



The Institute of  
Internal Auditors  
Singapore

***BANKING SECTOR  
INTERNAL AUDIT  
CONFERENCE  
2019***

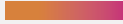
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***PUSHING THE  
INTERNAL AUDIT  
BOUNDARIES***

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**POST  
CONFERENCE  
REPORT**

# MESSAGES



## TAN BOON YEN

President of The Institute of Internal Auditors Singapore



Technological innovation and digitisation are leading a transformation in the banking business. The emergence of new threats and risks are forcing a change in the role and scope of internal audit. It is inevitable for the internal audit function and internal auditors to take stock of these changes, and seize the opportunity to push boundaries by embracing and leading change; harnessing and acquiring talent; engaging in collaboration and co-sourcing; adopting new audit tools and methods and leveraging on technology; promoting professionalism by adopting IIA global standards; and staying relevant through lifelong learning.



## NAOHIRO MOURI

Global Chairman of the Board of  
The Institute of Internal Auditors and  
Executive Vice President and Chief Auditor of  
American International Group (AIG)



With the rapidly changing operating environment in the banking industry, internal auditors need to focus on fundamental elements that drive the organisation towards better governance and controls for their organisations' sustainability. The International Standards for the Professional Practice of Internal Auditing (IIA Standards), is an evolving document that helps banks' internal auditors to understand how they should think about new and emerging risks that they face. Some things do not change, such as independence and competence. Thus, it is important to go back to the IIA Standards and Guidance when you are in doubt.



# INTRODUCTION



Disruptive technologies are at the forefront of digitalisation and innovation initiatives, and will revolutionise the way the banking and financial services sector operates. Along with these changes and disruption, existing risks are enhanced while new risks relating to cybersecurity threats, privacy breaches and complex compliance environments have emerged. How can internal audit align itself with the transformation initiatives and be at the forefront of technology and business innovation? Has the role of internal audit evolved beyond assurance and compliance as a result of this digital transformation? What actions must internal audit take to remain relevant and effective, in order to add value to its stakeholders?

On 27 February 2019, The Institute of Internal Auditors (IIA) Singapore hosted more than 150 delegates at the inaugural Banking Sector Internal Audit Conference. There were robust discussions on how the banking sector's internal audit function has evolved; and how internal audit can transform itself to fulfill its core mission of delivering assurance excellence to meet any new expectations of its stakeholders including the Audit Committee, Board and senior management.

With 16 speakers contributing through panel discussions and plenary sessions, the confluence of perspectives from these thought leaders brought useful insights, knowledge and practices. Participants were shown the latest trends and developments that would impact them and learnt about what they would need to keep on their radar as digital transformation continues.

This report captures the salient issues and views that the internal audit profession is required to deal with and embrace, to seize opportunities while managing the risks, and staying the course to continually transform for greater relevance to the business.





## ***DEVELOPMENTS IN FINTECH: OPPORTUNITIES AND CHALLENGES***



“

The FinTech wave offers many opportunities to improve financial inclusion and the way we access financial services. It requires a complete transformation of the way financial institutions think, plan and operate. Internal audit will continue to have a role to play, and its scope of work will evolve with digitalisation. I encourage internal auditors to reskill yourselves, understand how these technology trends will affect the financial sector, and stay prepared for the challenges ahead.

”

**SOPNENDU MOHANTY**

Chief FinTech Officer  
Monetary Authority of Singapore



The emergence of FinTech, spurred by rapid technological change and digitalisation, has brought about major disruptions to traditional banks today. Sopnendu Mohanty, Chief FinTech Officer from the Monetary Authority of Singapore (MAS), expounded on this and explained how technological innovation has created opportunities for banks to transform their financial services, and at the same time posed challenges to traditional job functions. He pointed out that as with many other jobs, the role and scope of internal audit will change, and auditors must prepare for these challenges and reskill themselves.

Sopnendu highlighted three key attributes of FinTech companies, which differentiate them from traditional banks. Firstly, FinTech companies are consumer-centric and passionate about improving customer engagement and experience. Secondly, they leverage technologies that are smart and agile. Thirdly, FinTech companies employ individuals who are not only talented but also passionate about transforming financial services to meet customers' needs. These elements provide FinTech companies with the ability and agility to scale and innovate at a much faster pace, and enable them to have a competitive advantage over others.

Sopnendu also elaborated on four technology trends which internal auditors should be cognizant of. These are artificial intelligence (AI), big data and application programming interface (API), cloud computing and distributed ledger technology (DLT). Internal auditors are encouraged to understand the opportunities, challenges and risks associated with these new technologies, adapt to changes and identify areas in which they can add value.

To that end, internal auditors should familiarise themselves with a set of principles that MAS introduced to promote Fairness, Ethics, Accountability and Transparency (FEAT) in the use of AI and data analytics in finance. The FEAT principles provide guidance to firms offering financial products and services on the responsible use of AI and data analytics, to strengthen internal governance around data management and use, and guide them in their decision-making. Internal auditors should also be familiar with the Association of Banks in Singapore's Cloud Computing Implementation Guide for the financial industry.

# **BANKING SECTOR INTERNAL AUDIT CONFERENCE**

## ***PUSHING THE INTERNAL AUDIT BOUNDARIES***

27 FEBRUARY 2019

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## ***PUSHING BOUNDARIES: WHAT SHOULD INTERNAL AUDIT REINVENT TO STAY RELEVANT IN DIGITAL ERA***

Moderator: **ALYWIN TEH**  
Partner, Risk Assurance, PwC



“

Stakeholders of the internal audit function, including regulators, are seeking an approach to internal audit that goes beyond reviewing past activities. They want an internal audit function that is insightful, forward-looking, and focuses on creating value for banks.

”



“

The DNA of auditors needs to change. We are used to taking a rear view focus on where the control gaps are and exercising conservatism. Now we have to change our mindset to one of experimentation, where we learn to fail fast, pick ourselves up and move on. We must have internal audit teams that are equipped with this mindset who are embracing change, willing to experiment and be able to learn fast.

”

Panellist: **GOH CHIN YEE**

Executive Vice President and Head of Group Audit  
OCBC Bank and Governor of IIA Singapore

“

A lot of banks are undergoing digital transformation. To support this, the culture needs to be changed. Internal audit's job is to challenge the status quo. It is an exciting time to continuously explore the unknown territory and to learn new things in the disruptive landscape.

”

Panellist: **HELEN LI**

Group Chief Auditor, The Bank of East Asia, Limited and  
President of the Asian Confederation of Institutes of Internal Auditors



“

I know where I want to be. I want to be right in front of the engine where I help to drive the train forward, because that is where we can make a difference as part of being a key function in the organisation. The adoption of innovation, digitisation and automation is inevitable. You have to make a conscious decision if you want to be on that train or you want to be left behind.

”

Panellist: **JIANN LO**

Managing Director and Chief Auditor Singapore and  
ASEAN Cluster, Citi



“

Technology tools are enablers. Internal audit functions today are leveraging technology and data analytics in a significant way to increase the efficiency and effectiveness of our work, as well as to enable us to deal with emerging risks more effectively. Yet, such tools and methods only sharpen our insights and we will continue to need to exercise a lot of judgment to do our work well. This specialised skill of analysing risks and assessing risks and controls will always be needed and relevant in the future.

”

Panellist: **DANIEL NG**

Head of Group Internal Audit, UOB





Views were shared on the role of internal audit in auditing strategic risk and digital risk during the panel discussion among the Chief Audit Executives (CAEs) from four major regional and global banks. Discussions also centred on the increasing demand for forward-looking audits by stakeholders and how the internal audit function can be digitised to provide such audits. The internal audit function must challenge its status quo or risk being irrelevant. The discussions focused on:

- Adoption of innovation, as digitalisation and automation is everywhere;
- Increasing demand for forward-looking audits such as:
  - Auditing strategic risk – (i) understand the business strategies, ask the right questions, recruit team members from business backgrounds who are able to engage in strategy conversations; train internal audit team on how to audit strategic risk through participation in business forums; participate as observers in bank committees; and (ii) audit strategic risk management structure and strategy formulation and implementation process;
  - Auditing digital risk – covering governance, design, implementation and operation / monitoring
- Growing demand for internal audit to provide consultancy or advisory services.

### ***FORWARD-LOOKING AUDITS***

Strategic risk is now becoming a top risk in the Audit Committees and senior managements' agenda. Helen from The Bank of East Asia commented that in Hong Kong, banking auditors are required to audit strategic risk management structure and process under the Hong Kong Monetary Authority's supervisory manual. The panel agreed that internal audit's mandate in strategic risk is not to audit the content of the strategy but to look at the process in terms of strategy formulation - assessing the strategic alignment of how corporate strategies cascade to business strategies and reviewing the effectiveness of strategy implementation. The panel recognised that this responsibility can differ among banks and may pose a challenge for internal auditors as it requires an understanding of business strategies, key performance indicators (KPIs), and the senior management's strategic choices. To address the competency gap, it is necessary to enhance the training of internal auditors and leverage on the experience of practitioners from other functions. There is benefit for internal audit to sit in business forums and committees within organisations as it allows them to better understand the business decisions and provide inputs upfront.

On the auditing of digital risk, the CAEs discussed how their respective functions embed digital risk audit within their current methodology. Chin Yee from OCBC considered digital risk as a source of risk arising



from digital transformation strategy, with impact on risk types such as cybersecurity and data privacy. In auditing digital risk, an area to consider is whether there is AI governance framework in place, and whether the use of AI is aligned with the bank's ethical standards and values. Jiann from Citi added that the pace of adopting digital and automation is blurring the lines of traditional audit methods, and therefore calls for both business auditors and technology auditors to collaborate closely together to be effective. As with the auditing of strategic risk, internal auditors need the relevant competencies in technology in order to keep up with evolving regulatory changes and requirements.

On the subject of forward-looking audits requested by stakeholders, Daniel from UOB foresees a blurring of the three lines of defence. He expects the role and scope of internal audit to evolve and acquire new tools and techniques, including the use of predictive analytics. Jiann believes in continuous auditing to be relevant and timely as the organisation moves forward, and discourages "internal audit looking back historically".

### ***REINVENTING THE INTERNAL AUDIT FUNCTION***

CAEs also shared their strategies to reinvent internal audit. Chin Yee shared that OCBC plans the reinvention through three pillars: technology, process and people. For technology, OCBC internal audit is developing a centralised audit data mart to bring in enterprise-wide data on continuous basis which means a shift from the traditional method of asking auditees for data prior to the start of the audit. Instead, internal audit has direct access to bank-wide data to facilitate continuous auditing and risk assessment. The data are processed by a variety of data science tools and developed into audit analytics programs for use across different audit functions and countries. On people, it is also critical to nurture auditors to embrace a digital culture beyond upskilling them with digital techniques and technology. Moving on, OCBC internal audit is also exploring the use of robotic process automation, machine learning and natural language processing across audit processes. Citi is developing bots and believes this technology is very much the way of the future. Daniel added that internal auditors should prepare for the future by being more effective and efficient – by developing analytics capabilities or changing the way things are being done – review processes, audit methods and tools to enhance capabilities.



## ***A BOARD'S EXPECTATIONS OF INTERNAL AUDIT FUNCTION IN THE DIGITAL DISRUPTION***

Moderator: **PATRICK ANG**  
Chief Executive Officer, Rajah &Tann Asia and  
Deputy Managing Partner  
Rajah & Tann Singapore LLP



“

On the issue of cybersecurity, there are two types of organisations; one that knows it is being attacked and the second type is one that does not know.

”



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New technologies such as GRC software, data analytics and AI, represent a real opportunity for the internal audit function to transform itself – in the administration of the internal audit function as well as the conduct of internal audits.

”

Panellist: **WILLIE CHENG**  
Chairman, Audit Committee of UOB

“

Internal audit's first and foremost role is to provide independent assurance, with useful insight and hopefully, foresight. If they are involved in providing advisory services to the auditees, they must take care not to compromise their independence.



”

Panellist: **CHUA KIM CHIU**  
Chairman, Audit Committee of OCBC Bank

“



With the rapid and constant changes in how businesses are being conducted through the increased use of technology and digitisation, risks from the unknown have increased. Hence, safety and security of platforms and operations are key concerns. Tone from the top in the adoption of good GRC practices will be critical to building a robust and resilient culture and practice to manage and mitigate the risks.

”

Panellist: **BILL CHUA**  
Chairman, Risk Committee and member of the Audit Committee  
Citibank Singapore Limited



The distinguished panel of Audit Committee Chairs and member discussed and exchanged views on:

- the Board's expectations of the role and function of internal audit in the changing banking environment;
- how internal audit should respond to the disruption of technology and digitisation of banks; and
- how internal audit can leverage on technology to remain relevant and enhance its value to stakeholders.

Technological innovation and digitisation have introduced new threats to banks, with safety and security being a top concern. As banks are connected all the time now, it is critical to ensure that data and platforms are safe. To mitigate new and emerging technology risks, effort and resources must be invested effectively across three stages of mitigation namely, prevention, detection and recovery. A key concern of the Board is "How much spending is needed to make sure that systems and platforms are safe?" An organisation's culture and the tone from the top play a critical role in mitigating these new risks. As a result, internal audit is expected to provide assurance on new areas of risks including cybersecurity, data management, data privacy, outsourcing and open APIs, strategy, culture and behaviour.

While digitisation has caused disruption, it has also enabled the internal audit function an opportunity to transform itself. Internal audit can harness technology to facilitate the administration of its function and in the conduct of internal auditing by leveraging on governance, risk management and control (GRC) software solutions for integrated audit planning, documentation and tracking; while adopting data visualisation tools for dashboard reporting of risk assessment results and reviewing the risk profiles of various functions of the bank. Internal audit can also leverage on big data, data analytics and data mining tools to identify patterns and trends, anomalies and non-conformance with policies and practices.

Challenges faced by internal audit when adopting these technologies included the lack of sufficient collaboration between IT and business functions, the ability of having unfettered access to data and

having people with the right talent and mindset. Solutions to address these challenges include the use of data lakes for data access concerns; a training and learning journey for internal auditors to develop the necessary skills and attitude; and an engagement in collaborative co-sourcing to gain new knowledge and expertise.

The panel then shared views on how the expected change in the internal audit's scope of work might potentially impact its role in the three lines of defence model. Increasingly, the Audit Committee, Board and senior management's expectations on internal audit have changed - expecting more than just providing assurance, but to be able to provide insights and foresight of existing and emerging risks and value-added advisory service. However, the moment internal audit starts to engage in the provision of advisory work, they must ensure that the role is well-defined to avoid the risk of losing its independence.

One panellist opined that any kind of advisory or consultancy work internal audit does, will eventually compromise its independence and objectivity, so it is therefore necessary to look at this whole question of value-add services very carefully. Alternatively, as part of internal auditors' career path, they can move on to another part of the organisation where they can perform advisory and consultancy work.

In conclusion, the panellists assured internal auditors that they have the full support of the Audit Committee. While internal audit may be perceived as being a 'thankless' job, internal auditors should not be discouraged because it is an important and meaningful job. Internal auditors must enjoy their work, overcome their challenges and engage in collaboration. Though there is an increasing challenge to show that they add value, provide insights or foresights, fundamentally, internal audit's role is to ensure that risks within an organisation have been identified and mitigated.



“

There is nothing more important than the IIA Standards. As organisations face challenges from evolving technologies and information security risks to toxic corporate culture and geopolitical pressures, we must use all the tools provided by the IIA Standards to build the foundation upon which we can continue to state our professional claim and remain relevant in the future.

”

Keynote Speaker: **NAOHIRO MOURI**  
Global Chairman of the Board of The Institute of Internal Auditors and Executive Vice President and Chief Auditor of American International Group (AIG)


“

Staying relevant. Being nimble. These are some of the key themes that internal auditors need to keep on their radar so as to push the internal audit boundaries. In DBS, internal audit practices are rewritten in the midst of evolving disruptions and digitalisation strategies. The robust adoption of agile practices, digitalisation and data analytics enhances our audit quality and efficiency, sharpens our insights to mitigate risks and strengthens stakeholders' confidence. This leads to stronger assurance to the Board and senior management.

”

Facilitator: **YIK YENG YEE**  
Chief Operating Officer, Executive Director  
DBS Group Audit

# ***EMPHASISE THE BASICS. ELEVATE THE STANDARDS.***



The conversation between Naohiro Mouri and Yik Yeng Yee focused on the International Standards for the Professional Practice of Internal Auditing. Naohiro emphasised on the value of the IIA Standards, and how adopting and conforming with the Standards can help internal auditors meet changing demands, without compromising its professionalism and maintaining professional standards.

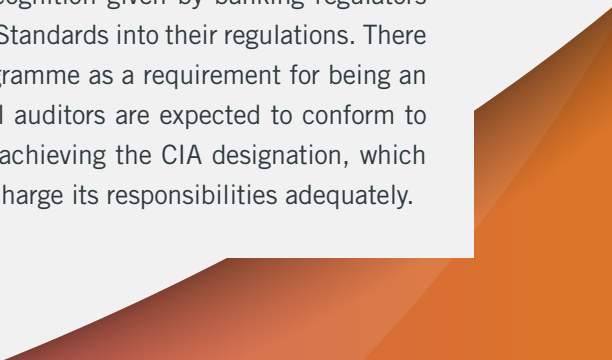
Technology and digitisation are changing the way banks are delivering products and services to their customers. This in turn affects the banking processes and the dimension of risks, and shifts the expectations of the role and responsibilities of internal audit. The traditional methods of auditing are becoming increasingly irrelevant. It is therefore critical, according to Naohiro, for internal audit to develop relevant skills, knowledge and attitude by acquiring new tools and methodology.

New digital technologies enable banks to leverage on data analytics to perform audit testing across the population of data. Rather than rely on sampling which is limited in identifying fraud, the use of machines can further enhance monitoring by the first and second lines of defence. Naohiro understands that since it is not possible for humans to compete with machines, internal auditors should learn to work and collaborate with machines. It goes without saying that competent talent is needed to meet the demands of a rapidly changing industry driven by digitisation.

Internal auditors are expected to not just provide assurance of controls but insights – be the “ears and eyes” of senior management. The fundamental role of internal audit is to perform and provide independent assurance to its key stakeholders, including the Board, Audit Committee, senior management and/or regulators. But, increasingly, senior management wants internal audit to go further and provide insights on how the strategy and culture is operating on the ground. Similarly, management or auditees are asking for internal audit to provide advisory on how they can do better in terms of controls and managing of risks. There is even an increased demand for the CAE to take on an additional role of a Chief Risk Officer or Chief Compliance Officer, which can risk a blurring of lines between the three lines of defence and compromise the independence of internal audit.

The IIA Standards provides guidance on how internal audit can “get around the three lines of defence” and deliver results, without compromising its independence. To achieve the goal of providing risk-based and objective assurance, advice and insight, it is necessary for internal auditors to build a career on a solid grounding of reliable and relevant IIA Standards. The IIA Standards provides a blueprint for internal audit to evaluate and contribute to improvements in organisational GRC processes. Conformance with the Standards is the only way internal auditors are going to be successful and remain relevant in the future.

The global standing of the IIA Standards is evident through the recognition given by banking regulators around the world. Some regulators have incorporated elements of the Standards into their regulations. There are even those who stipulate the Certified Internal Auditor (CIA) programme as a requirement for being an internal auditor. The banking sector is highly regulated, and internal auditors are expected to conform to these higher IIA Standards. Naohiro emphasised the importance of achieving the CIA designation, which demonstrates that internal auditors possess the competencies to discharge its responsibilities adequately.





## ***HARNESSING THE POWER OF INNOVATION TO DRIVE INTERNAL AUDIT***



“

We should harness innovation and make sure we do it in a pace that is needed. Take the change as a challenge and an opportunity.

”

### **JOHN BENDERMACHER**

Chief Audit Executive, Group Audit, ABN AMRO and Vice Chairman  
Professional Practices of IIA Global Executive Committee





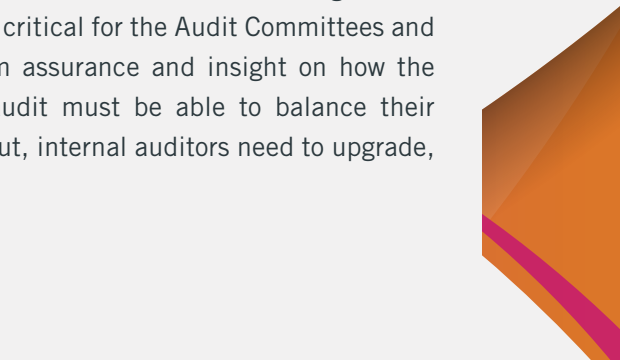
John shared how rapid technological innovation and digitisation have impacted ABN AMRO's internal audit function including the challenges encountered and strategies adopted. ABN AMRO has recognised the emergence of new risks which have to be considered in the scope of the bank's internal audit work. Internal auditors are now required to test new risks including deep-fake risks, risk of poor data quality, governance risk, culture and behaviour risk, strategic risk, risks associated with moral and ethics (particularly with the use of AI and robotics) and many others. In addition to its original independent assurance role, internal auditors are now expected to be effective by providing insight and added value; acting as advisors to business, much earlier in the design phase of change projects which involve new technologies and innovation.

Agreeing with Naohiro, John called for greater attention on auditing culture and behaviour by internal auditors. He shared that in an analysis conducted 10 years ago, the results revealed that at least 60% of operational losses and incidents were not caused by processes or systems, but by human interventions. Under the Netherlands' Corporate Governance Code, it is now a requirement for the boards to report on culture and behaviour. ABN AMRO internal audit integrates culture and behavior in every audit now, employing the Inductive and Deductive methods. The Inductive method includes human behaviour as potential root cause for any deficiency, the Deductive method includes specific audit procedures focusing on conduct drivers as such.

There will be difficulties in fulfilling the changing role and new scope of work for internal audit departments. First, the availability of internal auditors who possess the required knowledge, skills and attitude. Second, the ability of internal audit to be effective in new business models such as FinTech, without affecting its agility. Third, having the 'right to audit' for increasing outsourcing arrangements, in particular cloud services. Fourth, having the appropriate audit tools and methods. Fifth, the availability of quality data. Sixth, having adequate resources and budget to invest in technology, tools, processes and people. And finally, balancing the traditional role of providing independent assurance against providing insights on yet unknown or poorly controlled risks.

To face these challenges, John advised to first, update the Internal Audit Charter to reflect its changing role and scope of work. Second, continually review the framework of the three lines of defence and increase cooperation with the second line of defence. Third, use data analytics, data mining and process mining. Fourth, adopt new audit methods such as continuous and agile auditing. Fifth, engage in real-time communication to initiate improvements and promptly report on them. Sixth, move from a systematic to a more creative way of working; and lastly, increase collaborative auditing, particularly in relation to cloud outsourcing risks.

Auditing is moving at a speed of innovation. Change is inevitable and internal audit needs a big shift in skillsets and attitude because innovation is needed to survive. It is critical for the Audit Committees and Boards to see internal audit as a tool in innovation, giving them assurance and insight on how the organisation is performing, and timely adding value. Internal audit must be able to balance their day-to-day function with their investments in innovation. Simply put, internal auditors need to upgrade, adapt and adopt to do well in the real world.





## **AGILE AUDITING**



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Given the increased business complexity arising from digital advancements and rising regulatory expectations, the adoption of agile mindset and practices enable the DBS Audit team to better understand the emerging risks and the control environment to be more effective. The auditing profession will need to transform by adopting digital methods and new techniques to stay relevant.

”

### **DERRICK GOH**

Managing Director and Head of Group Audit  
DBS Bank



The drive for DBS to adopt agile auditing stems from the rapidly changing environment driven by digital and technological innovation, geopolitical climate, trade wars, the rise of terrorism, as well as increasing focus on environmental, social and governance. However, the internal audit function continues to be chained by traditional barriers such as the perception of being a strict policeman, and its use of traditional audit methods to detect risks which are evolving.

The agile methodology enabled internal auditors to collaborate with stakeholders, facilitating the exchange of information and clarifying on the scope of audit work. Internal audit will be better positioned to prioritise the audits given limited resources and time. DBS has observed that agile auditing helps break down the 'SILO' mentality and enhances the ability to uncover risks. This auditing method also increases the effectiveness in sharpening the audit scope, thereby enabling prompt detection and engagement with stakeholders.

On how collaboration can exist when a key principle of internal audit is independence, Derrick challenged the convention and shared that collaboration actually brought about higher quality audit findings. Ultimately the assessments and decisions remain an internal auditor's prerogative and therefore independence is preserved.

Some key ingredients for making agile auditing work included the competency of internal auditors who must be knowledgeable and are up to-date on relevant technological innovations. The internal audit team should constitute a diverse skillset in the different risk areas. Second, the right tone from the top is critical in facilitating collaboration while minimising risks. Third, the right culture and mindset is necessary for the different units to work together. Both internal auditors and stakeholders - even management, must transform itself and update the tools used.



## **AUDITING DIGITAL RISKS**

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Embarking on a digitisation journey is not going to be less complex. Instead, it will be equally more complex, with different types of complexity. It is thus, critical for internal audit to have a strong foundation of technology in order to deliver insights arising from digital risks.

”

### **VINCENT LOY**

Assistant Managing Director  
Monetary Authority of Singapore



Vincent's presentation touched on three areas: factors impacting financial institutions in their digitisation journey, the future of financial services sector in the digital world and auditing the risks in digitisation.

External and internal factors are impacting the financial services sector landscape. Externally, customers are expecting products and services to be seamlessly and interactively available; but regulations are becoming tougher and more complex, as organisations digitise their businesses in order to increase the share of the consumer market. Internally, institutions are faced with the problem of monolithic and complex legacy systems which make scalability and change costly and inefficient.

Traditionally, banks have a closed payment or customer systems which do not enable real-time integration with other partners. Collaboration is difficult as banks struggle with Garbage-In-Garbage-Out (GIGO) risk arising from the inferior quality of data; without clean data, IT transformation is not possible. The traditional governance process is also not fit for the agile development, and this will affect the ability of banks to transform. With the increasing risk of unauthorised access, GIGO and data breaches, it is vital for internal auditors to properly understand the financial services sector and its technologies in order to collaborate with stakeholders to audit these risks.

Financial institutions need to possess six key technology characteristics for future growth and relevance:

- A focus on customer experience and customer needs;
- A resilient, secured, elastic and multi-speed infrastructure to mitigate the risk of cyber attacks;
- A liquid workforce with multi-disciplined skills and the flexibility to change as job changes;
- Inspiring leadership;
- Integrated to the ecosystem; and
- Be data-driven to provide insights.



## ***UNLEASHING THE POWER OF DATA ANALYTICS FOR CONTINUOUS AUDITING***

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If we want to succeed, we must disrupt ourselves, push the boundaries and go far deeper. Though there will be challenges, we need to own it and help the organisation to solve these areas as well.

”

### **COLIN WAN**

Head, Global Audit Services, Analytics and Operations  
Group Internal Audit, Standard Chartered Bank



The implementation of data analytics in the internal audit function was shared by Colin through Standard Chartered Bank's use of risk-based audit, and how it has helped make the bank more asymmetric and effective.

Challenges faced included people, data and shifting mindsets. The success of Standard Chartered Bank's analytics journey was based on the existence of these factors:

- Having the right culture, where the tone from the top is supportive and is reiterated throughout the organisation;
- Establishing a central academy to enhance training of new skillsets and enabling an experiential environment for individuals to innovate and create in;
- Implementing KPIs to encourage the use of analytics;
- Developing and making available, a library of tests and procedures for internal audit and other lines of defence;
- Availability of talents with suitable and relevant skillsets;
- Re-skilling and transforming internal audit function;
- Encouraging a culture of collaboration with counterparts in various countries and divisions to determine if they should continue to do more;
- Creating awareness and marketing the team's efforts to obtain access to data for analytics;
- Providing assurance to owners of data on the use of data;
- Deploying, training, mentoring and coaching a team of champions within the organisation to execute, influence and champion the data analytics initiatives including changing the mindsets of people;
- Establishing a robust data governance framework to manage regulatory and data risks;
- Establishing a data acquisition warehouse and tools; and
- Having tools and technology to support continuous auditing.

Standard Chartered Bank's internal audit is now able to provide quality assurance across the full population of data. Conversations with stakeholders have become deeper, thus providing greater insights to stakeholders. Moving forward, the bank is working around predictive auditing, with the aim of providing more foresight to its stakeholders.







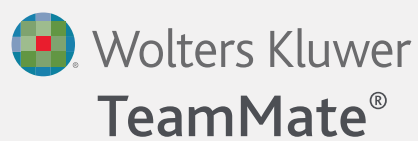
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  - Tan Boon Yen, President of IIA Singapore;
  - Gary Teo, Internal Audit Senior Manager, Accenture;
  - Erik Vledder, Vice President, Group Audit, Deutsche Bank; and
  - Laval Wong, Chief Internal Audit Officer, Asian Infrastructure Investment Bank.
2. The IIA Singapore team led by Goh Puay Cheh, Executive Director, Shirley Chua, Vivian Chen and Shevon He.
3. The Institute of Banking and Finance for the Financial Training Scheme.

## About The Institute of Internal Auditors Singapore

The Institute of Internal Auditors (IIA) Singapore is the only professional body dedicated to the advancement and development of the internal audit profession in Singapore. For more than 40 years, we have been advocating the interests of the profession and remain committed to raising the profile and standing of the internal audit profession and developing the knowledge, skills and expertise of internal auditors. Representing over 2,500 members, we enhance technical excellence through The IIA's International Standards for the Professional Practice of Internal Auditing and Code of Ethics. Our members belong to a global community of more than 200,000 professionals in over 170 countries and territories who share a common vision to advance their professional growth in internal auditing and add value in their organisations.

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