Frontiers in Finance

Issue #64

Innovating through platforms and ecosystems

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Foreword

Guest editor's notes

Innovating through platforms and ecosystems

The financial services landscape is in transition. Traditional players are evolving into platforms. New players — some with brands well-established in other industries — are entering the marketplace. Ecosystems are coalescing around customer pain points and value propositions. Digital currencies and assets are forming shadow systems. Financial market infrastructure is going digital. And the pace of change is continuously accelerating.

For financial services executives, the future remains uncertain and exciting, as the sector transforms at break-neck speeds with the lines becoming increasingly blurred. Many executives are struggling to understand the future trends and set a vision that will enable their organization to capitalize on them. Even those with a strong vision are worried they may not be moving fast enough — or boldly enough — to compete in the new world.

In this edition of *Frontiers in Finance*, our global network of financial services professionals sit down with financial services leaders across the ecosystem to find out how these trends are influencing their strategies and investments.

We explore the issues from various vantage points. In our cover story on page 6, Angus Sullivan from the Commonwealth Bank of Australia shares how his bank is building platforms as a foundation for growth. On page 14, BlackRock's Aitor Jauregui reveals how they are enhancing their world-leading Aladdin platform. And on page 38, Rob Schimek, CEO of bolttech, a start-up insurance exchange platform, discusses the growing demand for their innovative new platform.

This edition also takes a deeper look at cryptoassets — again, exploring the issues from multiple viewpoints. We unpack the various types of cryptoassets in the market today. We look at the evolving regulatory landscape. We explore the unexpected tax implications and reporting requirements being introduced around the world. And we look into the future to assess the impact Central Bank Digital Currencies may have on the current financial system.

For those concerned they are not moving quickly or boldly enough, this edition of *Frontiers in Finance* offers insights and ideas for accelerating innovation. Our authors share lessons from their work with fintechs. They look at ways companies can unlock the value of their data to speed transformation. And they look at how traditional brick-and-mortar sectors like real estate are catalyzing their own digital road map.

We hope this edition of *Frontiers in Finance* sheds light on the strategies, technologies, approaches and models that are rapidly redefining the financial services marketplace as we move into the era of platforms, ecosystems and cryptoassets. The future may still be somewhat uncertain, but the winning strategies of tomorrow are already being formed.

To learn more about the issues raised in this edition of *Frontiers in Finance*, or to explore how your organization can take advantage of these emerging trends and innovative ideas, we encourage you to contact your local KPMG member firm or any of the contacts listed at the back of this publication.

Thank you,

Antony Ruddenklau
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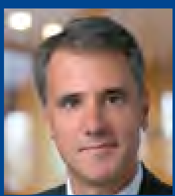
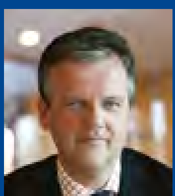
Editorial Board





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Preparing for platform primacy

Judd Caplain
Global Head of Financial Services
KPMG International and Partner,
KPMG in the US

Why the leading financial institutions are pivoting to platforms

Platform models are changing the game for financial services firms. And the leaders are already setting the rules. Are you ready to pivot to platforms?

Many traditional financial services products are being commoditized. They are becoming irrelevant in the lives of customers. They are seen as table stakes. What customers really care about is value, convenience, and security. And what they want is a financial services ecosystem uniquely tailored to their specific needs.

I am not particularly prone to making predictions. But — of this — I am fairly certain: in the next 15 years, all of the most successful financial services organizations will be platform players. The leaders will be defined by the ecosystems that gravitate around them. They will be measured by the incremental value they deliver their customers. And they will grow based on their ability to meet their customers' needs.

It's a foregone conclusion

In part, my confidence comes from watching customer trends. Today's financial services customers are looking for experiences and value. Traditional interactions with financial services firms are no longer engaging. People are looking for personalization, tailored offerings and value-added services. They want AI and technology to look after the more mundane stuff.

My read of the future also comes from my view of the evolving market landscape. For the past decade, we have seen fintechs disaggregate financial services — carefully unpicking pain points within the financial services system and solving them. But now the pendulum has swung back. Customers don't want to be dealing with multiple apps and interfaces. They want it all in one place. Demand for reaggregation is rising.

The third big sign that platforms are the future is the continuous drive among financial services firms for efficiency, agility and profitability. They recognize that the disaggregation of the past decade has created a massive ecosystem of niche players with valuable capabilities in key peripheral activities. Executives are increasingly asking themselves why they are expending resources on customer acquisition, or on anti-money laundering (AML) and know-your-customer (KYC), for example, when there are fintech players that can do it faster, more efficiently and more effectively.

A financial services future dominated by platform players is, therefore, somewhat of a foregone conclusion. Platform players will likely be more customer-centric, more value-driven, more personalized, and offer a broader set of services. They can use their ecosystems and their customer data to build impenetrable moats around their customers. They can operate more efficiently, with more agility and more profitability. They are more likely to remain relevant while others fade into obsolescence.

The leaders are already emerging

Fifteen years may seem like a short amount of time to achieve this type of transformational change across an entire industry (particularly one as regulated and as globally integrated as financial services). Yet I suspect my prediction may not be aggressive enough. In reality, the die will be cast within the next decade; just like Airbnb in accommodation, a handful of clearly dominant players will have emerged.

In other words, time is of the essence. The great power of platforms and ecosystems stems from their network effects. The more users, the more services, the more providers and the more data, the more valuable the network becomes.

It also becomes much 'stickier'. The deeper a platform becomes embedded into a user's life, the greater the barriers to switching. You are less likely to change mortgage providers, for example, if the lender is also providing you with your wealth management, payments, and insurance products through a single login (and then using that data to bring you better offers on everything else you need).

Urgency is also being driven by overwhelming customer demand. Prior to the pandemic, fintech offerings were mostly geared towards somewhat younger, more technologically savvy and less risk averse customer segments. Now, customers of all types have become more digital, more experience-focused and more open to new approaches. They expect their financial interactions to be more innovative, more valuable and more experiential.

Don't lose the plot

As financial services organizations reorient themselves at the center of new platforms, many will find they are facing a host of new challenges. As some of the profiles in this publication make clear, choosing the right ecosystem and platform partners, at the right time, and aligned to the needs of your customers, is key. So, too, is creating the right experience and the right products and services.

The big risk, in some respects, is that financial services companies may start to 'lose themselves' in the platform environment. Some will spread themselves into adjacent industry areas too hastily or not core to the customers they service. Others may struggle to maintain the closeness of their client relationships in a platform environment. I've spoken with leaders who are understandably concerned they might be ceding some control over their capabilities and risks by working so closely with third parties.

In my view, this all comes back to building from your core strengths and knowing your customers. It starts with understanding the value you bring to your customers and then building on that to incrementally (yet rapidly) grow the relationship. From there, financial services organizations will likely have the data and the customer insights to know how to predict their customers' needs and then respond to them.

Pulling off a pivot

I believe those financial services firms that fail to create and execute on a platform strategy today may rapidly become irrelevant to their customers in the near future. I also think they will find it increasingly difficult to deliver competitive offerings or value in an environment dominated by more flexible and innovative platform financial services providers. Without platform capabilities, it will likely be harder for firms to compete and even harder for them to keep customers.

In this edition of *Frontiers in Finance*, our professionals explore some of the challenges and opportunities facing financial services firms as they strive to pivot towards platforms. I hope their stories serve to inspire and catalyze financial services leaders to move boldly towards their platform strategy.

“The big risk, in some respects, is that financial services companies may start to 'lose themselves' in the platform environment. Some may spread themselves into adjacent industry areas too hastily or not core to the customers they service.”

Cover story

Digital driving customer value

How the Commonwealth Bank of Australia is reinventing the bank

Daniel Knoll, Head of Financial Services, KPMG Australia
Angus Sullivan, Group Executive, Retail Banking Services, Commonwealth Bank of Australia

The Commonwealth Bank of Australia (CBA) is using digital technology to create ecosystems of value for their customers. In doing so, they are reinventing what it means to be a bank. CBA's Angus Sullivan explains how they are doing it and where they are going.

"Digital has given us this amazing opportunity to completely reimagine what we do as a bank," Angus Sullivan, Group Executive, Retail Banking Services at the CBA told KPMG in a recent meeting. "A decade ago, we thought it was about digitizing existing functionality. Now, we see digital as an opportunity to deliver greater value to our customers in many different ways. And that is leading us to entirely new business models."

Focusing on value creation

CBA is certainly using their existing strengths to create new value for their clients. Take, for example, the bank's recent moves in the home loan market. CBA currently serves more than 15.9 million customers and is the largest provider of home loans in Australia. That gives them unprecedented insight into what homeowners need. And it gives them unparalleled scale to impact the lives of millions.

It's what they have done with that scale and scope that matters. Earlier this year, CBA announced a partnership with Amber, an energy retail start-up that helps homeowners tap into renewable energy when prices are low. Then they introduced a 10-year, fixed rate Green Loan at an ultra-low rate (0.99 percent pa) to help homeowners install clean energy products like battery packs. For those homeowners interested in saving money and protecting the environment, the offer is very compelling.

"The value is two-fold. First, it helps our customers save money — they can turn their expensive energy bills into an upfront capital commitment that comes at a much lower lifetime cost. But, at the same time, we're making a real difference in terms of greening the energy supply chain," noted Angus. "That's a big priority for us and for our customers."

Technology at the core

CBA has been making similar investments across a range of verticals central to the lives of their customers. It invested into Little Birdie, an e-commerce start-up that helps consumers find the best offers on products they need. It took stakes in More Telecom and Tangerine Telecom, two Australian high-speed (national broadband network) internet providers. It teamed up with Cogo, a carbon tracking and offset app. And it has invested into dozens of other promising ideas and technologies through its venture scaling entity x15ventures.

What has tied this all together, however, is a consistent and strong focus on improving the core through internal technology transformation, a shift towards open application programming interface (API) architecture and a world-leading Customer Engagement Engine (CEE). The CEE runs more than 400 machine learning models that ingest more than 157 billion data points to make more than 35 million decisions every day. It's at the core of the customer experience.

"The CEE allows us to orchestrate interactions with our customers and learn what they like and what they need. It allows us to engage customers in entirely different content. Ultimately, it is what is helping us to become much more relevant, more personalized and more trusted in the lives of our customers," Angus added.

> "CBA has been making similar investments across a range of verticals central to the lives of their customers. It invested into Little Birdie, an e-commerce start-up that helps consumers find the best offers on products they need."

Giving them what they want

As the Bank enters into new service areas and creates new offerings, Angus remains vigilant against scope creep. Customers want services and offers that are highly relevant to their lives and their needs. What they do not want is a 'junk yard' app that tries to be all things to all people, so Angus is clear that every new model, offer and service must meet a high bar for relevance.

"We need to remember that people often come to our app with a different purpose in mind — they want to make a transaction or are looking to update their information, so we need to make sure anything we put in front of them is really valuable and highly relevant. And as we expand our ecosystem of partnerships, we need to be very focused on keeping things relevant," he added.

Three keys to CBA's success

Angus credits CBA's progress to three key factors. First, they spend significant time and effort listening to their customers. Some of that 'listening' is done by the machine learning algorithms running in the CEE. But Angus is also keen on human-to-human listening. "You really learn a lot when you spend time with the customer — you find out what they really need, how we can make their lives easier and how we can help them reach their goals. That's been hugely valuable."

The bank's efforts to create dynamic partnerships has also helped them move ahead. Not just by adding innovative models and services, but also by helping the business develop, innovate and co-create. "Our preference to partner with businesses that are disruptive in their industry has really helped us open up our own thinking internally," he noted. "It's made us a better organization internally. We do things differently as a result of our partnerships and that's great."

Last but not least, Angus notes the critical importance of protecting customer privacy and maintaining a high level of trust. "The expectations on banks in particular are very high when it comes to protecting customer information. We've got sensitive information about our customers and how they spend their money. And we're going to make sure it's never used for purposes other than those our customers expressly permit."

Deeper, more trusted relationships

While CBA is clearly leading the pack, it is becoming increasingly clear that financial institutions of all types are moving beyond processing transactions and towards delivering value. Simply put, they are reinventing themselves and what it means to be a bank and, to do that, they are leveraging digital and creating ecosystems around customer needs and expectations.

"We see enormous opportunity for banks and financial institutions to evolve their offer to customers — to deliver something much more holistic than our traditional definition of banking would suggest. That's how we're going to build deeper, more trusted relationships with customers," Angus added. ■

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"As we expand our ecosystem of partnerships, we need to be very focused on keeping things relevant."

Angus Sullivan
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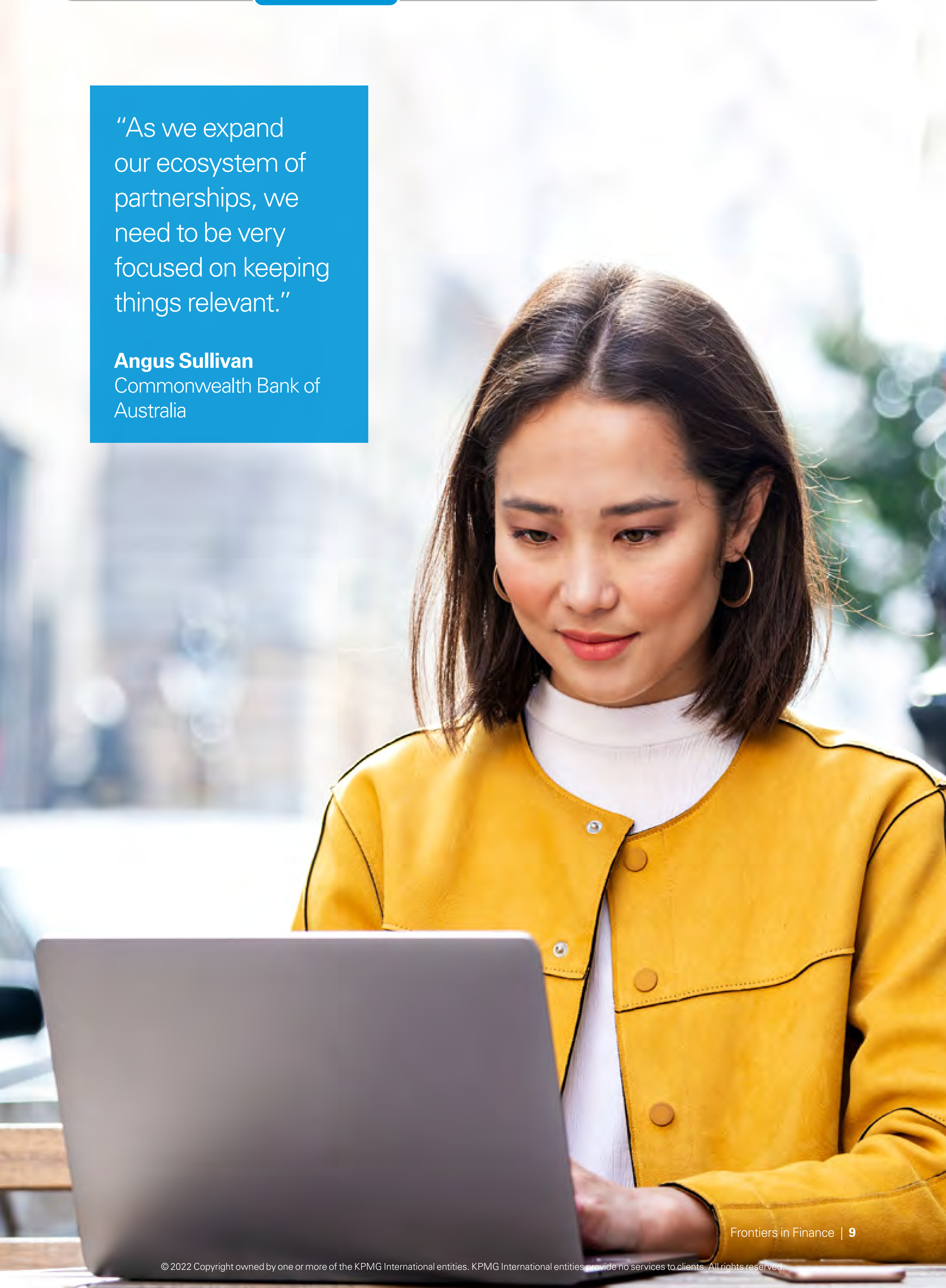

Platforms fueling growth

Evolving the model

Winning 'as-a-service'

Antony Ruddenklau, Head of Financial Services Advisory, KPMG in Singapore and Global Head of Innovation, Financial Services, KPMG International

Michael Habboush, Director, Financial Services Advisory, KPMG in Singapore

Financial services firms are building platforms and expanding ecosystems. But what's the end game? And what will it take to get there? Anthony Ruddenklau and Michael Habboush from KPMG in Singapore believe the future lies in 'as-a-service' models. Here's why.

This edition of *Frontiers in Finance* is filled with stories of financial services organizations avidly building and engaging in platforms. They are some of the leaders. They recognize that business models have changed. They understand that consumer expectations are evolving. And they see that technology is rapidly creating new revenue models and opportunities for growth.

They recognize that platforms are the lynchpin to success in this new world. They have seen that, in a platform world, integrated networks quickly become moats. And as their maturity evolves — from driving awareness to engagement to immersion to prediction — the moats they are creating around their platforms are becoming wider and value is increasing exponentially.

Perhaps most importantly, they understand that the data generated through platforms could kick off a flywheel of superior customer experiences. Simply put, financial services firms can better understand their customers (and their customers' customers) through better customer data (transactional, contextual, behavioral and motivational, for example), thereby enabling them to anticipate and predict future customer demands. That allows them to create more products and attract more customers.

Properly targeting these new products to the right customers at the right time leads to an overall better and more valuable customer experience. Particularly when data from those experiences are fed back into the flywheel to keep the cycle going.

The right platform strategy at the right time

Every day, the moats are growing wider, and the flywheel is picking up speed. For those already building their platforms, the competitive gap is spreading rapidly. And the leading financial services firms know which side of that gap they want to be on.

What can we learn from these leaders — and those in other verticals that are achieving massive platform success? Likely the most important lesson is that platforms tend to progress through several stages, and each requires a different strategy at different points. It is key, therefore, to understand those phases and deploy the appropriate strategies at the right times.

At first, the platform will need to focus on jump-starting and growing. The idea here is to attract more customers and more producers, using that flywheel to drive better services and better experiences. With the flywheel spinning, the leading platforms then tend to start predicting what their customers and producers will want and need in the future, enabled by better data and smarter interactions.

What many platforms find is that their access to data and their growing ability to predict demand opens up opportunities in new adjacencies. At this stage, platforms often expand into new industry spaces, new product spaces and new geographic spaces (think of how Amazon used its data and models to expand from bookselling in the US to a dominant global marketplace).

> “For those already building their platforms, the competitive gap is spreading rapidly. And the leading financial services firms know which side of that gap they want to be on.”

In the banking space, we are seeing organizations start to focus on 'high conviction' themes and verticals like agriculture and food, supply chain, health and wellness, and e-commerce. They are building out their ecosystems and capabilities in their chosen areas. They are creating platforms to improve the flow of transactions and create efficiencies for participants. Then they are using their data, their ecosystem partners and their technologies to expand their value propositions into adjacencies between those customers and producers.

The Commonwealth Bank of Australia offers a good example of this in practice (they're profiled in this publication). They started out by using their position in the home loans market to improve the way people finance and maintain their homes. Now they are using their data, their relationships and their platform to build capabilities in green energy and e-commerce.

Delivering 'as-a-service'

What's the end game? We believe that, ultimately, the greatest source of growth for financial services firms will come from 'as-a-service' models of bank capabilities as well as finance. Several financial services firms are already there. Consider, for example, how BlackRock (also profiled in this publication) is packaging up its data to provide clients with 'risk-analytics-as-a-service'. Goldman Sachs' reinvent program is essentially providing 'regulated-cloud-as-a-service'. HSBC is exploring how they can use their daily liquidity reporting to provide other banks with 'liquidity-data-as-a-service'.

The leading financial institutions are also moving into embedded finance, providing 'as-a-service' solutions to corporate clients across a number of different service layers. They are providing the digital wallets, transaction banking products and e-commerce solutions that underpin seamless customer journeys and experiences. They are supporting product provision with supply chain finance, consumer finance and circular economy services. They are providing data services, with insights gleaned from their supply chain software and financial services tools. And they are providing infrastructure such as lending-as-a-service. They are both enabling others' platforms, as well as creating platforms themselves.

Seeing it in action

The global restaurant franchise chain, McDonald's, offers an illustrative example of the size of the prize. McDonald's, serves 60 million customers a day. It has 34,000 franchise outlets. It spends around US$9 billion per year across its supply chain. And its corporate offices spend around US$21 billion per year on wholly-owned outlets and other costs. By providing a banking-as-a-service platform, banks could be reinventing themselves by playing to their core strengths and embedding finance in those existing transactions.

On the consumer side, financial institutions could be providing the loyalty benefits programs and the personalization. To franchisees they could be offering lending-as-a-service (i.e. when purchasing goods from corporate), as well as business advisory services and employee services. They could also be providing lending-as-a-service to the supply chain, alongside risk services like cash, currency, resilience and so on. At the corporate office level, they could be offering corporate treasury and liquidity, as well as franchise health services, for example. The opportunities are immense.

We have also seen a global super-market chain drive that transformation from the corporate side. What started as a program to create synergies across its seven businesses led to the creation of a common data platform. That platform was then opened up to fintech partners, third parties and

The leading financial institutions are also moving into embedded finance, providing 'as-a-service' solutions to corporate clients across a number of different service layers. They are providing the digital wallets, transaction banking products and e-commerce solutions that underpin seamless customer journeys and experiences.

digital product managers to encourage the development of new digital products and services — essentially commercializing their existing data through software as a service. That has led to better customer experiences, new products and services, and a greater share of wallet around simple financial services products like lending, insurance, payments and wallets. It has also unlocked incremental revenues.

The skills and speed to get there

Regardless of what financial service you might provide through an 'as-a-service' model, speed to market is critical. The majority of efforts that we have seen tend to be incubated away from the core organization, often through venture environments to be a separate business of the financial institution. These provide the kind of enabling structures that 'newco' type models require to grow quickly — IP commercialization strategies, balance sheet velocity, data sharing, streamlined global, risk and compliance (GRC) processes and new ways of working, for example.

Our view also suggests there are four characteristics shared by those leading the move towards 'as-a-service' models. They tend to have *strong commercialization capabilities* in terms of business development, pre-sales and partnerships. They create *high performance architecture* with common data models, open data standards and strong meta-data management. They build *low-cost operating models* using modern extensible architecture and leveraging highly automated infrastructure-as-a-service. And they strive to attract and retain people with the *right skills and experience*.

Don't be left behind

As financial services firms strive to create their platforms and form their ecosystems, they should be building with the end game in mind. Our view suggests that the future lies in delivering value to customers through 'as-a-service' models. And the time for staking out your position in those future markets is rapidly shrinking as the gap between the leaders and the deniers widens.

Our advice to financial services leaders is to move quickly, but with a clear vision of where you want to play and how you plan to get there. The last thing you will want is to be left behind. ■

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Platforms fueling growth

Staying one step ahead

BlackRock's Aladdin

Aitor Jauregui, Country Head for BlackRock, Iberia (pictured)
Chrystelle Veeckmans, Partner, Head of Asset Management, KPMG in Luxembourg
Javier Muñoz Neira, Partner, Head of Asset Management, KPMG in Spain

BlackRock's Aladdin platform has led the market for more than 30 years. KPMG in Luxembourg's Chrystelle Veeckmans and KPMG in Spain's Javier Muñoz Neira spoke with Aitor Jauregui, Country Head for BlackRock in Iberia, to find out how one of the world's largest asset managers is keeping their platform relevant and value-driven.

BlackRock has always been somewhat of a platform player. "From the very first days, BlackRock recognized that running an asset management business was — in many ways — an exercise in information processing and to do that well — and at a scale — you need technology," says Aitor Jauregui, Country Head for BlackRock in Iberia. "From the time BlackRock was founded, our Aladdin platform has been core to that proposition."

Aitor describes Aladdin (an acronym for Asset, Liability, Debt and Derivative Investment Network) as a comprehensive investment management and trading platform. But in practice, it is much more than that. Aladdin combines sophisticated risk analytics with comprehensive portfolio management, trading and operations tools on a single unified platform. It is used by thousands of investment professionals around the world. And it underpins a massive proportion of the world's financial ecosystem.

It is also at the heart of BlackRock's own success. On the one hand, BlackRock investment managers use the platform to drive their day-to-day investments. But, at the same time, the firm also offers the platform to clients, allowing them to tap into the same technology and intellectual capital available to BlackRock's own employees. In other words, it serves as both a core business platform and an outsourced service offering.

Keeping ahead of customer trends

BlackRock's platform may be market leading, but to keep that pole position, the global investment leader is striving to ensure that the platform remains relevant to its customers and users. And that means identifying — and getting ahead of — emerging customer and market trends. Climate change and sustainability likely rank among the most pressing.

"Every client wants to talk to us about sustainability. It is becoming a core element in all portfolios. And every part of our ecosystem is keen to get more granularity and better capabilities in this area," notes Aitor.

Larry Fink's Letter to CEOs at the start of 2020 catapulted his firm into the climate change agenda. In the accompanying Client Letter, BlackRock laid out its vision to make sustainability the firm's new standard for investing. Sustainability would play a stronger role in the active investment processes and environmental, social and governance (ESG) risk would be better accounted for in active strategies. Transparent sustainability data would be provided for a range of products. And Aladdin would play a key role in enabling this vision.

At that point, BlackRock was already a leader in measuring and reporting sustainability risks in their investments. ESG scores and carbon footprint measurements were readily available for iShares funds. And the firm's Carbon Beta tool was allowing managers to stress-test portfolios against various carbon pricing scenarios. Since Larry Fink's now-infamous Letter to CEOs, the focus on incorporating sustainability into every facet of Aladdin has sharpened.

"We are very committed to providing Aladdin clients with access to the capabilities they need to incorporate climate risk, transition risk and the

> "We're giving investors the information they need in order to become much more strategic about building their portfolios."
>
> **Aitor Jauregui**
> Country Head for BlackRock, Iberia

analysis of sustainability risks into their investment process," explains Aitor. "And we are continuously growing our capabilities and our ecosystem to deliver that."

Since the start of 2020, Aladdin has added nearly 30 high-level sustainability index scores from leading data providers. They've integrated new ESG data fields from groups like MSCI and Sustainalytics into the platform. And they are partnering to expand the offering, including a strategic partnership with Clarity AI (a tech-driven sustainability measurement start-up) and the acquisition of Baringa Partner's Climate Change Scenario Model.

The firm also recently launched Aladdin Climate, a tool that allows portfolio and risk managers to see climate-adjusted analytics alongside their standard datasets as they make decisions. And that sits within Aladdin's wider sustainability offering, which aims to help investors understand and integrate ESG and climate metrics across the investor workflow.

"As we promised back in 2020, we've been hard at work putting sustainability at the very heart of Aladdin," adds Aitor. "And at every step, we've been listening to our clients and working to understand their needs in this area."

Consistency at the core

Sustainability isn't the only evolving customer trend driving the evolution of the Aladdin platform. Many institutional investors and wealth clients, for example, are starting to increase their allocations towards private market assets and investments. And that is driving increased demand for better and more consistent data across both private and public markets.

"As more investors incorporate alternatives into their portfolios, the ability to seamlessly manage portfolios across public and private asset classes on a single platform is critical," said Rob Goldstein, Chief Operating Officer of BlackRock,[1] when the firm announced the acquisition and integration of eFront, an end-to-end alternative investment management software and solutions provider.

Similarly, clients are also shifting their views on portfolio construction. "We're giving investors the information they need in order to become much more strategic about building their portfolios. At its heart, Aladdin is all about providing investors with common risk reporting data in a way that allows them to properly monitor their assets and construct portfolios," Aitor added.

Value-focused and technology-driven

Ultimately, this focus on delivering consistent and timely data to investors is what has enabled BlackRock's Aladdin platform to remain relevant and value-focused.

"By continuously improving the platform, responding to client needs and building our capabilities, we are bringing clarity and connectivity to the world's financial ecosystem. And by providing a common language across the investment process, we are helping our clients to make more informed decisions, scale efficiently and achieve better investment outcomes," says Aitor. "That's how the Aladdin platform stays one step ahead."

Aitor is convinced that technology will be the key to managing these and future trends for the asset management industry. "In order to run an asset management business at scale, you need technology. Not just to grow efficiency, but also to provide clients and investors with the information they need in order to allow them to embrace change in the markets. Today's asset managers really need to put technology at the center," he added. ■

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>
> Many institutional investors and wealth clients, for example, are starting to increase their allocations towards private market assets and investments.

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[1] https://www.blackrock.com/corporate/newsroom/press-releases/article/corporate-one/press-releases/blackrock-efront-acquisition

Platforms fueling growth

Digital leaders are expected to outperform in life insurance

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Some of the world's most innovative insurers are using digital tools to help capture untapped pools of growth.

For more than 250 years, insurers have used data and statistical tools to assess and manage risk. Today, insurers have access to unimaginably vast troves of new data and the computing power to explore it quickly. The new insights extend far beyond risk: insurance organizations now gain a deeper understanding of when customers are likely to make a purchase or decline to renew a policy, how they prefer to get information, and which marketing messages are most likely to resonate with them.

Demand for life insurance rose during the COVID-19 pandemic as many people reviewed their policies and considered greater and new types of coverages. Applications rose 4 percent in 2020, the biggest jump since 2001, according to MIB Group; surprisingly, demand came mostly from people younger than 45.[2] Half of American adults believe life insurance is three times more expensive than it actually is, and more than 40 million say they need life coverage but don't have it.[3]

Despite these strong tailwinds — the North American (US and Canada) life industry grew premiums by only 2.2 percent compound annual growth rate (CAGR) from 2010 to 2020, while nonlife premium CAGR was at 10.6 percent. Similarly, the global life premium CAGR was at 1 percent, while nonlife premiums grew by 6.7 percent, for the same period.[4]

Many life insurers continue to rely heavily on their physical sales agent/broker channel. The average life agent in the US is now about 59,[5] recruiting new talent is increasingly difficult, and agents are less likely than ever to pursue middle-income customers — making efficiency increasingly important. Life insurers have been slow to harness new tools that could greatly improve efficiency, including advanced data analytics, artificial intelligence, and machine learning. Such life insurers are missing out on major industry trends and opportunities.

This brief overview will discuss the powerful trends unfolding, including continuously changing consumer expectations, the proliferation of data and digital tools, global innovation in products and distribution, and how industry leaders are building new capabilities in-house and through partnership and acquisition.

> "More insurance providers are expected to develop platform-driven, comprehensive digital health ecosystems... to help improve customer engagement and experience."

North America*

Life 2.2%
CAGR 2010-2020

Nonlife 10.6%
CAGR 2010-2020

*Source: SwissRe Sigma report No. 4/2000

Global

Life 1%
CAGR 2010-2020

Nonlife 6.7%
CAGR 2010-2020

[2] *Growth Slows but Continues in US Life Insurance Activity Reports the MIB Life Index*, MIB Group, 9 December 2020.
[3] *2020 Insurance Barometer Study*, LIMRA, 22 May 2020.
[4] *Sigma 4/2020: World insurance: riding out the 2020 pandemic storm*, SwissRe Institute, 10 July 2020.
[5] *Young Agents Survey: The Next Generation Steps Up*, Insurance Journal, 20 April 2015.

Consumers are more knowledgeable and demanding than ever — and ready to interact online

Consumers expect personalized seamless, complete online transactions, even for big-ticket products and services. They prefer speed and simplicity and, in many cases, want to make transactions with little to no human interaction. Personal line insurers recognized these profound shifts, and most now offer online quotes, transactions, policy management, and even claim submission and management. The potential benefits to the bottom line are dramatically reducing the costs of salespeople and claims adjusters, all while gathering mountains of real-time data.

Most life insurers cannot fully quote and bind policies online. While regulatory hurdles vary greatly by country and region, a handful of insurers are investing to develop and strengthen their online customer interactions to gain insights and competitive advantages for new products and services, within regulatory guidelines. AIA Vitality, for example, an Australian life and health insurer, monitors customers digitally, with their permission, and offers wellness programs and incentives to encourage healthier lifestyles. With social media and gamification, the company allows customers to share and compare fitness status with friends, promoting wellness and engagement.[6]

More insurance providers are expected to develop platform-driven, comprehensive digital health ecosystems like these to help improve customer engagement and experience. But some life insurers are also expected to invest large sums in online platforms and tools without seeing meaningful returns. In KPMG professionals' experience, the most cost-effective technology solutions are not the latest shiny objects. Insurers see potential tangible business benefits when investments in solutions are targeted to specific customer and market needs and aligned closely with the current business priorities. It is recommended to empower sales efforts with a customer-centric view informed by data-driven insights and recent sales analytics. Insurance providers should build out the ecosystem of services to deliver on customers' experiences to help drive customer persistency and penetrate new segments. This, over time, should deliver improved results and open new growth channels.

A global life insurer recently explored how to expand its customer base in emerging markets. As part of its customer strategy assessment, the insurer identified digital trends of hyper-personalization and social-media-driven engagement as the keys to empowering the 'agent of the future' in these regions. Based on analysis, the insurer built new tools and capabilities, including 'next best action' for the agent and product recommendation engines, across the marketing funnel to better customer and agent retention.

Digital disruption is unavoidable now for the life insurance business

There are many US-based life insurance companies continuously investing for innovation through acquisitions and partnerships across digital capabilities, product development, and distribution channels, for growth and relevance.

Life insurers are adopting new digital tools and intelligent automation to help reduce manual work and cut costs. The most common tactic is to automate current processes for efficiencies; however, few life insurers are pursuing both product and process innovation — a complete redesign leveraging today's enabling technologies. The COVID-19 pandemic has also forced innovation. More insurers now accept no-fluid, no-exam applications. The trend to use data for underwriting existed prior to COVID-19, but the pandemic accelerated its uses. More than a third of insurance companies offered accelerated underwriting for customers meeting certain criteria without uncomfortable medical/lifestyle questions or fluid samples.[7] A leading life insurer in China reportedly shed more than 9 percent of its 1.3 million agents in 2019 — and used some of the savings to invest in bancassurance and internet channels. In 2020, written premiums in China through internet channels increased by more than 58 percent; analysts expect internet insurance premiums to reach US$5.5 trillion annually by 2030.[8]

Life products have traditionally been marketed to customers based on their age and affluence. Innovators, both new entrants and some market leaders, are developing more personalized solutions tailored to people's needs at different life stages.

We see examples where life and health insurers are responding to the changing environment by investing in nontraditional growth products, such as pre-need and final expense insurance. Adding these new products to its suite of offerings allowed the insurer to appeal to medium- and lower-income customers who wish to preserve assets or avoid burdening their families with funeral and other final expenses.

There are many examples of product and service innovations undertaken by insurance organizations in their efforts to differentiate. Some life companies are testing flexible product offerings that allow policyholders to adjust coverage throughout the life of the policy. A leading Japanese insurer, for example, now offers medical, asset accumulation, and protection against disease and mortality in a single product that customers can adjust as their needs change. Insurers in Europe and Asia offer value-added services and nonmonetary benefits, such as administrative support for medical visits, health management, or telemedicine. Some offer to replace financial payouts with guaranteed placement in senior

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[6] *AIA Vitality announces new member benefits and partnerships*, Insurance Business Mag, 26 March 2021.
[7] *How Life Insurance Shopping Has Changed During the Pandemic*, Forbes, 9 August 2020.
[8] *Annual Report 2020*, China International Capital Corporation Limited, 2020.

living communities; others have created shared-value products with 'engaged wellness' reward systems that give policyholders financial incentives to pursue healthier lifestyles, such as shopping vouchers or extra coverage at special events or renewal.

One-click underwriting is on the horizon, with dynamic adjustment based on customer behavior and prescriptive actions to help improve health outcomes.

Digital tools can significantly boost an agent's effectiveness

Digital tools can help agents make better use of their time and make serving the small and middle market more efficient. Leading insurers are pioneering centralized digital agent support to streamline operations and improve customer and agent experiences. Using advanced analytics and data from a growing array of public and private sources, insurers can route agents to the most promising prospects at the right moments with the right messages and a clear view of offers. This is especially powerful for large multiline insurers who have a comprehensive view of their customers' needs and transitions in life, from buying a new home and having children to approaching retirement.

Insurers have always found a way to provide agents with scenario planning, pricing, and benefit comparisons. Today, most digital platforms are just electronic versions of the brochureware and tables of the past. Leading practices from wealth management should prove that dynamic tools, personalized offerings, digitized applications, and processing can win in the market. Digital platforms can require significantly less data entry but make greater use of available third-party data, yielding real-time underwriting results and digital policy documents in less time and with less effort. Agents should also be able to use digital platforms to manage multichannel, personalized customer interactions to provide high-quality service and promote cross-selling across many different interactive channels.

Each customer should be able to choose preferred channels at every step, from getting information and quotes to applying and making a purchase, and insurance providers should be able to connect them with the agents most likely to meet their needs. As customers manage policies and continuously engage with dynamic underwriting, they will likely build long-term, more trusting relationships with agents and insurers.

Next steps

Leading insurers are continuously rethinking their operations and business strategy to enable digital transformation and modernization. As part of this process, the sourcing options are almost without limit — many are building, buying, and forging new strategic partnerships to close gaps in areas where they lack capabilities.

The outperformers in the years ahead will likely be those that leverage digital tools effectively to enhance customer engagement; reach new customer segments, such as customers previously deemed as high risks; and target specific customer segments at lower prices or for longer or better terms if they share more health data. With new and innovative underwriting risk stratifications, forward-thinking insurers should be able to harness new technology to identify when policyholders are at risk and intervene to help reduce those risks.

In an industry where companies tend to change their approaches slowly, the insurers that will likely win are the ones that can innovate quickly and respond to consumers' changing sentiments and capture the digital acceleration in the wake of the COVID-19 pandemic.

The industry's most forward-thinking leaders should also anticipate, manage, and potentially help guide the regulatory shifts across jurisdictions, especially in data accessibility, accuracy, completeness, sustainability, and privacy. ■

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Platforms fueling growth

Embracing a new trajectory

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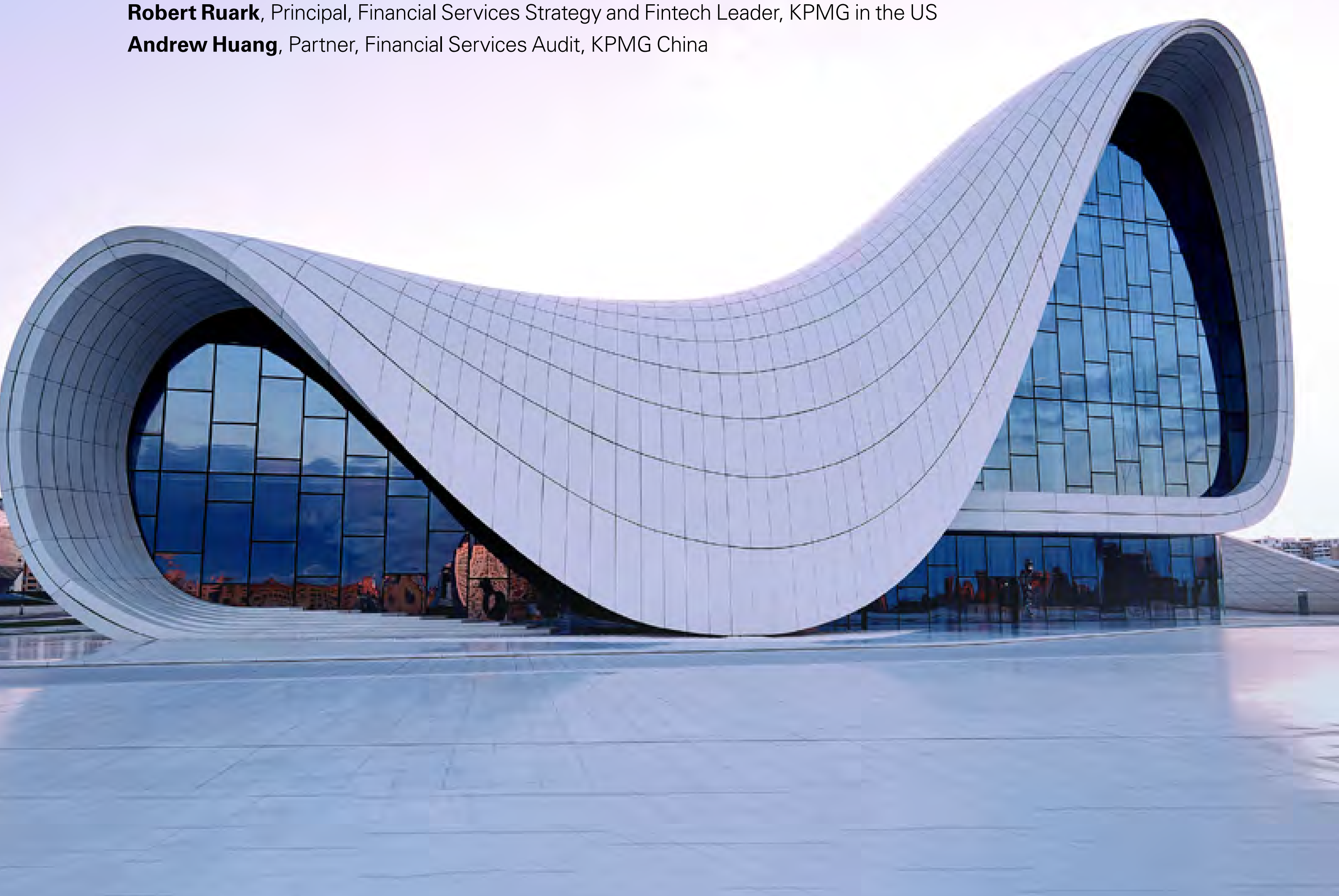

How financial institutions should rethink product management to thrive in a data-driven economy.

Over the last several years, the range of banking products has grown significantly. Fintechs focused on specialized products — such as digital wallets, 'buy now, pay later' (BNPL) credit offerings, and banking or lending-as-a-service solutions — have sprung up almost everywhere, from the US and China to Australia and Saudi Arabia.

The global pandemic acted as a catalyst for many of these innovative offerings, accelerating uptake as people and businesses abandoned cash and embraced digital payments. The desire of traditional retailers and big tech to extend their customer value into financial services combined with advances in AI, data analytics, and open banking also helped drive interest in alternative banking solutions.

While fintechs continue to play a key role in developing innovative banking products, banks and other financial institutions have not been standing still. But while some large banks and financial institutions have embraced new ways of thinking about product management, others have been stymied by how best to evolve their traditional approach to product development so they can thrive in a data-driven economy.

In the remainder of this article, we highlight the growth of alternative banking products, look at the evolution of how financial products are offered, examine potential opportunities for banks and financial institutions, and offer a place to start for financial institutions wanting to rethink their product management approach.

The rise of alternative banking products

Alternative banking products are not new. In China, the use of electronic payments, digital wallets, and installment financing for online purchases has become quite commonplace over the past few years. At the same time, such products have seen an incredible surge in interest since the emergence of COVID-19, particularly in jurisdictions that were not as quick to embrace electronic payments.

BNPL products are a prime example. One Worldpay/FIS report showed that customers financed approximately US$96 billion in online purchases using BNPL loans in 2020, projecting that the number could rise to US$300 billion globally by 2024.[9] In the US specifically, a survey by The Ascent showed the number of consumers using BNPL services rose from 37.6 percent in 2020 to 55.8 percent in 2021, while 53 percent of respondents who had never used BNPL were at least somewhat likely to use it within the next year.[10]

Interest in BNPL was also visible in the investment space in 2021. During the year, US-based Affirm raised US$1.2 billion in its IPO on the Nasdaq,[11] Sweden-based BNPL company Klarna raised US$1.9 billion across two venture capital funding rounds,[12] and US-based Square acquired Australia-based Afterpay for US$29 billion.[13]

> "The global pandemic acted as a catalyst for many of these innovative offerings, accelerating uptake as people and businesses abandoned cash and embraced digital payments."

[9] https://www.reuters.com/breakingviews/breakdown-buy-now-pay-laters-bill-is-coming-due-2021-10-14/
[10] https://www.fool.com/the-ascent/research/buy-now-pay-later-statistics/
[11] https://www.nasdaq.com/articles/affirm-prices-u.s.-ipo-above-target-range-raises-%241.2-bln-sources-2021-01-12
[12] https://assets.kpmg/content/dam/kpmg/xx/pdf/2021/08/pulse-of-fintech-h1.pdf
[13] https://www.cnn.com/2021/08/01/tech/square-afterpay-intl-hnk/index.html

A rapid evolution in the offering of financial products

The financial services industry globally is not homogenous, with many jurisdictions taking unique approaches to the regulation of fintechs or to the regulation of financial products. Despite sometimes radically different regulatory environments, however, it is clear that the pandemic has shifted the foundation of financial services in many parts of the world, driving demand for digital products.

This shift in demand, in addition to the rapid acceleration in digitalization among companies across sectors, has put a spotlight on the fact that almost any company or brand can integrate financial products within their business model or use their customer data to provide convenient and personalized financial products.

Numerous non-financial companies are doing just that. In 2021 alone, Walmart announced a strategic partnership with Ribbit Capital to provide tailored financial experiences to their customers,[14] Walgreens announced plans to offer digital bank accounts through a partnership with MetaBank,[15] and IKEA acquired a 49 percent stake in its financial services partner Ikano Bank as part of its plans to expand consumer banking services.[16]

While fintechs and non-financial companies are helping fuel the shift in how financial products are offered in some countries, in others, government initiatives are shaping the evolution. For example, the introduction of a central bank digital currency (e-CNY) by the Central Bank of China is expected to encourage traditional financial institutions in the country to provide digital wallet solutions aligned with the e-CNY — whereas historically digital wallets were primarily offered by fintechs and third-party payment companies.

Looking beyond current challenges

Opportunities for financial institutions

Given changing customer demands and a growing number of non-financial companies providing financial products, many banks and financial institutions are facing pressure to adapt their approaches to product management in order to retain their market share and customers.

While they may be under intense pressure, financial institutions should recognize that the current environment isn't only throwing up challenges; it's also providing opportunities. While the opportunities in specific jurisdictions might be very different, examples might include:

Recognize the product agnostic delivery of credit:

From a banking standpoint, the lines across traditional credit products are already blurring, while underwriting should be agnostic of the product through which credit is being delivered (e.g. BNPL, personal loans, credit cards). Banks that have a strong relationship orientation to credit versus a product orientation to credit and that can manage economics and risk effectively will likely have an advantage when it comes to providing or supporting alternative financial products.

Engage with customers across the purchasing life cycle:

Often, banks or other financial institutions are only involved at the point of need for their customers. Banks have an opportunity to differentiate themselves by engaging more holistically across their customers' purchasing journeys so that customers receive targeted and personalized content when it is most useful to them.

Partner with others in the marketplace:

Banks have a unique opportunity to work with partners to provide unique offerings — similar to how fintechs often work with non-financial companies. For example, working with small-ticket BNPL companies to originate higher ticket items, partnering with marketplaces or merchants on lending-as-a-service platforms, or providing non-financial companies with banking-as-a-service platforms.

[14] https://corporate.walmart.com/newsroom/2021/01/11/walmart-announces-creation-of-new-fintech-startup
[15] https://www.bankingdive.com/news/walgreens-to-launch-digital-bank-accounts-this-year/597645/
[16] https://www.theguardian.com/business/2021/feb/11/ikea-to-offer-financial-services-in-store-after-deal-with-ikano-bank

Reimagining financial product management

Where to start

Recognizing the need to change is only the first step; the more difficult challenge is determining how. As a starting point, banks and financial institutions should consider the following activities:

Concentrate on your customers:
Before building new financial products, work to understand your customers so that you can align activities directly to your proposed value offering. Then, as you begin to build and offer new products, keep taking the pulse of your customers so you can see how they respond, identify their potential pain points, and adjust course as needed. Throughout, make sure you have a robust approach to data so that you can make data-driven decisions and use data to enhance the value of your offerings.

Focus on product management:
Traditional methods of product development won't be as relevant in the future given how customer demand and purchasing behaviors are evolving. To be relevant to your customers, focus on understanding the customer experience that they want and engage with them where they want you to be.

Be open to ecosystem partnerships or selective acquisitions:
In the future, partnerships or acquired capabilities will likely be what differentiate financial institutions. With the right partners, you can build a stronger understanding of your customers, provide relevant and personalized services, and more readily engage in the purchasing journey. As you imagine the future, consider how partners can fit within your ecosystem and how you can fit within the ecosystems of others in order to provide the integration and relevance your customers want.

The COVID-19 pandemic may have acted as an accelerant for digital innovation in the financial services sector, but there's no stopping the new trajectory now. If anything, it's even more important for banks and financial institutions to reimagine their product management approach so they can thrive in the post-COVID world — a world where speed, agility, and data-driven insights are expected to be integral for meeting the ever-changing needs of customers.

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Platforms fueling growth

Rethinking new business models for banking

Brett Watson, Partner, Payments Advisory, KPMG Australia
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Adapting platforms, ecosystems, payments and data for the future, the banking business model has proven to be resilient to disruption. This is primarily due to the adaptability of incumbents (e.g. operating model innovations) and high barriers to entry. These barriers include stringent regulations, customers' demand for trust in banking service providers, and the necessary capital requirements to start and operate a bank.

Tech trend and threats

Innovations that change the way value is offered to consumers such as through embedded finance and decentralized finance threatens the integrity and resilience of the traditional banking business model.

Examples include Uber's embedded payments and Afterpay's cannibalization of unsecured consumer credit. These trends also eroded the value of the 'trust premium' banks have held for so long. For example, Nano Home Loans, a non-bank fintech lender established in 2019, offers to approve home loans at highly competitive rates within 10 minutes of an online application; this value proposition has resulted in faster-than-system growth rates.

While fintech and innovators dismember the banking value chain, incumbents also face the very real threat of highly capitalized tech giants. Many with deep customer connections and loyalty are stepping directly into financial services, potentially redefining the category. For example, although Google has abandoned plans to launch Google Plex (a transaction account for Google Pay), the proposition found strong consumer endorsement of innovative features that embedded financial services into everyday lifestyle choices.

Finally, regulators are deliberately adjusting their posture to help increase competition (e.g. open banking) and reduce entry barriers (e.g. the restricted authorized deposit-taking institution (ADI) offers a limited risk fast track for small challenger banks to start operating as a bank in Australia). Consequently, banks are (and should be) exploring alternative business models to deepen their value pools, entrench customer relationships and expand their value propositions.

As banks evolve their market role, they will likely also need to adapt their business models. Many of the innovations that have been a threat may also be a source of strategic strength as they incorporate them to complement their core.

Adapting the business model — platforms and ecosystems

Two new business models have emerged as digitalization alters the relationship between service providers and consumers: two-sided platforms and orchestrated ecosystems of partners.

Although platforms and ecosystems are not mutually exclusive, they are distinct. Platforms can help reduce market friction by connecting suppliers with the consumer, while ecosystems orchestrate complementary value propositions focused on a pattern of customer needs (Fig. 1).

> “Two new business models have emerged as digitalization alters the relationship between service providers and consumers: two-sided platforms and orchestrated ecosystems of partners.”

Fig. 1. Platforms and ecosystems schematic of relationship

Platforms	Ecosystems
Platforms can operate within ecosystems	
Reduce market friction by efficiently connecting suppliers and consumers	*Orchestrate complementary value propositions focused on a pattern of customer needs*
Engage with platforms to solve a specific problem Interact with a platform as a marketplace, typically with filterable choice Consumers can sometimes also be suppliers	Engage with an orchestrated ecosystem across a distinguishable lifecycle of need (e.g. buying a house) Interact with curated products and services, with tightly focused options for each stage of need
Typically offer products and services within the platform as a marketplace Compete with other suppliers also using the platform May be subject to non-financial incentives such as quality feedback	Offer products and services as part of a coherent ecosystem value proposition Participate within the ecosystem as a partner with the orchestrator Coordinate for shared value with the rest of the ecosystem, while benefiting individually
Limited information shared between consumers and suppliers within the context of a transaction Proprietary technology orchestrates consumer/supplier matching and may profile some preferences	Data is shared across participants to continuously improve ecosystem's proposition Digital capabilities to enable integrated customer experiences (e.g. APIs, standardized data, CX standards)

Key: Suppliers Consumers Information sharing and technology

Source: KPMG analysis, 2021

By adopting these innovative business model options, banks can complement their basic banking model (deposits, loans, transactions) and market strengths (e.g. scale of customer franchise, valuable banking licenses, strength of balance sheet) with new value propositions to help differentiate and deepen customer relationships.

For example, Goldman Sachs pivoted to become more like a platform, expanding its portfolio into consumer banking by deploying the Marcus offering, including a credit card partnership with Apple. A goal for Marcus has been to establish banking-as-a-service — a platform business.

Meanwhile, DBS Singapore has built DBS Marketplace to orchestrate ecosystems of partnerships offering value propositions shaped to address specific life cycle needs experienced by their customers, such as car ownership. This ecosystem model deepens the bank's relationship with their customers and keeps value circulating within the ecosystem.

Essential building blocks for the banking business models of the future

Three foundational capability building blocks are essential to establish either platform or ecosystem business models:

Value orchestration: This includes establishing, coordinating and governing participation (partner management) while also measuring the value of involvement (ecosystems or platforms) to help generate more value than the sum of the parts.

Data-driven insights: This is the ability to convert raw data into valuable insights on customers and operations. Harnessing the power of data can lead to continuous improvement, validation through experimentation and innovation (including accidental discovery through sophisticated pattern analysis); increasingly, this is machine-driven as AI and other advanced analytics tools become mainstream and accessible.

Digital interoperability: This refers to the ability to safely exchange information and drive functionality between participants, including orchestrating end-to-end processes across multiple participants.

Bringing these to life in a banking context involves building blocks that need to be augmented by the basic banking capabilities of financial management, payments, and risk management.

Payments are a significant capability for banks battling for consumer relevancy. Payments provide a cohesive capability for both platforms or ecosystems and maintains a connection with the basic banking value proposition (cash, credit, and transaction). It also works to generate valuable contextual and behavioral data.

A road map for adapting the banking business model

In KPMG professionals' experience, banks that choose to adapt and future-proof their business model should start the transformation by exploring three steps (see Fig. 2).

Assess capability maturity: Does the bank have the foundational capabilities needed to deploy the future business model effectively? If not, start work immediately as this is an investment with no regrets, while, in parallel, work on the other two steps.

Evaluate the bank's role in the market: How will the bank differentiate along the spectrum of a 'utility bank' to an 'intimate bank'? This can be unlocked by looking at what strengths the bank already has (e.g. if its cost discipline, it may be more suited to a 'utility' play).

Identify adaptions to the current business model: Does the bank need to adapt its historical business model by incorporating a platform or ecosystem play?

Call to action

The banking industry faces a volatile future, but one that is rich with opportunity. KPMG professionals believe banks that prepare to adapt their business models now by establishing the basic capabilities of the future and agreeing between the board and executive on the bank's role will likely be best positioned to take advantage of those rich opportunities. ■

Fig. 2. Road map to adapt the banking business model

Assess capability maturity
- What capability gaps will prevent us from exploiting future banking business models?
- What are our options of accessing those foundational capabilities?
- How do we defend ourselves in the interim?

Evaluate the bank's role
- Should we be more a 'utility bank' or an 'intimate bank'?
- What are the trade-offs and hybridized options that complement our strengths?
- What do our target customers need from us?

Identify adaptions to the business model
- What business model options best suit our strategic ambitions and role in the market?
- How would our customers' needs be best served?
- How do we architect our capabilities to differentiate?

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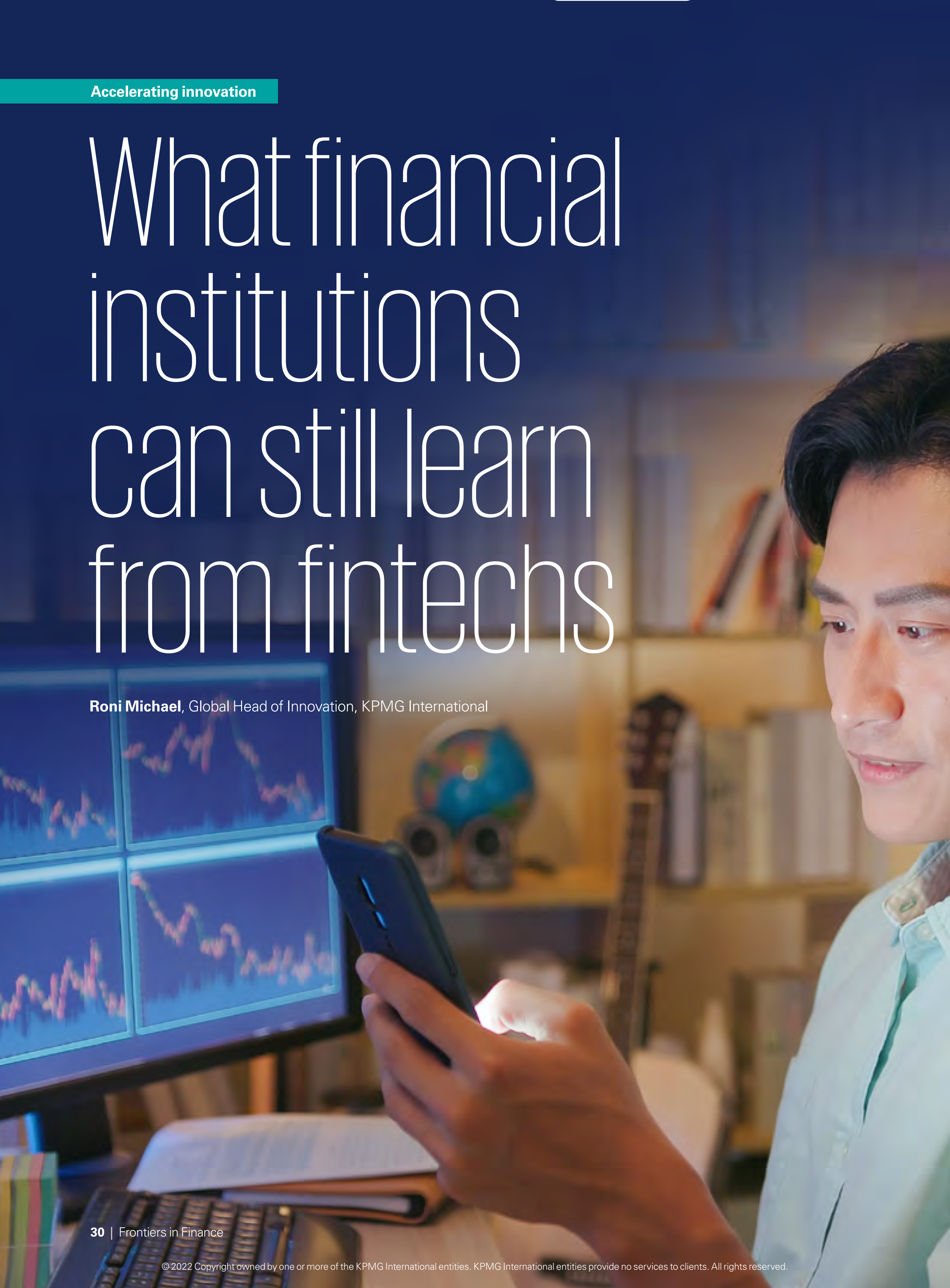
Accelerating innovation

What financial institutions can still learn from fintechs

Roni Michael, Global Head of Innovation, KPMG International



Financial services institutions have already learned a lot about innovation by working with fintechs. The most valuable takeaways are just starting to emerge.

Fintechs and traditional financial institutions have learned how to play well together. And, in doing so, they have catalyzed massive transformation across the financial services industry. Fintechs have been particularly adept at identifying and solving niche gaps that were inherent in financial processes and systems. Financial institutions have been quick to partner with them and help them bring their ideas to market. It is the coexistence and collaboration between the two sectors that is ultimately driving innovation in financial services markets.

Convergence of minds

Financial institutions have learned a lot from their interactions with fintechs over the past decade. One of the big lessons is that innovation is amorphic. It is not about a single partnership, investment or technology. Nor is it isolated within siloed functions, accelerators or lines of business. Innovation is holistic, it is decentralized, and it is intricately intertwined within an organization's culture, structure, purpose and value proposition.

They have also learned that innovation cannot simply be bought or rented. True innovation — the stuff that sees incremental improvements snowball into massively valuable outcomes for customers — comes from a combination of internal and external capabilities working together. Some of the most innovative financial institutions are those that are bringing together multiple sources of innovation; executing on a single plan that combines internal investments and capabilities with fintech investments, partnerships and accelerator models to help maximize available capabilities and outcomes.

These two lessons have led to a third realization among financial institutions: that it's all about the ecosystems. Over the past few years — particularly since the onset of the pandemic — there have been many types of financial services organizations that have embraced ecosystems with fervor. Yet the leaders are not necessarily those that belong to the biggest ecosystems or that carry the most weight in their ecosystems. Instead, the leaders are the ones taking the most collaborative approach to creating value with their ecosystems. They are the ones keeping the focus on the customer, not themselves.

Always more to learn

With these lessons in mind, many financial institutions are now starting to see real results from their innovation efforts. But there are still a few tips that financial services executives could be learning from fintechs. Here are my top five (in no particular order):

1. **Focus on the client, not the ROI.** There is a reason investors are pouring money into pre-revenue start-ups; they recognize that innovation doesn't always lead to immediate financial ROI. Indeed, every start-up knows that if you build the right product and bring the right clients, the revenue should eventually follow. Rather than focus on monetary ROI, financial institutions would be well advised to focus on the value ROI that comes from their investments — perhaps improvements in customer experience, the creation of a more innovative culture, or more agile infrastructure, for example. Regardless, the focus should be on building a great solution rather than building an immediate revenue stream.

“Innovation is holistic, it is decentralized, and it is intricately intertwined within an organization's culture, structure, purpose and value proposition.”

2. **Structure is overrated.** Rightly or wrongly, the common perception is that fintechs are flat, informal and agile, while financial institutions are large, formal and slow. And that all comes down to structure. Size and structure have a massive impact on organizational agility — the more complex and hierarchical the structure, the more pervasive the internal competition and the more disruptive the internal politics. While a certain level of structure is important for complex financial organizations, there are approaches that could be learned from fintechs (such as the creation of joint initiatives and targets) to help drive cooperation between units and to encourage a more non-hierarchical approach.
3. **Embrace failure.** Financial institutions are naturally risk-averse. So it's not surprising that most new initiatives tend to be safeguarded against failure. But that is not the path to innovation. Instead, financial institutions should be innovating like start-ups — moving quickly, failing confidently and testing constantly. When starting new initiatives, the leading financial institutions are starting small but thinking big. This not only allows them more scope for success, it also enables them to pivot to different use cases based on a solid foundation. And if it fails? Embrace the fact that your team has learned more about the problem and have practiced new ways of working and decision-making.
4. **Think like a product manager.** The most successful fintechs think in terms of product life cycles, taking a strategic view of their innovation to drive towards a market-ready outcome. Create clear product strategies supported by agile ways of working and a robust road map that spans the full product life cycle. This allows financial institutions to not only refocus their efforts and make tactical shifts when needed, it can also provide greater clarity to management and the board on the investment life cycle and when additional investments might be needed.
5. **Unlock the data.** Fintechs are driven by data. Most financial institutions are still far from unlocking the power of data. Recent studies suggest banks are still using less than 10 percent of the data they have. The value left untapped in that data would make a fintech swoon; some would pay huge amounts to get their hands on just a small portion of that data (even with all the accompanying regulation and safeguards). Those financial institutions with small 'fintech-like' units tend to do better at unlocking the value of their data. But most will likely still need to work to change the way the wider business thinks about data if they hope to reap the real value of innovation.

Commit to innovation

Perhaps the greatest lesson financial services executives can still learn from fintechs is about commitment. Fintechs are committed to innovation; they don't just dabble in it — they live it, breathe it and champion it. They don't flirt with partners and play around the edges — they get married and remain fully committed. They put all of their effort and all of their resources into driving innovation. Few banks can say the same.

Fintechs and financial institutions have already learned a lot from each other. And as they continue to converge and partner, more lessons are expected to emerge. The smart financial services leaders will be the ones watching for them. ■

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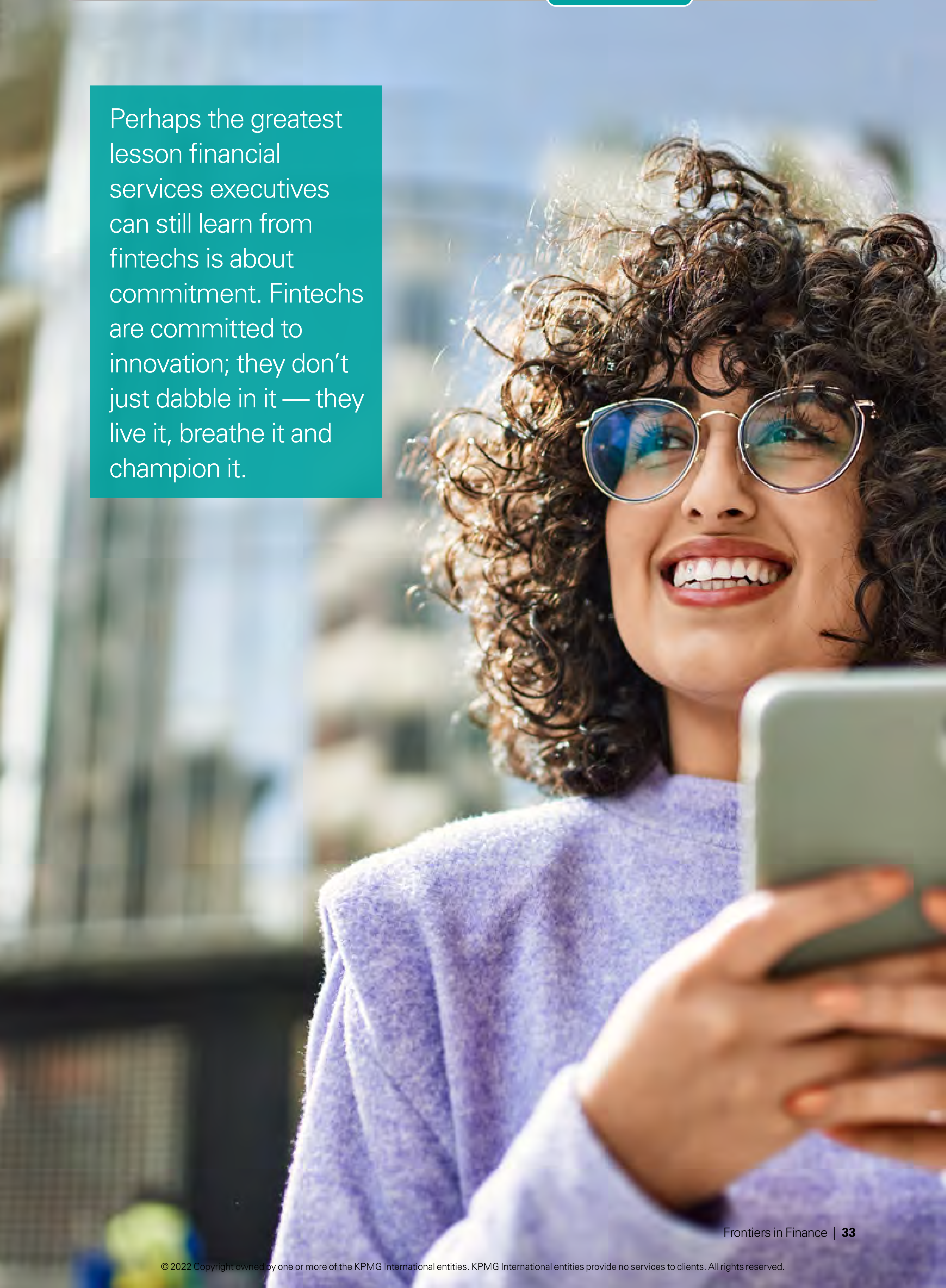

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Accelerating innovation

Data driven

The new value of financial services data

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Financial institutions are rethinking the value of data. And that is taking them outside the boundaries of traditional financial services. The implications could be massive.

Call it the third wave of data value for financial services. Or simply call it a natural evolution of data maturation. No matter what you call it, what is clear is that many financial services firms are now looking at the value of their data in an entirely new light.

At first, the value of data was in its ability to make routine processes more efficient. Automation was applied, data was captured and analyzed, transactions and business processes were executed faster and more efficiently. The second wave was about taking data out of siloes and integrating it across the enterprise in order to do things better. Processes were reimagined, experiences were created, the way financial services were delivered was vastly improved. Yet it was still about the transactions and the business processes.

What makes the third wave of data value different is that financial institutions — of different types and sizes — are now looking at their data as a business unto itself. They see that demand for interesting combinations of data is growing rapidly among both clients and third parties. And they know they are sitting on a potential gold mine of information and insights. Simply put, the third wave is about data monetization and value creation.

Just consider how a simple combination of transaction and mobility data could help inform consumer choices or retailer investment decisions. Or the value a real estate investor may get from combining property insurance data and ESG metrics with weather and fire data. Or perhaps the certainty and insight created for investors when asset managers combine traditional financial measures with independent ESG ratings to provide a clear picture of a private company's actual carbon footprint or climate risk.

The lines become blurred

In part, this third wave is an extension of the last two waves; an ongoing effort to help improve the way financial services are delivered. Financial institutions are integrating sources of data in order to innovate the services and products they deliver to their clients. Auto insurers are combining customer data with weather and mobility data, for example, to better assess risk and price policies. They are also packaging their information and insights up and providing them to mobility companies as a unique data stream.

Indeed, many financial services organizations are starting to see this burgeoning demand for market data as an opportunity to create new revenue streams and business models. And it's not just about anonymizing their customer data and selling it to third parties. There is a growing number of financial services organizations that are creating entire ecosystems around market data, supported by slick analytics technologies and capabilities, and focused on delivering niche market insights.

The range of potential use cases are almost immeasurable. And this is just scratching the surface when it comes to the types of data that is available, the ways the data could be integrated and the insights that could be generated. The market for interesting combinations of data may seem like it is exploding; but right now, this is likely just the spark of the flint. The big bang has yet to come.

“There is a growing number of financial services organizations that are creating entire ecosystems around market data, supported by slick analytics technologies and capabilities, and focused on delivering niche market insights.”

From data to value

Over the past few years, KPMG professionals have spent a lot of time talking with various financial services institutions about their data, the value it contains and potential opportunities to capture that value. And this experience suggests the leaders are focusing on four key areas:

They are building dynamic ecosystems. They are thinking broadly about the types of data they could be integrating, the potential sources of that data and the value they could generate. They are partnering with customers, competitors, and non-traditional players to help uncover new sources of value. They see their data ecosystems as agile and dynamic constructs that shift as expectations change.

They are asking interesting questions. The value you can derive from data is largely dependent on whether you are asking valuable questions. The leaders are making sure they are asking the right questions, based on a clear understanding of where value can be created. And they are bringing together the right sources of data — at the right quality and integrity — to deliver on demand.

They are taking ethics and privacy seriously. From understanding the levels of consent around certain data sources to striving to ensure that machine learning models are being trained on ethical and unbiased data, the leaders are taking steps to help ensure that the data they are using and monetizing is being used appropriately — both internally and by the organizations they share it with.

They are applying new management capabilities. The leaders are defining the competencies and capabilities that are expected to be relevant for data-driven products and services in the future. They are focusing on enhancing their management and board capabilities to keep pace with the innovation they are hoping to achieve. And they are focusing on creating models that match where the marketplace is going.

Just getting started

The implications for financial institutions could be massive. On the one hand, the explosion of new market data is creating opportunities and disruption within competitive marketplaces. Large players with sophisticated analytics and access to data have certain advantages. But so, too, do smaller players with more agile approaches and niche ecosystems or value propositions.

Nobody is suggesting that financial institutions should start thinking of themselves as data companies; what financial institutions bring to the table is a legacy of trust, security, and financial acumen. But now they are also bringing rich sources of data and innovative business models to monetize its value. A new wave of data value is clearly on the horizon.

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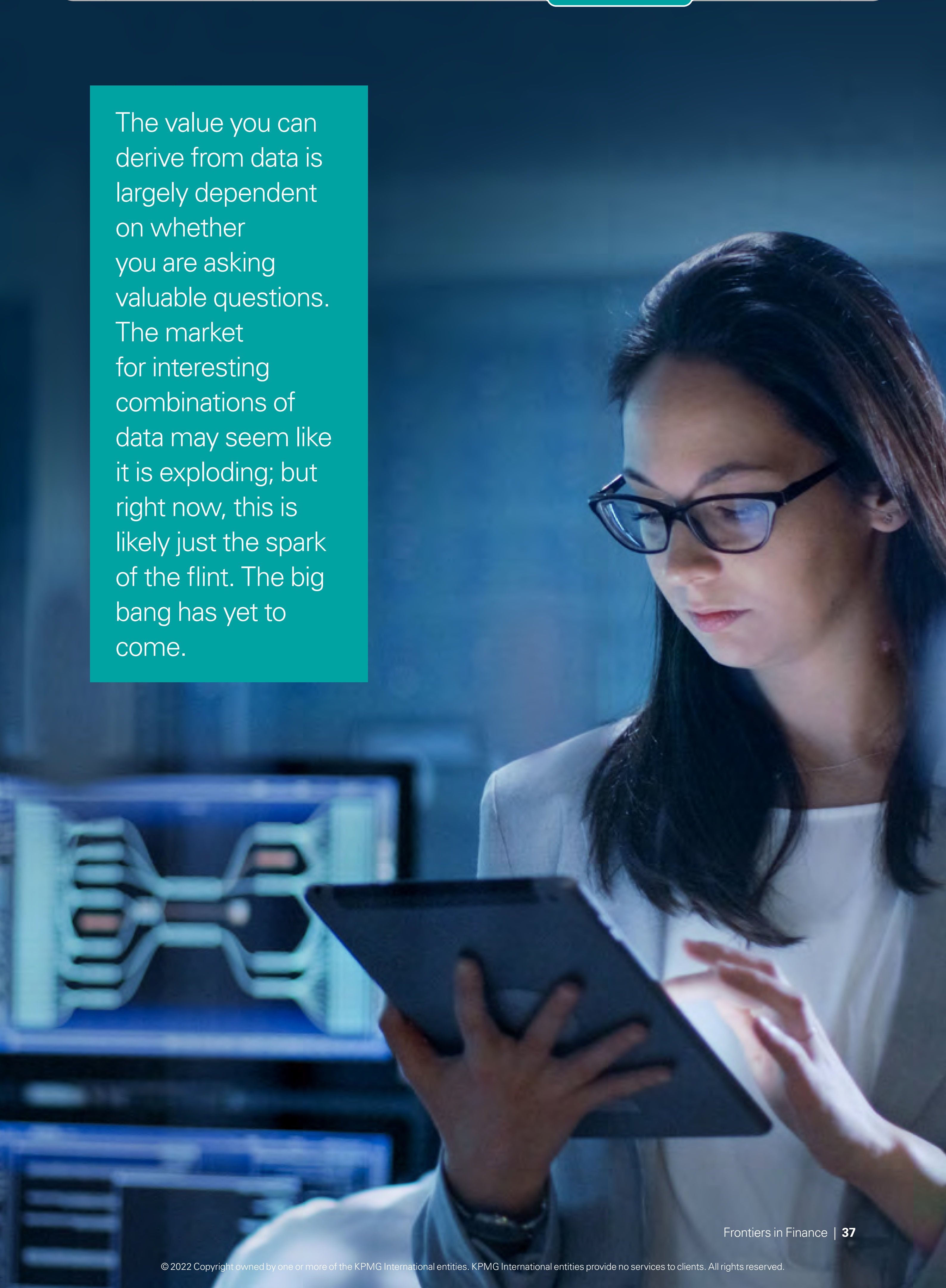


The value you can derive from data is largely dependent on whether you are asking valuable questions. The market for interesting combinations of data may seem like it is exploding; but right now, this is likely just the spark of the flint. The big bang has yet to come.

Accelerating innovation

In conversation with bolttech CEO Rob Schimek

Laura Hay, Global Head of Insurance, KPMG International and Partner, KPMG in the US

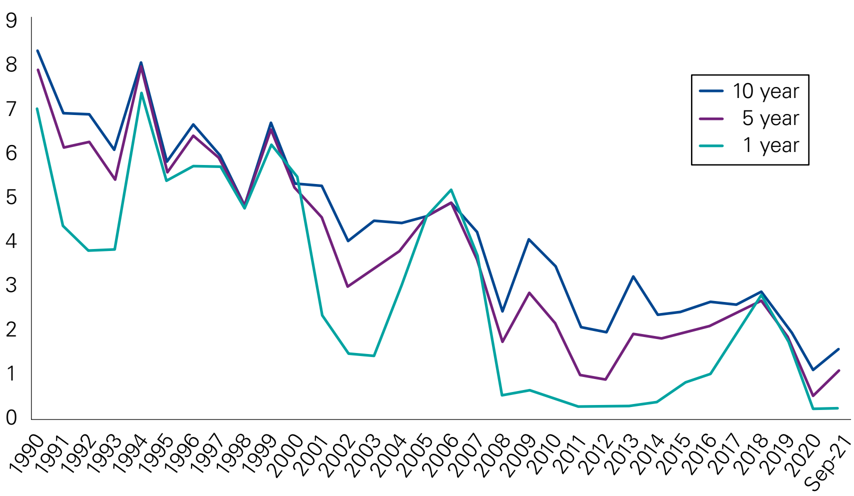
Rob Schimek, CEO, bolttech (pictured)

With a fast-growing global presence spanning 30 markets across three continents, bolttech has the world's largest insurance exchange — a next-generation platform that's seamlessly connecting insurance providers, distributors and customers. Laura Hay, KPMG's Global Head of Insurance, talks to CEO Rob Schimek to get a better understanding of the game-changing trends driving today's booming insurtech space and what it all means for insurers and their customers.

Thanks for your time today, Rob. bolttech continues to experience impressive growth. Why do you say that today is 'the perfect time' for emerging insurtechs?

It's absolutely the perfect time for insurtechs, and I see three crucial trends impacting the insurance industry that show us the time is right for insurtech success. The first involves *macroeconomics.* Today's investors are pursuing yield and the opportunity to outperform, which is attracting significant capital to this space, allowing insurtechs to grow and innovate. The second key trend is the acceleration of *digitization* following COVID-19 and its tremendous global impact. Digitization in insurance has never been more important and this drive is creating huge opportunities for insurtechs. The third is the rise of the *sharing economy.* As we connect participants across our technology-enabled insurance distribution ecosystem, we harness the spirit of today's sharing-economy environment to meet the diverse needs of consumers with expanded choice and convenience. This is also inspiring product innovation for new risks in our daily lives. So those are the three major trends that I believe make today a great time to be an insurtech like bolttech.

US treasury yield curve



Source: *Daily Treasury Par Yield Curve Rates,* US Department of the Treasury, September 2021.
https://www.treasury.gov/resource-center/data-chart-center/interest-rates/Pages/TextView.aspx?data=yield

> Today's investors are pursuing yield and the opportunity to outperform, which is attracting significant capital to this space, allowing insurtechs to grow and innovate.

Can you break down these significant trends to illustrate their impact?

Taking a closer look at macroeconomics, it's clear that economic conditions in the global marketplace are creating significant challenges for insurers today. Look at interest rates in 1990 compared to early October 2021, for example. Back in 1990, you could put your money in the bank for 1 year and obtain a 7 percent return — and almost 8.5 percent over 10 years. Today you will get almost nothing by putting money in the bank for a year — while over 10 years you will get a return of about 1 percent.

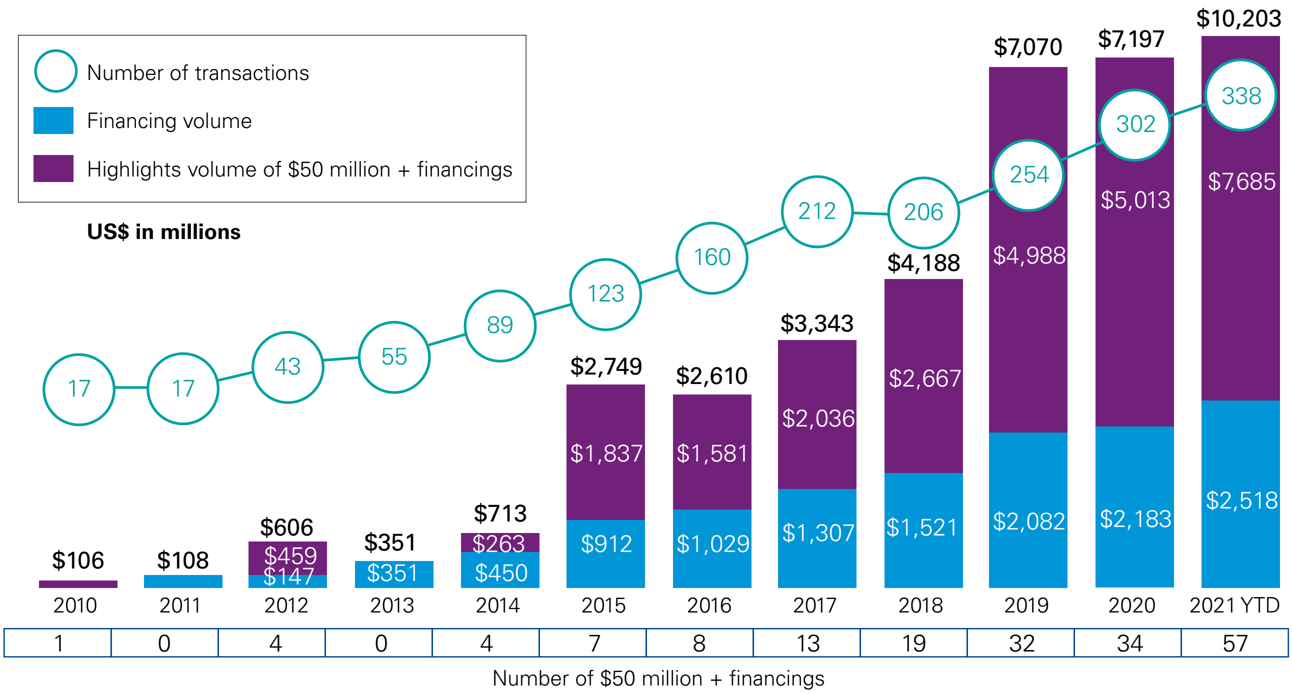
Yet insurers typically make money via underwriting and investment portfolios. In the event of an underwriting loss in 1990, you could ideally cover it with investment returns. Not today! In this environment, many new players are looking at the industry and saying: 'Hey, I see the problem here — and maybe I can do this differently.' This impact has attracted investment dollars to businesses that want to disrupt the industry and participate in it for the long term. The first three-quarters of 2021 alone saw 338 total insurtech funding transactions, generating a higher financing volume as in all of 2019 and 2020 — which was a record year. So, 2021 has become another record year for insurtech funding. Some big names we have seen in the IPO space include Lemonade and Root, and SPAC mergers involving Hippo, Metromile and others.[17]

As insurers fight today's battles, they recognize that they can't control the macro environment and interest rates and returns, so they need particularly accurate underwriting. They also know that they can't compete simply on price to drive performance and profitability. Therefore, insurers need to innovate to survive. Others are recognizing this too, and that brings us to the new business models that are emerging.

That's a revealing look at the macroeconomic trend. What impact is the second key trend of accelerated digitization having on the industry today?

The pandemic has really super-charged the need to transform, and nowhere has that been bigger than in the area of digitization. For example, your recent KPMG report notes that 96 percent of today's insurance CEOs cite an acceleration of digitization due to the pandemic[18] and I would absolutely agree with that — and add that digitization is really helping insurtechs pick up speed. A 2021 Gartner report notes that worldwide IT spending has increased by 9 percent to hit US$4.3 trillion in 2021,[19] while a Forrester's report predicts that 83.4 percent of new motor, property and travel insurance sales will be digitally influenced by 2023.[20]

Q3 2021: Insurtech financing activity annually



Source: *Q3 2021 Quarterly Insurtech Insights: Global Financing and M&A Statistic,* FT Partners Research, October 2021. https://ftpartners.docsend.com/view/86nscvzau25gb5ew, Page 6.

[17] *Home insurance company Kin to go public via SPAC merger,* CNBC Fast Money, 19 July 2021.
[18] *KPMG 2021 CEO Outlook Pulse,* KPMG International, March 2021.
[19] *Gartner Forecasts Worldwide IT Spending to Grow 9 percent in 2021,* Gartner, 14 July 2021.
[20] *The State of Digital Insurance,* 2021, Gartner, 9 February 2021.

What are you seeing regarding the third trend, the sharing economy, and its impact on the business?

Well don't get me wrong — I recognize that the sharing economy itself is changing today and that companies have experienced ups and downs and changes over the past year or two in how they do business. But if I mention popular brands such as Uber, Airbnb, Amazon, Etsy, Kickstarter and others, you can probably identify ways in which your life has been impacted. The range of services and their rapid emergence and adoption is remarkable.

As the sharing economy grows, how would you compare the bolttech exchange to Lloyd's?

I would view Lloyd's as an exchange but not a technology-driven exchange. Let me give you an example to illustrate what I mean. In the US, we work with a leading and established auto insurer marketing bundled auto-and-home coverage packages. To do that, they are offering property insurance from many other insurers to their customer base, through the bolttech platform. We are accomplishing this in a very technology-driven manner, so that generally speaking, after the first five questions are asked of the insured, we can identify a list of potential insurers. We use technology and third-party data sources to provide precise underwriting details — such as the customer's home location, construction details, distance to police and fire services — and connect that information with the underwriting engines of various potential insurers to provide quotes on coverage. And this all takes place in a matter of seconds!

We also provide access to access to insurance to businesses outside of the industry wanting to add insurance products relevant to their own customer journeys — like device protection for telcos and electronics manufacturers, extended warranties for e-commerce, or travel insurance for airlines. The digital nature of the platform is essential for embedded insurance to happen.

Can you talk about bolttech and where you fit into today's dynamic environment?

Well as I noted at the start, these three trends that we've looked at have been really big drivers of why today is truly an exciting time to be an insurtech. Our mission is to build the world's leading technology-enabled ecosystem for insurance. We are currently a team of 1,400 people serving 30 markets across three continents — giving bolttech the greatest global reach of any insurtech on the planet.

We have the world's largest insurance exchange, with US$5 billion in premiums on platform, which is connecting more than 700 distribution partners to more than 150 insurance providers and more than 5,000 products. We are helping our partners provide a fast, easy, customer-centric experience. In addition, we have celebrated becoming a 'unicorn' last year — having completed the largest Series A funding ever for an insurtech.

Was there skepticism in the insurance market as bolttech got off the ground over the past 20 or so months?

No doubt about it — and it's logical that any insurer would ask 'Why share my customer base with another insurer if I can provide services and products myself?' At the same time, it can take just a few forward-looking partners to help change the mindset of the industry. Many of our partners have come in knowing exactly the type of customer they want to own and ready to do whatever it takes to keep those customers — even if that means selling someone else's products and co-existing with others in the market. Their success has been evident, and the momentum continues to grow.

You say that bolttech is really transforming the way insurance is being bought and sold by enabling all industry stakeholders to meet their needs in new ways. Can you talk about the impact you are having today among various stakeholders?

We like to think of the exchange as enabling value for all participants. For customers, we are delivering unprecedented convenience and choice — the ability to choose from insurers to meet their needs. This includes individual customers, and we are growing in the small- to mid-size enterprise space. In terms of our distribution partners, we are delivering new revenue sources, and ways to engage and retain their existing customer base. For example, we are working with telcos that are providing the connectivity individuals and businesses rely on today to insure things like customer phones and home electronics — and while they are at it, they can offer the option of extending coverage to include auto, home or travel insurance. So, we are helping those businesses unlock new opportunities to drive revenue and, at the same time, customer loyalty. As for today's insurance carriers, we are providing unprecedented access to new markets and potential customers that they might not otherwise see and helping them provide lifetime customer value.

Does the bolttech platform enable cross-border business or primarily domestic transactions between customers and insurers?

We are currently focused on providing in-country transactions, but we are seeing interest among investors amid the potential opportunity to connect buyers and sellers across geographies. At the same time, the industry is highly regulated and nuanced across markets, and we need to pay very close attention to the array of insurance laws and regulations in place. But we are certainly working with multinational partners to take the offerings of one market into others to scale.

With bolttech's success and growing global footprint, are there plans to expand your presence in the southern hemisphere, including Africa?

We definitely have our sights set on expanding geographically, but we also want to ensure that we have established the right partnerships for success in specific geographies. We generally follow our partners into a geography with business already established.

You say there is a myth in today's marketplace — the notion that no one will make big-ticket purchases such as home or life coverage online. Can you explain?

I really do want to dispel that myth and you only need to look at how consumers are embracing the ability to purchase everything from cars to diamonds online today. For example, I believe one major player in the diamond market sold more than US$450 million in diamonds last year with just a few hundred employees. So, don't be fooled. What we are seeing is that insurers can successfully break into this industry and become a powerhouse by eliminating elements of the traditional value chain that create little significant value while adding to operating costs and customer premiums.

Ultimately, I think there's no doubt that the future is about delivering the convenience, cost and reliability of online capabilities and services, supported by the human skills and expertise that customers want and expect. We are using today's technology to power tomorrow's insurance and the opportunities are both exciting and unprecedented. There truly is no better time than today for insurtechs and the remarkable advantages they are delivering worldwide.

Note: The views and opinions expressed herein are those of the interviewee and do not necessarily represent the views and opinions of KPMG International Limited or any KPMG member firm. ■

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Accelerating innovation

Real innovation in real estate

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The real estate sector has not traditionally been known for being innovative. That is about to change.

For years, the real estate and construction sectors have been slowly ramping up their efforts to innovate. Some have been dipping their toes into pilots and proof of concepts, others have been making major steps. While some have been partnering with the larger proptechs or testing new construction materials and approaches. Many are looking for ways to more efficiently and effectively manage their ESG ambitions. And some are looking to incorporate available data in operations and/or re-invent property management.

Yet, for the most part, the sector still has a great potential to future embrace innovation.

Breaking the gauge

Over the past few years, however, the pressure to innovate has become intense. Even before the term 'COVID-19' entered our common vernacular, real estate users, owners, operators, and investors had been pushing for digital transformation and innovation.

Stakeholders were already calling for more ambitious ESG and sustainability targets. Boards and regulators were focusing attention on cybersecurity and safety. Operators and users were keen to see more data and analytics applied to the user experience and reporting. And everyone was looking for more process agility and robotics to help boost efficiency. The pandemic shattered the pressure gauge.

Consider some of the ways the pandemic impacted the commercial real estate sector, for example. Remote working became the norm, forcing companies to rethink (future) ways of work and their lease arrangements. The need to reduce on-site staff led to the rapid adoption of automation through IoT, sensors and remote monitoring software. Touchless entry systems became ubiquitous in most office buildings. Users' expectations around health and safety morphed into their views on sustainability and ESG.

Innovating the solution

With the pressure to innovate mounting on all sides, real estate players across the value chain are now putting significant investment into catalyzing innovations in their business and across their ecosystems. In particular, we are seeing four areas capture significant attention — from real estate players, technology companies and venture capitalists.

Safety and hygiene. User expectations for building sustainability, health and wellness are creating massive space for new technologies and applications. Wearables and monitoring devices are helping ensure safety and social distancing at job sites and in offices. In some cases, UV-light robots are being introduced to deliver consistent cleaning cycles. Data and analytics are playing an important role — in the optimization of cleaning services, for example, or the identification of potential safety concerns.

Integrating the digital and the physical. In almost every facet of the industry, we are seeing cutting-edge technologies like AI, virtual reality and robotics start to change the way people interact with the physical space. In the back office, technology is being used to automate real estate processes. At the front end, new innovations are helping to enhance the customer and user experience, to help

> "Operators and users were keen to see more data and analytics applied to the user experience and reporting. And everyone was looking for more process agility and robotics to help boost efficiency."

optimize the workspace and to create new ways for workers and residents to interact virtually with the spaces they lease.

User experience. For developers, property managers, owners and brokerage firms alike, the user experience is shifting from 'product push' to 'client first' concepts. Data is being collected from right across the asset, allowing deep insight into user expectations and interactions, and allowing developers, property managers and brokerage firms to find and target the right customers. To help support new front-end user interfaces and solutions, we are also seeing growing activity in the areas of data management and compliance.

Construction and architectural innovation. The drive for net-zero carbon buildings is serving as a catalyst for the development of new sustainable building materials. Leveraging cloud-based technologies and remote collaboration solutions, new off-site construction management techniques are spawning creative models and ideas. The widespread adoption of 3D printing and modular construction is creating new opportunities for developers, property managers and technology companies to collaborate and innovate.

Is proptech ready?

Demand for new innovations, solutions and technologies is rising. The good news is that the supply of new and established proptech options is also growing. In KPMG's recent *Real Estate Innovations Overview* report (our 6th annual edition), we looked at 42 different countries and territories around the world to find innovations that are aimed at the real estate and construction sector. In the report, we identify 742 companies across 40 different fields of expertise.

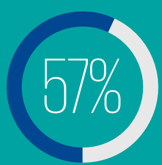
There are literally hundreds of technology companies out there, all working to develop innovative solutions for the real estate and construction sector. Now consider this — more than US$23 billion of new capital was invested into proptechs last year alone. While that is down significantly from 2019 numbers, it still suggests a strong appetite for proptech among investors, including corporate and traditional venture capitalists.

From pilot to profit

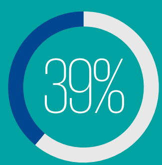
So, what is stopping real estate and construction players from nurturing and adopting these technologies and innovations? For some less-established players and those with assets particularly hard-hit by the impacts of the pandemic, it comes down to cost. Ultimately, of course, that's a losing equation — less

Better data, better decisions

The race for better data and insights is on



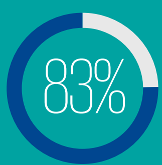
of real estate participants have a formal data strategy



store and access their data via a centralized data repository

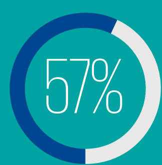
have data scientists on staff

And larger managers (with assets under management of more than US$5 billion) seem to be pulling ahead



have a formal data strategy

use a centralized data repository



have data scientists on staff

What will it take to compete and innovate in a data-driven environment? Check out KPMG's *Better data, better decisions* to learn more.

innovation translates into lower valuations which leads to lower profitability and less room for investing into innovation. It is a deadly cycle.

KPMG's work suggests there are three broad areas where most real estate and construction players are struggling. The first is in the identification of new ideas and opportunities. In this area, our report provides a comprehensive resource. We have an online tool that allows you to target specific technologies, regions, innovations and value chain components from among the 742 different and unique innovations featured within the report. KPMG firms also work with clients to develop their own ideas, sometimes by challenging their entire organization to crowd-source and collectively enrich new ideas, or by hosting innovation challenges to help collect and test solutions.

The second big challenge is in quickly moving from pilots and proof of concepts to scaled solutions.

For the most part, this is about designing a tailored innovation process that fits your organization. It requires new approaches like design thinking, Lean start-up and scaled agile. It will also require leaders to patiently bring along their colleagues, create a culture and organizational capability of innovation and inspiring them along the way by helping them experiment with technologies and test new business models while also verifying customer demand.

The third big area where most companies struggle is in turning their investments and solutions into measurable and sustainable value. In part, this is about being able to measure the results of innovation by determining the brand, business and/or cultural value of each project. It also requires leaders to stay on top of the latest trends, technologies and start-ups that are active in their areas and that fit into their innovation strategies. Those on the leading edge may want to focus their ideation efforts on underexposed themes in order to uncover new sources of value.

Time to deliver

The real estate sector had limited disruption and innovation over the past 20 years. But all that is about to change. And it is expected to change quickly. The pressure to innovate is coming from all parts of the value chain: users demand it; regulators are expecting it; investors are rewarding it; operators need it; and property managers and brokers depend on it. Are you doing enough to deliver it?

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Cryptoassets and CBDCs

A world of challenges amid opportunities as cryptoassets gain momentum

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The proliferation and popularity of cryptoassets continue to generate widespread interest — and considerable debate — over what the future holds for today's fast-emerging digital economy and the global financial services industry.

The cryptocurrency trend that has soared in the wake of Bitcoin's emergence offers an array of potential benefits for users and holds the potential to revolutionize the global financial ecosystem. But significant challenges remain for cryptocurrencies, and without institutionalization — large-scale participation by emerging and traditional financial services companies — crypto's prospects for success remain limited if not uncertain.

Cryptoassets are digital assets that use cryptography, a peer-to-peer network, and a public/private ledger to create, trade and manage those assets. The current array of cryptoassets includes cryptocurrencies, protocol tokens, stablecoins, security tokens, and non-fungible tokens (NFTs). Their value to users is diverse — whether as an investment asset class, a store of value, a medium of exchange, or a record of rights and ownership. Their emergence has been largely driven by retail demand, and financial institutions are increasingly offering cryptoasset services to meet their clients' demands and expectations in areas such as research, trading and custody.

Seen for their potential to revolutionize the financial sector and create an open global financial system, their benefits include: reducing friction, inefficiencies and costs within today's global financial system; a hedge against currency devaluation and hyperinflation; providing access to the unbanked; and a peer-to-peer exchange/trading capability providing access to investment opportunities for a larger population. Some specific cryptocurrency products, services and use cases include:

- Bitcoin as an emerging digital asset class, similar to gold and seen as an alternative to traditional asset classes
- Ethereum (ETH) and its enablement of initial coin offerings to raise capital and encourage a broader flow of capital from a wider group of investors. ETH is a decentralized, open-source blockchain and is the leading protocol token for decentralized-finance (DeFi) applications. Most of today's top 10 DeFi solutions by market capitalization are built on the ETH blockchain
- Litecoin and its ability to enhance the speed, accessibility and cost of current cross-border payment systems such as wire transfers
- Tokenization involving the creation of digital, tokenized versions of traditional assets such as securities, commodities and real estate assets. The tokenized economy is being seen as a particularly significant innovation that crypto is enabling.

As they continue to gain attention and adoption, consider some of the numbers related to the soaring crypto market today:

- The cryptocurrency market soared to an all-time high of

> "... benefits (of cryptoassets) include: reducing friction, inefficiencies and costs within today's global financial system."

US$3 billion in November 2021, but has subsequently dropped to around US$2 billion, as of April 2022. Two of the world's largest cryptocurrencies — Bitcoin and Ether, the token supporting the ETH distributed ledger technology — also surged to record highs in November 2021.[21]

— There are more than 10,000 cryptocurrencies in existence as of April 2022.[22]

— The global cryptoasset-management market is projected to grow from US$0.4 billion in 2021 to US$1.2 billion by 2026, reflecting a compound annual growth rate of 21.5 percent.[23]

Nations leading the way in crypto adoption include the US, India, Vietnam, Pakistan, El Salvador, Nigeria, Canada and Singapore. El Salvador, for example, has adopted Bitcoin as legal currency, and Nigeria recently launched the 'eNaira,' a central bank digital currency that is the first in Africa. The ASPAC region is anticipated to be the fastest-growing market in the next few years amid emerging network infrastructure, continued economic growth, the emergence of affluent young investors, and a relatively stable geopolitical system, all of which are providing a fertile ecosystem for crypto services.

Challenges amid revolutionary opportunities

While the promise of cryptoassets to redefine the global financial ecosystem is clear, so are the current significant challenges they face. It is important to note that cryptoassets do not fulfil the primary functions of money as a medium of exchange, a unit of account and a store of value, and they are not deemed a viable substitute for cash and deposits. Cash is still king — at least for the time being.

A global regulatory framework for cryptoassets has yet to emerge amid today's patchwork of regulatory guidelines, and regulators are focusing on establishing essential requirements for participants in the crypto space. The regulatory focus largely to date has been on anti-money laundering (AML), know-your-customer (KYC) requirements and regulatory permissions regimes. KYC considerations are a high priority, given that cryptoasset owners are 'identified' using cryptographic addresses that pose barriers to knowing exactly who owns what in today's crypto ecosystem. Establishing a KYC program that can verify customers and risk profiles, monitor transactions and help ensure AML capabilities will be crucial.

Tax implications, accounting and financial reporting will also demand solutions. Accounting for cryptoassets remains an emerging area that poses challenges amid traditional reporting requirements and limited guidance to date. On the tax front, guidance also remains inadequate regarding tax treatment of cryptoassets and potential liabilities related to their sale or exchange. See our article — Tax information reporting on cryptoassets, page 52.

Not to be underestimated is the need for broad accessibility that can also ensure appropriate security and protection from cyber criminals targeting cryptoassets. Security and trust are paramount for cryptoassets, as their potential for cybercrime is known to be high today.

Regulators are responding

On the regulatory front, the Basel Committee on Banking Supervision (BCBS) is considering how the Basel Framework should incorporate cryptoassets.[24] The BCBS stated its minimum expectations for banks' exposures to cryptoassets and related services in March 2019, and these expectations may be further augmented by additional country-specific requirements. They apply to due diligence regarding:

— risk assessment

— governance and risk management via a robust framework

— public disclosure of cryptoasset exposures and their accounting treatment

— supervisory dialogue to inform authorities of crypto activity, exposures and due diligence in a timely manner.

In October 2021, meanwhile, the Financial Action Task Force (FATF), as part of its ongoing global monitoring of virtual assets, came out with its *Updated Guidance for a Risk-Based Approach to Virtual Assets and Virtual Asset Service Providers.*[25] The guidance from the FATF — the global money-laundering and terrorist-financing watchdog — includes updates focusing on six key areas:

1. clarification of the definitions of virtual assets and providers
2. guidance on how FATF standards apply to stablecoins
3. additional guidance on the risks and tools available to countries to address money-laundering and terrorist-financing risks for peer-to-peer transactions
4. updated guidance on the licensing and registration of service providers
5. additional guidance for the public and private sectors on implementation of the 'travel rule' requiring businesses to collect and share personal data of participants in a transaction
6. principles for information-sharing and co-operation among service provider supervisors.

The need for fork management and governance is also significant.

[21] https://fortune.com/2021/11/09/cryptocurrency-market-cap-3-trillion-bitcion-ether-shiba-inu/
[22] https://www.investopedia.com/tech/most-important-cryptocurrencies-other-than-bitcoin/
[23] Crypto Asset Management market, 2021
[24] https://home.kpmg/ca/en/home/insights/2020/03/beyond-basel-iv-crypto-assets-and-basel-framework.html
[25] https://www.fatf-gafi.org/publications/fatfrecommendations/documents/guidance-rba-virtual-assets-2021.html

Forks that occur when a single blockchain breaks into two chains will likely require financial businesses to manage this capability from an array of perspectives that include technology, operations, accounting and tax implications.

The KPMG Cryptoasset Framework

As the future of cryptoassets continues to emerge, the KPMG Cryptoasset Framework is being used by our firms' crypto specialists to provide businesses with the key capabilities they need related to strategy, technology, operations, risk management and compliance. Our framework addresses these crucial capabilities across five pillars:

1. **Plan:** Strategizing on the products and services to be provided and establishing an optimal product-market fit.
2. **Onboard:** Onboarding the cryptoasset and the customer.
3. **Service and delivery:** Providing support for cryptoasset servicing and management.
4. **Protect:** Securing cryptoassets, protecting client confidentiality, monitoring blockchains.
5. **Comply and report:** Complying with applicable regulatory frameworks, financial reporting requirements and tax-reporting obligations.

Leveraging the KPMG Cryptoassets Framework, our risk-assessment work with one large financial institution identified more than 200 risks related to crypto that the organization will need to address. And within those risks exist several hundred more factors demanding solutions. With cryptoassets being developed by third parties, for example, banks will need to closely address third-party and vendor risks.

Ultimately, it seems clear that amid their potential, the success of cryptoassets and their markets will depend on addressing key challenges such as regulatory compliance, price volatility, liquidity and security. Institutional participation by banks, broker dealers, exchanges, payment services, fintechs and other players in today's financial ecosystem will inspire confidence in these emerging products and markets.

As cryptoassets increasingly go mainstream among financial institutions, dedicated crypto services and products will continue to emerge, ultimately enhancing opportunities to manage cryptoassets while raising awareness of their potential benefits among investors and the public. Institutional-grade infrastructure and services can ultimately position cryptoassets to deliver on their potential. ■

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Cryptoassets and CBDCs

Tax information reporting on cryptoassets

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Tax authorities are increasingly focused on enforcement of tax rules relating to cryptoassets. A case in point is the passage of the *Infrastructure Investment and Jobs Act* in the US in November 2021. The new legislation would authorize the US Treasury to issue regulations requiring brokers to report on the sale and other transfers of digital assets much in the way they are currently required to report on the sale of stocks and securities. In addition, receipts of digital assets in excess of US$10,000 by persons engaged in a trade or business would generally also be subject to reporting. The provisions are generally effective for returns filed after December 31, 2023.

Industry participants are still digesting the provisions of the *Infrastructure Act* and are awaiting further guidance from the US Treasury on their application. In brief, the crypto-related tax information reporting changes include the following:

Broker definition expanded. US broker tax reporting rules are amended to define a broker as including "any person who (for consideration) is responsible for regularly providing any service effectuating transfers of digital assets on behalf of another person." This is a relatively broad definition of broker and industry participants are hoping that guidance from the US Treasury would narrow the scope of the definition.

Digital assets in scope. The tax reporting provisions also include digital assets in the mix of assets subject to reporting. They define digital assets as "any digital representation of value that is recorded on a cryptographically secured distributed ledger or any similar technology as specified by the Secretary." This definition includes common cryptocurrencies but could have broader application to other (and newly developed) digital assets such as non-fungible tokens.

Covered securities. Digital assets are treated as 'covered securities' if acquired on or after January 1, 2023. Covered securities under US broker tax reporting rules are subject to cost basis reporting by the broker. Thus, brokers will need to monitor a customer's tax cost with respect to a holding of cryptoasset and determine gain or loss on disposition (beginning in 2023 even though the information returns for calendar year 2023 are filed in 2024).

Transfer reporting. The tax provision that currently governs the production of transfer statements when stocks and securities are transferred between brokers will cover transfers of digital assets. These requirements may apply when a customer transfers cryptoassets from an account at one exchange to another. In addition, transfer reporting will also be required for transfers of digital assets to an account or address not maintained by another broker — for example, transfers to private wallets. This provision is also effective beginning in 2024.

Receipt of digital assets. Finally, digital assets would also be treated as 'cash' for purposes of the statutory requirement for businesses to report receipts of cash in excess of US$10,000. The provision applies to any person engaged in a trade or business and who, in the course of such trade or business, receives more than US$10,000 in digital assets in one transaction or two or more related transactions. There is, however, an exception for certain financial institutions already subject to similar currency transaction reporting rules. This reporting change is effective as of 1 January 2024.

The rationale for these new information reporting requirements is to provide tax authorities with visibility over taxpayer crypto transactions, but the provisions may also allow taxpayers greater access to tax-relevant data as brokers would generally also be required to furnish account holders with a recipient statement on reportable trades.

Similarly, the Organisation for Economic Co-operation and Development had published a report on global tax rules for cryptoassets in 2020 and is expected to provide guidance on how the automatic exchange of tax information between jurisdictions under the Common Reporting Standard would apply to these assets.

Businesses, whether they facilitate cryptoasset activity or in certain cases simply receive cryptoassets as payment, will need to monitor and assess their systems and procedures for compliance readiness as tax information reporting rules come to the fore. ■

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Cryptoassets and CBDCs

Central bank digital currencies are in the spotlight

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The future of money remains uncertain but there is no mistaking the intense focus that central bank digital currencies (CBDCs) are attracting among the world's central banks, governments and businesses.

The rapid emergence of Bitcoin, other decentralized cryptocurrencies and stablecoins continues to fuel the global debate over digital money. And as more countries explore the promise of 'programmable money,' central banks are sharpening their focus on CBDCs.

Not to be underestimated as well is the impact of the global pandemic in accelerating the development of CBDCs for their potential advantages as a monetary policy tool, as governments currently address the need to transparently distribute and track economic-stimulus programs emerging since early 2020.

A CBDC is a digital version of a fiat currency and they vary significantly in their design. The technology behind each CBDC depends on the preferences of individual nations and central banks. In some cases, CBDCs rely on distributed ledger technology (DLT), a database that stores multiple copies of financial records across multiple entities that can be managed by a central bank. DLT use differs from the use of blockchain among popular decentralized cryptocurrencies like Bitcoin.

China is leading the way on digital currency development. It has been expanding pilot use of its digital yuan (e-CNY) in major cities and is expected to be among the first countries to officially launch a digital currency. China extended its CBDC trials rolling out e-CNY for foreigners visiting during the 2022 Winter Olympic Games and Winter Paralympics. It is estimated that 260 million people have opened e-wallets for China's digital yuan to date amid the nation's pilot programs, and the digital yuan has been used to conduct the equivalent of US$13.8 billion in transactions as of the end of January 2022.

Other CBDC first movers include the Bank of England, Sweden's Riksbank and the Bank of Canada. The Bank of France this year launched one of the European Union's largest CBDC trials to date, and other European nations pursuing them include the central banks of Italy and Germany. Also on the forefront are the central banks of Uruguay, Thailand, Venezuela, Singapore and the Bahamas.

While the rapid emergence of CBDCs inevitably includes questions regarding security and trust, it is worth noting that central banks may indeed hold an advantage regarding public trust in CBDCs as a digital currency. According to a global 2020 poll by the Official Monetary and Financial Institutions Forum, more than half of potential users surveyed in 13 countries said they would prefer a digital currency issued by their central bank, while private digital currencies issued by tech companies were deemed least-trusted.

The benefits are clear but questions remain

CBDCs, depending on the geographies, present the opportunity to deliver significant benefits to individuals and businesses. Programmable money offers a broad range of new use cases that include spending restrictions, triggers and limits. Potential benefits to corporates including the use of DLTs, smart contracts, M2M payments, pay-per-use models and more. CBDCs also help in meeting the need for greater financial inclusion amid the limitations, costs and insufficient reach of today's existing payment systems. The use of digital distribution channels and infrastructures can provide broad new levels of global access to central bank money and payment services.

> “Potential benefits to corporates including the use of DLTs, smart contracts, M2M payments, pay-per-use models and more. CBDCs also help in meeting the need for greater financial inclusion amid the limitations, costs and insufficient reach of today's existing payment systems.”

As noted, CBDCs are also showing their potential to enhance central banks' transparency and efficiency in distributing capital based on monetary policy decisions. As climate-related disasters continue to rise, for example, CBDCs could enhance the ability of governments to provide broadly accessible public support as needed. CBDCs have also been touted as more secure than decentralized cryptocurrencies like Bitcoin. However, the problem usually lies in the crypto-exchanges, some of which have insufficient processes and security measures.

China's significant progress in the development of its national digital currency has helped raise international focus on economic implications and challenges regarding broad global adoption of CBDCs.

In Europe, the governing council of the European Central Bank (ECB) in July 2021 launched a 24-month investigation phase of a digital euro project to address key issues regarding their design and distribution.[26] The ECB notes that a digital euro must fully meet the needs of users while also helping to prevent illicit activities and avoid negative impacts on financial stability and monetary policy. Public consultation and focus group analysis have been conducted to collect views on the benefit and challenges of issuing a digital euro and on it's potential design. The project will also explore potential changes needed to the EU legislative framework. In general, the implementation of the digital euro is focused on retail payments.

In the US, the Digital Dollar Project (DDP) will launch at least five pilot programs over the next 12 months, with interested stakeholders and DDP participants to explore the value and future design of a CBDC or US digital dollar. The DDP initiative is the first of its kind in the US. Meanwhile, the US Federal Reserve has also expanded research on CBDC system design.

Amid the potential benefits are concerns surrounding future CBDC adoption and global alignment on their use. Giving central banks much broader access to businesses and individuals via CBDCs is raising questions over the potential disintermediation of financial institutions. The Bank for International Settlements (BIS) has clearly warned of the possible negative consequences for businesses and consumers if retail CBDCs are not carefully designed: "Unrestricted introduction of retail CBDCs could result in disintermediation of banks. This, in turn, could lead to a decline in lending capacities, increase the cost of financing for businesses and thus profoundly impede economic growth for the foreseeable future."[27]

Global co-operation becomes crucial

Given the cross-border capabilities of CBDCs, co-operation among nations and regulators on their use will likely be critical amid the threat of potentially harmful economic competition. As highlighted in a joint report[28] to the G20 by the Committee on Payments and Market Infrastructures, the BIS Innovation Hub, the IMF and the World Bank, while no major jurisdiction has launched a CBDC, they clearly have the potential to enhance cross-border payment efficiency — as long as countries work together.

The report to the G20 notes that "faster, cheaper, more-transparent and more-inclusive cross-border payment services would deliver widespread benefits for citizens and economies worldwide, supporting economic growth, international trade, global development and financial

> China's significant progress in the development of its national digital currency has helped raise international focus on economic implications and challenges regarding broad global adoption of CBDCs.

[26] https://www.ecb.europa.eu/press/pr/date/2021/html/ecb.pr210714~d99198ea23.en.html
[27] https://www.globalgovernmentfintech.com/account-based-cbdcs-built-on-digital-id-are-way-forward-bis/
[28] https://www.bis.org/publ/othp38.htm

inclusion." But it concludes that the potential for CBDCs to enhance cross-border payment programs will require "international integration and co-operation, ranging from basic compatibility with common standards to the establishment of international payment infrastructures." This includes aligning regulatory, supervisory and oversight frameworks for cross-border payments, consistency on anti-money-laundering/combatting financing of terrorism programs, payment-versus-payment adoption and payment-system access.

In conclusion, while CBDCs appear poised to deliver new advantages for global payment systems, questions remain over what their global implementation is expected to look like.

The central question is whether political developments are moving fast enough to keep up with the competition from private initiatives. In addition, there is limited experience with such major transformations among today's central banks. Success also depends on efficient adoption that could be accelerated and enhanced by technology providers.

In anticipation of the multi-faceted transformations that CBDCs present, KPMG professionals are working to help global clients navigate the journey ahead in order to:

— understand the implications, risks and opportunities that CBDCs present

— design effective strategies for adoption across the business and technology

— assess, configure and deploy core technology infrastructure for CBDC systems

— harden CBDC systems for security and resilience against leading standards.

While the COVID-19 pandemic and the current need to transparently distribute and track economic stimulus programs has served to accelerate the rise of digital payments and the discussions on CBDCs, their ultimate adoption and impact on the global financial ecosystem remains to be seen and will likely be largely defined by the ability of adopting nations to design the new digital currency best for relevant use cases and with tangible benefits. ■

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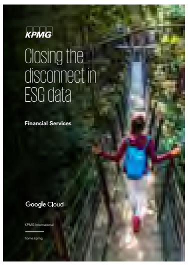
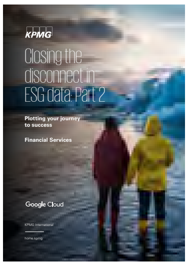


Closing the disconnect in ESG data: Part 1

KPMG and Google Cloud investigate ESG data challenges and opportunities facing financial services and how, with access to more detailed ESG data, there is an opportunity to secure competitive advantage while delivering positive societal outcomes.

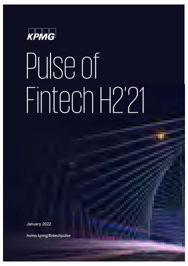


Closing the disconnect in ESG data: Part 2

The second of three in-depth analyses of ESG data challenges and opportunities within financial services, this report explores several technology solutions including KPMG's Climate IQ powered by Google Cloud.

Real Estate + Real Innovation

This report recounts observations in the real estate industry that discuss the industry's current standing and where it's headed. Real estate companies can benefit from innovative technologies that make them more efficient and effective.



Pulse of Fintech H2'21

2021 was a remarkable year for the fintech market. In this year-end review of the global fintech landscape, we share M&A, VC and PE deals with geographical analyses, Fintech segment insights and the top trends to watch in 2022.

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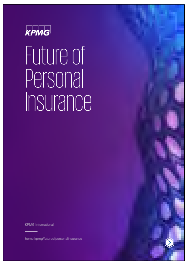

Future of Personal Insurance

This report outlines KPMG's vision for personal insurance, exploring how key forces of change are already creating competitive opportunity. It also examines emerging business models and their place in driving future success in the sector.

Global Banking CEO Outlook

A unique snapshot of 135 bank CEOs from around the world, and how their strategies and concerns have shifted as a result of the pandemic. The data reveals how today's connected bank CEOs are plugged-in, people-first and purpose-led.

Global Insurance CEO Outlook 2021

COVID-19 has disrupted insurance industries across the globe, but of the 129 insurance CEOs surveyed for KPMG's annual Global CEO Outlook, there's an emerging optimism driven by a focus on innovation and a strong connection to organizational purpose.

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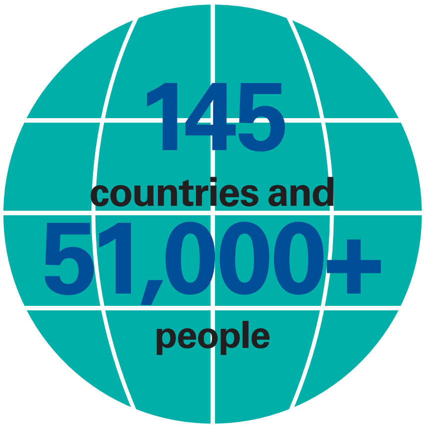

KPMG's Global Financial Services practice has more than 53,000 partners and professionals across the KPMG global network of 145 member firms, providing audit, tax and advisory services to the retail banking, corporate and investment banking, investment management, and insurance sectors. KPMG professionals bring ideas, innovation and experience from across this network, to the benefit of financial services clients around the world. Member firms offer leading financial institutions practical advice and strategies backed by world-class implementation. We believe our commitment to the industry, our sector-specific insights and our passion for serving member firms' clients to the very best of our abilities help us stand out.

We welcome the opportunity to discuss how KPMG member firms can help you achieve your business objectives.

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