Sustainable Finance Must Be the Basis of Malaysia's Post-Covid Future
Failure to do so will undermine long-term profitability and economic prosperity

BANKING INSIGHT

IDEAS FOR LEADERS | **JULY/AUGUST 2020**

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STEADY HANDS
TO HOLD A FULL CUP

'NEVER LET A GOOD CRISIS GO TO WASTE'

Corporate Social Performance & Credit Risk

PROLIFERATION FINANCE: STILL OUT OF SIGHT, OUT OF MIND?

WHERE NEXT FOR MONETARY POLICY?

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Editor's Note

Moment of Truth at Banking's Quatervois

The most stirring images from Covid-19 are of total calm. From London's Square Mile to Kuala Lumpur's financial district, the lockdown imposed a surreal, eerie quiet. In this silent upheaval, banking was thrust into the 'new normal'.

As the health crisis unravels into a looming economic crisis, the *Banking Insight* team felt it was an imperative to present content that is current yet timeless in order to be of value to our members and banking at large. With this in mind, we upended our previous editorial direction and went back to the drawing board in order to present what you see today.

This edition of *Banking Insight* is the first to centre on a *quatervois* – a critical turning point in the industry – as the pandemic unfolds.

In a hyperconnected world, financial stakeholders are inundated with information, but not necessarily knowledge. This Covid-themed edition is devised as a companion for readers, zeroing-in on perspectives and transformations that must take place in financial institutions within the next six to 12 months.

While the end of the crisis is still a way off, our cover story, *Steady Hands to Hold a Full Cup,* critically assesses banking's trajectory thus far and highlights trends that will shape the future. Coupled with our curated features on risk modelling, Agile implementation, cloud infrastructure, and remote work security, we encourage financial stakeholders to reimagine the industry in a post-Covid era.

As fraud takes on new dimensions, our exclusive interview with Tom Keatinge, Director of the Centre for Financial Crime and Security Studies at the Royal United Services Institute, is timely. The defence expert warns us that "the reality is that the job of securing the integrity of the financial system will just get harder, a job that it is critical governments support via fully engaging in public-private partnerships and collaborating with and supporting the banks."

> In a hyperconnected world, financial stakeholders are inundated with information, but not necessarily knowledge. This Covid-themed edition is devised as a companion for readers, zeroing-in on perspectives and **TRANSFORMATIONS THAT MUST TAKE PLACE IN FINANCIAL INSTITUTIONS** within the next six to 12 months.

Giving us a birds-eye view of the effectiveness of government stimulus is Asia Business School's Prof Hans Genberg, whose feature on *Helicopter Money: How, for What, to Whom, and by Whom?* details the methods, mechanisms, and banking's role in achieving the desired economic objectives.

Globally, there is a resurgence in calls for sustainability to be a pillar of rebuilding economies. We explore the 'why' in WWF's *Sustainable Finance Must Be the Basis of Malaysia's Post-Covid Future,* and contemplate the 'how' in *Corporate Social Performance & Credit Risk* with new research presented by Dr Lutfi Abdul Razak, Prof Dr Mansor H Ibrahim, and Dr Adam Ng.

In an unprecedented crisis, there is no textbook response or crystal ball. The best strategy in times of acute volatility is quite simple – stay informed, be mindful, move flexibly.

Ambitious initiatives may win headlines, but incremental steps make the biggest difference.

With this in hand, I'm certain we will arrive at the future of our choosing. ✱

The Editor

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INDIVIDUALS AGED 55+

CUSTOMERS EARNING RM10K+

are twice as likely to be interested in a virtual bank due to a bad experience with their current bank.
~ *PwC Malaysia during the AICB Empowering Bankers Webinar.*

On Winning The Digital-Banking Race

Committed to the continuous professionalisation of the Malaysian banking industry, the Asian Institute of Chartered Bankers (AICB) launched its Empowering Bankers Webinar in March this year and recently kicked off a joint Digital Banking Series with PwC on 20 May 2020.

Moderated by AICB CEO Prasad Padmanaban, close to 300 members attended the inaugural digital series titled *'Digital Banks – Why Will They Matter?'*, with speakers Marcus von Engel and Ching Chuan Ong, Financial Services Consulting Leaders at PwC Malaysia.

The interactive discussion mapped the dynamics of the global banking landscape, the strategies and technologies deployed by digital banks, and the potential of digitalisation to open up new markets, in particular the underbanked and micro-SME segments, which are ripe for the picking.

Highlights include an overview of Bank Negara Malaysia's digital banking licence plan vide the *Licensing Framework for Digital Banks – Exposure Draft* and tips (reproduced below) on wresting the opportunities ahead:

- Build and nurture trust with your customers in data privacy, security, and brand reputation;
- Capitalise on Malaysians' openness to new things by bringing world-class experience to an emerging market;
- Empower customers to better manage their finances with innovative access to personalised information and services; and
- Introduce distinctive digital and lifestyle services, which in Malaysia is not always easily available.

NO LONGER CRYPTIC OVER CRYPTO?

On the digital currency front, the possibilities of centrally backed digital assets have captured the imagination.

In January, the European Central Bank (ECB) released one of the most comprehensive working papers on integration of cryptocurrencies into the financial system, titled *Tiered CBDC (Central Bank Digital Currencies) and the Financial System*. This comes after the idea was floated last year about an ECB-backed digital currency, primarily to counter the disruptive effects of Facebook's own cryptocurrency, Libra.

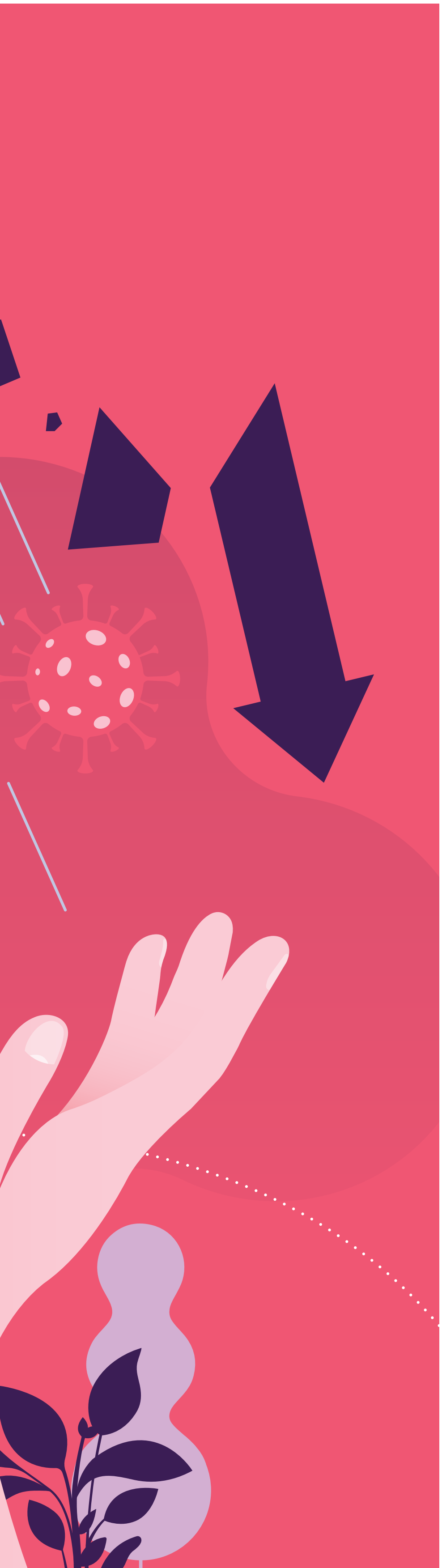
The US Senate has also introduced legislation, the Banking for All Act, proposing that the Federal Reserve create fiat-backed digital dollars in order for the government to disburse its US$2.2 trillion (RM9.6 trillion) stimulus package to average Americans.

It's estimated that one out of every 14 households have no bank account or address for the government to disburse its US$1,200 coronavirus aid cheques.

China announced in late April the launch of a national blockchain platform, believed by many to be the precursor to a central-bank backed cryptocurrency termed DCEP. ✱

STEADY HANDS TO HOLD A FULL CUP

'NEVER LET A GOOD CRISIS GO TO WASTE'.



Here's the difference between this crisis and past others.

In the 1930s, when banks needed a lifeboat to survive the Great Depression, aside from holding companies coming in with their reserves, some headed to Washington with a tin cup and got it filled with US$90 million from Uncle Sam's coffers.

Then in 2008, the global financial crisis once again saw financial institutions lining the steps of Capitol Hill with the proverbial tin cup and returning with a mug-full of bailout money. The cost of US bailouts has been pegged at US$498 billion (RM2.1 trillion) by Prof Deborah J. Lucas, Director of the MIT Golub Center for Finance and Policy.

This current crisis, however, has seen a fundamental change.

At the onset of Covid-19, financial institutions have fared better than most other sectors. After more than a decade of Basel regime reforms – overhauling financial institutions, strengthening regulatory oversight, and upping the bar for financial stability – banking may have weaned itself off pan-handling and is starting to flex its muscle as part of a global solution.

Most banks had shored up strong capital and liquidity positions, with most nuts and bolts in place ready to weather the storm. The European Banking Authority's (EBA) preliminary assessment on 25 May 2020 of the impact of Covid-19 on the EU banking sector was mostly positive:

+ Banks have entered the Covid-19 crisis more capitalised and with better liquidity compared to previous crises. Prior to the pandemic, the common equity tier 1 ratio rose from 9% in 2009 to nearly 15% as of the first quarter of 2019, and liquidity coverage ratios were on average close to 150%, significantly above the regulatory minimum.
+ Despite the pandemic's negative impact on asset quality and increased non-performing loan volumes, which can reach levels similar to those recorded in the aftermath of the sovereign debt crisis, state-guarantees introduced in many jurisdictions might soften this impact while loan moratoria will avoid the automatic classification of affected exposures as forborne or defaulted. Nonetheless, the extent to which banks will be affected by the crisis is expected to differ widely.
+ Banks have been using their liquidity buffers and are expected to continue using them in the coming months. Spreads have been widening substantially and new unsecured debt issuances almost coming to a halt until mid-April. Under these circumstances, banks have increased significantly their reliance on central bank funding.
+ Banks' operational resilience is under pressure due to the handling of large volumes of applications for debt moratoria and guaranteed loans, and the insufficient preparation of some offshore units to work remotely, among other things.

By and large, this reflects the position of banks across the board. It may seem a **SMALL VICTORY** to say that the industry fared better than other sectors, but it is a victory hard won, especially as many believe this crisis surpasses the Great Depression.

By and large, this reflects the position of banks across the board. It may seem a small victory to say that the industry fared better than other sectors, but it is a victory hard won, especially as many believe this crisis surpasses the Great Depression.

Financial markets have been trounced in days described as "utter carnage". Global equities saw a US$24 trillion wipeout between December 2019 and March 2020 as well as a triple whammy – a coronavirus-triggered health crisis coupled with an oil price shock and off-the-chart volatility – leading to material declines and stagnated cash flow for borrowers.

According to a research note by S&P Global on 5 April 2020, in Asia Pacific alone, this skyrocket non-performing assets and consequent credit losses this year by as much as US$600 billion and US$300 billion, respectively. As resilient as the region is, negative ratings are inevitable with China, India, and Indonesia's banking systems pegged to be the hardest hit.

Several trends and/or innovations have emerged as the industry navigates its way to harbour:

> **Halt to dividends and buybacks.** Managing Director of the International Monetary Fund (IMF), Kristalina Georgieva's op-ed in the *Financial Times* this May was just one of many to calls for this. She writes: "One of the steps needed to reinforce bank buffers is retaining earnings from ongoing operations. These are not insignificant. IMF staff calculate that the 30 global systemically important banks distributed about US$250 billion in dividends and share buybacks last year. This year, they should retain earnings to build capital in the system. Of course, this has unpleasant implications for shareholders, including retail and small institutional investors, for whom bank dividends may be an important source of regular income. Nonetheless, in the face of the abrupt economic contraction, there is a strong case for further strengthening banks' capital base."

At the point of writing this article, the US Federal Reserve has just announced moves to cap dividends and ban buybacks by big banks including JP Morgan Chase, Wells Fargo and Bank of America, whilst the UK's banks – Royal Bank of Scotland, HSBC, Barclays – have voluntarily scrapped payout plans totalling GBP8 billion (RM42.5 billion) to forestall a recession. *Bloomberg* reports that China's banks are facing a US$42 billion dividend trap as the Communist Party defends the decision to proceed with payout to shareholders, whilst *Nikkei Asian Review* reports that angry Hong Kong-based retail investors of HSBC are demanding the London-based bank issue a scrip dividend (the option to receive the distribution in the form of equity) in place of cash distribution.

> **Calls for sustainability as a pillar of economic recovery.** Multilateral agencies, international lenders, and a growing number of research houses have come out in favour of the idea that environmental, social, and governance criteria have a material financial impact on equities and other asset classes, and should form the basis of economic recovery. Notably, the World Bank Climate Change Group's virtual series, *Kickstarting the Sustainable Recovery,* introduces new research on how sustainable finance can be part of the Covid-19 recovery.

> **Innovation in debt markets.** In the face of tail risks – the probability of losses occurring due to rare events, of which a pandemic is one such example – there is renewed interest in tapping the bond market to fund the healthcare and economic response. Martin Scheck, Chief Executive of the International Capital Market Association, said in a recent interview with *The Banker* that this year's Covid-19-related social bonds issuance has hit US$7.7 billion, mostly by multilateral agencies.

However, others such as Nordic Investment Bank (NIB) – a Helsinki-based international financial institution equally owned by the five Nordic and three Baltic countries – have issued NIB Response Bonds to finance projects that aim to alleviate the social and economic consequences of the pandemic in order to support the recovery process in member nations. The framework will follow NIB's normal financial, risk, and liquidity policies and guidance, and differ from social bonds in its structure.

THE BETTER 'F' WORD

Regulators across the board are also embracing and adjusting to the 'next normal'.

Commenting to the *Financial Times* this March, William Coen, the former Secretary-General of the Basel Committee on Banking Supervision, said: "…in this crisis, extraordinary measures are required. So long as the measures are just temporary, not structural or permanent, it could help reestablish confidence. I don't think regulators are using the word forbearance; flexibility is the better 'F' word."

Swift prudential measures by global and national supervisory authorities focus on flexibility to ensure banks can continue to provide adequate lending under extraordinary stress and comply with the objectives of Basel. The move enables financial institutions to extend rather than cut lines of credit, directing all efforts and resources toward stimulating the real economy and boosting the rate of recovery.

For instance, the European Central Bank nudged banks to use their prudential capital and liquidity buffers – which have significantly improved since 2008 – whilst the European Banking Authority mirrored this message by reminding that these buffers were intended for use during periods of crisis in order to uphold lending levels in the economy. Authorities have also extended support to banking systems such as liquidity or credit guarantees and relief on minimum regulatory requirements.

But is all this enough to stimulate a quick recovery?

"If you look at the forecasts that investment banks produce, and indeed governments, [these] wonderful V-shape projections suggest that we'll be back to where we were at the end of 2019 by some point in 2021," says Scottish-born historian Niall Ferguson in a *World vs Virus* podcast by the World Economic Forum.

"If you believe that, I'll sell you a bridge," he says drily, "because there's no way this is going to be a V-shaped recovery."

Veiled and harsh. Ferguson's phrase – I'll sell you a bridge – refers to one of the greatest cons of the 20th century by George C Parker who 'sold' the Brooklyn Bridge to gullible investors multiple times, implying that only a sucker would believe that this crisis will be over easy.

The Hoover Institution fellow argues that even in the less-pervasive 2008 crisis, unemployment took six years to recover to pre-crisis levels and it will likely take years before the world recovers from this one. This idea that the world will "merrily go back to where we were in a matter of months" is not just unlikely, but out of sync with economic history.

BLACK SWAN OR GRAY RHINO?

In early 2007, Nassim Nicholas Taleb, a mathematical statistician and former options trader coined the term 'black swan' to mean an unpredictable, improbable, and catastrophic occurrence. His bestselling book of the same title sought to illustrate why business and society needed to change in order to mitigate risks in a hyperconnected world. Several months after its publication, *The Black Swan's*

predictions had seemingly materialised in the form of the global financial crisis.

Describing the characteristics of a black swan event, Taleb wrote: "First, it is an outlier, as it lies outside the realm of regular expectations, because nothing in the past can convincingly point to its possibility. Second, it carries an extreme 'impact'. Third, in spite of its outlier status, human nature makes us concoct explanations for its occurrence after the fact, making it explainable and predictable."

Is Covid-19 a black swan? According to Taleb, the answer is a categorical 'No'.

An excerpt from *The New Yorker*'s April 2020 interview with the Lebanese American author:

"*The Black Swan* was meant to explain why, in a networked world, we need to change business practices and social norms — not, as he (Taleb) recently told me, to provide "a cliché for any bad thing that surprises us." Besides, the pandemic was wholly predictable — he, like Bill Gates, Laurie Garrett, and others, had predicted it — a white swan if ever there was one. "We issued our warning that, effectively, you should kill it in the egg," Taleb told *Bloomberg*. Governments "did not want to spend pennies in January; now they are going to spend trillions."

His description of the pandemic seems to fit another animal metaphor – that of the 'gray rhino' event, which is described by its progenitor, Michele Wucker, as "a highly probable, high-impact yet neglected threat: kin to both the elephant in the room and the improbable and unforeseeable black swan. Gray rhinos are not random surprises, but occur after a series of warnings and visible evidence."

At the point of writing this article, the US Federal Reserve has just announced **MOVES TO CAP DIVIDENDS AND BAN BUYBACKS** by big banks including JP Morgan Chase, Wells Fargo and Bank of America, whilst the UK's banks – Royal Bank of Scotland, HSBC, Barclays – have voluntarily scrapped payout plans totalling GBP8 billion (RM42.5 billion) to forestall a recession.

Wucker's 2016 bestseller, *The Gray Rhino: How to Recognize and Act on the Obvious Dangers We Ignore,* has since been embraced internationally, most notably by China's top brass as a way to signal policy changes to reduce financial risk in the economy as well as deflecting those looming high-impact threats.

In *The World Ahead: Covid-19 and the Perils of Prediction podcast* by *The Economist*, Wucker says it's never too late to catch it: "I always ask people to ask themselves, "What's my gray rhino? What's the big thing that's coming at me? What am I doing about it? Is it working and what can I do better?""

"That sort of question is so shockingly simple and obvious, if you will, that people don't always pay attention to it. But it's true, it's almost counter-intuitive that the most obvious things are the ones we don't pay attention to and when you're more aware of that vulnerability we have a lot of power to keep from being trampled by things that other people are ignoring.

"Part of my message is that it's okay if you missed something in front of you because it's human. But it's not okay once you realise how vulnerable you are to missing the obvious to keep ignoring it. So step on to it."

Far from holding a cup out during this crisis, banking has thus far held its own. But a few careless actions is all it takes to turn the tables.

As for those steady hands – well, they've long been at work since 2008, proof that banking's reform pains haven't been for naught. ✱

■ *Angela Yap Siew Peng is a multi-award-winning entrepreneur, author, and writer. She is Director and Founder of Akasaa, a boutique content development firm with presence in Malaysia, Singapore, and the UK and holds a BSc (Hons) Economics.*

SIMULATING MEGA RISKS OF TOMORROW

What do you do when even the hypothetical doomsday scenario falls short?

As our reality is shaken by a virulent virus, banking should consider a shake-up of its own.

For over a decade, overhauls to the risk model under the Basel regime undoubtedly strengthened the financial sector's resilience; yet, none were prepared for the onslaught of Covid-19. As the impact of the pandemic borders unexplored dimensions, the only rule as we overhaul banks' risk models is this: No assumption is sacrosanct.

For most financial institutions, the sensitivity analyses in their risk models only take into consideration the most likely occurrences – upside, downside, and near the baseline. There are also more extreme stress tests, those which push the limits of the financial system by simulating one-in-a-thousand events a.k.a. Armageddon scenarios, but even these have come up short in predicting the financial fallout.

The *Wall Street Journal* quotes Randal Quarles, US Federal Reserve Vice-Chairman for Supervision, in stating that the regulator is "adjusting its annual 'stress tests' for banks to incorporate lenders' performance during the coronavirus-triggered downturn, which is worse than the hypothetical scenarios that the central bank previously planned to use".

In Quarles' own words: "The right thing to do is for us to continue our stress tests but as part of them to analyse how banks' portfolios are responding to real, current events, not just to the hypothetical event that we announced earlier this year."

Forecasting models are populated by reasonable assumptions and historical relationships in data. However, there is no precedent in recent history that mirrors this pandemic or resembles the forces at play. Even in machine learning and artificial intelligence models, failures exist as their predictive power is highly dependent on historical precedents, data quality, and the sets of assumptions used.

In light of this, banks must question whether their long-held assumptions in current risk models still hold.

RETUNING DATA

The Basel Committee on Banking Supervision's (BCBS) final revisions to Basel III was to be implemented on 1 January 2022. These revisions, commonly referred to as Basel IV, include improvements to the market risk framework. Since Covid-19, the BCBS has announced a 12-month delay for banks, allowing them to focus on navigating the pandemic and perhaps an opportunity to retune their data collection processes in this 'new normal'.

Data provider CRISIL, an S&P Global company, in its April 2020 paper, *The Hour to Rejuvenate Credit-risk Data Models,* highlights three broad risk-model areas for lenders to zone in:

- **Broader definition of default.**

To mitigate the impact of the pandemic, institutions have allowed financially strapped borrowers to postpone payments. In the UK, for instance, banks can extend zero-penalty payment holidays of up to three months on mortgages with no impact on the borrower's creditworthiness. Despite the new repayment schedule, the exposure would not be reclassified as forborne or distressed. Overrides – manual or system-wide – are to be expected and it is imperative that banks do two things:

+ **Factor in impact on credit-risk data collection, process, and governance.** Reset systems and controls to monitor the timing of payment postponement and pandemic-related overrides, ensuring that borrowers are not penalised. Control failures will likely have implications for banks from a conduct risk perspective and may lead to regulatory penalties.
+ **Foolproof the distressed restructuring.** Continue to assess all indicators of borrowers' unlikeliness to pay during and after the moratorium, accurately presenting the quality of the bank's portfolio to market participants and ensure it remains adequately capitalised. Institutions should continue to capture data on distressed restructurings for a robust assessment of unlikeliness-to-pay. This ensures timely and accurate identification and measurement of credit risk.

• Delays in implementing the revised Internal Ratings-based (IRB) framework.

These improvements relate to the probability of default (PD) and loss given default (LGD).

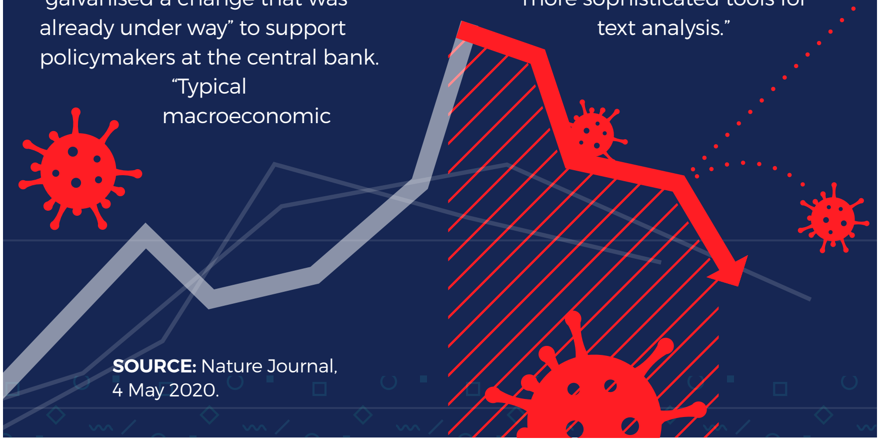
+ **Poorly performing PD models.** With the expected surge in defaults and credit migration, PD models which are largely driven by annual or quarterly financials are unlikely to predict accurate ratings reflective of the Covid-19 crisis and overrides are expected. However, determining the specific overrides for each borrower is challenging and will greatly burden model monitoring teams as they assess the performance of the overrides.
+ **Conduct impact analysis due to a rise in defaults and LGDs.** As new data emerge, the central tendency of the default rate is likely to shift and a recalibration of current PDs may be required. For LGDs, institutions need to monitor the pool of collateral used to mitigate credit risk as it will have a significant bearing on the recovery rate.
+ **Improve data capture for risk-weighted assets (RWA) optimisation and pricing.** While the full impact of the outbreak and related relief measures may take some time to manifest, it is imperative that institutions conduct an impact analysis of their RWAs and use this knowledge in the pricing of new loans.

FRINGE SCIENCE?

Risk officers should diversify their sources of information, keeping abreast of research on the fringe, which may unlock critical components in refining risk models.

For instance, Nature journal featured Arthur Turrell, a physicist-turned-economist whose current work at the Bank of England's data science unit fuses economics and epidemiology (a branch of medicine studying the spread and risk factors of infectious diseases), merging life science with data analytics to track the financial fallout of the pandemic.

He shares how the virus has "galvanised a change that was already under way" to support policymakers at the central bank. "Typical macroeconomic data points, such as figures on gross domestic product, come out every quarter. That's fine in normal times when changes are gradual – but now, changes are happening week by week. And with policies such as lockdown, it's as though whole sectors of the economy have been turned off overnight. So we've had to think differently. We've been using tools from data science and computer science to automatically collect and analyse data as soon as they come out, to create a report for policymakers at the bank. We use a little bit of machine learning and more sophisticated tools for text analysis."



SOURCE: Nature Journal, 4 May 2020.

• Economic support and relief measures affecting International Financial Reporting Standard 9 (IFRS 9) provisioning.

The goal is to capture defaulting loans correctly. It is up to institutions to define what constitutes a significant increase in credit risk, capture the expected credit loss effectively, and document this in accordance with its credit impairment policies and procedures.

Under IFRS 9, credit obligations are allocated under three stages: performing (Stage 1), underperforming (Stage 2), and impaired (Stage 3). During the period of pandemic relief programmes, credit obligations that would normally move to Stage 2 (a transition state before default) will now remain in Stage 1 for a longer time.

From a data governance perspective, this counts as a system override. Banks should apply the stage allocation correctly throughout the forbearance period and revert to the original classification once this period lapses. Where there is a significant deterioration of credit risk, the transfer to Stage 2 needs to be considered from when the loan was granted.

The forward-looking information must

be reasonable and supportable for the purpose of IFRS 9. Additionally, the impact of overrides should be carefully monitored, with senior management having visibility. This will, in turn, provide better traceability and enable a better understanding about the key drivers of credit impairment during this time of pronounced uncertainty.

COMPETING PERSPECTIVES

Haresh Sharpa, Professor of Accounting at Chicago Booth, is one of the many voices advocating against banks being temporarily relieved from post-crisis regulations such as IFRS 9 and the current expected credit losses (CECL – America's new credit-loss standard), which were designed to curb excessive risk-taking.

Drawing from current research, Prof Sharpa writes in the April edition of *Chicago Booth Review:* "Some argue that due to the economic uncertainty brought about by Covid-19, banks may face higher-than-anticipated increases in credit-loss allowances. But my research demonstrates that the role of expected-loss models such as the CECL is to reveal timely information about credit losses so that a bank's stakeholders can be more nimble and make informed, sound decisions."

"Ignoring such information," he warns, "would not discipline risk-taking – and could potentially exacerbate it."

"As the crisis evolves, many companies and consumers will unfortunately default on their loans and banks will incur credit losses. But banks that are timely about recognising these losses will emerge from this crisis in better shape and with more credibility."

On the flip side, economists such as Dr Jon Danielsson, Director of the Systemic Risk Centre at the London School of Economics, caution against preaching that risk models are the be-all and end-all of financial stability.

"Statistical pricing and risk-forecasting models played a significant role in the build-up to the crisis. For example, they gave wrong signals, underestimated risk, and mispriced collateralised debt obligations," writes Dr Danielsson in a February 2011 opinion piece analysing the post-2008 crash.

"I am therefore surprised by the frequent proposals for increasing the use of such models in post-crisis reforms – and I am not alone. If the models performed so badly, why aren't we questioning their increased prominence?

"This may be because of the view that that we can, somehow identify the dynamics of financial markets during crisis by studying pre-crisis data. That we can get from the failure process in normal times to the failure process in crisis times. That all the pre-crisis models were missing was the presence of a crisis in the data sample.

"This is not true. The models are not up to the task. While statistical risk and pricing models may do a good job when markets are calm, they lay the seeds for their own destruction – it is inevitable that such models be proven wrong. The riskometer is a myth."

How then can we forestall finance's next big crunch?

"The next crisis will not come from where we are looking," Dr Davidson hints. "After all, bankers seeking to assume risk will look for it where nobody else is looking."

Vigilance – a watchful eye for possible dangers on the financial horizon – might just be the critical determinant in this risk-model puzzle. ✱

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

As the crisis evolves, many companies and consumers will unfortunately **DEFAULT ON THEIR LOANS AND BANKS WILL INCUR CREDIT LOSSES.** But banks that are timely about recognising these losses will emerge from this crisis in better shape and with more credibility.

Haresh Sharpa
Professor of Accounting
Chicago Booth

INFORMATION AND ETHICS

Addressing the dilemma of information asymmetry in our midst.

As service providers, banks deal mainly with money and information. Over many centuries, they have developed great expertise in dealing with money, and in the last century in particular they have proved to be innovative, creating products to meet a whole spectrum of needs to an expanding customer base.

Despite the rapid development and deployment of advanced communications technologies, managing information presents many challenges. This article explores some of these challenges and examines the implications for banks, with special emphasis on their ethical dimensions.

WHY IS INFORMATION IMPORTANT?

The money held and processed by banks mostly belongs to others, such as customers, accounts payable and businesses. Banks earn the right to deal with financial assets belonging to others through a bond of trust. Account relationships will only be formed and maintained if customers and others are confident that the bank will protect the funds, use them wisely and act in their best interests.

Focusing on customers, it is usually sufficient for a bank to provide information on how a service will meet the customer's need in order to proceed. This is usually expressed in terms of benefits; as long as the customer has an assurance that a service will meet their needs, they will be unconcerned about the technical features. Even if a service has disadvantages, the customer may still go ahead if the benefits outweigh the drawbacks. Here lies one of the problems when managing information.

In nearly all buyer-seller relationships there will be some degree of information asymmetry. This term relates to the gap in knowledge and understanding between the service provider and the customer. Just as one would expect a motor engineer to know more about the workings of a car than the owner of the car, a banker will inevitably know more about the products and services offered than the person using them. This asymmetry is one justification for regulation of the banking sector, without which less scrupulous banks would be able to sell products and services for profit, regardless of any harm done to the customer. In 2014, the Financial Conduct Authority, a UK regulator, identified information asymmetry as a significant driver of conduct risk.

Fortunately, the vast majority of banks are not unscrupulous, and since the global financial crisis there has been a renewed focus on putting customer interests at the heart of business activity. The crisis had exposed several deficiencies in the banking industry, such as sales of inappropriate products (notably sub-prime mortgages), indiscriminate risk-taking and, in a minority of cases, appallingly unethical behaviour. Banks have had to work hard to rebuild trust and confidence of the public, regulators and governments, and that relies to a large degree on information and how it is communicated to others.

One of the essential building blocks of ethical behaviour is technical competence. The banker has to understand what is right for the customer and that judgement can only be exercised properly if the banker knows the bank's products, its processes and its customers. However, simply being prepared to identify and anticipate customer needs and then match products and services to needs will only partially reduce the level of asymmetry.

CUSTOMER INERTIA

In most countries, the majority of customers do not shop around for the best banking products available in the market. Switching accounts to alternative providers takes time and busy people are seldom prepared to expend their time and energy in seeking out what is best for them. Despite the best efforts to develop open banking and reduce barriers to switching, many customers are content to stay right where they are. There are several reasons for this:

Many customers are influenced by current bias, which is the perception of what is best for them now, placing less importance on what could be better in the longer term.

Some customers are driven by mental

shortcuts and rules of thumb, influenced by what their parents did or what their friends suggest. This is quicker and cheaper than carrying our product searches, albeit less efficient.

In many cases, customers may take decisions they perceive to be safer. This is one reason why many thousands of customers leave funds in non-interest-bearing accounts for fear of the proverbial 'rainy day' when the funds may suddenly and unexpectedly be needed. An ethical banker will respect this, even if they advise that alternative choices could be advantageous.

Despite increases in financial inclusion, many customers do not understand the products and services, and in many cases do not want to understand them, as long as they serve their purpose.

THE ROLE OF THE ETHICAL BANKER

The factors described above might suggest that bankers need do nothing except perform a passive role in providing information, as and when it is demanded by customers. In fact, it is now more important than ever for professional bankers to reach out to customers and establish ongoing dialogue. Unfortunately, this is now more difficult than it was in the past. When banks relied heavily on physical branches, nobody was better informed that the counter staff, who would have a deep knowledge and understanding of the many hundreds of customers they met every week. With the transition towards digital banking and the rationalisation of branch networks, this personal bond has been broken and the relationship has to be built and maintained by alternative approaches.

This void can be filled in numerous ways. Most banks have customer relationship systems (even if they call them by a different name) and these can be used to build and amend profiles over time. Knowledge workers, including those involved in building management information systems, have a crucial role to play if customers are to take on a persona and not represent a virtual concept. Some banks are now building artificial intelligence systems to model customer scenarios and simulate the decision-taking process in customer advisory scenarios, but the better banks will surely understand that these systems have to be driven by human judgement and not used as a shield to evade individual responsibility.

THE AGE OF MISINFORMATION

Ethical bankers must concern themselves with the quality of information they process and to which they have access. Advanced technologies bestow the gifts of big data and the power to sort it, categorise it and use it as a platform for effective customer fulfilment. The quantity of information is not a problem, but the harder task is to allocate resources in a manner that will increase efficiency in achieving positive customer outcomes.

At the same time, bankers must understand that providing appropriate, correct information might not always be enough. Customers can gather information from a bank that is 100% correct and appropriate to their needs, but they will also gather information from other sources too.

Consider the following information, all posted on social media in the last year:

- Sir Richard Branson (founder of Virgin Group) is recommending bitcoin as a means of building a fortune (false).
- Beatles drummer Ringo Starr is dead (false, he is very much alive).
- Actor Bob Hoskins is dead (true, but he actually died in 2014).
- UK exports to the European Union (EU) only comprise 8% of total exports, so the UK should leave the EU (the actual figure is 44%).
- The Swedish government has officially sanctioned cryptocurrencies (false).
- The Covid-19 emergency in the USA will be over by the middle of March (tragically false).
- Kim Jong-un is dead (false).

These posts would have been read by thousands and shared with others by some who believed them to be true. Obviously, the majority of these would have been used as 'clickbait', while some may have been politically motivated. One question we have to ask is if the global financial crisis had occurred in 2020 and not 2007, what would these media have said about banks, and how would the banks have responded? The only appropriate response is to tell the truth.

Quality of information is key. Banks can publish facts about successful products and services. They can produce codes of ethics extolling their values, beliefs and promises to their stakeholders and publicise their successes. They can also post positive reviews of their services by satisfied customers, but anybody who has stayed in a terrible hotel on the strength of positive reviews will confirm the drawbacks of doing so. Perhaps the safety net can be provided by validating information offered to the public. Some banks do so by commissioning independent feedback on service provision and then committing themselves to publishing it, whatever conclusions are drawn. This is a brave approach, but sometimes bravery yields rewards. ✱

> One of the essential building blocks of **ETHICAL BEHAVIOUR IS TECHNICAL COMPETENCE.** The banker has to understand what is right for the customer and that judgement can only be exercised properly if the banker knows the bank's products, its processes and its customers. However, simply being prepared to identify and anticipate customer needs and then match products and services to needs will only partially reduce the level of asymmetry.

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AGILE FINANCE

MOVING FROM CRUISE LINER TO SPEED BOATS

As both philosophy and methodology, Agile has helped transform segments of our rigid financial institutions. But beware the fakes in our midst.

'Agility' refers to the capability of an organisation to respond quickly to change and deliver value in conditions of high uncertainty, and is increasingly seen as a strategic priority for future-ready organisations. KPMG's *2019 Global Agile Survey* found that 88% of organisations have already implemented Agile practices, and 70% intend to have Agile integrated in the wider business in the next three years. All show a clear trajectory of progress along the Agile maturity curve.

Banks that have taken the bold leap have realised significant commercial benefits. Accenture's *Enterprise Agility in Financial Services: The New Strategic Imperative* report found that truly Agile firms are more than twice as likely than the average to achieve top-quartile financial performance (55% versus 25%). They also show better long-term performance, with a 16% growth in earnings before interest, taxes, depreciation, and amortisation between 2007 and 2017, compared to 6% on average.

Agile has also enabled banks to de-risk their digital strategies, simplify working practices, and increase customer centricity. When done right, this in turn leads to increased employee motivation and higher retention of talent.

AGILE IN ASIA-PACIFIC BANKING

In April 2020, despite ANZ's 51% decline in statutory net profit for the first half of 2020, Shaun Elliott, CEO, credited their early move into Agile as a key factor that enabled them to navigate the pandemic better than others.

"Covid-19 has clearly impacted our performance, however the work done over many years to simplify our business, strengthen our balance sheet, as well as developing a more Agile and resilient workforce meant we were well-prepared to support customers through the crisis and I'm confident we will

emerge even stronger."

Over 95% of ANZ staff have been working remotely since mid-March, 500 staff are now working on Covid-19 measures, another 300 staff have been redeployed to support customers via digital channels, and the bank is digging deeper with the newly created role of group executive data and automation to spearhead its digital transformation.

Other Asia-Pacific banks who have started their Agile journey include Standard Chartered, HSBC, RHB, and Westpac. The shift is underway, but the journey is fraught with dangers as few understand Agile's roots and commitment to simplicity, flexibility, and customer-centricity.

Agile ways of working originated in the **AGILE SOFTWARE DEVELOPMENT** methodology that emerged to address the shortcomings of 'Waterfall' methodology in the 1990s.

THE AGILE MANIFESTO

Agile ways of working originated in the Agile software development methodology that emerged to address the shortcomings of 'Waterfall' methodology in the 1990s.

Waterfall is a linear project management approach, in which tasks are planned sequentially (i.e. Task A must be completed before Task B begins) and the lifecycle of the project is mapped out in phases using tools such as a Gantt chart. Each phase must be completed before moving on to the next; Waterfall management doesn't allow you to return to a previous phase once it is complete.

The entire project plan – deliverables, milestones, checkpoints, documentation, sign-offs – can sometimes take weeks to plan and get buy-in, especially for complex programmes such as new product development or transformation.

In contrast, Agile is not just about methods, practices, or tools; it is a philosophy, a way of life that works for organisations and individuals. Critically, one must have a shared mindset and culture that embraces change and delivers value quickly to customers.

+ True Agile practitioners adhere to the Agile Manifesto, a statement of four core values, where the parts that are in bold are valued more than those that are unbold:

Individuals and interactions over processes and tools

Working software over comprehensive documentation

Customer collaboration over contract negotiation

Responding to change over following a plan

The Agile Alliance, whose founding members consist of 17 software architects, programmers and independent thinkers, drafted and signed the Manifesto and its 12 Principles at a Utah ski lodge in February 2011. The diverse talents of the Alliance are part of Agile's uniqueness as it sought to break away from the confines of traditional project delivery and establish a simpler, trust-driven, customer-centric way of working.

There was Mike Beedle, an American theoretical-physicist-turned-software-engineer who authored the earliest papers about Scrum (now used extensively in research, sales, and marketing); Jeff Sutherland, Chief Technology Officer of PatientKeeper, an MIT based start-up; and author-cum-programmer Dave Thomas.

Another founder, award-winning programmer Jim Highsmith, describes the cornerstone of Agile and its resonance with people across all industries: "We all felt privileged to work with a group of people who held a set of compatible values, a set of values based on trust and respect for each other and promoting organisational models based on people, collaboration, and building the types of organisational communities in which we would want to work."

"At the core, I believe Agile Methodologists are really about 'mushy' stuff — about delivering good products to customers by operating in an environment that does more than talk about 'people as our most important asset' but actually 'acts' as if people were the most important, and lose the word 'asset'. So in the final analysis, the meteoric rise of interest in — and sometimes tremendous criticism of — Agile Methodologies is about the mushy stuff of values and culture."

Since then, millions have signed up to the Manifesto, and as Agile gained traction, its ideals have become co-opted. Founders such as Thomas have in recent years come out publicly to steer people back onto the true path of Agile.

In a 2014 article, *Agile is Dead (Long Live Agility),* he writes: "The word 'Agile' has been subverted to the point where it is effectively meaningless, and what passes for an Agile community seems to be largely an arena for consultants and vendors to hawk services and products."

He points to the four simple values in the Manifesto and asks: "Now look at the consultants and vendors who say they'll get you started with 'Agile'. Ask yourself where they are positioned on the left-right axis. My guess is that you'll find them process- and tool-heavy, with many suggested work products (consultant-speak for documents to keep managers happy) and considerably more planning than the contents of a whiteboard and some sticky notes."

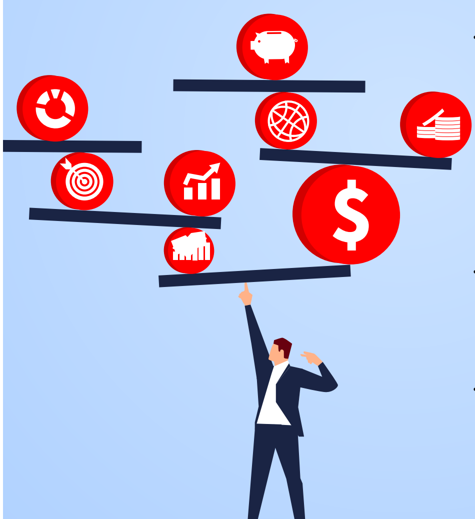
"If you see this too, then it's more evidence of the corruption and devaluation of the word 'Agile'."

CHALK & CHEESE

There are distinct differences between Agile and traditional ways of working a.k.a. Waterfall.

SELF-SABOTAGE

Becoming Agile is not an easy or quick process. Failure can be expensive, with long-term consequences. Here are some ways organisations sabotage their own Agile transformations:



- Adopt the tools of Agile without adopting the mindset.
- Skimp on training and allow leadership to duck out. Everyone (including senior leaders) must get the same training, otherwise expect conflict to follow.
- Copy the way another organisation does Agile. Adopting wholesale an Agile approach that's been tailor-made for another organisation is like wearing a tuxedo measured against someone else – an all-round bad fit.
- Carry out Agile theatre – where you pretend you are Agile but in reality, everyone still sticks to old processes and ways of thinking.
- Empower senior managers who don't align with Agile culture. They'll impede and undermine what's happening on the ground.

AGILE	WATERFALL
Work is done in short cycles of design-build-validate, then tackled in small chunks and in strict order of importance to the customer.	Work is specified in detail, in advance, and in entirety. The entire body of work is tackled in fixed sequence, against a pre-agreed cost and time.
First delivery to the customer is expected within two- to four-weeks, then regular deliveries at a similar frequency.	Projects can take months or years from start to finish, with few interim deliverables.
The customer is asked for feedback all the way through and is collaboratively involved in designing and prioritising the work.	Output is typically shown to the customer in a 'big reveal' right at the end. The customer does not tend to participate while the work is happening.
Iteration, reiteration, and change are woven into the rhythm of work. The end of every two- or four-week cycle is an opportunity to reprioritise in response to change.	Iteration or change is discouraged and only allowed within a strict change control process. Scope creep (growth in a project's scope) is tightly controlled.
Each team must be diverse, multidisciplinary, collaborative, and equally accountable for delivering customer value.	Teams are structured according to functions. Outputs are thrown 'over the wall' from one team to the next.
Teams have autonomy in deciding how to best meet customers' needs and business objectives.	Decision-making is hierarchical and bureaucratic, with direction coming from the top and filtering down through the ranks.

Table 1: Key differences between Agile and Waterfall ways of working.

Many perceive Waterfall as being lower risk, because scope, time and cost are specified and agreed upfront. However, there is a higher possibility that the final deliverable will not meet the customer's needs as the landscape can change within months or, as experienced during Covid-19, in a matter of days.

An Agile project can be perceived as higher risk, because the scope evolves every two to four weeks as the work goes on. However, the customer's return-on-investment trickles in sooner and they continue to receive incremental value all the way through.

Note that Agile is not a panacea – the British Association for Project Management cites a 9% failure rate for Agile projects. Nevertheless, this pales in comparison to the documented 29% failure rate for Waterfall projects.

Many have therefore jumped on the Agile bandwagon. But due to the sheer difficulty of effecting the required culture change, it takes time for Agile to take root. Successful organisations will transition to Agile maturity whilst others get stuck. Without the right support to catch and correct behaviours early, the workplace can become a 'twilight zone' where Agile is practiced in name only – no actual Agile thinking is applied and none of the expected benefits materialise. This is referred to as fake Agile, Agile theatre, Wagile (Waterfall-Agile), or dark Agile.

HOW TO SPOT A FAKE

The consequences of practicing fake Agile are damaging and far reaching. Productivity suffers as frustrated employees struggle to reconcile the gulf between 'say' and 'do'. Fake Agile results in loss of talent and reputation at the very least, or at its worst, can cost millions of dollars and jeopardise your entire digital transformation programme.

Is your organisation truly Agile? Telltale signs can indicate otherwise.

You're not truly Agile if you:

- Don't talk to or build the product or deliverable with your customer. Agile demands laser focus on delivering value to customers.
- Maintain a fixed end-to-end delivery plan (Waterfall style) but apply the cosmetic change of two-week reporting chunks. Going through the motions of reporting in shorter sprints does not mean you've incorporated a reiterative process of improvement or the flexibility to overhaul work completely to fit the changing environment.
- Outline a fixed scope of work within a fixed time…and stubbornly stick to this plan even when everyone knows it is not achievable.
- Prioritise outputs over outcomes. (Note: "We've written 132 requirements", isn't an outcome).

Banks in particular face many challenges when implementing Agile. C-suites can often be dyed-in-the-wool traditionalists, convinced there is no need to do things any differently than before. Core banking systems sitting on legacy technology can also act as the millstone that drags down change initiatives.

There are many financial and organisational advantages to be gained if you choose to become Agile, but also many challenges along the way. If you are not ready to tackle organisation-wide culture change, or if you don't have the right support, mandate, investment, or resources, it is best to wait until you do. But bear in mind, in a hyperconnected world, organisations built like cruise liners – big, impressive, weighty – risk being outmanoeuvred by the competition travelling in Agile speed boats. ✱

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By Dr Lutfi Abdul Razak, Prof Dr Mansor H Ibrahim & Dr Adam Ng

CORPORATE SOCIAL PERFORMANCE & CREDIT RISK

NEW RESEARCH ELUCIDATES HOW COUNTRY SUSTAINABILITY CAN MODERATE FINANCIAL RISK

Financial markets play an important role in the allocation of capital by attracting funds from investors and channelling them to corporations. In particular, the magnitude and direction of credit is strongly influenced by credit rating agencies (CRAs), which is dominated by three market players: S&P (previously Standard & Poor's), Moody's and Fitch. However, the global financial crisis (GFC) of 2008 provides recent evidence that ratings may be affected by systematic errors or biases.

In 2011, the US Financial Crisis Inquiry Commission, in its 2011 report, wrote that "the three credit rating agencies were key enablers of the financial meltdown". In 2013, the US Department of Justice (DoJ) sued S&P for fraudulently inflating ratings on mortgage-backed instruments prior to the financial crisis. The lawsuits were resolved in 2015 with S&P agreeing to pay a US$1.5 billion (RM6.5 billion) settlement fee, which exceeds the profits earned by the company for rating mortgage-backed securities from 2002 to 2007.

More recently, regulatory pressures on CRAs have been building up in Europe, particularly in relation to sustainable finance. In 2018, the EU acknowledged that CRAs are systemically important institutions and their risk assessment methods influence the sustainability and stability of the financial system. While the consideration of non-financial or qualitative information, such as environmental, social and governance (ESG) criteria, is not new to credit risk analysis, the systematic analysis of ESG within the framework is. In May 2016, the UN-supported Principles for Responsible Investment (PRI) launched the *Statement on ESG in Credit Risk and Ratings* for investors and CRAs to publicly state their recognition of the value of considering ESG factors transparently and systematically in credit risk analysis.

Dialogue between investors and CRAs have noted several issues pertinent to future academic research.

Firstly, PRI notes that while academic and market research establishes a "clear link" between ESG factors and the credit risk of a borrower, most studies are based on inadequate measures of credit risk such as credit ratings.

Secondly, PRI highlights the importance of differentiating between "ESG factors that may affect the performance of an issuer, its risk of default and the trading performance of its securities". This means that ESG factors that are material from a business or investment perspective may not necessarily be the same as those that are material from a credit risk perspective.

> "...credit is the pavement along which production travels, and the bankers if they knew their duty, would provide the transport facilities to just the extent that is required in order that the productive powers of the community can be employed at their full capacity."
>
> **John Maynard Keynes**

Thirdly, regional roundtables indicate that the appetite for ESG integration in credit analysis differ across jurisdictions and regions. In particular, the global forums organised by PRI revealed regional differences on three levels:

(i) awareness and advancement of ESG considerations;
(ii) relative sensitivity to ESG factors by country; and
(iii) regulatory environment and attitudes toward it.

Increased scrutiny by regulators is likely to lead to further adoption of ESG considerations by the business and financial community, including support for PRI's *Statement on ESG in Credit Risk and Ratings*. While CRAs have always considered non-financial or qualitative factors, incorporating ESG issues into credit risk analysis has not been done in a transparent or systematic way. It has long been acknowledged that credit can be a powerful tool in the process of allocating resources towards sustainable development. As John Maynard Keynes in 1930 remarked: "…credit is the pavement along which production travels, and the bankers if they knew their duty, would provide the transport facilities to just the extent that is required in order that the productive powers of the community can be employed at their full capacity."

Many corporations increasingly engage in ethical behaviour, more broadly described as corporate social performance (CSP). Donna J Wood defines CSP as "a business organisation's configuration of principles of social responsibility, processes of social responsiveness, and policies, programmes, and observable outcomes as they relate to the firm's societal relationships". This is the most widely accepted definition of the term. Wood clarifies that CSP "views the business organisation (corporate) as the locus of actions that has consequences for stakeholders and society, as well as for itself (social performance)". CSP has been interpreted by experts as strategic investments into activities that could eventually translate into higher profits and, in turn, higher shareholder value. These strategic investments, in turn, can generate social and moral capital in many ways, such as promoting brand loyalty among customers, managing human resources, improving reputations with governments and other stakeholders such as NGOs.

The empirical literature on CSP has grown substantially with increased availability and quality of sustainability information. The majority of these studies seek to establish whether a business case for CSP exists, hence focusing its impact on corporate financial performance (CFP). The overall empirical evidence is mixed but largely encouraging. In a recent metaanalysis of over 2,000 individual studies, Friede, Busch & Bassen observed that roughly 90% of studies find a non-negative relationship between ESG and CFP. However, prior to the work of Mozaffar Khan et al, most of the earlier studies relied on measures of CSP that did not sufficiently account for the differential materiality of ESG issues across different industries. This partially explains the discrepancies in some of the findings. Companies in different industries are exposed to ESG risks and opportunities in varied ways and can devise various techniques to mitigate against risks and capitalise on potential profits. Khan et al argue that the relation between sustainability ratings and financial performance would be significantly more robust if the differential materiality of sustainability issues were considered.

Within the CSP-CFP literature, there is an emerging, albeit limited, strand that explores the relationship between CSP and credit risk. The majority of these studies employ at least one of the following measures as a proxy for credit risk: credit ratings, corporate bond spreads, and spreads on bank loans. However, the use of these measures may be problematic.

Firstly, while borrowers with better credit ratings are judged to have lower credit risk, an agency problem might result from issuer-paid credit ratings, according to researchers Jin-Chuan Duan and Elisabeth Van Laere, CRAs would prefer to offer a more attractive credit rating to a firm to prevent them from moving to a rival CRA.

Secondly, empirical studies have found that corporate bond spreads consist not just of credit risk but also liquidity risk and systematic

Overall, the findings in our research support the view that the financial sector can play a role in aligning private sector incentives with regard to **SUSTAINABLE DEVELOPMENT**, without incurring additional financial risk or sacrificing returns. Importantly, however, we find that the CSP-credit risk relationship is dependent on country sustainability.

risk. Furthermore, corporate bond spreads may also be affected by bonds with embedded options.

Thirdly, bank loan spreads are accounting-based, rather than market-based, measures of credit risk. To avoid misspecification issues, studies which use bank loan spreads also require detailed firm-level information about lender and borrower characteristics, which may not be easily obtainable.

Recent studies exploring the CSP-credit risk nexus have also used credit default swap (CDS) spreads as a measure of credit risk. Theoretically, CDS spreads should provide a reliable measure of credit risk as they reflect the compensation that market participants are willing to pay for bearing that risk. While the CDS market has shouldered some of the blame for the GFC, regulations have since been tightened to prevent potential manipulation and speculation. After the crisis, the CDS market underwent several changes, including the standardisation of contracts, expanded reporting requirements, mandatory central clearing and margin requirements for a wide range of derivatives.

Several studies within the CSP-credit risk literature also explore the importance of the external context in which the corporation is embedded, particularly that country sustainability has an economically meaningful impact on corporate credit risk. Chengyong Xiao et al explain that country sustainability is "the extent to which the tenets, principles, and practices of environmental integrity and social equity are institutionalised and embedded in a specific country domain".

This article is an encapsulation of a technical research that seeks to explore whether CSP affects credit risk, using CDS spreads as a market-based measure. We proxy CSP using data from MSCI ESG Ratings, which measures firm performance across various value-relevant ESG issues. This contrasts with much of the literature, which have relied on CSP measures that do not sufficiently consider the differential materiality of ESG issues across different industries. Furthermore, we also assess the influence of country sustainability on the CSP-credit risk relationship using

the Bloomberg Country Risk Tool. To address these research questions, we use a dynamic panel data model, System GMM, which accounts for the potential endogeneity of explanatory variables. In line with the empirical literature on the determinants of credit spreads, particularly CDS spreads, we control for a wide set of firm-specific and macroeconomic variables.

Based on 2,094 firm-year observations for 592 non-financial firms between 2013 and 2016, we provide empirical evidence on how CSP affects corporate creditworthiness. Firstly, we find that an aggregate measure of CSP is negatively associated with CDS spreads. This is consistent with the view espoused by Khan et al that the relationship between CSP and corporate financial performance would be more robust if the differential materiality of sustainability issues were accounted for. Furthermore, we find that the magnitude of the CSP-credit risk relationship is stronger at lower levels of country sustainability, but diminishes as the level of country sustainability increases. Secondly, the empirical evidence suggest that governance factors are a more important determinant of credit risk than environmental or social factors. This implies that the benefits of CSP improvements in terms of corporate credit risk is primarily achieved by meeting governance best practices, which helps build up internal resources and intangible benefits. This reduces cash flow volatility and improves the firm's credit risk profile. Therefore, non-financial corporations should strengthen governance frameworks and procedures prior to embarking on environmental and social objectives.

The finding that both CSP and country sustainability are statistically significant determinants of CDS spreads is in contrast to research by Andreas GF Hoepner et al, which showed that only country sustainability, not corporate sustainability, has a meaningful impact on the cost of debt. Consistent with Christophe Stellner et al, we've found that there is sufficient evidence to suggest that country sustainability moderates the CSP-credit risk relationship. The results suggest that CSP effectively acts as a substitute for country sustainability. In the absence of country-level institutions that support sustainable development, firms which develop effective corporate social responsibility (CSR) strategies can also have lower credit risk.

Overall, the findings in our research support the view that the financial sector can play a role in aligning private sector incentives with regard to sustainable development, without incurring additional financial risk or sacrificing returns. Importantly, however, we find that the CSP-credit risk relationship is dependent on country sustainability.

Corporations are embedded within broader social structures and the results are consistent with wider empirical literature which finds that the financial benefits of CSR activities is greater in the presence of institutional voids. Hence, initiatives that improve country sustainability, such as laws and regulations that limit carbon emissions, prevent deforestation, and protect labour rights, and so on, would not just help to preserve natural capital and promote social capital but would also be beneficial to businesses and financial stability.

For example, several central banks and supervisors have recognised the importance of climate change to financial stability and formed a coalition called the Network for Greening the Financial System, which seeks to integrate the monitoring of climate-related financial risks into day-to-day supervisory work. While the results suggest that financial markets can play an important role in promoting sustainable development through ESG integration, their actions may not necessarily be sufficient to achieve the United Nations' Sustainable Development Goals if left completely to market forces. This concurs with research by economists Prof Dirk Bezemer, Josh Ryan-Collins, and Lu Zhang that further government intervention may be required in the form of credit guidance policies to ensure that credit is directed towards activities that promote sustainable development. ✱

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WHERE NEXT FOR MONETARY POLICY?

Central banks are increasingly choosing the road less travelled in their approach to monetary policy.

Over the past 10 years, central banks have increasingly turned to unconventional means to steer the economies of individual countries in the right direction. From quantitative easing (QE) and forward guidance to negative interest rates, central banks are now prepared to intervene in new ways. Is this unconventional monetary policy becoming the new normal, and, if so, what are the implications of this? For example, is there a danger of untested policies fixing existing problems – while creating new ones?

"I would argue that unconventional monetary policy (UMP) already is the new normal," says James Athey, Senior Investment Manager at global asset manager Aberdeen Standard Investments. "My biggest concern is not only that it's ineffective but it's self-defeating.

"For example, basic economic theory says that if you raise interest rates, people will borrow less and save more – and this will slow economic activity. If you lower interest rates, the theory is that people will borrow, spend and invest more, and save less, and this will increase economic activity.

"But what we've really observed is a psychological phenomenon where saving actually increases when you lower interest rates. If you're lowering interest rates because the world is a very scary place, people are worried they may lose their jobs. That's a more important driver of their behaviour – their confidence about the world – than where interest rates are. Not only that, if you're closer to retirement, you may well have either explicitly or implicitly set a savings goal, a retirement target that you want to retire by a certain period of time – and you need a certain amount of savings to do so. If interest rates fall, you may save more to try to stick to your original retirement goal. So that's one of the mechanisms where theory and reality seem to disagree with one another."

RISKY ASSETS

Another potential risk of UMP is known as financialisation, where governments effectively become players in financial markets in ways that might trigger changes – intentional or otherwise – in market behaviour. For example, one of the biggest impacts of unconventional interventions such as QE has been to encourage investment in risky assets like equities and corporate bonds.

"It encourages risk taking, but it doesn't necessarily encourage responsible risk taking," Athey says. "Corporates seem to have responded to this new world by investing less and less in their business and in the real economy, and more and more in financial markets.

One of the trends we've observed in the past two years is companies buying back their own shares and in doing so, they're not investing in plants or paying higher wages. They're piling the money back into equity prices, which then increase and make it look as if the company is more profitable. But, underneath all that, they're possibly sacrificing future growth and that appears now to be setting us up for further economic weakness."

Industry concentration is another unintended consequence of the 'cheap' money created when central banks pump liquidity into a market.

"IT ENCOURAGES RISK TAKING, but it doesn't necessarily encourage responsible risk taking," Athey says. "Corporates seem to have responded to this new world by investing less and less in their business and in the real economy, and more and more in financial markets.

James Athey
Senior Investment Manager at global asset manager Aberdeen Standard Investments

"At the most extreme end of concentration, you have a monopoly – one company which covers an entire sector," Athey explains. "If there are two companies, that's a duopoly. If it's a small number of large companies, that's what's called an oligopoly.

"These are generally viewed as undesirable extremes because there is too much control and too much pricing power within a small group of companies and that tends not to be efficient. It tends to reduce the benefit to consumers because sellers can spike the price of goods and what we've seen, actually, is an increasing concentration of industry because the price of money has been kept artificially low.

"That means large companies are able to easily access and borrow money to buy small competitors. We see this most extremely in the tech sector, but it has happened in lots of other sectors too. Again, the incentive for these companies to pay higher wages or to invest in their business is reduced, because there isn't sufficient competition to drive them to do so.

"If I was to summarise all of that in one phrase, I'd say we are breaking capitalism and leading the way to inefficient resource allocation."

UNINTENDED CONSEQUENCES

Dr Simone Giansante, Assistant Professor of Finance at the University of Bath School of Management, is an expert in financial systems. He recently led research papers on whether QE in the UK boosted bank lending to the real economy or led instead to banks reallocating their assets.

"We know from the aggregated stats that lending to the real economy in the UK actually declined during QE instead of improving, and that's the problem that we look at in our papers," Dr Giansante explains. "Basically, we've just tried to understand why banks didn't increase their lending to the real economy after the QE money injection. From the supply side, the banks might have decided that lending to the real economy was not the best choice.

"Or on the demand side, it could be that corporates found an alternative way to fund their activity, instead of borrowing from the banks, because when interest rates go down, it's cheaper for corporates to borrow in the capital markets.

"But actually, what we are claiming in our paper is that banks were using this money to do something else that the central bank wouldn't have intended."

Instead of increasing their lending to the real economy with this injection of liquidity, banks invested in assets that shored up their own capital strength, Dr Giansante and his team argue.

After the 2008 financial crisis, banks were forced to increase their capital to absorb any potential losses in the future. Minimum capital requirements under the Basel III international accord were designed to promote financial stability and efficiency in economic systems around the world.

Dr Giansante continues: "The thinking is that, with every asset they purchase, banks also have to raise a percentage of capital, also known as risk-weighted based capital requirement. Equities and corporate bonds would have offered good returns and been a better substitute for the assets sold back to the QE programme. But these are assigned with high risk-weighting, so would require the banks to hold higher capital. Instead, what we found is that banks preferred to invest in government debt – sovereign bonds and government securities in general. A lot of these had been triple A-rated before the sovereign debt crisis but were downgraded a few years later. It meant the banks could invest as much as they wanted in these bonds without raising any capital, providing them with a good risk-weighted return."

BURSTING THE BUBBLE

Portugal, Ireland, Italy, Spain and Greece were among the European countries to benefit as the wall of money flowed overseas in search of good returns from highly rated government debt that was regarded as low risk.

Dr Giansante says: "In the finance literature, they refer to this as regulatory arbitrage, because, although it's not arbitrage per se (benefiting from the price difference between two or more markets), banks were trying to take advantage of this risk-weighting approach to capital requirements.

"Banks were pumping and building this big bubble that then burst. Greece was downgraded, Portuguese bonds were downgraded, Italian bonds were downgraded and so on.

"If we look back at all of the original intentions and objectives of QE, you can really see that the lack of credit going to the real economy was a failure and that promoting the sovereign debt bubble was an unwanted consequence; because of lower yields due to QE and capital requirements, banks preferred not to lend to the real economy, but to invest in these other products instead."

In the finance literature, they refer to this as **REGULATORY ARBITRAGE**, because, although it's not arbitrage per se (benefiting from the price difference between two or more markets), banks were trying to take advantage of this risk-weighting approach to capital requirements.

Dr Simone Giansante
Assistant Professor Finance, University of Bath School of Management

Stephen Grenville, a former deputy governor of the Reserve Bank of Australia, is a non-resident Fellow at the Lowy Institute, an independent policy think tank in Sydney, Australia.

He argues that one problem in evaluating QE is that it is hard to distinguish its impact from that of forward guidance, which was often provided at the same time, either implicitly or explicitly.

"Forward guidance provided financial markets with additional information about the future intent of monetary policy," he explains. "When central banks succeeded in changing the market's perception of the future path of interest rates, this influenced asset prices and exchange rates, so was effective. However, markets sometimes misinterpreted the message, and began to focus more on analysing policy pronouncements and less on the prospects for the economy."

DISAPPOINTING RESULTS

Negative interest rates drew headlines and spirited academic discussion, but were the least important of the UMP measures, Grenville adds.

"For practical reasons, interest rates can only be trivially below zero and the main impact was on exchange rates," he says. "This leaves countries open to accusations of 'beggar-thy-neighbour' exchange rate manipulation – enacting a policy that benefits them at the expense of their neighbours or trade partners. Real interest rates (adjusted for inflation) are what matter for investment and these have often been negative in the past, so there seems little important distinction between low rates and negative rates."

'Helicopter money' – the provision of direct cash grants funded by the central bank – is another unconventional policy that was mooted, but no country ever enacted it.

"Over time, it came to be accepted that helicopter money was just a form of fiscal policy, funded by the banking system's forced holdings of excess reserves," Grenville says. "On mature consideration, bypassing the normal parliamentary processes and handing over effective fiscal policy to the central bank didn't have wide appeal."

For all the boldness of these initiatives, the results were disappointing, Grenville notes.

QE1 – the first US foray into QE in 2008 in a bid to rescue the financial system – mainly involved buying back 'toxic' mortgage-backed securities and was universally seen as a huge success. But later QE episodes directed at a different objective – stimulating growth and inflation – had patchy results.

"Longer-term interest rates fell, asset prices rose and exchange rates depreciated, but bank lending remained weak," Grenville says. "US bank lending fell after QE1 began, and didn't recover its pre-crisis peak until more than three years later. In Europe and the UK, bank lending was even less responsive. Japan, the country with the longest experience of QE, remains mired in slow growth and below-target inflation to this day."

HERE TO STAY?

Looking ahead, Grenville says QE is proving hard to unwind, as the financial system has become accustomed to operating with substantial excess central-bank money.

"Whether it can be weaned off its dependence on excess liquidity remains to be seen, but central banks are less enthusiastic about QE than they once were," he says.

"And, of course, the need for QE1-type crisis action has gone. Forward guidance seems set to stay, even though

THE UMP TOOLKIT

Negative interest rates
Reducing rates below zero, so cash deposits incur a charge for storage at a bank, rather than receiving interest. First deployed by Sweden's central bank in July 2009, Denmark, the Eurozone, Hungary, Norway, Switzerland and Japan followed. Rates have been lowest in Switzerland at -0.75%.

Extended liquidity operations
Approaches differed across countries, but included expanding the range of collateral accepted, extending liquidity volumes and eligibility and providing funding to banks at below-market cost.

Quantitative easing
First used by Japan in 2001, this is the outright purchase of private sector financial assets by central banks, who pay for those assets by creating central bank reserves. Central banks mostly bought government securities (government debt). Before the 2008 financial crisis, the major central banks owned securities equivalent to around 5% of gross domestic product. In recent years, this has risen to nearly 30%.

Forward guidance
Giving markets a steer on the direction of monetary policy. This generally looks ahead for a specific time period, such as a year, or links money policy to economic factors, including changes in unemployment or interest rates. The US Federal Reserve started using forward guidance during the recession of the late 2000s. The Bank of England launched forward guidance in 2013.

Yield curve control
By promising to buy government bonds if yields rise a certain distance, central banks can influence government bond yields further into the future. This is a policy designed to give the impression of looser financing conditions to encourage borrowing, investing, spending and risk taking.

Helicopter money
The provision of direct cash grants funded by the central bank was discussed, but never implemented by any central bank.

it presents central banks with a minefield of misinterpretation possibilities. Markets are always demanding more information, so the current stream of official speeches and predictions seems likely to remain the norm. There seems little enthusiasm for negative interest rates."

Unconventional monetary policies have probably done no great harm, and maybe some overall good, Grenville believes. But the basic problem remains: none of these policies has been very effective in stimulating growth or getting inflation back to target.

"Developed economies have lost their mojo," he adds. "The lesson ought to be that monetary policy did a good job in handling the unfolding 2008 crisis and has helped the recovery. But has not been powerful enough to offset the many headwinds: the longer-term effects of the financial crisis (including balance-sheet effects), structural and systemic problems, over-sensitive risk concerns, trade-based global uncertainty, short-termism and distorted investment incentives, and the misjudged budget austerity of the 2011 to 2015 period.

"In most countries, monetary policy is still working 'pedal to the metal', but can do no more. If more is needed, it will have to come from fiscal policy and structural changes that unleash investment-enhancing productivity."

SIDE EFFECTS

In October 2019, a report titled *Unconventional Monetary Policy Tools: A Cross-country Analysis,* was published by the Committee on the Global Financial System (CGFS), which monitors developments in global financial markets for central bank governors.

It is part of the Switzerland-based Bank for International Settlements (BIS), which represents 60 central banks around the world and aims to foster international cooperation on monetary and financial stability.

Philip Lowe, Governor of the Reserve Bank of Australia, chairs the CGFS and summarised some key observations of the report in an address to the Australian Business Economists Dinner last November.

"There is strong evidence that the various liquidity support measures and targeted interventions in stressed markets were successful in calming things down and supporting the economy," Lowe said. "When markets broke down and became dysfunctional, the actions of central banks helped stabilise the situation and helped avoid a damaging gridlock in the financial system."

However, he noted various side effects of the different unconventional measures.

"The first is that the extensive use of unconventional monetary tools can change the incentives of others in the system, perhaps in an unhelpful way. It is possible that the willingness of a central bank to provide liquidity reduces the incentive for financial institutions to hold their own adequate buffers, making episodes of stress more likely in the future.

"It is also possible that the willingness of a central bank to use its full range of policy instruments might create an inaction bias by other policymakers, either the prudential regulators or the fiscal authorities. If this were the case, it could lead to an over-reliance on monetary policy.

"A second side effect is the impact on bank lending and the efficient allocation of resources. Persistently low or negative interest rates and a flattening of the yield curve can damage bank profitability, leading to less capacity to lend. In some countries, there are concerns that low interest rates allow less-productive (zombie) firms to survive. There are also financial stability risks that can come from low interest rates boosting asset prices (and perhaps borrowing) at a time of weak economic growth."

A third side effect is a possible blurring of the lines between monetary and fiscal policy, Lowe continued.

"If the central bank is buying large amounts of government debt at zero interest rates, this could be seen as money-financed government spending. In some circumstances, this could damage the credibility of a country's institutional arrangements and create political tensions.

"Political tensions can also arise if the central bank's asset purchases are seen to disproportionality benefit banks and wealthy people, at the expense of the person in the street. This perception has arisen in some countries despite the strong evidence that the various monetary measures supported both jobs and income growth and thereby helped the entire community. These are all side effects we need to take seriously."

Lowe concluded that a package of measures works best, with clear communication that enhances credibility. Exactly what that package looks like varies from country to country and depends on the specific circumstances. But clear communication from the central bank about its objectives and approach is always important.

Ultimately, there may be better solutions than monetary policy to solving the problems of the day.

Summing up, Lowe said, "We need to remember that monetary policy cannot drive longer-term growth, but that there are other arms of public policy than can sustainably promote both investment and growth". ✱

■ *This article previously appeared in the Chartered Banker magazine, UK, spring 2020 edition.*

PROLIFERATION FINANCE

STILL OUT OF SIGHT, OUT OF MIND?

Defence expert with world's oldest international security think tank weighs in.

As director of the Centre for Financial Crime and Security Studies at the Royal United Services Institute (RUSI), Tom Keatinge is at the forefront of advocating for banking's greater role in disrupting the flow of money towards the illicit arms trade.

Proliferation finance — funds or financial services used in activities to procure weapons of mass destruction — is a growing global concern. Tools have been designed to disrupt the underlying financial network that enables proliferators and their facilitators to procure, ship, and receive illicit goods, however its effectiveness hinges on close cooperation between the government and private sector.

The road is long. In 2016, Keatinge co-authored RUSI's first research paper on the subject titled, *Out of Sight, Out of Mind? A Review of Efforts to Counter Proliferation Finance.* But for the majority of financial sector stakeholders, the light bulbs have yet to come on.

In Kuala Lumpur last November and on panel for the 2019 edition of the AICB's International Conference on Financial Crime and Terrorism Financing (IFCTF), Keatinge's insight into proliferation financing was shared with over a thousand delegates in a plenary moderated by Bank Negara Malaysia.

Tom Keatinge

In this exclusive interview, we revisit themes from his talk and research.

Q ***First off, are bankers liable if they are found to have inadvertently financed arms to sanctioned countries, i.e. Iran or North Korea?***

Yes, you are absolutely liable. You're never going to have a perfectly secure system, but if your systems and procedures don't even recognise the risk of North Korean financing, then your systems and procedures are negligent, aren't they?

If you're doing regular proliferation finance training, if you are screening and your KYC (Know Your Client) checks reflect proliferation finance risk, you might be unlucky from time to time and there will be mitigating circumstances. But if your compliance team hasn't even heard about proliferation finance, how can you possibly argue that you are anything other than negligent?

Q ***Since joining RUSI in 2014, your work has focused on engaging with governments and corporates on managing proliferation finance risk. In your estimation, how much has the needle moved?***

When I started at RUSI, my colleague who focused on nuclear issues said, "Why don't we team up and have a look at the issue of proliferation finance because it is a requirement of the Financial Action Task Force (FATF)". Our starting point or our initial thought was that even though it was a requirement of the FATF, countries and their private sectors didn't really understand what it was they were meant to be doing.

Out of Sight, Out of Mind was a statement of what we found to be the case following about a year of interviews; that for most countries, the issue of proliferation finance and managing proliferation finance risk was an issue that was out of sight and out of mind. In other words, they weren't doing anything.

So, we were really at that time the only think tank looking at this issue. The result was we got a lot of attention for our work from the private sector who suddenly realised, "We should be doing something about this"; from governments who were starting to feel the heat from the FATF; from lots of other countries who did not get a good review on proliferation finance in its evaluation, including Malaysia.

We suddenly found that we were kind of the smartest guys on the block when it came to understanding proliferation finance. So, that's how our research and work in that area builds to where it is today.

At the IFCTF conference, I did a poll by a show of hands. Have you heard of the Financial Action Task Force? Yes, everybody puts their hands up. Does your job involve anti-money laundering? Most people put their hands up. Does your job involve terrorist financing? Most people raise their hands. Does your job involve capturing proliferation finance? Nobody. So, awareness in the private sector is very low and that's the responsibility of governments to fix.

...as the offline world becomes more restrictive for North Korea, we know that they are developing very good and very **STRONG CAPABILITIES TO OPERATE IN THE ONLINE WORLD**, whether it's mining cryptocurrencies, hacking an exchange, or conducting cyberattacks and demanding cryptocurrency as ransomware payments. There are lots of ways in which North Korea is trying to raise funds in the crypto world.

Proliferation finance was added to the FATF's list of focus areas in 2012. When the evaluation started in 2014, it was therefore the first time that people had actually been assessed for their ability and their commitment to combating proliferation finance. One of the earliest countries to be evaluated in the new round of evaluations, which included evaluating counter-proliferation finance efforts for the first time, was Malaysia.

The FATF Recommendation 7 requires countries to implement targeted financial sanctions related to proliferation finance without delay. Question: Do you have the legal framework that allows you to do that? In many countries, the answer is 'no'. So, at a very basic level, these countries were failing.

But beyond that – and this is one of the areas we focus on extensively – are governments demonstrating an understanding of proliferation finance risk and how that risk affects the private sector in its country? Not just banks, but also insurance companies, money service businesses, casinos, and other regulated entities. The focus will vary depending on where you are in the world, as North Koreans are very smart at raising money in different ways and exploiting weaknesses.

I think even in countries that do have the right laws in place to implement sanctions on a timely basis, their ability to articulate this to the private sector is quite poor. That's an area that we've really focused on, trying to get countries to be smarter at understanding the proliferation finance risks in their jurisdiction.

Q *How do you shift mindsets and get financial actors to understand the risks and implement controls?*

We try to get people to understand what we actually mean by proliferation finance. Some people would say to us, "Well, we make sure that if we are funding trade, we're not financing the sale of a nuclear weapon". That's obvious and you're never going to see that on a funding contract anyway.

What we get people to think about is: "Okay, you're sitting in Malaysia or in Namibia. What might be of interest in your country to North Korea?" We emphasise that North Koreans are always trying to raise money. If there's a North Korean embassy in your country, they're not issuing visas; they're trying to do trade, they're trying to raise funds for the country to support the nuclear weapons programme.

So, it's trying to get countries and their private sectors to think, if you were in North Korea and facing all the restrictions that you face because of sanctions, how might you use my country or industry as a way of raising money, moving that money, exploiting that money.

Q *Is bribery and corruption a factor in proliferation financing?*

One of the mechanisms that facilitate abuse of the financial system is, of course, insider threats. It's banks that are captured by political patronage, for example, and act as the piggy bank for a political leader or a particular member of society. So, we certainly look at the integrity of the financial system and one of the threats to the integrity of the financial system is bribery and abuse of the financial system for personal gain.

Q *Banks today are moving into cryptocurrency. Does this increase the risk of them also being exposed to financing trade deals that end up financing arms and illegal weapons?*

Obviously, as the offline world becomes more restrictive for North Korea, we know that they are developing very good and very strong capabilities to operate in the online world, whether it's mining cryptocurrencies, hacking an exchange, or conducting cyberattacks and demanding cryptocurrency as ransomware payments. There are lots of ways in which North Korea is trying to raise funds in the crypto world.

The question then is how robust are banks' controls and checks in dealing with a customer who is also operating in the crypto world because the banks are the interface between the online world and the offline world and therefore, they remain a first line of defence.

Q *Some nations are resistant to the fact that there seems to be an official sanctions list, such as an EU blacklist, that goes beyond blacklisting Iran and North Korea. In your opinion, should this be seen as an added measure or is it a step too far?*

This comes up all the time. So, obviously you've got the sanctions according to international law, which are the sanctions issued by the United Nations (UN). You then have sanctions issued by individual countries or groups of countries. The obvious one in all of that is United States sanctions issued by the US Treasury Department's Office of Foreign Assets Control (OFAC) to which the Malaysian government might say, "Here, we require banks in Malaysia to implement international law, i.e. UN sanctions, but sanctions issued by OFAC in the United States, by the EU, or Her Majesty's Treasury are not legally applicable in Malaysia."

That is certainly true but if you're a Malaysian bank operating internationally, you need to pay attention to direct regulations wherever you work in the world and you will definitely care what the Americans say about sanctions; even if the Malaysian government doesn't think it's relevant, it is relevant in Malaysia. It's a challenge for banks to navigate the landscape where their domestic regulator says one thing and other regulators say something different.

Q *Will we see a shift in global priorities given the outbreak of Covid-19?*

Despite the pandemic, the fundamentals remain the same. Banks and other regulated entities should know their customers, understand where funds are coming from, and why and where they are being sent. The pandemic does not change these requirements. But it does change the behaviour of clients and it does heighten certain fraud-related risks. For banks, the reality is that the job of securing the integrity of the financial system will just get harder, a job that it is critical governments support via fully engaging in public-private partnerships and collaborating with and supporting the banks. After all, we all have the same objective and that is to secure the financial system in Malaysia and around the world from abuse by criminals, terrorists, and sanctioned entities. ✱

■ *Angela Yap Siew Peng is a multi-award-winning entrepreneur, author, and writer. She is Director and Founder of Akasaa, a boutique content development firm with presence in Malaysia, Singapore, and the UK and holds a BSc (Hons) Economics.*

STEERING CLEAR OF REMOTE WORK LANDMINES

Must-haves as corporations shore up work-from-home operations.

After years of saying, "It's just not part of banking's DNA," work-from-home in financial institutions looks like it is here to stay.

Faced with tighter balance sheets and lower profits, banks are leaving no stone unturned, including the possibility of remote work as a permanent option for employees. Aside from the continued public health of workers and communities, it may be a far cheaper option than routine testing employees for coronavirus infection and antibodies, and enforcing government-mandated standard operating procedures.

There is, however, a flip side.

The immediacy of quarantines saw a mad dash to the doorsteps of vendors; banks rushed to equip essential staff with hardware and software – laptops, conferencing kits, and virtual private network (VPN) passes – leading to a global shortage.

Deutsche deployed 50,000 videoconferencing sets within two weeks. Standard Chartered increased its VPN system by 600% since February. Goldman Sachs reportedly sent a midnight reconnaissance team to secure additional monitors from a warehouse in India.

"Everyone was facing the same problem at exactly the same time," says Stuart Gurr, Deutsche's group chief information officer for Asia Pacific, when asked by *Retail Banker International.* "Being decisive and acting quickly was critical. If you waited a day or two to decide on your strategy, laptops you wanted would have been gone."

'UNPRECEDENTED ANOMALY'

In the rush to keep the cogs of the financial machinery going, crucial elements were left on the wayside.

A March 2020 research note by digital advisory firm Javelin Strategy & Research had warned of increased security threats – protocol lapse, social engineering, malicious and negligent insider incursions – due to "a sudden work-from-home workforce".

At the global height of the coronavirus outbreak, cybercrime targeting financial services reached an unprecedented level. VMWare Carbon Black, a subsidiary of Dell Corporation specialised in software security, detected an "unprecedented anomaly" in financial sector security breaches beginning early February to end-April 2020:

+ a 238% increase in cyberattacks;
+ a 9x increase in ransomware attacks; and
+ targeting of customer service representatives and consumers directly by exploiting gaps in the wire transfer verification process or through social engineering attacks.

Reuters reports that at the height of the pandemic in the US, JP Morgan had 180,000 of its 200,000-strong workforce voluntarily working from home. "However, a number of critical functions for the bank – such as securities trading and IT tasks – are significantly more difficult to perform in remote-work situations," states the news agency citing an internal memo it had obtained.

Across Asia, although humans are slowly trickling back into financial districts, a majority continue to telework. Here, chief information and security officers must take the lead in transitioning teams to collaborate on secure platforms and extend security perimeters to cover endpoints outside of its corporate network.

Some guidelines on how this transition can take place:

+ Shift to a Threat-centric Mindset

Oliver Friedrichs, an antivirus veteran and co-founder of several cybersecurity companies acquired by Symantec and McAfee, emphasises the need for banks to inculcate a threat-centric mindset in an interview with *Bank Info Security:*

"As we raise the bar, threats will continue to jump over it. You have to deal with that breach and that includes technologies on the forensic side, the incident response side, whether it's memory forensics or incident response to recover from a threat.

"A threat-centric approach to security is really getting back to what security is all about…as an industry we tend to focus on things like compliance and other factors, but fundamentally, customers, especially if you look at the Fortune 500 or 1000, they're dealing with advanced threats today, and that is the single biggest problem faced."

This involves addressing each phase of the threat life cycle:

> **Before:** Technologies you can use to protect yourself before you get attacked, like a firewall. It reduces the attack surface so that there are less applications and less protocols being allowed through, but don't necessarily block attacks.

> **During:** Using intrusion prevention systems or antivirus software. These are meant to detect, at a certain point in time, whether a threat, content, or object is a threat. If it's not, then it's allowed through and typically

A CHECKLIST TO REDUCE SECURITY RISK IN THE SUDDEN AGE OF REMOTE WORK

Doug Saylor, a director at global tech advisory firm Information Services Group, recommends enterprises immediately protect their assets by addressing risks in these three critical areas.

Technical

+ Ensure internal and external workers have VPN access and use it for all connections to corporate networks.
+ Require all employees to use endpoint protections (A/V, personal firewall, etc.). Increase the company's security level to a higher-than-normal setting and turn on logging for employees in geographies with known security issues.
+ Where supported, use network access controls to validate users and acceptable device configurations during connectivity to enterprise networks. If a device cannot be secured, quarantine it until security issues can be remediated.
+ Require employees to use company-provided assets whenever possible.
+ For high-risk industries, implement data loss prevention (DLP) solutions for access to a broader-than-normal data range. At a minimum, implement DLP for the most sensitive data, if not already in place. Use virtual desktops for sensitive applications to prevent the possibility of data exfiltration.
+ Encrypt all sensitive data at rest and in transit. Many companies do the former; few do the latter. An increase in usage of insecure networks by some remote workers significantly increases the theft risk for data in motion.
+ Encrypt emails when possible. Some technologies, such as Microsoft Office 365, have built-in encryption capability. Publish guidelines on the proper configuration and usage of these technologies for all employees and partners.
+ Avoid public Wi-Fi. The local coffee shop network is at higher risk of being hacked or mimicked. Turn off the 'auto connect' function for all Wi-Fi connections to avoid accidental connection to a rogue hotspot. If possible, use a company-provided hotspot or Mi-Fi device for basic connectivity.
+ Educate employees about the importance of being aware of where they are and physically protecting company assets like laptops and hotspots.
+ Instruct employees and provider employees to force the use of screen locks within a shorter-than-normal timeframe and avoid leaving a logged-in device unattended.

Human Resource

Employees who work on sensitive or secret programmes will become high-value targets if allowed to access information remotely. Organisations should:

+ safeguard required data with special information security protections.
+ put in place physical security controls to ensure the overall safety of the employee.

Legal Protections

+ Pay special attention to location provisions, data confidentiality, limitations of liability, and indemnification provisions as they relate to remote workers.
+ Review cyber insurance policies to determine if exclusions exist for remote workers or provider employees who are not using systems that comply with your corporate security policy.

forgotten.

> After: Systems to tackle post-security breach, i.e. when a threat bypasses those defences, which is increasingly more common today.

"The reality is that there really isn't a cohesive solution that ties those three steps together – the before, during, and after. That's really where we're looking at investing, to really tie together that whole threat continuum to provide a threat-centric approach to security," Friedrichs said.

Protecting the brand today necessitates asking a different question. Instead of, "What should I do to check the box?", look at your extended security perimeter and ask, "Where will the next threat come from?"

+ Safeguarding Data

Regulators have granted banks temporary flexibility in order to cut red tape and guarantee business continuity. These include accepting e-signatures in processes that usually require a wet ink signature and the use of customer selfies to verify their identity. These decisions inadvertently increase the risk of data breach.

In all cases of remote access, teleworkers must exercise the level of care set by the respective national data protection acts, including active enforcement, immediate investigation upon detection of a data breach, and reporting a breach within the specified timeframe. There are no exceptions to the policies outlined in the banks' information security plan and the message from regulators has not changed, i.e. no carte blanche for reckless behaviour, with emphasis on "reckless" as authorities are aware that some leeway is needed during this period of adjustment. Bankers are encouraged to be open and continuously engage with regulators should they be hard-pressed to comply.

In addition to national legislation, conducting a data privacy impact assessment on teleworking is beneficial in order to identify and mitigate data protection risks. The UK's Information Commissioner's Office has extensive tools for financial institutions and designated data protection officers, which may be useful guides for compliance officers in other jurisdictions.

Regulators have **GRANTED BANKS TEMPORARY FLEXIBILITY** in order to cut red tape and guarantee business continuity. These include accepting e-signatures in processes that usually require a wet ink signature and the use of customer selfies to verify their identity.

+ Secure and Reliable Connections

Even the best-laid plans can go awry.

Behemoths like Chase, TSB, Capital One, Bank of America as well as regional players have had network outages and access issues, with customers turning to social media to vent their frustrations. Other banks have had to do the 'intercontinental shuffle' as network bandwidth hit limit up. Sources informed *Reuters* that Citigroup asked some employees to log in to its remote access system only after 1 p.m. to prevent systems from being overwhelmed by both Europe- and US-based staff logged in simultaneously. The news agency also cites a Wells Fargo memo asking teams to only begin conference calls at 2.20 p.m. and other odd times to avoid clogging teleconferencing systems.

Even the Big Four consulting firms, whose mainstay it is to advise other financial actors, have experienced web downtime…an embarrassing (but not fatal) circumstance.

The rise of collaborative tools like Zoom has sounded alarm bells. The suddenly popular videoconferencing is now facing at least one class-action lawsuit for illegally sharing personal data with third parties like Facebook and falsely asserting its service was end-to-end encrypted (note: it was not). This was after the Federal Bureau of Investigation issued a public warning about increased Zoom-bombing, i.e. when hackers join a video conference and post pornographic or hate images in the virtual meeting room.

Through this crisis, network pressure points and gaps have emerged. Now, it's time for networks to up their game (and bandwidth) by leveraging on innovations like cloud technology (see *Demystifying the Cloud,* page 68) and making a concerted enterprise-wide move towards enterprise-wide adoption of Agile (see *Agile Finance: Moving from Cruise Liner to Speed Boats,* page 18).

+ Lurking Landmines

Then there are work-from-home risks that appear when you least expect it.

On 25 May 2020, the federal court of Switzerland decided that employers were required to partially cover a staff's monthly rental payment under work-from-home arrangements. This is under the proviso that the employee is expected to work remotely as part of his or her job.

Web portal *Swissinfo.ch* cites a report by the German-language newspaper *Tages-Anzeiger* that an accounting firm had "argued that they had not reached an agreement with the employee ahead of time and therefore was not obligated to cover part of his rent. The court rejected this argument and added that the employee could even request rent compensation retroactively after leaving the company".

This landmark Swiss ruling is likely to establish precedents in other jurisdictions and will undoubtedly impact business scenario planning as remote work options become the norm.

With this in mind, we must be aware that any prescriptive, step-by-step plan only reflects the risks or 'landmines' at that point in time. To effectively navigate the rough months ahead, organisations must rely on every officer's good judgement, feedback, and courage to communicate these unforeseen landmines up the value chain. ✱

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CULTURE BY DESIGN:

PULLING THE FUTURE FORWARD

After a spell of 'quick-and-dirty' training to cope with the pandemic, leaders must now get creative in order to lift teams to the next normal.

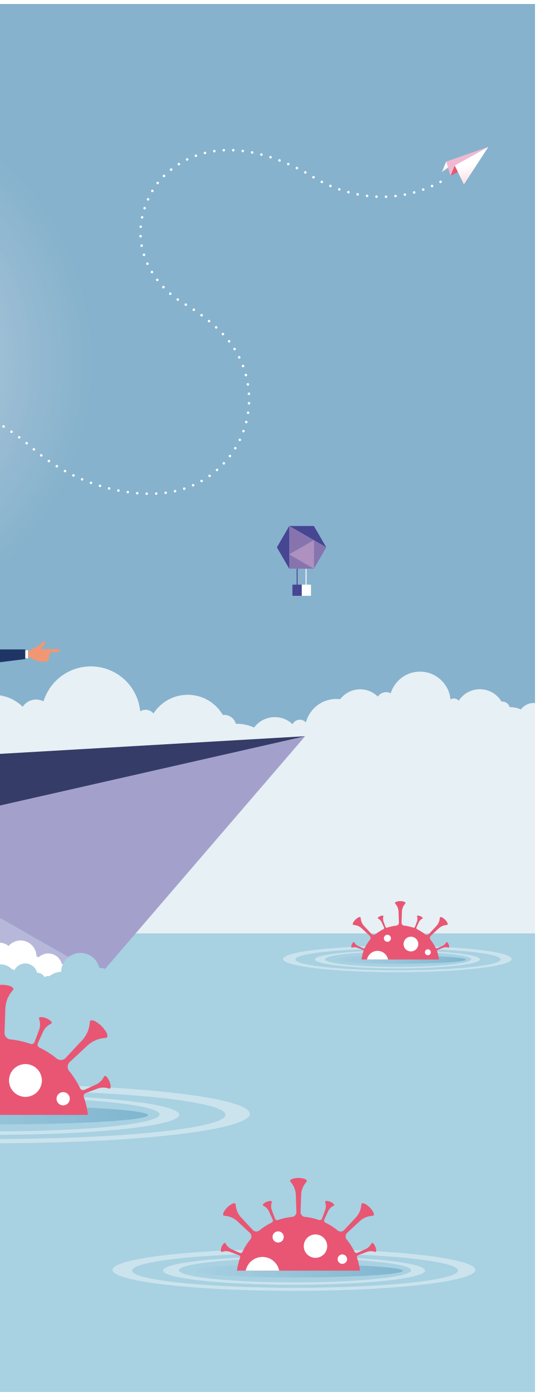
Striding to build resilience on all fronts, institutions are rushed to reimagine the status quo. As competing priorities vie for attention, corporations risk slipping back into 'culture by default' mode – where values, norms, rituals are created and reinforced with no clear direction; a perilous journey on autopilot.

Whether we consciously create it or not, culture happens. But a positive corporate culture doesn't just happen. Peer behind the curtain and you'll see that leaders direct the culture of their choosing.

This is culture by design, a conscious strategy to harness a corporate culture that is fit for excellence. It reengineers corporations from the inside out, paving the way for what leadership guru Mike Myatt calls "pulling the future forward".

In his book *Hacking Leadership,* Myatt describes it thus: "Conventional wisdom dictates that you move to the future, but the most successful leaders don't move toward the future, they bring the future to them – they pull the future forward. They focus on disrupting things now – not in some point in the future. They apply their creativity, not to a distant event, but to the immediate opportunity in which they can accelerate the future."

Culture by design gets us to that sweet spot, where we 'pull the future' to us by pulling the organisation forward.



FOOL'S GOLD

To align our perspective on culture, let's clear the air on a couple of misnomers.

The first is the phrase 'future of work', a term that is increasingly overused (and perhaps, abused). The Organisation for Economic Co-operation and Development defines it as radical shifts to how we live and work, resulting from globalisation, digitalisation, and other megatrends. It raises essential questions around the skills we need for future jobs, the quality of those jobs, the support available if we're unable to work or retire, and what voice we have in shaping these outcomes.

Many proclaim that a post-coronavirus world has shifted the goal post; that we should all hail a new future of work. But has it really?

Long before the pandemic hit our shores, banks had already spent over a decade cleaning up their act and doing many things right – investing in its people, strengthening operations, collaborating with fintech, and shoring up its digital capabilities – to prepare itself for the future of work. An advice that indicates otherwise is either misguided or ill-informed.

Take, for instance, this pandemic 'nugget' distilled by a prominent consulting firm, advising managers to "engage with radical empathy" through pulse surveys (quick two- to three-questions pushed to work phones) for team members to easily share their feelings. Is this really radical or is it fool's gold – repetitive, repurposed advice that brings nothing new to the table?

In the past decade, organisations that have invested in effective talent management programmes undoubtedly worked to build empathy into its DNA. Empathy is the core of every good diversity policy, and though it varies in degrees, it is nonetheless present. The push technology suggested (i.e. morning text messages to the team) isn't revolutionary either; all fundamentally sound managers practice this in one way or another, like the informal coffee break with colleagues or quick dial-ins a.k.a. scrums.

There is also a resurgent hype for all things digital – artificial intelligence, machine learning, distributed ledger, etc. Such technologies have been around since challenger banks debuted and their deployment in banking is far from the utopian vision technocrats would have you believe. In fact, banks which have forged ahead with fintech collaborations are still ironing out the creases.

Leaders who are truly invested in designing a positive culture will resist succumbing to hype and knee-jerk analysis. The pandemic merely accelerated the rate of change, and the priorities we have invested in over the past decade will outlast this crisis. As someone once wrote: "Be careful what voice you listen to, because if I change what you know, I can lead you to do whatever I want you to do."

THE OTHER MISNOMER

Upending the definition of 'disruption' is Phil Sager, Partner at Bain & Co: "We talk about this a lot – about organisations being disrupted, organisations changing. Our opinion is that it actually misrepresents what's happening or what's occurred in normal circumstances, but more so in the context of a health and financial crisis."

"It's not the organisation that's been disrupted, it's actually the employees that make up the organisation – [the people who] bring that organisation to life every day – that have been disrupted.

"Unlike the change of a reorganisation or new product launch, the disruption is not just in their work day – it's actually things in their daily lives, things which they hold near and dear. Even in parts of the world that are back to normal, there is still a feeling that there has been a significant change to the way things work," Sager said in a recent online webinar.

This heavy emotion underscores daily operations. Bain's Macro Trends group tracked its employees' feedback since the first wave in end 2019 and detected two unique trends:

+ Although it is not unexpected that 91% of Bain employees feel their lives are disrupted and are worried about finances, there is an added dimension not seen in previous crises, i.e. worry about the severe health impact. Covid-19 is hitting a lot closer to home.
+ Even for employees safely ensconced at home, 40% report being less productive. Many are forced to work from home in conditions which are clearly not set up for this. The lack of childcare or other support that they're used to having in the household, add to the strain.

The physical, social, and psychological effects are real and lasting. Leaders should not underestimate the disruptive effects of this pandemic on people's lives. With this

knowledge in hand, how do organisations design a culture that sets employees up for success?

SANITY FIRST, PRODUCTIVITY NEXT

Companies that exhibit a winning culture – defined by Bain as a strong internal compass which inspires employees – are 3.7x more likely to be business performance leaders. Among the values exhibited by strong cultures are collaboration, agility, integrity, people-centricity, innovation, accountability, and ambition.

Covid-19: Five New Human Truths that Experiences Need to Address, released by Accenture, suggests how corporates can address challenges head-on and prime their workforce for peak performance:

- **Erosion of confidence.** Planning and deciding even about basic decisions, such as holidays, where to live or work, or major purchases, is an anxious process. Familiarity will be more valuable and risk will be less tolerable to most people, thus brands that handle the crisis well will rise in stature and value. Beware as individualism may rise with more people adopting a look-after-yourself-first policy. To build trust in this context necessitates a 'trust multiplier' on the part of the organisation — actions that will rebuild trust quickly and credibly.
- **Every business is a health business**. The concerns about health amplified during the crisis and will not ebb once it is over. Health-related features are must-haves. Every business will need to understand how it can be part of a new health ecosystem that will dominate citizen thinking as employees will look to employers for advice, guidance, and care. Banks should run an Experience Health Check to understand customer/employee concerns and manage or eliminate them.
- **The virtual century.** Anything that can be done virtually, will be. Winners will be those who test and explore all of the associated creative possibilities which suit their organisation.
- **Cocooning.** At the height of the crisis, everyone was being told to self-isolate. This means an en masse return to home as the epicentre of life and experience. Many workers continue to spend more time at home and we can expect a shift in value systems, with employees placing a premium on meaningfulness and comfort in their lives. Companies who win will be those who zero their sights on the home. Creating a Scaling Roadmap – a plan on how to unlock capacity at scale to serve homes – is recommended so that service shutdown is unthinkable. Incentivise staff who are most frequently in contact with customers (call centre workers, delivery drivers, etc) for feedback on customer behaviour.
- **The reinvention of authority.** Greater acceptance for the role of government and companies in society, and the importance of collective behaviour, may occur. A culture may emerge that is more sensitive (read: disinclined) to ostentatious displays of exclusivity. This is a test of corporate values and is evident, for instance, in their display of care for workers' mental health. Banks should define (and keep redefining) their crisis purpose and operational metrics, bearing in mind that now is not the time for winners and losers; we all need to win together. Consider an ambassador or influencer programme and do not forget that the authority you put on the pedestal should be based less on who is driving the most product, and more on who is helping the most people.

LOSE THE COOKIE CUTTER

Culture is tough to get right.

Sir Ken Robinson, a global authority on creativity and innovation, often cites the cautionary tale of that once-revered brand, Kodak, which "went out of business because the whole company was ideologically committed to the idea that photography was a chemical process, and that digital photography was a fad".

"The world around the company was changing, but the world within it was not. If the internal culture of an organisation does not adapt to the external culture, it is like a plant and it will eventually die."

"The role of a creative leader," says Robinson, "is not to have all the ideas; it's to create a culture where everyone can have ideas and feel that they're valued."

This encapsulates the very spirit of culture by design. There are no cookie-cutter solutions here.

Get creative. Get going. ✱

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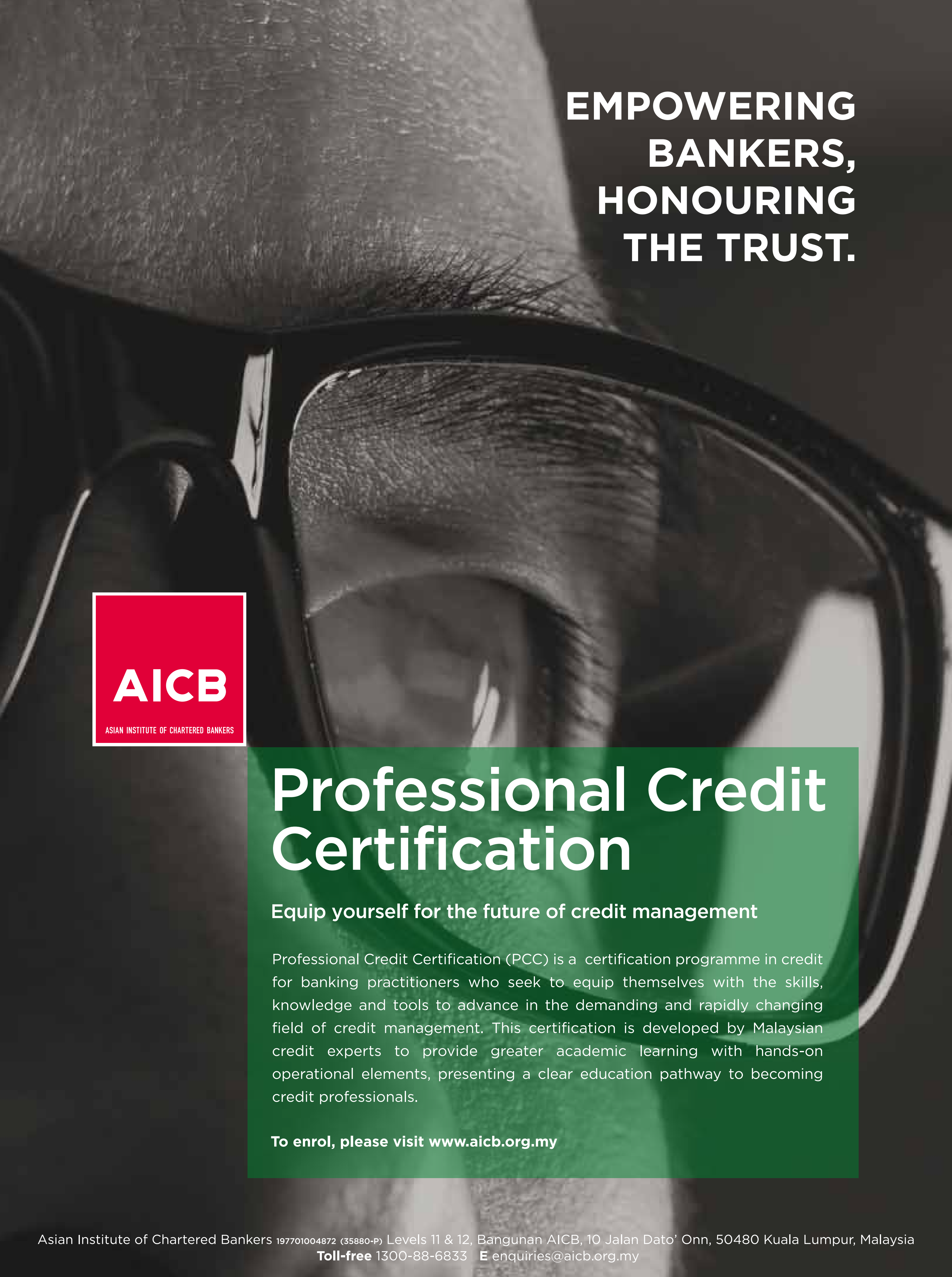
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SUSTAINABLE FINANCE MUST BE THE BASIS OF MALAYSIA'S POST-COVID FUTURE

Failure to do so will undermine long-term profitability and economic prosperity

As we write this article, the Covid-19 crisis is in full swing and affecting every country. Malaysia is no exception. With four phases of lockdown, the economy essentially has been put on hold. The response by the Malaysian government, Bank Negara Malaysia (BNM), Securities Commission, and Bursa Malaysia have been swift and commensurate to the scale of the crisis. Multiple stimulus packages and interventions have provided much-needed relief for affected households, businesses, and economic sectors.

With the Malaysian government seeking to gradually reopen the country, the economy will hopefully start its recovery. Now is an opportune time to talk about the need to ensure a long-term sustainable recovery, the importance of the banking sector, and sustainable finance to achieve this.


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RECOVERY MUST IMPROVE RESILIENCE TO FUTURE CRISES

While the response has provided immediate relief, the consensus among global institutions and thought leaders is that the recovery must provide long-term economic stability and prosperity by paving the way for the transformation to a low-carbon and climate-resilient economy, protection and restoration of the natural environment, and addressing of social issues.

Climate change and environmental degradation create systemic risks with significant implications for the financial sector. In September 2019, Governor Datuk Nor Shamsiah Mohd Yunus addressed BNM's Regional Conference on Climate Change, commenting that climate change "threatens our socio-economic prosperity here in Southeast Asia. It presents a major economic issue with direct implications on financial stability".

While governments have a key role to play, the economic recovery and addressing the unfolding climate and environmental crises can only be achieved with the full participation of the private sector. The banking sector, given its central role in the economy, will be paramount to such efforts and financial flows should be directed towards activities that support these objectives.

Failure to do so will create risks for financial institutions and undermine their long-term profitability as well as the economy's ability to prosper over the long term. Sustainable finance will enable banks to prepare for future political and economic realities.

SUSTAINABILITY IS THE INEVITABLE FOUNDATION OF THE FUTURE BANKING SECTOR

Globally, the evolution to sustainable finance is well under way. Three major factors are driving this and understanding them is vital for banks to maintain their relevance and competitiveness.

First, concerned citizens expect businesses to help address environmental and social problems articulated through major international processes such as the United Nations Sustainable Development Goals and the Paris Climate Agreement. As the climate and environmental crises escalate, so too do expectations.

Second, investors are increasingly concerned about the environmental and social risks to investment portfolios and are engaging portfolio companies, including banks and public policymakers, to accelerate the transition to a low-carbon world. As part of The Investor Agenda – a collaborative initiative to accelerate and scale up investor actions which are critical to tackling climate change and achieving the goals of the Paris Climate Agreement – 1,200 investors with over US$35 trillion (RM151 trillion) of assets under management have been engaging the world's largest greenhouse gas emitters via the Climate Action 100+ initiative and called on G20 governments to scale up their ambition under the Paris Climate Agreement. Further, the distinction between shareholders and stakeholders is becoming blurred, as stakeholders are increasingly able to mobilise shareholders in light of social and environmental issues. For instance, recent climate-focused shareholder resolutions at Barclays Bank and Mizuho Bank were filed by civil society organisations with the support of mainstream asset managers.

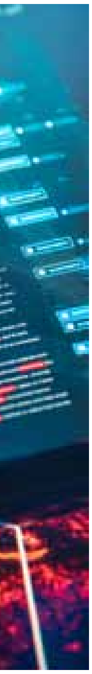
Third, financial regulators are increasingly interested in and supervising the non-financial performance of banks, supported by recommendations of the Task Force on Climate-related Financial Disclosures and the Network of Central Banks and Supervisors for Greening the Financial System, of which BNM is a member. In Southeast Asia, seven countries have already issued regulations or guidelines expecting banks to make sustainability an integral part of their business strategy.

MALAYSIA'S BANKING SECTOR HAS STARTED EVOLVING TOWARD SUSTAINABLE BANKING

These factors can be seen in various degrees in Malaysia, indicating that the evolution from traditional to sustainable finance has already begun.

BNM, Bursa Malaysia, and Securities Commission have formed a Joint Committee on Climate Change to systematically improve the financial sector's management of climate-related risks.

In November 2019, BNM issued the Value-based Intermediation Financing and Investment Impact Assessment Framework (VBIAF), for Islamic financial



institutions to "generate positive and sustainable impact to the economy, community and environment". It was noted that traditional institutions could use it to incorporate environmental, social, and governance (ESG) risks in their risk management systems. In December 2019, BNM also issued the *Climate Change and Principle-based Taxonomy* discussion paper for consultation with fundamental implications for the classification of financing and investments.

World Wide Fund for Nature's (WWF's) annual Sustainable Banking Assessment (SUSBA), which covers six Malaysian banks, show that environmental and social considerations are being integrated in both Islamic and traditional commercial banking activities. However, progress is uneven and all banks must progress further to comply with expectations set by the VBIAF . Comparatively, Malaysian banks lag far behind their Singaporean counterparts, particularly regarding restrictions to coal financing and investment, and requiring their agriculture and forestry clients to adopt best environmental management practices.

CIMB and Maybank currently have the most advanced ESG integration practices of the six Malaysian banks covered by SUSBA. CIMB is a founding member of the United Nations Environment Programme Finance Initiative's (UNEP FI's) Principles for Responsible Banking (PRB) and also signed the *Collective Commitment to Climate Action* in September 2019. Among these commitments are time-bound requirements to set sector-specific, scenario-based targets for portfolio alignment and publicly report on progress; demonstrating focused effort on the most carbon-intensive sectors within its portfolios; and taking "concrete action" to align portfolios to "the low-carbon, climate-resilient economy required to limit global warming to well below 2°C".

Figure 1: WWF's *Sustainable Banking Regulations in ASEAN – Raising the Bar* report, issued in December 2019, assesses regulations issued in five ASEAN countries and China against a newly released framework and looks at how banks perform against these expectations.

THE SUSTAINABLE FINANCE EVOLUTION IS AN ORGANISATION-WIDE PROCESS

Malaysia has the potential to be a leading regional sustainable finance hub. However, what does sustainable finance mean for a bank?

Sustainable finance requires a comprehensive integration of ESG considerations in the overall strategy and decision-making process. WWF's team of experienced sustainable finance specialists have developed the freely available SUSBA tool to support banks in their sustainability journeys. It contains forward-looking, science-based, and portfolio-level criteria across six pillars (purpose, policies, processes, people, products, and portfolio), 11 indicators, and 70 sub-indicators, which can be used as a roadmap for action and benchmark against industry peers.

The development and implementation of more granular sector-specific or thematic policies is central to proper ESG integration. These outline a bank's expectations towards its clients, conditioning the provision of financial products and services to meet minimum environmental and social standards, ideally in line with national and international best practice. Within the context of Malaysia and Southeast Asia, these policies should cover environmentally and socially sensitive sectors such as fisheries, agriculture (including palm oil), forestry, buildings, and infrastructure (including transport, energy, and waste) and cover key issues such as human and labour rights, biodiversity loss, water- and climate-related risks.

These policies can also foster a constructive dialogue with clients on how to improve their ESG practices. This can lead to the development of specialised financial products, such as sustainability-linked loans which reward clients who meet ESG performance targets. To deliver positive outcomes, such targets should be measurable and science based. Green or sustainability bonds and *sukuk* have also great potential for Malaysia, bolstered by the Green SRI Sukuk Grant Scheme issued in 2018 and the SRI Sukuk Framework established in November 2019. The issuance of green bonds and *sukuk* in Malaysia was US$1.3 billion as of 2020.

These efforts should be part of a bank-wide sustainable finance strategy or roadmap, driven by top management and aligned with state, national, and international sustainable development objectives. Strong internal governance structures and processes, with ongoing capacity building, are crucial to support holistic approaches to sustainability.

INITIATIVES AND TOOLS EXIST TO HELP BANKS WITH THEIR EVOLUTION

Banks can benefit from several sustainable finance platforms and resources. The most prominent is the UNEP FI's PRB initiative, launched during the UN General Assembly in September 2019. The initial group of 130 founding banks from 49 countries represent more than US$47 trillion in assets (one third of the global banking sector) and has since grown to more than 170 banks, ranging from regional banks just starting their sustainability journey to the most advanced international banks. The initiative outlines six areas to guide banks on integrating sustainability, most importantly impact analysis, target setting and implementation, and accountability.

The Science Based Targets initiative is a platform through which corporates can adopt a greenhouse gas emission

Figure 2: WWF's SUSBA tool assesses and compares the ESG integration practices of 35 ASEAN banks and 10 international banks based on their public disclosures.

reduction target that is in line with what the latest science says is necessary to meet climate goals. Currently, 873 companies, including 53 banks, have joined the initiative.

The Asia Sustainable Finance Initiative provides technical support to banks. This initiative brings together academic, industry, and science-based knowledge partners to support financial institutions in understanding and sharing ESG best practices; and to identify solutions which link sustainable finance activities with measurable and positive impact on the ground.

WWF is keen to support banks wanting to undertake the sustainable finance evolution and its dedicated team of experienced sustainable finance specialists is currently working with several banks in Malaysia and Southeast Asia. Central to this is WWF's ability to establish and develop long-term relationships through a constructive and confidential approach to engagement that is in tune with the social, economic, and political context.

SUSTAINABLE FINANCE EVOLUTION REQUIRES STOPPING THE FINANCING OF FOSSIL FUELS

Halting global warming to well below 2°C – the global target in the Paris Climate Agreement – will require almost complete decarbonisation of energy generation (phasing out fossil fuels like coal, gas, oil) by 2050 and immediately and rapidly investing in renewable energy (geothermal, wind, solar).

Undoubtedly, fossil fuels have been pivotal to the Malaysian economy. But technology and society are moving beyond fossil fuels.

Indeed, phasing out fossil fuel investments makes business sense as these are increasingly risky and volatile. *Carbon Lock-in Curves and Southeast Asia: Implications for the Paris Agreement,* a 2018 briefing paper by University of Oxford, estimated that 89% of existing and planned fossil-fuel-based power plants in Malaysia are incompatible with the aim of preventing dangerous levels of climate change. Consequently, they may become stranded assets and investments, suffering unanticipated or premature write-downs and liabilities. More than 100 globally significant banks and insurers have already announced restrictions to financing and investment in coal, according to Institute for Energy Economics and Financial Analysis. This includes the three largest banks from Singapore (DBS, UOB, OCBC) and Japan (MUFG, Mizuho, SMBC). Commonly cited reasons for enacting these restrictions are international science and policy, investor and regulator concerns, and financial risks; all of which are relevant considerations for Malaysian banks.

The evolution into renewable energy is underway and inevitable, not only due to the need to tackle climate change. According to the International Renewable Energy Agency's *Renewable Power Generation Costs in 2018* report, unsubsidised renewable energy is often the cheapest energy generation source. This relative cost-competitiveness is projected to only increase; current volatile and historically low oil prices may only exacerbate the inevitable by frustrating project investments.

To paraphrase a famous quote 'the stone age did not end because the world ran out of stones', the fossil fuel age will end and not because of a lack of fossil fuels. Situations and societies change as better and more sustainable technologies are discovered. The abovementioned reports indicate that banks which retain investments in high-carbon sectors will financially suffer and banks which address exposure to these sectors will be well positioned to prosper in the low-carbon economy.

THE FUTURE WE NEED IS NOT IN THE PAST

Sustainable finance must become the basis of the economic recovery. The economic problems of today coexist with existential environmental and social problems. They have to be addressed collectively or the solutions to one crisis will cause another.

Sustainable finance is needed to safeguard the progress Malaysia has made since its independence and to achieve this we need more collaboration between stakeholders. Governments, citizens, corporates, banks, and civil society organisations need to come together to deliver the future we need.

Our response to the current economic recovery will affect an entire generation with lasting implications for the children of today and future generations. We owe them to do everything that's in our power to change course. ✱

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For more information, please visit www.susba.org and www.wwf.sg/sustainable_finance

ARE WE READY FOR IKEA-STYLE BANKING?

Banks seeking to offer best-in-class customer service could pick up some tips from major retailers – and loosen up the 'computer says no' rule at the same time.

Technology has become integrated into almost every aspect of our daily lives and banking is no exception.

Yet for most of us it is something of a love-hate relationship – it can be easy to forget the huge gains in convenience that banking technology has brought to customers over the past 50 years when we are waiting in an automated queue on the telephone to speak to a human being.

TOMORROW'S CUSTOMER

John Aves, CEO of specialist customer experience consultancy cp2experience, points out that when it comes to customer service, banks are not so much in competition with each other as with the levels of service offered by other sectors.

"It's no longer good enough to say 'this is what we do in financial services' because customers' expectations are based on best-in-class in other sectors," he points out.

Louise Hill, COO of children's prepaid card app gohenry, suggests that the coming generation of banking customers will be even more demanding. "They are not just digital natives, they are cashless natives. Anyone who has grown up using our kind of service will expect a slick digital interface, they'll expect real-time transactions."

Aves accepts that financial institutions face a difficult task in delivering across multiple channels, from website, social media and chat through to telephone banking and the face-to-face experience in-branch. However, he points out that customers' expectations are only getting higher – and are often not being met.

"The experience needs to be seamless across all these channels. From the customer's point of view it is often not consistent and not easy to access."

Aves' colleague, Managing Director Mark Gould, says customers' needs continue to be focused on convenience, personal service and competitive products.

"It's about knowing me as a customer and treating me as an individual, online and offline. Using what you know about me to provide products customised to my needs."

cp2experience sum this up with a value equation comprising two parts, the 'what' and the 'how'. They point out that while banks have a tendency to focus on the 'what' in terms of products, customers tend to make judgements based on 'how' these products are delivered.

ALL ABOUT THE 'HOW'

"The 'how' is the service component," says Aves. "Do I trust you? Do you treat me as an individual? Are you empathetic? Responsive? Reliable? Do you do what it says on the tin? Then finally, there's the cost, which is not just about the price of the product but the 'hassle factor' involved."

Jo Causon, CEO, the Institute of Customer Service, points to her organisation's own research in this regard. "About 26% of us will pay substantially more for great customer service and about another 60% of us are interested in paying what we would call value for money."

Causon recognises there is a strong role for technology in delivering for customers: "What you don't want is human beings processing because that's a waste of resource. If there is anything that is purely transactional, then tech should take the strain."

COMPLIANCE VS COMMON SENSE

However, all are of the opinion that bank customer service tends in itself to be too transactional.

Aves says: "There's a regime of 'computer says no', which is there because banks are scared stiff of doing something that will get them into trouble. And staff are worried about personal liability, so they don't apply common sense, they're too worried about being called out for not following the letter."

Gould says that regulation intended to ensure better service for customers has made banks more motivated by compliance than solving issues for customers, with the result that staff are often hamstrung.

"It's a shame because the rules are intended for the benefit of the customer rather than the bank. And empathy and curiosity are unlikely to break the rules. There's a tendency to be 'bank first' and about protecting the bank rather than addressing customer need."

Aves agrees: "It's about permission to operate within a frame of reference."

Ask most customers what most annoys them about their bank and they are likely to refer to waiting in a queue for human intervention. Aves admits that the gating process is a 'necessary evil' but one that most banks need to manage more effectively.

"It's a balancing act between the desire to enable people to get through quickly and an inability to forecast accurately the flow of calls. Tech has a role to play in terms of artificial intelligence (AI) filtering questions," he adds.

Aves also sees a role for technology in dealing with more routine queries: "AI can be useful in terms of giving consistent and appropriate advice, rather than the potentially more variable advice even from a trained professional. Consumers will hopefully grow to trust AI to do this."

+ As well as systematised advice, a 2019 report by Foresight Factory for CYBG plc identified several further ways in which technology can deliver a better experience for customers, including:

More sophisticated budgeting tools offering account aggregation and predictive analytics;

Virtual reality to enable more direct remote interaction and an immersive view of key financial information; and

Mass adoption of biometrics, including behavioural biometrics, for seamless and secure identification.

RIPE FOR DISRUPTION

Gould refers to a 'major failure' around banking products that are too complex and focused on the needs of the provider. He suggests banks could learn from retailers by packaging products to appeal to the needs of customers.

"Most banks have regular savings accounts or ones where you can pay in when you can. But what about having a 'First Car' account or a 'College Fund' account? There's no complexity as it's essentially the same product but the experience is much more customer-focused."

Another area where Gould feels traditional approaches are ripe for disruption is in commercial banking, at least in terms of small- and medium-sized enterprises (SMEs).

"With SMEs, banks tend to be even more wary of regulation, in a way, because of the risk of money laundering. For businesses, there's even more need for speed of gratification, yet the documents required are more complicated and response times longer."

Gould suggests the way in which IKEA is disrupting how we buy kitchens as a good model for the future of banking in which the customer is in control. Fewer, bigger stores provide inspiration and advice, giving you access to a consultant with whom you can start designing the right solution for you.

"When you're ready, you can then press the button to order and either pick the boxes or have someone come in and fit the whole thing for you. It's full service or do-it-yourself. There's no reason not to do mortgages or pension plans in the same way." ✱

■ *This article previously appeared in the Chartered Banker magazine, UK, spring 2020 edition.*

HELICOPTER MONEY

HOW, FOR WHAT, TO WHOM, AND BY WHOM? STIMULUS PACKAGES IN A TIME OF CRISIS

Extraordinary circumstances necessitate extraordinary measures.

The term helicopter money, once a metaphor for how monetary policy might be conducted, has become commonplace in the current environment where governments are introducing stimulus measures to counter the devastating effects of the coronavirus pandemic on economic activity and well-being more generally.

The term was invented as a thought experiment by the Nobel Laureate Milton Friedman in an essay published in 1969.

"Let us suppose now that one day a helicopter flies over this community and drops an additional $1,000 in bills from the sky, which is, of course, hastily collected by members of the community. Let us suppose further that everyone is convinced that this is a unique event which will never be repeated."

Friedman's purpose was to discuss the short- and longer-run effects of monetary policy in normal times. Recently the idea of helicopter money has been extended to refer to policies that aim to revive sluggish economies or prevent economic meltdowns in times of crises. This note is an attempt to clarify some of the issues that need to be considered in this latter context:

- How should transfer of purchasing power be accomplished? By direct money transfers to individuals or households; by lowering taxes; by price subsidies, etc.
- What is the intended purpose of the policy? To shore up aggregate demand; to focus on individuals who have lost jobs as a result of the current pandemic; to keep firms from bankruptcy, etc. To be sure, these objectives are, of course, not independent of each other.
- Who should be the recipient of the 'helicopter drops'? The entire population as in Friedman's example; only those who lost jobs; only those with an income below a certain amount; SMEs generally, etc.
- Which official sector agency should be in charge? The central bank, the central (federal) government; local governments.

The analysis will show that helicopter transfers should be well targeted and that the fiscal authorities should be in charge. Let's deal with each of the issues in turn.

Helicopter Money by Any Other Name…

Distributing purchasing power can be accomplished by different means. For an individual who has a job and pays income taxes, a direct transfer of RM100 is essentially equivalent to a one-time tax cut of the same amount. But for the unemployed who has no income and therefore pays no income tax, the two methods are vastly different. For this reason, the direct transfer appears to be preferable. A subsidy to retailers in exchange for a commitment to lower prices on (essential) goods would increase the purchasing power of customers.

This type of measure is already practiced in some jurisdictions in the case of petrol, for example. To do it on a grander scale is likely to be a practical nightmare and the room for abuse would likely to be substantial. Those who are sceptical about the government's ability to increase purchasing power by direct transfers, tax reductions, subsidies and

the like sometimes argue that 'there is no such thing as a free lunch', so that the government transfers of any type essentially takes purchasing power from some individual and gives it to someone else. The aggregate effect is therefore null as the transfer has to be paid by someone.

This misses the point that in a time of high and increasing unemployment, an increase in spending by one individual means increased income for someone else, who in turn will spend more. Incomes for everyone will increase. So, even if it isn't completely free, the lunch is very low cost and highly beneficial.

What is the Intended Purpose? and Who Should Be the Recipients?

The coronavirus pandemic is on course to create unprecedented increases in lay-offs, unemployment, bankruptcies, and other economic dislocations. Which of these should be the primary target for 'helicopter money'?

The primary objective of government transfers should be to ensure that individuals who have lost their jobs are able to meet basic needs, such as paying for food and necessary medicines, rent, and utility bills. We can think of this as a humanitarian objective of preventing the temporary, but potentially protracted, effects of the pandemic from leading to permanent hardship due to malnourishment, deterioration of health, and homelessness.

This implies that transfers should target the unemployed. If the intention is to shore up aggregate demand in the economy more generally, a universal transfer scheme may be tempting. But this is likely to be inefficient because a transfer of RM100 to a high-income household is not likely to have the same effect on aggregate spending as a similar transfer to a low-income household that lives from pay cheque to pay cheque. In other words, the transfer should target households that are likely to spend most of it. This is quite apart from the fairness aspect of transfers to high- versus low-income families.

What about lowering payroll taxes to keep firms from laying off employees? Such tax relief would help offset some of the loss firms face when demand dries up, enabling them to keep operating longer. It would also encourage firms that are doing well to hire additional workers, even if temporarily.

> **THE PRIMARY OBJECTIVE OF GOVERNMENT** transfers should be to ensure that individuals who have lost their jobs are able to meet basic needs, such as paying for food and necessary medicines, rent, and utility bills. We can think of this as a humanitarian objective of preventing the temporary, but potentially protracted, effects of the pandemic from leading to permanent hardship due to malnourishment, deterioration of health, and homelessness.

But lowering payroll taxes has two drawbacks. One is that it would not be of any help for individuals who have lost their unemployment, and the second is that when demand is insufficient, firms are not likely to regain employees even if payroll taxes are reduced.

The first of these drawbacks could be mitigated by making tax relief or an employment subsidy conditional on a commitment by the firm not to reduce its workforce; but to address the lack of demand more targeted stimulus policies are needed.

What if the objective is to prevent an employer from bankruptcy? Would a payroll tax decrease not do the trick? It could help, but it would not be the most effective policy. A low-interest-rate loan would be preferable as it would not have to be across the board, but could target firms that can show a need for such a loan to stay afloat. The loan could either be given directly by a government agency or by banks, in which case the government would provide a guarantee in exchange for some oversight on how the loans are allocated.

Finally, a word about incentives. Will giving transfers to those who become unemployed reduce incentives to work? This argument is specious in the best of times, but if it is used to refuse such transfers in times of crisis, it is both cruel and likely to aggravate the crisis. That said, authorities should at the right time

establish an appropriate exit strategy.

Which Official Agency Should be in Charge?

In Friedman's original 'helicopter money' metaphor, it was the central bank that distributed the money to the public. But as we have argued, a 'helicopter drop of money' in the current situation is essentially a form of fiscal policy in most cases with intentional distributional effects. As such it should primarily be the responsibility of fiscal authorities. Involving the central bank would unnecessarily involve it in fiscal policy and distributional issues best left to be decided by elected officials.

Central banks should not stand on the sidelines, however. They should make sure that the financial system is operating smoothly by providing market with liquidity through access to central bank funding. This is what central banks are attempting to accomplish by lowering interest rates in jurisdictions where there are already not at an effective lower bound, zero or otherwise. The recent decline in policy interest rates are best viewed from this perspective and not from a perspective of shoring up aggregated spending by households and firms. In times of heightened uncertainty, spending is not likely to respond significantly to lower interest rates.

What level of government should be responsible for the transfer policy, central or local government agencies? This is a question that does not have a clear-cut answer. On the one hand, hardships and need may vary from locality to locality, and local authorities may be best placed to determine who is most at risk, and who, therefore should be most closely targeted with the transfer policy. But central authorities may need to coordinate and ensure that some local governments will not attempt to free-ride on neighbours.

This could, for example, be the case when the place of work differs from the place of residence. In this case, which local authority should be responsible for providing necessary support for laid off workers? In addition, the aggregate demand multiplier effect, whereby your spending is my income and vice versa, implies a central solution. Indeed, it would even call for international coordination of stimulus activities. A Quick Summary

- Extraordinary circumstances necessitate extraordinary measures. The metaphorical 'helicopter money drop' mentioned some 50 years ago should be part of such measures. Not literally, but in the form of transfer payments to those most harmed by the coronavirus pandemic.
- Monetary transfers, preferably in the form of cash grants, should first of all target individuals who have lost their jobs as a result of the economic fallout of the pandemic.
- In addition, more general cash transfers should be considered as a way to shore up aggregate demand in the economy and thereby limit the size of the inevitable increase in unemployment. These cash transfers should be skewed towards lower-income households, which are more likely to spend them, rather than high-income households whose spending is likely to be little affected.
- Suggestions that transfers associated with lost jobs will create incentives to not seek employment should be forcefully rejected as specious and cruel.
- Governments should consider guaranteeing low-interest loans to firms that are at risk of bankruptcy. The loans should be administered by the banking system.
- Fiscal authorities should take the lead in providing transfer payments. By intention, such transfers have distributional effects and should therefore be the responsibility of elected officials, not central banks.
- Central banks should support governments' efforts by providing the necessary liquidity to the economy to prevent finance from becoming a destabilising source of its own.
- International cooperation will be needed both in the fiscal and monetary policies to limit externalities associated with demand spillovers and financial contagion. ✱

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Prof Genberg also has extensive academic experience, having been Professor of International Economics from 1979 to 2008, and Head of the International Economics Department from 1989 to 1998 at the Graduate Institute of International Studies in Geneva, Switzerland.
He holds a PhD in Economics from the University of Chicago.

GRIT: THE FORMULA FOR SUCCESS THAT CAN BE LEARNED

What experts say about cultivating excellence.

While writing this article, most of the countries I deal with are in some form of lockdown. People who worked in offices are now working at home. Classes, meetings, strategy sessions that were face-to-face are now Zoom meetings. This impact has been massive – commercially, socially, and mentally. In these adverse times, some people are thriving and others are faltering. Some businesses are pivoting, adapting, and others are frozen, waiting for a green light to move forward.

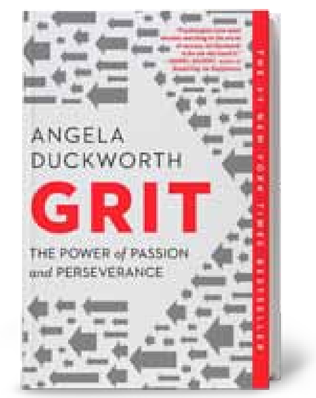
What makes the difference? I believe it is grit. This combination of passion and perseverance is the distinguishing feature and interestingly, it can be developed within all of us and our organisations. Grit allows us to deal with setbacks and keep moving forward. Developing grit allows all of us to achieve excellence regardless of time.

One of the leading experts in grit and this line of thought is Angela Duckworth. She is a professor of educational psychology at the University of Pennsylvania and a 2013 MacArthur Fellow (also known as the 'Genius Award'). She has done fantastic research in the area of grit. Her passion is to study grit and the attributes that contribute to success in life. Her research into grit is both thought- and

action-provoking. Her research marks a pathway for individuals and organisations to be able to build excellence and achievements.

+ In this article, we will discuss:

- What is grit and its importance;
- Why effort is a critical ingredient of achievement;
- How you can measure grit; and
- How to develop grit and its four stages.



WHAT IS GRIT AND ITS IMPORTANCE

Grit, by definition, is courage, resolve, and strength of character to complete a task.

According to Prof Duckworth, grit is the combination of passion and perseverance to get long-term tasks done. This connection came through several years of research and discovery.

+ Prof Duckworth was trying to identify answers to some tough questions, such as:

- What qualities make a person persevere?
- Why do some people succeed where others have failed?
- Why do some people, who have all the qualities for success, not succeed; yet others who may not have all the right attributes, surprisingly do?

The answer came slowly and through many years of study. An important discovery came out of one of her research projects. Prof Duckworth was working on a challenge faced at the US Military Academy, also known as West Point. West Point has the reputation of accepting only top-tier candidates. To be considered for admission to

West Point is a rigorous process where the school looks at only the best-of-the-best candidates.

Getting into the West Point programme is exceptionally difficult:

- 14,000 applicants sign-up to the process;
- 4,000 applicants are considered;
- 2,500 applicants meet the criteria; and
- 1,200 are accepted.

Yet, even after detailed reviews, 20% of students drop out before graduation, most of whom leave in the first seven weeks of a rigorous initiation training programme.

Try as they might, the critical factor to discern which students will see the initiation programme through and which will drop out could not be identified.

When working on the West Point project, Prof Duckworth found that measuring a cadet's level of grit could be an accurate predictor of whether the student would have the mental toughness to see the programme through. High levels of grit meant high levels of success.

This discovery was both impactful and significant. The stronger one's level of sustained passion, combined with long-term perseverance, the higher one's level of mental toughness and, in turn, success in completing the programme.

As individuals, we all vary in our grittiness. The higher your grit, the stronger the levels of passion, persistence, and performance.

WHAT IS MY GRIT SCORE

Yes, there is a way of measuring your grittiness. There is a grittiness scale readily available which you can use to measure your level of passion and perseverance. This scale is available online and similar to the one used in the West Point study.

To learn about your grittiness, here are two versions of the test which you can take.

A super-quick 60-second quiz which was created by Prof Duckworth for the *New York Times*: *https://www.nytimes.com/interactive/2016/03/01/us/01grit-quiz.html* or a slightly longer version accessible here: *http://angeladuckworth.com/grit-scale/*

Both these tests measure the perceived degree of passion and perseverance in a person. Irrespective of your grit score, you should know that grit can be developed further.

THE POWER OF EFFORT

Effort is defined as a vigorous, determined attempt, physically or mentally, to accomplish something.

According to Prof Duckworth, effort counts almost twice as much as other factors of achievement. Even though a person may not have an extremely high level of talent, if they put continuous effort into what they are doing, they will achieve success.

Conversely, it means that if someone has very high levels of talent but don't apply effort into developing the talent, they are likely not to succeed. Many of us have seen individuals or teams who worked hard, came out of nowhere and accomplished incredible feats.

The idea is to make it through difficulties and become successful. We need to need to put in the effort. Yes, hard work pays off more than we thought!

+ The theory and formula used by Prof Duckworth works like this:

Talent x Effort = Skill

Skill x Effort = Achievement

It seems as though hard work and effort will propel people forward.

Gritty people seem to share the following core characteristics:

- **Interest:** They are interested in what they do.
- **Practice:** They do deliberate focused practice.
- **Purpose:** They find a higher purpose.
- **Hope:** They have a growth mindset.

• Interest

Gritty individuals pursue activities in which they have a genuine interest.

Benjamin Bloom was an American educational psychologist. He contributed significantly to the theory of Mastery Learning. One of his well-known research projects was conducted over five years, interviewing 120 of America's top artists, athletes, and scholars.

In this study, he concluded that drive, determination, and interest led to extraordinary success. Bloom stated that the research "points to the enormous potential available in each society and the likelihood that only a small amount of this human potential is ever fully developed". He also concluded, "We believe that each society could vastly increase the amount and kinds of talent it develops."

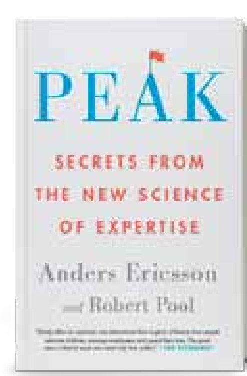
It appears that these 120 top performers developed an interest in their area of expertise and this interest grew.

For us, the takeaway should be that the starting point to grit is finding and developing an interest in what we do, then build that into our work.

What if you don't know what your interest is? Well, as a starter, create an Interest Inventory, a simple list of topics and areas that you are genuinely interested in. Here is a sample of questions for you to consider:

- What do I like to think about?
- What do I care about?
- What matters most to me?
- If I had a spare day, what would I do?
- Who do I admire and what do they do?

Of course, interest is not the only component in developing grit. It is the starting point. Once you have your interest established, you need to practice.



• Practice

Prof Anders Ericsson is a specialist in studying experts. His research deals with studying the behaviour of award-winning scientists, high-performing athletes, and world-class artists.

In his book *Peak: Secrets from the New Science of Expertise,* he identifies the standard behaviour of these high performers. They practice often and regularly. To be a great performer and to develop grit, people need to do what he calls 'deliberate practice'.

Deliberate practice is not the type of practice that you see distracted 7-year-olds do when they have to play the piano for an hour because Mom said so. Deliberate practice is the type of practice that is laser-like in its focus.

+ According to Prof Ericsson, deliberate practice has four components:

Before you practice, you develop a clearly defined goal;

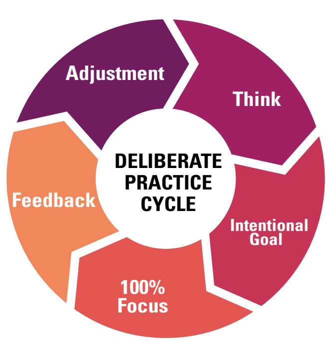
When you practice achieving this goal, you put in full concentration and effort;

You then monitor the progress, gather information, and feedback; and

Adjust based on the feedback.

Think and then start again.

It forms a continuous cycle that looks a little like this.



Experts do this and gritty people do this too. This deliberate practice model works across functions. You can use it for running a marathon or improving business practices.

For us, the takeaway should be to identify a goal to which deliberate practice can be applied. Make sure it is something that stretches you. Examples of goals could be:

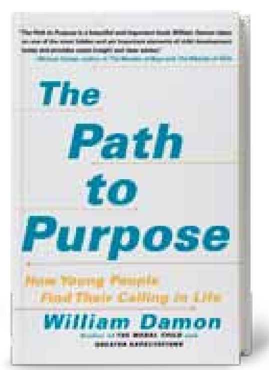
- Learn a language;
- Compete in a sport; or
- Develop an area of expertise.

• Purpose

The third characteristic of gritty people is that they have a bigger purpose behind what they do. They are developing and growing to accomplish a purpose bigger than themselves.

Whether a hedge fund manager, a teacher, a performer, or an investment banker, according to Prof Duckworth the gritty individual wants to accomplish something beyond what they do for themselves.

Often, the purpose is around benefitting others. For example, for the teacher, it may be to create accessible education for everyone. For the hedge fund manager, it may be to share the principles of investing with the public. It doesn't matter what the bigger purpose is, as long as it is personal and important. This seems to be the energy source that people tap into when things get tough and it gets them to perform.



This is in line with the findings of Prof William Damon at Stanford University. Prof Damon is a leading researcher in the development of purpose. In his book *The Path to Purpose,* He identifies that the highest sense of fulfilment comes from combining your purpose with something that benefits you and assists other people.

So, the question to us may be, "What is our bigger purpose?"

• Hope

The fourth characteristic of gritty individuals seems to be that despite setbacks, they keep picking themselves up and moving forward.

There is a Japanese proverb, "fall seven times, get up eight". This is what gritty people do. What gives people the ability to do this?

The idea behind this is if someone has hope, they will learn and grow from any setback. Hope is all about the person's mindset. Gritty people don't see setbacks as a stopping point. Instead, they see setbacks as a learning experience. They take their learnings as part of the journey to becoming better.

These people will look for opportunities to keep learning and growing. They will put more effort into it, and in turn, their successes will improve. The ability to be able to keep learning and growing is all about having the right mindset.

We've seen by looking at the qualities of extremely gritty and successful people that by developing personal grit, excellence and achievement is possible for all of us. Sure, developing grit, takes work, but the benefits are worth it. ✱

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PARTNERING TO BUILD THE NEXT DIGITAL BANK

HOW TO BUILD A SUCCESSFUL CONSORTIUM

DIGITAL DISRUPTION IN ASIAN BANKING

A banking revolution is sweeping across Asia as an increasing number of countries introduce new regulatory frameworks for digital banking. Leading financial centres, including South Korea, Hong Kong, Taiwan, and Singapore, have either issued or plan to award new licences for digital banks. Malaysia is next: Bank Negara Malaysia (BNM), the central bank, is currently seeking industry comments on a proposed framework for digital-bank licence applications.

Fintechs, traditional financial institutions, tech giants, and other large corporations are now eyeing the opportunity – and many are doing so in consortiums to maximise their chances.

In Singapore, for example, six out of the seven applicants for digital full bank licences and at least five applicants for digital wholesale bank licences are consortiums. In Hong Kong, half the winners of virtual banking licences were joint ventures.

FINTECH, TRADITIONAL FINANCIAL INSTITUTIONS, tech giants, and other large corporations are now eyeing the opportunity – and many are doing so in consortiums to maximise their chances.

Regulators require that applicants demonstrate deep capabilities in several areas. In Malaysia, these capabilities will include furthering financial inclusion, technological innovation, customer analytics, and a solid understanding of banking risk management and compliance, according to the draft framework circulated by BNM. In addition, a consortium presents its members with an opportunity for potential synergies. These introduce the ability to deliver better services to target customers and improve the consortium's chances of being awarded a licence.

However, forming a consortium to create an application is complex. The partners each need to thoroughly consider their potential contributions and interaction and how they would form the bank. Based on our experience of working with applicants in Hong Kong and Singapore, we have developed some primary considerations for potential applicants. These aim to help the partners discuss and agree on how to build a successful digital banking consortium.

WHAT COMPONENTS ARE REQUIRED?

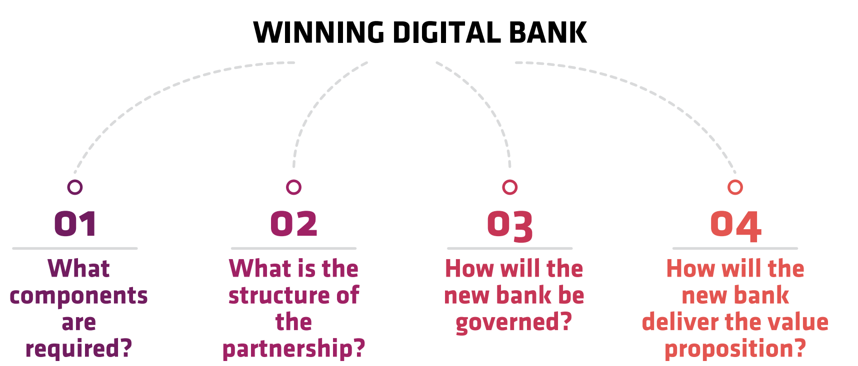
Consortium partners need a common understanding of the components needed to build a bank and of what each partner will contribute. Broadly, they need to cover five areas:

> **Access to a sizeable customer base.** This is essential to sustain a digital bank and make it profitable. For example, BNM has placed strong emphasis on financial inclusion and players with meaningful access to underbanked rural and urban population segments will have an edge.

> **Distribution channels and customer touchpoints.** Building a profitable digital bank will likely require a variety of customer touchpoints, where nudges towards various financial products can be placed. These could include a combination of both online and offline channels for various kinds of business: Travel services, e-commerce, gaming, e-wallets, convenience stores, remittance services, gas stations, etc. A successful consortium will likely need multiple customer touchpoints to quickly scale up its offerings and build engaging, sticky relationships with its customers.

> **Ability to provide financial products to target customers.** In Malaysia, while a large number of adults have bank accounts, only about 40% have a credit facility. This is primarily due to traditional banks' inability to assess the risk of most customers. So, a key success factor for new digital banks will be an ability to provide financial products – such as financing, insurance, savings, investment, payments, and remittances – in a price-efficient manner. To do this they will need alternative data sources for credit evaluation, and they will have

Figure 1: Building a winning digital bank requires answering key questions along four dimensions



to create microproducts to suit the needs of target customers.

> **Technology and analytics expertise.** Several digital banks will be launched around the same time and none will have a physical presence. So, it will be important for each bank to provide top-quality digital customer experience to attract customers. In addition, technology can greatly reduce the cost of acquiring and servicing customers, enabling the new banks to pursue previously underserved segments of the population. Moreover, as these underserved customers will have diverse needs, the use of analytics to deliver tailored propositions will help the new bank scale quickly, which will be crucial for its success.

> **Risk management and compliance.** Many consortiums will have fintech as participating members, but they are typically unfamiliar with the level of regulatory scrutiny to which banks are subject. So, risk management and compliance will be important criteria in the assessment of applications. This implies that consortiums will have an advantage if they also include members demonstrating experience in risk management, compliance, and traditional banking. Expertise will be particularly relevant in cyber and information security, anti-money laundering, and compliance aimed at preventing financial crimes.

WHAT IS THE STRUCTURE OF THE PARTNERSHIP?

It is important for consortium members to agree in advance on the structure of their partnership. This includes answering questions such as the following:

+ Which partner will lead the consortium? What will be each partner's shareholding?
+ How will each partner bring value to the new venture? How much will each contribute in cash, other assets, human resources, and expertise? At the current stage, to what extent can their planned contributions be considered commitments?
+ Beyond financial returns, what is each partner expecting to obtain from the new venture?
+ How will the appointment of key executive positions be divided among the consortium partners?
+ If a fintech's business is subsumed into the new bank, how will it be valued? Do all partners agree with the valuation of the fintech's business?

These considerations are strategic in nature and will have potential reputational and financial impacts, so the decisions need to be made at the most senior levels and may need board approval. Based on our experience working with applicants for digital banking licences, we encourage proactive seeking of the necessary board approvals to ensure shared understanding by all stakeholders.

HOW WILL THE NEW BANK BE GOVERNED?

Consortium members should agree on an optimal governance structure. This will assure the regulator that the consortium has made good governance a priority and considered it thoroughly. A structure also makes each partner accountable for delivering on the capabilities it has promised. Key considerations include the following:

- What will be the digital bank's organisational and governance structure? That is, how will its various functions be structured?
- How will consortium partners bring their expertise to the bank? Will they transfer people or assets? Or will they bring their capabilities in some other way?
- How will the consortium partners contribute staff? Through managerial appointments, secondments, contractual arrangements, or other means?
- What will be the working cadence at the new bank? How will partners, particularly those that are not fintechs, ensure that decision-making is agile and timely?
- How will the non-fintech members be able to bring experience and learnings from this venture back to their main organisation?

Consortiums inevitably bring organisations of different styles and strengths together so the cultural challenges of enabling successful collaboration should not be underestimated. Our experience has shown that establishing strong governance at the outset can dramatically offset the potential for such friction.

HOW WILL THE NEW BANK DELIVER THE VALUE PROPOSITION?

Potential consortium members should

think about how to deliver the agreed value proposition to customers. This implies developing a clear understanding of how the consortium members will build and contribute to the new bank:

+ How will the partners share data with the new digital bank? They will need to comply with data privacy requirements, while still developing innovative propositions.
+ What changes – especially in technology – will the consortium partners need to make in order to deliver the customer propositions? What investments are needed to make these changes? Does the timing of these changes fit the new bank's launch timelines?
+ What will be the value share mechanism between members' respective distribution channels and the new bank? Will use of member resources require arm's-length commercial agreements?

WHERE SHOULD A CONSORTIUM START?

To succeed, all consortium partners must perceive clear value from investing in the business and believe in the value the new bank will bring to the customers. They must reinforce their mutual commitment, create structures that ensure accountability, and carry out an effective transfer of capabilities to the new bank. A consortium can only be built by bringing together different parties and holding difficult conversations upfront. The key considerations listed above, as well as the options for each consideration, need to be evaluated and thoroughly discussed before decisions are made. Only then can partners truly hope to build a winning digital bank. ✱

TO SUCCEED, all consortium partners must perceive clear value from investing in the business and believe in the value the new bank will bring to the customers. They must reinforce their mutual commitment, create structures that ensure accountability, and carry out an effective transfer of capabilities to the new bank.

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■ *Jayant Raman is a Partner in Financial Services practice at Oliver Wyman. He specialises in topics related to non-financial risk management, such as anti-money laundering, cyber risk, and has worked with leading banks across the region.*

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■ *Oliver Wyman is a global leader in management consulting that combines deep industry knowledge with specialised expertise in strategy, operations, risk management, and organisation transformation.*

PRINCIPLE OF THREE

CUSTOMER-CENTRIC BANKING TO ACCELERATE OUT OF COVID-19

Marked by an unforeseen voluminous shift to digital channels, areas of opportunity have emerged from the crisis. Seize the moment.

Change is now the new normal. Customer behaviour has undergone a seismic shift, with lockdown forcing customers to switch to non-branch channels. Uncertainty is set to continue even after the health crisis is over. Meanwhile, the gap between customer expectation and reality continues to grow. How can banks not only survive but thrive in these circumstances? I believe one answer is a customer-centric, responsible approach to banking.

A SHOT ACROSS THE BOW

This February's *Banking in the New Decade* report by EY pinpoints Asia Pacific as the region with the biggest delta in profitability between outperforming banks and their peers (7.2% profitability gap versus 2.6% in North America). Let's examine some of the factors that contribute to this high differential.

Five years ago, market intelligence firm IDC predicted that by 2020 the top 250 Asia-Pacific banks would all be executing a digital strategy, but their latest report, *Fintech and Digital Banking 2025 Asia Pacific,* indicates that the reality is far from it. Covid-19 has highlighted the gulf between banks that are ready to serve customers via digital versus banks that are not.

Right now, leaders practicing customer-centric digital banking are reaping the biggest rewards. One such is Ping An Group, which started its customer-centred digital transformation in 2013. In 2018, 16.4% of group profit came from investments into tech startups; 40% of new customers came from mobile apps; and their net promoter score was 40%, a top quartile measure of customer satisfaction in banking. Their suite of mobile apps not only supports basic banking, it provides self-service for wealth management, insurance, foreign exchange, and trust management. E-learning resources are also available. When Covid-19 hit, Ping An was ready, and quickly launched a 'Do It At Home' campaign.

In two weeks, three million customers made 11.7 million transactions, and 475,000 customers watched online lectures on mutual funds, private equity investment, financial law, and taxation.

In contrast, a recent PwC study titled *Virtual Banking: Malaysian Customers Take Charge* found a whopping 45% of Malaysian banking customers suffer from bad user experiences and a lack of online functionality provided by their bank. These unhappy customers expect better digital experiences and are looking to virtual banks to remedy this. Incumbents, take heed – this is a clear shot across the bow.

Despite the recent forced shift to non-branch channels, evidence from the same IDC study suggests that only 30% of Asia-Pacific customers are actively using digital banking. A recent study by analytics firm Research and Markets, lists Maybank, CIMB, and HSBC as the banks with the least digitally active customers amongst its peers. What is driving this poor customer adoption rate? Customers are fed up of time-consuming, repetitive, and frankly, boring processes; 70% of Asia-Pacific banking customers view banking as a tedious experience. They expect slick and engaging experiences across all channels. Without this, engagement and adoption suffer, followed by loss of advocacy, and ultimately, loss of the customer.

It's telling that only 20% of Asia-Pacific banks believe that they truly understand their customers, according to the PwC study. This is arguably the root cause of these woes. A frightening 38% of traditional bank revenue will be at risk by 2025 because of new competition and digital disruption. How do banks not only catch up, but accelerate out of the Covid-19 crisis?

Successful banks will be those that adopt a socially responsible, customer-centric operating model. Here are three relevant opportunity areas, which I've come to nickname digital banking's Principle of Three and its corresponding rules for great customer-centric execution.

PRINCIPLE OF THREE

+ Take advantage of digital acceleration

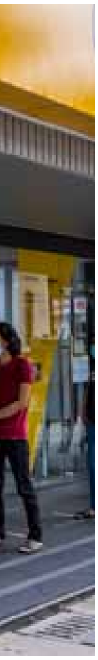
In the last few months, banks have worked faster than they would have ever thought possible. McKinsey estimates that Covid-19 has accelerated the shift to digital by two years. Given the uncertain economic climate,

EY estimates an additional US$800 billion (RM3.4 trillion) in revenue could be generated through **SERVING UNBANKED AND UNDERBANKED INDIVIDUALS AND MICRO-, SMALL- AND MEDIUM-SIZED ENTERPRISES ACROSS ASIA PACIFIC.** Banks need to continue improving their digital capabilities to reach and serve customers as effectively and efficiently as possible.

spending will be under scrutiny. But there are big potential returns, and uncertainty should not delay transformation. EY estimates an additional US$800 billion (RM3.4 trillion) in revenue could be generated through serving unbanked and underbanked individuals and micro-, small- and medium-sized enterprises across Asia Pacific. Banks need to continue improving their digital capabilities to reach and serve customers as effectively and efficiently as possible.

Three principles to give customers the most value right now:

+ **Identify and address customer pain points.** Reduce the number of clicks, taps, or inputs needed to accomplish each task. Shorten processes drastically. Send 'push' updates to reduce uncertainty and improve error messaging on forms to increase efficiency. Apply best practice usability principles and user-centred design to guide you here.
+ **Focus on journeys that are highest priority for customers.** Right now, these could include loan applications, debt management, financial health checks, and payment holiday applications. Cut cost-to-serve by optimising routine tasks that drive high call centre demand, such as password resets or credit increase requests.
+ **Help non-digital natives to transition.** Many elderly customers are turning to online channels for the first time and not out of choice. Remove the hurdles for them, like the Commonwealth Bank of Australia, which made 250,000



proactive calls to customers who were infrequent users of digital channels. Every digital product must be intuitive and effortless to learn. This reduces training cost and cost-to-serve.

+ Build customer trust and loyalty

According to the EY Future Consumer Index, over 50% of consumers believe their future purchase decisions depend on whether a bank actively supports the community, is transparent in all they do, and is doing good for society.

Citing responsible banking, National Australia Bank has allowed business customers to defer repayments, reduced loan rates, and given access to loans worth billions of dollars in response to the crisis. Personal customers are able to pause mortgage repayments, reduce loan repayments, and access reduced loan rates and funds previously locked in mortgage accounts. By showing that they actively care for and support customers and communities, banks can build customer trust and loyalty for the long term, leading to increased customer advocacy, and share of wallet.

Three principles to build customer trust and loyalty right now:

+ **Show empathy and care.** Many customers are stressed, anxious, vulnerable, and suffering mental or physical health issues due to Covid-19. Now is the time to strengthen your relationship with each individual customer. Fail them now, and you lose them forever; support them, and you keep that customer for life.
+ **Show purpose.** Work closely with your customer communities to identify shared values you can commit to. Wear these values on your sleeve, live up to them, and defend them. Fulfil all promises you make to customers. If you don't, they will remember.
+ **Do the right thing.** In these extraordinary times, this means being lenient and avoiding punitive action. Go the extra mile to preserve what's important to your customer, whether it's a business deal, home, or clean credit rating.

+ Redefine your service offering

Many banks have creatively redefined what banking does, to provide what customers really need in crisis. South Korea's KB Financial Group is providing masks and food supplies to local communities. HSBC is waiving all remittance fees for donations and medical purchases, and partnering with healthcare providers to offer virtual consultation services to ease pressure on hospitals. DBS has launched online medical consultations, online lesson videos for kids, and contact tracing. These boundary smashing initiatives are investments for long-term success.

Three principles to effectively redefine your service offering right now:

+ **Listen to customers.** True customer understanding is a strategic and competitive necessity for banks seeking to innovate on new propositions and extend their service portfolios. Winning banks will have a deep and holistic understanding of their customers' needs.
+ **Meet customers' changing needs.** Stop delivering services your customers do not want, and prioritise those that they are shouting for. To be a true leader, identify customers' latent or undiscovered needs, and start delivering on those before you are even asked.
+ **Tap into the zeitgeist.** Be the first to spot changing patterns in customer behaviour or lifestyle. To be successful, any new service must provide a compelling customer benefit at the right time. For example, customers are now thinking about health more than ever before. What will your bank's role be in the emerging 'health economy', where every business is a health business?

The pandemic has highlighted significant opportunity areas. Banks that can align to customer-centric, socially responsible banking are well placed to make the most of these opportunities, distance themselves from the competition, and emerge triumphant, regardless of crisis. ✱

■ *Dr Amanda Salter is Associate Director at Akasaa Agile CX. She has delivered award-winning global CX strategies and is currently working with the UK Office for National Statistics on its digital transformation. Her recent guest lecture at Cambridge University shared insights from architecting impactful digital customer experiences. Dr Salter holds a PhD in Human Centred Web Design, BSc (Hons) Computing Science, First Class, and is a certified member of the UK's Market Research Society and Association for Qualitative Research.*

DEMYSTIFYING THE CLOUD

Banks' slow embrace of this innovation must change. Here's how.

Cloud computing has been heralded as one of the game-changing technologies for business.

The Bank of England's (BoE) *Future of Finance* report in June 2019, citing data from McKinsey & Co, indicates that adoption of cloud technology could cut bank costs by 30% to 50% and "firms should be able to benefit from the agility, cyber security and platform for innovation that this technology offers".

Companies that have switched to the cloud are reaping the benefits – higher productivity, lower cost, improved time-to-market, and enhanced security. But financial institutions have been slow on the uptake.

CLOUD WHAT?

The 'cloud' is a metaphor for the Internet. Cloud computing is the outsourced, on-demand delivery of IT resources – servers, storage, databases, networking, software, analytics, and intelligence – over the Internet and clients are billed on a pay-as-you-go basis.

For non-techies, the term 'cloud computing' is a bit of a misnomer. Far from being an intangible space where data is hosted, operating a cloud infrastructure requires high-powered servers with risks similar to those of any other IT infrastructure. What is different is where the servers are located (on site vs. off premise), its architecture and how cloud servers communicate.

There are three types of cloud:

+ **PUBLIC CLOUD:** Infrastructure that is available for use over the Internet; it exists on the premises of the cloud provider. Organisations as well as individuals can procure public cloud services from third-party providers without having to invest in the hardware or management and maintenance of the system. With a public cloud infrastructure in place, applications can also be deployed and scaled much faster. As long as there is Internet connectivity, every employee can access the same application anywhere in the world using their device.

+ **PRIVATE CLOUD:** Designed for a single organisation or specific community, the infrastructure may exist on or off premises. Other interchangeable terms are 'internal cloud' or 'corporate cloud'. Through the use of firewalls and internal hosting, a higher level of security and privacy can be achieved, ensuring data and ongoing operations are secure and not accessible by third parties, including the vendor. It is similar to managing a traditional data centre in terms of headcount, management, accountability, and maintenance schedule.

+ **HYBRID CLOUD:** A combination of private and public cloud infrastructure, which allows data and applications to be shared and segregated. The public cloud stores basic data and applications whilst the private cloud retains security over sensitive data and mission-critical applications. Its main advantage is 'cloud bursting', i.e. a configuration to cope with spikes in private cloud processing demands, such as during Covid-19 when remote work access became an overnight necessity for many. When the demand for private cloud applications exceed 100% of its capacity, the overflow traffic is directed or 'bursts' into the public cloud to ensure uninterrupted services. Once peak demand subsides, traffic flow reverts to the original configuration.

Gaining popularity is the multicloud, which is sometimes confused with hybrid cloud although the two are different. Multicloud is a strategy which involves subscribing to multiple public cloud services from more than one vendor and is deployed for a variety of reasons – as a risk mitigant in the event that demand may overwhelm a single provider; geographic requirements to deploy resources in several regions; to maintain resiliency, i.e. the ability of the system or data centre to recover quickly from a disruption (power outage, equipment failure, or security breach); or avoid vendor lock-ins.

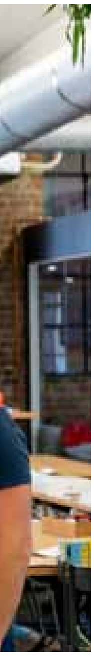
Service offerings on the cloud are classified as follows:

- **Infrastructure as a Service (IaaS):** The fundamental computing hardware – servers, networks, software – is delivered as a service over the Internet by a cloud service provider. The client does not manage or control the cloud infrastructure but does have control over operating systems, storage, and applications.
- **Platform as a Service (PaaS):** A platform such as an operating system and other services which is delivered over the Internet. Unlike IaaS, users can subscribe to immediately use applications but will have no control over cloud hardware.
- **Software as a Service (SaaS):** Provides the capability of running providers' applications on a cloud infrastructure. The applications are accessible from multiple devices (e.g. web browser, mobile phone) or a programme interface. Users do not manage or control any part of the infrastructure or application capabilities except for certain application configuration settings.
- **Function as a Service (FaaS):** A relatively new product, FaaS is the capability to deploy codes (i.e. functions) on a cloud infrastructure. Also known as 'serverless computing', developers install a code or function on the cloud platform, which will only be activated when there is a demand by the user. When there is no demand, the server process is idle. The automatic scaling lowers cost as clients are charged only for resources used, not idle time.

GAINING POPULARITY is the multicloud, which is sometimes confused with hybrid cloud although the two are different. Multicloud is a strategy which involves subscribing to multiple public cloud services from more than one vendor and is deployed for a variety of reasons.

NOT 'IF', BUT 'WHEN'

Like all businesses, banking is under significant pressure to introduce digital



capabilities. A cloud-based infrastructure is critical for enabling such digitalisation.

However, Accenture's *2018 Cloud Readiness* Report, a survey of 35 retail banks, indicates that many banks have not laid the foundation for a rapid and orderly transition to flexible cloud-based systems:

53% of respondents believe cloud-based technologies are having the biggest impact on improving the operational efficiency of their industry. Despite this, 63% do not have a cloud roadmap and key performance indicators to measure progress.

43% of banks say they do not have a cloud strategy or have only started to implement basic cloud practices.

Whilst 83% of respondents say that information technology (IT) has had "preliminary" or "thorough" discussions with business units about cloud strategy, two-thirds say that fewer than half of their lines of business are currently using cloud.

Although the leap is inevitable, the business case for banking is inherently more complex. The cost-benefit analysis includes trade-offs that are largely unique to financial institutions:

- **Integration with heritage systems:** The investment (cost, infrastructure, reskilling) to transition from legacy to cloud technology is significant for banks which have spent decades maintaining and upgrading IT infrastructure as well as acquiring staff with the requisite skill set.
- **Cost savings:** It's a misconception that moving to the cloud will translate into tangible savings in all cases. Depending on the cloud architecture (most incumbent banks operate on either a private or hybrid cloud; challenger banks have the advantage of being cloud native from onset), there may be little difference between the cost of operating a private cloud and maintaining private servers in a typical data centre. A recent *Forbes* article, *Banks' Inevitable Race To The Cloud,* quotes the CEO of a credit union: "It's a myth that it's cheaper. We've found that sometimes it's more expensive than what we can do for ourselves. But it makes you spend what you should have been spending all along. Do it because simplifying the environment makes it easier to scale."
- **Business continuity:** Customer expectations have evolved. Banks are no longer benchmarked against their peers but against tech giants such as Google, Amazon, and Facebook to provide near-instant, on-demand banking services with no scheduled downtime. Delivering the optimal customer experience is necessary for banks to remain relevant, even if the numbers don't always stack up in the near or medium term.
- **Regulatory compliance:** Financial firms insist that they lack clear regulatory guidelines as to which critical services might be outsourced to the cloud, reporting requirements and anticipated oversight from authorities. A survey by fintech Finastra reports 43% of UK firms cite complex regulatory requirements as a key barrier to adopting new technologies, including cloud.
- **Security:** There's been a discernible shift in security concerns. When cloud technology in finance was floated circa 2013, banks' foremost concern was about data security in the cloud. Cloud providers today have allayed fears with multiple resiliency measures, such as data spread across multiple geographies for disaster recovery and superior threat management capabilities. The BoE's own fieldwork suggests that the cloud could enhance cyber resiliency, especially in smaller financial firms which invest less in cyber defences. The more pressing security issue today, as Bill Glasby, Chief Technology Officer at Heritage Bank, succinctly puts is the "operators' ability to configure the tools. The problem is that it's all home-brew today."

Fortunately, for banks embarking on a cloud strategy or still in 'science project' mode, there are several independent guides as reference: The European Network and Information Security Agency's *Cloud Computing: Benefits Risks and Assessments for Information Security* manual remains a detailed, if slightly dated, guide for preliminaries; whilst the International Institute of Finance's three-part *Cloud Computing in the Financial Sector* series advantageously highlights multiple risk perspectives in banking environments.

Milestones and use cases of banks leveraging cloud computing

March 2019: UOB becomes the first organisation in Southeast Asia to adopt VMware Cloud on Amazon Web Services (AWS) for the bank's hybrid cloud infrastructure as a "fast and cost-effective way to migrate mission-critical applications, or even entire data centres, to the cloud". Jointly engineered to comply with UOB's security requirements, this allows the bank to deploy applications with robust disaster protection and optimised access.

December 2018: Bloomberg reports that UBS Group AG signed a deal worth hundreds of millions of Swiss francs to use Microsoft Azure Cloud Services to reduce costs while complying with strict Swiss privacy laws. The Swiss bank would begin to store data at Microsoft's secretly located, purpose-built facilities near Zurich and Geneva and scale back its own 25 data centres over the next four years.

A global financial services firm began using a PaaS private cloud five years ago. It evaluated public cloud providers in 2016 and currently has two wholesale trading apps on a public cloud.

A leading investment bank has been using a public cloud provider for regulatory reporting solutions. It is conducting pilots with two vendors for a cloud-based IaaS solution.

A major bank in North America currently is on a private cloud and getting its feet wet on public cloud, primarily using SaaS and IaaS. The bank expects to be multicloud in the next four years.

Source: Bloomberg, Channel Asia, Deloitte.

STEREOTYPES ARE EASY BUT EXPENSIVE

Financial market players must be vigilant of in-built prejudices, especially when it comes to technology. Losing out on an opportunity can be as costly as an unimpressive quarter.

Jessica Lam, Head of Strategy at WeLab, which operates one of the first virtual banks established in Hong Kong, shared her team's experience during a Refinitiv-hosted online forum.

"Prior to us applying for the virtual banking license, we sat down and thought about how we were going to assign this tech stack (the set of technologies an organisation uses to build a web or mobile applications)."

The team proceeded to scope out a multicloud deployment system and spoke to a couple of reputable consultants in the market. She said: "They came back and proposed that we should have a main server hosted on the cloud and the backup should be a physical server, as in hardware. My team fell off their chairs...then we [also] heard this from multiple vendors."

"Their rationale was not because of a capability issue, but they understood that [it] was what the regulator would be more comfortable with. That was their perception of the regulator."

Lam and team decided against it. In their opinion, it was not the way to build a bank for the 21st century. Instead, they put forth their initial idea to the regulator and clearly outlined the benefits of a cloud platform in their proposal. Today, WeLab deploys a multicloud infrastructure and tech stack.

"There is a lot of misconception about regulators," says Lam, "in terms of what they're receptive to. Simply because it hasn't been done before, doesn't mean that they're not willing to accept it. You just need to know how to talk to them in terms of showing them the pros and the cons and make them feel comfortable from a security standpoint."

A cautionary tale, perhaps, for banks to get out of their own way. ✱

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