IDEAS FOR LEADERS | JUNE 2019

banking insight

PP 17327/05/2013(032407)

EXCLUSIVE INTERVIEW WITH DATO' ONG ENG BIN, CHIEF EXECUTIVE OFFICER OF OCBC BANK (M) BERHAD
NAVIGATING NEW WATERS

A.I. & Financial Crime: More Hype Than Happening

BUILT TO LAST OR BUILT FOR CHANGE?

BON VOYAGE TO THE
'MURDER ON THE ORIENT EXPRESS' DEFENCE

Bankers can no longer say 'it wasn't me'.

THE TRUTH ABOUT TRUST

A PUBLICATION OF
AICB
ASIAN INSTITUTE OF CHARTERED BANKERS

ISSN 2231-8267


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Editor's Note

DRIVING BETTER GOVERNANCE

CORE TO THE DNA of the Asian Institute of Chartered Bankers (AICB) is our commitment to enhancing governance in the financial ecosystem - by advocating for professional education and culture change, backed by our sound code of conduct and unyielding integrity.

Fittingly, this issue delves deep into new and upcoming developments that are reshaping the global and local governance landscape, as regulators and stakeholders strive to avoid a repeat of the 1998 Global Financial Crisis triggered by unethical behaviour and untrammelled greed.

Our cover story focuses on efforts to increase the accountability of those in power at the very top of financial institutions, in order to pre-empt future misconduct that damages entire financial ecosystems. We assess the impacts and challenges of the UK Financial Conduct Authority (FCA)'s Senior Managers Regime (SMR), a shift in regulatory approach that holds top bosses personally accountable for wrongdoing first announced in March 2015. The SMR was devised as part of a broader suite of regulations under the Bank of England's Senior Managers and Certification Regime (SMCR) to manage conduct risk in financial services, and is having a global ripple effect across jurisdictions. In Malaysia, the Central Bank is devising a comprehensive Responsibility Map that seeks to map a clear proposal of the prescribed roles under the regime and aims for full implementation by 2019. AICB stands committed to supporting this shift through our advocacy for banking practices and roles infused with ethics and integrity.

In our special profile this issue, the spotlight is also firmly on governance as well as leadership. Dato' Ong Eng Bin, Chief Executive Officer of OCBC Bank (M) Berhad and the Asian Institute of Chartered Bankers Council Member, offers insights into his brand of leadership and how banks are rising to meet challenges on the horizon. Reinforcing the message that good tone starts at the top, Dato' Ong talks about initiatives such as the recently established OCBC group level Ethics and Conduct Board Committee, which sets the direction for all employees while defining and rigorously embedding a culture of responsible banking.

Pivotal to good governance in the financial sector is to address and manage risks. One key risk is the issue of non-performing loans (NPLs) in the banking sector, which was especially severe post the global financial crisis. Professor Owain ap Gwilym, Deputy Head of Bangor Business School and module director for the Chartered Banker MBA programme discusses the opportunities and ramifications emerging from the European Union (EU)'s December 2018 agreement on new rules aimed at avoiding a future build-up of bad loans. Subject to ratification at the national level, the rules will determine the provisions that EU banks will be required to set aside against potential losses.

SME finance is a challenging area that poses multiple risks for many financial institutions in Malaysia, and affects the national development agenda. This issue offers insights into the regulator's stance on promoting continued access to finance for the critical small and medium enterprise (SME) segment. Analysing the findings of Bank Negara Malaysia's 2018 demand-side SME Finance Survey can enable a better understanding of the financing needs and behaviour of SMEs, underlying challenges faced by SMEs and policy implications moving forward.

Also under the lens are security and cyber risks, an emerging governance minefield in the digital era. This issue looks into a gamut of developments in this space, including payment scams, initiatives by governments to collaborate and share threat intelligence, the modernisation of IT legacy systems in financial incumbents, and the burgeoning role of artificial intelligence in regulatory technology e.g. cognitive and machine learning in financial crime programmes to arrest misconduct.

The caveat is that legislation and technology, no matter how sophisticated and all-encompassing, is purely an enabler and a tool for risk management and good governance. It is imperative to fortify the weakest links in the chains of governance – people, behaviour and culture – through advocacy, education and professionalisation that is embedded with values and integrity. This is the mindset change that AICB champions, and we trust that our thought leadership and content can be eye-openers for financial practitioners operating in the financial sector. ✱

Hope you have a fruitful read.

The Editor

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AICB

bankinginsight

Ideas for Leaders

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June 2019

NEOBANKS LIGHT UP ASIAN LANDSCAPE

2019 is turning out to be the year of the mobile-first bank and incumbents are getting in on the action.

In January, Malaysia's CIMB Bank announced its formal expansion into the Philippines with an all-digital, mobile-first bank; UOB's TMRW was launched in Thailand this February; and in March, the Hong Kong Monetary Authority awarded its first three virtual banking licences.

The region is preparing for more. In April, Bank Negara Malaysia Governor Datuk Nor Shamsiah Mohd Yunus said the country will be releasing its virtual bank licence requirements by year-end.

A cornerstone for greater financial inclusion, the burgeoning landscape of neobanks capitalises on its lower cost base and cutting-edge tech stack. These virtual banks are overall subject to the same strict regulations as their incumbent counterparts with, at times, stricter IT security structures due to their cloud-based business models. ✱

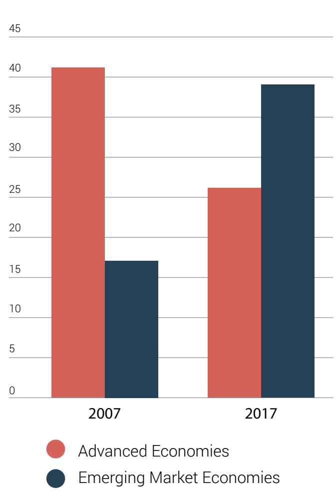
FOREWARNED IS FOREARMED

The International Monetary Fund (IMF) launched its newest tool, House Prices at Risk (HaR), designed to flag the probabilities of a future housing downturn at least a year before the market turns. HaR feeds in to the IMF's growth-at-risk model and links financial conditions to the dangers of an economic downturn. The April edition of its biannual *Global Financial Stability Report* draws some significant conclusions from the 32-country study:

Risk Reversal

In most advanced economies, weighted by GDP, the risk of a big drop in house prices declined from 2007 to 2017. In most emerging markets, risk increased over that period.

(share of economies with high house price risk)



~ In the short term, easy credit supports home prices although in the longer term, it could fuel overborrowing, making a bust more likely.

~ Large declines in home prices are associated with economic contractions and risks to financial stability, e.g. a –12 reading on the IMF gauge indicates a 31% probability of a financial crisis two years later in advanced economies and a 10% probability in emerging markets.

~ House prices in global major cities move in tandem; a shock in one country will likely affect housing markets elsewhere.

~ In most advanced economies, the odds of a big drop in inflation-adjusted house prices were lower at the end of 2017 than 10 years earlier but remained above the historical average. In emerging markets, by contrast, riskiness was higher in 2017 than on the eve of the global financial crisis. ✱

NOTE Shares of 22 advanced and 10 emerging market economies, weighted by GDP, where the three-year-ahead HaR exceeds –10% on an annual basis.
SOURCE IMF staff calculations.

Only **36% OF EUROPEANS TRUST BANKS**, compared to 54% in emerging Asia-Pacific economies.
~ EY, How to Maintain Trust in Global Banking's Digital Ecosystem.

Adjusting to the changing nature of work also requires rethinking the social contract… four out of five people in developing countries have **NEVER KNOWN WHAT IT MEANS TO LIVE WITH SOCIAL PROTECTION.**
~ Jim Yong Kim, President, World Bank Group, World Development Report 2019: The Changing Nature of Work.

NAVIGATING New Waters

DATO' ONG ENG BIN, CHIEF EXECUTIVE OFFICER OF OCBC BANK (M) BERHAD AND THE ASIAN INSTITUTE OF CHARTERED BANKERS COUNCIL MEMBER, OFFERS INSIGHT INTO HIS BRAND OF LEADERSHIP AND HOW BANKS ARE RISING TO MEET CHALLENGES ON THE HORIZON.

Q In a distinguished banking career spanning over three decades, you've seen the financial landscape reshaped on many fronts. What are the greatest challenges you faced? Would you share an event, experience, or 'Aha!' moment that shaped your personal philosophy as a banker?

I rose from the ranks as a graduate trainee in OCBC Bank. When I joined in 1988, the country was still recovering from the recession of the mid 1980s. Unemployment was still very high and property prices were very depressed.

Ten years later, the whole region was hit by the 1998 Asian Financial Crisis and many countries had to resort to the International Monetary Fund for aid and open up their banking sector. Malaysia devised its own set of remedies through entities such as Danamodal and Danaharta, and also took the occasion to consolidate its financial sector.

Ironically, a decade later in 2008, we would see the infamous Global Financial Crisis hitting the banking systems of the West; this time the Asian banks came out largely unscathed and even gained ground while the US and European banks had to be rescued by their own governments and recapitalised.

Today, a further decade later, we are witnessing a potential trade war that is expected to hurt everyone besides the two main players, the US and China.

These events tell us that history has a habit of repeating itself although crises may come in different forms and levels of severity, and that the

Taking things a step further, we encourage our staff to be future-ready by embracing the things that come their way positively and proactively. We are already heading in that direction with the rollout of our #FutureSmart initiative in which we encourage our people to get to know the digital world better, including how to use it for their daily tasks.

banking sector tends to always remain resilient as governments and central bankers are now more prepared and better equipped to handle the events as they unfold.

Through it all I think the lessons learnt revolve around how we as leaders and bankers can help our stakeholders, i.e. staff, customers, and shareholders navigate the tumultuous times without too much stress and hardship.

Q Honesty and ethics – hallmarks of a Chartered Banker – are the most powerful leadership traits one can possess. But *en masse* change is needed if we are to tip the scales in our favour. What actions can individual leaders take to cascade and enhance professionalism throughout their organisation?

Leadership by example is key.

To this end, and in order to set the tone from the very top, we recently set up an Ethics and Conduct Board Committee at OCBC group level. The Committee sets the direction for all our employees, outlining what responsible banking looks like, and the proper way forward. This is then rigorously enforced across the entire group to sustain and grow a strong culture of sound banking and fair dealing.

The setting up of the Board Committee is timely, given that in recent times many financial institutions across the globe have been mired in controversies involving ethical misconduct due to an imbalance between the pursuit of financial goals and responsible banking.

Q Power dynamics in the banker-customer relationship have evolved.

Digital innovations have radically empowered customers, pushing many banks beyond their comfort zone. In your estimation, how well have banks in Malaysia navigated these new waters?

At OCBC Bank, we have embraced digitalisation as a powerful way to improve our customer engagement and staff productivity. True, it is changing the way we run our business and how we deal with our customers, but we are relishing the challenges and opportunities that come with these changes.

Early last year, we rolled out our very own fintech unit in Malaysia called 'The Open Vault by OCBC', an arm that works closely with fintechs out there to help us improve the customer's experience at various touch points by using digital platforms.

That said, I remain a die-hard believer in the proposition that banking remains a people business and that technology can never truly replace humans.

Technology is, at best, an enabler so people can do things better and serve customers more efficiently. To be effective, you cannot run away from the human touch!

People transformation is a critical component in future-proofing the sector. What requisite skills must the 'banker of tomorrow' possess? How do we pave the road to fortify talent within our own unit or organisation?

Simply by being adaptable to change. I am a strong believer in change; it is both necessary and, ultimately, good. It beckons us to do things differently and produce better results.

At OCBC Bank, we are always on the lookout for solid candidates who, above all, have a positive attitude. With that kind of posture in a person, most things

Not a day should pass without our thinking about what little we might be able to do to make the world a better place to live in for both those who are near and dear, and also those unknown and far away. No matter how small the gesture, the impact will always be felt.

tend to fall nicely into place.

Taking things a step further, we encourage our staff to be future-ready by embracing the things that come their way positively and proactively. We are already heading in that direction with the rollout of our #FutureSmart initiative in which we encourage our people to get to know the digital world better, including how to use it for their daily tasks.

Beyond that, we are looking at ways to better engage and attract millennials through the numerous non-banking jobs at our disposal today. These include previously unheard of roles such as those in data science, cybersecurity, agile learning, biometrics, blockchain, digital design, and mobile programming.

What's the one piece of advice you would give your younger self?

Patience is a virtue that is essential in banking.

We recently rolled out our group-wide brand promise to be 'Simply Spot On' in everything we do. One of the pillars of this promise has to do with taking a long-term view. Sometimes, we tend to hurry and not stop to think things through thoroughly enough.

Consequently, we don't allow ourselves enough time to make the right judgements and decisions. There is a tendency these days for people to overact given the instant nature of the Internet in this digital age.

Pondering thoughtfully through something always trumps sheer gut reaction.

What do you think should occupy more of a leader's mind today?

It is important to constantly give back to the community and be inclusive in our practice of doing so. This thought should extend to our families, colleagues, the needy, yes, every facet of the community.

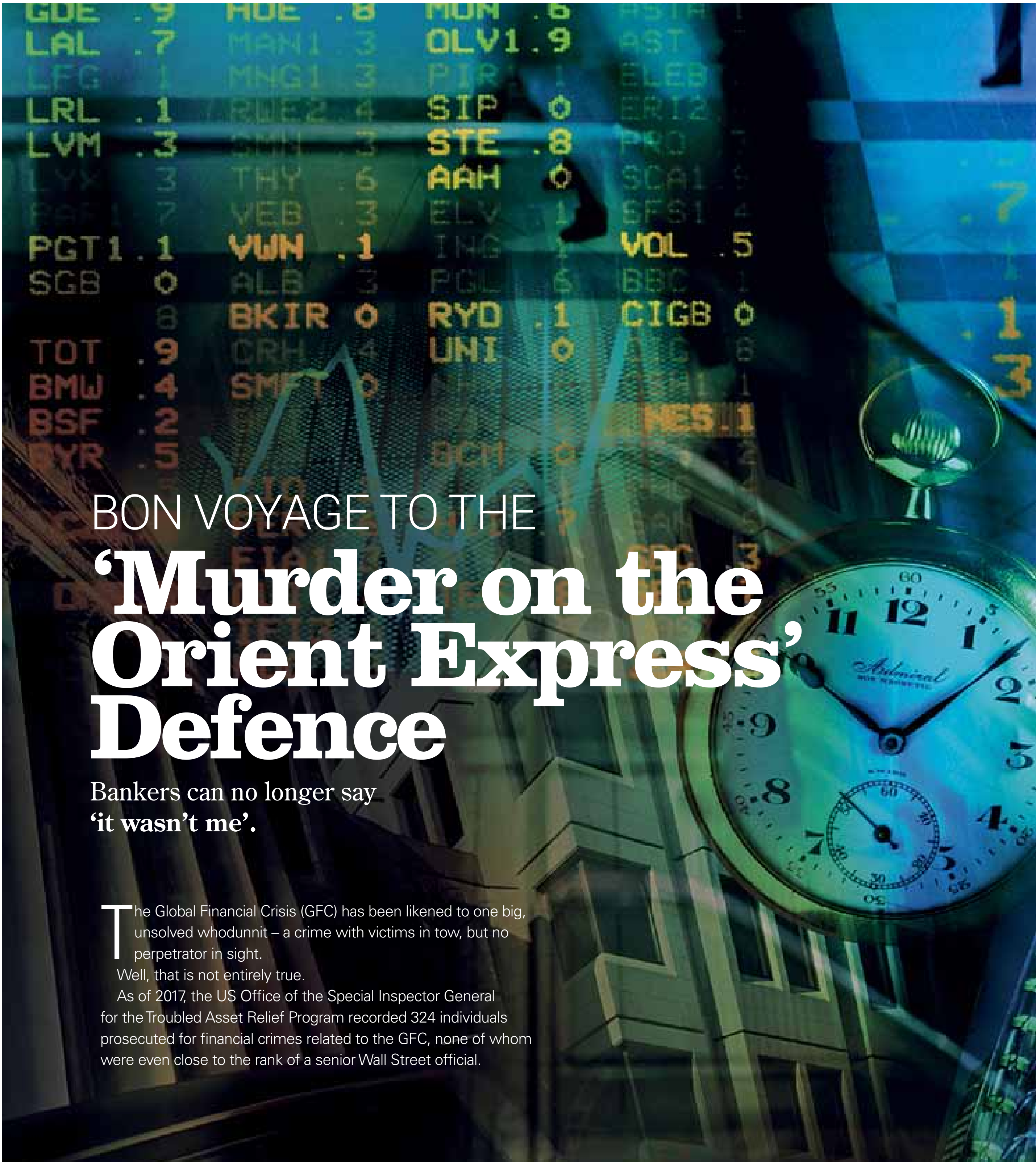
Not a day should pass without our thinking about what little we might be able to do to make the world a better place to live in for both those who are near and dear, and also those unknown and far away. No matter how small the gesture, the impact will always be felt.

I do my best to maintain a positive attitude, and to have the simplicity of heart to recognise the good in others.

We should all adopt this posture because, no matter what our standing, we are able to make a difference. I often like to quote Mother Teresa, who was often told that the things we do are like a drop in the ocean and won't change things much. She would respond: "Without that, the ocean will be missing that drop."

The Missionaries of Charity, which she founded in 1950 in Calcutta, India, has today grown from 12 members to over 4,500 sisters running orphanages, homes for the dying, and charity centres; caring for the unfortunate in Asia, Africa, Latin America, North America, Europe, and Australia. With a noble and contrite heart, she gave for the betterment of the community.

I think we should start somehow, somewhere, no matter how small that good deed may be. ✱



BON VOYAGE TO THE

'Murder on the Orient Express' Defence

Bankers can no longer say
'it wasn't me'.

The Global Financial Crisis (GFC) has been likened to one big, unsolved whodunnit – a crime with victims in tow, but no perpetrator in sight.

Well, that is not entirely true.

As of 2017, the US Office of the Special Inspector General for the Troubled Asset Relief Program recorded 324 individuals prosecuted for financial crimes related to the GFC, none of whom were even close to the rank of a senior Wall Street official.

Far from taking down 'big fish', the only US bank ever to be prosecuted was Abacus Federal Savings Bank, a small family-run community bank in Manhattan's Chinatown with the lowest default rate and which did not receive a bailout, the subject of which was made into an Oscar-nominated documentary, *Abacus: Small Enough to Jail*.

So, it is a fair question when the public asks: Where are the big fish?

ROCKY ROAD

Martin Wheatley, the then Chief Executive of UK's Financial Conduct Authority (FCA), has not had the smoothest of rides.

Unceremoniously ousted as FCA chief following dissatisfaction with his tough stance of cleaning up markets, he is now back as an adviser to the UK's top watchdog and tying up "unfinished business".

This includes his brainchild, the Senior Managers Regime (SMR), a shift in regulatory approach that holds top bosses personally accountable for wrongdoing, a move Wheatley first announced in March 2015.

Alluding to the actions of prime suspects who as good as pulled the trigger on the financial crisis, he said: "Industries characterised by weak accountability – or by individuals seeking to protect themselves on a 'Murder on the Orient Express' defence (it wasn't me, it could have been anyone) – are almost invariably less financially stable, and more prone to misconduct."

Recovering from the London Interbank Offered Rate (LIBOR) scandal and still grappling to regain public trust, the SMR was devised as part of a broader suite of regulations under the Bank of England's Senior Managers and Certification Regime (SMCR) to rein in conduct risk in financial services.

When a firm contravenes a regulatory requirement, senior managers will now be held responsible and must convince regulators that he/she took reasonable steps to prevent it from occurring, in stark contrast to current enforcement where the burden of proof lies with the regulator.

UK professional bodies played an essential role in weighing up the pros and cons of the new regime and ironing out loopholes in the rollout.

For instance, when the SMR was first mooted, Simon Culhane, CEO of the Chartered Institute for Securities & Investment (CISI) sounded the alarm regarding a critical loophole arising from the incongruence of existing laws and the SMR.

In the October 2014 edition of CISI's *The*

+ Industries characterised by weak accountability – or by individuals seeking to protect themselves on a 'Murder on the Orient Express' defence (it wasn't me, it could have been anyone) – are almost invariably less financially stable, and more prone to misconduct."

The CBA operates under Chatham House Rules (a principle whereby information disclosed during a meeting may be reported by those present, but the source of that information may not be explicitly or implicitly identified). It is a cross-sector conduit for participants to discuss 'thorny' issues regarding the SMCR, providing valuable market feedback to the regulators as the rules gradually extend to smaller firms.

Securities & Investment Review, Culhane declared that the UK's criminal records checking system, which at the time did not permit information technology (IT) staff to be vetted for fraud, stood at odds with the FCA-issued consultation paper proposing that "certified" persons be appointed under the SMR. How could IT managers be certified if they could not be checked in the first place?

He wrote: "The FCA requires that anyone seeking to be an 'authorised person' needs to be checked against the Disclosure and Barring Service (DBS). However, there is no such requirement for any check for those working in IT. In fact, it is worse: it is expressly prohibited to subject current or future IT staff to verification from the DBS as the vast majority do not hold a role that meets the strict criteria that allow them to be checked."

"It does lead to a strange anomaly. If you become a football steward, then you can be checked, but not if you work in critical IT roles in major banks and finance houses controlling millions of data points, and are responsible for the money transmission of billions of pounds."

"The government needs to shut the back door and give employers the basic tools to carry out first level due diligence on those who hold power over a critical part of the cyber network."

The CISI said it would follow up with the Home Secretary to ensure the industry had at its disposal the authority and tools to conduct thorough background checks of all critical personnel as part of the SMR compliance.

Professional bodies in the UK have also taken the lead to assist in the "major adjustment in the expectations of senior management of firms and parent companies".

An example is the creation of the Chartered Body Alliance (CBA) – a joint initiative by the Chartered Banker Institute, Chartered Insurance Institute, and CISI – which aims to promote high standards of knowledge, skills, and integrity across the financial sector.

"It does lead to a strange anomaly. If you become a football steward, then you can be checked, but not if you work in critical IT roles in major banks and finance houses controlling millions of data points, and are responsible for the money transmission of billions of pounds."

Simon Culhane,
CEO of the Chartered Institute for Securities & Investment (CISI)

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Such initiatives have contributed to fine-tuning of the regime, with a marked shift "from an excessive reliance on punitive, *ex post* fines of firms to greater emphasis on more compelling *ex ante* incentives for individuals, and ultimately a more solid grounding in improved firm culture," as stated by Mark Carney, Governor of the Bank of England, at a Banking Standards Board conference in 2017.

OVERHAULS

By end-2019, the SMR will be fully rolled out in the UK, marking a long phase-in period that began in 2016 for banks, insurers, large investment firms, and incoming branches of overseas banks. It overhauls several critical aspects outlined below by the FCA:

+ **Accountability.** This covers the creation of Management Responsibility Maps to allocate key responsibilities to senior individuals within the financial institution, devising each senior managers' Statement of Responsibilities, and the certification process of senior managers. See *Key Deliverables Under the SMR* on page 14.
+ **Remuneration.** Publication and continuous updating of its remuneration rules for greater alignment between the industry's risk and reward.

+ **Whistle-blowing.** An overhaul to strengthen whistle-blowing systems and controls in firms, encouraging people to speak up and report wrongdoing.

In May 2018, the UK regulators filed their first-ever case under the SMR.

Barclays CEO Jes Staley was fined a combined £1.142 million – an early stage settlement totalling £642,000 to the regulators and a £500,000 pay cut by the bank – for trying to identify a whistle-blower.

Following this, on 19 September, for the first time, regulators issued a 'Dear CEO' letter to all major banks and insurance firms. They requested a senior manager be named and held personally accountable to undertake a "comprehensive risk assessment of the potential prudential and conduct impacts associated with a transition in a range of scenarios, including LIBOR (London Interbank Offered Rate) discontinuation".

By January 2018, global legal firm Baker Mackenzie reported a 75% spike in investigations of individuals connected to the GFC.

These drastic steps underline the seriousness of holding individuals liable for firm-wide transgressions, and hopefully, mitigate conduct risks as well as constrain excessive credit and market risk-taking.

CASE STUDY

Given the long phase-in period, it is now possible to infer valuable lessons from the UK experience for other jurisdictions.

A KPMG study, *Individual Accountability: Global Regulatory Development In Financial Services,* lists five broad areas in which UK firms have

struggled with SMR implementation:

- **Some firms and senior managers have found it difficult to understand their obligations in several areas.** Many firms have found it challenging to define how far they – and their senior managers – should go to establish "reasonable steps" had been taken to avoid regulatory breaches, the extent to which second and third line of defence control functions and internal audit should be involved in monitoring this and providing assurance of taking the appropriate steps.

Firms have also struggled with how to interpret some of the prescribed responsibilities such as those relating to culture; with the identification and notification of breaches of the Conduct Rules; and with the identification of populations for the Certification Regime (including the interpretation of "significant harm" and the extent to which to capture roles requiring formal qualifications).

A more recent challenge relates to the roles and responsibilities of a firm's chief of operations in areas of fintech, operational continuity, legacy data systems, and cybersecurity.

- **Some firms have found it difficult to establish the identification and role of group-level senior managers and the application of the "other**

Firms have also struggled with how to interpret some of the prescribed responsibilities such as those relating to culture; with the identification and notification of breaches of the Conduct Rules; and with the identification of populations for the Certification Regime (including the interpretation of "significant harm" and the extent to which to capture roles requiring formal qualifications).

KEY DELIVERABLES UNDER THE SMR

+ PRE-APPROVAL AND ONGOING ASSESSMENT OF SENIOR MANAGEMENT FUNCTION (SMF) HOLDERS

Firms must have a procedure in place to assess the fitness and propriety of SMF holders before their appointment. SMF holders must also be pre-approved by one or both of the regulators before the individual is appointed to the role. Firms must reassess the suitability of each SMF holder at least once a year and report to the regulators if there is any cause to doubt the individual's suitability for the role.

+ STATEMENT OF RESPONSIBILITIES

In support of their application for regulatory pre-approval, each SMF holder must submit a signed statement setting out the responsibilities that will fall within their proposed remit. The SMF holder must notify the regulator and resubmit the relevant statements should these change significantly. Firms should have a procedure in place to govern any transition between roles.

+ RESPONSIBILITIES MAP

Each firm must submit a Responsibilities Map showing each relevant SMF and how it has assigned the prescribed responsibility amongst the SMF holders. The firm must annually confirm with the regulators that there are no gaps in the allocation of responsibilities.

+ REPORTING DISCIPLINARY ACTION TO THE REGULATOR

If a firm imposes disciplinary action against an SMF holder, the firm must then notify the regulator.

+ THE DUTY OF RESPONSIBILITY

The FCA is currently consulting on proposals to amend the *Decision Procedure and Penalties* manual that gives guidance on how the 'duty of responsibility' will be enforced. A senior manager is guilty of breaching their duty under the SMCR if:

- there was a regulatory contravention by the firm;
- the senior manager was responsible for the activities concerning the contravention that occurred; and
- the senior manager did not take such steps as would have been reasonable to avoid the contravention.

SOURCE Adapted from KPMG.

overall responsibility" senior manager function. Entities with overseas parents have struggled to identify and allocate a clear set of responsibilities to group-level senior managers and to define how responsibilities will be shared with UK-based senior managers within a matrix management structure.

In some cases, an overseas parent has been reluctant to designate managers based outside of the UK as senior managers.

Further complexity has arisen where an overseas parent operates through both a subsidiary and a branch in the UK, with some senior managers undertaking senior management functions (SMF) in both UK entities.

Even within the UK, issues arise where individuals in an unregulated group entity have a significant influence over one or more regulated entities within the group.

Firms are also often unclear about how many senior managers to allocate for the group entity senior manager function – some firms may have identified too many senior managers and in some cases have designated managers who are too junior. In both instances, this blurs accountability.

- **Firms have faced a series of operational challenges,** such as resourcing issues, particularly in compliance and human resource functions; the cost associated with tailored training for different cohorts of senior management and certification regime staff; preparing and maintaining documentation, and ensuring consistency between the management responsibilities map and individual statements of responsibilities; change management; and regulatory references.

- **Where branches of European banks are re-authorising as non-European Economic Area (non-EEA) branches,** this has resulted in these branches having to apply the non-EEA Branch SMCR regime, which captures a broader range of senior management roles and is not designed explicitly with some of the smaller European branches in mind.

- **Some firms have struggled to implement the SMCR at the same time as introducing organisational change** as a result of other regulatory requirements (recovery planning, resolution, and the ring-fencing of retail banks), Brexit, mergers and acquisitions, or other group restructurings.

Critics also say the SMR pushes the burden of proof onto senior managers, a violation of the legal principal *ei incumbit probatio qui dicit, non qui negat* (the burden of proof is on the one who declares, not on one who denies), or what we laymen know as 'innocent until proven guilty'.

It also at the centre of one of the longest-running third-party rights litigation trials in UK history, arising from the FCA's investigation into the 2012 London Whale scandal.

In this case, in its final notice to JP Morgan Chase traders and executives involved in the US$6.2 billion scandal, the regulator adversely referred to "CIO London management". Whilst the FCA did not identify Achilles Macriss – the bank's CIO at the time – by name, Macriss alleged that it was defamatory as the references were enough for the market to point the finger at him.

The UK regulator breathed a sigh of relief as the long-running dispute was finally put to rest in March 2018 when the Supreme Court set a precedent and

In Malaysia, the Central Bank is devising a comprehensive Responsibility Map vide a discussion paper circulated in February 2018 to market participants. It maps a clear proposal of the prescribed roles under the regime and aims for full implementation by 2019.

ruled in its favour, clearing the path for other similar cases to proceed under the SMR.

IN THE OFFING

The SMR has inspired other jurisdictions to follow suit as more nations in the Asia Pacific train their sights on the robust codification of conduct risk.

In Malaysia, the Central Bank is devising a comprehensive Responsibility Map vide a discussion paper circulated in February 2018 to market participants. It maps a clear proposal of the prescribed roles under the regime and aims for full implementation by 2019.

The Monetary Authority of Singapore's *Guidelines on Individual Accountability and Conduct* issued in April 2018 target three key areas: individual accountability of senior managers (excluding non-executive directors), strengthening oversight of employees in material risk functions, and embedding standards of proper conduct amongst all employees.

Australia's Banking Executive Accountability Regime came into effect on 1 July 2018 for large banks and will be binding on all authorised deposit-taking institutions by 1 July 2019. The rules also apply to Australian branches of foreign-owned banks.

Hong Kong extends its accountability regime to cover licenced corporations under its Manager-in-Charge Regime and registered institutions (i.e. banks and deposit-taking companies) under the Management Accountability Initiative.

A WILL AND A WAY

As with prior attempts at codifying ethical conduct, it was only a matter of time before news of a workaround surfaced.

Online portal *Risk.net* cites industry insiders who say that some banks 'juniorised' positions for managers to duck responsibility.

The UK's Prudential Regulatory Authority has also on occasion halted interviews midway because bankers were unprepared.

Such bravado is unsurprising and exemplifies the shortcomings when it comes to enforcement. Voluminous paperwork is not good enough; it is the culture of banking that must change.

Will people step up to do what is right or what is expedient? That is the real acid test.

Who knows how many more GFCs may be lurking in the financial shadows. ✱

■ *Angela Yap is a multi-award-winning entrepreneur, speaker, author, writer whose work has been featured and referenced in international journals and magazines. She is the founder of content research firm, Akasaa.*

BY KARUNAJOTHI KANDASAMY, SAMUEL LEE & NG SHYUE JER

UNDERSTANDING FINANCING THROUGH THE LENS OF SMALL & MEDIUM ENTERPRISES

Highlights from the Central Bank of Malaysia's Survey on SME Finance.

+ The positive linkage between entrepreneurship and growth is well established, but a growing body of research focusing on the importance of finance in supporting SME development shows that firms with access to loans grow at a faster rate than those without such access.

Small and medium enterprises (SMEs) play a critical role in generating income, employment, innovation, and facilitating social cohesion. With about one million establishments in the country, SMEs contribute 37.1% of the Malaysian GDP, 66% of employment and 17.3% of exports. The positive linkage between entrepreneurship and growth is well established, but a growing body of research focusing on the importance of finance in supporting SME development shows that firms with access to loans grow at a faster rate than those without such access.

As part of Bank Negara Malaysia's (the Bank's) function to promote a sound, progressive and inclusive financial sector, efforts have been directed towards developing a holistic SME financing ecosystem. This includes addressing information asymmetry and market imperfections, which are key barriers to finance. There have been significant strides made in the areas of credit information, credit guarantees, specialised funds, advisory services, redress and debt resolution arrangements. Financing to SMEs now constitute 48.7% of total financing outstanding by

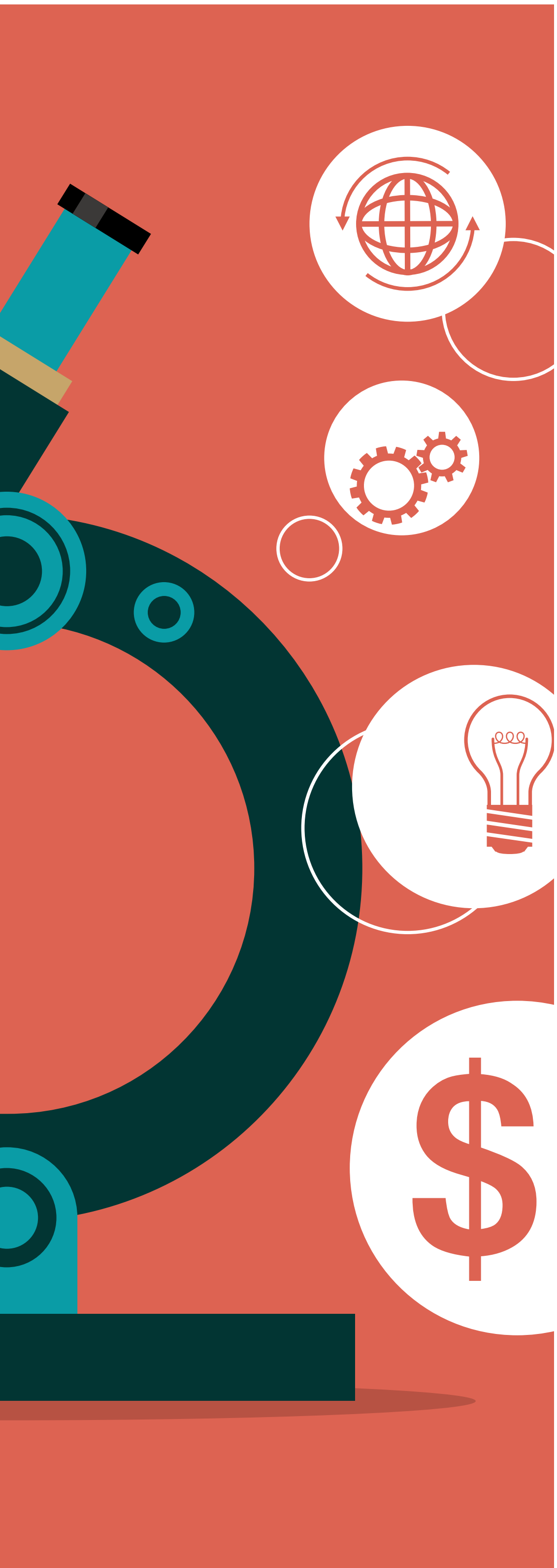
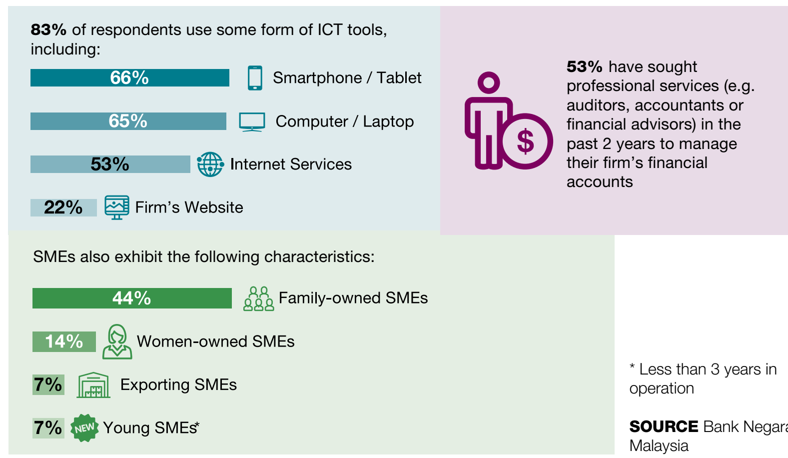


DIAGRAM 1 **Characteristics of Malaysian SMEs**



* Less than 3 years in operation

SOURCE Bank Negara Malaysia

financial institutions to businesses (2010: 37.6%) and 17.5% of total financing outstanding (2010: 14.4%).

In 2018, as part of ongoing efforts by the Bank to promote continued access to financing for SMEs, a demand-side SME Finance Survey (the Survey) was conducted to obtain a better understanding of the financing needs and behaviour of SMEs, underlying challenges faced by SMEs and policy implications moving forward.

INSIGHTS FROM THE SURVEY FINDINGS

Key Characteristics & Financing Behaviour of Malaysian SMEs

The Survey showed that more than 90% of the SMEs served the domestic market, with 7% exporting their products and services. About 83% of SMEs reported utilising information and communications technology (ICT) in their business operations (**Diagram 1**), with 22% having their own website and 14% operating online stores. More than half of the respondents (53%) used professional services, including auditors, accountants or financial advisors to manage their financial accounts.

Despite the challenging business environment in the first quarter of 2018, a majority of SMEs (71%) recorded profit margins of above 10% (**Chart 1**) and were able to maintain positive cash flows. Manufacturing firms reported higher levels of productivity and paid higher wages for new graduate hires compared to other sectors.

On financing, respondents reported utilising funds from a variety of sources, both internal and external, with own cash contributions being the main source. Among other funding sources, about 27% of the respondents had facilities with financial institutions,

CHART 1 Profit Margin of SMEs by Sector

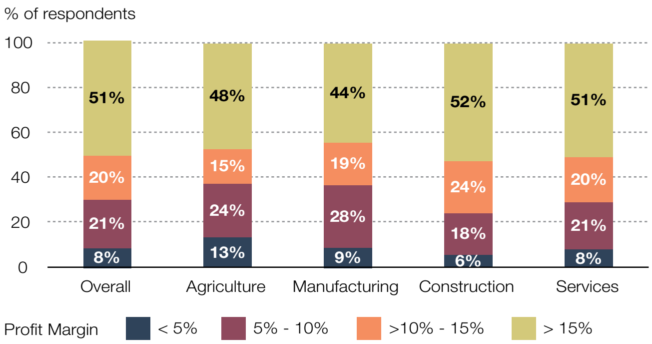
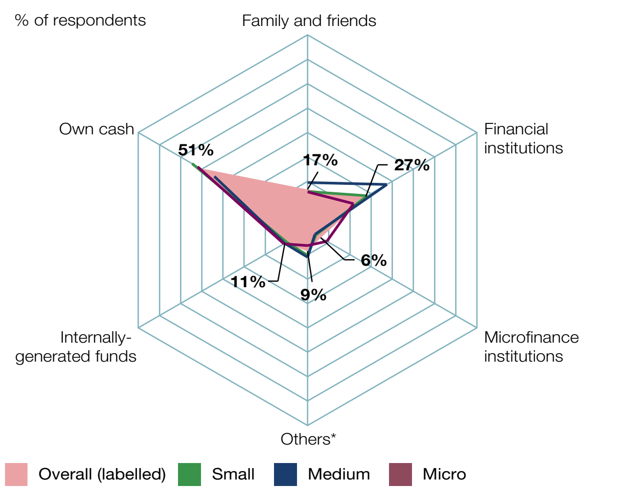


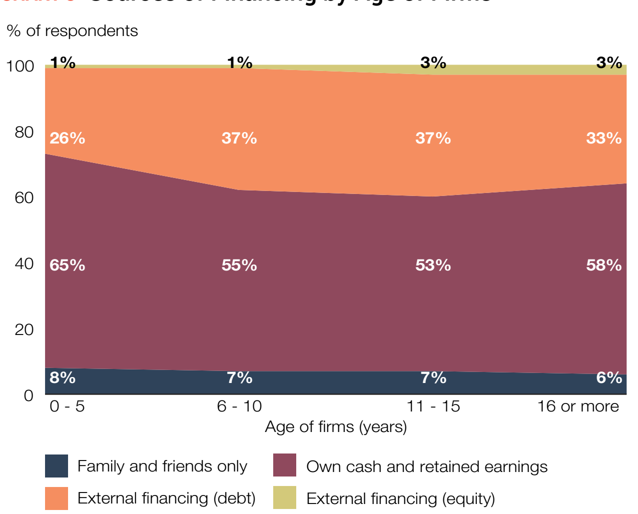
CHART 2 Sources of Financing by Firm Size



* Others include alternative finance and Government grants

NOTE Figures labelled refer to % of total firms. Firms can provide multiple answers

CHART 3 Sources of Financing by Age of Firms



SOURCE Bank Negara Malaysia

Sources of financing also vary throughout the business life cycle. At the initial stage, young firms tend to rely on their own cash and informal sources such as family and friends. This is consistent with most research findings, which attribute such behaviour typical of young firms to information opacity; lack of collateral, track record and financial skills; as well as high transactional costs.

followed by family and friends, internally-generated funds and microfinance institutions (**Chart 2**). In the microenterprise segment, 22% had financing facilities with financial institutions, including 9% of respondents who secured financing under the *Pembiayaan Mikro* facility.

Sources of financing also vary throughout the business life cycle. At the initial stage, young firms tend to rely on their own cash and informal sources such as family and friends. This is consistent with most research findings, which attribute such behaviour typical of young firms to information opacity; lack of collateral, track record and financial skills; as well as high transactional costs. As businesses mature (typically after five years in operation), they tend to rely more on external financing in the form of both debt and equity, including bank financing (**Chart 3**).

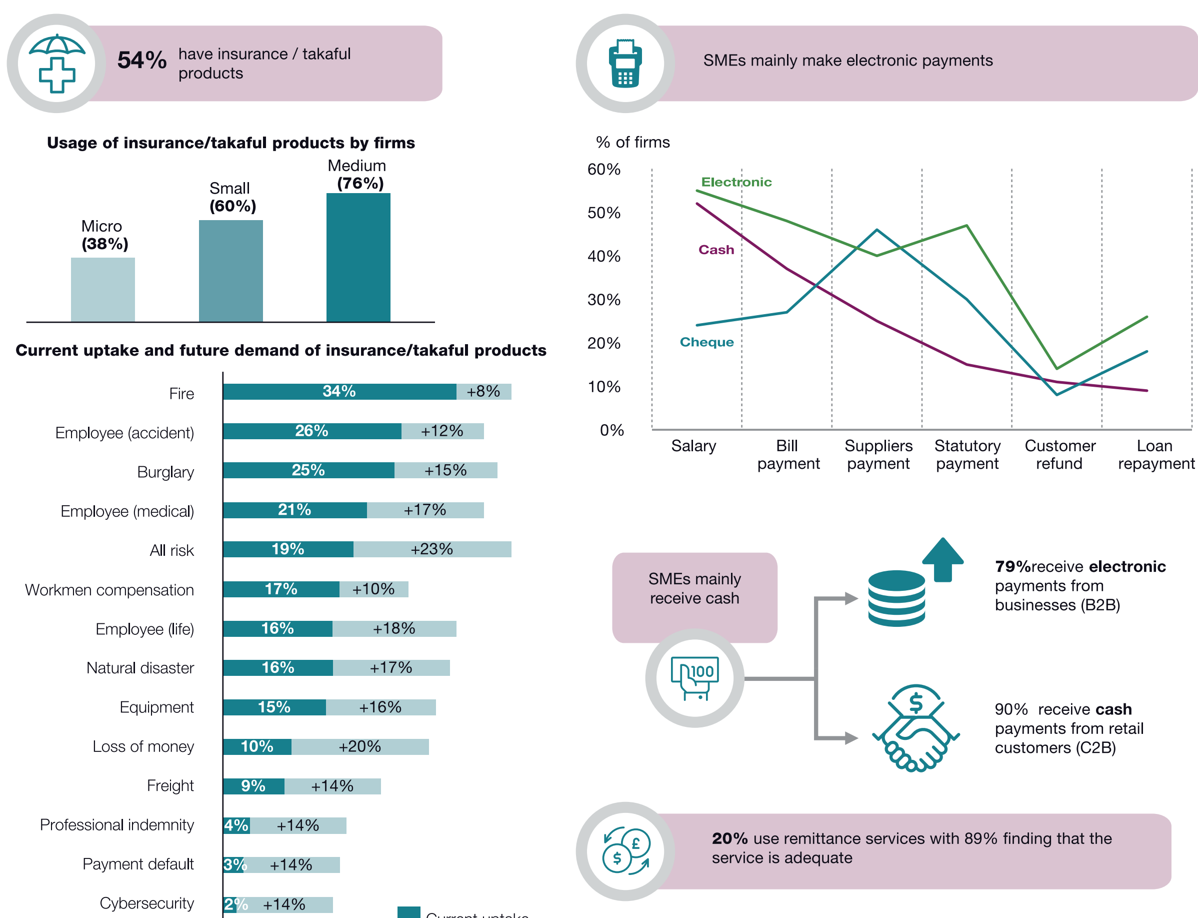
Among the SMEs that had applied for financing, most indicated that they were able to secure financing. About 22% of the respondents had applied for financing in the six months prior to the Survey, with the majority (94%) of their applications being approved.

- About 13% applied to financial institutions with 91% of their total financing applications approved, while the remaining 9% applied to other sources with a 99% approval rate.
- Women-owned firms reported a higher demand for financing (33% of women-owned firms applied versus 22% of all respondents), but experienced a lower approval rate of 83% (overall: 94%) mainly due to the lack of track record and insufficient documentation. Most of these firms obtained unsecured financing from microfinance institutions, banking institutions and development financial institutions.
- About 44% of the respondents were first-time borrowers.

- The main purposes of the financing applications were for the purchase of assets (building, property, machinery and equipment: 23%), working capital (22%) and starting a new business (19%).
- On average, the majority of the applications (89%) was approved within one month and the funds were disbursed within the subsequent month (87%).

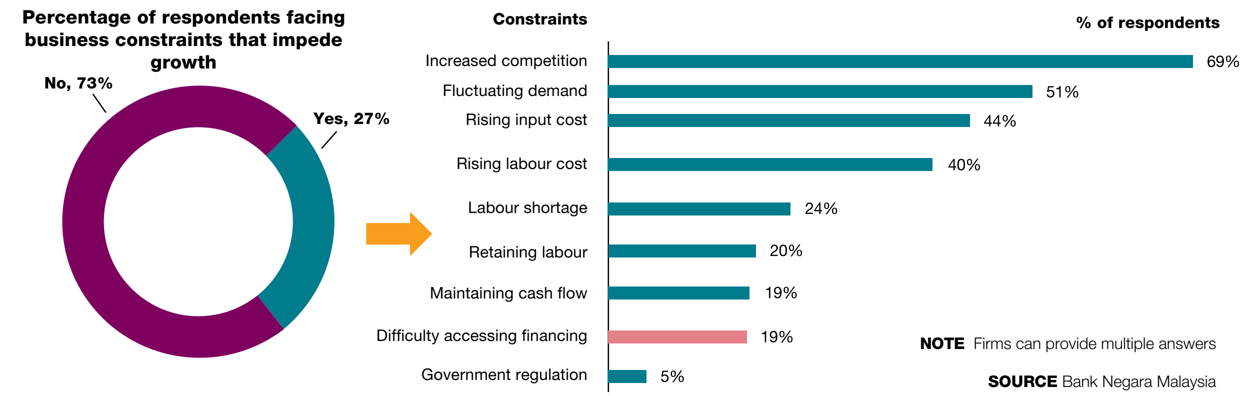
The Survey also provided insights on SMEs' usage of other financial services, such as insurance, takaful and e-payments (**Diagram 2**). More than half of the respondents have insurance or takaful

DIAGRAM 2 SMEs' Usage of Other Financial Services



NOTE Firms can provide multiple answers **SOURCE** Bank Negara Malaysia

CHART 4 Business Constraints Faced by SMEs

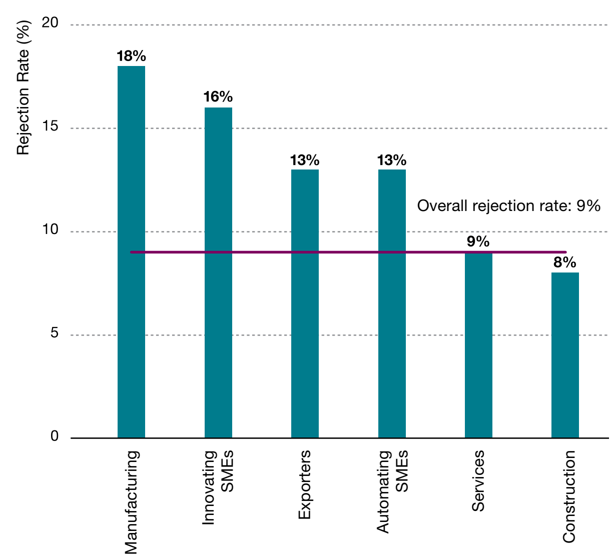


NOTE Firms can provide multiple answers

SOURCE Bank Negara Malaysia

products, although this was less prevalent among microenterprises. While the current take-up has been low, potential future demand for insurance and takaful by SMEs is significant for all products across the board, with emerging interest particularly in securing protection for risks associated with cybersecurity, professional indemnity, payment default and damages in crops. SMEs mainly made electronic payments, but preferred cash in receiving payments from customers. It was also observed that cheques remained popular for payments to suppliers and other B2B (business-to-business) transactions.

CHART 5
Rejection Rate of Financial Institutions for Key Segments



SOURCE Bank Negara Malaysia

UNDERLYING CHALLENGES IN FINANCING

1. Financing barriers mainly relate to documentation, costs and business viability

Among the key constraints to business growth, difficulty in accessing sufficient financing was ranked low, second to last out of the nine constraints identified by SMEs (**Chart 4**). Nevertheless, the findings from the Survey revealed some financing barriers faced by SMEs:

a. SMEs that experienced rejections of their financing applications cited insufficient documentation, insufficient cash flow to meet repayments and non-viable business plans as the main reasons for rejection.

b. SMEs involved in automation, innovation, manufacture of goods, and exports experienced higher rejection rates compared to the overall SMEs (**Chart 5**). Firms that automated stated insufficient collateral and projects perceived to be of higher risk as key reasons for rejection. The rejected applications were mainly for the purchase of machinery and equipment and ICT tools, as well as undertaking research and development (R&D). These projects could be deemed to be higher risk as they may involve movable and intangible assets with low salvage value in the event of

CHART 6 Government Assistance Deemed Most Useful by SMEs versus the Key Constraints Faced

NOTE Firms can provide multiple answers SOURCE Bank Negara Malaysia

commercial failure, and involve the use of new and untested processes with high uncertainty on returns. Innovative firms cited insufficient documentation as a key factor for rejection. Exporting and manufacturing firms that faced greater difficulty obtaining financing were mainly firms that were newly established with limited repayment track records.

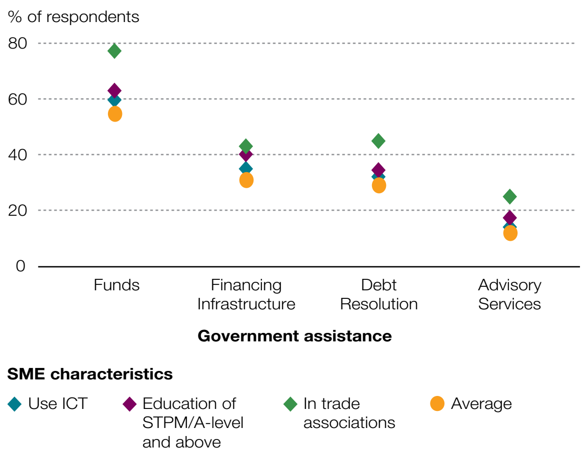
c. Businesses that needed financing but did not apply (41%) were either cautious in taking on debt, unsure of their repayment capacity, or found the application process too difficult.

d. About 46% of the respondents stated that the financing products offered by financial institutions did not meet their business needs due to high financing costs (50%), insufficient financing amount (42%) and onerous documentation requirements (29%). The average financing rate that respondents were willing to pay was 3.88%, well below the average lending rate to SMEs of 6.18% at the time of the Survey (second quarter 2018).

The challenges raised by businesses in the Survey point to opportunities for improvement in the onboarding process of financial institutions (including documentation requirements) and financial management capabilities of

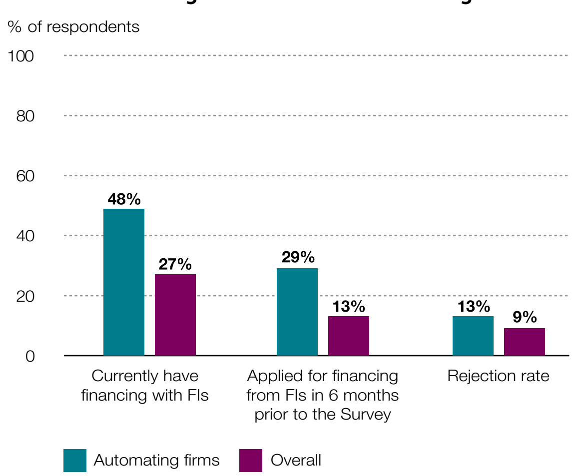
In particular, for automating firms the purpose of financing was mainly to purchase machinery and equipment and ICT tools including hardware and software, as well as to undertake R&D activities. Such financing can involve higher risks associated with uncertain values and security attached to intangible or movable assets, including their ability to generate cash flows, hence the higher rejection rate.

CHART 7 SME Awareness on Government Assistance



NOTE Firms can provide multiple answers

CHART 8 Financing Behaviour of Automating Firms



SOURCE Bank Negara Malaysia

SMEs to enhance their creditworthiness. New approaches to credit assessments by leveraging on technology and big data also present opportunities to increase access to financing for SMEs.

2. Funding is the most sought after form of government assistance

The Survey indicated that the main constraints to SME growth were factors associated with operating and business conditions, namely increasing competition (69% of respondents), fluctuating demand (51%), rising input costs (44%) and rising labour costs (40%). However, when asked which form of government assistance would be most useful, financial assistance (e.g. grants, soft loans, guarantees) was consistently preferred by a significant majority of SMEs as being most useful (**Chart 6**). This could suggest that SMEs lacked awareness on other forms of government assistance which could be better suited to address specific challenges faced, including capacity building support, regulatory responses or access to new markets.

Findings from the Survey further suggest that certain factors such as the level of education, membership in trade associations, and ICT usage are positively linked with higher awareness (**Chart 7**). These factors can be leveraged upon in the development of future awareness programmes to ensure more effective outreach.

3. Higher demand for financing for automation and technology

About 19% of the respondents indicated that they have automated their operations, 15% actively leveraged on technology to innovate or introduced new products and processes, while some 17% (especially medium-sized firms) were preparing for Industry 4.0. Businesses that had automated their operations (mainly in the wholesale trade, computer and IT-related services, and machinery and engineering equipment manufacturing) reported higher revenue per worker on average by about 90%, compared to those that did not automate. The move to automate therefore holds significant potential for enhancing the growth and contribution of SMEs to the economy, for which financing will be a key enabler.

Firms using technology generally had higher demand for financing compared to the overall respondents (**Chart 8**), but also faced higher rejection rates. In particular, for automating firms

At the same time, the Survey revealed that automating firms were open and willing to share information with financial service providers. They also have higher ownership of assets (three times higher than those not automating).

the purpose of financing was mainly to purchase machinery and equipment and ICT tools including hardware and software, as well as to undertake R&D activities. Such financing can involve higher risks associated with uncertain values and security attached to intangible or movable assets, including their ability to generate cash flows, hence the higher rejection rate. A further reason may be a lack of customised products in the market for financing automation due to inadequate experience in evaluating innovative technologies and pricing the associated risks.

At the same time, the Survey revealed that automating firms were open and willing to share information with financial service providers. They also have higher ownership of assets (three times higher than those not automating). Therefore there are opportunities to better understand the distinct profile and financing needs of automating firms, enhance and customise product offerings for automation, as well as review collateral policies and the supporting infrastructure to tap into movable assets and intangibles as acceptable collateral.

4. Persistence of informal businesses further limits access to finance

The Survey also revealed that unregistered firms generally recorded higher profitability averaging at 17.7%, compared to 16.1% by formal SMEs. These firms rely heavily on funds from family and friends and own cash at the initial stage, and continue to depend on family and friends, and internally-generated funds even as their business expands, with low access to external financing. The lack of access to critical resources and assistance could limit their scope for growth. Only 6% of the owners of unregistered firms indicated that they intended to formalise their business in the next two years. The World Bank Enterprise Surveys indicated that common reasons for firms not registering include the lack of information on how to register, time taken to register, taxes to be paid, and the lack of perceived benefits from formalisation. Other studies have also highlighted high entry costs, strict labour regulations, lack of access to resources and a complicated registration process as being deterrents to formalisation. These factors, potentially also relevant in the case of Malaysia, could be further examined through future surveys to encourage greater formalisation of businesses.

CONCLUSION

The Survey findings affirm that recent initiatives such as an online financing platform, regulatory sandbox, fintech enablers, and psychometrics remain relevant in light of barriers to financing. In addition, areas for further development to enhance SME finance include the ongoing effort to establish a secured transaction framework (collateral registry to enable movable property to be used as collateral), stepping up formalisation of businesses (for further financial inclusion), and promoting alternative finance (such as equity crowdfunding, venture capital, peer-to-peer financing). These efforts would serve towards enhancing the ecosystem and build a well-diversified financial landscape for SMEs. ✱

■ *The report is written by Karunajothi Kandasamy, Samuel Lee & Ng Shyue Jer, and is a contribution from Bank Negara Malaysia. Read the full report at http://www.bnm.gov.my/files/publication/fsps/en/2018/cp02_001_box.pdf*

BY ANGELA YAP

WE THE PEOPLE: ARCHITECTING DIVERSITY IN FINANCIAL INSTITUTIONS

Counterculture and how it is shaking up the sector.

Say 'diversity' and the associative word today is most likely 'women'. However, diversity and inclusivity (D&I) is far more than that.

It covers the spectrum of fair and equitable representation, including:

+ **Gender.** With more women than ever in the workforce, many issues such as the 30% quota of women have been debated for decades and are only now centre stage in mainstream thinking.

A McKinsey & Co report, *Closing the Gap: Leadership Perspectives on Promoting Women in Financial Services,* found that over 90% of US financial services companies asserted a commitment to gender diversity, yet women remain significantly underrepresented in the upper levels of financial services firms. Women and men in financial services begin their careers at parity, making up roughly equal portions of entry-level staff, but higher up the ladder, women account for only 19% of C-suite positions, lower than the 22% average for US women overall.

The consulting firm states that although the data are based on North American research, the insights and implications are globally relevant.

There are also more wide-ranging issues: protections against sexual harassment, limited career advancement, policies and practices that are far from accommodating to working mothers and, consequently, high attrition rates. Especially in science, technology, engineering and mathematics-related fields, technical expertise is often skewed towards men, giving rise to unconscious bias.

However, things are improving at the

To level the playing field, many corporations, including financial institutions, are improving intergenerational ties through apprenticeships, mentor-mentee programmes or simply switching people's work stations and shuffling seating arrangements. Attention to the little things can lead to understanding and significantly improve cross-generation collaboration.

bottom as well as the top. In January 2019, an American study by Alliance for Board Diversity and Deloitte showed women and minorities comprise 34% of Board seats in Fortune 500 companies, up from 30.8% in 2016.

The trend is prevalent in much of Asia Pacific with positive results. In a 10-country study by consulting firm Korn Ferry of the largest 100 companies in the region, it found that those with a minimum 10% female Board representation recorded higher returns on assets and equity.

+ **Ethnicity/Race.** Just as concepts of race and ethnicity are shifting, so too should open discussions about these issues form part of corporate identity. Talent planners view that acceptance of ethnic diversities and race relations is essential if companies are to be 'inclusive' in their policies.

In recent times, we have seen some shifts as financial firms seek to boost ethnically diverse hiring and take proactive steps to move out of their 'comfort zones' and promote greater representation on this score.

+ **People with Disabilities.** The spectrum is broad and encompasses many aspects such as vision, movement, thinking and learning, mental health and more. It is common today in companies like IBM and SAP to specifically run hiring programmes in search of what is known as a 'neurodiverse' workforce.

+ **Age.** Whether young or old, age discrimination – or 'ageism' – has in many ways been left at the wayside. In many countries such as Japan which has a growing ageing population, they represent a source of economic power and valuable labour force if tapped right. So too do biases apply against young people as many corporates hold on to stereotypes of millennials and their work ethics.

To level the playing field, many corporations, including financial institutions, are improving intergenerational ties through apprenticeships, mentor-mentee programmes or simply switching people's work stations and shuffling seating arrangements. Attention to the little things can lead to understanding and significantly improve cross-generation collaboration.

+ **Cognitive and Thinking Styles.** Industrialist Henry Ford called this 'groupthink' and fought his entire career to avoid this pitfall, especially amongst his top executives. Driving innovation requires people of different experiences, skill sets and values. It is perhaps the most latent and subtle, but it is necessary that people with unique views and perspectives have a safe environment with built-in avenues so their voices can be heard.

BANKING ON MORAL SUASION

SustainAbility Trends 2019 reports that high profile topics such as diversity are "seeing the most action amongst banks and investment firms, driven by shareholder activism and more sophisticated environment, social and governance risk analysis. Asset managers are now working together to encourage better practices amongst portfolio companies on issues like gender diversity."

Indeed, one of the loudest voices on Wall Street, BlackRock Inc., which alone controls over US$6 trillion in assets under management, has waged a watershed move against boards and companies that fail to put D&I policies in place.

In his annual Letter to CEOs, BlackRock chief Larry Fink pointed out that "governance, including your company's approach to Board diversity", were among the issues the asset manager would scrutinise or take action against by way of votes.

Ethically Diverse

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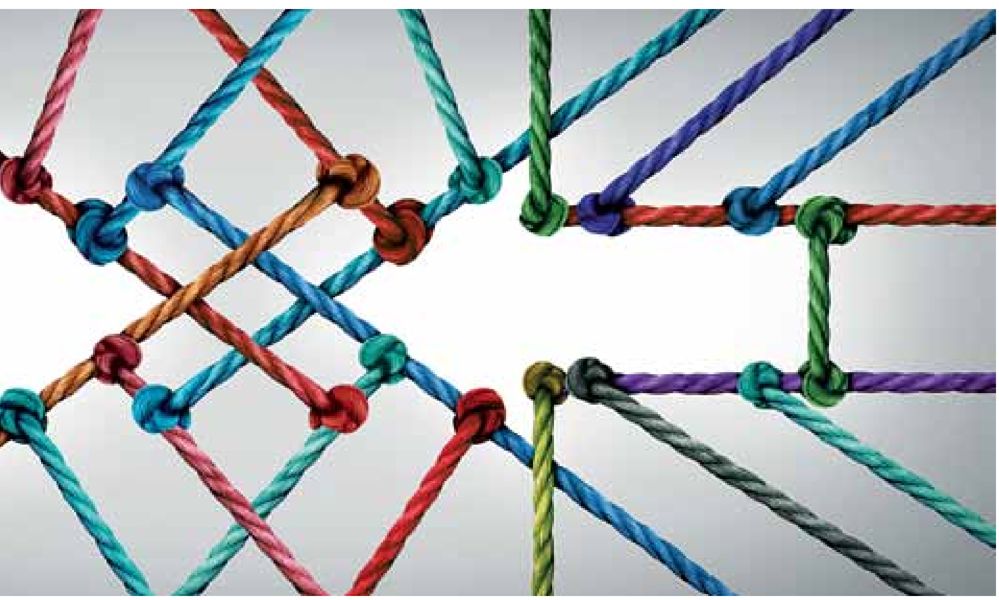


Its closely watched *Proxy Voting Guidelines for US Securities,* which sways vast numbers of proxy votes in the companies it invests in, was updated in February 2018 with these 'calls-to-action':

- **Board diversity**
  A diverse selection of individuals should make up the Boards. The guidelines speak most directly to gender diversity, stating that "we would expect to see at least two women directors on every Board."
- **Overboarding**
  CEOs to sit on no more than one additional Board and non-CEOs should not sit on more than four Boards in total.

In Malaysia, Kasturi Nathan, executive director (governance and sustainability practice) of KPMG Management & Risk Consulting, wrote in an opinion piece that the country's largest institutional investors, namely the Employees Provident Fund and the Retirement Fund Inc., have overt diversity policies at the Board level.

The Securities Commission Malaysia's new Malaysian Code on Corporate Governance (MCCG) released in April 2017, which covers listed companies including financial institutions and licensed intermediaries, has also stated that "diversity, when extended to senior management, will also serve as a talent pipeline for Board candidacy".

Specifically, item 4.6 of the MCCG outlines that the Board should "use a variety of approaches and sources to ensure that it can identify the most suitable candidates. This may include sourcing from a directors' registry and open advertisements or the use of independent search firms" to strengthen corporate culture.

Even so, policies, however well-intentioned, are susceptible to window dressing.

Nathan shares this cautionary tale: "For example, when the Securities and Exchange Board of India made it mandatory for all listed companies in 2015 to have at least one woman on their Boards, some controlling shareholders and corporate bigwigs responded to this requirement by appointing their wives and in some instances, even stepmothers as directors."

CASE FOR BUSINESS

For decades, the anecdotal ("I know someone who…") or qualitative metrics ("women are better at multitasking because…") has alluded to a positive correlation between diversity in leadership and business performance.

In one of the most comprehensive research yet on D&I strategies, McKinsey & Co.'s latest 2018 paper, *Delivering Through Diversity,* sheds light on one of the top questions when it comes to diversity: Great PR, but will it make me money?

"Corporate leaders we speak to appreciate the business argument for D&I. However, most wonder how to make D&I work for their firms and, more specifically, the extent to which this can support their growth and value creation goals."

Few disagree that social justice and corporate responsibility are critical in building public perception and intangible brand value. But is there a business case? The global firm sheds light on tangible growth and the business performance of companies which are inclusive and diverse in boardroom representation.

With data from over 1,000 companies across 12 countries and using two measures of financial performance – profitability (measured as average earnings before interest and taxes margin) and value creation (measured as economic profit margin) – here is what the study found:

- **The relationship between diversity and business performance persists.** The statistically significant correlation between a more diverse leadership team and financial outperformance continues to hold.
- **Leadership roles matter.** Companies in the top-quartile for gender diversity on executive teams were 21% more likely to outperform on profitability and 27% more likely to have superior value creation. The highest-performing companies on both profitability and diversity had more women in line (i.e. typically revenue-generating) roles than in staff roles on their executive teams.
- **It's not just gender.** Companies in the top-quartile for ethnic/cultural diversity on executive teams were 33% more likely to have industry-leading profitability. That this relationship continues to be strong suggests that inclusion of highly diverse individuals – and the myriad ways in which diversity exists beyond gender (e.g. sexual orientation, age/generation, international experience) – can be a crucial differentiator among companies.
- **There is a penalty for opting out.** The penalty for bottom-quartile performance on diversity persists. Overall, companies in the bottom quartile for both gender and ethnic/cultural diversity were 29% less likely to achieve above-average profitability than were all other companies in the data set. In short, not only were they not leading, they were lagging.
- **Local context matters.** On gender, while there is plenty more to do, some companies lead the way in both absolute average diversity and representation in the top-quartile – Australia, UK, and US companies make up over 70% of this group. On ethnicity, there is less global progress, but South African and Singaporean companies have a higher representation in the top-quartile versus overall representation in the data set, suggesting material progress on ethnic diversity.

DOES CLASS HOLD YOU BACK?

Pedigree: How Elite Students Get Elite Jobs, a book by Lauren Rivera, Professor at Kellogg School of Management, is one the most recent studies of classism – prejudice or discrimination based on social class – which, according to her research, is still alive and kicking in the corporate world.

Debunking the American Dream, she infers in her book how "elite employers define and evaluate merit in hiring strongly tilts the playing field for the nation's highest paying jobs toward children from socio-economically privileged backgrounds."

The definition of 'corporate fit' – likeness in leisure pursuits, backgrounds, self-presentation styles – unfortunately, tilt the hiring process in favour of the already prevalent elite, which leaves hardworking but 'unfit' candidates on the wayside. A result of such bias is a corporate monoculture that leads to inequality.

Prof. Rivera, whose specialism includes class, gender and racial bias in talent management at investment banks, consulting and law firms, commented to the *Financial Times:* "One of the biggest challenges people from under-represented backgrounds have is fitting in. They don't feel part of the club, whether that is the boys' club, the white club or the wealthy club."

Fitting in, as Prof. Rivera points out in her book, often relies on arbitrary metrics such as a candidate's 'polish'. However, what exactly constitutes 'polish'?

"Interviewers in my study initially had difficulty explaining to me how they recognised and assessed 'polish' during job interviews."

One female banker went so far as to liken polish to pornography, and said to her: "You kind of know it when you see it".

And see, they did.

Acquisition of skills is just one of the challenges minority groups face in the financial sector. The same news article quotes Pamela Sandy, President at the US' Financial Planning Association, who attributes the industry's lack of diversity to a deeply entrenched culture of vested interests.

"When you have successful white males who have easily stepped into this profession and made a very good living because there was little competition, they're protecting their territory."

DIVERSITY PIPELINE

It has led to adroit industry-driven initiatives such as the Chicago-centric Financial Services Pipeline (FSP) Initiative.

Founded in 2013 to address the lack of diversity in the city's financial services industry, FSP Initiative comprises 16 members, including Bank of America, CME Group, Federal Home Loan, and aims to increase the participation and cultural competency of Latinos and African-Americans within Chicago's

financial services industry.

Its report, *Bridging The Diversity Gap: Building African-American and Latino Talent Pipelines for the Financial Services Industry in Chicago,* was conducted by research house Mercer and outlined the state of play in the vibrant city.

Chicago's demographics include 17% African-American and 21% Latino but they are under-represented in the financial sector at 12% and 2%, respectively.

Financial institutions have since stepped up to the plate.

Several US banks such as Barclays now have diversity and inclusion in its balanced scorecard, an essential assessment and business performance management tool.

JPMorgan Chase vide its resource group supports workplace diversity by providing information and networking opportunities to encourage professional development for Latino employees across the US.

Yet, progress is slow and tangible gains remain elusive for most corporates, who have more urgent imperatives to address.

Although the McKinsey research prominently qualifies throughout that correlation does not equal causation, its findings are crucial for companies who wish to reap the benefits of a genuinely inclusive organisational culture.

It reports: "Lessons learned from the 17 leading companies we studied – among those that are engaging effectively with D&I – support our earlier perspective on what likely drives the relationship with performance: that more diverse companies are better able to attract top talent; to improve their customer orientation; employee satisfaction and decision-making; and to secure their licence to operate. While progress has been slow on average, individual companies have made real strides in improving their D&I outcomes and in effectively using these results to influence business outcomes."

Equity – the fair and just inclusion in society – is when our most marginalised have equal access to opportunities, power, participation and resources.

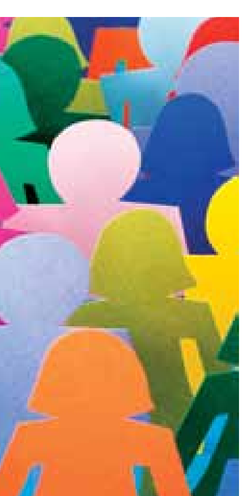
+ Its analysis is reflected in the following four imperatives for delivering impact through D&I:

Commit and cascade. CEOs and leaders must articulate a compelling vision, embedded with real accountability for delivery, and cascade through middle management.

Link D&I to growth strategy. D&I priorities must be explicitly defined based on what will drive the business growth strategy. Leading companies do this in a data-driven way.

Craft an initiative portfolio. Initiatives in pursuit of D&I goals should be targeted based on growth priorities; there should be investments to both hard- and soft-wire the programmes and there must be a culture of inclusion to capture the expected benefits.

Tailor for impact. D&I initiatives should be tailored to the relevant business area or geographic region context to maximise local buy-in and impact.



FAIR PLAY

Equity – the fair and just inclusion in society – is when our most marginalised have equal access to opportunities, power, participation and resources.

The end game is not an Orwellian economy where everyone is the same; that itself is counter-intuitive to diversity. But everyone must be given two things: choice and opportunity.

Equity (or the lack thereof) holds a mirror up to society. But we are defined more by how we act than what we see.

Discussions on diversity are always uncomfortable. That is how you know you are hitting the nail on its head. ✱

BY PROFESSOR OWAIN ap GWILYM

Non-Performing Loans

AN INTERNATIONAL CONCERN

Bad loans and what further **measures are needed to build** on recent positive progress.

Events during the global financial crisis of 2008 triggered increased attention on the issue of non-performing loans (NPLs) in the banking sector.

Problems in addressing NPLs were especially severe in some Eurozone countries including Cyprus, Greece, Italy and Portugal.

In December 2018, European Union (EU) governments reached an agreement on new rules aimed at avoiding a future build-up of bad loans.

Subject to ratification at the national level, the rules will determine the provisions that EU banks will be required to set aside against potential losses from bad loans. Higher collateral requirements and levels of provisions are necessary steps to address one of the most challenging issues in the Euro area banking system.

Nevertheless, any uncertainty or discrepancies in the proposed rules might undermine their effectiveness in addressing the problem, while increasing pressure on lenders.

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A GLOBAL ISSUE

However, these issues are not unique to large Eurozone banks and similar problems are becoming evident in other financial sectors and across the globe.

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As some big banks have been forced to pull back on lending, the alternative lenders have brought new risks to the financial system. In the US, for example, there has been a surge in non-traditional lending to already highly leveraged companies.

Recently, NPL problems reported in China have generated concerns. A UBS report estimated that RMB1.75 trillion of bad loans were disposed of by Chinese banks in 2018.

Authorities in China are concerned about both financial and social stability if NPL problems are not dealt with effectively.

SPOTLIGHT ON ITALY

The Eurozone's largest banks disposed of EUR30 billion of NPLs and advances in the third quarter of 2018. Total gross bad loans at Italian banks fell to EUR100 billion in December 2018, the lowest since July 2011, after banks disposed of more than EUR17 billion worth in December alone.

In the period between 2016 and 2018, several initiatives were undertaken by the Italian authorities to address the NPL problem, such as the creation of two private asset funds (Atlante 1 and Atlante 2) and the introduction of a state-backed guarantee on senior tranches of securitised bad loans (Garanzia Cartolarizzazione Sofferenze, GACS).

SNL reported in December 2018 that Iccrea Banca SpA had closed a securitisation deal for NPLs with a gross book value of EUR2 billion, composed of NPLs from 73 separate cooperative banks.

To date, this was the largest Italian bad-loan securitisation backed by the state guarantee scheme. In February 2019, Intesa Sanpaolo SpA reported that its NPLs were reduced by around EUR16 billion in 2018, and non-performing exposures at Banco BPM SpA were reduced to 10% from 24% over the past two years.

FURTHER ACTIONS

Policies aimed at improving economic conditions (in terms of growth andproductivity) significantly contribute to easing the NPL problem. An upsurge in the unemployment rate or in the sovereign debt burden adversely impacts the debtors' capability to meet their contractual obligations, thereby raising levels of banks' NPLs.

Despite positive developments, including improved macroeconomic conditions and banks' determination to clean up their balance sheets, some challenges persist in the Italian context. Further actions aimed at improving the efficiency of the NPL market, the speed of recovery procedures and reducing the overall uncertainty are fundamental to underpin the positive achievements to date.

NPLs have the potential to cause substantial systemic difficulties and even social instability if not tackled promptly and effectively by the relevant authorities. Academic research can illuminate the factors that contribute to a build-up of NPLs and can identify successful policy initiatives. ✱

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This article previously appeared in the Chartered Banker magazine, UK, spring 2019 edition.

the truth about trust

Embrace the pursuit of **self-interest and ambition** as normal.

Selflessness. Servant Leadership. Putting others' interests ahead of one's own.

In addition to things like competence, honesty, and reliability, the above-mentioned attributes are usually the ones people mention when asked to describe a leader whom they could trust. I've asked thousands across the globe, and these come up all the time. But many of the same people fall deathly silent when asked to honestly answer if they are truly selfless servant leaders who always put others' interests ahead of their own, or if their people fully trust them.

My point is this: Most people reference "self before others" type of attributes as prerequisites to trusting a leader. But if they are totally honest with themselves, they will admit that it is very difficult, if not impossible, to be selfless all the time. The basic human (survival) instinct is to take care of one's own interest first. By expecting leaders to be selfless, are we demanding something that goes against the very grain of human existence? What if we were to accept putting one's own interest before others' as normal? Put another way, can we trust someone who is self-centered and wants the very best for himself first?

The answer to that question ought to be a big yes, but under one condition; the person also works equally hard to maximise your gain. In my experience, I have found that the best leaders don't pretend to be who they are not. They fully acknowledge their own ambitions for themselves and take care of others' needs equally. They don't believe in zero-sum games; they believe in abundance. They practice what savvy negotiators refer to as win-win outcomes by working extremely hard to maximise their own gain AND working equally hard to maximise others' gain. They understand that one's gain need not be another's loss. Metaphorically, they believe in growing the pie, so that when it is divided everyone gets an equally big slice. They also recognise that to reach a win-win outcome, it is important to fully understand the other sides' concerns, needs, and priorities.

As an example of these principles,

My point is this: Most people reference "self before others" type of attributes as prerequisites to trusting a leader. But if they are totally honest with themselves, they will admit that it is very difficult, if not impossible, to be selfless all the time.

consider what happened to me recently. After several rounds of meetings during which we established a good relationship with a prospective client, we sent a proposal for a consulting assignment quoting US$100,000. When our contact at the client company received our proposal, he balked at what he considered too high a price for the work involved. He called and told us there was no way he could do business with us for that price, and unless we were willing to negotiate, he'd go shopping with other firms. We checked our numbers and reconfirmed that the price we had quoted was reasonable and fair. But before we walked away from the deal, we asked him what his concerns were, and if there was a way to make the numbers work. Upon further discussion, we learned that the company's selection committee was skeptical about working with us because we were a small boutique firm and our pricing was very close to what was being quoted by bigger, established firms. Our contact told us he needed a basis to justify choosing us, so he needed a lower quote. He also said if we did a good job, there was significant potential for follow-on business.

While we appreciated his position, we found it impossible to lower the numbers. So, to address the selection committee's concern about our small size and relatively lesser known brand, we offered to do a free two-hour presentation on digital transformation for their entire senior management before delivering on the larger consulting work. We also offered to refund 20% of our fees if we failed to deliver the desired results. With this offer, the client signed off on our full pricing.

What happened here? Through honest dialogue, we convinced our client that we had their best interests at heart and were willing to go the extra mile to give them exactly what they wanted. We saw the opportunity to present to their entire senior management as a good credibility building exercise, so we had no hesitation in offering this "extra value" to them. Furthermore, since we had completed many similar projects before, we were confident of delivering on our promises. Hence it was not difficult for us to offer a refund in the event the client was not satisfied. By working to understand our clients' concern, we were able to offer a win-win solution. The key here is, we did not give up on our own interest, but worked very hard to maximise the benefit for our client as well. Once we won their trust in this way, they showed no hesitation in signing on the dotted line… on our originally quoted price.

Metaphorically, they believe in growing the pie, so that when it is divided everyone gets an equally big slice.

Personally, I'd rather work for people who admit they are motivated by self-interest if I can have the confidence they will not push me under the bus for their own gain. Instead, they will go out of their way to make me as successful as possible without giving up their own interest. Such a person would be acting in accordance with basic human instinct, not against it. That's why I would trust them.

It is time to give up clichés about selflessness and embrace the pursuit of self-interest and ambition as normal. If you really want to achieve something, why pretend otherwise? The key is to think and act in a way that creates full satisfaction (win-win) for both parties. ✱

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Trust

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Can Whistle-Blowing Policies EVER WORK EFFECTIVELY?

Weighing up the **advantages and disadvantages** of doing what is right.

The global financial crisis created renewed focus on many fundamental ethical principles, especially transparency, openness, and honesty. That these were ever called into question in the banking industry is a sad commentary on the loss of reputational capital. Yet amidst the crisis, as disaster after disaster unfolded, there were several individuals who decided that enough was enough.

Having observed improper conduct and unethical behaviour, they decided to blow the whistle on their employers. In many of these cases, the firms that were exposed were forced to change their policies and practices, while in some instances, the firms proactively took immediate action. However, for some of the whistle-blowers, their decision to 'do the right thing' rebounded on them badly, and in some cases almost destroyed their careers.

Today, nearly everybody working in the banking industry knows what whistle-blowing is. When an individual observes a colleague behaving illegally or unethically, or failing to act when they should, it is appropriate to blow the whistle, or that is to say, to report the matter to senior management. The term 'whistle-blowing' is analogous to a football referee calling a player to account for unacceptable behaviour.

Whistle-blowing can be internal or external. Internal whistle-blowing is generally considered as acceptable, as the individual reports the matter through formal channels. Many banking organisations have put whistle-blowing procedures in place, nominating a senior person such as a senior non-executive director as the person to whom the matter should be reported in confidence, as well as guaranteeing that the employee will be protected from repercussions, such as a halt to career progression or even dismissal. By contrast, external whistle-blowing arises when the individual releases information to an outsider, such as the regulator, the media or even the police.

Some countries have enacted legislation to protect whistle-blowers, providing them with statutory protection and the right to compensation if their actions result in victimisation.

Whistle-blowing should work in practice. Every decent person agrees that it is the right thing to do, and therefore ethical. When wrongdoing is observed, an employee should be able to make a report so that persons with appropriate authority can address the issues. In a perfect system, employees who have the well-being of the organisation at heart should be able to call out bad behaviour or blow the whistle. Indeed, in its publication *Risk Outlook 2014,* the Financial Conduct Authority, a UK regulator, stated that having robust challenge processes in place could contribute much towards establishing a healthy organisational culture.

Despite its advantages, whistle-blowing does not always happen and does not always work.

At an early age, we learn very fast that it is frowned upon to 'tell tales' to one's teacher or parents, and better to keep silent. In adulthood, this extends further. A criminal plying their trade in the underworld may do almost anything except pass information to the authorities on the actions of other criminals, while in a prison environment the consequences of reporting a transgressor to the prison authorities has consequences that are too horrible to contemplate. At work, we often see examples of people behaving in an inappropriate manner, but might consider it too trivial to warrant making a report, or that it was simply 'none of my business'.

Nobody is better aware of the disastrous consequences of whistle-blowing than Paul Moore, who was Head of Group Regulatory Risk at UK bank, HBOS. Moore was dismissed from his position in 2004 after warning his colleagues that they were taking excessive risks. In the aftermath of the crisis in 2009, Moore made a report to a Parliamentary Treasury Select Committee on the "aggressive and reckless sales and lending culture" that had existed in the bank. In Moore's own words to the *Chartered Banker* magazine in 2014, "As a whistle-blower you become like a leper, a pariah. I had an impeccable record in my profession, but since I went public, I have not been offered a single consulting job or been approached by any headhunters".

Moore was a casualty for doing the right thing. Firstly, he alerted his seniors to the possible consequences of their sales and lending policies at the time. Secondly, as a former employee (he had been dismissed five years earlier), he told the truth to a Parliamentary body, as he was obliged to do. His revelations to the committee had some bearing on the resignation of the former CEO of HBOS as deputy chairman of the Financial Services Authority.

A further interesting feature of the case was that Moore accepted compensation from his former employer for unfair dismissal. The payment was subject to a non-disclosure agreement, but he agreed to speak out to the Treasury Select Committee on the grounds that it was in the public interest to do so.

There are other, simpler forces at work which inhibit an individual's willingness to blow the whistle. Quite often, it is an employee's direct line manager who has behaved inappropriately, and the subordinate may have a sense of loyalty or even admiration for the good qualities of the manager, as well as a respect for their knowledge, skills, and experience. The prospective whistle-blower may also be reluctant to act for fear of how colleagues would react. In such cases, it has been known for employees not to be dismissed but for their position to become untenable once ostracised by colleagues.

Whistle-blowing policies invariably include a commitment to protect the whistle-blower provided they act in good faith. This is backed by a guarantee of anonymity. But in many cases, the whistle-blowing report can only have come from one person, so the individual making the report is not revealed but is obvious through a process of elimination.

Whistle-blowing policies invariably include a commitment to protect the whistle-blower provided they act in good faith. This is backed by a guarantee of anonymity. But in many cases, the whistle-blowing report can only have come from one person, so the individual making the report is not revealed but is obvious through a process of elimination.

The reality, therefore, is that banking organisations can promote whistle-blowing and put in place robust protection mechanisms, just as regulators can force such processes on authorised firms, but it can never guarantee that employees will come forward. It is quite likely that many employees have a conscience that they do nothing, but like many ethical decisions, the individual may have to weigh up the advantages and disadvantages. The stakes are higher for those further down the management chain with many years of service, as they may worry that their job will be lost as a consequence of blowing the whistle and it may be impossible to find a comparable position elsewhere.

In the oft-misquoted words of John Stuart Mill, "The only thing necessary for the triumph of evil is for good men to do nothing" (he actually said, "Bad men need nothing more to compass their ends, than that good men should look on and do nothing"). In a modern context, one may be proud to go home to one's spouse or partner and inform them that they have acted ethically. The most difficult part is explaining that they may not be able to pay the bills next month. ✱

■ *Robert (Bob) Souster is a Partner in Spruce Lodge Training, a consultancy firm based in Northampton, England. He lectures on economics, corporate and business law, management, corporate governance and ethics. He is the Module Director for 'Professionalism, Regulation and Ethics', a core module of the Chartered Banker MBA programme at Bangor University, Wales.*

BY DEREK ARISS

CULTURE AND MINDSET

THE FOUNDATION OF ANY SUCCESSFUL INNOVATION EFFORT

Forming a culture that will deliver results for your innovation efforts.

All too often, we read and hear and say that "innovation is important". Even though there are many books and speakers that state innovation is a crucial ingredient to staying relevant, growing and surviving in an ever-changing future, we don't seem to do it all that well.

Innovation culture is the foundation of all innovation efforts. Methods, technologies, and systems cannot be successfully implemented without the right culture and the right mindset in organisations.

Organisations struggle with identifying how to embed the qualities, beliefs and values as well as the overall behaviours that will make innovation happen with their people, consistently and sustainably. In other words, organisations struggle with how to create a culture of innovation in their businesses. There are many moving parts to consider.

What if one didn't need to know all the parts? What if we just needed to know some key components that impact business culture and innovation culture?

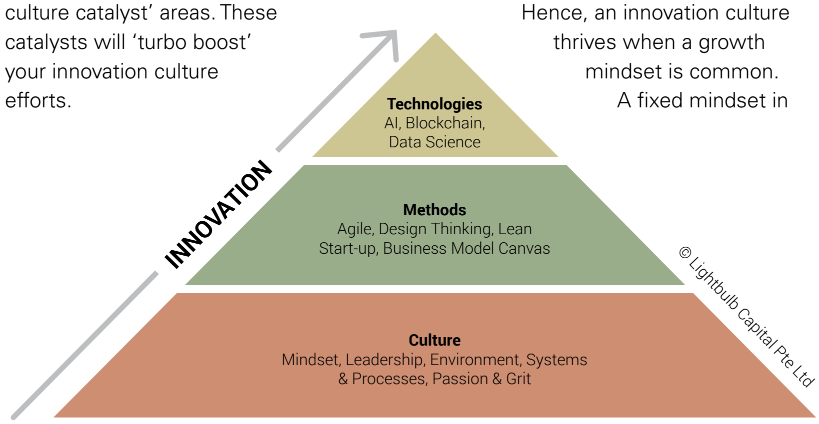
This article is written to address a set of critical components that will enhance your innovation practices by strengthening your people and, in turn, your innovation culture.

If you and your people have a strong innovation culture, then applying innovation tools such as agile, lean start-up methodology, or design thinking become easy because they rest on a firm foundation.

Without the foundation of a strong innovation culture, the delivery of these methodologies will fall short of expectations because a solid footing is lacking. It does not mean it won't work; it merely means the potential results will be limited.

We believe for innovation to thrive, getting the cultural foundation in place first is critical. Methods and technology only work with a strong base of culture.

Having said this let's look at two pieces of the innovation culture puzzle: mindset, and the four 'innovation culture catalyst' areas. These catalysts will 'turbo boost' your innovation culture efforts.



MINDSET

This is an integral part of the mix. If your people don't have the right mindset, the rest of the culture piece will not work.

'Mindset' is a term coined by Dr. Carol Dweck, one of the world's leading researchers in the fields of educational psychology.

A mindset is a group or set of assumptions held by one or more people that impact their view of the world and, in turn, their behaviour. The mindset creates the lens through which groups or individuals look at the world, their lives, and yes, even innovation programmes.

How organisations and individuals see the world is very much dependent on their frame of mind.

Based on Dr. Dweck's work, at one extreme there is the growth mindset. Organisations and people with this view believe life is a learning experience and most abilities and skills can be developed and grown through hard work and continuous learning.

At the other extreme, according to Dr. Dweck, is the fixed mindset. People, organisations, and individuals from this point of view see that abilities, talents, and skills are fixed. Things are the way they are and situations, skills, and talents are capped. They believe you can do very little to improve conditions and you have to deal with things the way they are.

A robust framework for organisations to consider since innovating is very much about creating and adding value through learning and testing.

Hence, an innovation culture thrives when a growth mindset is common.

A fixed mindset in

the business will most likely cause programmes to stagnate because very little learning is happening.

A good question to ask may be: Where does your firm sit on the mindset continuum? Is it growth/learning focused? Or fixed/predetermined? Alternatively, is it somewhere in between the two? The right frame of mind will make all the difference when implementing innovation programmes.

Now that we are clear on mindset, let's talk about catalysts. In chemistry, a catalyst is an agent or compound that is added to a process to make a chemical reaction happen more quickly. Without the catalyst, the reaction takes up more energy and more time. With a catalyst, the chemical reaction takes up less time and needs less energy. It's a shortcut to get the same result.

Imagine taking this chemical description of catalyst and applying it to businesses, people and the development of innovation culture.

Imagine when we talk about innovation culture catalysts, we talk about things we can do to develop an innovation culture in our business that will happen more quickly and take up less energy and still get great results.

+ We have identified four of these innovation culture catalysts that contribute to the development of strong innovation cultures:

Leadership;

Environments;

Systems and processes; and

Passion and grit.

LEADERSHIP

Let's assume a few things. When creating an innovative culture, it is vital that leaders support the innovation process.

If this is the case, some of the essential qualities needed for leaders to drive the culture of innovation are:

- Leaders have a growth mindset; they can see that all things are learning experiences;
- Leaders believe everyone in their organisation can innovate and contribute to innovation. Everyone can add value through creating, sharing and developing ideas;
- Leaders set up a clear specified definition of innovation. This definition will align all the innovation efforts so that the team is heading in the same direction;
- Leaders allow experimentation to happen because it is beneficial to the process. Here we are saying people can try new things, learn from them, and in turn add value to the business by sharing and applying this knowledge; and
- Leaders create a movement where other people emulate the behaviour of the leader and in turn their innovation behaviours.

Leadership is necessary but only one piece of the puzzle. Another component is environments.

ENVIRONMENTS

Physical and mental environments are a vital part of innovation efforts. The environment in which we work, think, and participate affect our moods, our thoughts, and our ability to create.

Using the right environment to create and test makes all the difference in driving innovation forward. For example, having a meeting outside the office usually establishes a mood of informality and conversation. Having a meeting in a boardroom changes the theme to one of formality. Knowing how the physical environment impacts people allows you to create the desired mood and behaviour to get to your innovation outcomes. It doesn't mean you need to spend lots of money to build these environments, you merely need to know which environments to access in order to stimulate productive and innovative behaviour.

Need a set of ideas? Go to a coffee house and do a brain dump. Need a quick decision made? Organise a walking meeting in the morning (the best time of the day to make complex decisions). Knowing the right physical environment to create is key to shaping your innovation efforts.

There are two other innovation culture catalysts to grow your innovation culture. Namely, systems and processes, and passion and grit.

The last innovation culture catalyst is passion and grit. People are usually keen to move forward and work in things that are of interest to them. Which is why passion is the fuel of innovation. However, oftentimes, passion needs to be coupled with grit in order to last. Getting excited about the project is easy. The challenge is how do you keep passion sustained and see the project through to the end?

SYSTEMS AND PROCESSES

When innovating organisations have various ways of achieving their innovations, it is crucial that all change programmes consider existing culture capabilities and processes. It would be best if you had a proper alignment to get good results.

Also, when creating these cultural changes, time needs to be your friend. Cultural change is a medium-term game and it takes time for change to happen. Are you asking yourself how your existing systems can align with your innovation programmes? Can we use similar reporting metrics? Can we build our innovation programmes into current human resource and operational system? These are all points to consider.

When putting in place an innovation strategy for my former employer, we looked at what innovative companies were doing. They were not only technology-based firms like Google, Amazon, or Netflix; they were companies like 3M, Tata, and Whirlpool. All these firms shaped their innovation programmes around existing systems and processes to align with their innovation purposes.

PASSION AND GRIT

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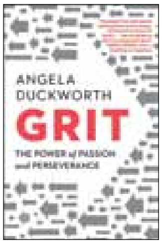
This is often accomplished by aligning your vision and purpose to the project. Sounds easy, but not so easy to deliver. It means you need to understand your purpose beyond simply words, and align the purpose with the vision that is trying to be accomplished. If this is done correctly, you have the basis of a sustainable innovation effort that will keep moving forward. Angela Duckworth, another great educational psychologist, has written a book titled, *Grit: The Power of Passion and Perseverance,* which highlights how interest, continuous effort and resilience contribute to success. Amazing opportunities appear when passion and perseverance are prevalent in your company.

We have established that innovation culture is the foundation of all innovation efforts. To develop an innovation culture, there are a vital set of qualities needed to be able to embed innovation into an organisation.

I realise this is a shallow dive into a mountain of information.

By bringing these components together, you will start forming a business and innovation culture that will deliver stronger and more sustainable results to any of your innovation efforts. It is the foundation that will make a difference in your future endeavours. ✱

■ *Derek Ariss is Head of Innovation Education at Lightbulb Capital and is responsible for building the education practice, focusing on creativity, design thinking, technology, culture, and mindset conducive to innovation in finance. He previously guided the company as an Advisory Board Member to Lightbulb Capital Pte Ltd. Before his current role, Derek was the Head of Innovation at LendLease. He was responsible for designing processes to deliver improved products and systems, nurturing a culture of innovation in Asia, and developing productive relationships with organisations that focus on innovation and growth. Before his position as Head of Innovation, he was Head of Retail Operations overseeing the retail assets managed by the company across Asia. Derek also teaches part of the Singapore Management University (SMU) Certificate in FinTech and Innovation course and an Innovation Culture Catalyst course at SMU. He holds an MBA in International Marketing and Strategy and Bachelor of Commerce (Honours) from the University of Windsor, Canada, and a Bachelor of Science in Psychology and Biology.*



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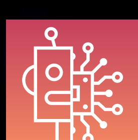
BUILT TO LAST OR BUILT FOR CHANGE?

There's more to modernising **legacy data systems** than just 'rip-and-replace'.



They want to make better use of technologies like artificial intelligence, but if their data platforms are not robust enough, they will end up in a bottleneck.

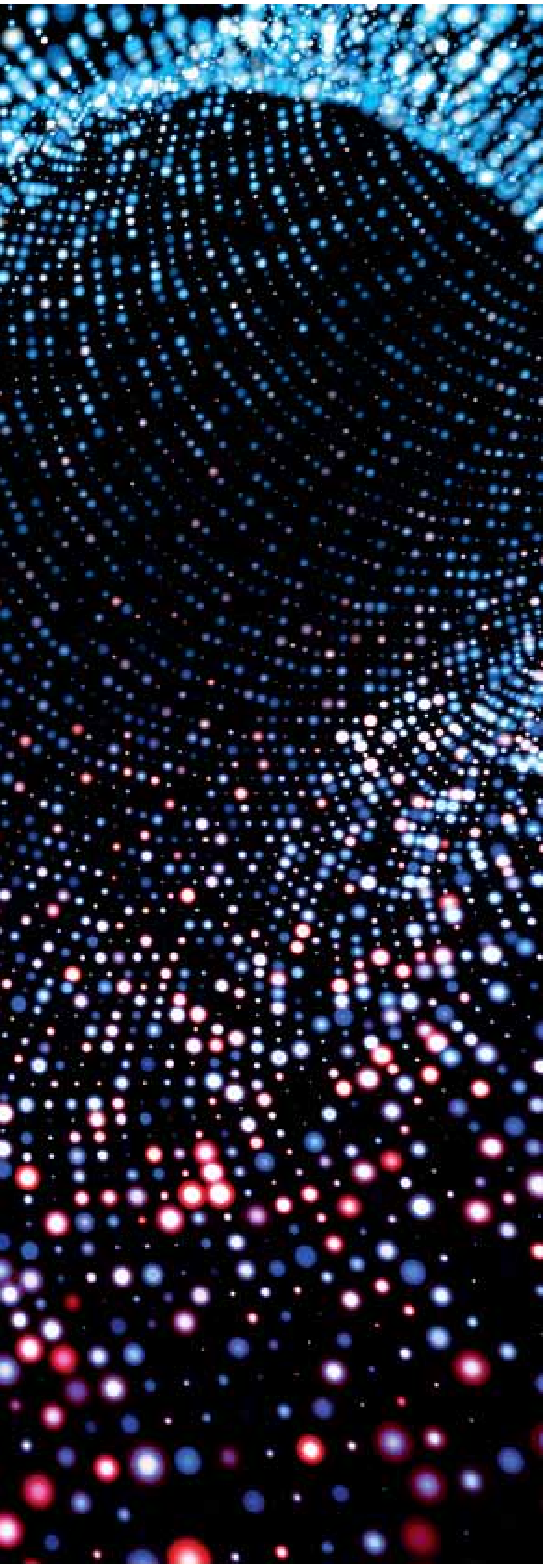
Arvind Swami
Director of FSI Solutions for Asia Pacific

The drive for financial institutions (FIs) to modernise IT platforms is essential for two reasons: competitive differentiation and regulatory compliance.

Although the limelight has been on fintech, there is that other infrastructure that has been the backbone of modern banking in the past decades, i.e. legacy IT systems.

PwC's *Global Banking Outlook 2018* reports that banks spend 75% of their IT budgets on maintaining legacy architecture, often on tactical patches that may embed poor processes. This presents a challenge for digitalisation efforts, especially in Asia where FIs typically spend more than their European and US counterparts on IT.

Panellists at a recent Asia Securities Industry & Financial Markets Association conference in Hong Kong in April 2019 unanimously agreed that traditional banks have had difficulties dealing with legacy



With vast networks of deeply integrated and valuable applications, such legacy systems are too costly for banks to ditch or rewrite, hence the need for a digital transformation process focused on re-engineering or seamless integration between two vastly different generations of IT.

systems. Although partnerships with fintech disruptors are an option, banks should look at their current data platforms with fresh eyes.

"They want to make better use of technologies like artificial intelligence, but if their data platforms are not robust enough, they will end up in a bottleneck," says Arvind Swami, Director of FSI Solutions for Asia Pacific, at global software firm Red Hat Inc.

In many cases, seemingly 'outmoded' legacy data systems can be transformed or overhauled to unlock business value.

With vast networks of deeply integrated and valuable applications, such legacy systems are too costly for banks to ditch or rewrite, hence the need for a digital transformation process focused on re-engineering or seamless integration between two vastly different generations of IT.

It is a tough job, but not impossible.

DISCONNECTED LEGACIES

Nasdaq-listed MuleSoft, Inc.'s *2019 Connectivity Benchmark Report* discovered that the No. 1 challenge faced by 42% of IT decision makers was disconnected legacy infrastructure and systems.

Moreover, 59% of respondents find it hard to introduce new technologies because of their legacy technology systems while 65% find it difficult to make changes to a particular system or application as a result.

This is because legacy systems were built to last, and not built for change.

With the demand by consumers for new digital banking services and new patterns of consumption, legacy machines and codes – devised to deliver the security, reliability and resilience needed in banking – are inefficient in today's fast-paced environment. However, logic and code behind such systems remain one of the most reliable that have stood the test of time.

To 'rip and replace' would be premature given what is at stake and the catastrophic events that have unravelled at banks that did precisely that.

HISTORIC(AL) FUMBLES

Many banks' Customer Information Control System (CICS) – the black and neon-alphabet screens you see when logging into banking systems – are written using COBOL (Common Business-oriented Language) created in 1959.

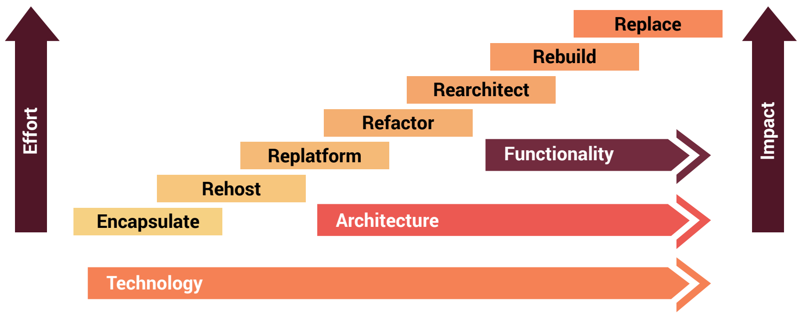
News agency *Reuters* estimates that in the US alone, approximately US$3 trillion in daily commerce flow through COBOL systems, with many FI and government infrastructure built around it; around 80% of in-person transactions and 95% of ATM swipes are made on COBOL-written programs.

This explains why it is too expensive and cumbersome for most FIs to consider replacing existing infrastructure.

History also has some dear lessons to impart:

- In 2012, the Commonwealth Bank of Australia decided to modernise its core COBOL banking platform with software developed by a German company, SAP. The price tag was a whopping US$750 million, five years of transition and multiple hiccups including a June 2015 outage in payment and online systems where 600,000 payments went missing.

FIGURE 1 MODERNISATION TECHNIQUES BY EFFORT AND IMPACT



SOURCE Gartner

- In April 2018, UK's TSB also experienced public furore as it migrated to a new core digital-friendly banking platform, Proteo. For five days, customers saw a multitude of glitches: account lockout, disappearing balances, viewing other customers' accounts.
- Stefan van der Zijden, Research Director at Gartner, advises: "Application modernisation is not one 'thing'. If you're faced with a legacy challenge, the best approach depends on the problem you're trying to solve. Replacement isn't the only option."

The research firm outlines seven different modernisation approaches IT decision makers should carefully select from, each option differing in degrees of effort and impact as illustrated in **Figure 1**:

- **Encapsulation.** A technique to reuse legacy software by leaving the code as is, connecting it to a new presentation and accessing layers via application programming interfaces (APIs). It is low risk, economical and fast to implement.
- **Rehosting.** Redeploying a mainframe application unchanged to another physical, virtual or cloud infrastructure at low cost and risk. Migrations like this do not alter the application code or modify features and functions. It also reduces space, power and cooling requirements.
- **Replatforming.** Migrating an application component to a new platform while preserving existing functionalities. This is because not all applications need the full benefits of new tech like cloud infrastructure. Minimal changes to the code are required but the code structure or the features and functions that it provides remain untouched.
- **Refactor.** Restructure and optimise existing code without changing its external behaviour. This is to improve the component's features and structure to maximise operational efficiency.
- **Rearchitecting.** This materially alters the application code so you can shift it to a new application architecture and fully exploit capabilities of the application platform.
- **Rebuilding.** Rebuild or rewrite the application component from scratch while preserving its scope and specifications. This opens the door to new features, functionalities and processes offered by new technology and third-party platforms.
- **Replace.** Eliminate the application component and replace it, taking into account new needs and requirements.

Depending on the modernisation technique, each has a different impact on the legacy system: technology, architecture and/or functionality domains.

OPEN BANKING

Crucial to modernising prior-generation IT systems is the use of APIs. It is the least intrusive option for FIs and also the fastest way to extend its services to consumers without having to do the bulk of the work.

An API is a set of coded commands that allows two applications to talk to each other seamlessly. These divergent software can be within the same company or between external organisations.

The elegance of APIs is that it does not give third-parties deep domain knowledge of each other. Previously, it would require point-to-point integration for such couplings to occur, which means banks would have to fully open up their systems and allow access – a significant risk for FIs. With APIs, this is not necessary, making it the preferred future approach for banks.

APIs have been around for decades. It is only in recent years that banks have had to open up their codes with the shift to Open Banking, an increasingly growing movement where FIs – grudgingly or otherwise – give access to third-party developers as part of compliance with regulations such as the Second Payment Services Directive (PSD2) and future regulations coming online (e.g. Australian Open Banking regulation by July 2020).

It has resulted in a proliferation of API tools for banking. For instance, when consumers using a ride-hailing service pay for the journey with an app, the successful payment is a result of a call to a third-party API. The bank itself does not build the payment gateway but makes available its code to allow other third-parties to connect to its platform via APIs and execute the payment through the designated bank account.

INCUMBENTS' OPEN EMBRACE

In May 2018, HSBC became the first big UK bank to release a new app for consumers to view all their banking accounts – whether with HSBC or rival banks – in a single app called Connected Money.

The mobile app connects to a

customer's bank accounts – online savings, mortgages, loans, cards – through an API to give them real-time information on their spending. It is also a handy budgeting tool that categorises their total spending across 30 categories such as groceries and utilities.

Development of the app by HSBC was in response to competitive pressures amidst growing consumer adoption of more innovative and comprehensive platforms provided by challengers like Monzo and Loot, which provide money management functionalities on top of transactional views and tools.

Also, on 7 March 2019 – a week ahead of the Second Payment Services Directive deadline for FIs to make their solutions available for external testing – HSBC launched a sandbox for developers (a secure server where developers test unproven code before putting it into production) using mock data from retail and corporate payment accounts.

Since then, many other established High Street banks have followed suit.

HSBC's path shows that it is possible for banks to execute an API strategy to expand its service offerings without having to replace its legacy platform.

Tom Eck, Chief Technology Officer at IBM, describes why this is important: "Banks are going to be increasingly seen as a collection of services rather than physical locations."

This shift from 'bank to banking' transforms FIs into market platforms that provide value-added content to developers as well as customers.

"Having an ecosystem that is enabled by an actual marketplace is what pulls third parties to bring content onto the platform, which increases the value of the platform," Eck said.

"It thus pulls in more customers, which pulls in [even] more developers."

Imran Gulamhuseinwala, a trustee of the Open Banking Implementation Entity, the company overseeing the rollout, said to the *Financial Times:* "Banks have very firmly moved from viewing Open Banking as a compliance exercise to an opportunity to compete and innovate."

An unexpected bump in the road though seems to be the lack of public trust regarding data protection and the usefulness of such apps. However, this is a separate aspect of consumer education and should be discussed another day.

BEAR IN MIND

Integrations are two-sided. APIs created by third-party providers are the purview of the providers themselves. However, the modifications, upgrades or rewrites within the COBOL/CICS mainframe itself is the purview of the bank. This is a risk as the number of COBOL fluent coders are fast dwindling and in its stead are younger coders trained only in Python or R coding languages.

Bob Olson, former Vice President at Unisys, once shared that one of his government clients "has someone who runs a chunk of their technology who's on oxygen, he's 70 years old, he knows the keys to the kingdom, he knows where everything is, it's all sitting in his head. They send out a police car to pick him up every morning and bring him in to work in a vault-like room".

Neel Krishnaswami, a programming researcher expert at Cambridge University, said in an interview with German broadcaster *DW:* "As programmers either retire or leave for new jobs, the living, human understanding of why the software was written the way it was, gets gradually forgotten."

"Changing a condition when you don't understand why it's there is a recipe for disaster…A few years ago, the Knight Capital Group lost US$440 million and nearly went bankrupt over a period of 30 minutes just due to a programming error," Krishnaswami said.

Foreseeing this skills extinction, there is currently a community of programmers working on the next-generation of COBOL called GnuCOBOL, experimenting on COBOL code for things like blockchain and security encryption. If they succeed, then this updated COBOL could potentially fulfil the demands of digital banking or at least bridge the gap between old and new.

So do not throw the baby out with the bath water. Legacy software is often software that still works. ✱

■ *Kannan Agarwal is a researcher and technical writer with content development firm, Akasaa. He is based in Singapore.*

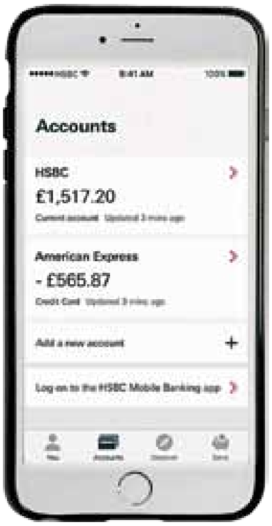


FIGURE 2 SCREEN CAPTURE OF HSBC'S CONNECTED MONEY APP

A.I. & Financial Crime

MORE HYPE THAN HAPPENING

Learning machines to investigate white collar crime? **Don't take your hands off the wheel just yet.**

From chatbots to algorithmic trading, artificial intelligence (AI) has captured the banking community's imagination.

But where are we really on the innovation curve when it comes to AI in banking? Has the technology advanced to a stage where it is tangibly beneficial? Or are we still experimenting to find the AI 'sweet spot'?

As far back as February 2018, the Basel Committee on Banking Supervision vide its research paper, *Sound Practices: Implications of Fintech Developments for Banks and Bank Supervisors,* cautioned market participants of the hype surrounding fintech.

Only now are rumbles (and grumbles) on the Street echoing this sentiment, proof that the market does, at times, trail regulatory prudence.

Whilst companies like PayPal deployed AI-based monitoring systems and cut the rate of false fraud alerts – known as 'false positives' – by 50%, the jury is still out when it comes to more sophisticated AI regulatory technology (RegTech).

At the cutting edge of AI deployment is cognitive and machine learning in financial crime programmes.

Through fintech partnerships as well as in-house development of RegTech, banks have poured billions into research in a bid to develop AI intelligent enough

Through fintech partnerships as well as in-house development of RegTech, banks have poured billions into research in a bid to develop AI intelligent enough to 'sniff out' false positives, identify complex criminal behaviour and continue to learn and adapt to new rules or behaviours…sans human intervention.

to 'sniff out' false positives, identify complex criminal behaviour and continue to learn and adapt to new rules or behaviours…sans human intervention.

However, are we there yet?

CRYSTAL BALL

Robotics processing automation (RPA) – used to programme chatbots, virtual personal assistants, customer profiling, and process streamlining – are increasingly common. RPA is the entry point to AI use and highly efficient in performing repetitive, rote tasks. It is seen as the tool that will spur an AI augmented workforce, an increasingly used term in banking crafted to allay neo-Luddite fears of a robotic takeover of human jobs. Right now, the technology may not be 100% bug-free, but it has been deployed with some measure of success.

As we move up the AI value chain though, the terrain is less explored, specifically in the research and development of machine learning and cognitive AI to track down financial crime.

A *Financial Times* article on 18 April 2018, *AI in Banking: The Reality Behind the Hype,* quotes Patrick Henry Winston, a Ford professor who headed MIT's AI lab between 1972 and 1997: "So much of what you need to replace thinking people [with] is not within reach of today's so-called AI systems, which are really more perceptual than cognitive."

When will cognitive AI become a reality?

"Eventually," says Winston. "But my crystal ball is cloudy on the timing. Few AI people today actually work on the cognitive side."

But is the industry ready to listen to killjoys?

IF YA GOTTA EXPLAIN A JOKE…

I spoke with Cheah Chun Perng, an ex-Silicon Valley coder and tech start-up owner with over 20 years of experience designing IT systems for Fortune 500 companies, who says: "To me, I think it's all hype."

"Take, for instance, this joke from Lynn Truss' tongue-in-cheek bestseller on the pitfalls in English punctuation:

"A panda walks into a cafe. He orders a sandwich, eats it, then draws a gun and proceeds to fire it at the other patrons.

+ RPA is the entry point to AI use and highly efficient in performing repetitive, rote tasks. It is seen as the tool that will spur an AI augmented workforce, an increasingly used term in banking crafted to allay neo-Luddite fears of a robotic takeover of human jobs.

"Why?" asks the confused, surviving waiter amidst the carnage, as the panda makes towards the exit.

The panda produces a poorly punctuated wildlife manual and tosses it over his shoulder. "Well, I'm a panda," he says. "Look it up."

The waiter turns to the relevant entry in the manual and, sure enough, finds an explanation.

'Panda. Large black-and-white bear-like mammal, native to China. Eats, shoots, and leaves.'"

"A truly intelligent system would be able to figure out the correct punctuation of that last sentence," Cheah says. "Yet I sincerely doubt that there is a true AI system that could read the example above, and figure out that that last sentence should be, 'Eats shoots and leaves.'"

If it cannot figure out a joke, how can we expect a banking AI system to separate the wheat from the chaff in financial crime?

Cheah is convinced that many AI experts will give you the runaround: "They'll say that a specialised system can be tuned, or drown you in jargon. You'll hear things like a new 'neural network' or 'learning algorithm' is required. But just compare how effortless it takes my 9-year-old daughter to figure out the joke with the amount of money, time, and PhDs needed to develop an equivalent system."

"I think that qualifies as hype, don't you?"

EVANGELICAL CHOIR

What is not hype, however, is AI and automation functions already deployed in banks' financial crime programmes. Whether hardware or software, such systems already work to carry out mundane, repetitive, tasks such as flagging suspicious transactions.

Cheah illustrates the difference between automation and AI: "If you set up search parameters (e.g. 'look out for all transactions to or from a character named Jho Low'), and let your programme loose on a data set, that's automation. It's only AI if I can give a much vaguer command like 'look for all shady transactions'.

That doesn't mean the sector should cease its investments into developing AI to its fullest capability. He opines that although investments currently exceed returns, "we can't get to the cherished land if we don't make these types of investments".

Yet, concerns abound about job security. Banking is a trillion dollar sector that employs millions globally, and considerably more stable than most other sectors like manufacturing.

Former Deutsche Bank chief John Cryan raised alarms when he considered replacing as many as 49,000 of his staff with robots. Ex-Citigroup CEO Vikram Pandit predicted AI would wipe out 30% of jobs in the financial sector. I've personally met young technopreneurs toting Billy Graham-esque business cards that read 'Fintech Evangelist' as their formal designation.

Is there cause for alarm?

"I think 'normal' people don't understand either end of the spectrum," says Cheah. "On the one hand, they don't know how limited the current state of AI really is. If they did, you wouldn't see neo-Luddite movements start to gain traction on the Internet."

He explains why: "You know IBM's supercomputer, Deep Blue, that defeated Gary Kasparov in chess? Well, here's a thought – it can only play chess, where all possible moves are well defined in a well-defined environment. If you wanted it to figure out the joke, I'd wager that there would be a great deal of reprogramming required."

So, whilst AI will replace low-skilled, repetitive jobs like frontline processing and updating reports, and is indeed good enough to churn numbers and research in quanta impossible by the human mind, it cannot replace areas which need the 'personal touch' – soft skills that rely on relationships to extract information or seal the deal.

Even Russia – purportedly at the forefront with China in winning the AI arms race – faces structural challenges when it comes to the deployment of AI in banking.

In November 2018, the Russian rating agency, Expert RA, in cooperation with the Center for Financial Technologies, conducted a study, *Artificial Intelligence in the Banking Sector,* which showed that the scattered nature of data and information systems hampers the use of AI technologies in the Russian banking industry.

Moreover, analysts say that even if data scarcity and/or integrity issues are solved, there will likely be just a handful of specialists skilled enough to process such data.

In stark contrast to the millions of dollars the UK and US banks are pouring into AI research and development, Russia is more subdued (and cryptic) in its approach.

In an interview with the rating agency, Sergei Putyatinsky, Deputy Chairman of the Management Board at Credit Bank of Moscow, had this to say about AI in banking: "We are pragmatic in implementing 'hype' technologies."

Perhaps, we could do with a few more pragmatists to burst this bubble.

03
Things AI Cannot Do for Risk

BE EXPLAINED EASILY. FIs are judged by more than just performance. For instance, the systems banks use to meet KYC standards not only have to work well—flag bad guys and not flag good guys—they also have to be transparent enough to allow for compliance reporting. However, transparency is more difficult as the technology used looks more and more like AI. Supervised learning, at least, begins with input/output data pairs that have been chosen by the programmers. Unsupervised learning does not even allow for that level of accessibility, as a system trained in this manner finds patterns without any human prompts. And do not even start on neural networks.

In short, as AI technologies increasingly mirror our cognitive complexity, the 'black box' problem – the inability of banks to spell out the logic or reasoning behind cognitive AI decisions and prove to regulators that the decisions are safe, fair and logical – will only intensify. There is also the danger of firms turning down better performing AI applications in favour of what's tried, true, and easier to report. Transaction monitoring systems (TMS), for example, are a vital component of a FI's anti-money laundering arsenal. However, because of the vital role TMS data plays in law enforcement, regulatory pressure has made innovating these systems onerous.

Until then, 'explainability' will remain a hurdle to AI adoption in risk technology.

REPLACE YOUR JOB. The ability to fully automate complex information is not even close to where it would have to be to threaten the job security of analysts or investigators. Effective AI systems require clean, defined, and bounded data sets, and few elements in white-collar work match those descriptions.

One reason for the seeming plausibility of the takeover narrative is the widespread misperception around what is possible for AI. While machine learning may take cues from human mental processes, the similarity does not extend beyond inspiration. The AI of today is ultimately a game of predictive analytics—pattern recognition generated in slightly different ways. It is fundamentally incapable of higher-order thinking.

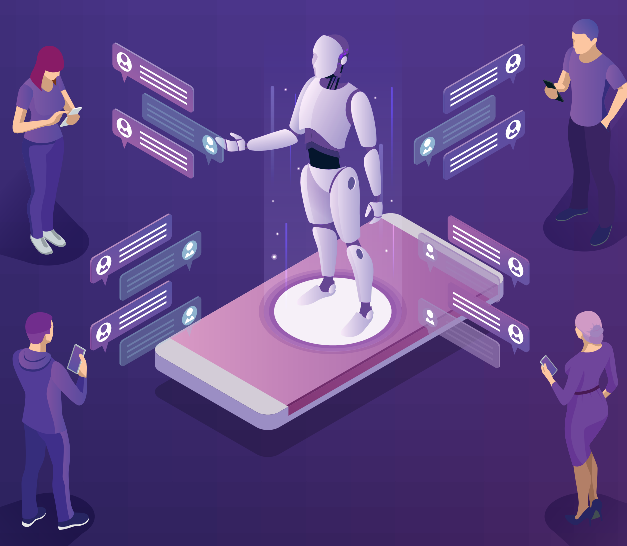
So, instead of replacement, think realignment.

DEAL WITH THE REAL WORLD. At the heart of the problem is data. Modern AI applications are built on machine learning, and machine learning is only as good as the people the machine learns from. With supervised machine learning, this reliance is direct. With unsupervised learning, this reliance can be insidious. As unsupervised, deep-learning AI systems have been unleashed on public data they've sometimes emulated patterns their programmers never expected or wished: human prejudice.

The automated analysis of Twitter has produced an anti-Semitic chatbot. In another instance, software for LinkedIn's user activity seemed to lead recruiters away from female candidates. This reveals the startling susceptibility of AI to the bias embedded in human systems. But sometimes, the drawback is as basic as the lack of correct data. A key event could be so rare that gathering sufficient data points is near impossible.

Such limitations can result in meagre, unrepresentative training data, undermining the utility of algorithms built on this information.

Summarised from Basis Technology's *The Honest Guide to AI for Risk 2018.* ✱



Regulator Targets Payment Scams

Payment service providers have their say on a **new code designed to make it harder** for criminals to commit bank transfer fraud.

Consumers lost GBP92.9 million in the first half of 2018 through authorised push payment scams – where people are tricked into sending money to a fraudster.

The effect on victims can be devastating and in volume and value, it is the second-largest type of payment fraud, behind card fraud, reported by industry body, UK Finance.

A new voluntary code is being introduced this year to better protect consumers from this type of theft, also known as bank transfer fraud. It follows a consultation by the Authorised Push Payments (APP) Scams Steering Group, which was set up in February 2018 by the Payment Systems Regulator, the controlling body for the UK's GBP75 trillion payment systems industry.

Ruth Evans, Independent Chair, APP Scams Steering Group, said: "Authorised push payment fraud is a crime that can have a devastating impact on victims and this voluntary code is a major milestone in protecting customers.

"With payment service providers and consumer groups working together to create a lasting and fair solution for all, the code will also help to stop these scams occurring in the first place."

For the first time, APP scam victims who have acted appropriately will be fully reimbursed – if their provider is a signatory to the code but did not meet the standards expected of them under it.

The aim is to reduce the occurrence of APP scams and the harm caused to targeted account holders, setting out how consumers can take reasonable steps to protect themselves, while giving them greater levels of protection and support from their banks.

"However, we disagree with the notion that payment service providers should accept all liability for a scam in the instance that 'no blame' can be attributed to either party," the bank continued. "If this were to happen, consumers may see very little benefit in protecting themselves online (leading to greater volumes of fraud and scams), with payment service providers effectively taking responsibility for the criminal behaviour of fraudsters and, at times, customer behaviour.

INDUSTRY CONSULTATION

A total of 53 consultation responses were received to the draft code – known as the Contingent Reimbursement Model – published by the APP Scams Steering Group last September.

They included submissions from consumer groups, payment service providers, trade associations, public bodies, media organisations and members of the public.

In its response to the consultation, Barclays said it supported payment service providers taking responsibility for their actions where they have been substandard and have contributed to a customer losing their money.

"However, we disagree with the notion that payment service providers should accept all liability for a scam in the instance that 'no blame' can be attributed to either party," the bank continued. "If this were to happen, consumers may see very little benefit in protecting themselves online (leading to greater volumes of fraud and scams), with payment service providers effectively taking responsibility for the criminal behaviour of fraudsters and, at times, customer behaviour.

"This would set a dangerous new precedent, by creating tangible liability which should only be within the remit of the courts, or Parliament."

Barclays also said it strongly believed that a primary focus of any policy effort should be preventing scams from occurring in the first place. "Taking the profit out of crime for fraudsters will, in turn, reduce attempts, undermining a source of funds for organised

WORK ALREADY UNDERWAY TO MITIGATE THE RISKS OF APP SCAMS INCLUDES:

UK Finance's APP Best Practice Standards – a voluntary set of standards expected of both sending and receiving banks when dealing with APP fraud.

The Banking Protocol – a scheme that enables branch staff to alert local police to suspected fraud, with an immediate response to the branch.

Take Five to Stop Fraud – a government-backed awareness campaign offering straight-forward, impartial advice to help people protect themselves against financial fraud.

crime, and therefore weakening their wider negative impacts on the UK."

Nationwide Building Society said that, for residual 'no-blame' cases, a sustainable funding model would need to be developed that provides the correct incentive for all parties with the power to prevent APP scams to take requisite care – including, for example, online marketplaces.

Chris Rhodes, Chief Products and Propositions Officer, Nationwide, stated: "While Nationwide is not a member of the steering group establishing the Contingent Reimbursement Model, we fully support efforts by the industry to create a fund to reimburse 'no-blame' cases to ensure such people aren't left out of pocket.

"The financing of this reimbursement pot over the long term is being developed by the steering group, and whether organisations pass some of the costs to customers is up to them. However, we don't believe our members should pay the costs for our share and therefore we do not intend to pass this on.

"Providing swift reimbursement needs to go hand in hand with consumer awareness. One of the best defences against scams is education. That's why we continue to offer fraud advice in our branches and online, in addition to warning customers when making payments on our internet and mobile banks."

STAYING VIGILANT

Royal Bank of Scotland also highlighted the importance of vigilance.

A spokesperson for the bank said: "We know fraudsters are using increasingly sophisticated techniques to get customers to reveal their security information and to convince them to make payments from their accounts. To protect our customers, we invest heavily

in our security systems and processes and we work continuously to improve fraud detection. If a customer does become a victim of a fraud or scam, they have our full support, and we always look at each case on an individual basis.

"We'd like to remind all customers to remain vigilant, especially from cold callers asking you to move money to 'safe accounts'. Your bank will never ask you to move money in this way, nor will it ever ask you to reveal codes generated on a card reader."

A number of consultation responses highlighted the important role in preventing APP scams of the new Confirmation of Payee system being introduced by the Payment Systems Regulator.

This indicates to customers at the start of the payment process that they may be a target of a scam or mistakenly misdirecting a payment. However, some providers expressed concern about this and other interventions creating more friction along the customer journey.

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HSBC UK said: "Alongside additional layers of friction in the payment journey to ensure customers have taken steps to protect themselves, there is a risk that the process of making a payment [may become] too complex for some customers.

"We are also concerned that an unintended consequence may be limitations on access to payment services where a customer is considered 'at risk' of APP scams. This could have the effect of limiting access to financial services – either directly or indirectly – for the most vulnerable in society and we do not support that outcome."

HSBC UK said it supported calls for an implementation period following the code's publication to enable financial institutions to prepare for the major operational and technical change programmes required.

FUNDING OPTIONS

In response to several outstanding issues highlighted by the consultation, the APP Steering Group has established four working subcommittees. These will focus on what evidence is needed to show that payment service providers and consumers have met their standard of care under the code; possible sources of funding for reimbursement in 'no blame' scenarios; guidelines for the consumer reimbursement process; and the implementation timeline of the final code.

HSBC UK said: "We support the work of the no-blame working group to consider the full range of funding options and suggest that this must be supported by cost-benefit analysis and engagement with government at a senior level where relevant 'before' options are ruled out."

In potential 'no-blame' scenarios where victims could not be reimbursed, a number of respondents stressed the importance of repatriation as an alternative. This is the process of tracking stolen money across payment systems, freezing it and then returning it to the victim of the crime.

Responding to the Payment Systems Regulator's first APP consultation in January 2018, for Vocalink, a Mastercard payment systems company, Rob Cowle, Head of Economic Regulation, said: "Merely reimbursing the victims of scams does not reduce the economic harm of scams – it just means that the payment service providers bear the costs.

"To reduce systemic harm, the Payment Systems Regulator should seek to introduce a model that repatriates funds away from the illicit accounts."

Cowle's other observations included that the approach to APP scams at the time of the consultation tended to be "ad hoc and not systematic" and often based on email communication.

"This approach leads to consumer confusion because a nonstandard approach to reimbursement rules means some PSPs (payment service providers) are more likely to reimburse than others," he said.

"The absence of a common tool to discuss disputes and reimbursement introduces the possibility of delayed action and mistakes from parties having to manually create cases.

"We consider that a systematic approach with an established process, rules and toolset will help to mitigate these risks and, ultimately, [create] a better experience for the consumer."

As reimbursement claims may be disputed, the system should also include a dispute resolution process that walks the parties through an established workflow to resolve the dispute and reimburse the consumer, Cowle suggested. ✱

■ *This article previously appeared in the Chartered Banker magazine, UK, spring 2019 edition.*

GOVERNMENTS ARE SHARING THREAT INTELLIGENCE & YOU SHOULD TOO

THE HERE AND NOW OF COLLABORATIVE CYBERSECURITY.

Not too long ago, one would have been hard-pressed to find firms, both public and private, sharing cybersecurity intelligence. The cybersecurity landscape of today is markedly different from a decade ago and much progress has been made.

Over the past few years, one key fact has become abundantly clear; the traditional independent approach to cybersecurity has not been working and as the threats posed by cyberattacks rise, so do the stakes.

A recent Frost & Sullivan study anticipates that the Asia-Pacific region would incur economic losses of US$1.75 trillion due to cybersecurity threats.

Today, governments across the region are actively collaborating to combat cyberthreats, such as Indonesia, Malaysia, and Singapore, which have cemented cybersecurity agreements with other countries and organisations.

Recently, Indonesia and the US reached an agreement to collaborate on cybersecurity. Similarly, the Monetary Authority of Singapore partnered with the Financial Services Information Sharing and Analysis Center (FS-ISAC) to set up its Asia Pacific Regional Analysis Centre in Singapore to improve threat intelligence sharing.

Governments collaborating on cybersecurity set a strong example for the private sector to follow, especially when one considers just how hard it is to find security talent in the region. A recent report, *Cybersecurity Workforce Study 2018* by the International Information System Security Certification Consortium (ISC)², revealed that there is a 2.14 million shortfall in cybersecurity talent in the region.

To fill the gap, we must look at embracing diversity in the workforce. According to Frost & Sullivan's *2017 Global Information Security Workforce* study, women are vastly under-represented in the global cybersecurity workforce at a mere 11% compared to their counterparts in the overall global workforce.

In Asia Pacific, women make up only 10% of the cybersecurity workforce. To encourage greater diversity in the sector, FS-ISAC started the Building Cybersecurity Diversity scholarship in the hopes of helping women interested in cybersecurity kick-start their careers. To date, FS-ISAC has secured nearly 60 scholarships and hopes other institutions will consider contributing.

Diversity of thought can go a long way towards helping the global financial services stay ahead of cybercrime.

+ Governments collaborating on cybersecurity set a strong example for the private sector to follow, especially when one considers just how hard it is to find security talent in the region.

The good news is that the options for collaboration are already out there. Information sharing and analysis centres (ISACs) have been around for years and are now, more than ever, a crucial piece in the fight against cybercrime, but it does not come without its own set of challenges.

Ultimately, we must try to plug the talent gap as much as we can as the lack of trained staff only exacerbates the problem for firms trying to keep up with the ever-changing cybersecurity landscape. Threats are growing rapidly and trying to keep up is hard when one does not have skilled staff on the payroll. In the (ISC)² report, close to 60% of organisations say they are at "extreme or moderate risk" due to the shortage of cybersecurity staff. To overcome this, gain a better handle on cybersecurity, and improve overall cyberthreat posture, we must look towards the models used by governments and apply that across industries. This is especially true for the financial services sector, a favourite target of cybercriminals.

THE VALUE OF SHARING & ESTABLISHING TRUST

Collaboration is possibly the only way firms can get by without maintaining an army of cybersecurity specialists. The growing threat of cybercrime to both the public and private sector is not one that we can simply throw money at and the effective sharing of information will be critical.

The good news is that the options for collaboration are already out there. Information sharing and analysis centres (ISACs) have been around for years and are now, more than ever, a crucial piece in the fight against cybercrime, but it does not come without its own set of challenges. For companies new to the concept, there may be some hesitation and perhaps even pushback when it comes to working with external entities for fear of reputational damage.

Establishing trust is vital to enable the sharing of information. Everyone is comfortable sharing information with people they know personally and trust. In the context of threat intelligence sharing, this is equivalent to sharing information with a circle of people that may number in the several thousands across the world.

To maintain a high degree of trust in a community where many members may not ever have crossed paths, a third-party facilitator becomes a necessary factor. ISACs allow firms, communities and even entire sectors to overcome the fundamental challenges for intelligence sharing. Members of ISACs are empowered to solve problems collaboratively alongside like-minded peers, across multiple sectors and geographies. When it comes to cyber intelligence, the more reliable the data, the better the decision. Access to data enables security teams to identify threats as they emerge and respond quickly when they do. The stronger the connection to one another, the stronger the threat response will be.

FS-ISAC, does this through the Traffic light Protocol (TIP), which indicates how and with whom information is shared. Additionally, members connect through a secure member portal and engage in smaller circles of trust created for specific communities of interest within the financial services sector.

Ultimately, more must be done to improve the willingness of private companies to share information and more quickly at that, so that other firms will have time to put defences in place to combat new cyberthreats. As governments continue to publicise their partnerships in the cybersecurity space, the hope is that more private companies will take a page out of their book and embrace all the benefits that come with being part of such a community. ✱

■ *Brian is the Executive Director of FS-ISAC Asia-Pacific. Prior to his time at FS-ISAC, Brian worked for the Pharmaceutical Security Institute as the Senior Intelligence Analyst directly coordinating production of intelligence analysis for executive leadership on criminal involvement with global counterfeit pharmaceutical networks, including cyber-based networks. Earlier, he served in the US Department of Defense for 26 years in intelligence and foreign affairs roles with increasing responsibilities, culminating as the principal intelligence officer for the Deputy Assistant Secretary of Defense, East Asia, with responsibility for Taiwan, China, North and South Korea, Japan, and Mongolia. Brian received his Master of Arts degree in Global Affairs from George Mason University focusing on global conflict and security. He is fluent in Mandarin, Portuguese, and Spanish.*

 BY JUSTIN ONG

THE END OF LIBOR IN 2021

How prepared are you?

BACKGROUND

It was announced in July 2017 that the UK Financial Conduct Authority (FCA) would no longer persuade or compel banks to submit the London Interbank Offered Rate (LIBOR) by 2021, making it clear that reliance on LIBOR could no longer be assured beyond this date. LIBOR is a benchmark that is regulated and administered in the UK, but has been adapted by banks globally. Today, LIBOR is embedded in contracts involving banks, asset managers, insurers and corporates, which are estimated to be at US$350 trillion globally on a gross notional basis. The rate is so embedded in existing banking practices and relied upon by market participants, that the transition away from LIBOR will be one of the most, if not the most, challenging transformation programmes faced by the finance industry today.

2018 has seen regulators turning up the pressure by stating that firms should treat the discontinuation of LIBOR as a certainty and that progress has been relatively slow. In the UK, a joint "Dear CEO" letter from the UK Prudential Regulation Authority (PRA) and the FCA was sent to large banks and insurers in September, requiring Boards to sign off on a comprehensive risk assessment of LIBOR transition in respect of their firms. Swiss regulators have also been proactive in reaching out to firms. Further afield, US regulators are holding bilateral discussions with firms, and the Bank of Canada has called on financial institutions to consider their "readiness" for benchmark reform.

WHY LEAVE LIBOR?

LIBOR is the underlying interest rate used in various financial instruments and millions of contracts around the world. For over three decades, LIBOR has been a reliable source used to determine the cost of financial products, from housing loans to corporate bonds, and even complex derivatives. LIBOR is calculated based on submissions from panel banks (usually the larger banks) at which they estimate the rate to obtain wholesale, unsecured funding for multiple tenures. In essence, it represents the average interest rate at which banks are willing to borrow from one another.

While this may seem like a relatively straightforward process, LIBOR has its limitations and flaws. LIBOR submissions are not based on actual transactions, but rather judgement calls, hence do not provide a strong representation of the actual landscape occurring in the market. This reliance on expert judgement increases susceptibility to manipulation.

The global financial crisis in 2008 was the tipping point for this deep-rooted benchmark in the financial system. When Lehman Brothers failed, banks refused to lend to each other at published LIBOR rates, illustrating just how weak a representation LIBOR was. As a result of the crisis, new requirements on banks' capital were introduced. The larger, systematically important global banks were compelled to hold larger liquidity buffers to cushion losses, altering the way banks fund themselves.

"The discontinuation of LIBOR should not be considered a remote probability 'black swan' event. Firms should treat it is [sic] as something that will happen and which they must be prepared for. Ensuring that the transition from LIBOR to alternative interest rate benchmarks is orderly will contribute to financial stability. Misplaced confidence in LIBOR's survival will do the opposite."

Andrew Bailey, Chief Executive of the FCA

KEY DIFFERENCES BETWEEN UK LIBOR AND SONIA

UK LIBOR	SONIA
Various maturities	Overnight
Built-in credit component	Nearly credit risk-free
Forward-looking	Backward-looking
Deep liquidity (US$30 trillion worth of underlying transactions)	Relatively less liquid compared to LIBOR (US$610 billion worth of underlying transactions)

The limitations of LIBOR have made banks and regulators increasingly concerned about the future of LIBOR. As a response to these growing concerns, the industry has decided to transition away from LIBOR, in search for new reference rates.

ALTERNATIVE RATES AND ITS CHALLENGES

Working groups in each jurisdiction are identifying the most suitable risk-free rate (RFR) in the market, with plans to develop them in the near future. Some of the considerations include easing availability of sufficient and reliable underlying market data, enhancing robustness to changes in market structure, setting appropriate controls and governance, and reviewing the expected/actual market funding rates ratio of the RFR. These selected RFRs include pre-existing rates, reformed versions of pre-existing rates, and newly created rates.

However, RFRs are constructed differently to LIBOR. RFRs generally do not incorporate risk whereas LIBOR reflects perceived credit risk, therefore fixings for RFRs tend to be lower. This could mean that a trade which transitions from LIBOR to a RFR could have a different market value over time. In other words, there might be 'winners and losers' in an RFR transaction. Hence, valuation methodologies should be revised. Liquidity in the market for RFRs is also likely to be a restraining factor from the start.

In the UK, the Working Group on Sterling Risk-free Reference Rates (Sterling RFR Group) has recommended that GBP LIBOR should be replaced by the Sterling Overnight Index Average (SONIA). The confirmation of this replacement on 29 November 2017 by the FCA further underlines the importance of understanding the potential impacts and practical considerations of the transition.

Other countries such as the US and Switzerland have identified secured RFRs to replace LIBOR, namely the Secured Overnight Financing Rate (SOFR) and Swiss Average Rate Overnight (SARON), respectively. This would pose further challenges in regard to the transition as these rates are derived from secured transactions, removing the credit element that served as an important function in pricing and hedging. Furthermore, since its debut in April 2018, SOFR has been significantly more volatile compared to LIBOR due to its susceptibility to price swings tied to the Treasury bill issuance as well as month- and quarter-end supply variations.

In the Asia-Pacific landscape, regulators and the financial industry are mostly at the initial stages of looking into the impact of this transition, however, the progress is moving at a slower pace than expected.

To support the transition to RFRs, working groups such as the Sterling RFR Group in the UK and the Alternative Reference Rates Committee in the US are continuously putting effort to build forward-looking RFRs, issue consultation

"Since the financial crisis, LIBOR really has become the rate at which banks don't lend to each other."

Mark Carney, Governor of the Bank of England

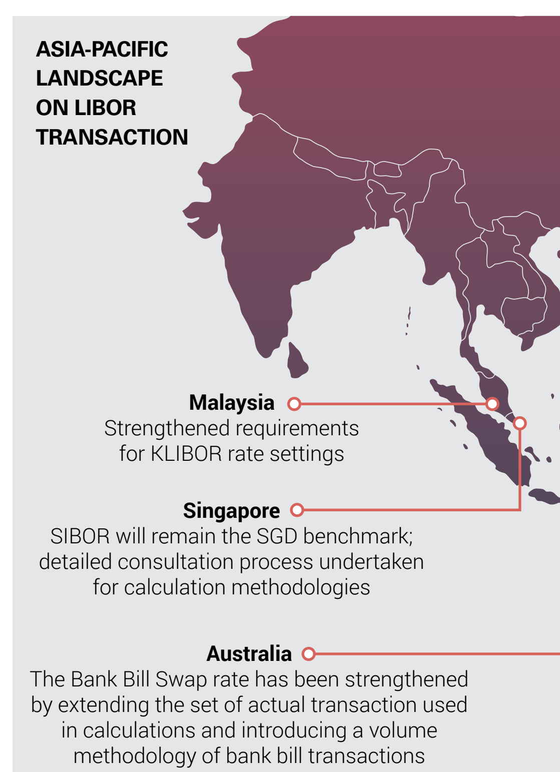

TABLE 1 POTENTIAL IMPACT OF THE TRANSITION OF LIBOR

AREA	LEGAL	SYSTEMS AND PROCESSES	VALUATIONS AND RISK MANAGEMENT	ACCOUNTING	TAX
Potential Impact	Contract amendments will lead to increased transition costs and operational risks. A significant administrative effort associated with transitioning contracts to the alternative RFRs will be required.	Significant challenges may arise when the required institutional infrastructures (e.g. trading and clearing data, systems, and operational procedures) are established to support the transition to the alternative RFRs.	Transition of legacy contracts could potentially result in less effective hedges and/or market valuation issues, and may require adjustments to address inherent differences between the interbank offered rates and alternative RFRs.	The transition may result in complications related to fair value designation, hedge accounting and inter-affiliate accounting structures.	The transition may result in changes in the amount of taxes due or acceleration of payments on financial contracts or tax structures.

papers and guidelines, and build liquidity in the market via publishing of indicative rates using derivatives launching and trading of new RFR products such as swaps and futures. The US has been at the forefront of these initiatives, with CME Group, the world's largest derivatives marketplace, launching SOFR futures in May 2018. Across the Atlantic Ocean, British clearing house LCH began clearing interest rate swaps referencing SOFR just two months later. Intercontinental Exchange has also expanded its offering by launching various tenures of SOFR futures. Despite their efforts, LIBOR-referenced products are still heavily used and traded today. According to the Bank of England, LIBOR exposures are growing faster than they are maturing.

THE TIME TO ACT IS NOW

While many market participants in the US and UK have already embarked on transition programmes, globally, the pace of transition is not accelerating. This is, in part, due to the absence of any formal regulatory or legal mandate. However, banks have to accept that the discontinuation of LIBOR is not a possibility, but a certainty. Banks have to act now. Regulatory and supervisory scrutiny is expected to grow, with focused intervention in areas that are underdeveloped. Boards and senior management should expect questions regarding their timelines, governance plans, assessment of financial exposures and conduct risks, with enquiries becoming more focused and detailed over time.

It is important for banks to establish a Steering Committee (SteerCo) that comprises of all relevant business units and stakeholders (including the control functions or 'three lines of defence'), to manage and oversee the LIBOR transition programme. A balanced governance structure is vital, as the SteerCo will ultimately be the primary decision-taker in relation to the programme. Its membership needs to be sufficiently senior to enable it to take decisions which commit the business (first line) and engage the control functions, without becoming so large as to impair its ability to take decisions efficiently and effectively.

A disorderly transition from LIBOR would be detrimental to individual firms as well as to the broader market. There is, therefore, a strong incentive for each individual bank to perform an impact analysis, identify key risks and challenges, and manage these risks as early and efficiently as possible to avoid problems further down the line. Above are some of the potential impacts that may arise during the transition period (see **Table 1**).

LIBOR transition will be like no other transformation programme that banks have undertaken. While firms may consider 2021 to be a long way off, the fact is that the complexity, magnitude and scope of the task ahead allow no room for complacency. The clock is ticking and the time to act is now.

For more information on how your bank can build a holistic LIBOR transition programme, please refer to Deloitte's thought leadership paper, *LIBOR transition – Setting your firm up for success: https://www2.deloitte.com/uk/en/pages/financial-services/articles/libor-transition-ibor-benchmark.html* ✱

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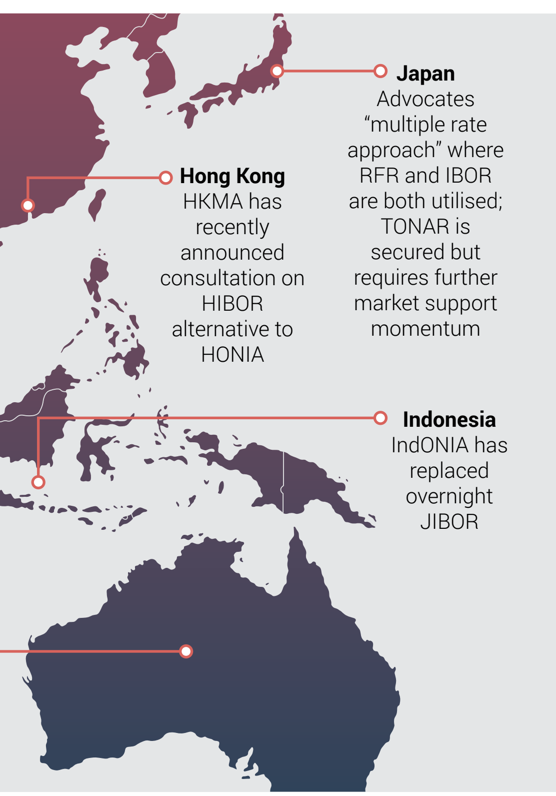


 BY JULIA CHONG

Innovative Onboarding

DOING DIGITAL RIGHT

The low-down on revamping banks' **onboarding architecture** to deepen the banker-customer relationship.

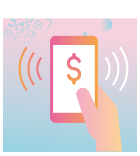
Over the past decade, there has been a concerted push by banks to channel customers into adopting digital banking platforms.

From online opening of retail bank accounts to real-time e-Know Your Client (e-KYC) checks, the push for technology-driven solutions to replace manual processes is, as one CEO said, "a no-brainer". It minimises costs, ups efficiencies and appeals to the next generation of consumers – digital natives comprising Gen-Xers and Millennials.

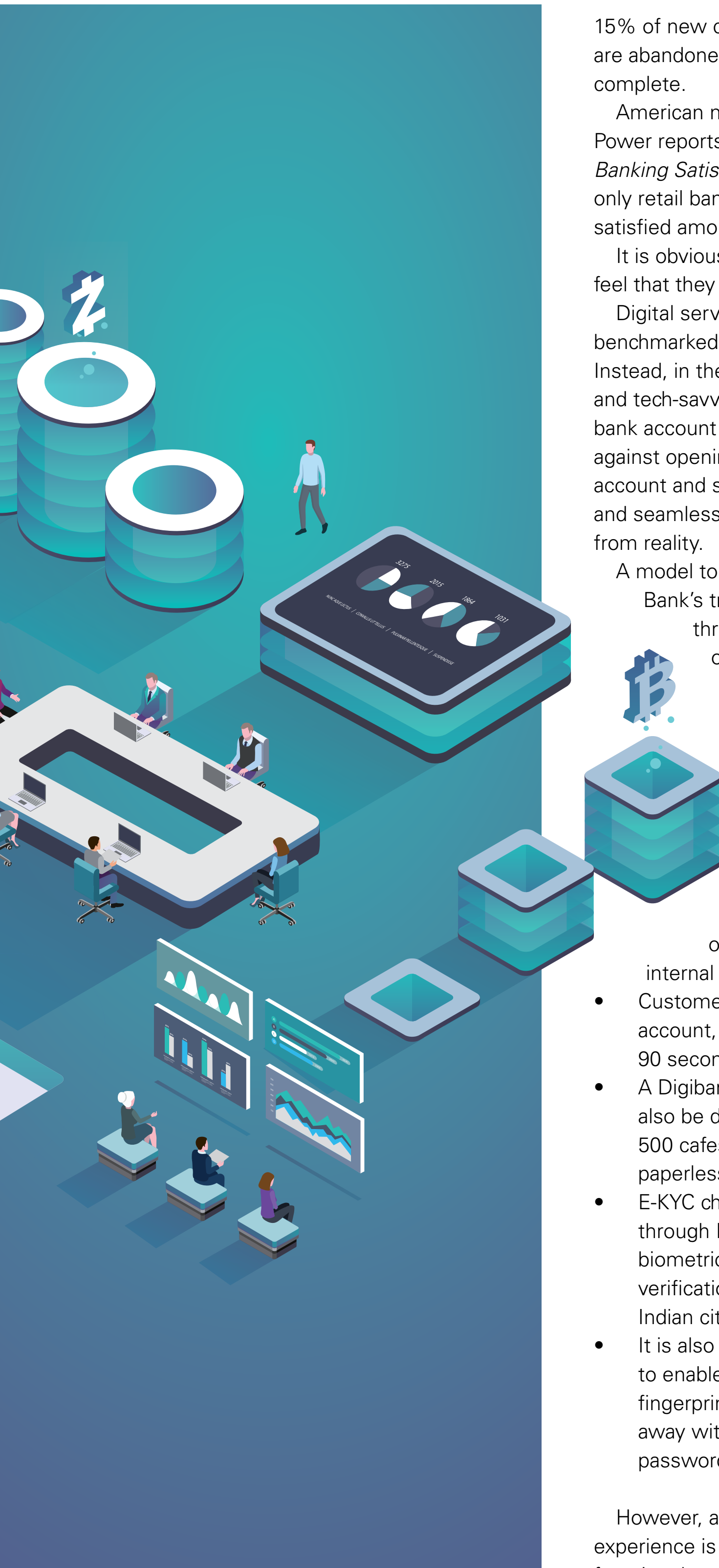
However, few realise that digital-first strategies are a double-edged sword.

Recent studies show that financial institutions (FIs) with robust digital offerings do indeed benefit from lower branch/operational costs and enhanced efficiencies. But the failure of banks to fully integrate or properly leverage on such technologies result in a backlash – high attrition rates, unprofitable accounts and a lot of dissatisfied customers. Indeed, a fully digital footprint and total elimination of physical branches are far from practical as today's consumers still require varying degrees of hand-holding.

According to global research firm Aite Group, 5%-



+ Recent studies show that financial institutions (FIs) with robust digital offerings do indeed benefit from lower branch/ operational costs and enhanced efficiencies.



15% of new customer applications are abandoned before onboarding is complete.

American market research firm J.D. Power reports in its *2018 U.S. Retail Banking Satisfaction Study* that digital-only retail bank customers are the least satisfied among all customer segments.

It is obvious that some digital users feel that they have been let down.

Digital services at banks are no longer benchmarked against other banks. Instead, in the minds of digital natives and tech-savvy corporates, opening a bank account online is benchmarked against opening an Amazon or Spotify account and should be as simple, quick and seamless. For most banks, this is far from reality.

A model to look to, however, is DBS Bank's transition to a digital bank through its very first mobile-only bank in India, Digibank. In one of the most successful cases of innovation and process re-engineering, the Singapore-based bank's digital onboarding has rolled out a host of new technologies in India, some as a result of hackathons as well as internal re-engineering:

- Customers can open a deposit account, or eWallet, online within 90 seconds.
- A Digibank account opening can also be done digitally or at over 500 cafes across India in a pure paperless process.
- E-KYC checks are performed through India's Aadhaar card, a biometrics database containing verification data for over 1 billion Indian citizens.
- It is also one of the earliest banks to enable biometric login using fingerprint identification, doing away with user identification and passwords for login.

However, a gap in the customer experience is Digibank's Internet banking function, launched years behind its peers in 2018. DBS India CEO Surojit Shome attributed this to the bank's mobile-only strategy, which viewed online banking as a "fallback activity" for customers in the event their mobile devices were lost or damaged.

Indeed, gaps in the customer journey are common and affect banks of all sizes.

In a recent webinar, Christine Barry, Senior Research Director at Aite, said she knew of a Top 4 US bank whose Treasury had recently lost a client to a smaller bank due to their digital onboarding process.

"Unfortunately, onboarding challenges go across the board. No bank regardless of size is immune to it. Very often we think of the largest banks as having the most significant IT budgets and advanced technologies.

"But I recently spoke with a corporate treasurer that needed more enhanced foreign exchange capabilities. Their primary bank was actually a Top 4 bank in the US, and the onboarding process was so long and inefficient that they ended up going to another bank that was able to deliver the capabilities they needed at a faster rate. It ended up being a smaller bank, but that's just to show that even the large banks with deep pockets have the same challenges."

GETTING TO A JOURNEY MINDSET

Such incidents prove that an effective customer-centric onboarding strategy is crucial. It is one of the easiest ways to grow the balance sheet and counter negative first impressions.

Deploying new technologies for onboarding is not new (see *Technologies Automating Onboarding Functions* on page 60). But deployment of these tools will not deliver big scale results if there is no concerted effort to map and redefine the customer experience.

For instance, a customer submits her statutory documents to open a trading account with Bank A, whose relationship manager then forwards as a lead to another department, say insurance, for cross-selling. The insurance division makes the sales call, and the customer

TECHNOLOGIES AUTOMATING ONBOARDING FUNCTIONS

PAPER DIGITALISATION

Optical character recognition (OCR) overcomes challenges of reading data from documents that were not designed to be machine readable.

ELECTRONIC DATA CAPTURE

This function allows data or documents to be typed in just once by the customer and auto-populated for future functions, saving time and effort and allows for seamless identity verification. Smart forms or forward-looking systems enable seamless connection to customer relationship management and core banking systems, bundling all functions within a single form.

DIGITAL SIGNATURE CAPTURE

Mobile e-signature is at the forefront of this tech which gives customers the flexibility of using their own mobile devices as a signature capture pad, allowing legally binding transactions to be conducted on the go for an end-to-end digital experience.

KYC AND OTHER TYPES OF AUTHENTICATION

Centralised databases such as India's Aadhaar (biometric identity system) were built with the major purpose of making KYC easier. Other major innovative authentication methods are video selfies, video chat with agents, fingerprint and iris scans.

COMPLIANCE

Deep analysis and code that goes into interpreting AML/CFT regulations, especially in Compliance-as-a-Service products, have the ability to trigger breaches in near real-time.

instructs the bank to proceed. But rather than closing the deal over the phone, the insurance division requests for a fresh submission of documents – documents that were already submitted by the customer for approval of her trading account. The customer postpones the submission, and this results in lost revenue for Bank A.

In this case, the lack of ability to re-use data and documentation during cross-selling results in an opportunity foregone. Had Bank A mapped its client's user experience (UX), it would have identified the overlap in digital onboarding processes and developed a standard operating procedure for agents to complete the process with the path of least friction and avoid the customer dropping out. For instance, the insurance officer above should have proceeded to verify the client's identity online as all required documents for subscription were already in the bank's safekeeping.

Customer satisfaction is fast becoming the prime differentiator in a highly competitive industry. After all, costs can only go so low, and less satisfied customers are also less likely to purchase the full range of banking products.

Enter UX. Today, it is regarded as a methodical science that seeks to quantify the experience of consumers interacting with your product. Aside from mapping the entire customer experience for each key segment by building 'profiles' for each demographic, it emphasises measured metrics such as abandonment and attrition rates, click-throughs and clicks to completion, success rate and time to completion of a task.

It is crucial in what Boston Consulting Group calls achieving a 'journey mindset', a measurable goal if FIs follow the four steps below, summarised from its publication titled *How Digitised Customer Journeys Can Help Banks Win Hearts, Minds, and Profits:*

+ **Adopt customer-centric design practices.** Obtaining a deep understanding of banking customers' wants and aspirations goes beyond buying histories, demographic data, and segmentation analyses. It takes observing customers in their contextual environments. Ethnographic research—where teams study customers at home, in the store, at the office, while commuting, and so on—reveals customers' needs, wants, and preferences and clarifies not only what makes them tick but also what ticks them off.

+ **Redesign processes from end to end.** Think outside existing norms and gain inspiration from practices in adjacent sectors and breakthrough technologies. Once the aspiration is defined, cross-functional teams use agile development techniques to pull together a minimum

Mapping a digital architecture is a sophisticated undertaking. Although regulations in this realm are not explicit in how banks should digitally onboard clients, the intersection where new tech meets compliance is critical as failure to comply has genuine consequences…but so does exasperating a valued customer.

viable product which is then deployed into the field to refine, iterate, and rerelease it in rapid, successive cycles until the journey elements meet predefined customer thresholds. Back office functionality is designed concurrently so that the completed journey is capable of delivering a full end-to-end experience. Operations and servicing components must also be redesigned to align organisational structures and underlying business rules. Often, this type of end-to-end process redesign allows financial services institutions to generate new functionality in weeks instead of months.

+ Apply digitisation, machine learning and robotic process automation. Cognitive tools capable of ingesting vast quantities of data and performing sophisticated analyses in near real-time allow financial institutions to create more responsive journeys and to employ highly accurate and predictive insights to inform customer interactions. In banking settings, such tools are transforming the quality of interactions that are as varied as call centre support, credit scoring, and wealth management advice. Many of these tools are designed to execute predefined actions based on highly refined reasoning capabilities and because the tools are capable of learning, the more they are used, the more accurate the decisions and insights generated.

+ Transcend organisational silos. Designing and building end-to-end customer journeys requires collaboration across business, technology, and operations functions. Different reporting hierarchies in cross-functional teams, as well as rapid and agile reimagination waves, may require new skill sets, talent, performance incentives, and metrics, all of which can diverge markedly from traditional ways of working. To support this collaboration and to scale innovations across the enterprise, FIs can rely on a variety of sources, including centres of excellence, innovation labs, venture funds, activist programme management offices, and strong senior management support.

MIND THE REGULATORY GAP

Mapping a digital architecture is a sophisticated undertaking. Although regulations in this realm are not explicit in how banks should digitally onboard clients, the intersection where new tech meets compliance is critical as failure to comply has genuine consequences…but so does exasperating a valued customer.

Logic dictates that if the client to be onboarded is an existing client with another part of the bank, then the documents required for regulatory purposes already exist. But how does the relationship manager achieve a single client view?

Some market experts estimate that up to 80% of the data and documentation needed for compliance with recent regulations like the Foreign Account Tax Compliance Act or over-the-counter derivative rules like the Markets in Financial Instruments Directive II, are already captured under existing standard anti-money laundering and KYC checks. Hence, it is possible that FIs need only win over the remaining 20% to comply.

For this, institutions are shifting away from the concept of client onboarding towards a client lifecycle management approach where tracking, monitoring and continuous compliance is the end goal. For this to happen, the tech platform into which data is fed must be capable of responding to new data and determining if it is material enough to trigger a breach.

Is it any wonder that one of the most lucrative markets in the banking ecosystem is for third-parties providing Compliance-as-a-Solution offerings?

REALISTIC BASELINE

Even in small-medium enterprise onboarding, considered less complicated than corporate, there is much room for improvement. Thus, best-in-class innovation should be seen as a moving target, not a static goal.

Deluxe Financial Services, a subsidiary of NYSE-listed Deluxe Corporation, advocates banks aim for a 35% acceleration of revenue and 40% efficiency gains through the implementation of innovative onboarding programmes.

+ Joe Pitzo, its Senior Manager for Product Management, in a recent webinar advised corporates to apply these four simple questions to guide them toward best processing practices:

What systems are users interacting with to onboard your customers?

Are all of the steps in your existing onboarding processes required?

Are there opportunities to re-engineer existing processes?

Are there opportunities to reuse data or applications that could shorten the deployment times for automating onboarding?

In an age when every bank is 'doing digital', ask yourself: "Am I doing digital right?" ✱

■ *Julia Chong is a Singapore-based writer with Akasaa. She specialises in compliance and risk management issues in finance.*

CROSS-BORDER B2B PAYMENTS

GETTING IN ON THE ACTION

How banks can remain competitive in the ever-changing payments landscape.

Growth in the payments sector has been focused on the fast-changing landscape of business-to-consumer (B2C), consumer-to-business (C2B), and peer-to-peer (P2P) segments.

With far more consumers than there are businesses in the world, the impetus for innovation in the global payments sphere is skewed towards these segments. Capgemini and BNP Paribas' *World Payments Report 2018* found that 73% of all fintech investment in the Asia-Pacific payment space was in the consumer segment versus 3% in the business-to-business (B2B) sphere.

However, recent research indicates that B2B payments are set to become banking's next big revenue churner with Asia Pacific as a key battleground.

BURGEONING LANDSCAPE

Consulting firm McKinsey & Co's *Global Payments 2018* report estimates that global payments revenues grew 11% to US$1.9 trillion in 2017 with international cross-border payments revenues exceeding US$200 billion.

Asia Pacific, led by China, dominates growth in global payments revenues, accounting for over US$900 billion and is projected to hit a five-year compounded annual growth rate of 11% by 2022.

The growth is led by two factors: Asia's underserved small- and medium-sized enterprise (SME) sector, which accounts for nearly 30% of all cross-border imports globally and is revving its engines for greater volumes in cross-border trade; and the region's demand for payment solutions that prioritise cash flow management.

Despite innovations by correspondent banks such as SWIFT's gpi – its latest offering that promises payments within 30 minutes or a 24-hour time frame – users still deem it inefficient in comparison to cross-border payments clearance by non-bank players such as blockchain-based RippleNet, who perform the same in mere seconds.

It is mission critical that FIs improve these aspects in the B2B payments space if they intend to gain and/or retain a foothold in Asia's payments landscape:

> **Long lead time and extraneous steps.** According to global credit insurer Atradius' *Payment Practices Barometer Asia Pacific 2018*, the average B2B payments duration in the region is a painstaking 55 days, an increase from 57 days in 2017. The days are calculated from the moment the purchase order is generated and ends upon obtaining proper sign-offs and receipt of the remittance advice, and the most common reason for the long lead time is the amount of manual processing involved in the accounts payable/accounts receivable (AP/AR) workflow. Paper-based processing, approval lag time, potential errors or missing information in manual entries, or even worse, forged documents, are common in manual processes for AP/AR workflows.

> **Complex processes for domestic and international payments.** In the same survey by Atradius, 40.7% of

respondents state that the main reason for payment delays in cross-border B2B transactions is the complexity of the payment procedure. With 16 banking systems operating across Asia-Pacific and the lack of cross-border harmonisation in basic configurations (e.g. remittance advice format, invoice information), same-day clearance in the vein of the European Union's Single Euro Payments Area – the region's payment integration initiative for euro-denominated bank transfers – is not yet realisable.

> Lack of transparency. The more a business can track every dollar, the better it can optimise its cash flow. However, a fragmented global payments networks and systems that are low in visibility often leave business in the dark about:

ASEAN regulators are taking steps to boost electronic B2B payments. These measures include the enhancement of the e-payments infrastructure, waivers of transaction fees for domestic online transactions, and an increase in cheque processing fees.

- ***The status of payments.*** Queries include: Has the money 'left' the account? When will beneficiaries receive the payment? Is there a delay in the transfer?
- ***The full cost of performing cross-border payments.*** International wire transfers through a correspondent bank are often opaque on the total cost to process the payment, leaving payments short of the needed amount. Apart from the inconvenience, there is also reputational damage and potential breach of contracts if monies do not arrive on time and in the correct amount in an international supply chain.
- ***Real-time exchange rates.*** Liquidity and cash management is suboptimal if information is delayed. Markup or upkeep fees are all crucial aspects of international payments and can 'eat' into the bottom line, giving businesses good reason to adopt fintech solutions that are cheaper, provide greater visibility, and allow more control over their cash management.

STRATEGIC PLAY

There are two ways in which banks can increase market share in the B2B cross-border payments sphere.

#1 Develop a Clear Digital Strategy

In an article titled *Re-imagining the Future of B2B Payments,* Ankur Kanwar, Standard Chartered Bank's Regional Head – Cash Management Products, ASEAN and South Asia, wrote: "ASEAN regulators are taking steps to boost electronic B2B payments. These measures include the enhancement of the e-payments infrastructure, waivers of transaction fees for domestic online transactions, and an increase in cheque processing fees."

"In the ASEAN agreement on e-commerce endorsed in August 2018, provisions encouraging member states to promote paperless trade, cross-border data flows, and electronic payments were laid out," he wrote last December.

"With the advent of digital solutions that have transformed retail payments, it makes good economic sense to leverage existing innovations to engineer a shift in the B2B payments space."

This shift can take many forms. Banks can become an aggregator platform, embrace

Open Banking and work with fintech, or leverage on its network of existing industry players to devise new solutions.

Kanwar cites the PayNow Corporate Scheme, an initiative by the Association of Banks in Singapore and is an extension of its P2P funds transfer service, PayNow, that provides an end-to-end process for billing, payments, and collections.

Open Banking initiatives have also seen successful partnerships in the B2B payments sphere. One such solution is developed by MC Payment, a Singapore-based unified payment platform in Asia-Pacific for Visa and Mastercard.

Its stable of products include lower processing rates for commercial credit cards using Level 3 data – an improvement over Level 2 data processing – which captures data fields such as merchant name and address, invoice number, tax amount, freight commodity, and product codes. Level 3 processing can help businesses lower interchange rates by as much as 1% with the additional benefit of data reported back to the business on sales, costs, and tax details.

These collaborations are proof positive that incumbents must embrace new strategies to create a win-win situation for all in the payments ecosystem.

#2 Develop Real-time Payment (RTP) Capabilities

RTPs are instant payments using a proxy, such as a mobile number or business registration number, that is linked to a specific bank account to enable instant transfers and acceptance of payments.

Boston Consulting Group (BCG) elaborates how RTPs enable faster B2B payments in its *Global Payments 2018* report:

"Faster speeds, payment certainty, and payment finality will enable just-in-time deliveries and time-critical disbursements and will expedite the shift away from paper in payment-on-delivery situations. RTPs can also provide organisations with richer contextual data. Newer RTPs are set up to transmit more-detailed remittance information than legacy payments systems, adhere to international (ISO20022) message standards, and make it possible to attach PDF files with invoices or other payment information to the payment message, which can enable a more seamless, straight-through-processing experience in accounts receivable."

Most B2B RTP systems are an extension of already well-established payments platforms built for the P2P sphere.

Case in point is PayNet, Malaysia's national payments network and central infrastructure provider, which rolled out its first initiative, DuitNow, an instant credit transfer service in January 2019 for the retail market as part of the nation's Real-time Retail Payments Platform. This was progressively extended to cover the B2B segment by linking business registration numbers (BRN) with bank account numbers.

Under DuitNow, funds are available 24x7 and businesses need only provide their BRN in order to receive notifications of incoming DuitNow transactions, or settle invoices or payments with other corporations. It is a secure platform as account or bank details are not required and the seamless, paperless process provides a secure audit trail with no manual intervention.

Globally, there are over 20 countries with RTPs that have come online fairly recent, including Australia's New Payments Platform and Singapore's Fast and Secure Transfers initiative.

With these national B2B payment platforms in place, it is only a matter of time that the vision of greater ASEAN payments integration to scale financial flows across the region is achieved.

STILL THE PREFERRED CHOICE

However, BCG cautions that FIs looking to adopt real-time B2B payments will need to address these pain points:

adjust current processes (e.g. move from batch processing to real time, with implications for control processes, liquidity management, and accounting protocols);

integration with enterprise resource planning systems; and

collaboration for industry-wide adoption of ISO20022 for standardisation.

Despite the proliferation of fintech solutions in the B2B space, there is still demand by corporates and business that trust and will continue to rely on banks for their operational needs, including B2B payments.

The ball is now in banking's court to renew its strategies and remain competitive in the ever-changing payments landscape. ✱