

## Embracing a new pace of change

- How robotics and cognitive automation will transform the insurance industry
- The biggest challenges facing Southeast Asian banks today
- Through the regulatory looking glass
- Five key lessons for Asian banks' BCBS 239 compliance journey



## In this issue

- 03 **How robotics and cognitive automation will transform the insurance industry**
- 06 **The biggest challenges facing Southeast Asian banks today**
- 09 **Through the regulatory looking glass**
- 12 **Five key lessons for Asian banks' BCBS 239 compliance journey**

To receive a copy of *FSIReview* or the latest updates in the financial services industry, subscribe to our mailing list at [sgindustries@deloitte.com](mailto:sgindustries@deloitte.com).

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited ("DTTL"), its global network of member firms, and their related entities. DTTL (also referred to as "Deloitte Global") and each of its member firms are legally separate and independent entities. DTTL does not provide services to clients. Please see [www.deloitte.com/about](http://www.deloitte.com/about) to learn more.

Deloitte is a leading global provider of audit and assurance, consulting, financial advisory, risk advisory, tax and related services. Our network of member firms in more than 150 countries and territories serves four out of five Fortune Global 500® companies. Learn how Deloitte's approximately 264,000 people make an impact that matters at [www.deloitte.com](http://www.deloitte.com).

This communication contains general information only, and none of Deloitte Touche Tohmatsu Limited, its member firms, or their related entities (collectively, the "Deloitte Network") is, by means of this communication, rendering professional advice or services. Before making any decision or taking any action that may affect your finances or your business, you should consult a qualified professional adviser. No entity in the Deloitte Network shall be responsible for any loss whatsoever sustained by any person who relies on this communication.



# Foreword

In the first quarter of the year, the impact that FinTech is having on business model sustainability was a common theme among regulators and businesses alike. From our conversations with financial services executives, a majority of financial institutions, banks in particular, cited digital transformation as a priority this year. As a result, we've seen increasing investment in technology continue to drive efficiency and strengthen risk management and compliance capabilities.

In our first article, we take a look at robotic process automation (RPA) as an emerging technology that is gaining traction in the insurance sector. While banks have begun employing RPA to automate and speed up processes, insurers in Asia are also making strides to automate their business. Our article highlights the long-term business implications of RPA beyond robotics alone and how insurance companies will need to reconfigure its operating model and adopt a more customer-centric approach in order to capitalise on the opportunities unlocked through cognitive automation.

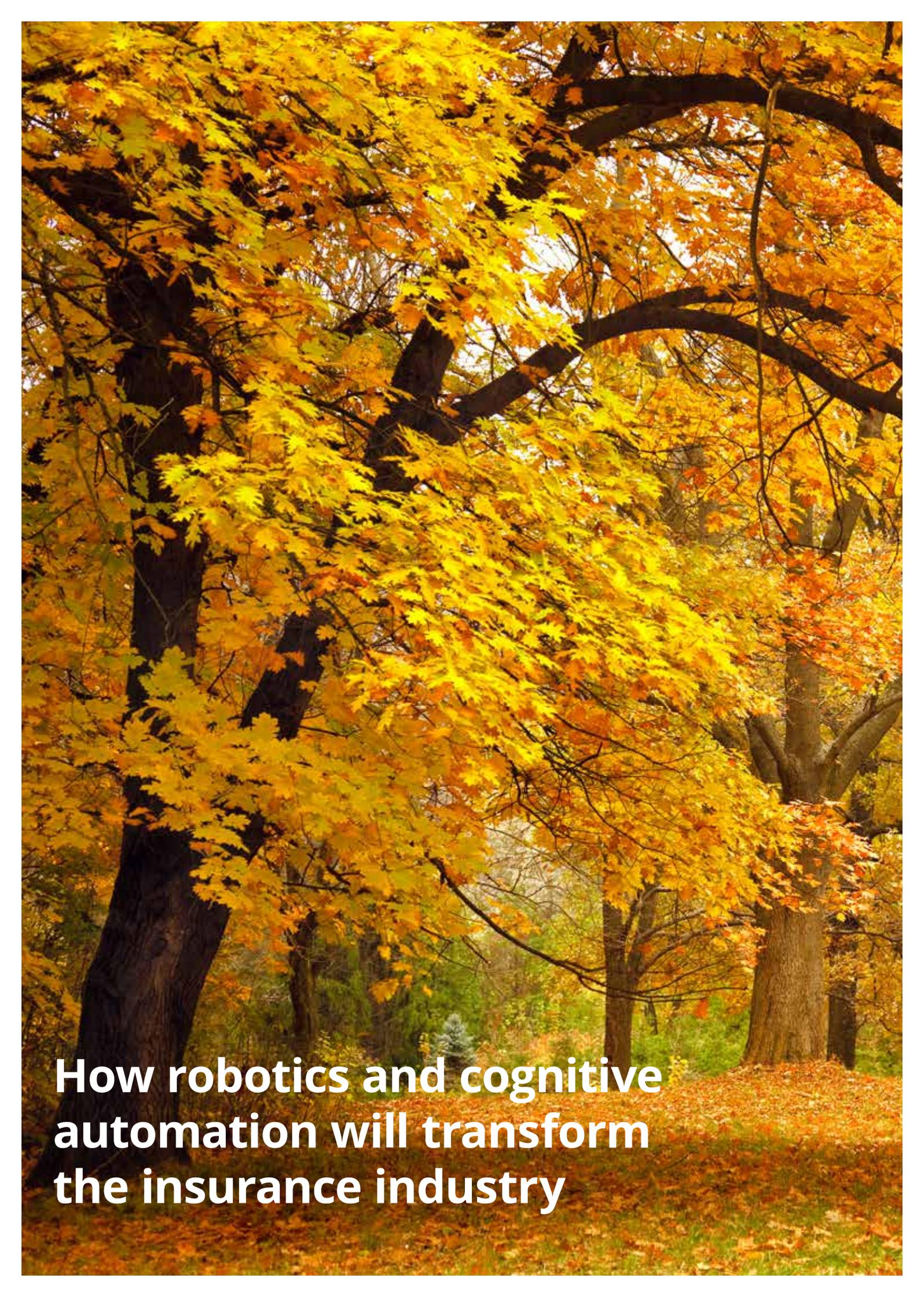
Next, we highlight the biggest challenges banks facing banks today. Adapted from Deloitte Global's *Banking Outlook 2018*, we've put a Southeast Asian spin on the challenges most banks face in balancing the need to restructure their foundations for the long-term with finding near-term growth.

2017 was an eventful year for regulatory developments both globally and in Southeast Asia. Glancing into the proverbial "looking glass", 2018 beckons with perhaps even more exciting new market and regulatory developments and initiatives. To help steer you through the evolving regulatory environment, we've listed the top five areas that financial institutions in the region should look out for the remainder of the year. We round things off with five key lessons for Asian banks' BCBS 239 compliance journey.

We hope that you will find this edition of the *FSIReview* an interesting and insightful read.

## Ho Kok Yong

Financial Services Leader  
Deloitte Southeast Asia

A photograph of a forest in autumn. The trees are covered in bright yellow and orange leaves, creating a dense canopy. The ground is covered in fallen leaves. The text is overlaid in the bottom left corner.

**How robotics and cognitive automation will transform the insurance industry**

The use of robots to drive tangible business benefits is very much a reality today. According to Transparency Market Research, the global IT-enabled robotic process automation (RPA) market is expected to reach US\$5 billion by 2020.

RPA is just the beginning: Cognitive capabilities that enable machines to perform tasks reserved for human intelligence are now being leveraged with robotics. Robotics and cognitive automation (R&CA) is expected to foster greater collaboration between humans and machine by both automating repetitive tasks and enhancing the quality of jobs.

#### **Automation in the insurance sector**

RPA technology is seeing widespread adoption across industries and insurers in Asia are making strides to automate their business. Successful RPA adoption in the insurance sector can transform the actuarial, risk and finance functions. Asian insurers including Mitsui Sumitomo, Tokio Marine, Sompo Insurance and Ping An are harnessing R&CA to reduce administrative tasks such as responding to inquiries, processing insurance applications as well as supporting and streamlining claims processing and the underwriting process. NTUC Income in Singapore announced in 2017 that it plans to roll-out RC&A technology to improve its pre- and post-hospitalisation claims process. The benefits of R&CA go far beyond just efficiency gains and its potential across the insurance value chain is significant. It can also support the adoption of innovative value proposition to simplify the customer journey and enhance distribution efficiency.

It is important that insurers understand the long-term business implications of R&CA beyond robotics alone. Insurance companies will need to reconfigure its operating model and adopt a more customer-centric approach in order to capitalise on the opportunities unlocked through cognitive automation.

#### **Impacts to the insurance operating model: People**

As insurers automate volume-heavy transactions and reporting processes, previously done by humans, companies will need to re-deploy FTEs into more complex, judgement-intensive roles. Recruitment and training engines will also have to be upgraded to hire and train skilled FTEs with competencies to handle complex decision-making roles.

It is important to note that technology will not replace talent as a sustainable competitive advantage. Instead, organisations will need to strike a balance between transitioning to R&CA, making required FTE adjustments and upgrading the skills of existing workforce.



#### Impacts to the insurance operating model: Technology

Insurers should also prepare themselves for the imminent transformation by reconfiguring their IT systems. The transformation will be an extension of the journey that has begun in such areas as RPA and advanced analytics enablement, most likely including:

- **Modular sourcing:** The R&CA technology industry is now engaged in a start-up-like phase, in which nimble firms that provide specialised technological capabilities are well positioned to disrupt the incumbents.
- **Integrated systems:** R&CA technology has the inherent capability to iteratively self-learn and generate insights through access to data from multiple sources.
- **Transparency and control:** Cognitive technologies and systems will undoubtedly partner with humans in the near future.

The technological landscape is evolving quickly, and the implication for insurers is the need to identify and source relevant capabilities to allow for better task design and an appropriate division of labour between humans and machines.

#### Staying focused on customer centricity in an R&CA world

Insurers serve a diverse demographic of clients and customer interaction preferences are changing. Customer expectations for convenience through consistent information and service levels across multiple channels is likely to drive insurers to mirror non-insurance industry experiences, such as online retail and banking.

Insurers have already started to employ advanced analytics to gain deeper customer insights. However, the volume, unstructured nature, and velocity of data being generated are beyond the realm of traditional analytic processes. The benefit of cognitive technologies in insurance is that it can solve problems that traditional analytics cannot readily address. R&CA will help empower insurers with the ability to provide improved customer experiences and more personalised offerings.

#### The time is now

Insurers who fail to embrace the cognitive journey will likely cede important strategic advantage to competitors and new market entrants already riding the wave. Conversely, organisations that try to do too much too soon in pursuit of first mover advantage in the R&CA space may also be at risk. The key is running a manageable set of pilot programmes to test R&CA capabilities. This enables the insurer to align business outcomes with the expectations and facilitate a smoother implementation downstream.



This article by Raj Juta and Yacin Mahieddine first appeared in May 2018 issue of Insurance Asia. Raj is the Insurance Leader at Deloitte Southeast Asia. Yacin Mahieddine is a Consulting Executive Director at Deloitte Southeast Asia.



**The biggest challenges  
facing Southeast Asian  
banks today**

Banking executives today not only have to deal with running the bank, but also transforming it to grow in a sustainable manner. Banks have to balance these goals against the exigencies of the day, and those that are able to do so will be amply rewarded. This holds true for all banks, even those operating in Southeast Asia. This transformation is far from easy as banks come to grips with challenges such as complex and diverging regulations, legacy systems, disruptive models and technologies, new competitors, and a diverse customer base that has increasing and greater expectations. This article explores the challenges most banks face in balancing the need to restructure their foundations for the long-term with finding near-term growth.

### FinTechs and customer centricity

In just a few years, FinTechs have defined the direction, shape, and pace of change across the financial services industry. While they may not dominate the industry today, FinTechs have succeeded as both standalone businesses and vital links in the financial services value chain.

Once considered a threat, FinTechs represent a great opportunity for incumbents on multiple fronts: modernising business functions to improve efficiency and helping banks serve their customers, both through emulation and collaboration.

In Southeast Asia, national banks are recognising these opportunities and benefits FinTechs can bring. Take for example OCBC in Singapore which has tapped on artificial intelligence (AI) and machine learning to combat financial crime. The use of AI to monitor suspicious transactions will help cut down the time that typically takes several analysts a few days or up to a week to do, depending on the complexity of the transaction, to just a couple of hours. Another example is Kasikornbank in Thailand – they have digitised their Letter of Guarantee process using blockchain. The transparency provided by blockchain can help eliminate forgery and improve efficiency.

Long-term sustainable growth in the banking industry is possible if banks are willing to do away with a traditionally sales- and product-obsessed mind-set to one of genuine customer centricity backed up with strategies to target the right markets, customer segments, and solutions.

Customers now expect seamless digital onboarding, rapid loan approvals, and free person-to-person payments (all innovations that FinTechs made popular); proving that it is possible to meet, and even exceed, customer expectations.

Singapore's DBS, OCBC and UOB have successfully leveraged on big data, biometric and AI to make banking simple and seamless for its customers. DBS bank introduced a chatbot, POSB digibank Virtual Assistant, which allows customers to do transactions via Facebook Messenger. OCBC launched an algorithm-based robo-advisory service for its wealth management arm. UOB rolled out contactless ATMs where users can withdraw cash by holding their phones to the contactless reader and verifying their identities with their thumbprints.

### Regulatory recalibration

After a decade of intense scrutiny by regulators globally, Deloitte predicts a slowdown in the pace of regulatory integration and a focus on supervision. Higher capital and liquidity requirements, stress testing, and recovery and resolution planning will take precedence. Compliance expectations around fair treatment of customers and executive accountability are expected to stay elevated.

2018 presents an opportunity to modernise regulatory compliance and bring together disparate silos created for individual compliance goals. Banks should consider integrating regulatory compliance goals with strategic initiatives such as growth, operational simplification, risk management, and cost efficiency. Regulatory compliance should be aligned with business strategy. Not doing so could put banks at risk of unmet regulatory expectations and poor performance.

### Technology management

To help banks become more agile, bank Chief Information Officers (CIOs) should manage their portfolio of technology assets to emphasise activities that truly differentiate the bank. Externalisation efforts should be focused on generic functions with an emphasis on cost efficiencies. Modernising core operating infrastructure is also an obvious priority.

CIOs have to ensure that new solutions sourced from multiple vendors are integrated to maximise value creation and minimise internal disruption. In their drive to simplify and modernise, and to build technology agility, banks should ask themselves three important questions:

- How can they best manage the portfolio of technology assets to deliver the most impact for businesses?
- What is the right level and type of technology externalisation (i.e., the use of third-parties to design, develop, and manage technology solutions)?
- How do they direct development resources toward only the activities that truly create competitive differentiation?



Undoubtedly, externalisation is not the answer for every core activity: there will still be some activities, such as compliance and risk management, that will usually be maintained internally, and for which internal technology support would remain critical.

#### Mitigating cyber risk

Financial services innovation and digitisation are certainly being encouraged by regulators and are being advanced by financial institutions. In Southeast Asia, this is particularly so in Singapore, Thailand and Indonesia. With this development comes increased cyber risk.

In Southeast Asia, regulatory frameworks and supervisory approaches for addressing cyber risk are evolving. Financial institutions are focused on building cyber resilience, where the emphasis is not just on preventing cyber-attacks, but being able to respond, recover and adapt. Importance is being placed on enterprise-wide cyber risk programmes that are continually being tested and updated to allow for agility and swift recovery, and that are overseen by the executive and board, and underpinned by strong governance.

The widening of the regulatory lens to capture system-wide resilience will not translate into less focus on banks. An important element of systemic resilience is consistently strong and active cyber risk management on the part of all players within the ecosystem.

#### Reimagining the workforce

Banks should consider rethinking their workforce strategy given how work is evolving with increasing automation. As a start, bankers would need upskilling to work more effectively in a digital environment. For example, Singapore's DBS Bank is investing S\$20 million to train its existing workforce in digital banking and emerging technologies, via an artificial intelligence-powered e-learning platform, curated curriculum, and module delivery.

Banks will also need to reorient existing workforces to be collaborative and inclusive, while providing them with more integrated employee experiences. This workforce experience would have to be designed to accommodate a work-life balance, a purpose-driven career, and be digitally enabled.

#### Conclusion

2018 could be a pivotal year for banks in accelerating the transformation into more strategically focused, technologically modern, and operationally agile institutions, so that they may remain dominant in a rapidly evolving ecosystem.

But technology is typically only part of the solution. The core objective for most banks is to achieve organisational agility, and to do so they should consider embracing innovation, managing talent differently, and pursuing key partnerships within a broader ecosystem to manufacture and deliver solutions for customers.



Adapted from Deloitte Global's *Banking Outlook 2018*, this article by Ho Kok Yong first appeared online on the Asian Banking & Finance website in April 2018. Kok Yong leads Deloitte Southeast Asia's Financial Services Industry practice.

A scenic landscape photograph of a mountain range. In the foreground, a calm lake reflects the sky, clouds, and the surrounding forest. The middle ground is filled with a dense forest of evergreen trees. In the background, a large mountain peak with snow-capped ridges rises against a blue sky with scattered white clouds. The overall scene is peaceful and natural.

# Through the regulatory looking glass

They say that change is the only true constant. While 2017 had indeed been a very eventful year for regulatory developments both globally and in the region, glancing into the proverbial “looking glass”, 2018 beckons with perhaps even more exciting new market and regulatory developments and initiatives. Amidst a backdrop of sharp stock, bond and forex market volatility, expected rises in interest rates, new disruptive technologies and the resurgent threats of global trade wars and economic “insularity”, financial market participants must make sense of these market challenges while at the same time meet the heightened expectations and scrutiny of global and regional regulators.

In Southeast Asia, we have seen a wave of fresh regulatory and market initiatives such as the recently announced Singapore Exchange and Bursa Malaysia stock market trading linkage, Bank Negara Malaysia's "Responsibility Mapping" discussion paper, the Monetary Authority of Singapore's (MAS) recent initiative to bring the trading of over-the-counter (OTC) derivatives under organised markets, increased attention to culture and conduct risk, as well as ongoing amendments to the Singapore Securities and Futures Act (SFA) concerning OTC derivatives and regulatory safeguards for investors, and upgraded financial reporting standards under the Singapore Banking Act.

As the rest of 2018 unfolds, we anticipate greater industry disruptions, disintermediation but also tremendous opportunities from the adoption of Distributed Ledger Technology, digitisation, big data and predictive analytics, robotics and artificial intelligence/machine learning – which can be deployed in different functions within and across financial institutions. We also envisage that regional regulators will pay heightened attention to conduct risk and culture issues, data collection and cyber-security, while keeping vigilant focus on core prudential and anti-money laundering (AML) concerns, as well as stringent enforcement against market misconduct. These challenges and opportunities no doubt will keep financial services compliance professionals busy well through 2018 and beyond.

To help steer you through the evolving regulatory environment, we've listed the top five areas that financial institutions in the region should look out for in 2018:

### **Conduct risk and culture: Is there such a thing as "bad" culture and can culture be changed?**

Recent public statements have been made by senior officials from the MAS, emphasising the importance for financial institutions to manage conduct risk and culture. MAS recently conducted a culture and conduct survey among a number of key financial institutions and spoke about strengthening the industry's resilience by developing strong risk cultures and mind-sets. MAS also signalled recently that it will engage financial services companies to understand how they embed the desired conduct and culture in their day-to-day decision-making and operations, and will look beyond compliance frameworks to assess if the financial institutions have embedded a sound "risk and ethics DNA". We believe that MAS will strengthen its focus on these issues as well as how the Board's and senior management's oversight and the "tone from the top" will translate to the middle and lower level echelons. Financial institutions should consider taking a good hard look at assessing and improving their internal conduct risk management framework and risk culture, and establishing a formal conduct and culture programme.

### **MAS Notice 610: Equipping Banks to Submit Statistics and Returns**

The "MAS Notice to Banks 610" and "MAS Notice to Merchant Banks 1003 – Submission of Statistics and Returns" also known as "MAS Notice 610/1003" have been in consultation for revision since 2014. The reporting forms were finalised as of 30 April 2018, with the exception of Appendix I (Foreign Exchange, Interest Rate and Commodities Derivatives Turnover) as MAS is reviewing the possibility of using the data that banks are already submitting to the Singapore branch of DTCC Global Trade Repository (GTR). GTR provides trade reporting services for the global derivatives market. The changes have been widely considered by the industry as presenting a transformational change to a bank's regulatory reporting structure due to the massive increase in data points and reporting requirements. Banks have also been encouraged by the regulator to kick start initiatives to cope with the reporting challenges since the second consultation paper was released on 10 February 2017. This includes impact assessment, data gap analysis and vendor evaluation, amongst others.

The revised Notice will inevitably compel banks to rethink and relook at their current regulatory reporting data, data governance principles, structures, processes and systems in order to comply with the new regulatory reporting requirements. As a starting point, banks can consider relooking at incumbent reporting data elements, reporting processes and systems, and conduct a complete gap analysis against the proposed revisions; developing and implementing procedures and technologies for coordination of enterprise-wide data with minimal disruption to existing processes; and sourcing for adequate manpower with the relevant expertise, time and resources to assist with implementation.

### **MAS Notice 643: Transactions with Related Parties**

On 21 November 2016, the MAS issued an amended "MAS Notice 643 to Banks on Transactions with Related Parties" (Amended Notice), which will require banks to take measures and steps to be aligned to the Amended Notice by 21 November 2018. The Related Party Transaction (RPT) requirements in the Amended Notice sets out the oversight and controls to be exercised by banks over RPTs. These requirements are to mitigate the risks of conflicts of interests arising from the RPTs, and to align with international best practices such as the Core Principles for Effective Banking Supervision issued by the Basel Committee on Banking Supervision. Some key changes include:

- Exclusion of a RPT with a related corporation group and financial group from approval by the Board/Authorised Person;
- Exclusion of "centrally coordinated" intra-group transactions from the Amended Notice requirements;
- Exclusion of transactions below the bank's nominal threshold; and
- Requirement for independent review of RPTs for compliance with the requirements.

### Incoming regulatory safeguards for investors: The Accredited Investors “opt-in” regime

MAS has introduced legislative amendments to the Securities and Futures Act in 2017 to implement policy proposals aimed at ensuring that the capital markets regulatory framework in Singapore keeps pace with market developments and is aligned to international standards and best practices. MAS is currently finalising the Regulations to support the implementation of the legislative amendments. The SFA and Regulation amendments are expected to take effect sometime in the third quarter of 2018.

Amongst other objectives such as completing MAS’ two-phase review to implement OTC derivatives regulatory reforms, enhance the credibility and transparency of the capital markets, and strengthen MAS’ ability to take enforcement actions against market misconduct, the SFA amendments are also aimed at enhancing regulatory safeguards for retail investors.

As part of this enhanced regulatory framework for safeguarding investors’ interests, the definitions of accredited investors (AIs) and institutional investors (IIs) will be refined to better reflect categories of non-retail investors identified based on their wealth or income and financial knowledge respectively.

An AI “opt-in” regime will also be introduced via subsidiary regulations to give investors who meet the prescribed AI wealth or income thresholds the choice of benefiting from the regulatory safeguards afforded to retail investors. Financial institutions should anticipate necessary changes to their processes and controls once the AI “opt-in” regime is in effect.

### The FX Global Code and Financial Benchmarks

The FX Global Code was published in May 2017 by the Bank of International Settlements (BIS) which sets out 55 principles (organised under six leading principles) of best practice in the foreign exchange (FX) market covering topics of ethics, governance, execution, information sharing, risk management, compliance, confirmation and settlement.

The Code does not impose binding legal or regulatory obligations on market participants. However, since its launch, there has been a lot of interest from market participants. Many have signed their Statement of Commitment (SoC) and we expect to see many more signings in 2018. The SoC is voluntary and attached within the annex of the Code. We have also seen various public registers that disclose the market participants which have signed a SoC being set up. Examples include registers by the Australian Financial Markets Association and Tokyo Foreign Exchange Market Committee.

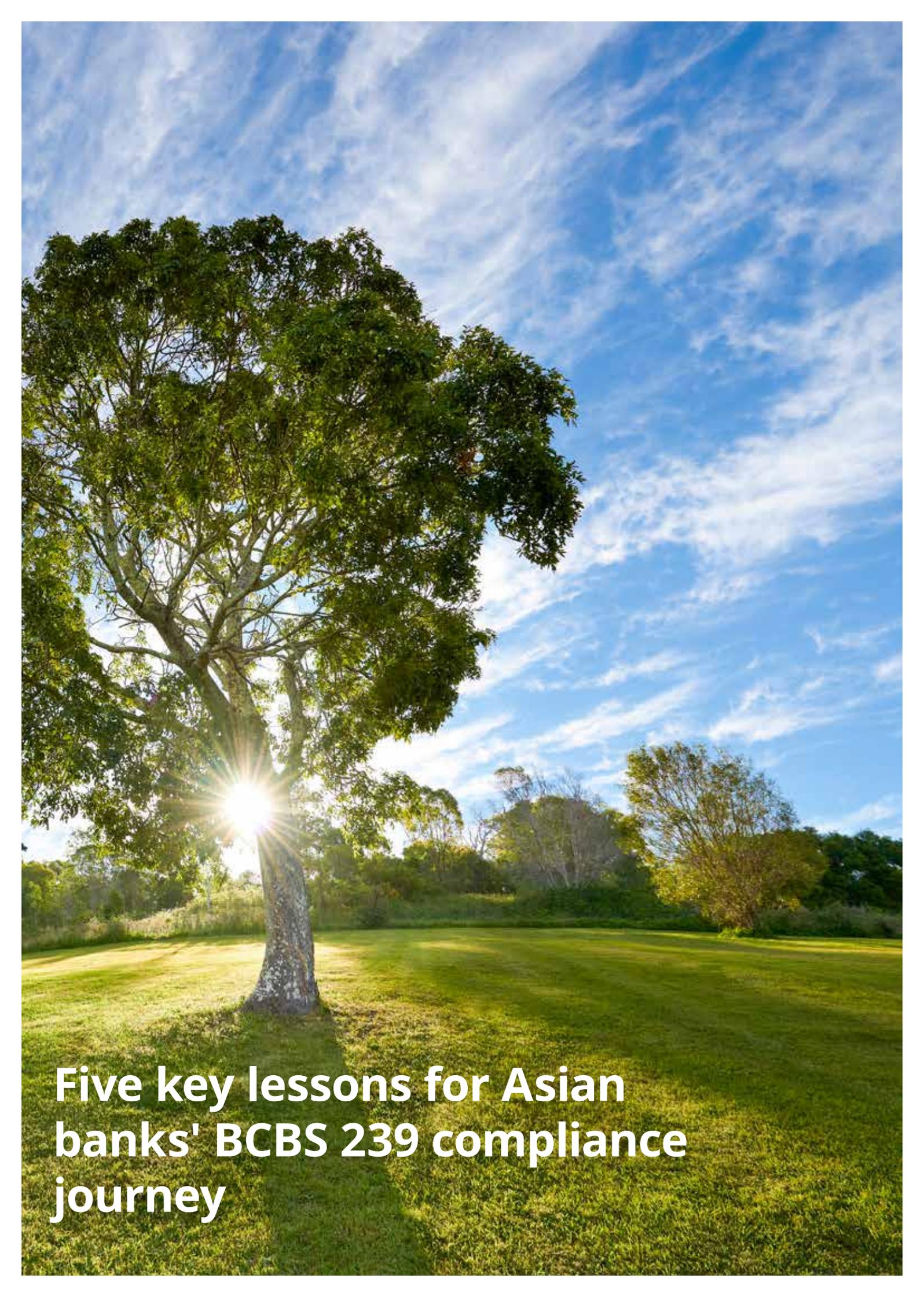
The Global FX Committee also surveyed more than 300 FX market participants from all over the world to measure the baseline level of awareness and adoption of the Code. A vast majority of respondents thought the Code would improve behaviours and market practices in the FX market. The results also showed that 57% of respondents planned to adopt the code and 50% intended to sign the SoC in the first half of 2018. 80% of respondents said that they would require/expect their counterparties to use SoC and of those survey respondents, 60% said they would scale down business with a counterparty in the case that the counterparty does not provide a SoC. Respondents had similar approaches to embedding the Code: more than 50% are engaging in a gap analysis comparing the Code’s principles and existing business practices and between 60-70% are undertaking staff training and education, and/or updating internal policies.

We have also seen the evolution of LIBOR and the emergence of regulations to address issues with financial benchmarks. For example, the Financial Conduct Authority in the U.K. released its Market Abuse Regulation (MAR). MAR strengthens the previous U.K. market abuse framework by extending its scope to new markets, new platforms and new behaviours. It contains prohibitions of insider dealing, unlawful disclosure of inside information and market manipulation, and provisions to prevent and detect these. The European Union (EU) Benchmarks Regulation, which became effective on 1 January 2018, emerged to further regulate EU and global benchmarks administration activity. This EU regulation will have an impact in Asia given that a comprehensive “Third Country Regime” has been set out. Furthermore, the recent consultation paper released by the Association of Banks in Singapore on the evolution of SIBOR also creates an interesting dynamic to Singapore’s financial benchmarks space.

Meeting the crowd of regulatory requirements will be challenging for financial institutions although this is certainly not a new state of affairs. However, 2018 also presents an opportunity for financial institutions to modernise regulatory compliance and bring together separate silos created for individual compliance goals. Executives should consider integrating regulatory compliance goals with strategic initiatives. Not doing so could put firms at risk of unmet regulatory expectations and lead to subpar performance.



This article is written by Giam Ei Leen, who heads the Financial Services Industry Regulatory Advisory practice at Deloitte Southeast Asia.



# Five key lessons for Asian banks' BCBS 239 compliance journey

Since the BCBS 239 principles on risk data aggregation and risk reporting were published by the Basel Committee in 2013, globally systemically important banks (GSIBs) have invested significant time and budget to reach compliance. However, four years on, the great majority are still not yet fully compliant, as updated by BCBS in March 2017.

Singapore was the first country in Southeast Asia to designate its domestically systemically important banks (DSIBs) when it did so in 2016. These banks (three local, and four foreign) have been identified by the Monetary Authority of Singapore (MAS) as being systemically important to the local economy, meaning that should one of these banks default, the potential impact on the Singapore ecosystem and marketplace could be very significant, and could have implications on the labour market and society as a whole.

The DSIBs are also encouraged to adopt the BCBS 239 principles, and those in Singapore are already working on their compliance programmes. In addition, regional banks in the other Southeast Asian countries that have either already been or are in the process of being designated as DSIBs will soon begin work to meet the BCBS 239 requirements. As they embark on their implementation, there are lessons that can help them avoid, or at least mitigate, certain pitfalls.

### Lesson 1: Be aware of the potential implications

First and foremost, BCBS 239 principles are a set of regulatory requirements which banks need to comply with. However, one should not forget that the primary driver of these principles is the global financial crisis of 2008, during which systemic organisations were wiped out partly because their management were unable to obtain accurate and timely information about their risks and exposures. Ultimately, what is really at stake, beyond the need for adequate information, is the stability of the economy and the protection of the public.

### Lesson 2: Spend time on scoping and interpreting the principles

BCBS 239 principles, like any other principles, are prone to subjectivity - what does it mean to be compliant? The principles require a certain level of pre-analysis, understanding and interpretation of the requirements. It also depends on how high the organisation is willing to set the bar. Here are some examples of areas of subjective interpretation:

- **BCBS 239 ownership:** Beyond the political aspects inherent to all ownership allocation processes, there are different governance models in the marketplace. Some banks perceive BCBS 239 as a risk management matter with the Chief Risk Officer (CRO) being the one responsible for the compliance programme. Others tend to consider BCBS 239 to be mainly about data management, and the Chief Data Officer (CDO) will hold this responsibility. There are also those that favour a more collegial setup, forming a BCBS 239 committee comprising all key decision-making stakeholders. While there is no one-size-fits-all solution, a common success denominator is a high level of ongoing coordination and involvement from all key stakeholders, no matter who is responsible on paper.
- **Selection of critical risk measures (CRM):** There is no rule of thumb for how many CRMs a bank should consider for BCBS 239. 80 to 100 CRMs is about average, but the range can be quite wide, with some banks including as many as 150 to 200 CRMs to be comprehensive. Others prefer to focus on a limited set of 30 to 40 highly critical ones. The number of CRMs to employ has to be a management decision and depends on the risk management appetite of each bank's governing body, even if the regulator might tend to be in favour of fewer CRMs with higher accuracy.
- **Level of process automation:** Some banks are comfortable with the current level of manual processes associated with their reporting production as long as there is a robust control framework and offers agility. Others will consider a higher level of automation that can better serve the purpose of becoming compliant. In some cases, BCBS 239 has even driven banks to deploy robot process automation (RPA) solutions. Eventually, each bank needs to perform a detailed analysis on which manual processes can be further automated, with a view to maximise the level of comfort on data accuracy and timeliness.
- **Data quality framework and data lineage:** How should data quality be defined in terms of threshold and tolerance levels when there is no "sweet spot" within this zone of subjectivity? In terms of accuracy and quality of a CRM, what is deemed acceptable for one bank may not be tolerated by another, with all things being equal. Most importantly, the bank needs to be able to articulate the rationale for its data quality thresholds and indicators, and ensure that it is fully understood and approved by its senior management. It is also essential to be able to deconstruct each CRM into its individual critical data elements (CDE) to map all data flows and data quality controls. In this area of data lineage, solutions range from simple and highly manual flowchart-types to more strategic, integrated and automated tools.



### Lesson 3: Identify synergies and leverage capabilities

Although the BCBS 239 principles are quite recent, the areas of purview are not new. Data integrity and risk reporting have always somehow been part of the organisations' agenda, whether in terms of governance or processes and controls. However, this does not mean that there are no gaps in data quality and reporting. These gaps need to be identified and addressed in due course in order to offer risk information that is of an acceptable and comfortable level to the senior management.

Hence, before deciding to invest in heavy solutions and initiate deep transformations, organisations should perform a detailed assessment of their current capabilities and how these capabilities already or could be leveraged to address BCBS 239 requirements. Similarly, banks that already have big transformation programmes in motion should consider integrating solutions to address BCBS 239 requirements more efficiently.

### Lesson 4: Try to avoid a pure silo-based approach

One of the key challenges of BCBS 239 compliance is that it requires many different skills - at least the CRO, CDO and Chief Information Officer (CIO) must be involved in the programme. However, if these key C-suite stakeholders are not properly coordinated and monitoring the same holistic and integrated agenda, the chance of success will be significantly reduced. Splitting roles and responsibilities by each BCBS 239 principle is possible, as long as there is a robust overarching governance framework with ongoing coordination and collaboration.

### Lesson 5: Engage other key stakeholders early in the process

Another mistake is to keep the BCBS 239 programme isolated with no regular communication on its progress and status. For instance, the internal audit team becomes a key stakeholder for BCBS 239 compliance once the related processes switch to business-as-usual mode. Although there is no obligation to have them involved at the start of the compliance programme, it is advisable to bring the team on board as soon as possible, as eventually they will be the third line of defence to provide the Board with assurance on the bank's level of adherence to the principles. Furthermore, some technical skills within the internal audit space can be quite useful to BCBS 239, such as operational risk, internal controls, data integrity management and IT controls.

The regulator is another key stakeholder that should be kept aware of the progress of the bank's BCBS 239 compliance programme. In fact, the sooner the bank engages the regulator to share its plans, the better the bank is perceived. Opening the dialogue early will allow for opportunities to verify the bank's understanding and interpretation of the principles, and will provide some assurance that the bank is in the right direction in terms of roadmap and work programmes.

To conclude, BCBS 239 compliance is challenging and requires at least a couple of years to achieve. However, if some of the key lessons reviewed in this article are not duly considered, it can easily double the time needed to reach full compliance.



This article by Frederic Bertholon-Lampiris first appeared online on the Asian Banking & Finance website in December 2017. Frederic is an Executive Director within Deloitte Southeast Asia's Financial Services Industry practice.

# SEA Financial Services Practice

## Southeast Asia Financial Services Leader

### Ho Kok Yong

kho@deloitte.com  
+65 6216 3260

## Business Leaders

### Audit & Assurance

#### Tay Boon Suan

bstay@deloitte.com  
+65 6216 3218

### Consulting

#### Kevin O'Reilly

kevinjoreilly@deloitte.com  
+65 6800 1038

### Financial Advisory

#### Jeff Pirie

jpirie@deloitte.com  
+65 6216 3168

### Financial Advisory

#### Radish Singh

radishsingh@deloitte.com  
+65 6530 8077

### Risk Advisory

#### Somkrit Krishnamra

somkrishnamra@deloitte.com  
+66 2034 0000

### Tax & Legal

#### Michael Velten

mvelten@deloitte.com  
+65 6531 5039

## Country Leaders

### Guam

#### Tung Wei-Li

wtung@deloitte.com  
+1 671 646 3884

### Indonesia

#### Rosita Sinaga

rsinaga@deloitte.com  
+62 21 2992 3100

### Malaysia

#### Anthony Tai

yktai@deloitte.com  
+60 3 7610 8853

### Philippines

#### Bonifacio Lumacang

blumacang@deloitte.com  
+63 2 581 9000

### Singapore

#### Ho Kok Yong

kho@deloitte.com  
+65 6216 3260

### Thailand

#### Somkrit Krishnamra

somkrishnamra@deloitte.com  
+66 2034 0000

### Vietnam

#### Thinh Pham

thpham@deloitte.com  
+84 839100751



## Rewrite the rules for the digital age

The forces of consumerism, regulation, and technological development are reshaping the financial services industry. Amid shifting customer and regulatory expectations, financial institutions are seeking ways to boost profitability in an ever-more-demanding environment.

Success will depend on their ability to design new business models, adapt their products and services, and develop strategic partnerships to tackle relevant markets and key client segments. Keeping the status quo is no longer an option.

Are you ready to rewrite the rules for the digital age?

Visit [www.deloitte.com/fsi](http://www.deloitte.com/fsi) to find out more