

## 30 Voices on 2030

The new reality for financial services

**KPMG** Singapore kpmg.com/sg/voices-2030

# 30 Voices on 2030: The new reality for financial services

The financial services sector is undergoing unprecedented change. To explore the future ahead, KPMG asked 30 Voices to place themselves in 2030 and reflect back on the last eight years. The 30 Voices in this report are senior executives representing every facet of the financial services industry, from incumbents to challengers, big tech firms to investors, academics and more. Taken together, these Voices culminate in a valuable collection of insight and expertise. Their predictions span five areas in which KPMG envisages dramatic change.

Many of the views expressed in this report may be personal and not necessarily represent those of the Voices' organisations or that of KPMG.







### **Foreword**

#### **Antony Ruddenklau**

Head of Financial Services Advisory
KPMG in Singapore
Global Head of Innovation and Fintech
KPMG International



2030 – a year far enough away for it to be a hazy concept but also close enough for it to be a reality that we should work towards.

When we started 30 Voices on 2030 in 2018, we wanted to support more acuity within financial services. The findings of those initial thirty industry voices have been validated, with COVID-19 recently adding a short tailwind.

But we still have a collective mission to achieve

We need to leave our world in a much better place than when we found it.

This will be a place that directly connects the financial services industry with real economy outcomes: job growth; social mobility; sustainable communities; protection for all from risks, and a sound economic footing for future generations.

As we walk through this programme, learning from our 30 Voices, and reflecting on their visions, it has become very apparent that financial services will become a set of capabilities rather than an industry. These will be capabilities that can be provided to many and shared by all.

The future will be about proliferating these across all our industries - both verticals and the public sector - so that capital (balance sheet, risk, private market, and patient capital) and liquidity are available at the point of need. Essentially, the traditional financial services industry will need to become perimeterless.

We are seeing this happen as our large legacy institutions begin to externalise their products, functions and intellectual property.

We also see other industries developing their own financial services capabilities to serve their upstream or downstream ecosystems even better. Will financial services become 'As-A-Service?' Certainly, but just how and when this happens is still up for debate.

There is much talk about the disruptions to the traditional industry verticals of the financial services sector.

But we are not yet at the disruption stage.

Our 30 Voices see Environmental, Social and Governance (ESG) as the key driver that will change the shape of the industry, including its actors, services and economics. The sheer weight of this 'transition' will need to be an 'all-in', with collective responses across ecosystems, supply chains and public/private domains.

Data will shift the power across our ecosystems.

Twinned with ESG, data will drive the proliferation of business and economic models, hollow out operating models and shift the power dynamics across participants in ways we have not seen before.

I hope you enjoy reading the insights from our 30 Voices; do share these wide and far. There is a huge opportunity for those with acuity and vision for the future.

We are the movement for change. Make your voices heard.





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The industry shifts from being suppliers of products to market makers to address climate risk and social impact, and redefine consumption behaviour.



The sharing economy comes to financial services with a proliferation of new market infrastructure, utilities, partnerships and entities.



Financial inclusion is realised as social impact, embedded finance and digital currencies converge.



The power shift: Democratised data moves power around the financial system



Ecosystems trump individual organisations for competitive strength.



Open data allows all industries to equally partake in financial services provision at point of need, removing legacy financial services industry competitive moats.



Through regulation, customers regain ownership over the use of their data, with new commercial models for access and consent.



### A changed landscape:

Business models proliferate and adapt



Business models are datadriven as AI enables granular decision making and personalised services at scale.



Legacy institutions employ multiple business models concurrently to maintain margins.



Decentralised models have entered service in the fields of digital identity, payments and trading.



### The data economy:

Data changes the economics of financial services



Transforming data becomes 'the product' and drives intellectual property management into the mainstream.



Partnerships and open data promote economies of scale over in-house services.



Corporate functions and financial market infrastructure transform their cost bases in response to industry-wide digitisation.



### Talent opportunity:

Talent becomes open too, with ecosystem-based experience a competitive differentiator



Systems and design thinkers are the minimum benchmark for capability for all talent.



Talent strategies embrace access to skills across ecosystems – partnerships are formed to access and share skills.



Retention and the war for talent has intensified – diversified work experiences create a virtuous cycle for talent and organisations.







## ESG: The great behavioural driver of system change



The industry shifts from being suppliers of products to market makers to address climate risk and social impact, and redefine consumption behaviour.



The sharing economy comes to financial services with a proliferation of new market infrastructure, utilities, partnerships and entities.



Financial inclusion is realised as social impact, embedded finance and digital currencies converge.

In 2030, the financial services sector is now accountable for its progress in helping the real economy meet ESG targets.

To meet 2030 obligations, financial institutions have learned how to create market demand for ESG in their manufacturing and distribution arms. They have opened their businesses front-to-back and partnered with the likes of data companies, NGOs and fintechs to accelerate their influence on our economies, communities, and individuals. The regulators have incubated cross-industry workings to bring the markets and real economy sectors together.

The ability to measure climate impact is big business in 2030, and specialised climate data collation market infrastructure will spur partnerships and collaborations across the industry. Legacy financial institutions also measure the social impact – including economic and employment development of their capital, money services, asset, and risk management. Non-life commercial insurers can assess their climate risks real-time as they underwrite and ESG will play a core part in all underwriting.

Measuring and quantifying ESG targets have accelerated digital transformation as a social necessity, enabling firms to develop new content-supported services and build out their customer experiences. Firms can measure their ESG impacts real-time from a variety of data sources – both internal and external metrics versus their targets. Many have reached net-zero and have embedded monitoring processes to ensure they remain there.

Alongside the progress on climate, strides have been made to boost financial inclusion and literacy. Businesses now bank the unbanked and insurers now insure the uninsured, with industries working in various roles and operating models to allow access and enable communities to participate. Digital currencies have begun to support more effective ways for low-cost and interoperable financial services to thrive across all industry sectors. Much of the economic cost of transition is now known in 2030. Public-private partnerships, new financial market infrastructure and new multilateral funding mechanisms are in place to fuel system-wide change across the Asian markets.





### The power shift:

## Democratised data moves power around the financial system



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Through regulation, customers regain ownership over the use of their data, with new commercial models for access and consent.

Holding the key to their data, the customer is in the middle of the ecosystem, and businesses look outwards to find ways to boost customer engagement and harness that data. Accessing the data pool for product development and marketing is the top priority for all sectors.

In 2030, the power shifts back to the customer as they increasingly regain the rights and ownership of how their data is used. The regulator plays a role in enforcing the notion that data should be used transparently and responsibly, but encourages efforts made by financial services providers to provide a more personalised consumer experience.

Driven by ESG and digitisation, the rise of the Internet of Things (IoT) has increased the data pool significantly and our digital twin has become a reality. This helps financial services reconcile and predict financial needs based on lifestyle activity and business processes. Due to this, the customer expects a hyperpersonalised experience in 2030 where services are provided in the context of their preferences, goals, and predicted needs.

Although customers have more control over how their data is used, they want to continue sharing their data in return for convenience. Leveraging insights into customers' behaviour has lowered the point of entry to new financial services and products across sectors and boosted financial inclusion. Insurance underwriting is done before meeting the customer, and not after.

To increase market reach, partnerships have emerged where companies access the consumer via another, becoming an invisible partner. These collaborations aim to provide a holistic approach to a consumer experience that cannot be achieved in silos. Open Data has necessitated that companies across sectors give away their traditional competitive moats to remain viable.

Banks are increasingly held accountable on reporting ESG outcomes and need to partner much more with their customers to attract this data. The dynamics of the bank-customer relationship will become more symmetrical to drive these outcomes.

Financial services regulators have continued to open up the availability of data and services through policy, support of innovation, publishing of APIs and joint agreements with non-financial services regulators. Real-time reporting and disclosure, within agreed limits, have brought new transparency to lending processes, ushering in a new age of digital lending across all asset classes.





### A changed landscape: Business models proliferate and adapt



Business models are data-driven as AI enables granular decision making and personalised services at scale.



Legacy institutions employ multiple business models concurrently to maintain margins.



Decentralised models have entered service in the fields of digital identity, payments and trading.

Major established players have expanded horizontally and have more permeable boundaries, with data, services and functions moving freely between businesses. Open business models such as marketplaces, exchanges, multi-sided platforms and embedded finance exist within legacy institutions alongside traditional businesses. Software and data businesses are now commonplace, exchanged between legacy and challenger businesses. Software-, Data-, Platform- and Infrastructure-as-a-Service models target every aspect of financial services.

By 2030, consumer expectations of digital solutions have increased, and there are more lifestyle and one-stop-shop solutions. This shift in the landscape has forced financial services players to embed their services within real economy sectors and vice versa. With sectors blurring, ecosystems involving alliances, partnerships, and APIs proliferate as companies think of new ways to tap into the supply chain.

The customer has largely become time-poor with too many digital services on offer.

Convenience and personalisation are the top priorities in 2030. Organisations leverage artificial intelligence (AI) technology and data to provide simple aggregated interfaces with a wide range of services under one umbrella. The question is not about who owns the customer, but at which stage in the value

chain do companies play to commercialise their services. Both legacy and challenger organisations are comfortable playing multiple concurrent roles in the provision of services.

Adaptable technology is integral to this changing ecosystem, and cloud services have enabled organisations to change at speed at all levels of their technology stacks. Technical debt still exists but is being eroded by newer low-cost services.

There are robust cross-border frameworks for Central Bank Digital Assets (CBDA), allowing decentralised finance to thrive. Insurance becomes a portable product between providers. Nascent developer ecosystems have taken hold across all sectors, with traditional financial services, challengers and real economy sectors competing for market share in equal measure. The wholesale market is the first to scale the use case of CBDAs to any degree with payments, digital identity and supply chains.

Digital assets become the workhorse utility of interactions between digital financial services and real economy sectors. Cost, speed, provenance and trust drive the accelerated adoption of digital assets. Interoperability develops between the digital islands of blockchain, which accelerate the use of supply chain, wholesale payments and fixed income services provided by fintech firms to traditional businesses in the industry.





## The data economy: Data changes the economics of financial services



Transforming data becomes 'the product' and drives intellectual property management into the mainstream.



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Corporate functions and financial market infrastructure transform their cost bases in response to industry-wide digitisation.

Regulators have put policies around the access to and use of data ensuring customers of all types (retail, wholesale, capital markets, insurance and financial market infrastructure (FMI)) only permission to certain data for specific time-limited purposes. This changes the economics of digital services, giving power and source of revenue to the customer.

The race to collate data has intensified between the legacy financial institutions and the challengers. Access to lifestyle and business process data is considered the gold standard and shapes product development and strategy. Partnerships increase to capture access to data and resultant insights, and businesses now design for open API architecture. Alliances help providers get ahead of mono-line business models, which are beginning to become marginalised.

The efficient use of data has improved predictability within the industry. Mobile, combined with social and big data, and analytical insights, drive universal adoption of

platforms for front and middle office usage. Front-to-back corporate functions have also begun to significantly hollow out through data-led automation – AI, machine learning, and software engineering have replaced the large monolithic enterprise systems inherited from the 20th century.

Increasingly under pressure to renovate their technologies, enhance their data and analytics services and become cloud-native, FMI has begun to transform. Market infrastructure moves into adjacencies and higher value services to compensate for the loss of margin in their traditional rails. Capturing and transforming data becomes the cornerstone of the FMI playbook.

The result of engineering with contemporary, modular and configurable data platforms is a new paradigm for cost. Challengers reliant on scale economics and legacy vertically integrated firms meet in the middle, with cost income ratios halving.





### **Talent opportunity:**

## Talent becomes open too, with ecosystem based experience a competitive differentiator



Systems and design thinkers are the minimum benchmark for capability for all talent.



Talent strategies embrace access to skills across ecosystems – partnerships are formed to access and share skills.



Retention and the war for talent has intensified – diversified work experiences create a virtuous cycle for talent and organisations.

Employees are technically literate from top to bottom of the organisation in 2030, as well-designed transformational change will be business as usual.

Engineering, design and systems thinkers are a core capability for financial services providers as market systems from regulators and Central Banks to FMI and participants address the effects of digital currencies, ESG, data and digitisation, and open data.

The top skill that beats the most technically gifted candidate is a rich understanding of the financial services sector and how to commercialise change. As partnerships grow, the ability to find talent that can understand the complex architecture of business models has become necessary.

Talent has moved both ways – from the financial services to other firms investing in financial services, and from the challengers/ real economy or technology firms into financial services. Digital capabilities and domain knowledge are critical to developing the new economic models of the industries. Diversity remains a crucial element of this process, and the focus is on employing people from various business areas, genders and races to gain broad perspectives. Social metrics continue to be exposed, driving organisational accountability.

"Old school" financial services skills remain in hot demand. A good grasp and experience of traditional products, their behavioural economics and associated governance, risk and compliance, is sought by all organisations. Understanding the fundamentals of markets, financial stability and customer duty are critical skillsets as finance decentralises and rings unintended consequences if not properly designed.

With specialised skills in high demand, the talent war continues in 2030, but employee retention is the battle to win. Money is not the only bargaining tool on the table. Organisations offering training, flexibility, and secure and engaging career prospects remain in demand. Businesses continue to embrace remote working in 2030, creating a global and borderless talent pool.

At the leadership level, the talent with a good grasp of technology and data and its impact on a business or systems will be paramount. Talent specialising in data, digitalisation and innovation is sought for leadership roles to encourage change and bring a different perspective to traditional businesses in the industry.



## Actions for legacy organisations

Huge opportunities lie ahead for legacy organisations to shape the next frontier of financial services, and here are five actions to take now to get there.



**Define your new business models now |** Assess your competitive strengths and weaknesses, core competencies and forecast your likely revenue streams. Determine how you will be disrupted and use this playbook to set your strategy for business model innovation. It will take some time to change your business into a portfolio of complementary business models, and by starting now, you have time to learn and iterate new commercial models.



**Develop a commercial innovation capability |** Set your innovation capability up as a new profit and loss account with appropriate governance. Bring in a critical mass of new commercial, engineering and product talent who can collaborate with your incumbent talent to do things differently. Whilst any new innovation may start small, your vision for innovation must be at a material scale for your business.



**Invest in your chosen ecosystems** | Choose your fields of play from your strategy, invest in commercial and capability partnerships and design your competitive moats. Determine your role in these ecosystems and how they will support your economic, customer and competitive outcomes.



**Create an open talent strategy |** Think strategically about the ecosystem partnerships that will provide you with complementary skills to allow you to run concurrent business models. Address the shape and nature of your workforce and plan for big leaps in how you develop skills, capabilities and career paths.



**Embrace ESG** | Develop a medium-term strategy to do more than comply with emerging regulations and codes. Determine your business and operating model impacts, including opportunities and risks across ESG. Partner with other firms to de-risk and accelerate the execution of your plan. Double down on your investments into data and your partnerships to support manufacturing, distribution, and service innovation.



## Actions for challenger organisations

Challenger businesses continue to shake up financial services, but these five considerations will help them stay ahead of the game in 2030.



**Accelerate your scaling |** Invest in understanding your future end customers. Bring forward your product horizons and support concurrent market development of your product and business model.



Path to profitability | Your business is probably predicated on scale economics and high take-up rates. Assess how you target the traditionally deeper pools of profitability such as lending, capital markets and asset management. Consider how you can partner with or support the transformation of financial market infrastructure. Consider if you can diversify to add governance, risk and compliance as a part of your product roadmap as demand for this category of service is only set to increase.



**Regulatory engagement** | Determine how you can align your growth plans to the intent of future policy, whether within financial services or other adjacent regulatory fields of play. Develop and invest in a plan of regulatory engagement to understand how best to structure your services.



**Embed ESG in your product** | Legacy businesses, regulators and customers will be seeking firms that support the move towards outcomes that are meaningful to them. Become ESG native and consider repurposing existing products to meet ESG outcomes.



**Ensure your platform is open |** While it may sounding counter-intuitive, the more open your operating and business model is, the easier it will be to scale and build customer and asset growth quickly. Create competitive moats through ecosystems and not walled garden operating systems.





Alex heads SC Ventures at Standard Chartered, established in March 2018 to drive innovation in banking, fintech investments and ventures that explore new business models. He was previously the Global Head of Transaction Banking for Standard Chartered. Prior to that, Alex was at Deutsche Bank for 12 years, taking on roles such as Global Head of Lending and Corporate Banking Coverage. He was also at Credit Suisse for eight years.

Given the speed at which the financial services industry is evolving, there will be a need for flexible, nimble, and fast business models. The traditional vertical corporate structures of the past will be replaced with horizontal ecosystems as companies start to work together. As partnerships form, financial organisations will be forced to become more open in the way they work.

I've used the term partnerships, as opposed to mergers and acquisitions, because all organisations big or small will likely be on a level playing field. It might seem potentially confusing, with companies working together and yet competing at the same time. But ultimately, businesses will realise they will be a lot more powerful when they are plugged into each other.



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The traditional vertical corporate structures of the past will be replaced with horizontal ecosystems as companies start to work together.

By 2030, data ownership will be high on the agenda for many organisations. Financial institutions have a role to play in ensuring that they preserve data trust and not just the assets, money, and wealth of consumers. This is because we will see more consumers demanding that their data be used in a more targeted way that is more helpful to them. There will be challenges to achieving this but by 2030, new technological capabilities in Al will make the end-user experience more personalised.

The financial services sector has a great opportunity to put data to good use and do it in a way that is more transparent than before. Data flow will go both ways, where we acquire data from consumers, but also give them a lot of valuable insights on various things, like spending patterns. This two-way flow of data between data aggregators and data owners will mean businesses will be more productive and lucrative for everyone involved.

Furthermore, the consumer experience will look very different in 2030 and I predict virtual immersion will play a big part in that. For example, virtual reality (VR) headsets have already evolved in recent years. The VR experience is set to become more refined and comfortable by 2030. We're already seeing the metaverse being used extensively, more than we realise.

How do we see this woven into the financial services sector? The honest answer is that we don't really know yet. However, this gives us the chance to work closely with retail and corporate organisations to co-create new

spaces in the metaverse. This could include virtual car sales branches or luxury retail players using VR. The change will come not from us building the systems, but by the community building it for itself.

Financial services will become more embedded in everyone's lives, but I don't see the offline customer experience disappearing completely. The online and offline worlds will evolve to work together more seamlessly. More importantly, the challenge will be in making the front-end experience so easy that users of any age, educational background or level of digital savviness will be able to use these platforms.

To reach these goals by 2030, a shift in leadership approach will be needed, along with more time, space and open-mindedness. Businesses will have to balance efficiency against innovation. Ultimately, it's about providing a platform where people can experiment and co-create.

In addition, workforce diversity, through hiring people with different skills, mindsets, and backgrounds, will also play a big part in the evolution of the financial services space.

Those that are successful are the ones that embrace diversity, an element of creativity, technological know-how and the ability to operate in a hyper-regulated environment.

The DNA of our Ventures platform can also be applied at the organisational level, in the sense that we should be thinking outside the boundaries when considering the type of partnerships that will take us forward.







In the next eight years, we'll see a rise in financial inclusion, helped by the rapid growth in financial literacy. This will boost demand for financial services in all sections of society. More than 400 million of Southeast Asia's 650 million population are online, and 90 percent are mobile-first. Financial planning will see a boom, along with areas such as remittances, micro-financing, micro-insurance, and retirement investing. These digital solutions will provide access, which will be at the very centre of this critical space. Keeping pace with these changes - whether it is the metaverse, Web 3.0, or blockchain technology - will be paramount.

Convenience will be the main driver for people of all ages to move towards digital adoption. We've seen a dramatic change in consumer behaviour due to the pandemic, particularly in the health sector. Health-tech is growing exponentially and will continue to evolve in 2030. We already have AI technology that can deliver vital signs and diagnostics via mobile phones without people having to leave their homes. Other health information, such as blood pressure, oxygen saturation, breathing, stress levels and sleeping patterns can also be gleaned through phones. By 2030, the health tech capabilities will be even more advanced. This brings about opportunities for financial services providers looking to build a holistic picture of their consumers' health and well-being.

Helping people better understand how to prevent future health issues is intrinsically linked to their financial planning, wealth, well-being and quality of life. There are financial costs to maintaining one's health, well-being and lifestyle, with health being a more significant focus later in life. Having a holistic view of a customer will not only be expected by 2030, but will be a requirement for financial services in order to stay relevant in a future of hyper-personalisation.

People are already sharing many parts of their lives online, and I think by 2030, they will entrust more of their lives digitally within agreed boundaries. Financial services will bring health and well-being into its core, building on its trusted relationship with consumers to offer secure and verified data that can be stored, transformed and communicated in the right context.

Partnerships will help transform the health-tech sector, especially in the platform economy. Partners that are already purely digital and others who may have just started on their digital journey have evolved quickly over the last few years, particularly as private market capital has injected significant funding into health-tech. These companies will need to be clear about their partnership strategy, the ecosystems they want to build, and what new products and services they wish to include in their core businesses.

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In the next eight years, we'll see a rise in financial inclusion, helped by the rapid growth in financial literacy.

Likewise, financial services companies will become more open, and will design their services around complete lifestyle experiences and journeys. To be relevant in the health, well-being and lifestyle domains, multiple firms will need to partner up. For instance, insurance, asset management, wealth management and everyday banking will need to develop blended services, which can be served up by brands in any space and not just financial services. By 2030, a consolidation of customer experiences and journeys will be the name of the game. We can expect to see aggregated offerings in the finance space, which may include non-financial services brands.

For longer term propositions like health, wellbeing, wealth management, lifestyle and laterlife savings, the challenge will be attracting customers at a younger age and ensuring that they will use such a superapp. Those in 'Generation Z' will be well into their careers by 2030, so the question will be about how companies can activate this segment? Some options include smart bank accounts, digital concierges, affinity- or cause-related services, everyday insurance services and superapps. Creating this new service category will imply a significant reengineering of product pipes, infrastructure and economics.







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The majority of industries, both public and private, are now leveraging the insights provided by the Earth observation sector and have built operational resilience to the ever-increasing effects of climate change, the primary challenge of the 21st century.

In 2020, my business partners and I noticed that the majority of companies trying to help financial institutions address physical climate risk were only looking at 2050. They were trying to understand what the future would look like under various emissions scenarios. They were using models that scientists meant to be used for scenario planning and selling them wrongly as 'truths' about the future. At the time, everyone seemed to be hanging their shingle up and calling themselves a climate company selling data that could only be proven right or wrong 30 years down the road. This may be a great business model for climate data companies but not so great for financial institutions that were earnest about addressing their climate risk.

When we looked at the 2050 data and the wild uncertainty between methods and approaches, one undeniable truth came into view. Regardless of the model and scenario that was chosen, whether wildly optimistic about reducing carbon emissions or incredibly pessimistic about our ability to take meaningful climate action, climate volatility was already happening. It was already causing trillions of dollars in economic losses. And regardless of which model you looked at, it was only going to get worse. If our institutions needed to be resilient to losses today and tomorrow, what sense did it make to only focus on 2050?

This question brought us to a renewed belief in the need for introducing Earth observation data into our economic system. In 2020, satellites to monitor the Earth were launched in the hundreds every year and were only going to increase. Cloud computing to process these images and make meaningful insights was becoming increasingly cost effective. Connecting these insights to financial assets, monitoring them at global scales, and providing predictive analytics about what the impacts of extreme events were going to be on people, companies and governments seemed possible.

Doing this seemed like a piece of critical infrastructure for the world's financial system so that climate risks could be adequately priced into the economic system. We viewed this as critically important to the world's resilience to the volatility that was to come. If risks were priced into the economic system

then the resources and investments needed to build resilience would be taken seriously by companies and governments around the world. We could learn how to be flexibly adaptive to the increasing volatility of our planetary systems.

Over the past decade, we have worked with multiple organisations including financial institutions, central banks, and corporations to help them integrate data into their day-to-day operations. We successfully curated placebased Earth observations at the hyper-local, regional and global levels, and connected them to physical assets, political jurisdictions and supply chains. We worked with various partners to help the institutions we rely upon become more flexible and adaptive to climate volatility. Now, we have a near real-time and forecasted pulse of not only the climate risks and environmental impacts as they happen, but also their economic costs and social consequences. We've successfully transitioned our understanding of climate risk and environmental impacts from being lagging, post-event indicators, to being predictive, leading-indicators in near real-time.

In the past decade, we've seen the Earth observation sector flourish with thousands of new satellites with a multitude of different sensors and instruments, giving us the ability to monitor planetary change like never before. The majority of industries, both public and private, are now leveraging the insights provided by the Earth observation sector and have built operational resilience to the everincreasing effects of climate change, the primary challenge of the 21st century.

The next decade will see another technology leap in terms of the ability to monitor at increasing frequencies and resolution at lower and lower costs. This will enable the democratisation of these capabilities so that the entire planet will have access to real-time insights into planetary change in order to understand the impacts for each individual, institution and government. This is the only way to build a resilient global society: we need to have every citizen and every organization, public and private, understand the pulse of planetary change so they can adjust behaviours and become resilient in their own right.





As Regional Business Lead of Microsoft's Worldwide Financial Services for Asia, Connie is responsible for driving thought leadership and high-level engagements with key stakeholders in the financial services industry across the Asia Pacific. She is also part of Microsoft's Worldwide Financial Services group where she provides strategic direction and leadership across all aspects of the financial services sector.

Connie was named among the "25 Women Leaders in Hong Kong Fintech" by InvestHK in Oct 2018, and is a veteran in the financial services sector with more than 20 years of experience across banking, finance as well technology.

Every company is becoming a tech company and it is very true for the financial services industry. Fintechs, startup innovations, consumer habits and expectations can create both challenges and opportunities in driving massive transformation.

In Asia, the tech-savvy, mobile-first population is only accelerating this trend. With its energetic mix of optimism, technology, entrepreneurship, and open regulatory environments, the region is well-poised to drive inclusive economic growth, with a more inclusive and resilient financial services ecosystem.

Certainly, technology will continue to transform the industry, as financial services institutions (FSIs) – both well-established enterprises as well as new business ventures – will capitalise on data-driven business models and offerings. Traditional banks are relooking their business models to ensure greater resilience and efficiency. We are already seeing FSIs across the region, in pursuit of competitiveness and digital transformation, turning to data as the underlying driver of insights. They have also accelerated the adoption of data analytics and Al tools to ensure new levels of customer experiences.



We have recently announced a strategic partnership with Westpac. Microsoft's integrated clouds are helping Westpac achieve strategic transformational goals, allowing the bank to respond rapidly to customer, employee and market needs. Westpac is also leveraging Azure AI, machine learning and the ecosystem of services available on Azure to bring its application, data and artificial intelligence capabilities together in a more cohesive manner that can be scaled across the whole organisation, proving compelling customer insights. This only validates that data analytics and Al technology will be instrumental in redefining the industry as we approach 2030.

As much as technology is instrumental, it needs to land in the right environment, with the right people, skills and mindsets. For the legacy banks, the challenge, and opportunity at the same time, will be to change their mindset and embrace strong leadership and a vision. We will see non-financial talent taking on the positions of Chief Innovation Officers, Chief Digital Officers, Chief Data Officers, and so on to lead the way to Finance 2030.

The consumer will also dictate the path ahead, and products will become even more customer focused by 2030. That said, financial services organisations must keep thinking ahead of the game and be the creators. It is especially important in our region where many adults still are either unbanked or underbanked, with the Philippines and Vietnam being in the worldwide top five. This creates enormous opportunities for FSIs and fintechs to close this gap and improve financial inclusion.

The data economy will emerge, where various ecosystems and cross-industry collaborations are created in the market, whether B2B or B2B2C. I believe public and private sector collaboration will also increase, helped by the support of governments and regulators. This will give rise to further industry innovation and help streamline processes. By 2030, the significant benefit for the financial industry will be progress made in building digital identities; as company registries become digitalised and available; this will help facilitate know-your-customer (KYC) processes and financial inclusion.

With customers demanding more access to financial services, we'll see a simplification of paperless transaction processing. With the data privacy, governance, and controls in place, an end-to-end digital experience across providers will become a reality in 2030.

Over the last eight years, we have already seen many guidelines modernised, and by 2030, we will continue to see policies become more principle-based. Regulations will be more open, supporting cloud-based computing and innovations as well as cross-collaboration business models. This will provide more clarity to customers. Regulations will no longer be an obstacle to innovation and technology adoption and we'll see better fintech, regtech, insurtech and digital banking frameworks in the market.

With that, data privacy will become a key area of attention. At Microsoft, data privacy is paramount and infused into our products and solutions by design. Customers across the industry trust us with their data strategies and operations not just for data storage, but also for data processing, data analytics, and insights. I also believe that in 2030, we will see more transparency on data usage and more utilities around data exchange on the cloud. Data will be a source of value, and data insights will become a new business model.

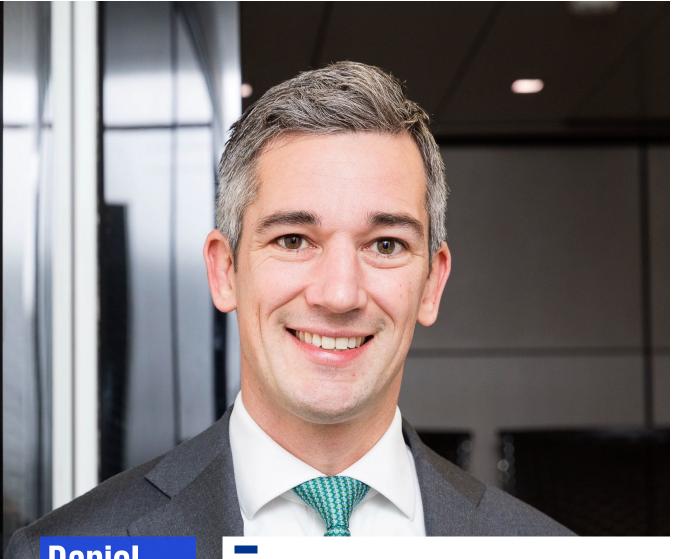
The pace of change will continue to speed up over the next few years. Learning fast and failing fast will be a new culture. Implementing new projects no longer takes years; it's now just months or weeks. The mindset is that if it's not good enough, it will evolve and become better.

More than ever, Asia is a hotbed of potential – growing from the world's factory to the world's new innovation engine and a driver of global disruption. Being risk-averse is no longer the right strategy. Disrupting the status quo and trying new business models is the new direction to ultimately drive growth and societal progress.

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**Technology** will of course continue to transform the industry. We already see FSIs across the region, in pursuit of competitiveness and digital transformation, turning to data as the underlying driver of insights and accelerate adoption of data analytics and Al tools to ensure new levels of customer experiences.





Daniel Klier

Chief Executive
Officer
ESG Book

Daniel is the CEO of ESG Book, a leading ESG data and technology company. Prior to this, he was Global Head of Sustainable Finance for HSBC, where he developed the global climate strategy for the bank and led the development of the sustainable finance business across the corporate bank, retail bank and asset management business.

He chaired the Bank of England Climate Risk Working Group and the Sustainable Finance Working Group at the Institute of International Finance. He is also a member of the Board of Sustainable Energy for All.

Daniel joined HSBC in 2013 as Group Head of Strategy in London, following nine years at McKinsey & Company where he was a Partner. In 2016, Daniel was selected as Young Global Leader at the World Economic Forum.



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In 2030, ESG data will be transparent and accessible for all. This could simply involve going into a system to look at a company's sustainability performance at every minute of the day.

Every year has been a record year for emissions. COVID-19 has led to a dramatic halt of the global economy, but emissions were reduced by only circa. 6 percent in 2021. It is clear that even locking down the entire world was not enough to change the world's emissions profile fundamentally without significant change to its economic profile. Sectors and industries will need to transform, which will require billions and trillions of investments.

By 2030, companies will accept that non-financial considerations, especially sustainability considerations, are part and parcel of any investment decision. Companies will no longer discuss whether they can deliver impact or financial returns, as they will realise that the two go hand in hand. Sustainability will no longer be an afterthought in 2030.

Data and transparency are critical to this transition. We have vast amounts of data we can measure at our fingertips. We no longer must wait for companies to deliver data that is out of date. For instance, if you want to know the gross domestic product (GDP) of a country, there will not be a need to wait for government GDP growth rate data to be published. The data can be collected through looking at the number of containers in the country's port or looking at the lights at night in the cities. This will give a day-by-day. minute-by-minute assessment of the country's growth rate in the same way. That does not mean a company's reporting has no value, but it will be vital to combine these two worlds.

In 2030, ESG data will be transparent and accessible for all. This could simply involve going into a system to look at a company's sustainability performance at every minute of the day. This is very different from how most data providers think today, with outdated and expensive data sitting behind steep paywalls a norm. ESG data will be super transparent because more people will care about seeing it.

ESG data could also be commercialised in a way where it will be mostly free, but those who want greater access will have to pay more. For example, an investor who wants to enjoy access to tens of thousands of company profiles to build new investment solutions and have a consistent data set will have to pay a fee. There will be commercial demand from companies who are looking to benchmark themselves and manage their ESG profile. Ultimately, however, there will be a need for a neutral source of data which can provide the maximum amount of information for people to form an opinion and reduce the risk of losing trust.

ESG standards will be a priority in all parts of the world, including developing markets, because supply chains will be scrutinised. Improving the ESG performance of a company will necessarily entail investigating the supply chains. These supply chains usually sit in emerging, developing markets. Therefore, I think companies in less developed markets will have no choice but to improve standards.

The challenge for companies will be in allocating the time, space, and innovation to make the necessary transformations. For many companies, the status quo always looks better than change. Managing horizons and having the willingness to think beyond the next quarter, or even the following annual results, are the biggest challenges for every executive team.

However, this can be done. Already, we are seeing it happen in the automotive sector, with electric vehicles as well as in oil and gas companies investing in alternative energy supplies. We have yet to see anything like this in the financial services sector. Hence, if financial services are only optimised quarter by quarter, then eight years from now, many businesses will have not have any relevance.





David is an external advisor to Singapore's Corrupt Investigation Practices Bureau in the capacity of Senior Advisor (Artificial Intelligence) and to Singapore's Central Provident Fund Board in the capacity of Senior Advisor (Data Science).

Prior to this, David was Monetary Authority of Singapore's (MAS) first appointed Chief Data Officer and Head of Data Analytics Group, reporting to the Deputy Managing Director for Financial Supervision. He was subsequently Special Advisor (Artificial Intelligence) reporting to the Deputy Managing Director for Markets and Development. In these roles, he led the development of the AI strategy both for MAS and Singapore's financial sector as well as drove efforts in promoting open cross-border data flows.

Finance is going through a revolution which will see digital banks becoming a life enabler and more embedded in our everyday lives. This goes beyond just being able to access financial services via our phones but also through other electrical products that we may use daily, such as a smart fridge. For example, imagine that the screen of the smart fridge in your home has an in-built bank that will be able to issue a buy-now, pay-later loan to help you with cash management.

In particular, with digital banks, we will see more focused services from financial players by 2030, with some of them even targeting specific social groups. Currently, there are banks who market to the gaming community, which is a great way to tap the group of underbanked millennials. In 2030, we will certainly see more tailored banking experiences built around lifestyle and preferences.

The commoditisation of customer engagement is integral to the transformation of financial services in 2030. There will be increased access on every device, from mobile phones to computers and cars. Previously, the touchpoint for finance was through physically walking into a bank branch. By 2030, there will be touchpoints everywhere. We are ultimately seeing a power shift from the provider to the consumer. The customer is becoming more concerned about the types of product they want, which can be provided to them at their convenience and on the terms most suited to their circumstances.

We will also see consumers having more control of their data. At the moment, consumers still have a certain degree of control over how much data they share with social media platforms, search engines and retailers. There is even an opportunity, in some cases, for the consumer to earn a dividend from sharing their data. However, by permitting these platforms to use this data in the current set-up, consumers have ultimately lost control of it. Currently, there is more concern over data consent from the companies' perspective, but this will change by 2030.

In the future, the approach will be centered on the consumer and how they can access data while maintaining their control of it. With finance in 2030, we will live in a world where money is data, and data is money. Essentially, it will be a bank account of data, of which the consumer holds the keys in providing access. This is already happening, but the demand for more control over data and the ability to manage it will become a more common theme in eight years.

Data can unlock a new way of working for financial services and their lending capabilities. Banks will have the ability to offer loans built on a lifestyle and not a credit score. It will be more accurate because decisions can be made on additional information about the company, involvement locations and its work in other non-financial areas. This allows banks to estimate the company's risk profile accurately but in an unconventional way, using alternative data. This results in a different lending capability which further promotes financial inclusion. I envisage that there will be a lot more of this, and with Al crunching the data, it can be scaled to assess not just 400 people but 4 million, for example.

Regulation will play a big part in how the financial services industry evolves. We will need to move away from prescriptive regulation to a more principle-based rule to innovate. There will be some risks to this, but in specific areas such as AI, this is how we need to approach it. If businesses are going to keep up with the transformation that we see in the financial sector, then calculated risk is something that leaders will have to accept. The worst thing a company can do right now is not to start implementing digital change. You don't have to start making changes across the entire enterprise, but if you don't start now, you would have missed the boat entirely by 2030.

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With finance in 2030, we will live in a world where money is data, and data is money.







Like so many sectors, banking is at a crossroads. In particular, there will be a focus on how companies manage the in-person element that is so fundamental to relationship banking, amid changing customer behaviour and expectations for digital banking propositions. There are both threats and opportunities here, but the overarching trend here will be one of collaboration and partnership. We can expect banks, tech companies and non-financial institutions to partner up to create network effects and virtuous circles that ultimately benefit customers. This could result in deflationary opportunities that may reduce prices and remove friction for participants in the system.

Several mega-trends are occurring across the banking landscape, particularly in Southeast Asia. One is that banking will become more ubiquitous. Up until now, banking has generally been a monolithic activity. Between now and 2030, customers and companies will see banking as less of a distinct activity; it will become invisible and embedded in the underlying interaction. Whether it is a B2B payment, supply chain optimisation, or even simple things like buying groceries online, this trend will be well-established by 2030 and a dominant distribution model for all banks.

Banks will have to form partnerships to create symbiotic relationships that build value and create network effects, both for their customers and suppliers. In a digital economy, a bank can play the role of a curator of platform interactions. If successful, this could open up vast amounts of value for the financial services sector. When we start to think about embedded finance, banking as a service, API-first products and developer portals, they all represent distribution advantages that banks have not yet unlocked

at scale. These business model innovations allow us to participate seamlessly in the digital economy and even become part of the customer's digital strategy. Platform businesses create value using resources they don't always own or control. Hence, with this, banks will be able to grow much faster than traditional, capital-intensive business models. This will only accelerate as more digitally native companies come through.

By 2030, customer expectation for banking services will be real-time and instantaneous. It would be unfair at this stage to dismiss the opportunities presented to banks by emerging areas such as the metaverse. Certainly, will be very interesting to see how customer and purchasing behaviours change as we start to move between different realities. Banks are beginning to think about how their customers would experience that interaction model.

We have to look at 2030 as just around the corner because the pace of change stimulated by technology. Customer behavioural change is happening so fast now that the planning cycle is not like what it used to traditionally be. Financial services will be more agile, which means being empathetic while adjusting to changing risks, macro-environmental changes and customer preferences with speed.

COVID-19 has been an excellent example of the agility and nimbleness of the largest financial institutions working through unprecedented times to ensure a safe and sound financial services sector. We have to take those learnings and apply them on a horizon now that is undefined. Financial services will go through a massive transformation that I believe will create additional value for the societies we serve.

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We can expect banks, tech companies and non-financial institutions to partner up to create network effects and virtuous circles that ultimately benefit customers. This could result in deflationary opportunities that may reduce prices and remove friction for participants in the system.



### Diana Britt

GM Cloud Partnerships APJ **Databricks** 

Diana is a technology sales and partner leader with more than 20 years of experience. She is currently the GM Cloud Partnerships APJ at Databricks. She has a passion for building teams, creating markets and driving thought leadership. Her experience spans across industries, including FSI, manufacturing, agriculture, retail and consumer. Prior to Databricks, she was a key leader contributing to the growth of Google Cloud. She also drove enterprise adoption of customer relationship management for Salesforce and led transformational enterprise resource planning implementations at Oracle.





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By 2030, paperless KYC onboarding will be fully implemented in many financial service operators, which will help banks meet other areas of ESG, like boosting financial inclusion.

As we head towards 2030, the main commodity for most businesses in the region would be data. There are 17,000 fintechs globally, with the majority growing and thriving in Southeast Asia. The population in the Asia Pacific is mobile-first, which has become intuitive for many regardless of age. Therefore, we see Asia adopting new technology faster than the European market. The challenge will be for organisations to make their data work hard while remaining relevant in an evolving ecosystem. Whether that is through hyper-personalisation, instant loans, mortgages or other products, using data for predictive modelling will keep businesses ahead in the game.

Organisations will have new opportunities to integrate with third-party applications or take on additional datasets as their predictive modelling. We are also going to see a democratisation of data. Data will not be just within the power of information technology, but we can expect to see citizen data scientists with everyone in an organisation responsible for predictive analytics and understanding the business using data.

However, as data volume and complexity increase, end-users will become even more concerned about privacy. This will push companies towards decentralisation of finance which requires financial institutions to be much more data-savvy in 2030. We will see new data management paradigms, control, and usage in 2030. Through Web 3.0 and decentralised finance, there is a growing push for people to own their data instead of it being held and centrally controlled by institutions.

Regulators will play a role in how data is used in the financial services sector. As the use of technology increases in the industry, there will be more guidelines and scrutiny to ensure that data is being used ethically. For example, if an

organisation wants to issue a loan, it will be important to explore whether the types of information they use and analyse to package the product is appropriate and ethical. Automachine learning will be an excellent tool because it provides that glass box capability and audit trail to ensure the company is compliant and ethical. Regulatory bodies and governments will also require transparency in Al algorithm models, which will see more cross-sharing of such data by 2030.

By 2030, there will be more regulation around ESG targets too. Sustainable finance will be a priority and ESG will no longer just be a buzzword. Businesses will be held accountable by regulators and customers. The shift we are seeing today is that businesses are looking at ways to meet ESG targets at every level of their business model. For example, facial recognition technology has helped banks onboard their customers digitally, which reduces paper usage. By 2030, many financial service operators will fully implement paperless KYC onboarding, which will help banks meet other areas of ESG, such as boosting financial inclusion. In the early 2020s, nearly 2 billion adults were unbanked, mainly due to a lack of credit history and complicated KYC and onboarding processes. Learning the behaviour of "banked" customers and applying it to the "unbanked" dramatically reduces these onboarding obstacles.

To keep ahead of the game by 2030, organisations will have to consider two key actions. The first is that data and AI will need to be ubiquitous among the C-suite, and the board of directors will require an understanding of how insights can be derived from their data. The second is ensuring that the IT organisation within a business has a solid voice to help drive and steer the organisation.





Eddie has 25 years of financial markets executive experience across multiple asset classes, ranging from fixed income and currencies to commodities and carbon trading. He was formerly the Global Head of Fixed Income, Currencies and Commodities at both ANZ Bank and Dresdner Kleinwort, the investment banking division of Allianz. Eddie is also a former board director of Carbon Trading, a joint venture initiative of Dresdner and Gazprom, a former committee member of Singapore Foreign Exchange Committee, and former member of the board of SIFMA (The Securities and Financial Markets Association) in London.

As the global population increases along with human-induced emissions, quality carbon credits to help hedge this growing exposure will become an in-demand asset class in 2030, with fund managers and pension funds heavily increasing their portfolios' allocations in this area. There'll be more liquid carbon products for investors to trade, such as carbon stocks, exchange-traded funds (ETFs), and carbon funds with shorter redemption windows, allowing a broader investor base to participate and liquidity to flow into the market.

Today, the voluntary carbon market is a billion-dollar business. However, the market is

too reliant on philanthropy and government subsidies. What is needed in order for a level of market maturity to be realised is more private capital investing in projects that help reduce and remove emissions from the atmosphere. As that begins to happen by 2030, the voluntary carbon market will have the potential to be close to a trillion dollars as it becomes a quasi-compliant market. We will see such significant growth in this asset class, and it will likely become as big as oil or any other commodity. This will put increasing pressure on all market participants, particularly regulators, to ensure the system's integrity.



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The new metric for measuring a company's overall financial performance in 2030 is EBITDA(C): earnings before interest, taxes, depreciation, amortisation and carbon.

To build greater integrity, confidence and professionalism, there is opportunity for regulators to create more robust enforcement policies and incentives for compliance. We see it in industries like traditional banking. However, there is a lag in reform around carbon emissions, despite the explosive growth and potential. Putting systems in place to better monitor and respond to issues, such as non-disclosure of a true carbon footprint or under provisioning for carbon exposures, should result in appropriate regulatory action. As reform improves, so does the necessary scrutiny of the adoption of best practices by management. This ultimately leads to minimising or redeploying divisions that produce the lowest return on equity net of carbon charges.

My hope is that the industry as a whole avoids the sorts of penalties for non-compliance that are seen in other industries. Rather, the focus can be on implementing incentive-based measures that support the essential ESG targets that many companies are striving to achieve, with regulation in place to support the scrutiny that is inevitably required. Regulators can lead by example here.

I see Asia, particularly Singapore, as a driving force in solidifying the voluntary carbon market as a real asset class. Singapore's move to allow big emitters to offset 5 percent of their emissions will drive demand for high-quality carbon credits. The city state is also opening various exchanges and will become the market leader by 2030 for exchange traded carbon products.

2030 sees many opportunities for expansion of the voluntary carbon market. The new metric for measuring a company's overall financial performance in 2030 will be EBITDA(C): earnings before interest, taxes, depreciation, amortisation and carbon.

We will start to look at addressing the 'S' in ESG: Do carbon projects reduce poverty and hunger, address clean water and sanitation, promote gender inclusion, reduce inequalities, reduce conflict, and ensure peaceful and strong institutions? There is an immense amount of capital waiting to be invested in high-quality carbon reduction and removal projects that tick the social and economic boxes of the UN Sustainable Development Goals. Viridios AI simulates a fair price for these co-benefits that reside in some carbon projects above and beyond the carbon component. All carbon offsets and allowances have the same unit of measure, which is a ton of carbon dioxide. But the market is now starting to price in premiums for projects that promote reduced inequalities and biodiversity, for example.

By 2030, there is a strong chance that sustainable development goals (SDGs) will be independently traded. For instance, companies are not just avoiding deforestation when replacing logging concessions with carbon credits, but are also preserving and boosting opportunities for local communities by employing these community members. Companies can use the carbon revenue to help promote quality of life for local residents, such as by installing solar panels on homes, funding scholarships and infrastructure for health and sanitation - all of which will be financed by the carbon offset revenue that would likely not have been achieved with existing types of non-traditional land use like logging. Hence, a regulated carbon market that brings transparency and awareness of high-quality carbon credits will drive more capital at scale to assist the least developed countries achieve their SDGs.





### **Eddy Ng**

Head of Group Commercial & Supply Chain Sustainability Solutions **PSA** 

Eddy is PSA's Head of Group Commercial & Supply Chain Sustainability Solutions and a member of the Senior Management Council of PSA International.

He has a leadership role in PSA with a focus on strengthening and cascading PSA's technology roadmap and digital developments in PSA portfolio globally.

The pandemic has led to long term structural changes in the maritime industry, with many companies seeking resiliency in their supply chains. Countries and companies are seeking shorter supply chains, by bringing closer together manufacturing and consumption activities. There have also been many vertical integrations as companies to seek to build resiliency within their production systems. This includes companies buying into activities of other companies up and down the supply chain. This is because they're seeking better control and management of their end-to-end supply chain capability. Such consolidations will have structural impact and bring about changes well into 2030.

Supply chain visibility will be table-stake in 2030, where consumers demand for real-time track and trace capability to know where goods originate from and how goods are moved. 2030 will be about digital transformation and the use of data. We're not just talking about the ability to use data for decision making, but also the ability to learn, simulate and forecast better. We'll use data to improve forecasting and be able to put together scenarios that are as realistic as possible, so that we can make real-time quick decisions about the future.

By 2030, PSA Singapore will have a very wide scale deployment of over a thousand autonomous vehicles. High productivity and operational excellence can be achieved. However, the challenge will be to control and manage the vehicles while, at the same time, make sense of where the bottlenecks and demand are to be able to deploy the vehicles efficiently. That doesn't mean our workforce in 2030 will be significantly smaller, but it will be significantly smarter. We might not need as many drivers and operators as before, but in a labour market that is already very tight, we will definitely need more engineers, system analysts and people who can manage complex systems of data.

Technology will also transform payment infrastructures as we see more aggressive and intensive deployment of digital transfers.

The challenge will be for regulators to manage and control cross border transactions. By 2030, I believe we'll be seeing more than one country deploying its own Central Bank digital currency or its own cryptocurrency, and with this comes deep liberation. The advantages of digital currency are that it is encrypted, safe and secure. As technology progresses and transforms, governments and people will also get smarter and be able to optimally deploy this optimally.

Technological advancements depend on trust. Good partnerships and collaborations are based on the willingness to share data. The challenge is in being able to share openly, but at the same time, appropriately, taking into considerations the protection of commercial interests. Secured digital ledger in the form of blockchain technology will be key in this area, which allows for multiparty ecosystem to transact and operate in high inter-connectedness.

The other big changes we'll see in 2030 is the drive to meet ESG targets. PSA aims to reduce emissions by 50 percent by 2030, and then all the way to net zero by 2050. Consumers now want to know where the products come from, how they are transported, and whether or not there are options for greener and more socially responsible alternatives. By 2030, many of our transportation equipment and modes will no longer be driven by fossil fuel. They will be running on clean energy sources, as well as on renewable electricity

However, we are optimistic about meeting ESG targets in 2030, especially as businesses are calling for more accountability. The pressure is coming all the way from the shareholders to the Board of Directors. For example, we will look at whether we can ship the goods on railway instead, which is a much greener process. Increasingly, we're also seeing more awareness and responsibility from companies to drive their own sustainability efforts, which will accelerate the push towards tackling climate change.

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**Supply chain** visibility will be table-stake in 2030, where consumers demand for real time track and trace capability to know where goods originate from and how goods are moved. We're not just talking about the ability to use data for decision making, but also the ability to learn. simulate and forecast better.





Esther has over 12 years' experience in the financial services industry, including being certified by the Harvard Business School. She is also a former Management Consultant of a top Fortune 500 organisation. Esther has developed and implemented strategic initiatives for digitalisation, innovation and implementation of risk management regulation for major European Banks. As Agroclimatica's founder and leader, Esther focuses on the platform's strategy, global business development and impact generation.

The focus on sustainability, environment and climate change has been present in the last five years. The pandemic has catapulted its importance and showed us that we have no choice but to adapt and act.

I am excited to see how financial services related to agriculture unfolds over the next decade because, until now, it feels to me that this segment has been forgotten. Many people can't relate to smallholder farmers. Yet, over a third of the world's food is produced by smallholder farmers that cannot access finance. Because of climate change, armed conflict and population growth, problems related to water and famine are rapidly increasing. This sector should not be ignored. This is because despite conflicts and crises in the world, there is still a need for food. There will be more funds, technology, and more focus on climate smart agriculture by 2030. I hope the sector will be revolutionised by data and turn from being a traditional segment

which not many want to be in, to a digitalised field where we see the growth of innovation and new generations involved.

In the next eight years, there will be stronger regulation regarding carbon dioxide emissions, water usage and sustainable finance. Regulators are already taking the first steps to generate change in the financial services industry and create a greener, circular economy for the future. However, more needs to be done. Regulation must bring more clarity. Green finance remains in its early stages. Financial services need to be guided as to what is expected of them, including how much of their portfolio should go into green investments or green lending. Furthermore, national, and international regulation will need to go hand in hand with more strategic, in-house decisions, followed by action plans to implement these.



It is difficult to find banks and financial institutions that willingly want to implement change. One of the largest challenges we must acknowledge is that sustainability comes at a price. Transforming the economy, transforming the way we work, to be greener, to be sustainable has a cost. The cost comes in terms of change in processes, policies and products as well as time and resources to educate not only internal teams but also customers.

Technology will help the transition but there are big differences in tech adoption globally. In Asia, technology is more present, with a greater network coverage, smartphone penetration, and more people accessing loans via their mobile phones. This can helps in finding the early adopters who are already using online banking. This may be more of a challenge in other regions and this difference impacts the meaning and weight of the ESG message in those parts of the world.

Data collection will also change the ESG landscape by 2030. But it is what we do with the data that matters. Looking at it from a different perspective beyond just the data is important. We also need to look at what we need to achieve as an institution as well as our goals and commitments at a national, regional and global level to see how we can get there using data.

Currently, there is a lot of data available on agriculture, climate change and financial inclusion, for example, from the Food and Agriculture Organization, the UN's Intergovernmental Panel on Climate Change, and the World Bank. There are also various tools such as AI, analytics, machine learning and blockchain technology that can effectively process open source data, data from farmers, satellite imagery data as well as geographic and geodesic data. To optimise the utilisation of these resources, the traditional financial services sector cannot continue as it is. It will need to have greater adaptability and flexibility.

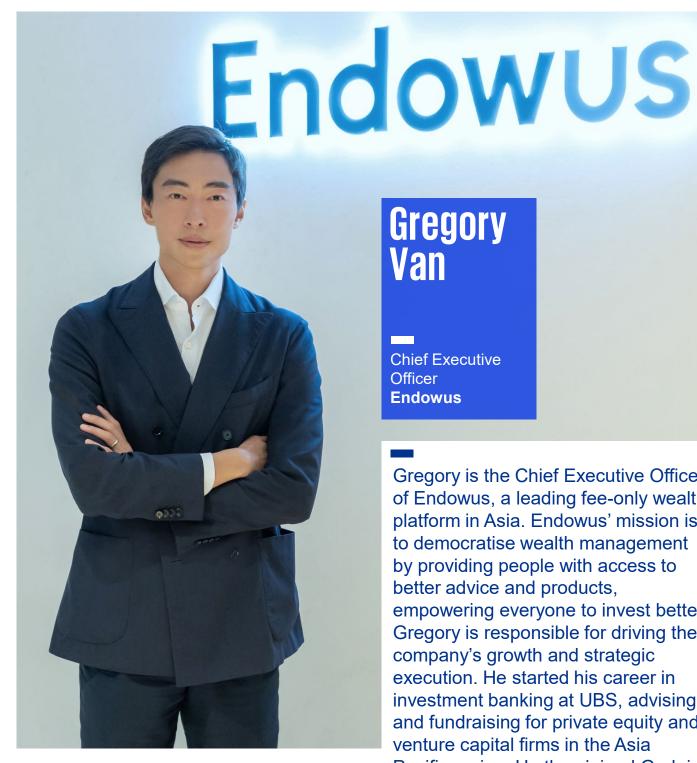
The pandemic has taught us the importance of being digital. There is a need to digitalise and become more consumer-focused. We will need to learn how financial performance follows value creation and, in this sense, create more value for customers through adapting financial products to their needs, particularly, in agriculture.

Wholesale banks and the larger legacy banks are the ones who will set the pace within the ESG agenda. I expect the message to cascade down to other regulated and non-regulated entities, including in emerging markets.

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Despite conflicts and crises in the world, there is still a need for food. There will be more funds, technology, and more focus on climate smart agriculture by 2030.





### Gregory Van

**Chief Executive** Officer **Endowus** 

Gregory is the Chief Executive Officer of Endowus, a leading fee-only wealth platform in Asia. Endowus' mission is to democratise wealth management by providing people with access to better advice and products, empowering everyone to invest better. Gregory is responsible for driving the company's growth and strategic execution. He started his career in investment banking at UBS, advising and fundraising for private equity and venture capital firms in the Asia Pacific region. He then joined Grab in its early days and was part of the pioneer team that launched the firm's digital payments services across Southeast Asia.



The financial services sector will see a shift in how we communicate with customers, aided by advancements in machine learning. In the case of our digital communication, we want our systems to optimise the data received from customers to produce more personalised experiences for them. Analysing data from interactions through our automated advisory system will make the digital set-up more intelligent. Imagine if a digital advisor could react and ask the right questions based on your reactions? Digitalised engagements with our customers will become more intuitive, as if they are having a conversation with a real person. The intention is to scale up the business model so that we can serve more people and bring down costs for the customer.

More people are moving online to manage all aspects of their lives. They're online to manage their finances, to shop, to book cabs, and so on. Habits of the entire population are shifting, but for wealth management, which is traditionally seen as an in-person service, the transformation to an entirely digital experience will take time. Although we can automate the entire digital wealth and investing experience, I still see the need for human interaction in 2030. I don't think you're only going to be served by just robots in eight years' time. It's going to be a combination of a digital and human experience.

Trust will be a key component as digital integration increases in the financial services sector. Reinforcing trust is a neverending process. Look at the big brands that we trust today, and how they've evolved over the last few decades. The digital financial services industry is at the very beginning of that journey. Building trust will be done by bringing the best of the industry to people at a fair and reasonable cost. If costs can be

lowered, by giving people advice at scale, more people will have a better investment experience and trust will evolve naturally.

Consumers will continue to be on the receiving end of an influx of data daily. Over the next eight years, there is going to be an infinite number of data points collected from all of us. Many people are already de-sensitised to this collection of data. Many are more focused on how that data is being monetized and used against them. If we can use the data and show that it can serve their individual needs better and bring greater convenience to them, it will help with allaying some of the worries around how their data is being utilised. Trying to keep people digitally engaged for as long as possible, to collect as much data as possible, isn't the answer. It will be more important to do the data filtering at the company level, and to offer personalised online experiences. If this is managed well then trust in the company and the brand will increase, which will help new players grow organically without having to bombard customers with incessant information.

Through this technological evolution, we will likely see a greater number of partnerships being formed and consolidation in the financial industry by 2030. We're already seeing legacy banks wanting to get into the new, digital-first businesses. There's a huge amount of opportunity for both sides to grow the pie, and not necessarily to disrupt each other. The success stories of the next eight years will ultimately be who can put the customer first and serve their needs best. To do that. financial services will need to be transparent. The regulator can help improve digital financial services by enforcing transparency of transaction costs, which I hope to see more of by 2030, helped by the adoption of blockchain across the industry.

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We will see a greater number of partnerships being formed and consolidation in the financial industry by 2030.





Group Chief Executive
Officer
OCBC Bank

Helen was appointed Group Chief Executive Officer of OCBC Bank in April 2021. She joined OCBC Bank in February 2020 as Deputy President and Head of Global Wholesale Banking and has more than 36 years of banking experience, having started out as a Management Trainee in the bank. She has vast experience in Greater China, covering a wide range of roles in capital markets, syndicated finance and corporate banking. Prior to this, Helen spent 27 years at HSBC, where her last role was Chief Executive for Greater China. She became the President and CEO of HSBC China based in Shanghai in 2010, and was promoted to be Group General Manager in 2011 in recognition of her responsibility for the business operations and strategic expansion in China.



KPMG



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In the ASEAN market, Singapore and Thailand already have a very effective cross-border faster payments system. I think in the next eight years, we will see more of these inter-country faster payment systems being developed.

Heading towards 2030, environment and sustainability considerations will reshape the banking industry. Banks must think about how they are being perceived within the sector. Ultimately, banks are here to serve the customer and fulfil their needs, but we also must address sustainability concerns. We are seeing commitments by governments and the financial sector regarding decarbonisation. As a bank, we need to engage with the customer about green financing and think about how we can help them to transform their business into a low-carbon emissions model for a greener tomorrow.

Take Singapore as an example. By 2030, the city-state wants 30 percent of its food supply to be sourced locally. As a bank, how do we support that initiative? One way is to support businesses in the agritech sector. We can do the same for the transportation space too, where we talk a lot about electric vehicles. By 2040, there will be no more petrol and diesel cars on the road. Banks can aid that mission by providing finance to individuals buying electric vehicles, and we can also finance companies and manufacturers at the production level. Overall, we are aiming to reshape our portfolio to reduce our total carbon emissions and support industries that are trying to do the same. It is very important to us that, in the markets we serve, we can support our customers, as well as government initiatives which often serve as catalysts for more sustainable practices. This approach is a way for us to fulfil our role in making sure that the world becomes a more sustainable place.

By 2030, our customers will demand something different and more advanced.

We will continue to see a rise in technology, like blockchain and AI, to make sure we can help our customers to move their money safely and manage investment risks for instance. Today, we are already seeing more competitors, such as fintech, virtual banks, or digital banks. There will be more providers in the sector serving customers online, but that does not mean the banks have no role in this. In fact, I see banks being major players in the whole ecosystem in 2030. For example, in the ASEAN market, cross border payments are crucial. Singapore and Thailand already have a very effective cross-border payments system, and I think in the next eight years, we will see more of these fast, inter-country payment systems being developed. The banks certainly have a role in this because we are seen as trusted partners that have the resources to be able to engage the respective country's regulators.

The other digital players are not to be dismissed. Rather, I think the market is big enough to allow the competition to continue. Overall, I think the legacy banks probably have a bit more advantage because their long history and ability to serve everyone from individuals all the way up to big companies. I also see us partnering with some of the fintech companies.

As a financial hub, Singapore will continue to see the rise of new financial players. The country is committed to encouraging new services and new financial products, in a bid to attract foreign investors and to serve the people. Singapore will remain a launchpad for those new companies who want to expand into other countries in the region that have a bigger consumption base.







People will want to invest in Asia over the next decade purely for its phenomenal growth opportunities. By the time we get to 2030, the population would have risen from about 650 million to around 800 million. Approximately 300 million of that population will be well-educated and digitally savvy. This rising middle class will have consumption demands such as housing, education, leisure and lifestyle. They will also want the opportunity for their children to have the best education and health provisions. This brings about enormous opportunities for financial players to create an intelligent distribution lifestyle platform covering several sectors.

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There are probably about \$1 trillion every year of unmet credit demands, and I think that will likely go anywhere between \$2.5 to \$3 trillion by the time we get to 2030. We'll see winners in that space if they learn how to bank that sector.

The corporate level will see vast infrastructure spending over the next few years. There has been a continuing migration of people from rural to urban areas in ASEAN. That trend will continue at a pace and generate additional housing needs of some 150 million homes in this part of the world. That will need to be financed and constructed, fuelling growth and demand for resources. The One Belt, One Road phenomenon will increase investments into roads, railways, seaports, airports and power stations. All of these will be funded by the corporate and investment banks, making Southeast Asia ripe with opportunities for financial players.

In addition to this is the small to medium-sized enterprise market, which constitutes about 70 percent of GDP in most countries surrounding Singapore. Quite candidly, it is an unbanked

market. There's probably about \$1 trillion every year of unmet credit demands, and I think that will likely go anywhere between \$2.5 to \$3 trillion by the time we get to 2030. We'll see winners in that space if they learn how to bank that sector. With payments becoming more electronic, the intelligence gained from that data will enable banks to offer funds and credit with less unknown risk. Many financial institutions are still perplexed by how to bank the SME sector across the region. I think you'll see the likes of the Grabs and possibly the more innovative telcos push further ahead in this space. The regulators will apply their regulation even to the non-banks that inherently supply banking services. They have to because they have to protect the consumers in their market.

The financial services sector will have to evolve to the cloud to compete for these projects. If you're not in the cloud by 2030, your legacy infrastructure will kill you because you won't be able to get insights into actual cash flow. However, there is a significant shift toward outsourcing operations to the pervasive software companies. Their task will be to provide both customer-centric and product-rich solutions and be able to clip into distribution channels and tap into all the big data lake-type technologies. At the heart of these operations are systems of records. The big question will be who owns the data, the bank or the software company?

Although the opportunities are enormous heading towards 2030, the key to success will be to focus on one area at a time because you can't go after it all at once. You can't go after the 300 million middle class, the 70 percent of SMEs, and the \$3 trillion of trade because you won't have enough management talent. C-suites will need to pick a priority and focus on a financially viable project.

The unexpected always happens, so finding the right technology leadership ability to architect the project and de-risk it pragmatically is an essential talent. The marketing know-how, technology leadership, and delivery excellence will lead some organisations to be more successful than others.







In 2030, cryptocurrencies will become the same as any other risk asset class, despite the volatilities we see today. There are already more institutional flows into crypto, and some of the most significant hedge funds globally are actively trading a range of different cryptocurrencies. Volatility will subside, and by 2030, we won't be having a conversation about the price of Bitcoin but the innovation, technology and protocols that underly the crypto tokens, predominately blockchain. There are many benefits of blockchain technology within the financial services industry. If you think about blockchain itself, it applies to just pure banking services, things like instantaneous settlements, and complete transparency through registries. These will ultimately provide safety in the ecosystem and reduce fees, which is what the end-user is looking for. Currently, there are many intermediaries involved in the banking system, but with blockchain, that disappears.

The crypto market is still in the early days. Widespread adoption will take time as market participation from significant financial players increases and regulation improves. As a society, we're effectively moving towards becoming cashless quite quickly. Ultimately, that's how the adoption of digital currencies will happen. By 2030, you will be able to store vour artwork, music and digital currencies all on your phone. You may also be able to choose from government-backed or nongovernment-backed currencies. In 2030, however, it will be less about choosing which token will be the new currency and more about the practical application of the technology that these tokens represent.

Many investors are curious about the ESG impact of crypto mining. A considerable amount of effort and money is being invested into finding a sustainable way, such as through using renewable energy. We've recently partnered with a crypto miner based out of Canada using exclusively hydropower; all the Bitcoin and our fund will come from that source as we advance. Our investors can track that by using blockchain to prove provenance and that it is green in the way it is being mined. Additionally, there are significant innovations in battery technology and how you

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Democratisation of financial services will expand by 2030 as greater access by tokenising or digitising assets leads to broader participation and a wider liquidity pool.

store energy. We can harness solar and water, but more importantly, we have to be able to store it. Equally, in crypto, we need to be tackling these areas of sustainability to meet ESG commitments and bring crypto to the mainstream.

The other significant shift in 2030 is data and how it will be monetised. I predict there will be a decentralised version of the Internet where consumers have more control of their data. Search engines and social media platforms earn fees through user participation in their ecosystem, but that business model will be turned on its head by 2030, thanks to Web 3.0. This brings a vast disruption opportunity in the financial services sector, particularly for the unbanked population. Some people have no access to banking in large developing economies, but have their smartphones and high-speed Wi-Fi. People will be using their phones to borrow land or participate in financial services activities. This democratisation of financial services will expand by 2030 as greater access by tokenising or digitising assets leads to broader participation and a wider liquidity pool. Buying private credit or a bond today will see a relatively high barrier to entry, where only the very high-net-worth or large institutions can invest. The challenge will be on how to build trust in the DeFi proposition. There is going to be a need for more information about the risks associated with borrowing and lending on DeFi, and that is something we'll work through over the next eight years.







By 2030, some economies will be entirely digitalised and operate fully on a digital currency. There are several reasons and benefits to this.

Firstly, the physicality of money has fallen out of favour due to the pandemic and fear of contagion. Secondly, resources are required to produce coins and banknotes. However, the efficiency factor will be the primary driver in the transformation to fully digital currencies.

I see Singapore leading the way in this space. Singapore has already made it incredibly easy to set up an online bank account remotely. It has also made considerable efforts to help people who are not technologically savvy access technology, whether through giving computers to the underserved or teaching IT literacy in schools and community spaces.

Other countries are also very focused on getting rid of physical money. In China, the digital renminbi is seen as a means to have complete visibility of their vast land and a tool to help people achieve better financial planning. Elsewhere, some countries will be compelled to adopt digital currency, such as those that have recently had a regime change or are faced with economic challenges. Any country where the financial system isn't well structured or suffering hyperinflation could adopt a basket of digital currencies to avoid the lack of value of their own.

As financial services evolve into a fully digital structure in 2030, we will nonetheless still want to communicate and connect with others in profound and meaningful ways. The Metaverse will play a significant role here but there are challenges to overcome. For instance, how will the jurisdiction in which the customer falls under be decided; will it be based on the jurisdiction of the passport held or the jurisdiction of the platform services accessed? I believe that regulators and banks need to work together on this. Jurisdiction is just one hurdle; we must also tackle data privacy, regulations, law, and the moral compass. All these questions need to be answered if we are to embrace digital finance. The appetite for technology will grow exponentially over the next eight years. We don't have enough programmers today and we still won't by 2030 because every single

part of our life can and is available to be digitised – and we love it. We love being able to order a taxi online; we love going to a country and having a map show us exactly where we should go. In 2030, we'll expect richer maps and more 3D experiences. As our need for online services increases, the pool of data collected relating to us will too.

That data will significantly change the landscape of the financial sector. Banks have enjoyed a data monopoly until recently but they're beginning to lose client data visibility. They used to hold specific transactional data about their clients, helping to build a customer profile. This is increasingly being replaced by a generic 'digital wallet top-up' description on their transaction lists.

Fintech companies, on the other hand, are gaining insights. Over the next eight years, banks will recognise that their customer is only their customer until they find something that's better, faster, or cheaper. Legacy banks will struggle unless they can work closely with regulators to ease protocols, such as allowing customers to sign up for products without coming to a physical branch or enabling sharing of data across their departments to get a complete picture of the customer. Legacy banks currently find it challenging to have such a 360-degree view because their departments are all separate. Wholesale is distinct from retail; retail is separate from investment banking, and none talk to each other. This is untenable if they seek to sustain their advantage. In contrast, fintech firms are using data to welcome customers onto their platform and delighting them with timely, relevant offers.

Regulators need to play their part and become deeply engaged with technology now so that they are knowledgeable about technology, automation, and data. By insisting on specific controls that aren't effective in a digital environment which requires new controls, especially in collaboration across jurisdictions to be effective, can hurt the banking system. These days, the critical role of regulators is to immerse themselves in the digital space to assess risks and opportunities. A regulator who merely does reporting and compliance is a thing of the past, and worse yet, could block future economic growth and unwittingly introduce more risk.

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By 2030, some economies will be entirely digitised and fully on a digital currency.





He is a senior Digital Transformation and Cyber Security Global Executive Leader committed to the development of people and implementing business models and technology solutions that change the way customers view an organisation, trust its reputation and use its products and services.



Today, people can't live without their mobile phones. By 2030, I see mobile phones being phased out and replaced with alternative devices. Instead, we'll see more people using wearable tech, such as a smart watch or even an implant. When that transition happens, consumers are going to let their guard down with regard to data because they'll prioritise comfort and convenience over privacy. Technology takes advantage of laziness and by 2030, companies will be pumping ultra personalised data to our devices.

The use of data is going to change the consumer experience dramatically by 2030. Using AI and algorithms, targeted data will be fed to the consumer depending on their spending behaviour, how they commute, their risk appetite, what they eat, and much more. It's already happening now, but it will be more sophisticated by 2030. As Grab pushes further into the financial services industry, we want to capitalise on the data we collect. Our main aim is to build one single ecosystem where we use data that we have collected to build a financial profile of the consumer. Through building a digital persona, we can create a credit report, which we can use to offer financial products. We hope this will go a long way in boosting financial inclusion in Southeast Asia, which has a population of over 500 million people, particularly for those who are currently unbanked. We're aiming to become one of the largest financial institutions in Southeast Asia with consumers having access to our digital banks as well as the Grab Wallet.

Although consumers will be more open with their data heading into 2030, data security will also be scrutinised, as more biometric data will be used. One biometric component won't be enough. Increasingly, devices will require combinations of biometric data, such as retina

reading alongside fingerprints, for example. The benefits of biometrics are two-fold. It builds the trust of the customer because it's almost impossible to steal or replicate biometric data. It's also a way to simplify data security for the consumer. We won't have to remember passwords and codes. It's already happening, but data security will get even more personalised and intelligent by 2030. The more intuitive the systems are, the simpler devices will be to operate. For example, imagine your home device wishing you a good morning as you walk in the door, because it recognises your walk. The smarter technology gets, the better security will be. We are creatures of habit, which is perfect for data analytics and finding patterns. Our devices will know us so well, they'll also know when some things are out of the ordinary.

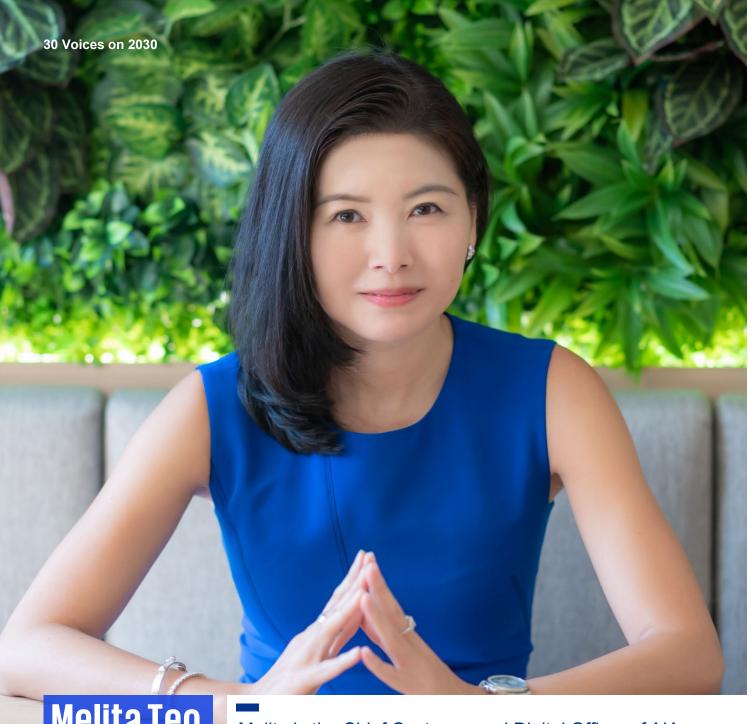
The challenge over the next few years is less about overcoming the difficulty of implementing technology than it is in accessing it. 5G coverage will have to expand for us to reach consumers in remote areas. This expansion is critical for the whole economic ecosystem in Southeast Asia, including many who perform important roles in supply chains, particularly within the agricultural sector.

Over the next few years, we can expect to see 5G networks penetrating more of Southeast Asia. As 5G expands, I envisage a rise in IoT, which will produce an incredible ecosystem of digital environments. One of the key reasons why mobile phones became a big success is because of the cloud. The cloud, along with 4G, was one of the biggest catalysts that increased the usage of mobile phones. The same thing will happen as 5G becomes more easily available, and by 2030, we will see a plethora of alternative devices to the mobile phone.

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By 2030, the mobile phone will start to be replaced by alternative devices. Instead, I think we'll see more people using wearable tech, such as a smart watch or even an implant.





**Melita Teo** 

**Chief Customer** and Digital Officer **AIA Singapore** 

Melita is the Chief Customer and Digital Officer of AIA Singapore. Drawing on a wealth of industry experience, Melita is responsible for strengthening the Customer, Brand, Health and Wellness propositions, advancing the enterprisewide Analytics capabilities and usage, and accelerating the delivery of an integrated Digital experience across Customers and Distribution.

Melita leads the division to identify strategic areas of growth for the business and service excellence to customers through an unwavering focus on customer experience and outcomes, and integrated digitalisation and transformation of business and services.



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By 2030, health, wellness and insurance will go hand in hand together. I envision highly integrated, hyperpersonalized products for our customers by efficiently analysing data from wearables.

We have seen much progress within the insurance industry, and in 2030, we will transform from where we are today. We'll see many interactions in a metaverse environment. For example, insurers would interact as a virtual agent with a virtual customer in a virtual cafe. We would accept digital currencies as a form of premium and pay claims in digital currencies. I think these are possibilities that could be a reality if the proper safeguards are placed within the ecosystem and, more importantly, for the customers. We're already seeing retail brands embracing the metaverse while we're only just starting to imagine how that will be for insurance.

COVID-19 has undoubtedly accelerated transformation in the insurance industry. In the past two years, we've demonstrated our ability to adapt using digital technology to improve the customer onboarding experience. We have improved the level of trust between our customers and us, enabling us to embrace technology even further.

By 2030, health and wellness and insurance will go hand in hand together. I envision highly integrated, hyper-personalized products for our customers by efficiently analysing data from wearables. We might even know the health risks that our customers face before they know

themselves. The question will be how to engage customers proactively to support better quality of life – essentially helping people live healthier, longer, better lives.

Over the next few years, the significant shift will be in the coverage we'll offer. The challenge will be for insurers to provide coverage that is immersive in individuals' lives. Customers will demand insurance products that are tailored to their needs. It could mean coverage for a minute or an hour, instead of the standard terms we see now. Instead of providing coverage to the thousands of dollars, it could be to the dollar as and when required.

Currently, the insurance industry is governed by individual country jurisdictions. Perhaps in 2030, the world will become so connected in the metaverse that insurance becomes borderless. Regardless of where you are, you'll be able to buy coverage from anywhere, in any part of the world, and it will cover you everywhere. You'll be able to dial it up or down and tailor it to your needs. For a company like AIA, which operates in 18 countries, I think that will give our customers limitless access to different types of coverage, medical advice and medical treatment. That would be exciting because it opens up a whole world of propositions.







As we look to 2030, we are well into the digital revolution rather than the evolution experienced for the first 20 years of the noughties. Individuals are generating more digital data exhaust than ever through e-commerce, social media, and e-gaming, which continues to grow. Combined with artificial intelligence, machine learning, and other abilities, that data is being used to build alternative credit and risk models and realtime behavioural insights. This has allowed new financial services players to attack the user base of traditional banks more effectively than ever before. All these mean the financial services sector is experiencing its 'Kodak moment': what e-commerce did to the High Street and what social media did to print and media advertising are now happening to Banks.

Development of a global digital identity, akin to a digital passport, will be key to digital financial transformation benefiting the widest population and allowing the digital revolution to be available to all parts of society. I don't think it's going to be fully resolved by 2030 because if it's going to work, it's got to work seamlessly across the world. The obstacle is that it requires regulators, policymakers, and corporates, who often have conflicting objectives and time horizons, to align.

In most other areas, though, technology will have substantially changed the banking ecosystem by 2030 with new financial players and services having a significant role in the market. One of the key impacts will have been the significantly lower infrastructure cost for new players entering the market. We are now seeing new entrants able to set up a digital banking stack for \$150 million or less, depending upon scope. \$150 million is no small sum but setting up an entire banking stack with that amount that is more agile than a legacy stack and one that costs less to run is a game-changer. Over the next eight years, cost-effective capabilities and options will increase.

In addition to technology, generational shifts are evident with wealth and decision-making

shifting to people who seemingly came into the world with a mobile phone in their hand. They're true digital natives, some of whom are now CEOs and CFOs of businesses, so business needs and attitudes to banking are also changing. They expect banks to provide the same level of service as their e-commerce or social media platforms and banks should know who they are and what they need.

Some of the incumbents, large and small, are recognising the implications of this revolutionary change. They also understand that decades of legacy is not going to get transformed in a short period and could take until 2030, even if they start now. For others, the sense of urgency is not so apparent.

We're seeing new challengers leverage platforms and ecosystems to move into the financial space and these aren't just the Apples, Amazons and Googles. Behind the scenes, platform players will cherry-pick which bank to work with. The problem for the background banks, those that don't carve a front-row position in this new world, is that if they're only offering a vanilla set of products, they'll ultimately become a low-cost utility. The platform leaders will increasingly dominate the space, and many legacy banks can be replaced relatively easily.

Incumbent banks must quickly start embracing this new technology if they don't want to risk becoming marginalised by 2030. The barbarians aren't actually at the gate here in 2022, but we can look to the horizon and see them coming. Banks that didn't feel the sense of urgency early and waited until the barbarians were 50 feet from the gates and transformation was obvious, will struggle to survive as consumers move to the choices offered by new suppliers that have embedded finance into every aspect of the services they offer.

In 2022, banks would do well to remember that change will never move as slowly as it does today.

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Development of a global digital identity, like a digital passport, will be key to digital financial transformation benefiting the widest population and to allow the digital revolution to be available to all parts of society.







In 2030, we'll see the consumer having more control. Customer behaviours regarding how they make payments and select what to buy are changing. As insurers, we need to offer bite-sized products at a premium they're willing to pay, with contractual specifications best suited to their circumstances. This concept breaks the mold of the traditional way of doing business in the insurance sector, where there are usually renewal dates and lock-in clauses. One of the challenges will be to keep up with customers' changing behaviours and expectations.

How insurers get their product to market will look very different in 2030. Consumers don't deal with insurers every day and that's a challenge for the sector. Business models will change because insurers will realise customers are dealing on a multi-sectoral basis every day.

The fundamental shift insurers will move towards in 2030 is to deliver insurance capabilities and focus less on providing insurance products. This means enabling non-financial services partners to start offering insurance propositions to their customers. For example, with our digital platform, SNACK, we work with about 100 partners such as cafes, E-commerce platforms, credit card companies, and even providers of fitness devices. The idea is to see SNACK embedded in people's lives. Being embedded means we can collect more customer data points, making it easier for us to create contextual insurance that can be offered at a particular time, not just something they signed up for earlier.

By 2030, customers who purchase insurance digitally through other platforms will still only account for 25 to 30 percent of our insurance portfolio. The traditional offline portfolio will make up the rest. In a decade, however, I see the offline customer's journey starting from an initial digital lead and that will be the difference between what we're seeing now and in 2030.

Understanding that the consumer sits at the heart of your business model is key to navigating the next decade. The challenge is that if businesses collaborate for greater market reach, who owns the customer data? We're used to working exclusively with banks in the financial services industry, but this will change and non-exclusive partnerships will increase.

Co-ownership of data is an important concept and it must happen on many levels. Behind the platforms, there are hardware providers, software providers, engagement layer creators, data curators, and data processors. These multi-player relationships or value chains are needed to help the insurance industry evolve but how best to navigate the right partnerships will take time.

Data will be the critical enabler for any insurer by 2030 and data privacy will become more critical to the consumer. Regulation will play a role and regulatory frameworks will cut both ways. By intervening too early, innovation could be stifled. If regulators let innovation go too far, the fear is that consumers will be unprotected. Over the next few years, we'll see frameworks supporting innovation and competition because that ultimately benefits customers. That balancing act will continue but regulators will need to let businesses push the boundaries and scale.

Moving into 2030, one of the most important things for insurance companies is not about how big or tech-savvy they are; it's about how quickly they learn.

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The fundamental shift insurers will move towards in 2030 is to deliver insurance capabilities and less about providing insurance products.





Ricky is CEO of Banking Computer Services Pte Ltd (BCS), a wholly owned subsidiary of NETS. BCS manages and operates the national clearing and payment infrastructure for the Singapore Automated Clearing House, including Fast And Secure Transfers (FAST), Inter-bank GIRO, Cheque Truncation System, PayNow and SGQR Central Repository. In 2014, Ricky led the team that successfully built and launched Singapore's FAST payments.

A seasoned industry leader with over 20 years in payments and financial services, Ricky has held senior roles in global transaction services at OCBC and Citibank. He was Senior VP and Head of Regional Cash Management at OCBC Bank responsible for driving the Asia cash product strategy.





We've seen a considerable boost in digital payments over the last few years. As a society, we've realised that the cashless way of making payments is not just convenient and practical but essential to mitigating health risks during the pandemic. The fact that we can now make payment by scanning a QR code also shows that payments are becoming more accessible, especially for underserved consumers and micro businesses. We're seeing QR payments breach culture and generational barriers, bringing payment options to the masses in the market. Such is the power of digital payments that gives control back to the same constituents it's meant to serve. Now that digital payment habits are set, we'll only see the uptake increase significantly as we approach 2030, particularly in Southeast Asia. The market size here is vast, and there are still segments of the population that are either unbanked or underserved. The ability to build a transnational infrastructure that digitally offers payments in real-time and is inclusive, connecting different payment services providers be it traditional banks, fintechs, or e-wallet players, in this ecosystem will further democratise payments to the benefit of all.

Singapore, Malaysia, Hong Kong, Thailand, Indonesia and the Philippines are just some countries that have started to deploy real-time payments and clearing infrastructure within their respective domestic markets. The big challenge will be connecting each of these markets to facilitate cross-border payments in a safe, secure and seamless manner. This will require trust and confidence between parties on a B2B level and is integral to progress, especially as new disruptors to traditional financial services providers enter the ecosystem.

At BCS, we're in the process of creating an enterprise "superapp" where financial institutions, regulatory bodies, and commercial enterprises are all connected via one cloudbased, API-enabled hub based on a 24/7 self-service platform. This will allow counterparties to transact with each other across different business verticals, providing greater digitalisation, speed and efficiency to business interactions in the financial ecosystem. Ultimately, once these domestic partnerships are in place, we'll look to extend this superapp platform across the regional and even global financial services value chain. The walls will come down within the next eight to

ten years as borders become more porous. As different parts of the world and markets build more real-time payment and digital market infrastructures, we'll see financial transactions and information embedded more pervasively in daily lifestyles, building greater trust and transparency in the entire ecosystem.

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Now that digital payment habits are set, we'll only see the uptake increase as we approach 2030, particularly in Southeast Asia. The market size here is vast, and there are still segments of the population that are either unbanked or underserved.

Trust is paramount in financial services and not just between corporations, but equally essential on a consumer level. Protecting data is a big part of the provider-consumer journey and will be something the sector will focus on. A breach of consumer data would erode trust in the entire system. There will be an increase in data collection to improve the customer journey and experience in their use of digital payments. In Singapore, we are placing more emphasis as an ecosystem on leveraging data at a broader level, analysing consumer and business data to drive further adoption and protection of digital payments, enabling a superior end-user experience. To preserve trust, there'll be increased scrutiny, oversight, and governance of the usage and collection of data to continue maintaining the data confidentiality standards required of financial institutions and providers.

The consumer is at the core of how we progress heading towards 2030. Keeping one step ahead of customer needs and being ready to offer new solutions will be an ongoing process, especially since the younger generation is now exposed to tremendous technology shifts. They're also interacting and embracing the market differently than before. Customers today know what they like, are technically literate, and are aware of options open to them. Consumer expectations will be the most important yet challenging aspect to which financial services providers should pay attention.







In 2030, we'll wake up to a very different world. The velocity of change we are witnessing is unprecedented. We can already see this in our daily lives - from 4G to 5G speeds of connectivity, under 30 minutes groceries delivery with SariSuki or a single app to control your TV and household appliances. Change is happening at an increasing pace. As we head towards 2030, players in the financial services industry must adapt to this demand by ensuring they have the proper infrastructure, technological capabilities, and resources to implement their vision.

As the landscape changes for financial services, many organisations will be rethinking their business models. There's a blurring of industry boundaries as we see an increase of new disruptors entering the market. For instance, super-apps now offer ride-hailing services, airline tickets, hotel bookings, food delivery, international logistics, payment services, and micro-investments all on the same platform. Would these be classified as a hospitality, food and beverage, or Banking offering? Legacy players will need to re-invent how they engage with their customers, alter their business processes and take advantage of data and intelligence to compete with newcomers in their space.

Web 3.0 is another factor that will shake up the business ecosystem in the next eight years. Being truly decentralised with a more democratic version of the current internet will change how we use our data. Blockchain is a critical tech stack of the Web 3.0 environment, and digital assets are changing the way the world stores and moves its information and value. We view the evolution of blockchain technology and decentralised networks today as analogous to the rise of the internet 10 to 15 years ago. Just as opensource developments were integral to the early days of the internet, blockchain is yielding innovation and value creation for consumers and businesses in the Web 3.0 world. As blockchain technology becomes mainstream, companies need scalable, secure, and sustainable infrastructure to grow

their businesses and support their networks. However, there is an urgent need for collective action with policy intervention regarding data governance to ensure improved accountability for governments, companies, and individuals. Without these interventions, it will be difficult to maintain integrity and trust in the emerging technology enabling data sharing on which future global growth depends. By 2030, sustainability will be non-negotiable. Google's infrastructure and services already have a net-zero carbon footprint, and we have been matching our energy use with 100 percent renewable energy since 2017. We're moving the world closer to a carbon-free future through three parallel tracks: purchasing carbon-free energy, advancing new technologies and advocating for better public policy. These steps are just the beginning and we're looking to do more across Asia-Pacific in the coming years. Our ambition is to operate 24/7 carbonfree by 2030. Sustainability is at the core of everything we do. We see organisations we work with taking several significant steps, whether through the greening of information technology (IT), reducing emissions of IT operations, or greening by IT.

As a region, ASEAN is poised to become a dramatic consumption opportunity over the next decade, driven by strong demographic trends. Rising income levels, increasing foreign investment and digital advances will give rise to new consumer markets. In 2000, only 15 percent of Asia's population was part of the consuming class but by 2030, that's expected to rise to three billion people, or 70 percent. According to the World Economic Forum, ASEAN will become the world's fourthlargest economy with an approximately US\$4 trillion consumer market over the next decade. Shoppers will move beyond omnichannel to expect omnipresence.

It will be important to invest in ambient computing to offer a seamless experience across all devices, including mobile, wearables, and TV, as IoT becomes mainstream in the years ahead.

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Web 3.0 will shake up the business ecosystem in the next eight years. Being truly de-centralised with a more democratic version of the current internet will change how we use our data.





Chief Executive Officer **Olam Ventures** 



Today, we're seeing technology transform the agriculture sector but mainly for large, established farmers. Smallholder farming communities in Asia, Africa, and Central America have yet to fully reap the benefits of technology and related finance opportunities. I see enormous potential for smallholder farmers over the next decade but there are challenges. First, infrastructure is lacking in Southeast Asia in terms of connectivity, penetration of smartphones, and cost of data. The second issue is the digital literacy of smallholder farmers. They love to

browse YouTube or Facebook, but they don't yet use an app on their phone to make transactions. So even if large companies innovate and create attractive solutions, their adaptability will still be low. We can change this by building trust and introducing education with the farmers, and I see this happening by 2030. Once there's a well-connected, efficient supply chain of farmers of all sizes, we can offer better finance and crop advisory, with crop advisory being the holy grail in smallholder farming.



These digital advancements will be crucial for farmers and organisations to keep on track with sustainability goals. In 2030, most supply chains should have the ability to tell an end consumer how sustainable their supply chain is. Today, it's not there. The notion of what sustainability is, is confusing because of too much noise. If you ask ten people what they mean by sustainability, you will get ten different answers. By 2030, ESG standards will be more apparent, and supply chain elements will be more transparent.

To create an industry with acceptable ESG standards, you will have to collaborate with competition, customers, and suppliers. One challenge with collaboration would be how fast stakeholders can move. Many large organisations still don't have the agility to work as a start-up and approval systems within larger organisations are usually cumbersome. Do you have to go all the way to the Board to agree that you can invest \$1000 or \$1 million? That slows down the pace either way, shackling larger organisations from collaborating effectively; you need to move fast and have agility because we don't have the luxury of time.

ESG governance will play a big part in how the agriculture sector progresses over the next few years — whether from governments or non-profit institutions. The consumer demand is already there, but there is no willingness to pay the premium because there's too little trust. Consumers are confused by the plethora of stories from

brands and food companies. As transparency increases, consumers will see through most of it and be able to place their bets on what they believe as sustainable practices.

If a business can prove the environmental worthiness of its company, it can unlock access to financing opportunities. In the next ten years, we could see billions of dollars flow into medium and large enterprises if they use their ESG data effectively. Currently, farmers and micro-entrepreneurs are largely being ignored because they don't have financing opportunities. Why? Essentially, there's no fool proof way of assessing their risk because of a lack of data and not being able to build reliable KYC frameworks with rural clients.

In the next decade, we'll have good KYC platforms for rural consumers, and financing will be done by platform players, input companies, micro-financiers, and even insurance companies. Today, it is trickling down, but a small farmer's option to borrow money at a reasonable rate is not available. That's a failing of our current society. If you don't facilitate that, there'll be no incentive for the farmer to grow.

Finding the right talent that aligns with our purpose is key to how we evolve over the next ten years. As we build ventures and scale up businesses, people are the most critical assets a company can have. If we're going to stay ahead in 2030, we also must allow our employees the space for innovation and big ideas.

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In 2030, most supply chains should have the ability to tell an end consumer how sustainable their supply chain is.





Susan has extensive experience in technology and banking, having started her early career at IBM and holding various senior positions in both regional and international banks before joining UOB. Susan is recognised by the IBF (Institute of Banking and Finance Singapore) as a Distinguished Fellow for her active contribution to the banking industry. She is also an active champion of inclusive employment in UOB and the wider community in Singapore.



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In Singapore, we have a program to encourage consumers to go green. Say a customer wants to put solar panels on their home, we won't just lend you money at a favourable rate, but we'll put you in touch will people who can do that for you. In 2030, I hope that our collective efforts will begin to see results.

As we embrace 5G and IoT, much more data will be collected, and its use will accelerate in 2030. This, combined with more sophisticated technology, will lead to a seamless blend of humans and machines. Today, you can tell you're talking to a bot when you call a bank. Come 2030, it will be hard to know whether you're talking to a bot or a real person; data, man, and machine will come together. For digital natives, the Metaverse will become their dominant interaction mode. This could mean a digital "life" beyond commerce, but more integral, as they personify themselves as "beings" in the virtual world. I see this transformation enriching the services we already provide by utilising digital capabilities in a fun, entertaining, and more accessible way.

However, customers want to be treated like people, not machines. We will see the next generation demanding this more, not less. There will come a time when efficiency at the touch of a button won't be enough, and a customer needs accurate advice on big life decisions. Customers won't want to speak to a machine for such needs that are more complex.

One of the critical challenges of purely digital engagement with the customer is maintaining the relationship of trust. After all, the banking industry is about trust. As a bank, we are the trusted custodians of customers' assets. That, I think, is one of the critical challenges we must address in a digital economy. How can we replace the face-to-face relationship or the warmth of a handshake? As we digitalise, we will still need to bring that level of trust in an efficient, meaningful manner and one accurate enough for the customer to feel. One way to tackle that challenge is hyper-

personalisation. Rather than inundating customers with unnecessary information, our mobile banking app sends tailored and unique messages. The key challenge in creating hyper-personalised solutions is often finding the right balance in collecting and using sufficient data to "declutter" information and present it to customers meaningfully.

Technological developments will create a more seamless, convenient, and secure infrastructure for the financial services industry. On the product side of banking, the use of blockchain will increase significantly. There's much hype surrounding cryptocurrencies, but it's all about the underlying technology of distributed ledgers. The ability to trace the authenticity of ownership, for instance, can be applied in so many areas of banking. From just experimentation today, we'll see it being used a lot more in 2030, particularly in capital markets and the area of smart contracts.

We'll also see more emphasis on sustainability. UOB is aiming to reduce its carbon footprint. The most considerable consumption for us is electricity and travel. However, as a bank, we would like to bring our customers along in the education of sustainability. One scheme we have is a sustainable trade financing facility. We help our customers look at their supply chain and help them build a green solution and facilitate the financing for that. In Singapore, we have a programme to encourage consumers to go green. If a customer wants to put solar panels on their home, we won't just lend them money at a favourable rate, we'll also put them in touch with those who can do that for them. In 2030, I hope that our collective efforts will begin to see results.





Thomas McMahon

Chief Executive
Officer and
Co-founder
AirCarbon
Exchange

Thomas McMahon is the Chief Executive Officer and Co-founder of AirCarbon Exchange (ACX), a frictionless carbon exchange offering the lowest fees in the industry, and an architecture which will allow the carbon market to expand efficiently and fulfil its true potential in helping the world meet Net-Zero.

Thomas has over 30 years' experience building commodities exchanges under US and Asian Exchange and Regulatory frameworks, with a focus on the development of Exchange-traded Cleared Futures and OTC products.



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In the next decade, carbon will have a costing impact on everything we do and will be fully embedded in the financial services sector by 2030.

In the next decade, carbon will have a costing impact on everything we do and will be fully embedded in the financial services sector by 2030. For example, we'll see it impact basic food supply chain economics. The focus will be on how food is transported; was it by land, sea, or air? This kind of transparency will be the thing of the future. In 2030, when you buy your pack of soup from the supermarket, not only will it state the ingredients, but it'll also show its carbon footprint. Being more carbon friendly may mean the soup costs more, but it'll be an embedded, micro cost.

If you look at carbon markets between 2012 and 2019, no one was interested. It wasn't so much a lack of awareness, but a lack of willingness to make any change because people didn't think they had to. Whether due to shareholder pressure or regulatory pressure, or pressure to just do the right thing, there's now a willingness from industry players to change. Carbon is now emerging as an asset class and more people are willing to invest into carbon projects and carbon technologies. We're seeing carbon become more mainstream and not just backed by private monies.

The voluntary carbon market is just one solution for carbon mitigation.

A voluntary credit is the incubation of a process of either sequestration, mitigation, removal, or capture of a tonne of carbon dioxide. Demand from corporates who have a responsibility to meet ESG targets is growing in this area. Carbon credits today will probably go through a pivot point around 2035 or 2038 when you'll see a significant shift in demand from carbon sequestration and mitigation, to removal and capture.

It will take more investment in technology to advance the carbon market. For example, solar panels were over \$1000 a panel 25 years ago. You put them on your house out of the goodness of your heart because it would take you an unreasonable amount of time to get your money back. Today, it's an asset that produces power and makes you money. That's because the technology has advanced and become cheaper. It went from \$1,000 a panel to less than \$100 a panel. The efficiency went from 9 percent to 18 percent. We're now seeing that same effort going into the technology of carbon removal. More money invested will allow you to scale the technology, do the research that's needed, and then produce the end products that will drive the prices down. We're probably looking at 2035 or 2040 until we get real scaling in carbon removal technologies.

The significant change you're going to see in the carbon market will be regulation. By 2030, there will be more regulation, but I think it will be a very supportive kind of regulation. I don't see it as cumbersome or impeding the growth of the carbon markets. Voluntary carbon credits need regulation to achieve tier one status as a financial instrument. We've talked to several regulators across the world to get their opinion of voluntary credits, and there is no standard because it's an intangible asset. Going forward, however, I think we'll see some regulators change the nature of a voluntary credit, or what's called an emissions instrument, and it will gain financial recognition as a product. I see them getting full recognition as a spot commodity. This will have a great impact on how financial institutions, trading institutions and banks will be able to finance the asset.





Tinku Gupta

Senior Managing
Director, Chief
Technology Officer
SGX Group

Tinku is the Chief Technology Officer and a member of the Executive Management Committee in Singapore Exchange (SGX). She is responsible for the development and implementation of the company's technology-related strategies and initiatives, as well as Information Security and Technology Operations functions in the SGX Group.

In a career spanning over 25 years in SGX, Tinku has led both business and technology units. She has led the implementation of many key business and technology initiatives that have helped shape SGX Group into a leading international multi-asset exchange.

She was awarded a place on The World Federation of Exchanges' Women Leaders List 2021 as one of the talented and gifted women leaders in the Exchange industry.

To get ahead in 2030, we must envision the disruptions around us. To stay relevant, we not only need to ensure well-run platforms, but also continually embrace change and transformation. Transformation, in my case, means staying plugged in to the future of technology developments: Al, machine learning, cloud computing, data, digital innovation, edge computing, and blockchain.

Cloud will become mainstream in 2030, even in low and predictable latency worlds. However, offering predictable latency in the cloud, especially in multi-tenant data centers, is not a simple task. The complexities that cause low latency uncertainty arise from distributed computing, virtualisation, lack of measurement tools, location of the cloud provider's data center, and traffic patterns. Hence, there are several challenges to solve. The most predictable and best latency is achieved when customers collocate with us in the same physical data centre. In the future, I envisage latency zones in the cloud, supported by market operators like us, where customers are present to achieve the best outcome from their trading algorithms. Research work and solutions are being explored and by 2030, this will be a muchimproved space.

To achieve the maximum potential of digital innovation, a lot more needs to be done to democratise data. Data has to go beyond the boundaries of countries today. There's much legislation around data rules, including who can use it and how it's accessed. Without proper access to data, it will be tough to fully embrace all the technological capabilities available to us. Of course, legislators have a significant role in this, but as we become more digital globally, we will see consumers having a big say in how their data is used and protected.

As we become more digital, cyber security becomes a number one issue for businesses. Thinking of cyber threats keeps me awake at night. There are defenders like us running our IT systems and the threat actors trying to plan the next big attack on any digital asset. Both are investing in technology. So every time we work on a new security tool to defend against an attack, we also know that the threat actor is looking at a new form of attack. It's a continuous game of chasing each other. Every other day, new vulnerabilities are being

discovered. Threat actors don't discriminate; every sector is vulnerable to cyber attacks, so it should be the highest priority of any CTO in any industry to invest well and find the right talent to continuously improve their cyber posture.

The hunt for talent with be a top priority for businesses in 2030. Technology has become so complex that there are many distinct talents required. A user experience developer will be different from an API developer, so skills and talents are becoming more silo-ed in terms of a role's requirements, creating a strain. Specialised skills will continue to be sought after, so an almost continuous assessment of what skills you need to run your business will be required.

#### 66 77

Every sector is vulnerable to cyber-attacks, so defending cyber threats should be the highest priority of any CTO in any industry. Invest well and find the right talent to improve your cyber posture continuously.

Next, COVID-19 has changed the landscape in terms of remote working, impacting employee loyalty. The supply and demand are different for each area of technology. Non-specific technology jobs are also experiencing a talent crunch. Cyber is the perfect example. A cyber specialist can work in several industries, including healthcare and finance, so demand is greater than supply.

Regardless, as we embrace digitalisation, the hunt for employees is borderless, and we can pick from a global talent pool. Collaboration can also be a great source of talent. I see more businesses working together as partners, with different parties developing different software parts. It might not be feasible in the real world yet, but many discussions are happening now where employees will work for multiple employers. Ultimately, no matter how much specialisation is required, the generalist is equally important because they come up with concepts around design and architecture AI.





Group Chief
Transformation
Officer
FWD Asia Pacific

Troy leads the effort as Group Chief
Transformation Officer at FWD Group,
overseeing Operations, Customer and
Digital Experience, M&A Integration
Partnerships and Agile Transformation
across the region. Before this, he was Chief
Customer Officer at Pizza Hut Restaurants
Asia Pacific since January 2018 and prior
to that, Chief Customer Experience Officer
at AIA Malaysia since 2014.



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Insurers need to evolve their business models.
Today, we value insurance on the value of the policy itself.
To see the industry transform, emphasis should be on the value to the customer.

The big challenge for the insurance industry is engagement. Insurance is not something you check when you wake up at six o'clock in the morning, to see what's happening with your policy. The frequency of engagement will build relevant and meaningful customer relationships. This is done by leveraging partnerships and collaborations across the board

To do this, insurers need to evolve their business models. Today, we value insurance on the value of the policy itself. To see the industry transform, emphasis should be on the value to the customer. If you start engagement early, it will build a brand, reputation and a relationship built on trust that evolves over time. Eventually, the products and services will have higher value due to that engagement.

Imagine if my relationship with insurance started when I was 22, and I had a couple of policies that cover me when I went on a plane, or for baggage, or going in vehicles. That then evolves into a policy that sets me up for retirement, where I've got my critical illness and other things that cover me for certain things that may go wrong in the next 10 to 20 years. There are elements and features in such a product or service that I can turn on or off to cater to my needs at different periods in my life. It sounds complicated, but I think it's where the insurance sector needs to go.

Generally, insurance can be perceived as irrelevant to the younger generation and where they are today. Their net worth and portion of the population may not be as great as other segments. Fast forward 10 years, however, and those attributes will increase substantially. Insurers that are not relevant to the younger generation today, and don't have products and services that meet the needs of that segment, could end up following the blockbuster journey.

Rightly or wrongly so, insurance as an industry has struggled to create products and services that are accessible and inclusive to all generations. That's both a challenge and an opportunity for the next decade.

Embedding insurance into other industries and becoming a partner can help the insurance industry penetrate a wider customer base. That's been the case in the travel space for some time now. Building partnerships with other industries and attaching products and services that are part of the everyday life of the consumer will boost engagement. This is despite insurance not being an everyday engagement vehicle. I think that will evolve over the course of the next seven or eight years.

As the industry moves into the digital space, trust will be key to maintaining a customer base. This comes through building a meaningful relationship but also by being responsible with data. As digital engagement increases, thought will have to go into the nudging approaches used to influence and encourage the purchase of a product. There is a fine line between being a company that does very well in personalisation and a company that crosses the line into intrusion.

With the digitisation of the industry comes a change in behaviour of both the customer and the organisation. Gone are the days of being available only Monday through Friday and only during daylight hours. Financial services that are not able to do business through the night due to legacy systems are going to have a problem remaining competitive.

The adoption of technology like blockchain and AI will come down to value creation and how it can provide trust for customers. AI is already being used to help manage risk better, create personalization, and build customer engagement models. Those use cases will become more and more prevalent. Will certain insurers jump on the fanfare, such as insurance company 'X' being the blockchain insurer of the future? No, but I think what you'll see is the technology woven into their environment and their architecture, creating unique experiences and different value propositions for customers and partners.







The transformation of the financial services sector is happening, and it's happening fast. Over the next seven or eight years, there will be consolidation in the market. Some new business ventures with exciting technological and financial solutions may struggle to keep the capital flow coming in. We'll see the legacy banks taking advantage of the situation and taking up the opportunity to buy into something they see as a value-add proposition rather than building everything from scratch.

The other evolution we'll see by 2030 is within the operational space. Many banks still transact on a T+2 basis. No one wants to wait two days for funds to clear and the evolution of business models haven't moved as quickly as technological advancements. Over the next few years, financial services will realise that extended risk around T+2 timeframes aren't necessary, along with the need for multiple intermediaries to facilitate the movement of stocks, bonds, and cash.

Currently, the systems behind how people transact are cumbersome. Giant firms operating in the background are charging too much money to move what is essentially your own money. I think the ability to embed transaction movement into the internet, whether for physical or digital assets, will be one of the significant material factors that will evolve in the next seven or eight years. The ability to transact without having complex and convoluted mechanisms around moving money will be transformational. Blockchain technology will be a crucial part of the underlying ecosystem, creating a trusted, transparent network where everyone can verify what's happened immediately. To move that forward, we need the largest firms in the world to start understanding and utilizing blockchain.

If these advancements are rolled out across the entire system, we'll see far more progress on financial inclusion. It's hugely important to give more people access to financial products and capabilities. Look at Sub-Saharan Africa as an example. People who migrate for jobs and send money back to their loved ones in their home country are being charged obscene amounts to do something digital assets or blockchain technology can do for almost nothing. Financial institutions need to facilitate the good that can happen by

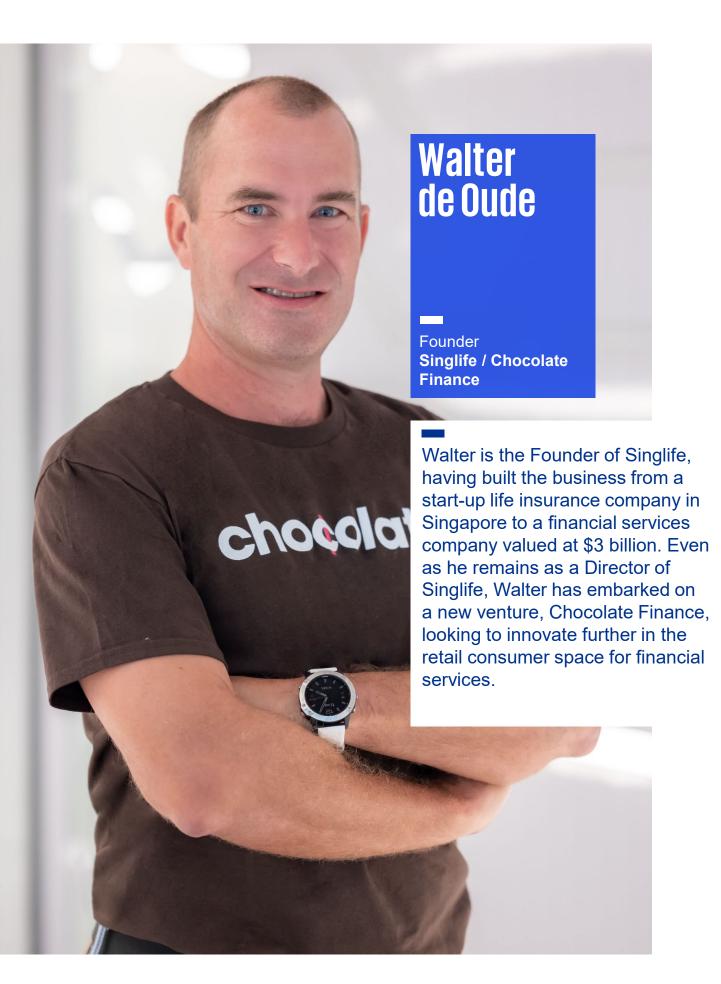
embracing the digital capabilities that are now available. It's a win-win for financial services firms because making efficiencies and improvements will eventually improve the return on their share price and make them more competitive against the digital native competitors who don't have the huge, legacy middle and back office overheads.

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Over the next few years, financial services will realise that extended risk around T+2 timeframes aren't necessary, along with the need for multiple intermediaries to facilitate the movement of stocks, bonds, and cash.

Advancement around regulation is essential to transforming financial services, particularly relating to digital assets. The default from the regulators right now is to err on the side of caution, particularly when overseeing major financial firms. Part of building trust with the regulator will be to show that you can manage the perceived risks with this new asset class. The most considerable perceived risk you hear with Bitcoin, for example, is that it's used to launder money. However, cryptocurrencies are probably the worst thing in the world you could use to move illicit funds because they're on a public, distributed ledger that can be assessed and traced back to inception. In contrast, a \$100 bill can be handed from person to person. Those perceptions need to change, and that's a process of education. That education doesn't start with regulators but culminates with the regulators seeing that this ecosystem is evolving. Everyone, including the regulators, can see that digital assets aren't going away and the demand is present. With this in mind, scrutiny will be put on ways to protect the consumer. The challenge is that the world isn't global regarding regulation. There is a risk of an arbitrage effect if you apply regulations in one location and not in another. Achieving a globally equivalent, standardised regulation will happen, but not for another 10 to 15 vears.







Financial services will go through significant changes over the next few years. We're going to see companies being built-focused on distinct parts of the value chain, whether that is payments, wealth management, stocks, or technology. Smaller companies with these specialised capabilities will be plugged into ecosystems to provide broader and more well-rounded products and customer service offerings.

Consumers will have so much choice in this world that the old idea of being all things to all people as a financial services company is fundamentally flawed. Improved infrastructure will allow businesses to leverage instantaneous integration of various component trees. The old days of large singular systems that do multiple things will disappear, and ecosystems around technology will form.

Building your product around your customers will be crucial for success in 2030. An example of a current challenge to achieving this is optimising secure login and 2FA. I think we will see further development of password authentication. Nobody has come up with a truly seamless solution in this space yet. A global authenticated sync pass would be one of the most incredible technology developments we'd all love to see by 2030. Every financial institution worldwide would have one central source of truth about who you are and where you are. Everybody can leverage it. Think of the efficiency we could gain in a financial services system if everybody sang from the same song sheet from a KYC and anti-money laundering perspective.

Over the next five to ten years, the ultimate customer proposition will be less of a singular purpose offering but more of a collaborative, connected financial services experience. The evolution of financial services will blur sectors, so a bank will not only be a bank and an insurance company will not be just an insurance company. To achieve this, we'll see a lot more partnerships and collaborations emerge in 2030. Services will be forced to become more specialised over time due to competition. From a customer perspective,

people won't value whether it was a bank or insurance or fund management offering; if their money is safe and they get the solution they need, they'll be happy. Customers will be more agnostic to the brand history and more focused on real value and experiences.

However, what will remain is that customers will continue to look for regulation of the products and services they use. The consumer will always want to be safeguarded. We're very fortunate in Singapore to have one of the most progressive regulators in the region. However, with all the technological innovation and industry proliferation, regulators are seen as playing catch-up to a certain degree. For example, asking for paper proof of an address as part of regulations is a waste of time for customers globally because this can be faked easily. It's an onboarding pain point for most, if not all, customers and a minor inconvenience for a fraudster. Instead, we need to find ways to help regulators value and acknowledge new technologies to meet the intended regulatory requirements, while maintaining the same principle behind the regulation. First-line protection for the consumer lies with the organisation, and more needs to be done. The industry is currently spending a lot of resources safeguarding against phishing, and better tech can help with this. If I'm a CEO in 2030, what do I worry about? I worry about waking up and seeing our systems have been hacked. Hackers are super smart and persistent in looking for ways to get in. There is no getting around the fact that systems must be bulletproof because if you get a breach, your reputation as a safe and secure space to do business is ruined.

Maintaining good customer experience takes time and innovative thinking. The ability to pause, stop and think will become your talent commodity. It's not a soft skill; you can't learn it; you must practice it. We're losing the ability to think big and intensely because everything is instantaneous. Organisations must allow their employees time and space to let innovation grow.

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Vice President, Global Sustainability Lead **Envision Digital** 

Ynse leads Envision Digital's global activities in sustainable and low carbon business. In this capacity, he pushes the boundaries of Artificial Intelligence of Things (AloT) technology to digitalise and decarbonise with companies and governments.

Prior to this, Ynse was a Partner with Accenture. He served as Managing Director leading Accenture's Strategy and Sustainability practice for Asia Pacific based in Singapore since 2008 and more recently, for northwest Europe based in Amsterdam since 2017.

As a thought leader in sustainability, circular economy and the energy transition, Ynse's track record includes serving as Board member, knowledge Partner, facilitator and advisor to various public and private sector institutions such as the Dutch Sustainable Growth Coalition, Dutch and European chambers of commerce and various government authorities.





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By 2030, businesses will be much more open to each other because everybody will realise that no one solves the climate crisis alone.

The journey to decarbonisation can't be made without digital technology stretching across the energy value chain. In 2030, carbon data collating capabilities will have increased and be connected seamlessly with platforms for businesses, customers and investors to see how they can improve their path to Net-Zero. AloT is integral in that journey. At Envision Digital, we stitch together the entire energy value chain, using an AloT platform to capture and then process that data cost-effectively and at scale.

Energy efficiency pays for itself and renewable energy is cheaper than ever. The path to net-zero is gaining traction as businesses realise that it is good for their bottom line and demanded by customers and regulators. Even better, decarbonising a business lowers the cost of capital.

That's why we're seeing sustainable finance taking off in Singapore and across the globe. By 2030, sustainable loans will have changed significantly. The mechanism of a sustainability-linked loan is that you agree on an investable project, identify some KPIs — often these are related to carbon emissions — and reduce them. Your discount on your interest rate depends on how far you reduce your carbon emissions. At the end of the first year of the loan, if you've achieved the goals, the discount will start to roll from that year onwards.

The next stage for sustainable finance will be to shorten that cycle. The reporting cycle will reduce from one year to three months, to one month, or even a week or a day. If businesses can show improvements and progress within a week, they can get a discount on their interest rates from that week onwards. For a \$1 billion or \$2 billion loan, that's a considerable amount of money. These transactional costs wouldn't be viable without the technology

available to us today. This is where I see AloT, decarbonisation, and financial services coming together in 2030.

We're going to see sustainability rising on the agenda across the Southeast Asian region. Indonesia, Malaysia, Laos, and Thailand have been playing catch up in the space, but I see them leapfrogging to get ahead in the game over the next few years. One of the mechanisms of this leapfrog is to make sustainability sustainable by finding a business justification to do so. There's also pressure from consumers for businesses to take action. Banks and institutional investors can provide loans at lower interest rates because there's ample appetite. Consumers demand banks invest more in sustainable products, businesses, and business models so it is ultimately consumers that are driving this change. Ultimately, the corporates will accelerate the transition because that brings economies of scale, so we all have our part to play.

By 2030, businesses will be much more open to each other because everybody will realise that no one solves the climate crisis alone. You'll see acquisitions, consolidation and many ecosystems; data sharing will be more commonplace. There will be an increasing concern around data security, but with the right IT and data team, it's not a problem that I see getting in the way of progress. Our biggest challenge, and what will create a bottleneck for growth, is finding the right talent. There's a need for people who have the best technology and data skills but equally important is a need for people who can think outside the box. Currently, the sector is fragmented, with many different businesses working in silos; finding people who understand the bigger picture will be crucial to achieving our goals.



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## **Contact us**

#### **Digital, Innovation and Commercial Transformation Services**



Grace Tan
GRC Transformation
KPMG in Singapore
E: grace\_tan@kpmg.com.sg
T: 6411 8531



Thurain Tun
Ecosystem and Alliances
KPMG in Singapore
E: thuraintun@kpmg.com.sg
T: 6213 3054



Talal Ikhwan
Digital Product Development, Digital Village
KPMG in Singapore
E: tikhwan@kpmg.com.sg
T: 6411 8122



Gopi Rengasamy
Head of Strategy Services
KPMG in Singapore
E: gopirengasamy@kpmg.com.sg
T: 6213 3896



Helene Mayne
Organisational Transformation
KPMG in Singapore
E: helenemayne@kpmg.com.sg
T: 9754 3284



Katharine Cheung
ESG Transformation
KPMG in Singapore
E: katharinecheung@kpmg.com.sg
T: 9756 2964



Vrinda Sood Global Fintech & Innovation Centre of Excellence KPMG in Singapore E: vrindasood@kpmg.com.sg T: 9631 3644



Barbara Crane
Data Driven Transformation
KPMG in Singapore
E: barbaracrane@kpmg.com.sg
T: 6213 3255



Michael Cutler
Chief Technology Officer, Digital Village
KPMG in Singapore
E: michaelcutler@kpmg.com.sg
T: 6411 8507



Farid Howladar
Platform and Venture Building
KPMG in Singapore
E: faridhowladar@kpmg.com.sg
T: 9630 8247



Mayuran Sivakumaran
Economics and Regulation
KPMG in Singapore
E: mayuransivakumaran@kpmg.com.sg
T: 9638 5246



Yashika Mody
Digital Product Development, Digital Village
KPMG in Singapore
E: ymody@kpmg.com.sg
T: 6213 3175



Zenia Chang
ESG Transformation
KPMG in Singapore
E: zeniachang@kpmg.com.sg
T: 8028 1296



Theodore Chua
Global Fintech & Innovation Centre of
Excellence
KPMG in Singapore
E: theodorechua@kpmg.com.sg
T: 9662 0687



## **Contact us**

#### **Financial Services Leadership**

T: 6213 3231

T: 6213 2008



Antony Ruddenklau
Head of Financial Services Advisory
KPMG in Singapore
Global Head of Innovation and Fintech
KPMG International
E: antonyruddenklau@kpmg.com.sg



Alan Lau
Partner, Head of Financial Services, Tax
KPMG in Singapore
E: alanlau@kpmg.com.sg
T: 6213 2027



Leong Kok Keong
Partner, Head of Financial Services, Audit
KPMG in Singapore
E: kokkeongleong@kpmg.com.sg



Stephen Bates
Head of Financial Services Deal Advisory
ASPAC
KPMG in Singapore
E: stephenbates1@kpmg.com.sg
T: 6213 2442



Irving Low
Partner, Head of Advisory (Consulting)
KPMG in Singapore
E: irvinglow@kpmg.com.sg
T: 6213 2071



Lau Kam Yuen
Partner, Head of Risk Consulting, Advisory
KPMG in Singapore
E: kamyuenlau@kpmg.com.sg
T: 6213 2550



Lee Sze Yeng
Partner, Head of Audit
KPMG in Singapore
E: szeyenglee@kpmg.com.sg
T: 6213 2257



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