July 2018

PwC Survey: Digital Banking in Indonesia 2018

pwc

Welcome

to the first PricewaterhouseCoopers Indonesia (PwCI) Digital Banking Survey of Indonesian banks. The survey attempts to gather and synthesize diverse views from senior banking executives from across the banking institutions within Indonesia whilst at the same time protecting the confidentiality of the participants.

Key objectives of conducting this survey are:

1. To understand the current state of digital banking in Indonesian banks;
2. To understand the digital banking ambitions and aspirations of Indonesian banks; and
3. To provide an overview of the risks and challenges facing the industry with respect to digital talent, culture and competition from fintechs.

The survey was conducted among banking institutions across Indonesia including state owned, local, foreign, regional and sharia banks. The results of the survey are based on completed questionnaires from senior banking executives from over one third of banks in Indonesia.

We focused our survey on mainly six areas:

1. Digital strategy and operating model
2. Digital talent and skills
3. Emerging technology and innovation
4. Customer experience
5. Digital analytics and decision making
6. Risks and challenges

We would like to express our sincere gratitude to the senior banking executives who have participated in this survey. Without them, this publication would not have been possible.

We trust that bankers, digital enthusiasts, fintech startups and other readers of this publication will find the results and analysis insightful.

We welcome any feedback you may have on the report so that we can incorporate it into future publications. Based on your feedback, we intend to publish periodically specific reports on digital banking trends in Indonesia.

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283
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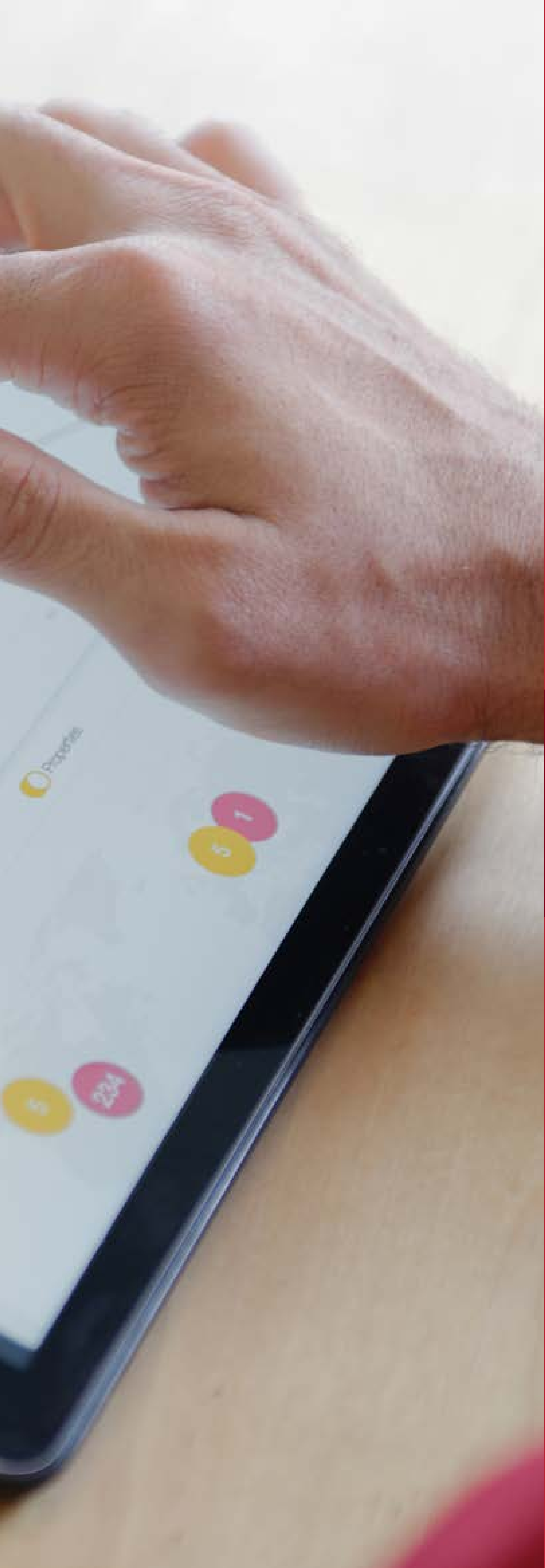


1.

Survey Insights

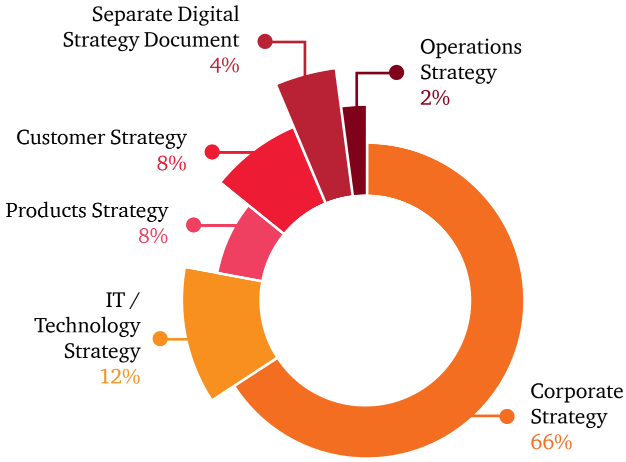
1.1 Banks have embraced digital strategy as part of corporate strategy

Digital disruption has been driving Indonesian banks to consider digital as part of their strategy. Most of the banks from Bank Pembangunan Daerah (BPD), joint venture banks, local banks, state-owned banks and Syariah banks have incorporated digital initiatives as part of their corporate strategy.

Digital banking has turned mainstream, with around 66% of survey respondents indicating that they have developed their digital strategy as part of their corporate strategy. Only 12% of the respondents indicated that they created the digital strategy as part of their information technology (IT) strategy followed by 16% of respondents who have included digital strategy as part of their product or customer strategy. It is very encouraging to see that only 4% of the respondents have indicated a separate standalone digital strategy document in place. This response shows the acceptability of digital strategy as a business strategy and not solely an IT initiative. (refer to Figure 1)

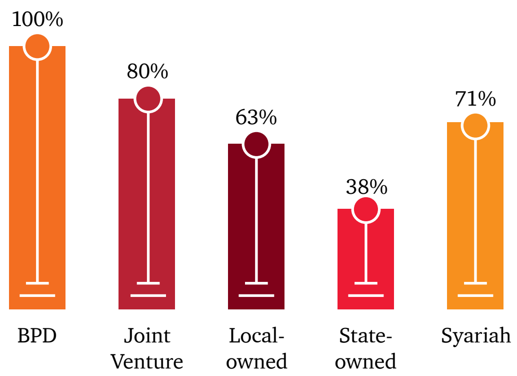
Q | *Your digital strategy is part of which one of the following?*

Figure 1: Digital strategy has turned mainstream



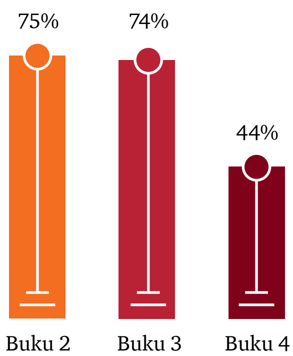
Q | *Your digital strategy is part of which one of the following?*

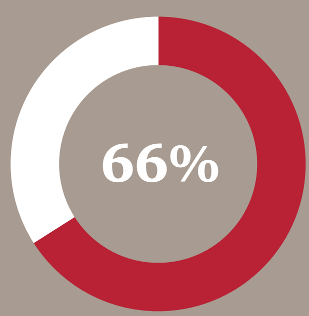
Figure 2:
Percentage split between different types of banks who view digital strategy as part of corporate strategy



However, we see a considerable difference between how large banks and state-owned banks view digital strategy compared to others. According to our survey, only 38% of the state-owned bank respondents and 44% of Buku 4 bank respondents have incorporated digital strategy as part of their corporate strategy (refer to Figures 2 & 3). This may be an indication that large banks have started on the journey of digital transformation; however, there are still challenges in developing a common view of digital strategy across these banks. Product teams, customer service team, IT team and dedicated digital teams are creating their own siloed digital strategies.

Figure 3:
Percentage split between different types of Buku banks who view digital strategy as part of corporate strategy





of respondents have indicated that they have developed their digital strategy as part of their corporate strategy

Customer experience and revenue growth are the key drivers for digital strategy

Whenever there is a conversation about digital, one of the buzzwords used is customer experience. In line with this, 44% of respondents have indicated that the primary objective of their digital strategy is to enhance their customer/ employee experience. It is very encouraging to note that revenue growth comes second with 32%, followed by 14% for cost reduction (refer to Figure 4).

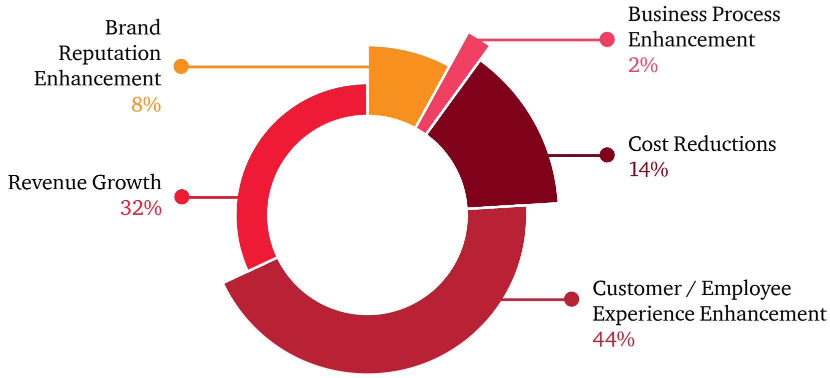
However, our survey indicated that state owned banks are primarily focused on using digital initiatives to enhance revenue growth, with over 63% of the state-owned bank respondents indicating this when compared to only 21% and 14% for local-owned and Syariah bank respondents respectively. (refer to Figure 5.)

On the other hand, the current revenue contribution of digital initiatives across all banks is still very nascent. About 40% of respondents have indicated that they do not currently measure the revenue contribution of digital. Another 40% have indicated less than 5% revenue contribution from digital (refer to Figure 6).

Despite all of the above, there is an increasing realization among bank executives of the need to monetize the enhanced customer experience and ensure there is a reasonable contribution of digital initiatives to revenue in the future. Around 56% of the respondents have indicated that they have set a target of over 5% revenue contribution from digital initiatives in the future (refer to Figure 7). This is an indicator which will denote the successful adoption of digital strategy to banking operations and new product development in banks. Even though the current and target revenue contribution figures from digital are still low, we believe the Indonesian banking industry is moving in the right direction.

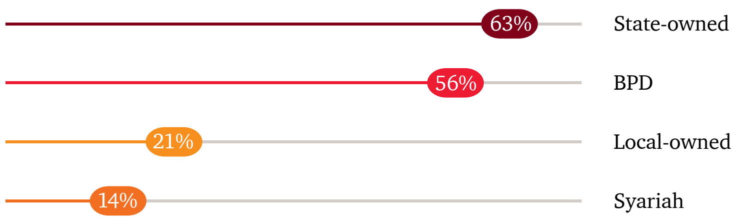
Q | *What is the primary objective of your digital strategy?*

Figure 4: Customer/Employee experience enhancement is the key



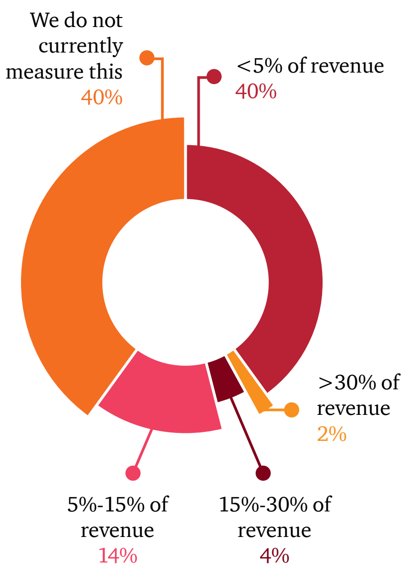
Q | *What is the primary objective of your digital strategy?*

Figure 5:
Revenue growth as the primary objective across various types of banks



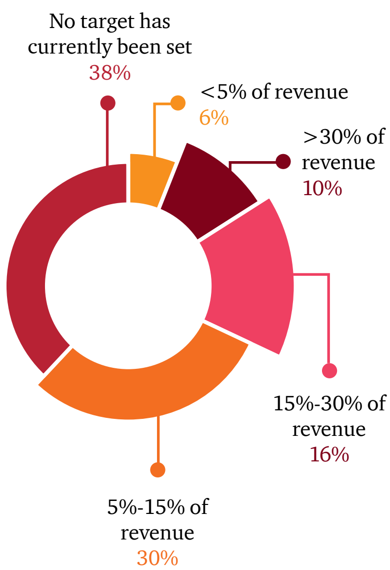
Q | *What is the current contribution of digital to your revenue?*

Figure 6:
Current contribution of digital to revenue *(as a % of current revenue)*



Q | *What is your target for the contribution of digital to your revenue*

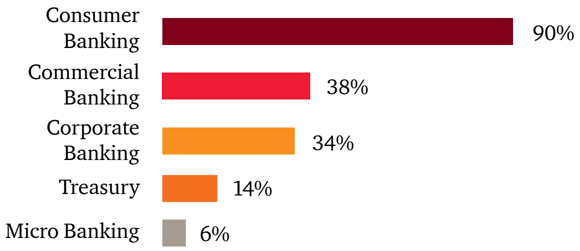
Figure 7:
Target contribution of digital to revenue *(as a % of current revenue)*



1.3 Consumer banking and customer service are the key focus areas for digital strategy

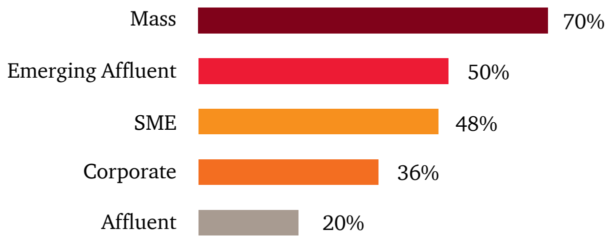
Q *Your digital strategy focuses on which products/services?*

Figure 8: Consumer banking is the key focus area for digital strategy



Q *Your digital strategy focuses on which customer segments?*

Figure 9: Mass customer segment is the key focus area for digital strategy



Consumer banking, once viewed as the bastion of stability in financial services, is now being identified as the most likely financial sector to be disrupted by fintechs over the next five years. The very simplicity that underlies banking products and processes for savings, lending, and business services renders the sector ripe for disruption.

New entrants see opportunity in disaggregating the components of traditional banking and offering targeted solutions with better servicing to both retail consumers and businesses. In parallel, the threats posed by fintechs have the ability to disrupt four categories of incumbents' business – market share, margins, information security/privacy and customer churn – at higher rates when compared to non-banking organisations within the financial sector.

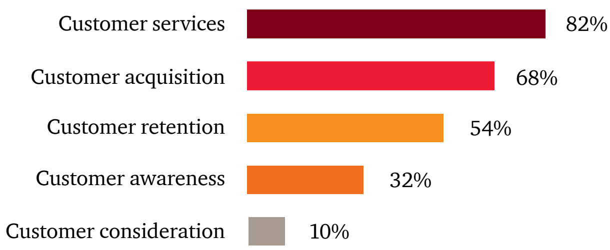
Some customers still prefer human interactions in certain parts of the processes, but the other hand, a viable digital approach is now mandatory for banks wishing to compete across all consumer segments. Traditional banks are still in the early stages of customer-oriented solutions, at least when compared to what fintechs propose. According to the PwC global survey, only half of the respondents from the banking sector (53%) believe they are consumer-centric, compared with over 80% for fintech survey participants.

By prioritising 24/7 access, fintechs offer services available via nontraditional channels such as social media, empowering customers to a great extent. Fintechs also stand out with their focus on ubiquity and omni-channel offerings. New entrants understand the need to design product offerings by considering and fulfilling the various needs of the customer at different points of their experience journey.

In line with this global trend, Indonesian bankers are also focusing their digital strategy primarily on consumer banking products/services and the mass customer segment (refer to Figures 8 & 9). Some of the banking products currently available in Indonesian market highlight the progress being made by Indonesian banks to focus on enhancing the customer experience across the customer lifecycle. Around 82% of the respondents believe that customer services is the key focus area for digital strategy, followed closely by 68% for customer acquisition (refer to Figure 10). As competition intensifies in the digital space in future, we hope to see greater emphasis on customer awareness and consideration aspects of the customer lifecycle as well.

Q *Your digital strategy focuses on which areas of the customer lifecycle?*

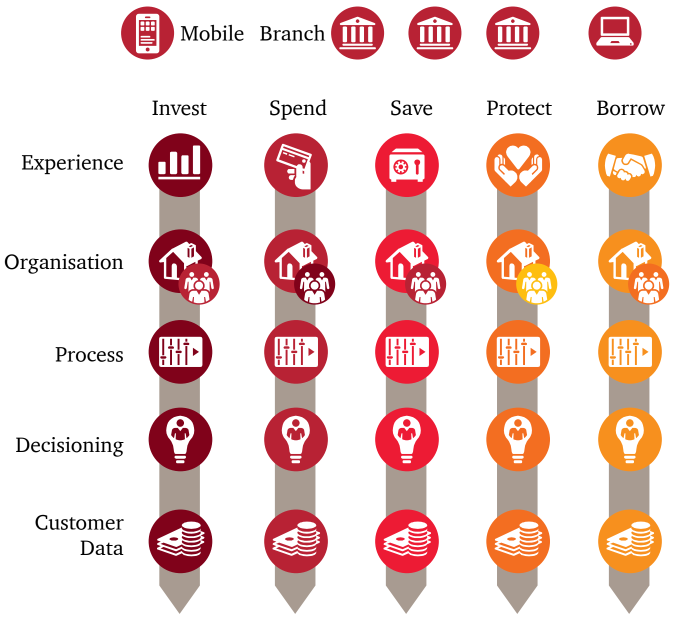
Figure 10: Customer services and acquisition are the top focus areas for digital strategy



The future state of banking is a complete reset: customer centricity enabled by a streamlined operating model and next-gen technology

From a Traditional Bank

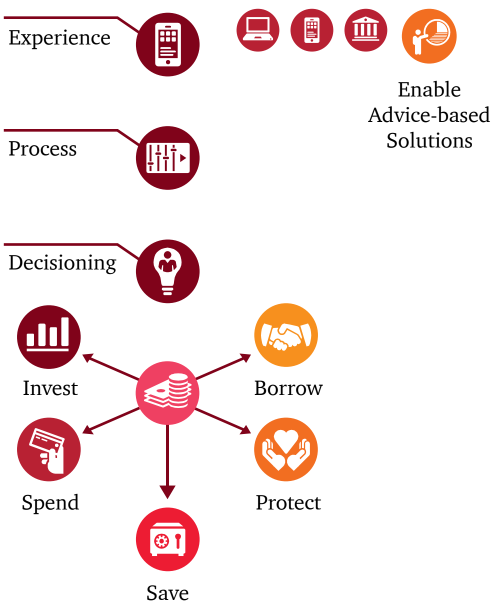
Product-centric mindset



Thinking about individual product is a traditional way of thinking

To a Digital Bank

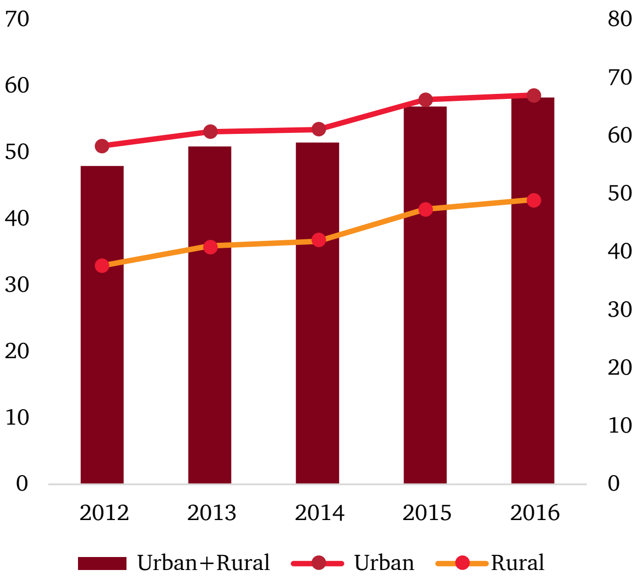
Customer-centric mindset



Thinking about customer needs, in a segment of one, is a way to position and steal share from competitors

1.4 Mobile banking based on smartphone-based application is the leading component of digital strategy

Figure 11: Indonesia Smartphone Users (% of Urban/ Rural Population).
Source: Statistics Indonesia

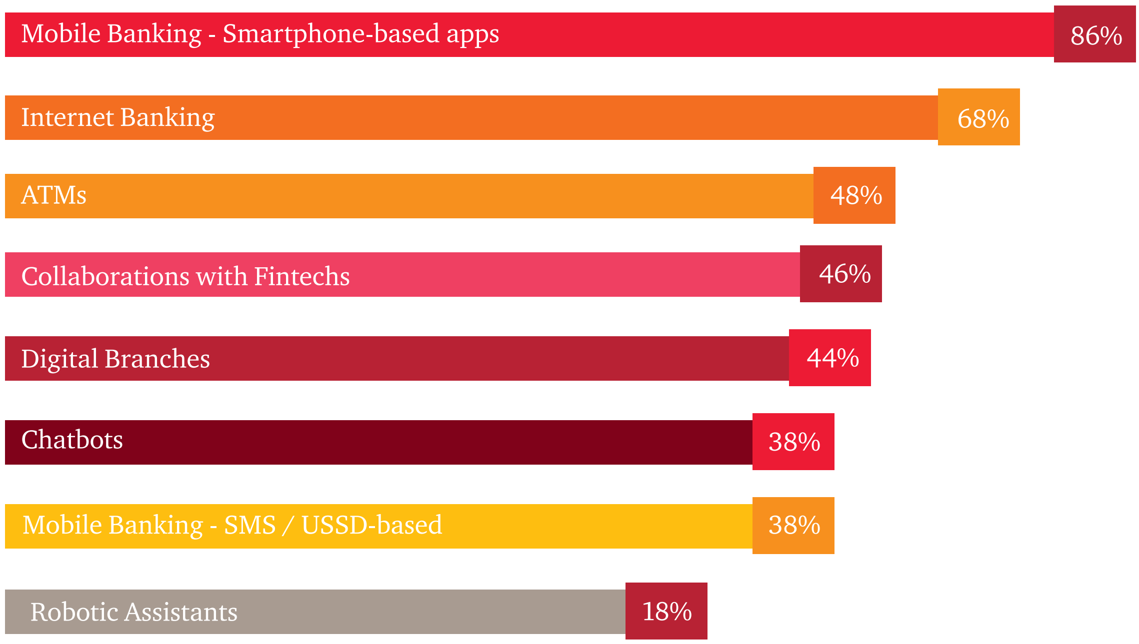


According to a 2018 report by We Are Social, Indonesia has around 132 million internet users, with 178 million unique mobile users and 120 million active mobile social media users. These figures combined with more than 50 million smartphone users (refer to Figure 11), forces Indonesian banks to create a smartphone based mobile specific strategy to service their end customers.

According to our survey, 86% of the respondents have smartphone based mobile banking application as a key component of their digital strategy. Internet banking follows closely with around 68% of the respondents. ATMs continue to be a critical component of the digital strategy with around 48% of the respondents indicating so (refer to Figure 12). Hopefully as the digital banking market matures, we will see more activity in the areas of chatbots, digital branches and robotic assistants, which will help banks to enhance their customer experience and cut costs in the long run.

Q | *Which of the following are components of your digital strategy?*

Figure 12: Smartphone-based mobile banking is the leading component of digital strategy



44%

44% of respondents have indicated that the primary objective of their digital strategy is to enhance their customer/employee experience

56%

Around 56% of respondents have indicated that they have set a target of over 5% revenue contribution from digital initiatives in the future

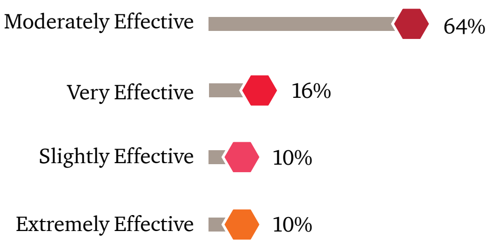
82%

Around 82% of the respondents believe that customer services is the key focus area for digital strategy, followed closely by 68% for customer acquisition

1.5 Digital office led by CIO/CTO/CEO is the prevalent option for executing digital strategy

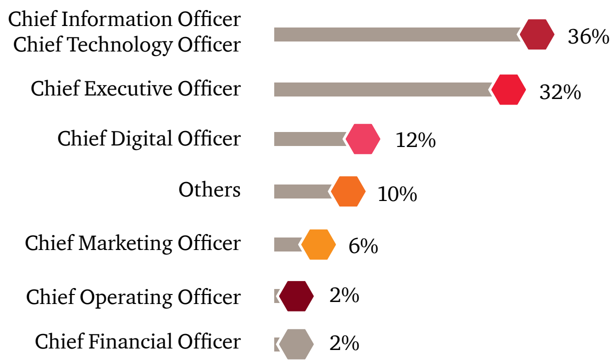
Q *How effective is your current IT environment for supporting your digital strategy?*

Figure 13: IT environment in banks still needs improvement to support digital strategy



Q *Who is leading your digital strategy?*

Figure 14: CIO/CTO are leading the digital strategy



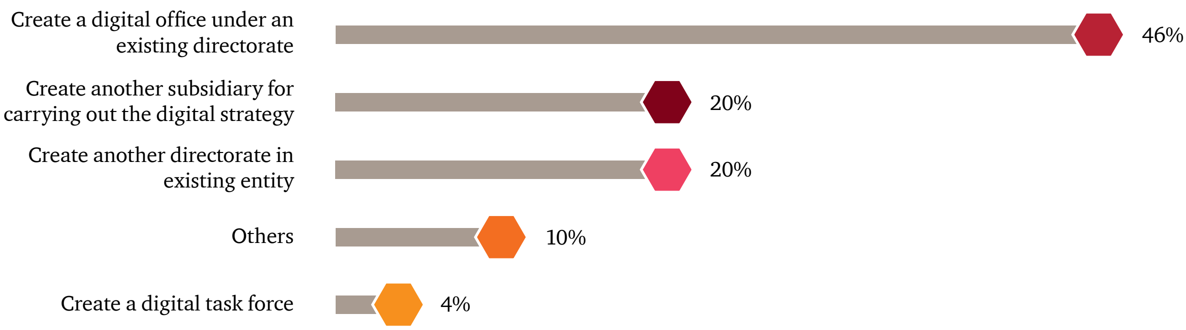
Around 64% of respondents believe that the IT environment of their current organisation is moderately effective in supporting their digital strategy (refer to Figure 13). This is a crucial indicator that we hope will improve over the coming years, as digital transformation of Indonesian banks is based on transforming their legacy IT environments.

Inspite of this, the Chief Information Officer (CIO)/Chief Technology Officer (CTO) typically lead the digital strategy according to 36% of the respondents. This is closely followed by another 32% respondents who believe the Chief Executive Officer (CEO) leads the digital strategy in their bank (refer to Figure 14). Indonesian banks are yet to evolve the role of Chief Digital Officer (CDO), who would develop and implement the digital strategy, with only 12% respondents indicating they have a CDO leading the digital strategy in their banks. This figure we hope will increase in the coming years with increased digital maturity in Indonesian banks.

Creating a digital office under an existing directorate – either IT, business team or corporate strategy team is the most common way to implement digital strategy with around 46% of the respondents indicating so (refer to Figure 15). In the future, we believe the percentage of respondents who believe that they need to create another subsidiary for carrying out activities related to digital will increase from the current 20%, as more and more banks look to accelerate their consumer and corporate businesses digitally.

Q *How do you plan to implement your digital strategy?*

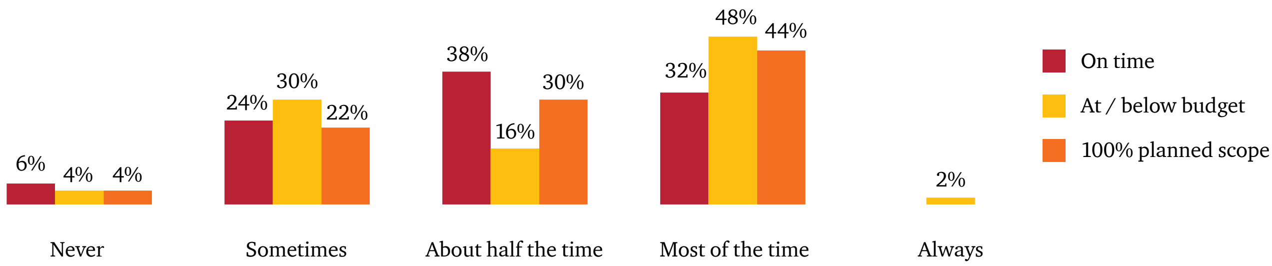
Figure 15: Digital office under an existing directorate is the leading way to implement digital strategy



Agile development processes will be widely adopted across all banks

Q *On average, how often did strategic digital initiatives fall within each of the following delivery categories in the last 12 months?*

Figure 16: Delivery of strategic digital initiatives is still facing challenges



Most organisations face a consistent set of software development challenges that are inhibiting their ability to change and grow quickly with digital:

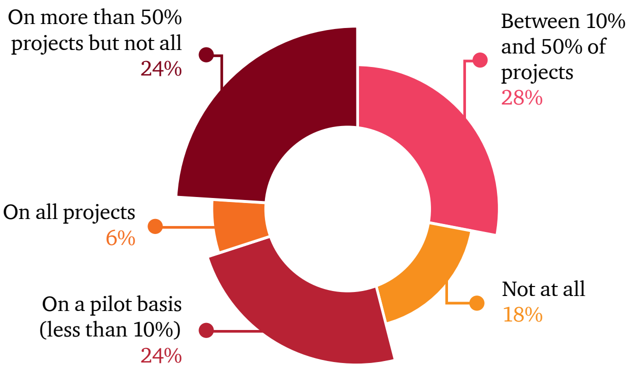
- **Time to market** – "Releases are late and missing critical features"
- **Development agility** – "We can't build features fast enough to meet demand"
- **Post-release quality** – "We use maintenance releases to get the bugs out"
- **Customer adoption** – "Our customers take six months to adopt products"
- **Flexibility** – "We cannot adapt to changing customer requirements"
- **Architecture** – "Our architecture and code base do not provide economies of scale"
- **Usability and interoperability** – "We cannot keep up with technology innovations"

Indonesian banks are also struggling with the delivery of strategic digital initiatives, with only one third of the respondents indicating that the projects are delivered on time, and around 50% of the respondents indicating that the projects are delivered at/below budget and with 100% planned scope (refer to Figure 16).

With increased focus on digital, innovation, and customer experience, financial services companies are looking to accelerate their execution and are exploring ways of becoming more agile. Only 28% of respondents have indicated that they adopt agile development processes for 10% - 50% of the projects (refer to Figure 17). However, it is very encouraging to see that around 76% of respondents have plans to increase the use of agile development processes in the coming years (refer to Figure 18).

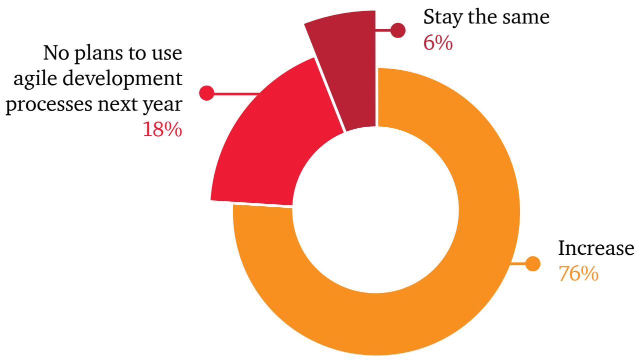
Q *To what extent are you currently using agile development processes for your digital projects?*

Figure 17:
Adoption of agile development is still in its infancy



Q *Will your use of agile development processes increase, decrease, or stay the same next year?*

Figure 18: Banks across Indonesia plan to increase agile development processes by next year



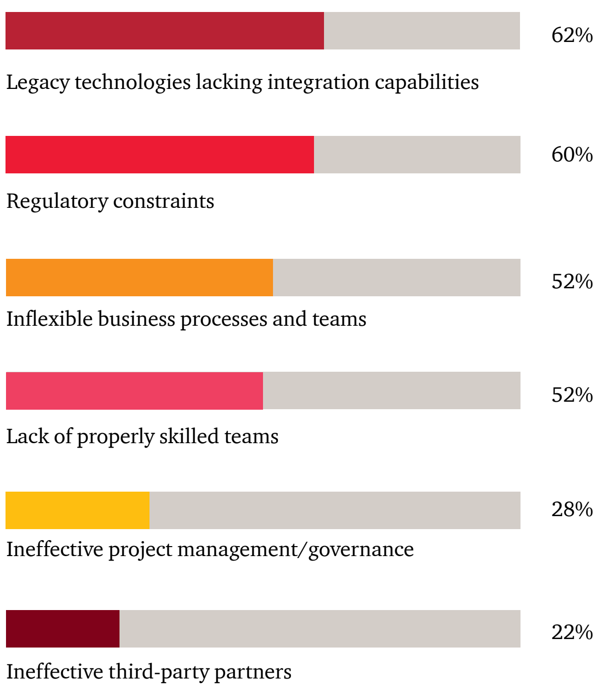
1.7 Cyber security threats pose a major risk to digital business in the next 2-3 years

Q *To what extent do the following pose risks to your digital business over the next 2–3 years?*

Figure 19: Risks to digital business in the next 2-3 years

Q *Which of the following are some of the challenges that you face for implementing your digital strategy?*

Figure 20: Challenges in implementing digital strategy



According to PwC's Global Economic Crime and Fraud Survey 2018, cybercrime has long passed beyond infancy and adolescence. Today's cybercriminals are as savvy and professional as the businesses they attack. This maturity calls for a new perspective on the multifaceted nature of cyber threats and accompanying frauds. Although it can be difficult for companies to accurately measure the financial impact of cyberattacks, 14% of survey respondents who said cybercrime was the most disruptive fraud told us they lost over $US1 million as a result, with 1% indicating they lost over $US100 million. According to Indonesian bankers as well, Cyber security threats is the biggest risk to their digital business. Losing skilled people to competition is the next biggest risk. Rapid changes to technology, competitor bank's digital banking initiatives and fintechs pose the third biggest risk (refer to Figure 19).

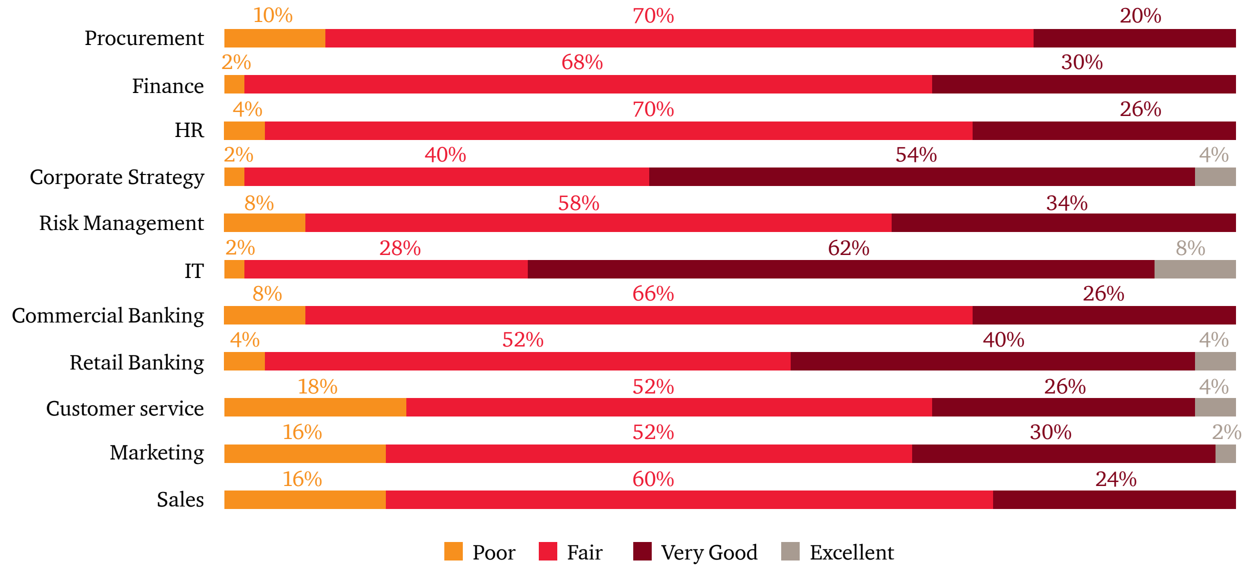
As per our survey respondents believe regulation is not a major risk for digital business, however Indonesian bankers see regulatory constraints as one of the major challenges for implementing digital strategy with around 60% of the respondents indicating so. About 62% of the respondents indicated that technologies like legacy core banking solutions, legacy point solutions, make it difficult to integrate with the digital channels and create challenges to mine the data generated. In order for successful implementation of digital strategy, it is important to have agile skilled teams along with technologies. Lastly 52% of the respondents indicated that inflexible business processes and teams along with lack of properly skilled teams is the third biggest challenge in implementing digital strategy (refer to Figure 20).

Enhancing digital skills across all business functions is critical to the success of digital strategy

1.8

Q *How would you rate the digital skills of the people within each of the following business functions?*

Figure 21: Digital skills across business functions

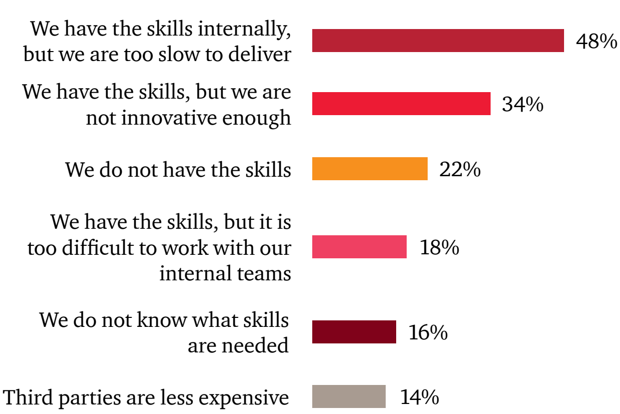


Understanding of digital technologies and their usage to business operations is critical to respond to the ever-changing market and technology dynamics. Today's changing landscape is demanding business people with new skills, not just digital experts or data scientists. To create new digital business leaders, we need to understand how they learn and what they want.

Assessment of the Digital skills across business functions of Indonesian bankers reveals that most of the people across functions of the organisation have been rated as fair, with only the IT, Corporate Strategy and Retail Banking teams doing better than others (refer to Figure 21). 66% of the respondents indicated that carrying our regular third party classroom training on digital topics is the leading way to enhance digital skills, closely followed by joint team by Fintechs at 56% (refer to Figure 23). Third party providers are engaged in the digital initiatives primarily for their speed of execution and innovation capabilities with 48% and 34% of the respondents indicating so respectively (refer to Figure 22). We believe this is one of the leading ways in which Digital skills of Indonesian bankers are enhanced and initiatives are implemented.

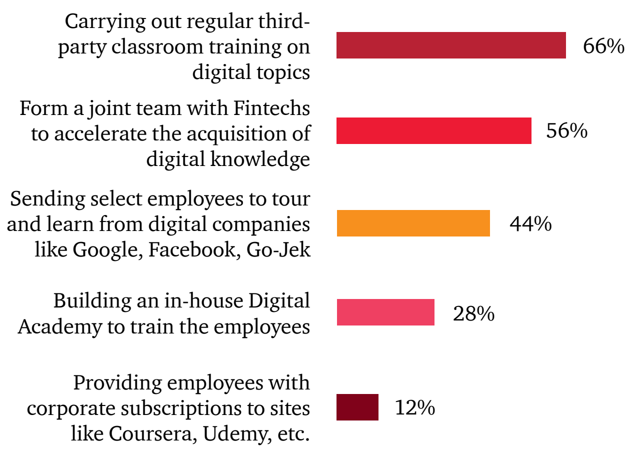
Q *When you use third parties for strategic, planning, implementation, or day-to-day work relating to Digital technologies, it is primarily because...?*

Figure 22: Reasons for using third party providers for Digital initiatives



Q *Which of the following are you using to enhance the digital skills of your Organisation?*

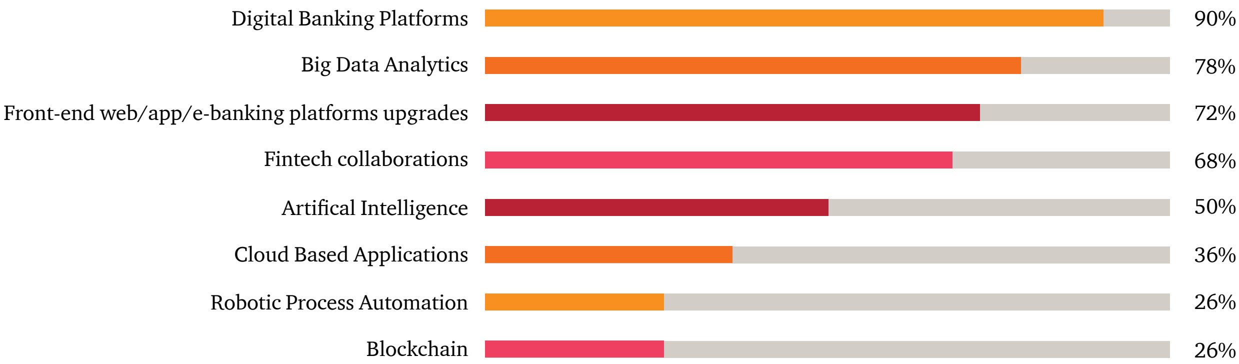
Figure 23: Ways to enhance digital skills



1.9 Digital banking platforms will see investments in the next 2-3 years

Q *Which of the following emerging areas you are planning to invest in over the next 2–3 years?*

Figure 24: Investments in emerging areas in the next 2-3 years



Expectations of bank clients are changing, primarily because of digitization. Whether in the form of disruption, revolution or evolution, the fact that major changes are taking place in the banking sector mainly due to new technology cannot be denied. Established banks, new fintechs, supervisory authorities and other parties are all jostling for position in the new banking landscape. What remains unchanged is the essence of the financial services as offered, up until recently, almost exclusively by banks. In other words, while the banking sector may change, the essence of banking remains the same.

Banking continues to be about keeping clients' assets and accompanying data safe, keeping a payment system operational, mediating between savers and borrowers (the transformation function of banks), and absorbing the associated risks. What is new is that there are now providers in the form of fintechs and Big Tech which offer clients alternatives for each of these core tasks (or parts thereof) which are based on new technologies. For each of the core tasks referred to, clients expect a more digital service and their wishes are becoming increasingly measurable and audible for financial service providers. These changes form a new basis, for both new players and existing banks, to truly place the client at the center of things, to serve them better and to provide better, more transparent, cheaper and more reliable products and services. Therefore technological developments and the changes in consumer behavior, not only constitute a threat for banks, but also certainly offer opportunities for an improved, more relevant service to clients. Banks that know how to make the most of these opportunities will be able to play an essential role in the new banking landscape.

Set against this background, banks are increasingly facing a variety of technology-driven developments, which are changing client expectations and offering opportunities to banks to improve services. These days many business sectors, and therefore also banks, are facing so-called disruptive technologies, which are technologies that can be so powerful that they change entire sectors. These disruptive technologies usually concern the digitization of existing processes and their uses in new areas.

Indonesian bankers are also investing in such areas with around 90% of respondents indicating investment in the area of digital banking platforms in the next two to three years. Followed by Big Data Analytics, front-end web/app/e-banking platform upgrades and fintech collaborations (refer to Figure 24). Surprisingly, emerging technology areas like artificial intelligence (AI), blockchain, robotic process automation (RPA) and cloud-based applications will see limited investment in the next two to three years. This shows that Indonesian bankers are still waiting for the right use case for utilizing such emerging technologies in their day-to-day business and for greater clarity from government with respect to regulation around usage of them.

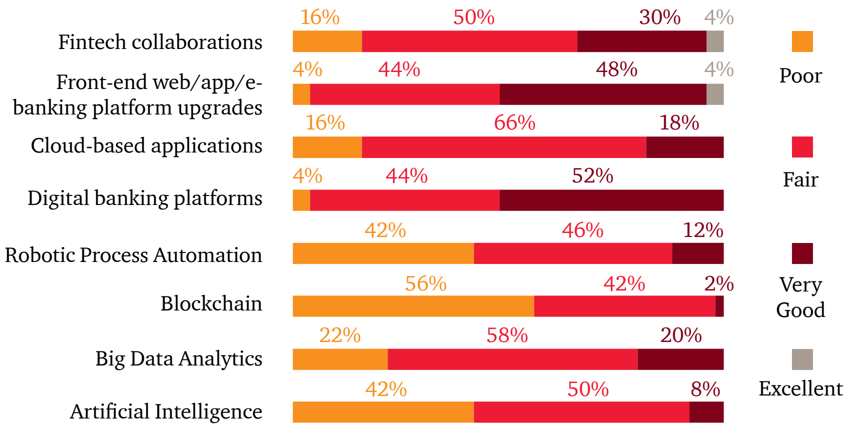
The essential eight technologies that matter now

1. AI. Software algorithms that are capable of performing tasks that normally require human intelligence, such as visual perception, speech recognition, decision-making, and language translation. AI is an “umbrella” concept that is made up of numerous subfields such as machine learning, which focuses on the development of programs that can teach themselves to learn, understand, reason, plan, and act (i.e., become more “intelligent”) when exposed to new data in the right quantities.
2. Augmented reality (AR). Addition of information or visuals to the physical world, via a graphics and/or audio overlay, to improve the user experience for a task or a product. This “augmentation” of the real world is achieved via supplemental devices that render and display the said information. AR is distinct from Virtual Reality (VR); the latter being designed and used to re-create reality within a confined experience.
3. Blockchain. A distributed electronic ledger that uses software algorithms to record and confirm transactions with reliability and anonymity. The record of events is shared between many parties and information once entered cannot be altered, as the downstream chain reinforces upstream transactions.
4. Drones. Air- or water-based devices and vehicles, for example Unmanned Aerial Vehicles (UAV), that fly or move without an on-board human pilot. Drones can operate autonomously (via on-board computers) on a predefined flight plan or be controlled remotely. (Note: This category is distinct from autonomous land-based vehicles.)
5. Internet of Things (IoT). A network of objects – devices, vehicles, etc. – embedded with sensors, software, network connectivity, and compute capability, that can collect and exchange data over the Internet. IoT enables devices to be connected and remotely monitored or controlled. The term IoT has come to represent any device that is now “connected” and accessible via a network connection. The Industrial IoT (IIoT) is a subset of IoT and refers to its use in manufacturing and industrial sectors.
6. Robots. Electro-mechanical machines or virtual agents that automate, augment or assist human activities, autonomously or according to set instructions – often a computer program. (Note: Drones are also robots, but we list them as a separate technology.)
7. VR. Computer-generated simulation of a three-dimensional image or a complete environment, within a defined and contained space (unlike AR), that viewers can interact with in realistic ways. VR is intended to be an immersive experience and typically requires equipment, most commonly a helmet/headset.
8. 3D printing. Additive manufacturing techniques used to create three-dimensional objects based on digital models by layering or “printing” successive layers of materials. 3D printing relies on innovative “inks” including plastic, metal, and more recently, glass and wood.

1.10 There is a need for emphasis on tracking and learning of emerging technologies/innovations

Q *How would you rate your Organisation's IT department on its current skills for each of the emerging technologies/innovations?*

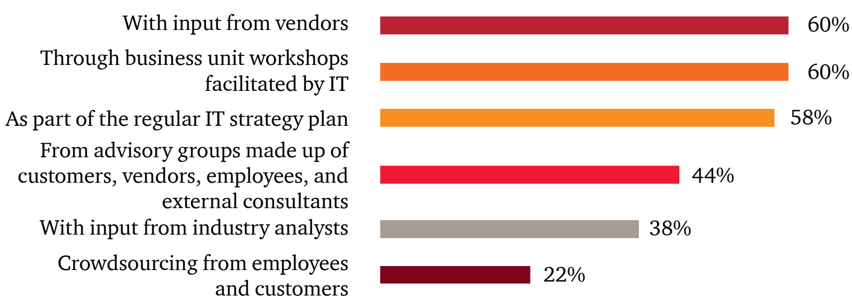
Figure 25: IT department's current skills across emerging technologies



Emerging technologies like blockchain, AI, and RPA are still very new to the IT departments of Indonesian banks. More than 40% of respondents have rated their current IT organisation skills in RPA and AI as poor, with around 56% indicating that IT skills in blockchain are poor (refer to Figure 25). This is an issue which needs to be addressed in the coming years, so that appropriate investments can be made by Indonesian banks in these technologies to gain competitive advantage in the market.

Q *How does your Organisation gather ideas for applying emerging digital technologies in new ways to solve business problems?*

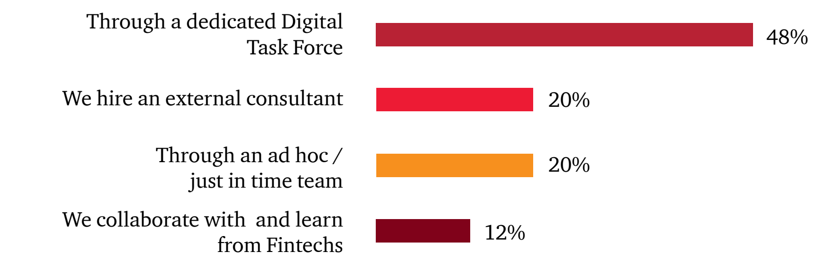
Figure 26: Ways to gather ideas for applying emerging digital technologies



Indonesian bankers depend on input from vendors, business unit workshops facilitated by IT along with the regular IT strategy plan to apply emerging digital technologies in new ways to solve business problems. Only 22% of respondents indicated crowdsourcing from employees and customers to gather new ideas (refer to Figure 26). We hope that as the market matures, we would see this figure improve in the future along with new ways such as dedicated experience centers or digital labs.

Q *What is the primary way in which you explore and act on high priority emerging and disrupting digital technology innovations?*

Figure 27:
Ways in which emerging digital technology innovations are acted upon



Around 48% of the respondents indicated that a dedicated digital task force is utilized to explore and act on high-priority emerging/disrupting digital technology innovations. Collaboration with fintechs is still low on the radar, which we hope will increase in the coming years.

Domestic and regional technology companies are emerging as serious banking competitors

1.11

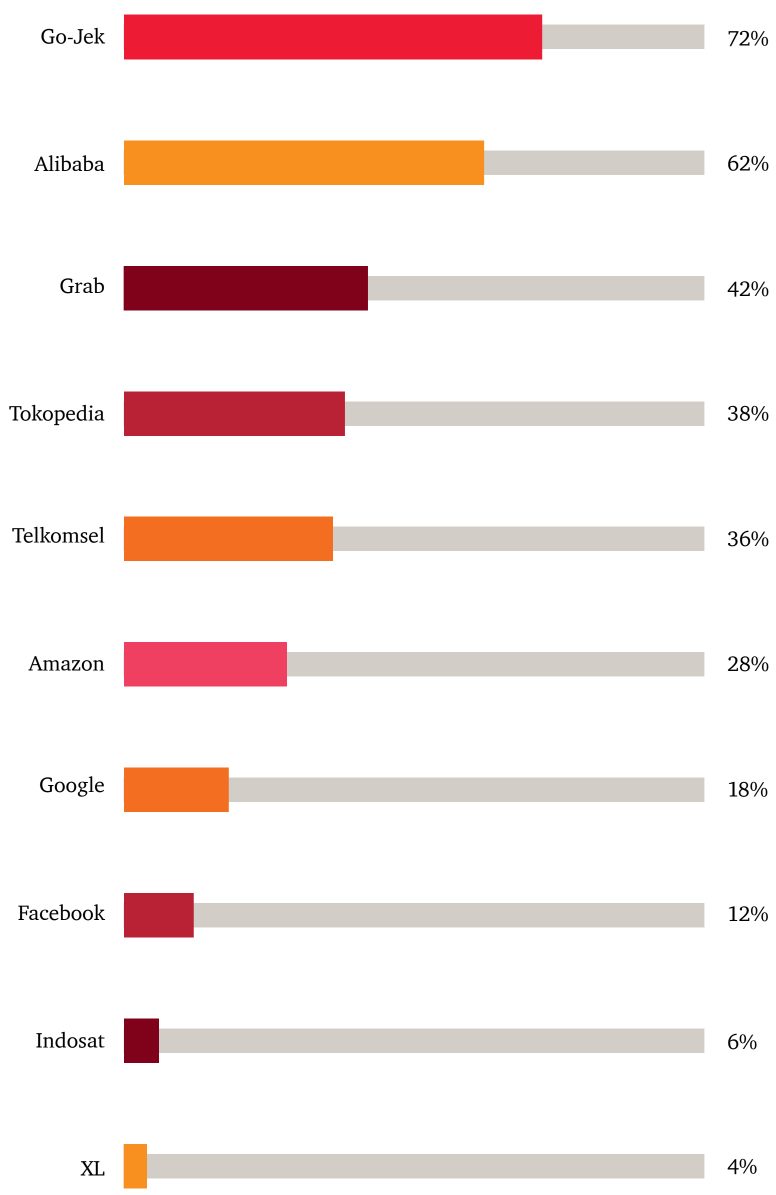
Indonesia is in the midst of an e-commerce and payments sector boom, with multiple domestic and regional companies leading the charge. It is not very surprising to see that a majority of Indonesian bankers, around 72% consider Go-Jek to be one of the emerging banking competitor with its Go-Pay and other services. Go-Jek's large customer base in Indonesia, combined with its ability to harness data, puts it in a unique position to tailor its payment offering to the end customer. Around 62% of the Indonesian bankers believe Alibaba with its Alipay and other services is a force to reckon with and can emerge as a serious banking competitor in the near future. Grab, Tokopedia and Telkomsel are also on the horizon to be perceived as emerging banking competitors. However they might still have some work to do, before Indonesian bankers take notice.

It is very surprising to see that the big global technology giants, such as, Amazon, Google and Facebook are in the bottom with only 28%, 18% and 12% respectively of the bankers looking at them as an emerging banking competitors. All the three global players are currently transforming the payments landscape in countries like India and others, with their respective payments solution. As an example, Facebook has just started rolling out WhatsApp payment services in India, which analysts believe will provide serious competition to the existing payment solutions like Paytm. Similarly, Google already provides payment solutions namely Tez, based on the Unified Payment Interface (UPI) of India.

What we also hope to see in the coming years is the digital services expansion of telecom companies – Telkomsel, Indosat and XL to further strengthen their mobile wallet / money solutions, which will help them to seriously compete or collaborate with banks and technology companies.

Q *Of the following global and domestic technology companies, which do you consider as emerging banking competitors?*

Figure 28: Emerging banking competitors



64%

of respondents believe that the IT environment of their current Organisation is moderately effective for supporting their digital strategy

76%

of respondents have plans to increase the use of agile development processes in the coming years

72%

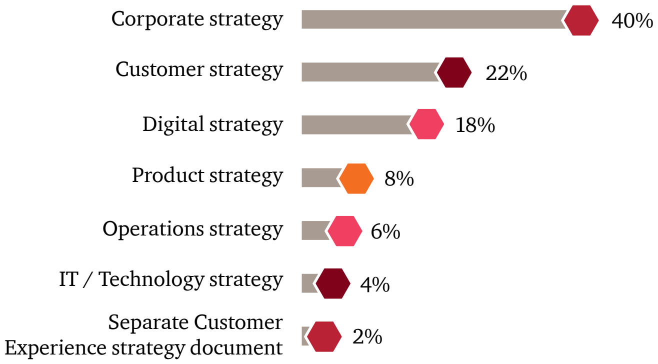
of respondents indicated that Go-Jek is an emerging serious competitor to Indonesian banks

Customer satisfaction and loyalty is driving customer experience strategy

1.12

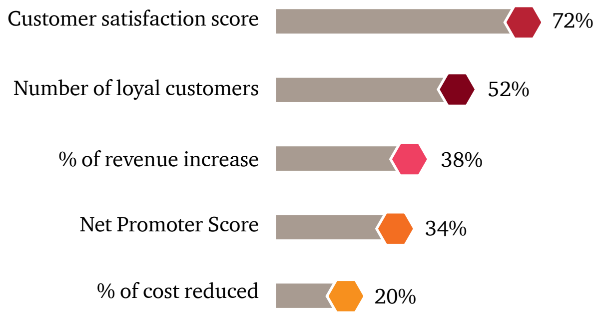
Q *Your customer experience strategy is part of which of the following?*

Figure 29: Customer experience strategy is part of business strategy



Q *What are the various ways in which you measure the customer experience?*

Figure 30: Ways to measure customer experience

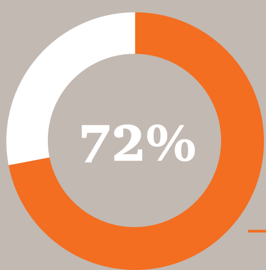


Customer expectations today are being shaped by global trends, new technology and innovative consumer offers. This is influencing the way customers make choices, including the way in which they bank and buy insurance. Poor customer experience is one of the top two reasons customers leave their banks today, and disruptors are taking note.

Disruptors are focusing on the changing customer trends and expectations, and how to meet them. They have consolidated customer data, updated technologies and a singular focus on customer experience, which is changing the way financial services are provided to customers today. Financial institutions like banks should be worried – the disruptors are emerging from every angle of their value chain. From providing funding through crowd-sourcing to electronic approvals of mortgages within minutes, they deliver a better experience to their customers and have lower costs, which is fundamentally challenging the existing business model of banks.

Customer experience is at the heart of success in the future. Technology on the go has changed the way customers want to interact today. They are looking for a good, seamless experience, and non-traditional players have started offering exactly that in the financial services space. Customer experience is critical to Indonesian bankers, as almost 94% of the respondents have indicated that customer experience strategy is part of their business strategy in the form of either corporate strategy (40%) or customer strategy (22%) or digital strategy (18%) or product strategy (8%) or operations strategy (6%) (refer to Figure 29).

Measurement of customer experience is vital to know whether the strategy is working in accordance with the objectives or not. 72% of the respondents believe the customer satisfaction score is the most important measure of customer experience, closely followed by 52% for number of loyal customers. Surprisingly, revenue increase comes third with 38% (refer to Figure 30). In the future, we believe net promoter score will gain importance as the digital strategy of banks mature.

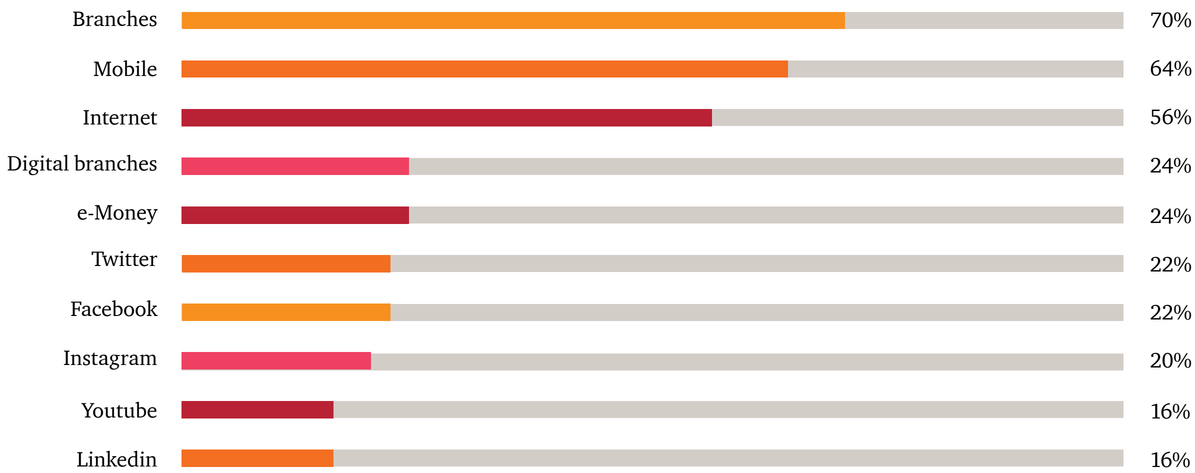


of respondents believe the customer satisfaction score is the most important measure of customer experience

1.13 Physical branches still provide the best experience followed closely by the mobile channel

Q *How do you rate the experience of your customers across your digital channels?*

Figure 31: Experience of customers across digital channels



Give customers a good experience and they will buy more or transact more, be more loyal and share their experience with friends. That is what every company strives for. So why are so many consumers disappointed? Call it an experience disconnect: companies tout the latest technology or snappy design, but they have not focused on — or invested in — the aspects of customer experience that are the most meaningful.

What truly makes for a good experience? Speed. Convenience. Consistency. Friendliness. And one big connector: human touch – that is, creating real connections by making technology feel more human and giving employees what they need to create better customer experiences. People are increasingly loyal to the organisations, products, brands and devices that consistently provide exceptional value with minimum friction or stress.

The challenge: use new technology with purpose to make the experience feel more human – without creating frustrations for customers and while empowering employees. There is a formula for getting it right. The right culture, new ways of working and empowered talent are key to unlocking revenue opportunities through better experience. However, technology alone will not cure what ails customer experience.

- **Customers have demands. They are not what you think.** Technologies and improvements that increase speed, convenience, friendliness and knowledge – core demands of consumers – are openings for companies to improve how people interact with, embrace and spend with their brand.

- **Customers generate revenue. Employees drive the experience.** Reduce friction for consumers and empower employees to bring higher customer satisfaction, resulting in more forgiveness if things go wrong. This may require new ways of working, more focus on the employee experience and a sophisticated view of the human and machine relationship in customer experiences.

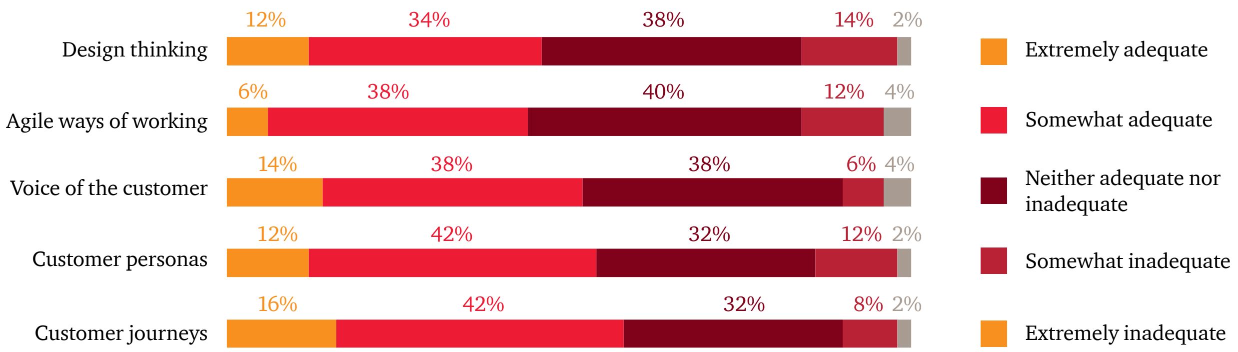
According to the assessment of Indonesian bankers, branches, mobile and internet channels lead on customer experience with around 70%, 64% and 56% respondents indicating so respectively (refer to Figure 31). Digital branches, e-Money and social media channels still need some work to enhance their customer experience. Indonesia, as a country with one of the highest social media customer bases, requires Indonesian banks to leverage social media channels to acquire and service banking customers and provide them with an enhanced customer experience.

Customer experience concepts are still under development

1.14

Q *Which of the following concepts are being developed as part of your customer experience strategy?*

Figure 32: Development of customer experience concepts



Design thinking

Design thinking is a method of human-centered design of new products and services. The key elements of this method are obtaining deep insight into a human's (user's) experience and his/her problems/struggles, creating various ideas and quick-prototyping the pilot of the product/service. The human (end user) is the key in the entire process.

Customer personas

Personas are a powerful technique to capture knowledge about the users and customers of a service or product. They help guide decisions about product features, navigation, interactions and even visual design. Personas are a way to capture and share details about what a typical day looks like and what sorts of pains, needs and desired outcomes the personas have as they do their work that can help plan the changes.

Voice of the customer

"Voice of the Customer" is a misnomer—many believe that the phrase means companies should go ask customers what they want. The real question is: What are your customers trying to DO with the solutions you offer? Or What job are they trying to accomplish with your solution?

Agile ways of working

Value delivery – Emphasizes short release cycles, frequent demos or working software, and continuous business involvement

Collaboration and empowerment – Recognizes that people, rather than process, often determine success in software development projects, enabling tight integration between software development, testing, and business functions

Quality – "Build Quality In" throughout the entire development lifecycle, not just an activity performed at the end

Lean operations – Promotes "Fail Fast" and "Reduce Waste Through Automation" philosophies through practices such as Test Driven Development and Continuous Integration practices

Visibility and control – Provides greater visibility through short release cycles, consistent visibility and quality across teams through Definition of "Done"

Adaptability – Emphasizes continuous refinement of release planning to increase responsiveness to changing market and business needs

Customer journeys

Once you have identified your personas, it's time to identify the key moments and decision points on the buying journey and then design the experience accordingly. By understanding the behaviours, preferences, media consumption habits, technology adoption patterns and detailed day-in-the-life routines of these audiences, you can begin designing a journey map that becomes the backbone of your customer experience architecture. The journey highlights the different touch points across your channels and others.

1.15 Consistent customer experience across all channels is still not a priority

Q *Customer-centric Organisations are structured around the experiences of their customers. Please indicate with which of the following statements you agree?*

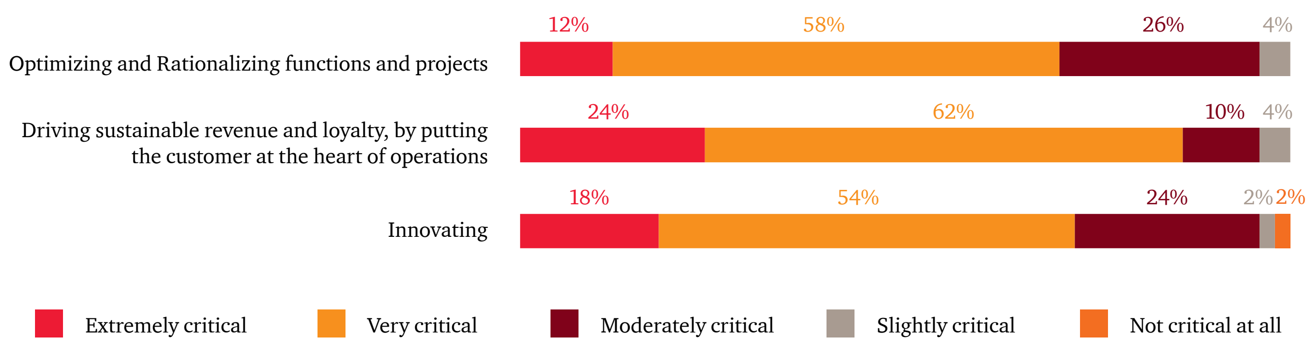
Figure 33: Percentage of respondents who strongly and somewhat agree

Indonesian bankers realize the importance of structuring their organisations around the experiences they want to create for their customers. Most of the respondents agree that it is important to structure organisation, products, services, processes and type of customers based on the experiences they want to provide the customer. Consistent customer experience across channels is still not a priority and we hope it will improve in the coming years (refer to Figure 33).

According to Indonesian bankers, customer experience is also critical for banks to drive sustainable revenue and loyalty by putting the customer at the heart of operations. Customer experience-based innovation and optimizing functions and projects come close second (refer to Figure 34).

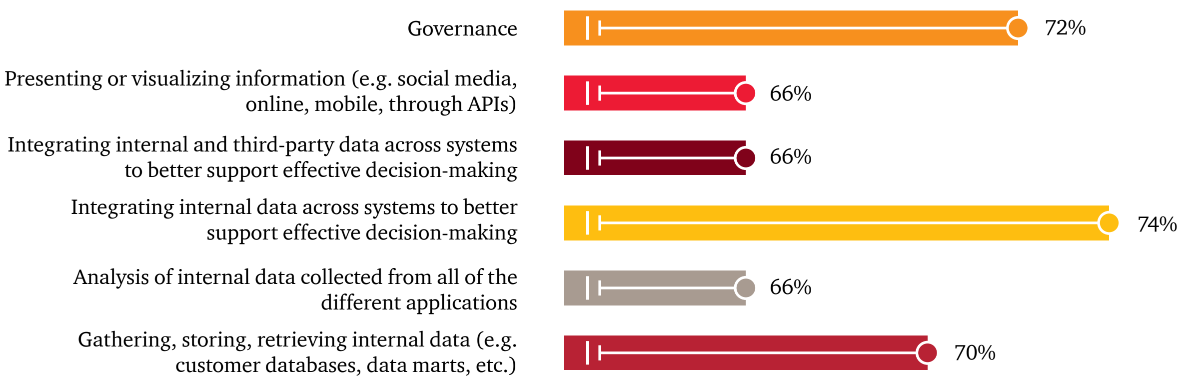
Q *In your Organisation, customer experience is critical to which of the following?*

Figure 34: Customer experience is critical to driving sustainable revenue



Q *Please select the areas where you plan to invest over the next 2–3 years, with respect to managing your data?*

Figure 35: Areas of investment in data management for the next 2-3 years



Imagine having the ability to see everything, everywhere. All the time. Every interaction with customers. Every moving part in the supply chain. Every financial transaction, anywhere in the world. Imagine being able to process all that information instantly, and use the insight to improve customer service, build products faster, or spot fraud.

Now imagine if that data could help you see into the future, giving you the ability to react to events before they happen, to stop customer churn, to predict and stop financial failures. Also imagine if analytics could open up totally new revenue streams for you. Taking the data in your business and finding ways to monetize it or creating entirely new products and offers you haven't even dreamed of yet. Doesn't it feel like you have a superpower? The good news is, it's a superpower we can all have. Data flows through your business every day. It is an asset you already own.

Indonesian bankers have also realized the importance of investing in managing the customer, transactional, financial, operational data they have, such that they will be able to monetize the data in the coming two to three years. Currently, data resides in different databases in silos and hence the ability to integrate and analyze the data across internal applications as well as external data sources to identify business insights is one of the highest area where banks are going to invest in the next two to three years, with almost 74% of respondents indicating so. Closely related to business insights is the ability to gather, store and retrieve data from different sources, where 70% of the respondents indicated they would be investing in the future.

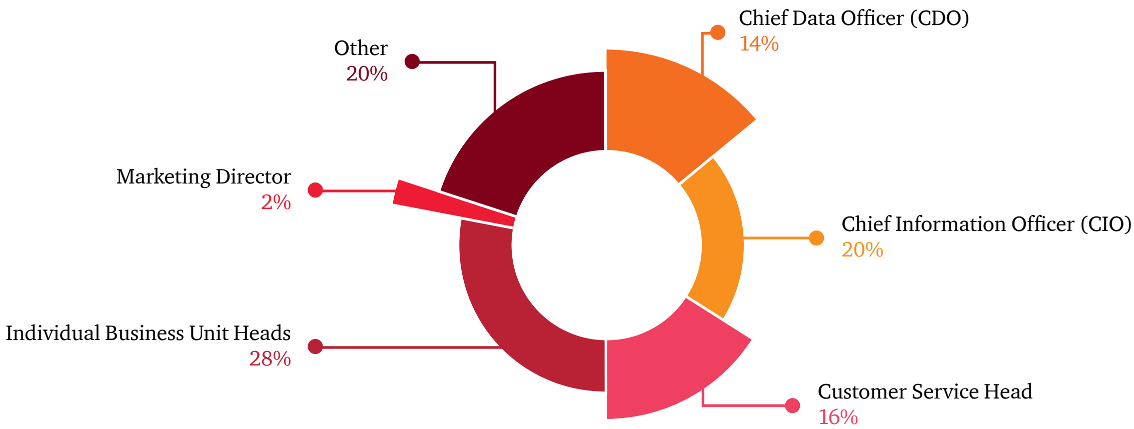
Proliferation of data also brings in the challenge of data governance. How can banks ensure data ownership, data integrity, data quality, data privacy and ensure there is trust in the bank's data? This is the reason why Indonesian banks are going to invest in setting up data governance processes, tools, and Organisation, with over 72% of respondents indicating so (refer to Figure 35).

> "Banks are going to invest in building capabilities to integrate and analyze data from different sources to gain business insights"

1.17 Responsibility for managing customer data is spread across the Organisation

Q *Who in your Organisation is responsible for the completeness of the customer-related data?*

Figure 36: Person/Unit in organisation responsible for customer related data



Banks everywhere face a growing challenge: how to use the vast amounts of data about individuals they now gather to create greater value for themselves and their customers while not crossing the line into unethical, unlawful, or unwanted use. Often, the sheer scale of their data is compounded by the reality data often resides in many different systems and silos—both inside the organisation and with external partners. These silos could be business units, lines of business, functions such as marketing or customer service, or even separate databases within the same function. For banks to effectively balance opportunity and risk, they should build data-use governance capabilities into their organisation structure.

Before a bank can unlock the value in its data, it needs the answers to seven questions:

- What data do we have?
- Where does it reside?
- Is data being collected broadly and retained indefinitely by default, or has collection and retention been tailored?
- How is that data being used, and by whom?
- Is that use appropriate and optimal for that data, and is the data optimal for its use?
- Is data being used consistent with legal obligations, customer expectations, and the company's values?
- How might the data be used differently in the future?

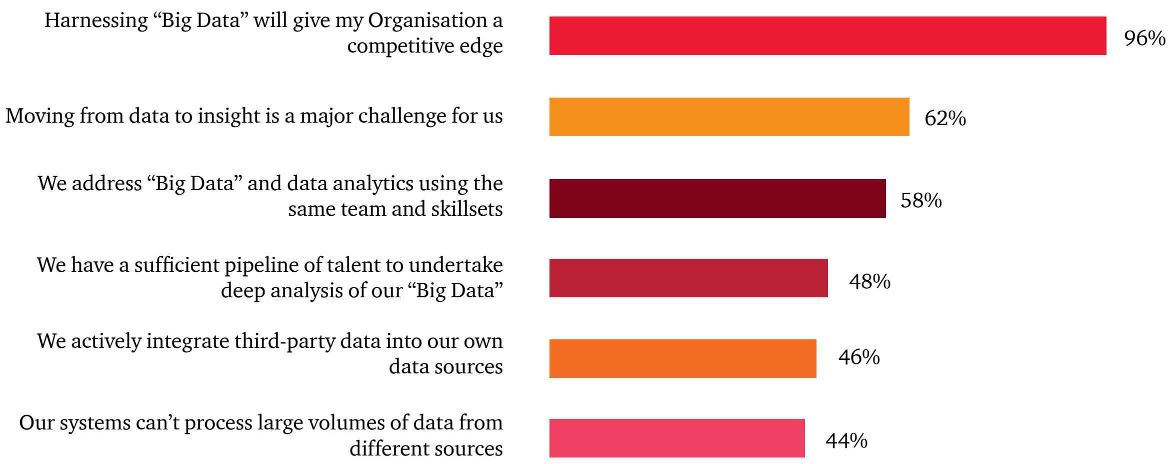
Answering these questions is not easy, especially in larger organisations whose data and data use is widely dispersed. Banks should build a governance structure that enables them to develop and maintain the practices and capabilities needed to manage data use more effectively. This data-use governance structure should be holistic and enterprise-wide, as well as fluid and responsive so it can flex with business drivers or regulatory changes. It should align with the company's existing data-governance and data-protection governance structures, as well as help support the banks's overarching information governance.

According to our survey respondents, there is no single governance structure or role which is responsible for ensuring completeness of customer data across the organisation (refer to Figure 36). Around 28% of the respondents believe individual business unit heads should be responsible for the completeness of the customer data, while 20% of the respondents believe CIO is responsible for the completeness of the customer data. We see that as the customer related data is not centrally managed by one team, the ability of banks to create customer insights and thereby act on it is also hampered. Hopefully as more master data management and data governance initiatives are taken up within the banks, we will see greater maturity and centralized teams responsible for managing and ensuring completeness of customer data.

Insights generated by Big Data analysis will be a key differentiator for banks in future

Q *To what extent do you agree or disagree with the following statements about Big Data and your Organisation?*

Figure 37: Big data in Indonesian banks



Data is everywhere and transforming the way we live our lives – with every click on a web browser, text message, mobile bank transaction or purchase, information is being collected, stored and analyzed. The ability of companies to process and mine information from a variety of sources has evolved significantly in recent years; the sheer volume of data available to analyse is transformational in itself. The shift to information management techniques like Big Data has signaled a new way of doing business – one that is driven by practical, actionable insights and data based decision-making. Big data capabilities, large volumes of varied sources of data – both internal and from third parties, can help businesses get higher definition "intelligence at the moment" that was previously unattainable and at a much faster pace. This insight can help inform strategy decisions, spur innovation, inspire new products, enhance customer relationships, uncover fraud, bolster operations, predict expected behaviors and build competitive advantage. Learning how to harness bank's data and interpret it insightfully requires a cultural shift in the way bank's think about data analytics.

An overwhelming majority of Indonesian bankers, around 96% respondents, believe that harnessing big data will give their organisations a competitive edge. This is also evident in the investments made and planned in big data platforms across the banking sector. About 62% of the respondents believe processing data and generating insights is a major challenge. This we believe stems from the fact that the quality of data in Indonesian banks is still fairly low. Around 58% of the respondents believe that they address big data and data analytics using the same team and skillsets. As the big data platforms and teams mature, we believe more specialist roles like data scientists will emerge and there will be a differentiation between big data and analytics teams. In terms of people capability, Indonesian banks are fairly comfortable with big data talent pipeline, with around 48% indicating that they have sufficient pipeline of big data talent (refer to Figure 37).

1.19 Data quality is a major challenge which inhibits the ability to generate business insights

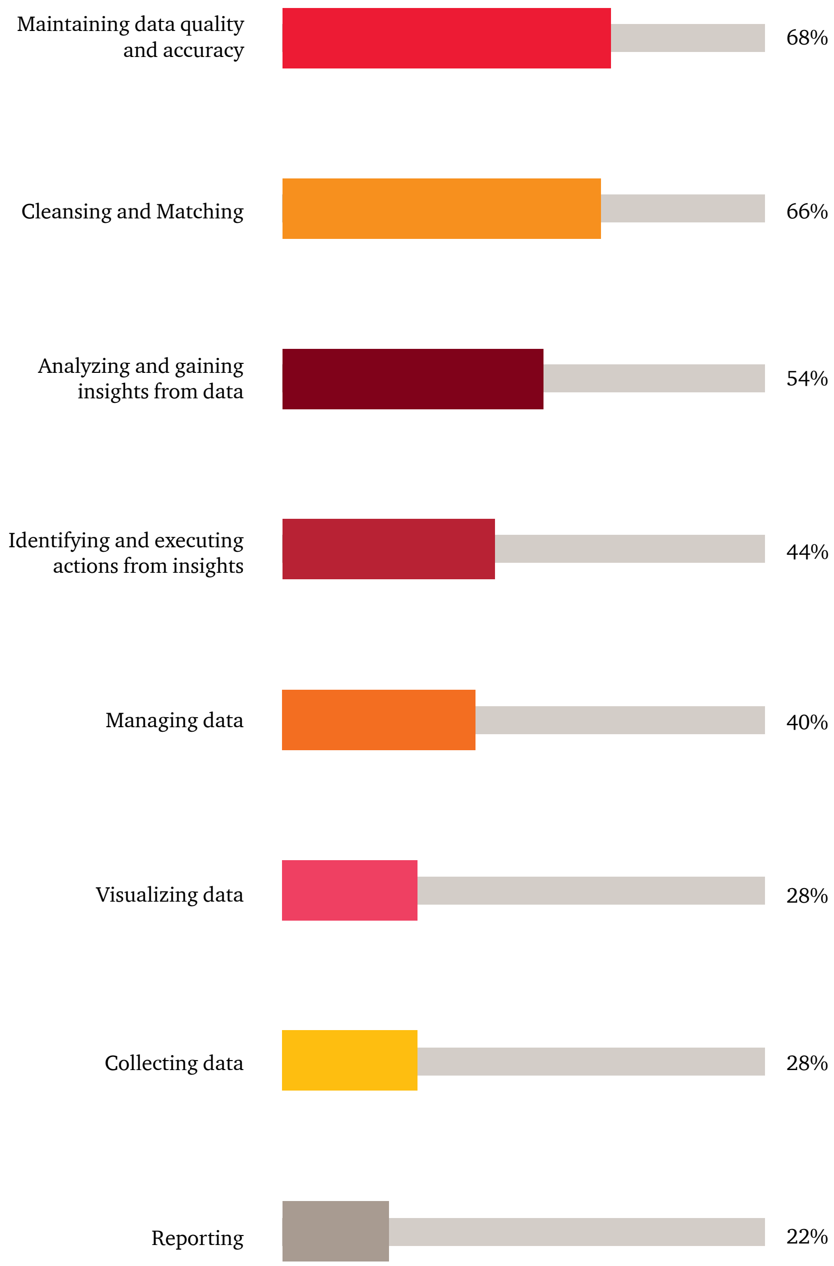
Everybody wants better quality of data. Some organisations hope to improve data quality by moving data from legacy systems to off the shelf products. Other organisations use data profiling or data cleansing tools to unearth dirty data, and then cleanse it with an extract/transform/load (ETL) tool for data warehouse (DW) applications. All of these technology-oriented data quality improvement efforts are commendable—and definitely a step in the right direction. However, technology solutions alone cannot eradicate the root causes of poor quality data because poor quality data is not as much an IT problem as it is a business problem. Other enterprise-wide disciplines must be developed, taught, implemented, and enforced to improve data quality in a holistic, cross-organisational way.

Around 68% of our survey respondents believe that maintaining data quality and accuracy is one of the biggest challenges. Lack of clear data related ownership structure along with challenges of integration with legacy technologies create data quality and accuracy challenges for Indonesian banks. This is closely followed by data cleansing and matching challenges with around 66% of the respondents indicating so. Both these challenges make it very difficult to generate insights from the data. More than half of the respondents believe that analyzing and gaining insights from available data is the third biggest challenge.

Visualizing, collecting and reporting data are the least challenging activities for Indonesian bankers (refer to Figure 38).

Q *Which of the following areas presents the biggest challenges in terms of reaping the benefits from your data?*

Figure 38: Data management challenges



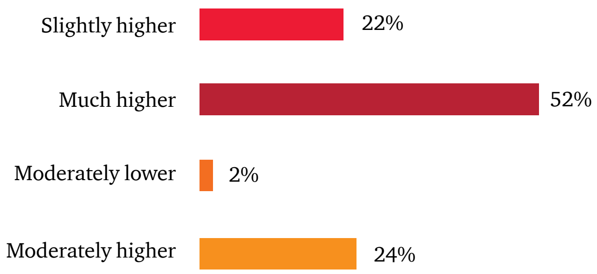
Data privacy risks are poised to be much higher in future

Data privacy is an urgent issue for both consumers and businesses. With each high-profile breach that makes the headlines, customers increasingly worry whether their personal information is protected and being used appropriately. Businesses are also on notice: recent disclosures about government and corporate practices have pushed privacy to the forefront.

However, amidst the growing scrutiny, are business leaders looking at the glass half-empty? By considering only what privacy safeguards can prevent – customer loss, brand damage, fines, litigation – they miss out on what the right strategy can enable. Customer data is one of your most valuable assets. Companies that not only protect that data but empower customers to have a say in its use build trust in their privacy programs – and their business.

Q *With the proliferation of digital channels for customer acquisition and service, what is the risk level for issues relating to data privacy in the future?*

Figure 39: Data privacy risks in future



Indonesian bankers are also very concerned about the challenges of data privacy risks with the proliferation of the digital channels. 52% of respondents believe that the data privacy risk will be much higher in future, followed by another 24% who believe data privacy risks will be moderately higher (refer to Figure 39).

Rethinking privacy is just one key part to keeping pace with today's changing realities. As part of the bigger picture, companies must reevaluate their approach to cybersecurity, understanding the new threats and opportunities a digital world brings.

The way your business thinks about data privacy – and the extent that is recognized outside of the organisation – is important today. Privacy can be seen as a differentiator, with organisations calling out companies they see as putting customers first when it comes to privacy.

Q *How do you rate your current internal processes/policies for handling your customer information?*

Figure 40: State of current customer handling processes / policies in Indonesian banks

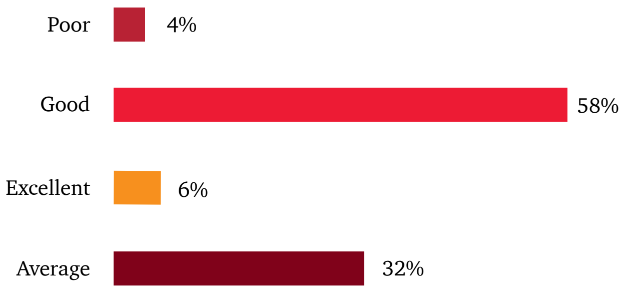
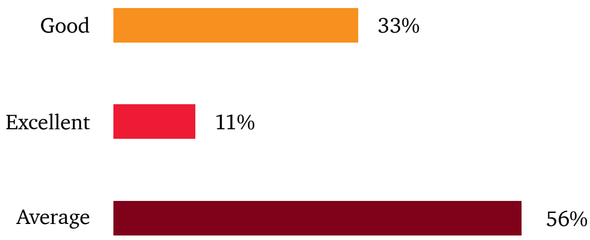


Figure 41: State of current customer handling processes / policies in large Indonesian banks



Banks in Indonesia have some work to do in the way customer data is handled by their internal processes/ policies. 58% of respondents have indicated that their current processes/policies are only Good at handling customer information (refer to Figure 40). The problem is more acute with large banks, where only 33% of the respondents have indicated that their current processes/policies are Good at handling customer information (refer to Figure 41).

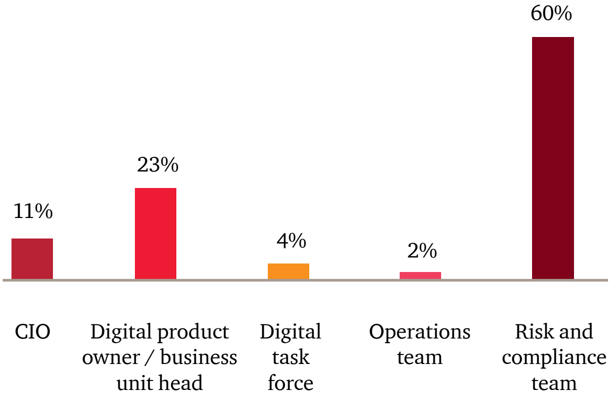
1.21 Risk management teams are still trying to adapt to digital innovation

The present is marked by such change and innovation that it is described in revolutionary terms: the fourth industrial revolution, the second machine age, the cognitive age. And history teaches us that when innovation rises, so do risks. As organisations increasingly face pressure to innovate, risk executives need to help their organisations strike the right risk – reward balance to succeed. After all, organisations that effectively manage innovation risk are more effective innovators.

As the digital innovation of Indonesian banks is still in the beginning stage, risk management organisations are also trying to evaluate the impact of digital on their existing risk management practices and are also in the process of upskilling their teams to be ready for the future.

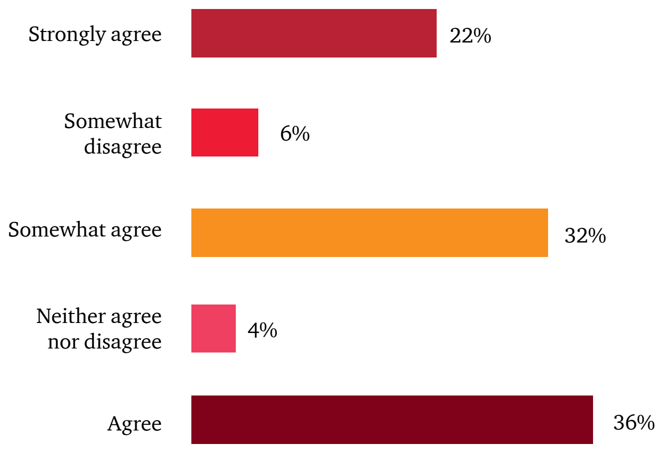
Q *Who in your Organisation is responsible to for managing the risks arising out of digital initiatives?*

Figure 42: Role responsible for managing risks arising out of digital initiatives



Q *Is your Risk and Compliance team aligned to your digital aspirations in terms of safeguarding initiatives against possible risks?*

Figure 43: Alignment of risk and compliance teams to digital aspirations



Responsibility for risk management for digital initiatives is still split in Indonesian banks with 60% of the respondents indicating the risk and compliance team is responsible for managing risks out of digital initiatives. Almost 33% of respondents believe the risk management responsibility is split among digital business teams/product owners and the CIO (refer to Figure 42).

Our survey also indicates that the risk and compliance team alignment with the digital aspirations of the bank still needs to improve. 58% of the respondents indicate their risk and compliance management teams are aligned to their digital aspirations by effectively safeguarding the digital initiatives against possible risks (regulatory/business/reputational/ operational/ financial/strategic) (refer to Figure 43).

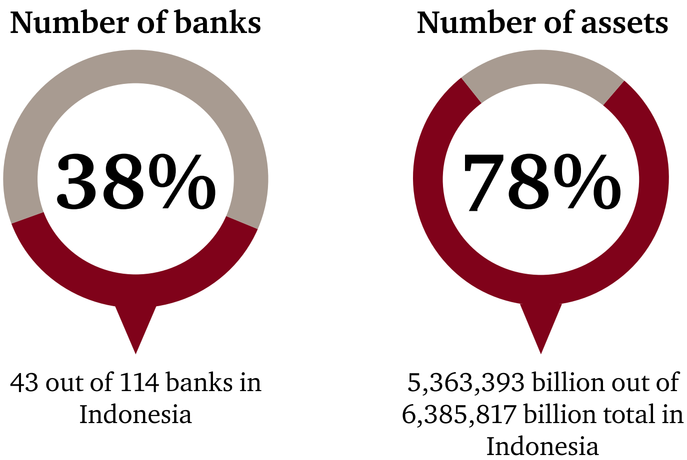
Risk executives must weigh in very early on the digital initiatives, as the pace of innovation accelerates and the appetite for the accompanying risk grows. Risk assessing opportunities at inception of the digital initiatives and making critical go/no-go decisions jointly with the business along the way will help keep digital-related risks at the forefront throughout the innovation lifecycle.


Live the music
Love the place

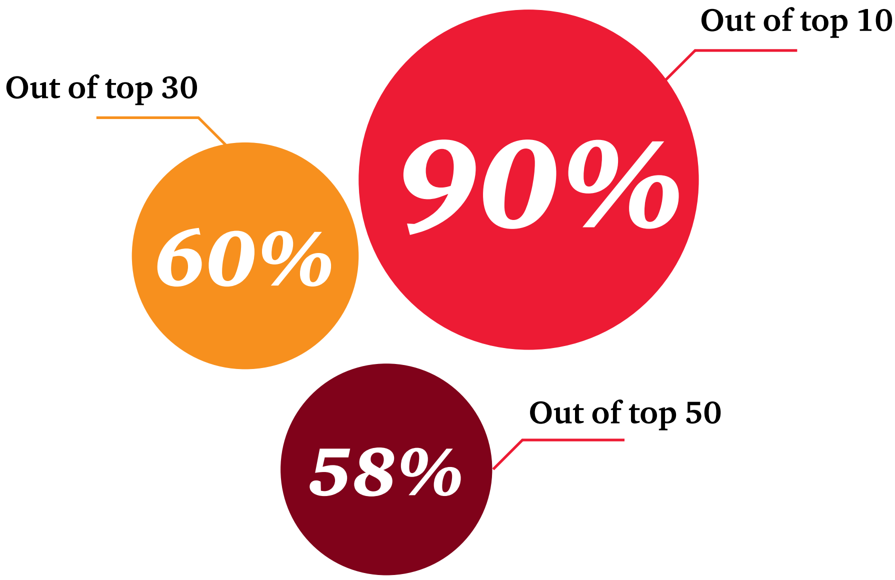
2.

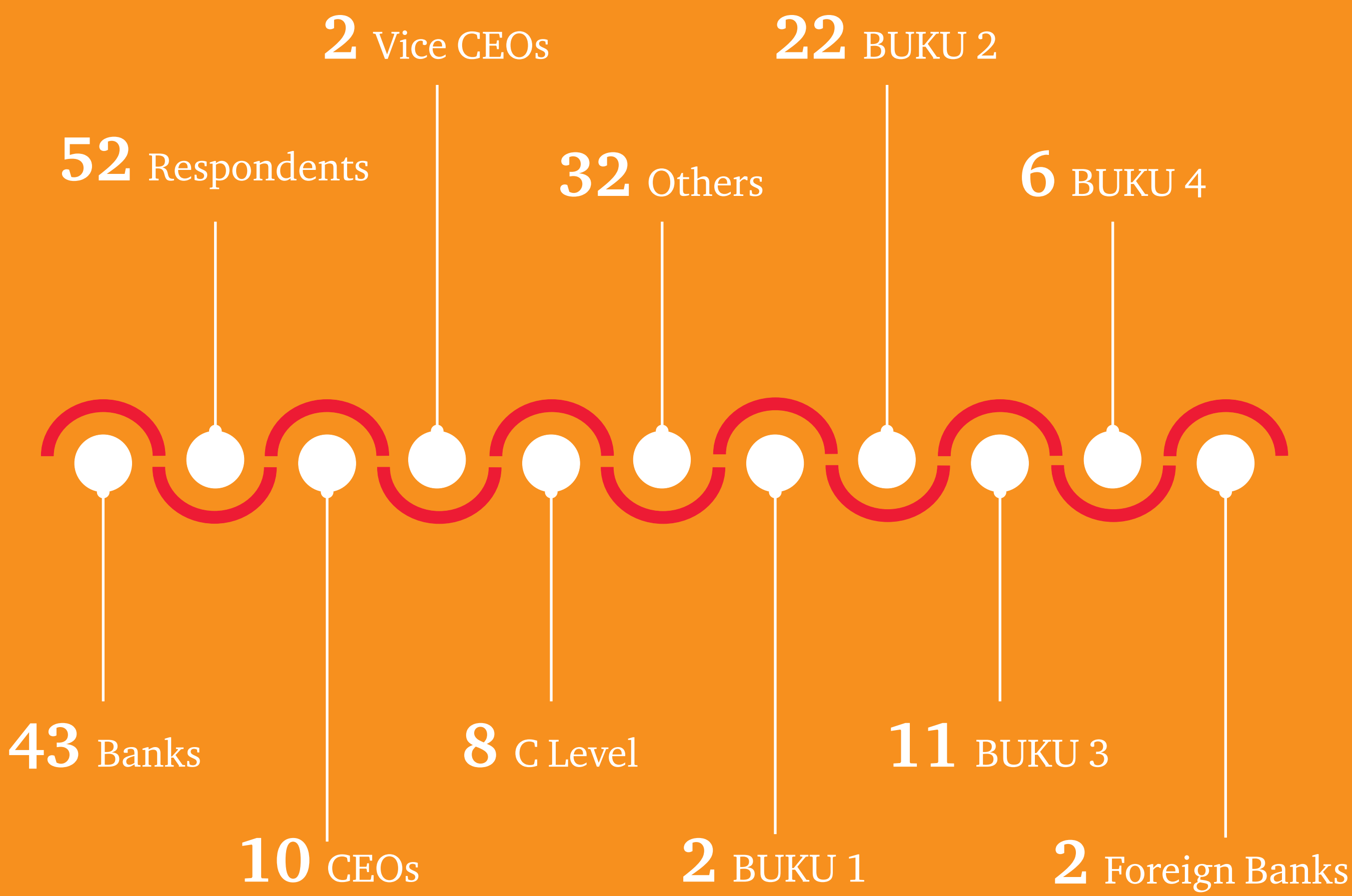
Survey Respondent Details

The coverage of our recent response:



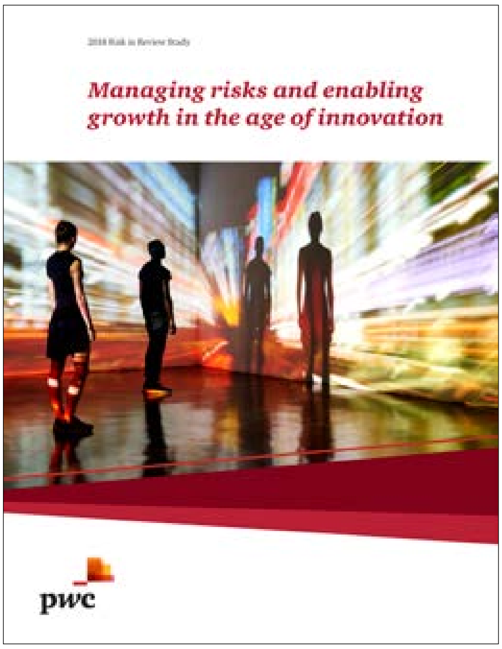
From the top 50 banks in Indonesia, we may summarize the response rate as follows:




2 Vice CEOs
22 BUKU 2
52 Respondents
32 Others
6 BUKU 4
43 Banks
8 C Level
11 BUKU 3
10 CEOs
2 BUKU 1
2 Foreign Banks

3. Further Reading

3.1 2018 Risk in Review Study



How can risk executives embrace innovation while preparing for unknown risks such as a self-driving car commandeered by hackers, data analytics software that unintentionally reflects biases, or autonomous weapons that cause accidental casualties? PwC explores how risk leaders can effectively manage innovation-related risk and by doing so, drive growth and performance. Key actions include linking an organisation's risk program to corporate strategy and periodically adjusting risk appetite and tolerances to align with innovation risk.

3.2 Tech breakthroughs megatrend

The technological breakthroughs megatrend is manifesting itself in a proliferation of technologies. To remain relevant and to succeed, emerging technology strategy needs to be a part of every company's corporate strategy. The most pertinent technologies—and the corresponding strategy—will of course vary from company to company; but our analysis of more than 150 emerging technologies pinpoints the eight that most C-suites should start with. Here's a look at what sets those technologies apart—and what business leaders now need to do about them, and emerging technologies in general.

2018 Digital Banking Consumer Survey

3.3

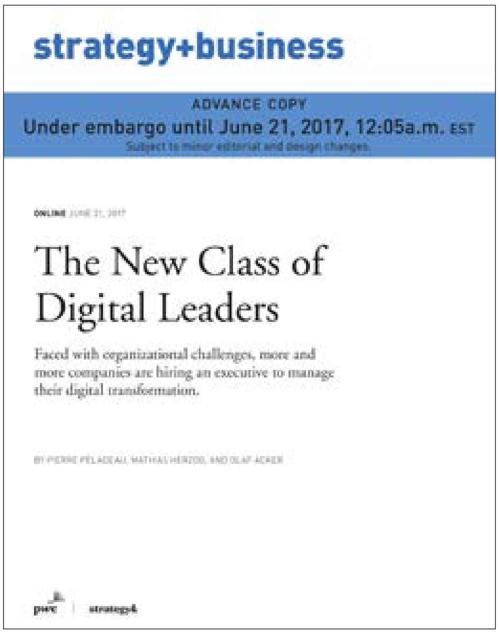
Consumer banking habits have continued to evolve, and users have many choices for how and where they bank. New devices and digital banking tools give consumers the convenience of banking on the go, but the traditional banking center still has plenty of fans for certain kinds of transactions. In our 2017 survey, we saw the rise of "omni-digital" consumers: those who prefer to interact with their bank digitally, without a preference for using a laptop, a tablet, or a smartphone. However, now we see that a clear preference has been forming, and the smartphone has won the contest. One conclusion: banks need to think "mobile first" to win in this market.

Banking Survey Report 2018

3.4

Technology 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.

3.5 2018 Digital Consumer in Indonesia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The New Class of Digital Leaders

Faced with organizational challenges, more and more companies are hiring an executive to manage their digital transformation.

BY PIERRE PÉLADEAU, MATHIAS HERZOG, AND OLAF ACKER

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Agrowing number of companies have embraced the need for strong digital leaders. Our 2016 study of chief digital officers (CDOs), which analyzed the presence of such leaders among the world's 2,500 largest public companies, revealed that 19 percent of these companies have now designated an executive to lead their digital agenda. This number is up from just 6 percent of companies in our 2015 study. And the uptick has gained momentum in recent years: Sixty percent of the digital leaders we identified in our most recent study have been appointed since 2015.

3.6 2018 Technological Readiness Ranking

The Economist Intelligence Unit's (EIU) Country Forecast service provides comprehensive medium- and long-term technological readiness forecasts for 82 of the world's largest economies. The highlights of the report are the top ten of its index filled by Finland, Sweden, west European countries, Australia, and Asia's advanced economies. The report sees an increasing score and position for Indonesia, which scored 4.375 in 2018, an increase from 3.25 in 2017, and the ranking rose to 67.

4.

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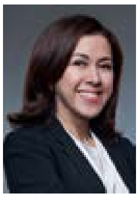

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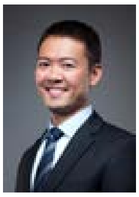

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