller market footprint. Foreign banks not only feel the most confident about their own ability to manage top risks, but they also have the largest gap (25%) between their view of the industry's ability to address top risks and their own ability to address those risks. This gap was much lower for other bank groups where all were less than 5% difference.

All respondents feel their bank is more prepared to address the risks than the industry as a whole

Q How well prepared is the industry in Indonesia to address top risks?



Lower satisfaction with credit risk management is driving changes in local banks compared to foreign banks

Indonesia Banking Risk Focus Map - 2018

Credit Liquidity Market Operational Compliance Technology Satisfied State Satisfied Satisfied Foreign Satisfied Satisfied Satisfied Satisfied Local Satisfied private BPD Syariah Satisfied High focus = greater than 60% said a top-3 priority Satisfied with risk management = 3.67 or more Unsatisfied with risk management = 2.33 or less Medium focus = 30 to 60% said a top 3 priority

The Indonesia Banking Risk Focus Map highlights the main risk management focus areas of bankers, and whether bankers are satisfied or unsatisfied with their actual management of that risk.

Low focus = less than 30% said a top 3 priority

Q Which are your top risk management focus areas in 2018?

Generally, we see that bankers are most satisfied with their management of risk areas they see as lower priorities -Liquidity Risk and Market Risk - and less satisfied with higher priority risks such as Credit Risk, Operational Risk and Technology Risk.

No indication = "neutral"

It makes sense that bankers would direct their attention towards risk areas where they are less satisfied with progress. However, these areas, particularly Credit Risk and Technology Risk, are also noted as top risks for the industry as a whole by almost all respondents. The lack of satisfaction with the management of those risks should be a call for action for Indonesia banks to invest more heavily into those areas.

Credit risk management still under a dynamic pace of change



As we can see, respondents from foreign banks and large state-owned banks are overall more satisfied with their level of risk management. We noted a strong correlation between banks that have an integrated risk management strategy and their satisfaction with risk management.

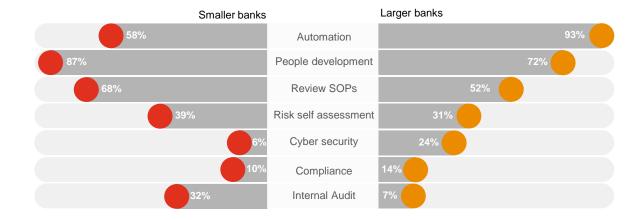
54% of respondents were satisfied with their management of credit risk compared to 65% in 2017. The level of satisfaction with the management of credit risk was highest among respondents from foreign banks (75%), compared to 44% among state-owned banks and 39% in local private banks.

As a result, Local banks are expecting to be much more active in making changes to their Credit Risk Management in 2018, particularly in enhanced loan monitoring and collection.

Larger banks are addressing Operational Risk through Automation

Following a similar trend from 2017, larger BUKU 3 and BUKU 4 banks are investing more into Automation to reduce Operational Risk. On the other hand, smaller banks are investing more into foundational areas such as People Development, a review of Standard Operating Procedures, Risk self assessments and Internal audit. As we can see, Cyber security was fairly low in priority as a strategy to manage operational risk. Larger banks investing in automation to reduce Operational Risk

Q What is your strategy to reduce and manage operational risk in 2018?



Top-3 initiatives to reduce Operational Risk

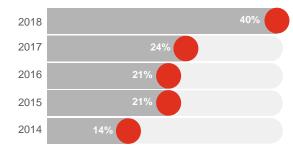


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Banks may be underestimating their response to Cyber Risk?

Global CEOs' concern about Cyber threats spikes

How concerned are you about Cyber Threats? Showing only "extremely concerned"



Source: PwC 21st CEO Survey (2018)

Although Technology Risk was viewed as the top risk to Indonesia banking, there does not seem to be a similar intensity to managing that risk.

Only 5% of respondents noted Technology as the #1 risk management focus area. Similarly only 6% of smaller banks and 24% of larger banks noted Cyber Security as a top-3 strategy for managing Operational Risk.

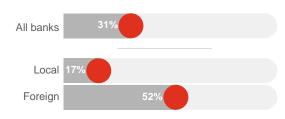
The level of respondents' overall satisfaction with the management of Technology/Cyber Risk was high at 62%. However, two-thirds of respondents noted their bank does not yet have a Chief Information Security Officer. Only 17% from smaller banks had a CISO. We believe the industry in Indonesia is underestimating the effort needed to address Cyber Risk. It is not a question of "if" but rather "when" the organization is subjected to a successful cyber attack. While many response plans and roles exist on paper, in our experience most banks do not run simulations with multiple stakeholders when testing whether those plans will be effective in practice.

In our recent PwC 21st CEO Survey, global CEOs expressed a sharp increase in concern about Cyber threats compared to past years.

Only one-third of Indonesia banks have a CISO

Q Does your bank have a Chief Information Security Officer?

Showing only "Yes" response



Source: PwC 2018 Indonesia Banking Survey

The average estimated total financial loss as a result of security incidents in Asia is \$2.6 million.

Source: PwC Global State of Information Security Survey

PwC's Global State of Information Security® Survey 2018

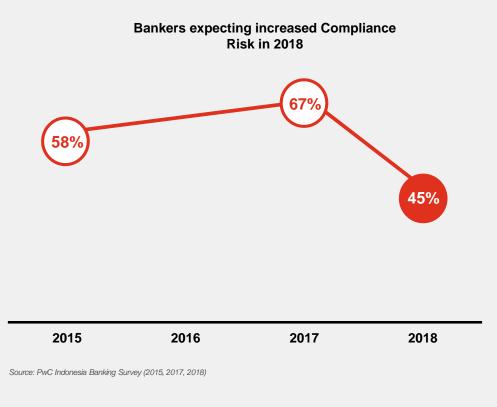
Our Global survey reveals that organisations in Indonesia are actively exposed to the top vectors of Cyber security incidents compared to global responses



Increased compliance risk anticipated for KYC/AML

Fewer bankers expecting an increase in Compliance Risk in 2018

Q Do you foresee your Bank facing increased legal and compliance risk in 2018?



Compliance Risk has been seen to be on the increase for the last several years. However, for 2018 most Indonesia bankers (55%) do not expect an increase in Compliance Risk.

The areas of most focus are related to Know-your-customer (KYC, AML) which was a top-3 risk noted by 75% of larger banks.

Increased KYC/AML risk

Q Which are your top risk management focus areas in 2018?

Consumer protection Other Regs Fraud

Тах

AML KYC

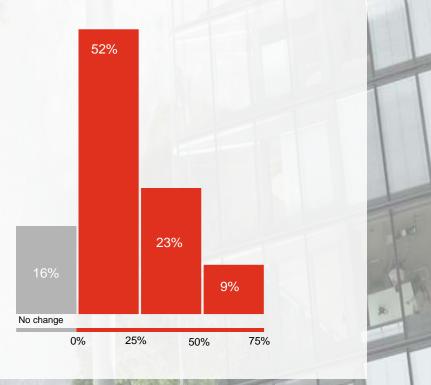
Areas of increased compliance risk (Top-3) Smaller banks were expecting the most increase in Compliance Risk in terms of fraud – 69% noted this as a Top-3 risk. There was also a sharp difference between foreign banks and local banks in this respect: 80% of local banks noted Fraud Risk in their top-3, as compared to only 25% of foreign banks. This may be reflective of a number of foreign branches that have smaller retail portfolios. Nonetheless, KYC – high on the list for foreign banks - is closely related to Fraud Risk as well.

The clock is ticking on PSAK 71 implementation

Most bankers expecting a PSAK 71 impact of less than 25%

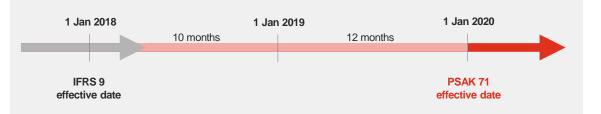
Q What is the estimated expected impact to the level of your Bank's loan impairment provisioning from the implementation of PSAK 71?

Expected increase in loan impairment provisioning due to PSAK 71



Only one-third of respondents noted that their bank has completed an impact assessment of PSAK 71. As a result, there may not yet be sufficient knowledge from which to draw a conclusion about the cumulative impact on provisions for impairment. However, at this point most respondents estimated an impact of less than 25%, which is below our experience from other markets.

Larger banks are farther ahead in their progress in that 48% are in advanced stages of impact assessment compared to only 10% of smaller BUKU 1 and BUKU 2 banks. Among those who had a view, 61% of respondents expect increased volatility in reporting results as a result of PSAK 71. This was as high as 78% from local private banks and 71% from state-owned banks Furthermore, 42% of respondents expect an impact to the way loans are priced.



IFRS 9/PSAK 71 requires an "expected-loss" impairment model for more timely recognition of expected credit losses. This requires entities to account for expected credit losses from first recognition of the loan and to recognize full lifetime expected losses on a more timely basis. Entities will be required to use not only historical losses and current information, but also reasonable and supportable forward-looking information.

Two-thirds of Indonesia banks have not yet assessed the impact

PSAK 71 presents a number of practical challenges that go beyond the core classification and measurement issues. System modifications, FV models, communication management with stakeholders, forecasting and sensitivity analysis, training, engagement with OJK just to name a few.

Only 8% of respondents to our survey were in a "very advanced stage" of implementation, 80% of which are foreign banks whose parent companies typically must already comply with IFRS 9 as of 1 January 2018. Although, as of the date of this survey publication, 22 months remain for implementation of PSAK 71, we recommend that banks who have not already started an impact assessment begin to do so as soon as possible. Looking to IFRS 9 as an example, large banks globally began their assessments at least 3 years before the standard's effective date.

	Challenges	Mitigation
Business model	 Definition of BM by senior management Selling decisions with impact on accounting Processes and systems required to document BM and reasons for sales 	 Use of existing BM documentation and portfolio structures as starting point Informing SM about requirements and strategic options (e.g. on transition date)
Contractual cash flows	 SPPI assessment at instrument level Required information not available Business units to be included 	 Improvement /implementation of systems Clustering & use of efficient questionnaires Training of business units
Fair value measurement	 High quality FV needed for (structured) loans FV needed for modified loans May result in P&L and Equity volatility 	 Implementation of FV models for loans Improvement of existing IT systems
Transitional impacts	 Availability of data on transition Determining opening position impacts FV may be needed for loans currently at amortised cost 	 Identify data gaps and capacity of existing IT systems Deploy simulation tools to identify and quantify impacts Develop, build and test FV models for loans
Disclosures	 Reconciliation between PSAK 55 measurement and new measurement categories under PSAK 71. Additional qualitative and quantitative information is required to be disclosed. Need to communicate clearly to investor base. 	 Mock up of disclosures Regular contact with regulators and investors Potential for national disclosures and / or guidelines

Measurement Considerations

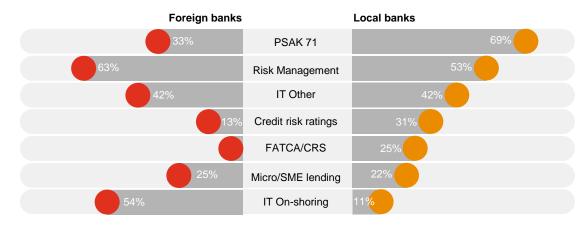
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Classification

Local banks seeking more dialogue from OJK on PSAK 71

Clear differences between local and foreign banks on their priority areas for engagement with OJK

Q In which of the following areas of regulation would you like to have more clarity from or more dialogue with OJK?



Areas where bankers would like to have more dialogue with OJK (Top-3 selected)

Source: PwC 2018 Indonesia Banking Survey

For Local banks, at the top of the list of areas for dialogue with OJK is PSAKI 71. Banks are required to submit their plans for compliance and this is raising desire for more dialogue. Given that early adoption is permitted, and that many foreign banks are more advanced in their implementation of PSAK 71, there is the possibility that certain banks may start reporting under PSAKI 71 while other have not. As impact assessments are completed, bankers would like to understand how OJK will interpret results and reconcile results to existing regulations.

Foreign banks are more interested in dialogue around risk management, as well as IT on-shoring which is a major issue for many foreign banks with globally or regionally integrated system architecture. Local banks are also more interested in dialogue surrounding regulatory credit risk ratings. It is unclear what his driving that need; perhaps a closer linkage between regulatory risk ratings and their own internal credit rating systems, concerns about NPL ratios, or the linkage to PSAKI 71.

Foreign banks are much more advanced on their compliance with FATCA/CRS; however a number of local banks are still developing in this area.

Opportunities: Risk Culture and Integrated Risk Management Strategy

Overall Corporate Governance is felt to be strong, though not yet best practice

Q What do you feel is the level of maturity of your bank's corporate governance activities in practice?



Source: PwC 2018 Indonesia Banking Survey

Opportunity to develop Risk Culture

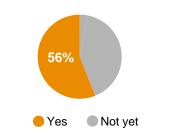
Q What is the level of maturity and strength of the "Risk Culture" throughout your bank organisation?

Good or Very Strong Risk
Culture

Foreign
88%
Local
39%

Many banks do not yet have an integrated risk management strategy

Q Does your Bank have a clear integrated risk management strategy in place?



As in 2017, bankers feel confident about their overall Corporate Governance. Responses to this question were stronger across the board compared to other questions on risk management satisfaction. Two critical success factors to be able to manage risk area strong Risk Culture throughout the organization, and an integrated risk management strategy.

Most respondents from foreign banks felt they had a strong Risk Culture in their bank (88%) However, only 39% felt this to be the case, indicating an opportunity to improve overall management of risk.

56% of respondents noted a clear integrated risk management strategy in place. Again this was perceived to be higher by respondents in foreign banks (67%) than those in local banks (44%). An integrated strategy insures that bank functions do not operate in their silos (risk, finance, internal audit, IT, sales, etc) and that they use a common set of systems, taxonomy and approach to identifying, monitoring and managing risk.

Notes on the Survey

- 1 A total of 65 respondents from among top management at 49 Banks.
- 2 "Foreign" banks in this publication refers to both "Foreign branches" and "Joint Venture" banks due to the extent of foreign ownership as well as similarity of responses.
- 3 "State" or "SOE" refers to large state-owned banks. "State-owned" refers to both SOE banks as well as BPD banks.
- 4 "Local" refers to banks which are not "Foreign". "Local private" refers only to local banks which are not state-owned.
- 5 "Larger banks" refers to BUKU 3 and BUKU 4; "Smaller banks" refers to BUKU 1 and BUKU 2.
- 6 In some cases data was not presented where in our judgment there was an insufficient number of respondents.



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Your goals are our goals too

Solving important problems has always been our main purpose, and we strive to provide industry-focused personalised services in line with your needs. Your goals will be ours too. **Let's grow together.**



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