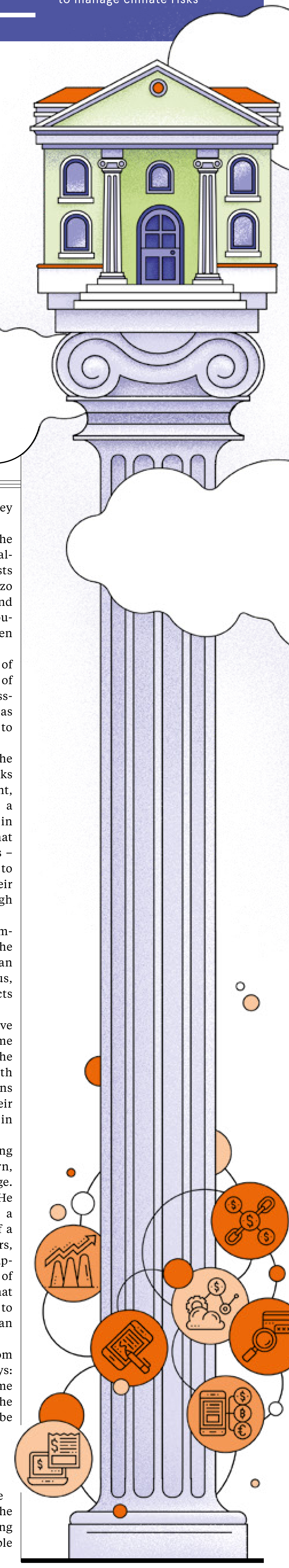
FUTURE OF FINANCE

FINTECH

Will banking's insurgents ever push the giants off their perch?

A cadre of subversive challengers has been striving to overthrow the industry's old guard since the mid-2010s, but the incumbents have stood remarkably firm against the fintech-fuelled onslaught – so far, at least



Charles Orton-Jones

The French revolution took a while to get going in earnest. After the storming of the Bastille kicked off proceedings in 1789, it was three years before the guillotine entered service. Then things really gathered momentum: Louis XVI lost his palace, then his head, and Maximilien Robespierre's reign of terror ensued – until the radical-in-chief got the chop himself in 1794.

How safe are the venerable members of the UK's banking establishment from the much-trumpeted fintech revolution? Only a few years ago, the outlook for them was worrying. Upstarts such as Atom, Monzo, Starling and Tandem were aiming not only to compete with them, but to beat them.

Even the normally understated Deloitte was warning that the big high-street players would struggle to shrug off this threat to their dominance, as they'd managed to do many times before. In its 2014 research report, *Banking Disrupted*, the firm's banking leader in the UK, Zahir Bokhari, wrote: "Deloitte sees this time as being truly different. Banks' core competitive advantages over new entrants are being eroded."

> "The interesting battle is whether the smart banks get big before the big banks get smart

In 2018, Nikolay Storonsky, co-founder and CEO of the aptly named Revolut, was bullishly predicting the end of the old order. "In the next five to 10 years, we won't see as many banks," he declared. "We will see a few global players, in the same way that Google and Facebook dominate advertising."

And today? The challengers' *cris de guerre* have faded and calm is returning. The high-street banks have fended off their initial assault and no ramparts have been breached.

Lloyds Bank, for instance, recorded a pre-tax profit of £6.9bn last year. By contrast, Monzo posted a loss of nearly £115m. Starling, a solid performer in the business sector, made a profit of £32m for the year ending March 2022, having raised funds at a £3.7bn valuation in December 2021. These are respectable numbers for a well-regarded enterprise, but they're still dwarfed by those of the high-street behemoths. Even the fusty old NatWest Group, bailed out by the taxpayer during the financial crisis of 2007-08, is still valued at about £24bn.

"All of the big banks are still alive, well and posting healthy profits," observes Charles McManus, the CEO of ClearBank, which he founded in 2015. "They have certainly weathered the first fintech storm to a large degree."

They have achieved this mainly through modernisation, he adds. They've updated software, launched apps and collaborated, rather than competed, with emerging fintech providers.

McManus points out that several fintech firms have engaged in "symbiotic relationships with banks rather than eating their lunch. They have filled technology gaps for banks, while banks have become major buyers and distributors of fintech."

HSBC, for instance, has signed an anti-money-laundering contract with Polish fintech company Silent Eight. The bank is a serial investor in fintech startups and runs an accelerator for them. Last year it signed a multi-year deal to work with CloudBees, a specialist in continuous software delivery – a serious improvement on the big-bang IT upgrade model that's been common in the industry for decades.

This June, HSBC announced the creation of "fintech 101", a course run by the University of Oxford's Saïd Business School to give its staff a thorough grounding in the sector and its latest developments. But McManus points out that most high-street incumbents, despite having integrated fintech into many of their services, do still face a significant technological threat.

"At their core, they are still running on legacy systems," he says. "So, while they have weathered the storm so far, there is a major question mark over whether they can continue doing that."

£6.9bn
Lloyds Bank's pre-tax profit in 2021-22

£32m
Starling Bank's pre-tax profit in 2021-22

Lloyds Bank and Starling Bank, 2022

Consider the impressive growth in the number of new customers that some challengers have been attracting, suggests McManus, who adds: "The likes of Monzo boast millions of customers already and they are only continuing to grow. Thousands of people are flocking to open accounts with them each month."

His assessment chimes with that of Michael Mueller, founder and CEO of Form3, a specialist in payment processing. Established in 2016, his company has attracted clients ranging from Lloyds to German challenger bank N26.

"The interesting battle is whether the smart banks get big before the big banks get smart," Mueller says. "At the moment, the tier-one banks are probably in a stronger position than they have been in the past six or seven years. Some of that has to do with the rise in interest rates – big banks like them high. And a lot has to do with the fact that they've started their transition to better technology, although that process is far from complete."

There's also the fact that several incumbents have invested in challengers, he adds. "If you look at Chase by JP Morgan in the UK or Goldman Sachs' Marcus, there are some really interesting projects in that area."

The high-street banks not only have scale on their side. While some income streams will have dwindled over the course of the pandemic, the sheer breadth of their offerings – from commercial loans to life insurance – has diversified their risk and enabled them to keep turning in decent results.

Nonetheless, the competition isn't going away. The challengers will reflect, learn, improve and return. New ones will emerge.

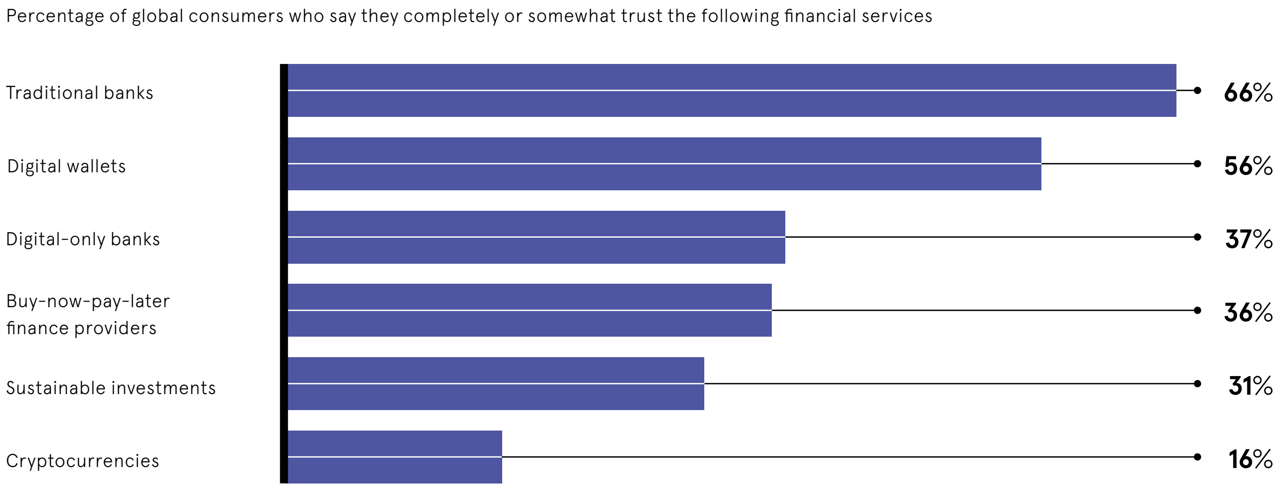
It's a prospect that McManus relishes. He points to Bank North, which secured a banking licence in August 2021. Part of a new wave of regionally focused lenders, the business is "myopically focused on supporting consumers in the north. In times of economic uncertainty, we may find that customers look to banks that are built to solve their specific problems, rather than the more generalist bigger players."

The longer-term outcome is far from obvious, according to McManus, who says: "While traditional banks may make some gains in the current economic storm, the big question is whether they will be equipped for what comes after."

The French revolution took 10-and-a-half years to play out. Inevitably, over such a long process, there were lulls in the action, but these would always be followed by periods of great upheaval. The high-street banks may well be sitting pretty today, but it's distinctly possible that a second act is in store. ●

THE INCUMBENTS ARE SIGNIFICANTLY MORE CREDIBLE THAN THEIR CHALLENGERS

Percentage of global consumers who say they completely or somewhat trust the following financial services



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Commercial feature

Fintech: don't make the "fin" worry about the "tech"

The use of platforms and software-as-a-service (SaaS) have transformed solutions such as CRM and ERP for customers – now it's the turn of fintech

Eduardo Martínez and Mike Galvin were working as strategic technology consultants for a range of blue-chip companies in the insurance sector during the late 1990s and early 2000s when they noticed an interesting trend emerging.

"At first, every firm was trying to build their own bespoke, on-premise technology solution, but it was proving to be very slow and expensive – after all, these were insurers, not tech companies," says Martínez. "At that time, the CRM and ERP systems they were using were transforming themselves into platforms. This is what happens with technology – to start with, people build their own. But, as an industry matures, platforms emerge that allow companies to buy these solutions, saving time and money."

He points out that, thanks to the emergence of software-as-a-service (SaaS), companies are now able to combine a variety of apps to create a solution that is much more affordable and faster to implement than anything originated in-house. Retailers, for instance, used to develop their own ecommerce technology but now they will almost always choose a ready-made solution such as Shopify.

Martínez and Galvin quickly realised that this SaaS model could be applied to fintech, thereby providing similar benefits to financial institutions, many of which were struggling to develop their own technology – and wasting time and money in the process. The success of Salesforce was already demonstrating that companies didn't have to create their own CRM solutions. Why not apply the same thinking to fintech?

"When we talked to financial institutions in the invoice financing and trade financing space about why they weren't working with SMEs, for example, many explained that they lacked the relevant data and the right products – they also didn't have access to the necessary financial technology," says Martínez. "A lot of these financial institutions didn't have the capacity or the desire to become technology companies and to spend tens of millions on developing the best solutions themselves. After all, it wasn't their business, they wanted to stick to what they were good at."

> A lot of these financial institutions didn't have the capacity or the desire to become technology companies and to spend tens of millions on developing the best solutions themselves

Having sold their startup which digitised administration and business processes for SMEs to Grant Thornton, the two went on to launch Toqio which offers neobanks, traditional banks, and financial institutions a range of fintech solutions in a SaaS format. Based on the principle that it's better to buy than to build, as companies can save money and implement their solutions much faster, Toqio enables companies to create their own B2B, B2C, or in-house finance solutions, providing functions such as online banking, foreign exchange, expense management, and many others.

Financial institutions can also embed their existing products in Toqio through the company's API, enabling them to create unique solutions. Companies can turn their unique integrations into modules and make them available on Toqio's Marketplace, as well as incorporate modules produced by other firms.

"We're the Salesforce of fintech," explains Martínez. "We help companies to digitalise their products and services in a faster, more cost-effective way." Toqio is working with a growing number of financial institutions to help them better serve their clients, for instance, by wrapping their trade finance or payment services around a central banking proposition. Others are more focussed on their own internal financial operations. In either case, these institutions are ensuring that they remain technologically agile and competitive.

But isn't the drawback with buying rather than building a solution that organisations end up with a generic, off-the-shelf product? Martínez rejects this idea. "It's about offering a range of off-the-shelf tools that a company can combine to create their own bespoke solution," he explains.

He adds: "The companies we work with like the fact that it's us, not them, who are constantly investing large amounts of money to create the next generation of fintech tools. The other day I was talking to the chairman of one digitally advanced bank who told me that they'd spent five years and over 100 million euros developing their systems. But, he pointed out, not many companies are large enough to do that."

More and more forward-thinking financial institutions are approaching Toqio because they've reached a certain level of digitalisation but they now want to expand their product offering. This will enable them to increase revenues, to serve their customers more comprehensively and to engage more deeply with them. Another new development is the number of retailers and cooperatives that are approaching Toqio as they understand the need for excellent, state-of-the art financial service capabilities but want them via this fast emerging medium.

Toqio already has successfully helped launch over 60 solutions for clients in over 13 international jurisdictions with more than 15 major financial service providers already participating in their marketplace. This success looks set to increase as more financial institutions and other organisations benefit from buying rather than building their own fintech solutions and concentrate on what they do well – the fin – while leaving the tech to the specialists.

An enhanced fintech solution suite – and savings of €1.4m

As one of Spain's leading alternative business financing and banking organisations, Crealsa serves over 4,000 businesses in Spain, most of which are SMEs. The Spanish neobank has built a strong brand and established itself as one of Spain's market leaders in invoice financing. However, the relationship with clients was often transactional as they moved between Crealsa and other business financing providers to satisfy their evolving funding requirements.

The answer to this challenge was to develop a much broader range of business banking solutions and to become a one-stop fintech shop aimed at SMEs and freelancers.

With Toqio as its fintech partner, Crealsa launched a full range of neobank business financing solutions, differentiating it from the competition. "The timing from application to receiving funds in the SME's or self-employed professional's account has been cut from an average of seven days to less than one hour, and even as little as five minutes. Compared to the market average of building such a product and rolling it out to market, we estimate a cost saving of €1.4m," says José Molina, Crealsa founder and CEO.

To learn more about Toqio, visit toqio.co

ANALYTICS

From zettabytes to deep insights

Big data is key to the evolution of financial services, but most players in the sector have yet to come anywhere near harnessing its full potential

Nick Easen

Many financial services firms have gained access to huge volumes of new data as a result of their digital transformations, but they've barely started to extract maximum value from the wealth of material at their disposal.

The average company collects and analyses only 24% of the operational data available to it, according to a global survey by Seagate and the International Data Corporation in 2020. There are several reasons for this, ranging from concerns about regulatory compliance to difficulties getting all the relevant material in the right format for crunching.

The first big challenge facing financial services firms seeking to get more from their data is "the data ecosystem, the second is talent and the third is data management". That's the view of Edouard Legrand, chief digital officer at BNP Paribas Asset Management. The almost unlimited capacity of the cloud is helping to address the first challenge, while cloud-based tech has also introduced many new capabilities, yet Legrand believes that, "even if progress has been made regarding the extraction, handling and governance of data, there is always room for improvement. Most of the focus has shifted to implementing cross-functional platforms that enable everyone in the organisation to make the most of the data. Ultimately, all information should be available seamlessly, as should the tools to exploit it."

When Legrand talks of the talent challenge, he's referring to the industry's inability to attract enough people with the right IT skills. Nick Broughton, chief information officer at Novuna, agrees with this assessment.

"Technology alone does not generate value; you need data-literate people with good ideas," he says. "Data science skills in particular are key to obtaining real insights from the wealth of data we have. Attracting, retaining and growing our internal talent pool around these new skills is an additional challenge when the demand for them in our market is so high."

A survey of more than 250 financial services firms in November 2021 by recruitment giant Hays revealed that 83% had struggled to recruit data scientists, even though they were typically offering annual salaries of more than £100,000 for such jobs. More than a quarter of respondents reported that they didn't have all the skills they required to achieve their commercial objectives.

The sector will have to become more flexible with its employment policies and practices if it wants to attract and retain the data specialists it so sorely needs. Knowing that they are in such great demand, these professionals can dictate the terms. Many prefer to work at home and not on the usual nine-to-five schedule, for instance, so it's up to employers to make allowances for that.

Some firms are going to great lengths to establish a reliable pipeline of talent by, for instance, establishing relationships with data science communities and setting up apprenticeship programmes.

When it comes to tackling Legrand's third challenge – data management – firms are working hard to put more effective governance systems in place. Their aim is to provide a holistic view of their products and customers using data collected and processed in real time. It's crucial to make analysis tools accessible to everyone in the organisation who needs them, since no one wants to be calling the tech team for help every five minutes.

One of the main opportunities arising from all this work is that it helps companies to come up with new ways of satisfying their clients, according to Broughton.

"Creating outstanding customer experiences should be central to any data-driven initiative," he says.

Providing ever-more personalised services is one obvious area of development, but the potential of augmented advice, whereby data insights complement human interactions, is also exciting some companies. By combining several sources of data, for instance, they can generate investment signals and intelligence that relationship managers can use to keep their clients better informed.

With the help of AI tech such as machine-learning systems, client-facing employees can identify trends that they'd never be able to spot unaided. Intelligent tools can also help customers to better understand their financial health and the risk/return profiles of given investment opportunities.

> Technology alone does not generate value; you need data-literate people with good ideas

"We see a future where clients can use tools to experiment. AI models can show them how investments could change over time, for instance," says James Brake, interim chief data officer at Hargreaves Lansdown. "Yet we find ourselves in a world where regulation often lags behind technological innovation. With this in mind, financial services businesses must be careful in their approach to AI-enabled services, say, to preserve their clients' trust. It's why Hargreaves Lansdown recently created the role of head of data ethics. This helps to ensure that our approach to AI is transparent, repeatable, unbiased and able to deliver the best outcomes for clients."

Financial services firms are already using virtual assistants and chatbots powered by natural language processing, an AI technology that's fast becoming standard fare. Natural language processing also enables them to run automated searches of information sources ranging from news feeds to earnings reports, which will quickly identify potential problems such as profit warnings and cases of greenwashing.

The use of alternative data sources – for instance, satellite cameras and smart sensors for climate-sensitive investments – is also likely to become a standard way to inform performance forecasts, for instance.

Open banking with data-sharing is another exciting area to watch, says Broughton, who adds: "As the world moves towards thinking about data as a product, we must start building services with the data they serve in mind. Making our data products more interoperable, secure and governable will be crucial to the success of future initiatives in this field."

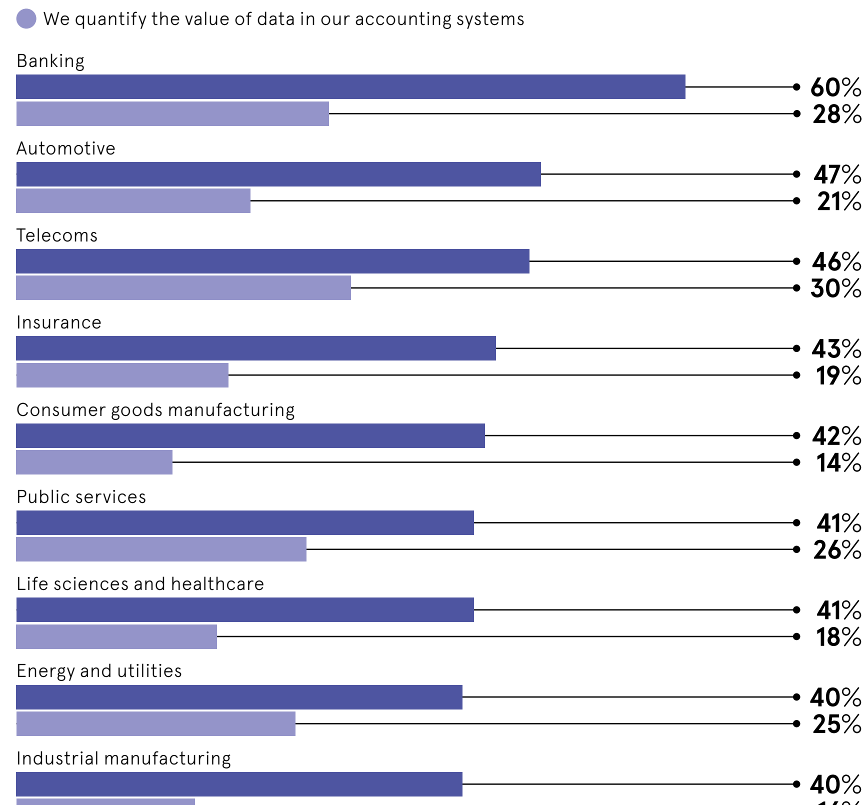
Once data becomes the product in this sector, expect to see a whole new ballgame.

BANKING LEADS THE WAY ON MONETISING DATA

Percentage of organisations across sectors that are doing the following

Capgemini, 2020

- We monetise data assets/insights through our products and services
- We quantify the value of data in our accounting systems

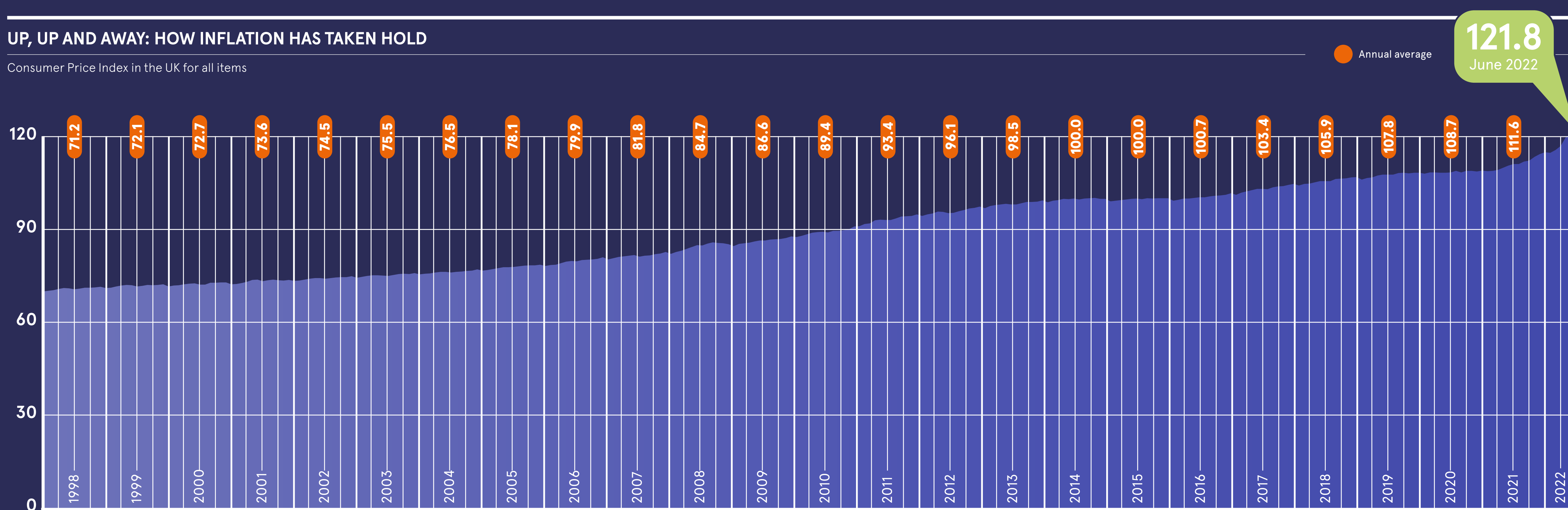


FINANCIAL SERVICES FOR GOOD

After the global financial crisis of 2007-08 shattered the public's faith in its probity and competence, the sector has had to work hard over many years to rebuild trust. The UK's cost-of-living crisis presents an opportunity for it to stand up and show some integrity. As rampant inflation forces millions of households around the country to tighten their belts, which financial institutions can be counted upon to support the most vulnerable members of society?

UP, UP AND AWAY: HOW INFLATION HAS TAKEN HOLD

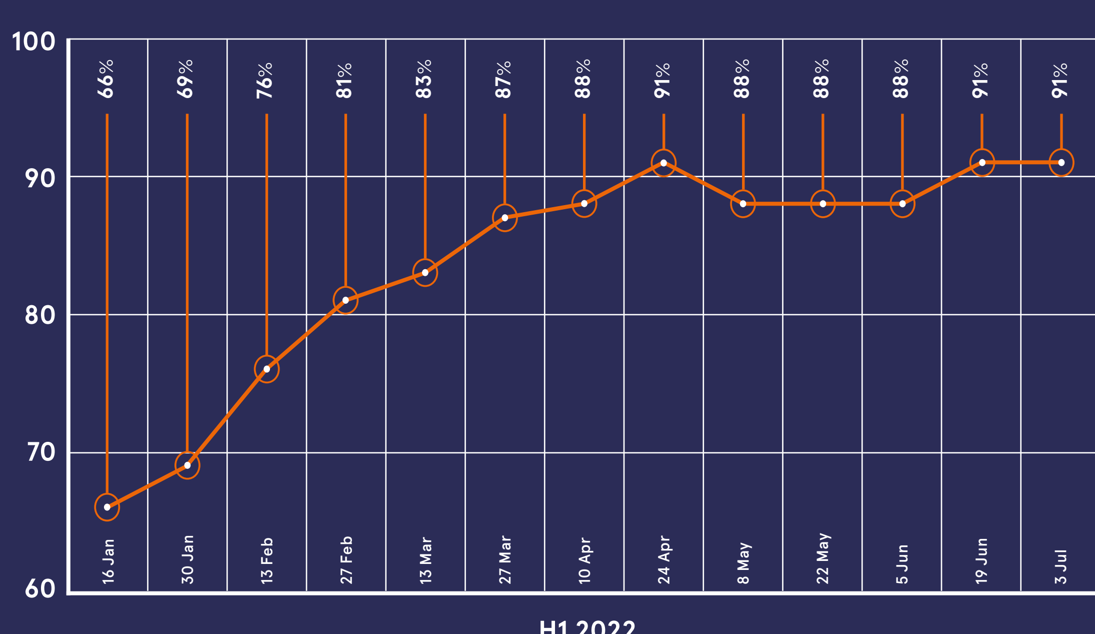
Consumer Price Index in the UK for all items



Office for National Statistics, 2022

HOUSEHOLDS ARE STRUGGLING TO KEEP UP

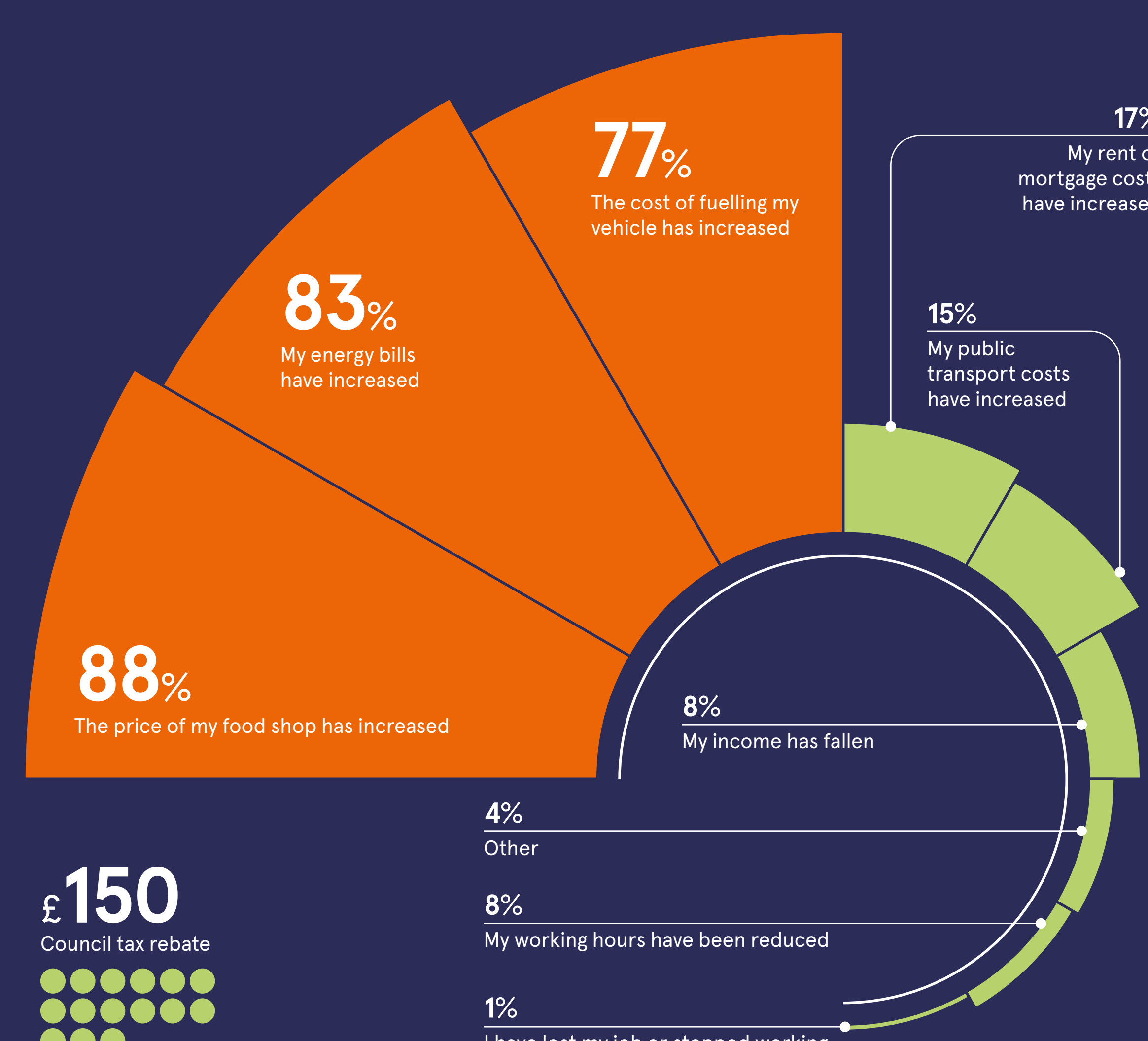
Percentage of GB adults reporting that their cost of living has increased in the preceding month



Office for National Statistics, 2022

WHERE CONSUMERS ARE FEELING THE PINCH

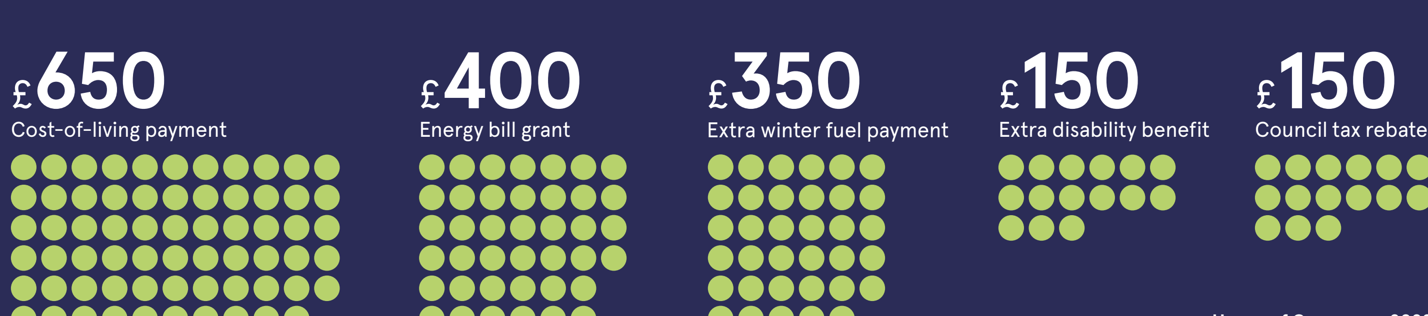
Percentage of UK households reporting their cost of living has increased over the preceding month in the following areas



Office for National Statistics, 2022

HOW THE GOVERNMENT IS HELPING

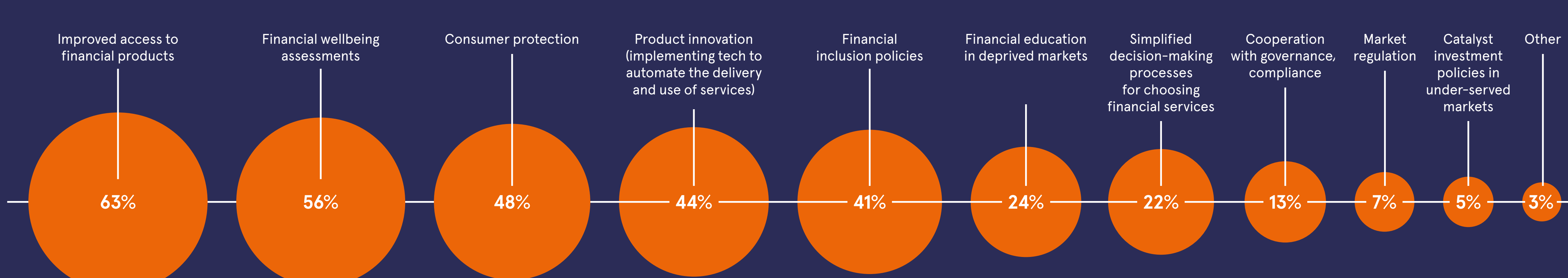
State support packages per person / household announced in response to the cost-of-living crisis this year



House of Commons, 2022

THE FINANCIAL SERVICES SECTOR IS AWARE OF ITS RESPONSIBILITIES

Percentage of global financial services organisations saying that they believe the industry can provide the following as ways to support consumers

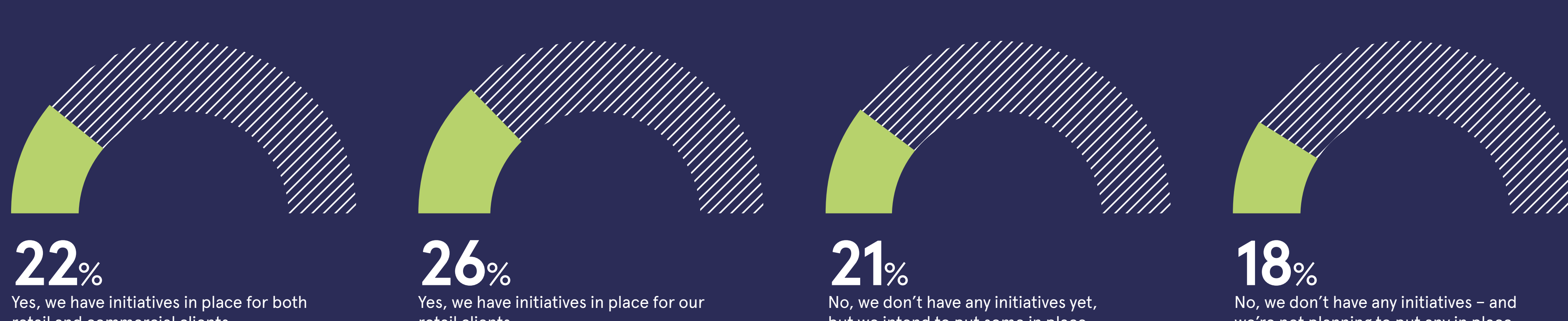


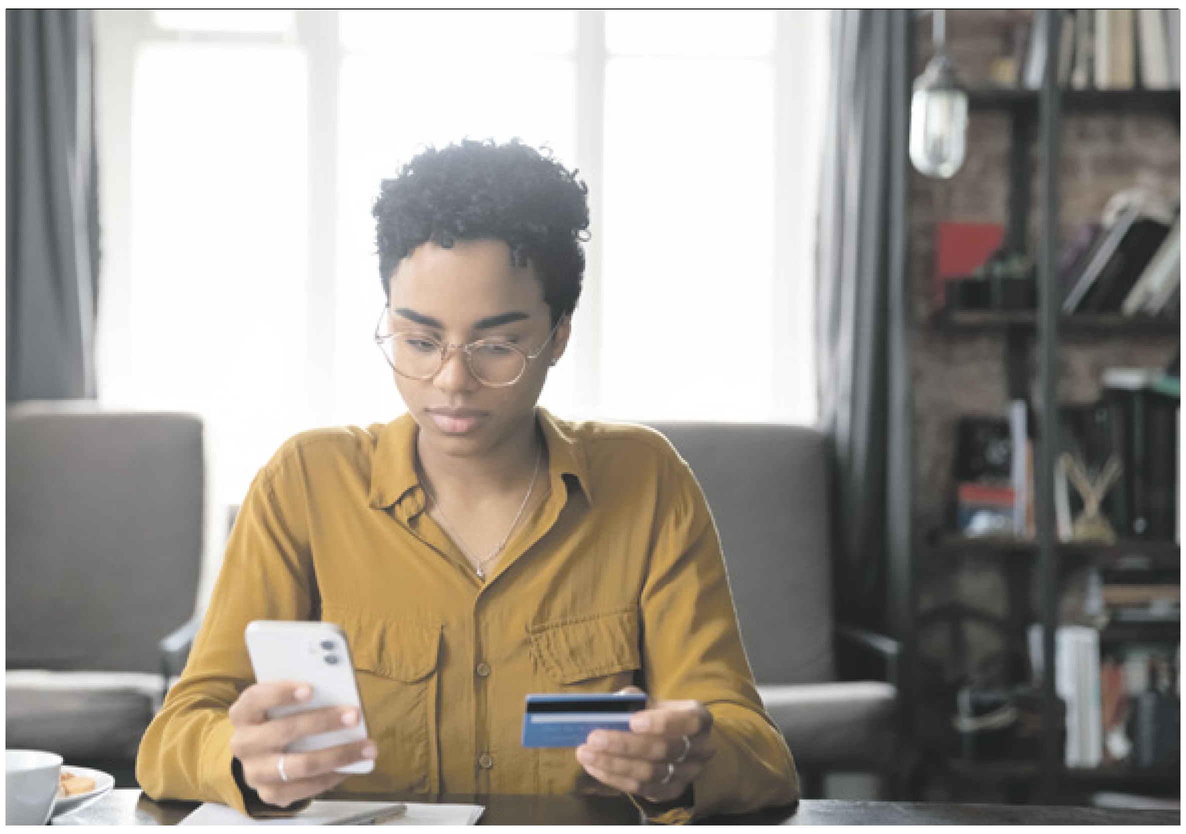
PwC and the Confederation of British Industry, 2022

PUTTING ITS MONEY WHERE ITS MOUTH IS

Responses of financial services organisations when asked whether they have put initiatives in place to support their clients during the cost-of-living crisis

PwC and the Confederation of British Industry, 2022





How psychology-based AI can transform your finances

Humans might not be wired to make the best money management decisions, but with customisable solutions and self-driving money, the road to financial satisfaction is in sight

You've been waiting for someone to say this your whole life – it's not your fault. So many of us feel guilty for not building the long-term habits that lead to financial success. It might be reassuring to know that basic human psychology is not helping you. Scientific studies have shown behaviours are still influenced by ancient short-term survival instincts, which doesn't align with modern-day financial planning.

A famous example is the marshmallow test, where children are told they will be rewarded for resisting eating a marshmallow placed in front of them. For many, the temptation is too strong to override the logic of prioritising delayed gratification, demonstrating that impulse control doesn't come easily to us.

Today, the ease of instant gratification has meant younger consumers are even less likely to save, despite facing much harder retirement burdens than their parents. This has left two in three people in the millennial generation already feeling they're not on track when it comes to saving for retirement, a TD Ameritrade study found. But, with the help of AI-assisted coaching and psychology-based personalised planning, we can counteract some of our fallacies.

Like millions of people, Katherine Salisbury and George Friedman, co-founders and co-CEOs of Qapital, found building healthy financial habits difficult. Along with more than 60% of consumers worldwide, they sought out a personal finance management app to help them gain control of their financial situation.

After years of searching the market for a product that would help them build healthy financial habits, factor in their unique behaviours, and automate how they moved their money between accounts, they realised it simply didn't exist. Largely because, despite personal finance solutions' attempts to improve money management among consumers, most products offer one-size-fits-all solutions, which invariably fail to adapt to people's unique needs and behaviours. This has resulted in a costly lack of financial literacy and long-term planning.

> **Qapital is designed to fit the user's goals and lifestyles**

"I was a lawyer, then ran a sports agency. I was living in New York with a good income but my husband kept saying: 'why don't you have any savings?'. It was hard to pinpoint," says Salisbury. "I always felt like once I started to focus on penny pinching, something else slipped, like I didn't go to the gym or I didn't eat so healthily."

Salisbury has noticed this trend applies to her peers too. "It's not that we're financially illiterate or lack self-discipline," she says. "Psychologically, saving is really hard today. The lack of friction in contactless payments doesn't help, and the fact we're marketed to constantly today. Add a gig economy, different income streams and two-income households and things are just much more complicated. So it's not so much that people don't know what they should be doing to save – it's trying to make space for saving so you don't keep having this leakage in your day."

Salisbury and Friedman set out to find a solution to this problem. Turning to behavioural economics, they built Qapital: an app that utilises automation and behavioural psychology to help users better understand their saving, spending and investing habits by highlighting the tradeoffs made when managing money. Qapital allows users to save and invest for their real-life goals with customisable, automated deposits. More than that, the app is creating a unique framework to help rewire consumer signals by anticipating and compensating for innate human instincts.

"Qapital is designed to fit the user's goals and lifestyle," says Salisbury. "Ultimately, it does not just offer a path to saving money. It provides the framework to help people manage their emotions and temptations in a way that resets their relationship with money, leading to greater success in saving, budgeting and investing. Individuals and couples can find money happiness."

Users of Qapital are motivated to save for their goals through visualisations of both the goals and the tradeoffs required to achieve them. The app makes saving automatic by setting up rules that trigger automatic deposits into goals every time you complete an action, like buying a coffee. Qapital can also round up purchases to contribute toward goals or set aside money for specific debts, reducing people's recurring burdens without having to think about it.

"We decided there's really nothing better than automation," says Salisbury. " If someone just managed your money for you, it would go a lot further. The early version of Qapital, and a lot of what we're solving for now, is how do we make the money management experience one where you're set up for success."

Since launching seven years ago, the app has evolved beyond checking and savings into robo-investing, enabling users to invest on autopilot according to the risk profile they desire, with zero management fees. Qapital simplifies the investing process by handling all the complicated work behind the scenes. By adding an investment portfolio to a savings set-up, bigger goals are likely to be reached sooner.

Since 2013, Qapital's over 2 million users have collectively saved almost $3 billion. The behaviour-based data from these interactions is enabling Qapital to innovate further.

The direction of travel is firmly towards self-driving money. Like self-driving cars, this technology will guide people to their destination, helping them manage their money and reach goals they would struggle to meet on their own.

The fintech and financial services sectors have thus far struggled to create trustworthy AI technology to move people's money safely and correctly. However, Qapital's data points are facilitating a breakthrough. The key: human psychology and behavioural economics – the heart of the Qapital product.

MANAGING FINANCES WITH AI SUPPORT

Qapital by the numbers

$2.8bn
saved in total by users

4million
financial goals created

2.3million
created user accounts

1.6million
externally linked accounts

Qapital, 2022

Regardless of financial expertise, effective financial coaching is vastly dependent on understanding individuals' habitual decision making, goals and motivations.

As such, to provide effective AI solutions, the product must understand the user's habits around money, while also allowing them to have full control over their finances. The result? AI-assisted money management that is truly tailored to the individual. Like a household CFO that sets you up for financial success.

"Everybody wants to build a personal finance super app, but the challenge has always been feeding the right products at the right time to the customers in a way that's good for everyone. That's pretty hard," says Salisbury. "A lot of people get nervous about the idea of a super app because it just feels like an overwhelming resort buffet. It needs to be more bespoke.

Salisbury explains that if you don't understand people's goals and intent, you hit a ceiling with AI. "If I move £20,000 into my checking account to pay my kids' tuition, and the AI suddenly invests that money for me, that's a problem. But thanks to data and technological advancements by Qapital, self-driving money is now very much a crackable nut in the next couple of years. When we achieve this vision, it will unlock financial freedom and money happiness for a lot of people."

TECHNOLOGY

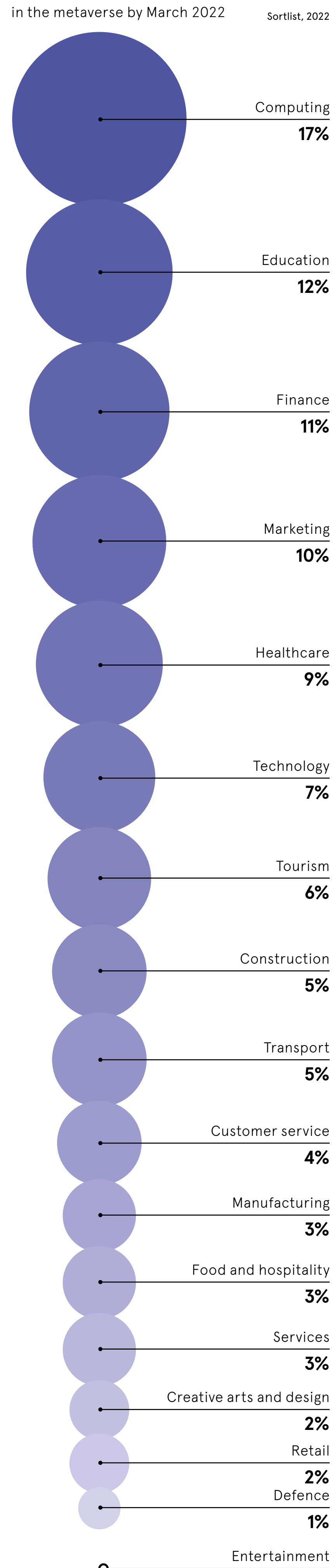
Masters of the metaverse

Financial institutions are investing large sums in digital 'plots of land' to establish a presence in this much-hyped virtual world. But will the rewards justify the risks?

WHO'S REALLY BEEN MOVING INTO THE METAVERSE?

Percentage of players in various sectors worldwide that had invested in the metaverse by March 2022

Sortlist, 2022



Marianne Curphey

Imagine a digital realm in which you, in avatar form, can stroll into a bank branch at any time you like, meet a member of staff and arrange a mortgage, before heading to a virtual mall to buy some trainers with your crypto wallet.

Welcome to the metaverse – an online world that will soon be within our grasp, if Mark Zuckerberg is to be believed.

Now is the time for financial services firms to choose whether to get metaverse-ready or not. It offers them great opportunities, but also significant risks.

There are two areas that fintech companies have been focusing on so far in the metaverse: making it easier for consumers to interact with banking staff and buy products and services; and experimenting with the gamification of financial services to enhance customer engagement.

Owen Wheatley is lead partner for banking and financial services at Information Services Group, a US-based research and advisory firm specialising in IT. He reports that several large and well-established financial institutions are investing heavily in establishing a virtual presence.

"These players include BNP Paribas, Citi and Fidelity," he says. "They are trying to tap into new customer segments and, frankly, attempting to look cool."

JPMorgan is another notable early adopter. In February, it became the first bank to enter the metaverse when it opened a lounge in a blockchain-based world known as Decentraland. A month later, HSBC – which has closed numerous branches in the physical world – bought a digital plot in The Sandbox, a digital gaming platform.

Wheatley says that, for the fintech sector and neobanks in particular, the metaverse represents an extension of their use of technology to engage with customers digitally in a way that feels easy and fun.

"There's a land grab under way in the metaverse," he says. "Some have likened it to a digital version of the 19th-century westward expansion in the US. Real estate seems to be one of the areas gaining the most traction."

The metaverse offers fintech players a chance to expand new products to existing customers (who tend to be more tech-savvy gen Xers and millennials). Examples include crypto trading services, investment advice and loyalty schemes in partnership with metaverse retailers.

One vision of the metaverse foresees a realm in which businesses offer parallel virtual experiences – including banking, insurance and mortgages – selling digital products and enhancing their brands.

Dave Pattman is managing director of customer services at Gobeyond Partners, part of the Webhelp Group, which is already providing services in The Sandbox. He believes that a big benefit for consumers in the metaverse will be the gamification of budgeting and financial management.

"For many people, money management can be confusing and stressful," Pattman says. "The metaverse's immersive nature creates opportunities for them to engage with their money in a more visual and personal way. In a virtual world, your savings objectives and life goals can be visualised in ways that provide more impactful motivation and behavioural changes."

That might mean being able to walk around in a world where your pension ambitions are realised, say, or where you already own the dream car that you're still saving for in the real world.

"Generations coming into the employment market today have been born and raised in the world of gaming," he says, predicting that this factor will change how they choose to interact with brands.

"Many of them find it hard to budget and visualise their savings goals," Pattman notes. "So this is a really interesting space, where you can see people gamifying real-life finance."

Another significant development in the metaverse will be the wider adoption of digital currencies. For these to be accepted more widely, they must first become more reliable and less volatile, he stresses.

While the metaverse offers many opportunities for businesses, not all of those businesses will be legitimate enterprises. As Pattman notes: "Wherever money goes, crime follows. We already understand the sophistication of cybercriminals."

How, for example, do you reliably verify a person's identity in the metaverse when part of its appeal is that you can be someone different there?

There are also concerns about the regulatory risks surrounding data collection and privacy. If you create an avatar to live, work and play in the metaverse, for instance, your behaviour may be monitored and analysed in a way that would be considered highly intrusive in the real world.

Wheatley points to another couple of significant risks facing fintech companies in the metaverse. These are: over-expansion (for instance, by offering too many products to too many people through too many channels too quickly, which can easily become unsustainable); and becoming a 'me too' player, with an insufficient focus on differentiation.

The very regulations that have helped to ensure that financial services providers are trusted in the real world may be hindering their access to the as yet unregulated metaverse, according to Pattman.

If a trusted and known bank appears in an unregulated environment, there is the potential for its brand to be harmed in the process. He suggests that metaverse start-ups have the advantage here because they aren't regulated and don't have a real-world reputation to protect.

In addition, cybersecurity risks in the metaverse differ from those elsewhere in the digital world – and businesses would do well to remember this, stresses Kevin Gosschalk, founder and CEO of cybersecurity specialist Arkose Labs.

> **There's a land grab under way in the metaverse. Some have likened it to a digital version of the 19th-century westward expansion in the US**

"Attacks targeting metaverse pioneers significantly increased in number during the first half of 2022," he reports.

In their pursuit of rapid growth, fintech firms want to make it as easy as possible for customers to sign up with them, which means keeping ID checks and so on to a minimum. This tends to increase their risk of being defrauded.

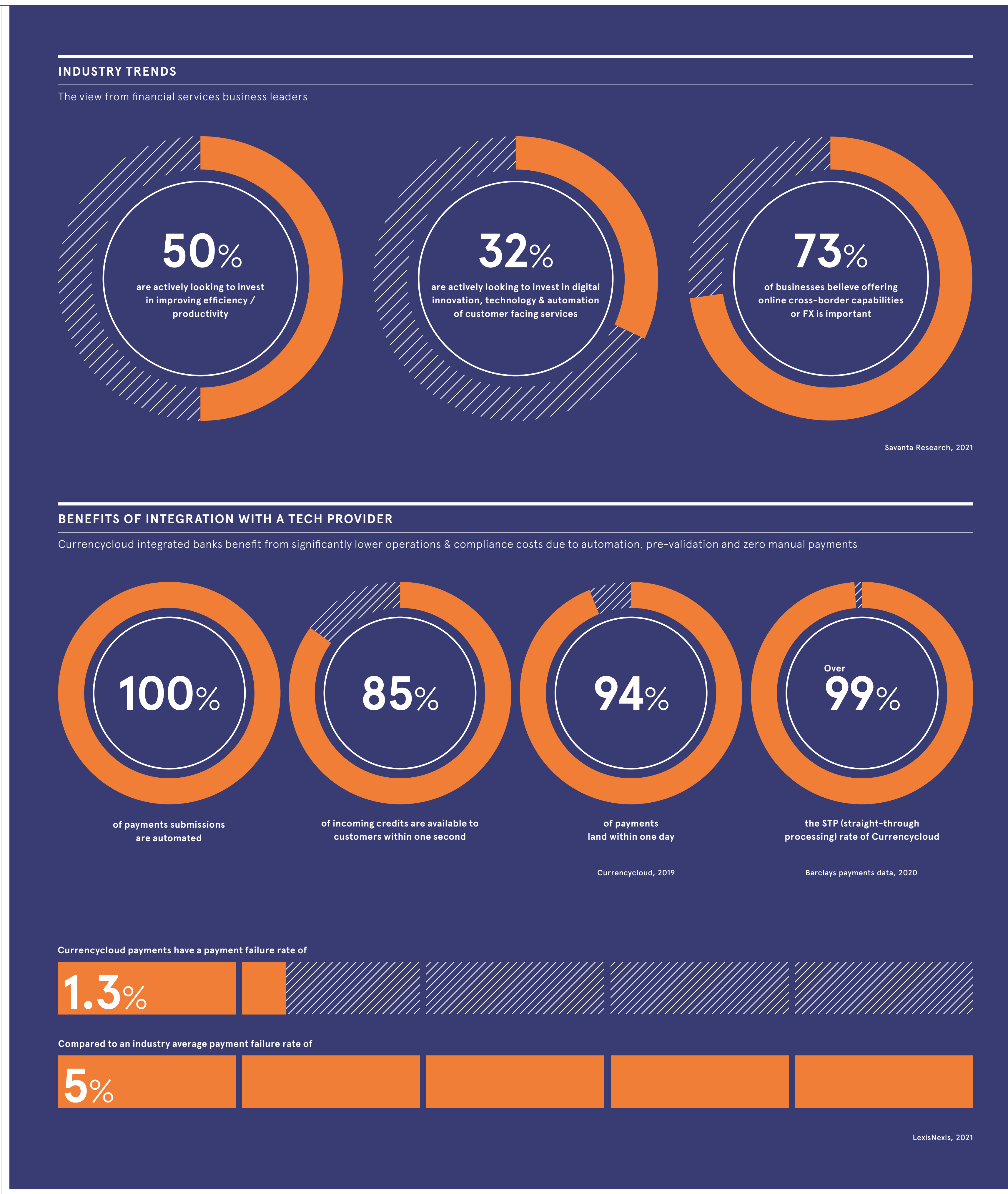
Master fraudsters are already attacking consumers who are active in the metaverse, Gosschalk warns.

"Fintech firms investing in the metaverse must put a premium on trust and safety," he says. "They need to ensure the security of all their account log-in, registration and in-platform actions to protect avatar identities in the world where real-time VR, AR and 3D merge and become an experience like we've never seen before."

Commercial feature

How a cultural mind shift can help traditional banks innovate faster

Partnering with third-party tech providers and creating standalone fintech units can enable banks to rethink their approach to innovation



Traditional banks increasingly recognise the need to innovate and embrace new technologies to remain relevant and competitive in a world of rapid digital disruption and the emergence of challenger banks. Yet while there is a willingness to transform, organisational culture can sometimes get in the way.

"There is a lot of desire to innovate and change and that's very different from a few years ago—incumbent banks know that they need to change but the reality is they have to remain focused on safeguarding their customers' funds and on being compliant and on things not going wrong," says Lewis Nurcombe, global vice-president of sales at Currencycloud, a cross-border payments provider.

Regulators also say it is essential. Pentti Hakkarainen, member of the European Central Bank's Supervisory Board, said in a speech earlier this year that digital transformation is a must for banks as changing customer demands and pressure to reduce costs and increase efficiency leaves them no option but to embrace modern technology.

"The desire is there to change, but it's just they have to prioritise protecting what they've got already," adds Nurcombe.

Much of the legacy infrastructure that banks have is focused on those priorities—keeping the lights on and protecting the status quo.

"Culture falls in behind that because invariably when innovation projects don't work, we blame it on culture," says Nurcombe. "But usually it's just someone from a technical team saying you can't do it because it exposes the system to risk. So culture and legacy technology as a blocker to innovation are completely intertwined."

One of the challenges that large financial institutions face with their corporate culture is that they tend to focus on specific skills, experience and education when hiring staff, rather than on personal traits that could indicate a more creative mindset.

"What you tend to find within corporate culture is that people become dispensable from the perspective that if you are unable to perform a specific function, they will replace you with somebody who can, and that decision is usually based on a couple of checkboxes," says Arno von Helden, head of Shyft, Standard Bank's FX-focused fintech app. "The reality is there are more significant factors to an individual's success or failure such as drive, ambition and passion—things that you can't measure by ticking a box. And so it is very much through that lens that corporate culture struggles to advance significantly and be innovative and entrepreneurial in their thinking, because banks are looking for individuals that tick certain boxes."

Part of the issue is that when organisations reach a certain size, they often lose the entrepreneurial spirit that led to their creation in the first place. Take Standard Bank as an example. When it was founded in the 19th century, it was created to fill a gap in the market—providing loans for sheep farmers in the Eastern Cape of South Africa. Yet as organisations grow in size and stature, risk-taking naturally starts subsiding, says von Helden.

> There is a lot of desire to innovate and change and that's very different from a few years ago

Partnership in action

Challenger banks have been able to disrupt the banking industry because of their innovative mindsets and their willingness to adopt new ideas. But it was their need to outsource their tech requirements to third-party providers that allowed them to move quickly and challenge the incumbents. Using third parties is something that traditional banks had historically been reluctant to do, partly down to risk aversion, but also partly because they have vast internal resources at their disposal.

"When a lot of the neobanks first started out, they had limited funding and they had to really pick their battles, and they needed to get to market quickly," says Lewis Nurcombe, global vice-president of sales at Currencycloud.

Partnering with Currencycloud gave these neobanks, including Revolut and Starling Bank, an edge by allowing them to offer cross-border capabilities to their customers without having to develop that capability themselves—they could just connect with Currencycloud's API and have an off-the-shelf cross-border offering ready to go. That enabled them to focus purely on enhancing the customer experience and growing their business.

"That was a real driver for a lot of the success of challenger banks—cross-border was one of the most opaque areas of banking that was ripe for disruption, so a lot of them led with that, whether it was for holiday spending money or migrants sending cash home," says Nurcombe.

Neobanks replicated this partnership approach across their organisations with other providers, ensuring they always had the most up-to-date technology in the market for their different product lines.

"As everyone continued innovating, before you knew it you had a platform that just kept improving every single year," says Nurcombe.

Given the success of Currencycloud's technology, the company was recently acquired by Visa. That comes as traditional banks increasingly turn to third parties to power their digital transformation efforts. Standard Bank's FX app Shyft, for instance, is underpinned by Currencycloud's tech. The bank needed to build the app quickly to get to market before any of their fintech competitors and partnering with Currencycloud enabled them to move faster than developing the tech in-house.

"The partnership with Currencycloud has been vital to the success of Shyft," says Arno von Helden, head of Shyft. "Currencycloud really understood the challenges Standard Bank was facing and delivered a solution that improved our speed to market, whilst reducing costs and delivering operational efficiency."

"You become more focused on protecting your brand and not losing customers," he says. "At that point, you start filling the organisation with individuals that see the world from that perspective. They've come in to protect that and start presenting risks to organisations such as 'how can this damage our brand if something goes wrong?' So organisations become very risk-averse and that is not a fertile breeding ground for innovation."

That means banks need to find a balance between this risk-averse mindset and having a more innovative culture.

"The culture of the organisation needs a level of risk aversion because if it was just a bunch of cowboys or mavericks running all over the place, chances are that would do some damage," says von Helden. "Banks shouldn't be switching from a risk-averse culture to a risk-on culture—there needs to be a happy medium."

Some incumbents are attempting to solve this problem by creating standalone fintech businesses that operate independently from their wider organisation.

"The banks that we're seeing be most successful at doing this are actually siloing off business units or creating brand new business units that look a lot more like a startup organisation," says Nurcombe. "What that does is it allows them to cut away all of the politics that you typically see in a huge organisation where you've got conflicting organisational or departmental priorities."

It can also enable organisations to hire people who have a growth mindset, for instance those that have worked in a fintech or startup environment rather than someone who has been at a traditional bank for a long time, Nurcombe says.

"Most importantly, it means that they can step away from that environment where they need to protect what they already have into saying 'we're a brand new organisation, we need to grow and create something that drives value and that people want', and as soon as you switch to that mindset, that's when you can really build new things," he says.

That approach is something that Standard Bank has adopted through the launch of Shyft.

"The reason why we created a fintech within an organisation is because the organisation itself struggled to actually solve problems that required innovative and entrepreneurial thinking," says von Helden. "The organisation was putting in place strategies and technical capabilities in the hope that they would solve those things, but they weren't actually solving them in the way that they needed to be solved."

By operating as a fintech startup, employees can be more creative and adopt a more entrepreneurial mindset because they will have a vision about what they want to achieve and how they want to grow the business, and that gives them a greater sense of ownership, says von Helden.

"Banks need to create vehicles and opportunities to explore new endeavours," he says. "Large organisations don't need to all of a sudden reinvent their culture, but they must create environments where ideas have a forum and there are people that can nurture and grow those opportunities when required."

The advantage of this approach is that it can enable banks to test new ideas and fail without it adversely impacting the wider business.

"You don't need to build the final solution from day one, just innovate for a very tiny section of your customer base or maybe it's customers that you don't even have yet and build an MVP (minimum viable product) that solves a really specific customer problem," says Nurcombe. "There's no reason to expose your existing bank to this innovation, you can do it on the side and remove all the risk."

$116bn
in payments processed since Currencycloud started

26.5million
payments since Currencycloud started

Over **$5bn**
in payments sent every month

Over
700,000
payments sent every month

130
API requests per second

Currencycloud, 2022

> The old school way of thinking was that every organisation must own and control every aspect of what they do

Banks can then develop new products at their own pace and slowly move customers over when they are ready rather than rushing to migrate all customers in one hit and then risk destabilising existing business lines.

"One thing that the fintech community sometimes overlooks is that banks make huge amounts of revenue already today and they've got brilliant business models that work," says Nurcombe. "Sometimes, it doesn't actually make sense to innovate and cannibalise a brilliant revenue stream."

The traditional banks that are doing the best job at this are innovating in small steps. Nurcombe says this approach mirrors what Kendall Roy in the HBO show Succession calls the 'Strategy of a Thousand Lifeboats', where an organisation builds lots of little life rafts that are moving away from the big sinking ship and one by one, they innovate.

"That's what the successful banks are doing at the moment," says Nurcombe.

Incumbents can also learn from challenger banks around how they approach innovation, he says.

"A lot of the neobanks have been created with an innovation mindset—it's been about growth, it's tech-first—so there's a different culture built in," says Nurcombe. "But the main thing that digital banks have done well is that, through necessity, they haven't tried to build everything themselves, they've been very receptive to partnering with third parties and pulling together different solutions. Traditional banks could still learn a lot from that."

There are three main reasons why banks should consider partnering with third-party providers rather than trying to develop their own technology in-house. The first is speed to market.

"If you're a bank with a huge customer base, it's really important that you focus on taking something to market and adjusting it to your customers," says Nurcombe. "What you don't want to be doing is trying to build everything from the ground up—by the time you've done that the market has moved on or the opportunity has been lost or someone else has built it already. That speed to market is something where the really successful neobanks have been so fantastic."

The second benefit is that banks need fewer resources to maintain third-party software, helping to reduce running costs.

"The old school way of thinking was that every organisation must own and control every aspect of what they do," says von Helden. "Now that we're in an age where technological advancement is happening at such a rapid pace, it becomes almost impossible for one organisation to have all of these different systems and be at the forefront of the development of all of these systems."

A third reason is that third-party providers like Currencycloud continually innovate and develop their products in line with current regulations, helping to ease the compliance burden for banks.

Financial institutions should therefore focus on their core offering—providing banking services to customers— and partner on everything else.

"Let's go to a third party that is 100% focused on, say, international cross-border payments, who can provide best-in-class technology and who will take ownership and responsibility of the development of that without us having to invest in the technology ourselves," says von Helden.

All of this requires a new way of thinking that embraces a more collaborative operating culture.

"The initial feeling among incumbents was to protect yourself from this," says von Helden. "Now the realisation has set in that it's no longer about protection, it's about partnership. And it's about leveraging those partnerships and being relevant. That's a completely different way of thinking. It is an open, integrated, platform mindset, versus a siloed barricaded mindset of protection."

To speak to a payments expert please visit www.currencycloud.com/sunday-times

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A Visa Solution

INVESTMENT

Venture capitalists reap the fintech whirlwind

A 'crazy time' for investment in the sector has come to an abrupt end. Most firms in search of funding are likely to find far less money flying around in the second half of 2022

Ian Fraser


Tokarsky via GettyImages

The technology investment market came back down to Earth with a bump this spring. As Russian troops poured into Ukraine, the tech-heavy Nasdaq Composite index plunged alarmingly, while soaring inflation in some developed markets fuelled fears of a widespread recession, prompting some venture capitalists to pause for thought and others to rediscover a sense of caution.

Last year, venture capital funding of fintech ballooned to $131.5bn (£109bn) worldwide compared with the $49bn that was invested in 2020, according to research by CB Insights. The consensus among investors is that this annual total is unlikely to be repeated any time soon.

"My gut feeling is that we will have less investment than in 2021," predicts Sheel Mohnot, a founding partner in US fintech investor Better Tomorrow Ventures.

At an event organised by the Founders Forum in June, he said it was clear that some investors – especially the "tourists" who had only discovered an appetite for fintech investing since 2020 – had already "checked out of the market".

Another Silicon Valley-based investor, Andreessen Horowitz, reported that valuations of publicly traded fintech companies had collapsed from 25 times forward revenues in October 2021 to a mere four times in May 2022 – a bigger reduction than in any other tech sector. The valuations of many unquoted fintech firms have also fallen markedly.

"I don't think anywhere near as much money is going to be flowing into the sector this year as we saw last year," says Hussein Kanji, an analyst with venture capital provider Hoxton Ventures. "You have to be very vigilant about the macroeconomic picture, especially at a time when the middle classes are getting hurt."

Kanji adds that most members of the European investment community were generally slow to recognise the deteriorating conditions for the fintech sector.

"In the US, investors were starting to get panicky in late February and early March, but we didn't seem to get that memo over here until late May," he observes.

As they seek alternatives to the so-called cash-burn approach in a toughening funding environment, some fintech companies will struggle to readjust their business models, according to Kanji, who expects to see "some wreckage".

One consequence of the downturn is that capital providers are taking longer to make their investment decisions. Due diligence processes, which were taking only a couple of days until recently, are lasting several weeks, Mohnot reports. Another is that investors are shifting their focus away from customer-facing fintech companies such as neobanks, whose customer-acquisition costs are often comparatively high. They are instead becoming more enthusiastic about infrastructure fintech firms, which provide the so-called picks and shovels for incumbents and other financial companies. But even these businesses won't be fully immune from the downdrafts.

Henry O'Brien, a fintech investor and co-founder of Mural Capital, says: "Venture capitalists are looking for infrastructure and capital/asset-light business models that can be scaled up fast."

Kanji points out that investors are focusing on "two variables: unit economics – whether the business is capable of making money – and speed of growth. If a company is really lean, growing by 400% a year and generating healthy margins, there will still be a queue of people wanting to invest in it."

Share prices of listed fintech firms have generally fallen by about 70% since their initial public offerings. For some venture capitalists, this is a reliable proxy for the unquoted sector's fortunes.

O'Brien believes that investors' appetites for deals and unlisted companies' valuations will continue to decline, but he adds that this trend could lead to a series of trade sales.

"It will be worth watching out for major acquisitions by global banks, insurers and payments companies," he says.

Mohnot predicts a slowdown in mergers and acquisitions activity during the second half of 2022. Regarding trade sales, he says: "The acquirers' stock prices are also depressed, so they won't want to make stock-funded acquisitions and they won't want to pay cash, since they don't know how tough it's going to be for them to raise the next incremental dollar."

Mohnot adds that some overvalued companies should be able to use their stock to make acquisitions, but he suspects that the window for doing so is closing rapidly.

What we are seeing, he says, is a return to 2019 levels of market activity after a period that was, in effect, an aberration. "Owing to Covid, near-zero interest rates and a bunch of other things, we had a crazy time. Valuations were getting ahead of themselves and the second half of 2021 was just nuts."

Mohnot believes that the market is merely becoming more disciplined and, indeed, normal again. "We've just snapped back to an earlier time," he says. "Europe has been a little behind the US in making that shift."

> **You can see there's a lot that's broken in finance. If there's a lot that's broken, there's also a lot of opportunity**

Mohnot adds that rising interest rates will benefit fintech firms such as Mercury, a neobank in which many startups deposit the proceeds of their funding rounds.

"As a company that makes money from deposits, it's suddenly earning a lot more than it did before," he notes.

Kanji reports that the "top 5% or 10% of fintech companies are still getting transactions", with proactive investors trying to persuade them to embark on further funding rounds.

"You might have thought that, in a recessionary market, people would be pulling back and everything would stall. But, when you have really interesting companies, deals are still being done," he says.

In the long term, the customer-facing and infrastructure sectors of fintech will continue to offer attractive investment opportunities, according to Mohnot.

"If you step back for a moment, you can see there's a lot that's broken in finance. If there's a lot that's broken, there's also a lot of opportunity. From a macro perspective, massive changes that will benefit consumers will come from fintech," he says.

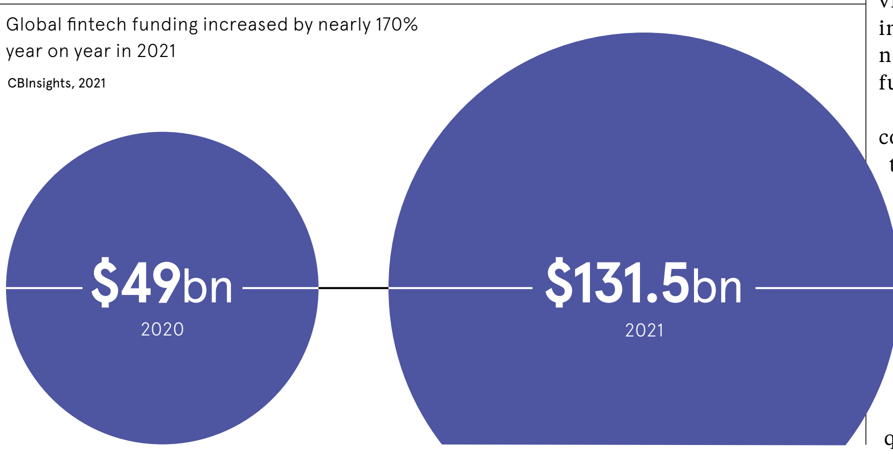
O'Brien believes that, without question, fintech will remain an attractive sector.

"The need for financial services underpins so many business models," he says. "When you tie in blockchain-related projects and also decentralised finance, I think that fintech and all adjacencies will remain a core focus for most of us."

A BUMPER PERIOD FOR INVESTMENT

Global fintech funding increased by nearly 170% year on year in 2021

CBInsights, 2021



Commercial feature

Oscar Wong via Getty Images

DECENTRALISED FINANCE

Banking on blockchain

Does the rise of DeFi spell the end for centralised finance, or should the two systems borrow from one another to create a banking system that's fit for the future?

Jon Axworthy

Defy (verb) – to openly resist or challenge. DeFi (noun) – a widely used contraction of 'decentralised finance'.

It's fitting that the term for an alternative financial ecosystem that's making waves in the mainstream sounds similar to one for a subversive act. From the outset, DeFi has been all about defying the established hierarchy of banks, brokers and various other gatekeepers of traditional finance.

Jeremy Eng-Tuck Cheah, associate professor of decentralised finance at Nottingham Trent University, describes it as "the latest disruption technology that's changing the architecture of finance as we know it."

> **If there are incomplete or faulty codes, it's likely that funds can be drained out by those who can exploit such weaknesses**

DeFi uses the revolutionary decentralised nature of blockchain database systems to enable friction-free peer-to-peer financial exchanges. It uses so-called smart contracts in the form of 'if..., then...' instructions coded into a blockchain's ledger. For instance, an instruction might be to measure the interchange of supply and demand to set interest rates and dictate the terms of specified financial exchanges accordingly. No intermediary or negotiation is required, because each party to the transaction is already clear about the terms of the contract.

"Smart contracts are stored on the blockchain and run when predetermined conditions are met," says Anton Mozgovoy, co-founder of DeFi savings platform Mover. "They are a revolution because of their composability – because everything is open and accessible, anyone can build innovative things. That also makes the whole DeFi system transparent."

This gives DeFi an advantage over the established transactional methods of centralised finance, because it isn't subject to the opaque internal workings of incumbent financial institutions.

There is, though, a caveat. DeFi has been described as the Wild West of finance – not a phrase that promotes investor confidence. Several critics argue that certain aspects of DeFi amount to little more than get-rich-quick schemes.

"This crypto space is lightly regulated, if at all," observes Igor Makarov, associate professor of finance at the London School of Economics and co-author of a recent working paper on DeFi. "As a result, investors are exposed to numerous risks. The Beanstalk hack is one of many colourful examples."

Makarov is referring to an incident in April in which a hacker extracted $182m (£150m) of cryptocurrency from Beanstalk Farms, a DeFi project whose goal was to balance the supply of and demand for crypto assets. This was proof, if any were needed, that legitimate endeavours could be exposed to bad actors set on exploiting the vulnerabilities of smart contracts. In the first five months of this year, there were $1.4bn-worth of DeFi hacks, according to cybersecurity auditor Hacken.

Moreover, the fact that so much of DeFi's infrastructure is founded on smart contracts means that investors are vulnerable to software flaws that can erase token value.

"If there are incomplete or faulty codes, it's likely that funds can be drained out by those who can exploit such weaknesses," Cheah says. "Apart from source-code vulnerabilities, there's a lack of sophisticated due diligence processes to ensure that codes are free from faults. Ultimately, smart contracts are only as good as the people who write them."

Perhaps the biggest investor concern is the lack of safeguarding baked into DeFi, especially when compared with traditional finance – things such as deposit protection, governmental-level insurance and the various other guardrails that centralised finance investors rely on.

But regulations cannot pre-empt innovation, argues Cheah, who adds: "If the principles underlying innovation are regulated, they can be circumvented or they might end up stifling innovation. And there is a lot of financial incentive to develop software very quickly to replace the role of financial intermediaries. In short, there is money to be made by first movers. So it's not surprising to me that DeFi has earned its Wild West reputation. That's the price you pay for all that innovation."

For all DeFi's flaws, it's hard to ignore how much attention it is attracting in many quarters. The interest of the big banks has certainly been piqued, for instance. They have commissioned a slew of studies to determine what effects DeFi might have on their businesses.

Goldman Sachs published a report in October 2021 that highlighted how DeFi had clear advantages over traditional finance with its ability to provide "access for underbanked populations and faster settlements for users". But it concluded that DeFi was not the finished article, pointing to "hacks, bugs and outright scams".

Dutch bank ING also recently commissioned a white paper. This concluded that DeFi was "a coin with two sides" and that the two services combined could bring benefits to the centralised institution as well as "to DeFi and, more importantly, its customers".

So, what forms might such collaborations take? Cheah believes that banks have a stark choice: adapt or die.

"Banks slow down transactions and can be costlier in the services they provide because they defray costs arising from regulatory compliance," he says. "These higher costs need to be weighed up against the benefits of allowing banks to be part of the DeFi solution. It would certainly be wise for the banks to migrate away from their ageing systems and adopt blockchain technology and principles. But this will not be a cheap endeavour."

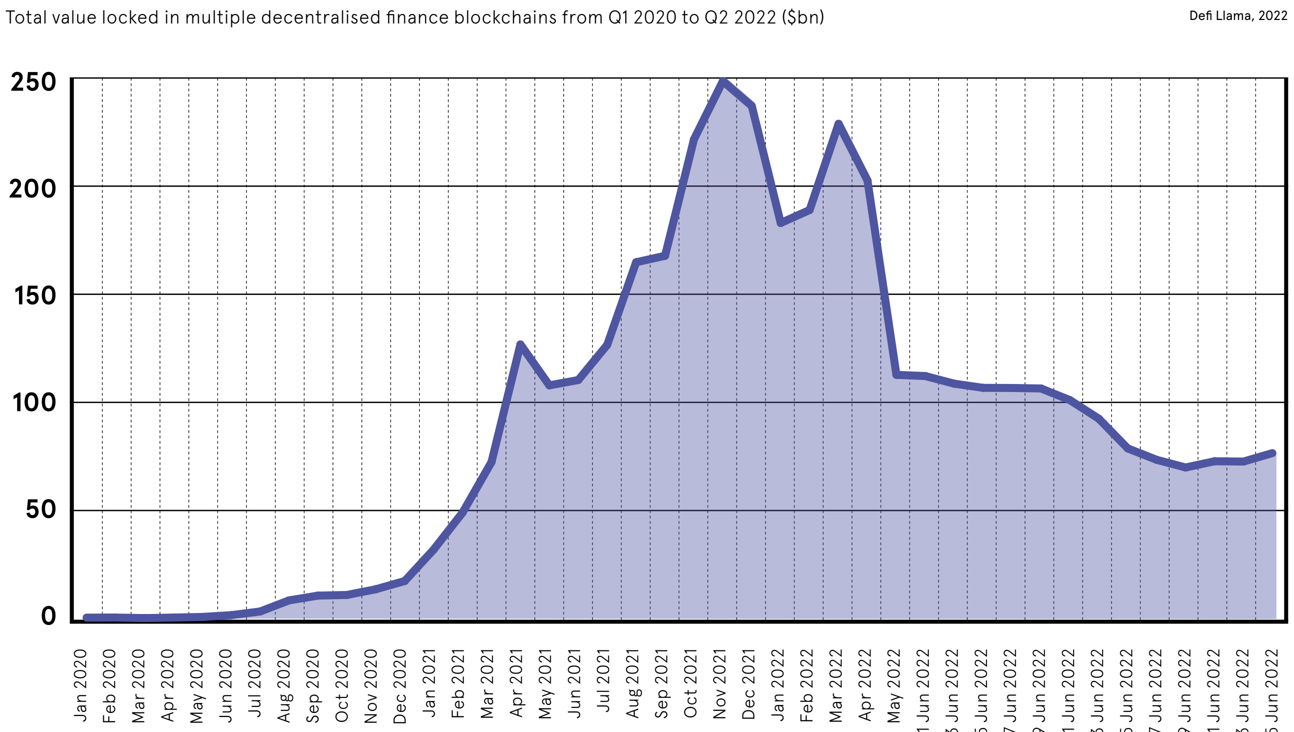
It's likely that DeFi will continue to defy and challenge conventional banking with disruptive innovations, yet remain a frontier populated only by the hardiest investors. But, if incumbent financial institutions become less risk-averse and decide to embrace blockchain innovation, they stand a much better chance of establishing a strong position in a digital-asset economy that's gathering pace.

Meanwhile, the DeFi coin is still turning in the air with plenty of interested parties watching closely to see how it will land.

IS DEFI DOMINANCE SETTLING DOWN?

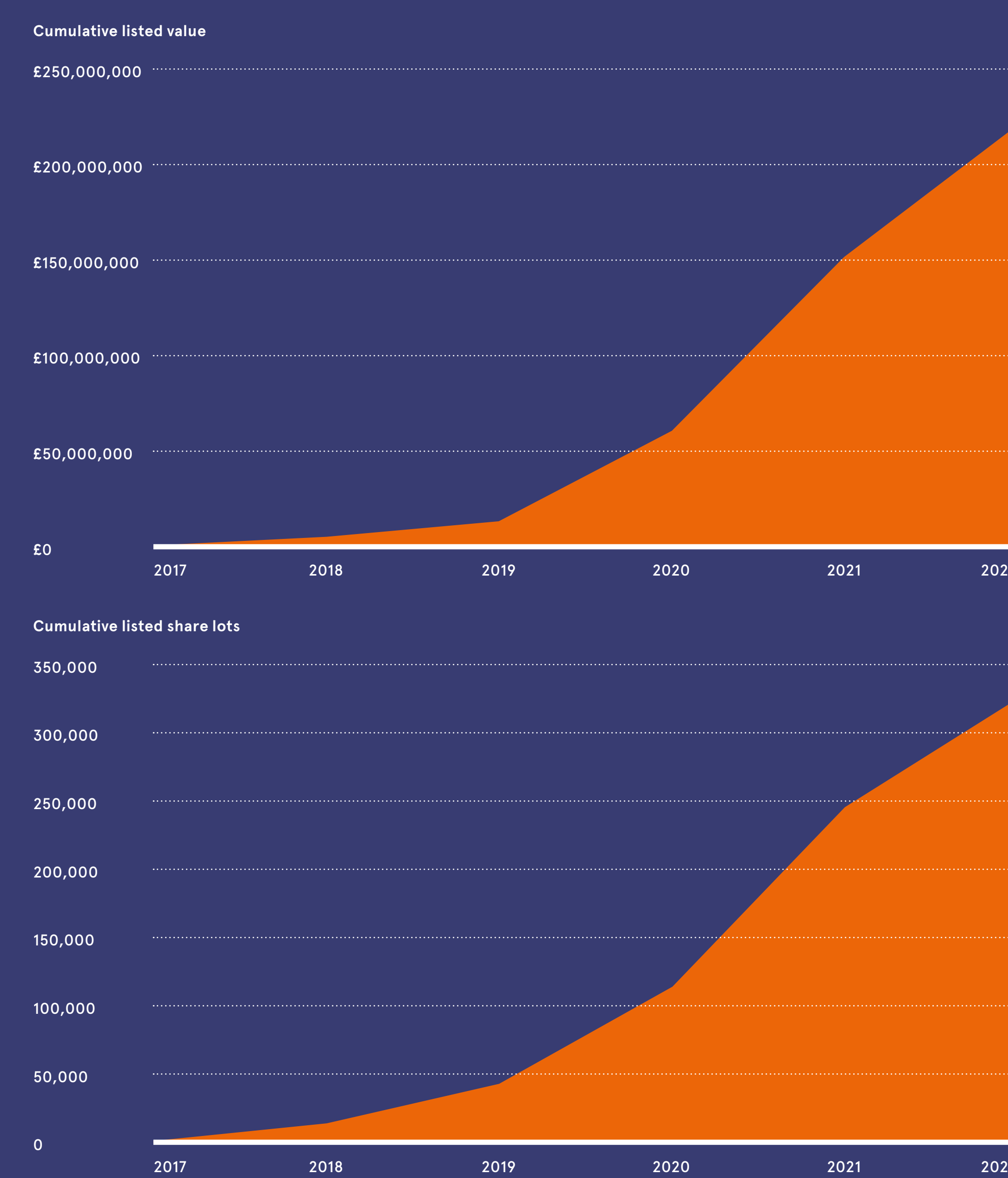
Total value locked in multiple decentralised finance blockchains from Q1 2020 to Q2 2022 ($bn)

Defi Llama, 2022



INTEREST IN THE SECONDARY MARKET FOR SHARES ON THE RISE

Cumulative growth, in both value (total value of listed shares), and volume (total shares listed) on the Seedrs Secondary Market – from launch in 2017 to July 2022



Seedrs, 2022

Opening up private investment to a wider pool

The secondary market, venture capital (VC) funds and alternative asset classes are now more accessible than they have ever been

Private investment is big business. In Europe alone, there is £200bn in assets under management in private companies in the early to growth and pre-public IPO stage.

Driving that growth is the proliferation of startups, with 3,000 UK businesses every year seeking investment in the seed and growth stage. That growth, in turn, is being fuelled by the current adverse economic and inflationary conditions, prompting firms to try to secure more funding and investors to seek out better returns.

Added to this, companies are staying private for longer in order to try to realise greater returns. For example, in the technology sector in 2020, on average, firms went public after 12 years, up from four-and-a-half years in 1999, according to industry estimates.

At the same time, private equity firms are looking to deploy their institutional capital. The problem, however, is that much of this capital is tied up in illiquid assets and doesn't have anywhere where it can be traded, except with other institutional investors.

As a result, the Seedrs secondary market is quickly gaining popularity as it enables more people that didn't previously have access to invest in private companies. That's evidenced by the fact that there have been 52,600 sell orders worth £20.9m in the secondary market to date. That amounts to £550,000 worth of shares traded per month in the last 12 months.

Added to that, there has been a 32% increase in sellers listing share lots in the last 12 months. Over the same period, there was a 27% rise in share lots listed.

These share lots can produce huge returns. For example, one seller made a £21,000 profit from selling their Revolut shares in less than an hour – the highest margin achieved for a single share lot. In context, the average profit per seller was £513.

Company listings on the secondary market have also soared by an average of 301 in the last 12 months. Concurrently, there has been a 61% increase in the total value of firms listed. Reflecting this, 12 of the businesses listed have a valuation greater than £100m, including Revolut, Paysend, BUX and Perkbox.

"There are many different segments of the market," says Jeff Kelisky, CEO of Seedrs. "There are the early adopters and angel investors who are prepared to take high risks, who will seek to get out when the company reaches a certain maturity and sell to investors who want a safer investment."

> **Essentially, we are doing for investors what Uber did for taxis, by bringing all of these investments into one place where it's accessible for all**

£21,000

the amount one seller profited from selling their Revolut shares in less than an hour; the highest margin achieved for a single share lot

Seedrs, 2022

Another growing trend is investment in VC funds. That growth is being driven by VCs' ability to tap into high-end wealthy investors looking to invest in private companies because of the returns they can achieve relative to the stock market.

In this vein, VCs are seeking to make it easier for investors to come on board. Thus, they are taking on a smaller number of big-ticket investors, namely retail and ultra-high-net-worth investors.

VCs are also increasingly opening up to crowdfunding. A prime example of this is Passion Capital, which recently sought crowdfunding for one of its mature funds. Such was the demand, it had to double its share allocation, which then sold out in 20 minutes.

Among the investment sectors most in demand currently are fintech, food and beverage, sustainability, software as a service and wealth management. As people become more concerned about climate change and bring their lives online, that trend will only continue.

Moving forward, investors are increasingly looking to get into alternative asset classes as an affordable way to own a share of something that was previously out of their reach. Among the most popular are cryptocurrency, art and real estate.

"There are a growing number of asset classes that are being made available to a wider group of people," says Kelisky. "Cryptocurrency is one such asset that investors are increasingly attracted to because of the returns they are able to achieve or the wider applications it can be used for, such as in providing cheaper insurance through the use of blockchain automation."

One of the biggest regions for potential growth is North America, with private equity, private debt and real estate expected to account for more than £1tn in assets under management by 2026, according to Preqin. Leading the way here is New York City-based global financial technology firm Republic, which recently acquired Seedrs, and has deployed more than £1.3bn in investments and supported in excess of 600 companies, with 2.5 million users across more than 150 countries.

Republic has hosted 12 regulation crowdfunding campaigns worth £4m each, as well as 22 real estate deals. It also supports more than 50 cryptocurrency clients, guiding projects from seed to liquidity, in addition to operating early and growth-stage institutional cryptocurrency funds.

Seedrs launched initially in 2011 with a crowdfunding platform, helping companies find the capital they need to grow and enabling retail investors to invest directly in start ups and scale ups. Then in 2017 it established a secondary market – one of the first of its kind – where investors can invest in, set the price of and trade out their shares, allowing investors to realise returns ahead of a public offering.

Around 200 businesses currently trade their shares on the market every month. They are exclusively companies that have raised capital with Seedrs and include small retail and technology firms, and even big players such as Revolut.

Seedrs has also helped no fewer than 28 VC funds raise capital between 2013 and 2022, including JamJar (£102.1m), Passion Capital and Seedcamp. Five more are set to go live soon.

"Essentially, we are doing for investors what Uber did for taxis, by bringing all of these investments into one place where it's accessible for all," says Kelisky.

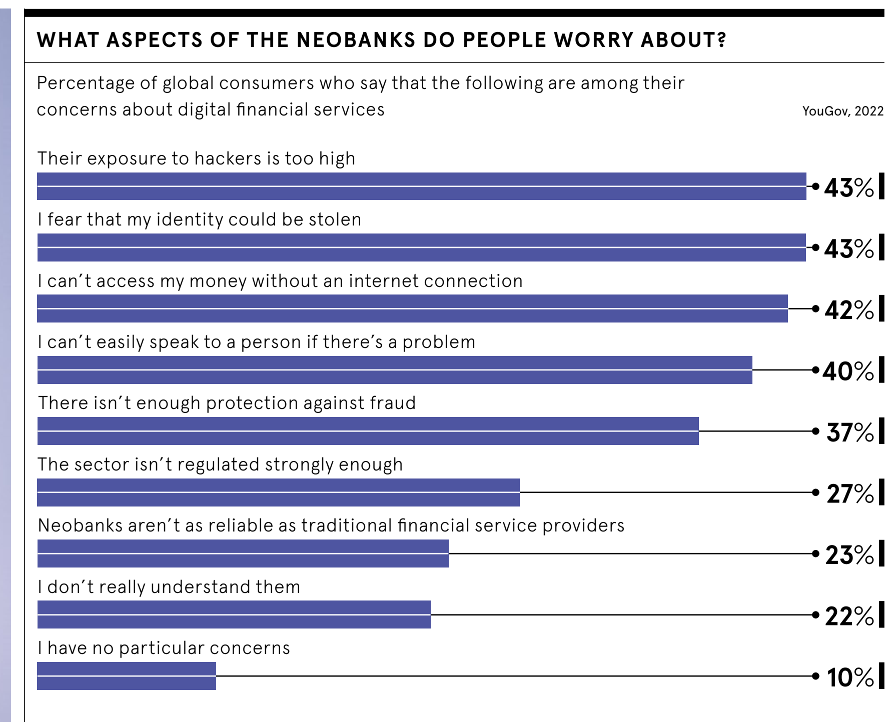
The performance figures in this article refer to the past and past performance is not a reliable indicator of future results

Approved by Seedrs. Capital at risk

For more information about Seedrs and private company, secondary market and VC fund investment, visit seedrs.com

SEEDRS


Qi Yang via GettyImages



NEOBANKS

How the challengers are becoming the challenged

The neobank sector has enjoyed explosive growth in recent years, but the return of high inflation to the UK represents a significant barrier to its progress

Daniel Thomas

Challenger banks surged into the mainstream in the UK during the late 2010s by offering more innovative services and, often, better savings rates than the high-street giants were prepared to give. But they have had a tougher time since 2020, first as the Covid recession constricted their revenue streams and now as the Bank of England continues to increase its base rate to control inflation, putting a brake on the economy in the process.

The next 18 months could be particularly bumpy for them. How they fare will depend on how well capitalised they are, the quality of their offerings and their exposure to weakening customer affordability as the cost-of-living crisis wears on.

Several challengers have yet to post a profit and still rely on venture capital backers whose faith in the sector is waning. Yet they continue to enjoy explosive growth. More than a quarter of adults in the UK – about 14 million people – hold an account with a digital-first neobank such as Atom, Monzo, OakNorth, Revolut or Starling.

In theory, a period of rising interest rates ought to benefit challenger banks, because yields on their mortgages and other loans should, after more than a decade of ultra-loose monetary policy from the Bank, be increasing at last. It has put up its base rate five times since December 2021 in a bid to curb inflation, which hit a 40-year-high of 9.4% in the year to June 2022. Some economists believe that the base rate could rise from 1.25% to 3% next year.

Despite this favourable trend, "not all lenders will benefit equally, given their different funding profiles", according to Fitch. In a research note published in June, the ratings agency observed: "Larger high-street banks tend to benefit the most from rising interest rates, given their large market share in current account deposits... Challenger banks will find it more difficult to widen their margins. They rely more on savings deposits, for which savers will demand higher interest."

Regulators have told banks of every stripe to put more money aside to prepare for potential shocks, which will further squeeze margins. More worryingly for neobanks, experts warn the mortgage market could slow down and loan defaults rise as more consumers feel the pinch from rising prices.

Simon Youel is head of policy and advocacy at Positive Money, a not-for-profit body campaigning to reform the banking system. He says that, while a period of higher interest rates "might be good for banks' profitability, it also poses dangers. It is likely that more than a decade of low interest rates encouraged them to engage in all manner of risky lending in search of yield. We don't know how much higher interest rates can go before bubbles start bursting. There are worrying signs already coming from housing markets in countries such as Canada, for instance."

But the challengers seem confident that they can cope with such risks. Take Monzo, for instance. In its annual report in July, the bank declared that it had shown "extraordinary resilience" during the Covid crisis and was continuing to "grow at pace".

In the year from March 2021 to February 2022, Monzo gained 1 million customers and its deposits grew by 42% to £4.4bn, enabling it to pull in a record revenue of £150m. But it also posted a loss of £119m, following similar results in the preceding two years.

T S Anil, the bank's CEO, wrote in the report: "While rising interest rates tend to benefit our business model... we need to remain watchful for the impact of cost-of-living increases on our customers. We're yet to see a direct impact on our customers' deposit balances, their spending behaviour or ability to repay us."

Another risk facing the challengers is that investors, concerned about the faltering economy, are losing confidence in fintech generally. For instance, Klarna, the Swedish giant of buy-now-pay-later finance, saw its valuation plunge from $46bn (£38bn) to below $7bn in July. And British mobile payments firm SumUp was valued at €8bn (£6.7bn) at its June fundraising round – a 60% discount on the price it had been aiming for at the start of the year.

The signs are that numerous fintech firms will struggle over the next 18 months and some may even fail. Starling believes that smaller "non-bank" operators could find life hard, but stresses that it and its fellow licensed players are in a far stronger position. The bank, which has about 2.1 million customers, reports that it is "very well capitalised" and not looking to raise more funds.

"We have a sustainable business model that lets us generate our own capital organically and expand into new markets," says a spokeswoman for Starling, which reported its first full year of profitability in July.

While there has been no hint that any licensed UK challenger is in dire straits, Australia's first ever online-only bank, Volt, has ceased trading. In July, it surrendered its licence and returned about A$100m (£58m) in deposits to customers. That came after it failed to raise enough capital to support its mortgage-lending plans.

If a UK bank were to get into serious difficulties, Westminster would probably help it, according to Youel, who notes that some operators are highly exposed to government-backed Covid business loans, which would be written off in "implicit bailouts".

Despite the risks, neobanks should be able to weather the UK's cost-of-living crisis even if they sustain a few bruises along the way.

According to Rich Wagner, founder and CEO of the digital bank Cashplus, the best-run challengers "should be in a strong position to cope and even thrive" if the going gets as tough as the experts are forecasting.

These are "well-managed businesses built on good economics", he says. "They will fare better than those that have chased explosive growth or dizzying valuations at the expense of setting solid foundations." ●

> We don't know how much higher interest rates can go before bubbles start bursting

Commercial feature

Q&A

Monitoring conversations to drive value and compliance

How can organisations remain compliant in the new work anywhere culture? **Oliver Blower**, CEO of VoxSmart, explains the importance of tracking communication in financial organisations

Benefits of regtech in financial services

A tier-one bank was recently required to report their dollar/ruble exposure. Using our technology, they could provide the data in a matter of hours, resulting in huge efficiency gains.

VoxSmart recently helped a global bank to reduce reporting time for Dodd-Frank Regulation compliance from 800 hours to under 72 hours.

Regtech can support process automation, especially to review voice communications. Rather than listen to recordings manually, banks can monitor 100% of communication automatically, with alerts to suspicious content or activity.

Major investment firms are using VoxSmart to enhance data analysis in business intelligence tools, by extracting data points such as prices, counterparties or buy/sell instructions from audio conversations.

Q Why do financial services firms need to worry about compliance in communication?

A I used to work in the financial services sector and saw a lot of complex problems first-hand. Trading floors are quite easily the most inefficient working environment on the planet, and despite having instant access to global markets and visibility of what was going on in the outside world, companies are often blind as to what's going on inside their own firm.

For example, when I was a trader, part of my job involved flying around the world, restructuring deals for clients. But as far as my firm was concerned, because I was working away from my desk, I wasn't compliant. Of course, that was very frustrating.

With the introduction of more regulation after the financial crash, I realised that many firms don't have any tools to manage visibility and risk, which increases liability for individual traders, and the reputational risk to each firm.

800hours

of reporting time for Dodd-Frank Regulation compliance was cut to under 72 hours for one global bank, using VoxSmart

95%

increase in active audio monitoring (RegTech can support process automation, especially to review voice communications. Rather than listening to recordings manually, banks can monitor 100% as opposed to just 5%

VoxSmart, 2022

VoxSmart was created to help firms build a view of internal risk, particularly risk deriving from employee-client interactions through email, instant messaging and telephone calls. regtech like ours helps to protect employees and firms when mistakes happen. We approach this from a position of protecting the good guys, not hunting down the bad guys.

Q Does regtech help firms to avoid risk, or can it also drive value?

A It's about both. Risk is an inherent part of the industry, so we definitely want to reduce and mitigate risk. But those controls can also contribute to efficiency and revenue growth, which is critical to both traders and financial institutions.

The trading operating model is very inefficient so it's 100% probable that you'll miss something at some point. How are you going to make sure that doesn't happen? Regtech can mitigate human error and protect employees when mistakes inevitably happen.

As soon as you've harnessed that data, it can be used to drive value, moving beyond surveillance to deliver insights that could reduce P&L or optimise trading strategies, for example. The value of data to financial institutions is huge and largely unrealised to date.

Q How will the growth of cyber currencies affect how we use regtech?

A Our technology plays a huge role in the cyber currency space. We already have several clients in that space and as large global firms and retail banks adopt cryptocurrencies into their financial offerings, the need for transparency into these trades is going to increase.

Cyber currency can only remain largely unregulated for a short time, and there are pending regulations in multiple countries. We were recently approached by the world's largest crypto exchange to build a capability to monitor Telegram communication ahead of upcoming regulation. That has meant that all of our 100-plus clients now enjoy the benefits of that new technology offering.

Q Why have so many financial institutions been relatively slow to innovate how they manage risk?

A It has been slow of course, but I think the situation is changing. Competition encourages innovation, and what crypto has done is introduce a new dimension of competition that has encouraged greater agility among traditional financial organisations.

> The biggest challenge for the industry right now isn't just monitoring the data, it's about understanding the data

Larger organisations face multiple challenges that slow down the rate at which they adopt new communication channels but using regtech like VoxSmart does let them play catch-up in their own time. Technology evolves constantly and firms need regtech to enable change and innovation in a compliant way that helps them future-proof systems and processes.

Q What do you see as the main differences between challenger fintech brands and more established financial institutions?

A We support the entire ecosystem of financial markets, so that includes new entrants and traditional players. With new crypto exchanges, we see more use of new channels such as Telegram or signal, which are positively influencing traditional markets. We often find ourselves advising firms on future communication trends. During the pandemic for example, we saw that communication in the industry switched to WhatsApp almost overnight. Since WhatsApp recording is a core offering for us, we were able to be there for larger clients who were facing a material shift in employee behaviour.

In a sector where we're only just scratching the surface of the many applications and benefits regtech can have, we encourage firms to be inquisitive and open-minded about new technologies like monitoring and analytics, and to think longer-term about the potential value they can bring to the business.

Q What do you think is the biggest regulatory/compliance challenge that the investment banking community is facing in 2022 and why?

A Somebody once told me that banks don't manage money, they manage data.

The biggest challenge for the industry right now isn't just monitoring the data, it's about understanding the data. Because once you have cracked the monitoring, that's almost like your checkbox ticked for regulatory compliance. But if you understand the data you are monitoring, then you can start adapting your business based on what you know, what the data is telling you. You can understand trends, you can understand insights, you can help your clients in a totally different way and be so much more efficient once you achieve that.

For more information, visit voxsmart.com

VoxSmart

STRATEGY

Five ways to power an industry towards net zero

A few key players are in the vanguard of the payments sector's decarbonisation charge. The insights they have gained so far are too important for them not to share

Tim Cooper

Payment service providers can play a pivotal role in supporting society's progress towards a low-carbon economy, yet several are struggling to attain their own net-zero targets. Some strategies have been working well, but much more needs to be done – even by the largest and best-resourced players in the sector.

Payment providers ought to be well positioned to cut greenhouse gas emissions – in their operations, supply chains and customer networks – thanks to their ability to track spending and engage with buyers at the checkout. They can use their data insights and influence to raise customers' awareness of their carbon footprints, inform them of their options and persuade them to choose the most sustainable ones.

That's the view of Doug Sabo, chief sustainability officer at Visa, whose network "connects billions of customers". Sabo believes that his company has a "great opportunity to use its assets to inspire climate action through enabling sustainable behaviour. This is also a chance for us and the payments industry to connect climate action to a business case, aligning with consumers' demands and mitigating risks. We could achieve this by, for example, enabling seamless payments for the charging of electric vehicles."

Here are five tips from pioneering payment providers on how the entire industry can hasten its progress towards net zero.

> "We need to work as a collective to make the industry fully sustainable

Rationalise and consolidate systems

One of the biggest contributors to payment companies' carbon footprints is the electricity that they consume in their operations.

To reduce its CO_2 emissions, North American Bancard (NAB), parent of PayAnywhere, has consolidated its systems and operations from six separate data centres into two, both of which use 100% renewable electricity. It has also equipped its call centres with energy-efficient Chromebook devices.

"We have learnt that competitively priced, environmentally friendly providers are out there," says NAB's chief information officer, Andy Bolin. "You just need to choose the right ones from the start. It's easier to build a more sustainable ecosystem now than to reverse-engineer it later."

Bring customers and networks on board

Perhaps the biggest opportunity for payments providers to cut CO_2 emissions lies in engaging with their billions of customers and their huge supplier networks. A 2021 business briefing by the University of Cambridge recommends that providers work collaboratively to shape new services that will counter climate change. The document, *Payments for Net Zero*, also highlights providers' ability to use data-driven insights to support this by, for instance, producing more targeted products.

Sendi Young, MD of payments settlement system Ripple in Europe, says: "Organisations should prioritise learning from others and take advantage of partnerships. We must work as a collective to make our industry sustainable."

To this end, Ripple has joined the Crypto Climate Accord, a group of crypto asset providers with the shared goal of decarbonising the industry.

PayPal, meanwhile, is aiming to harness the power of its 400 million customers to advance science-based action and align its offerings with their growing interest in sustainability. For example, its network of so-called return bars – locations where shoppers can hand back unwanted goods – enables product returns to impose a smaller carbon footprint than they would make using any mailing system.

A spokesman for PayPal says: "We've learnt that enabling climate solutions is not just about individual businesses; it's also about markets and ecosystems. Innovation and entrepreneurship are also essential. We've invested in startup companies that are testing ideas that can unlock new climate solutions and address scalability issues."

Sabo reports that Visa's decarbonisation strategy has "evolved outside our operations. For payment companies, the transformative opportunity is to enable others to transition to a low-carbon economy by inspiring and empowering the consumers and businesses that use our services to make more sustainable choices."

Visa has done this directly with bank clients and through a partnership with Ecolytiq, which enables them to obtain estimates of the carbon footprint imposed by their spending. Clients also receive tailored guidance on how they could make more sustainable choices.

Invest directly in removing carbon

Buy-now-pay-later giant Klarna has introduced an internal tax on all its emissions, including in its supply chain. This entails setting aside money to spend on decarbonisation schemes.

Last year the fund totalled \$1.7m (£1.4m). Initiatives have included four projects designed to remove 11,000 tonnes of CO_2 from the atmosphere.

Klarna believes that most carbon-offsetting activities aren't as effective at combating climate change as those that extract CO_2 already in the atmosphere, which is why it is focusing most of its attention on permanent carbon removal.

For its part, Ripple has committed \$100m to invest in carbon-removal innovations, building carbon credits and enabling users to reduce their carbon footprints through a digitised credit token system.

Commit to science-based targets

PayPal is targeting net-zero greenhouse gas emissions, as defined by the Science Based Targets Initiative (SBTI), by 2040. It has already achieved its goal of procuring 100% renewable energy for its data centres.

The company also has SBTI-based targets for reducing greenhouse gas emissions throughout its supply chain. It plans to achieve them partly by persuading vendors to set their own targets and work towards these.

Visa has already achieved carbon neutrality in its own operations, according to its reporting under the Carbon Disclosure Project (CDP) framework. Moving all premises on to 100% renewable energy has been key to its success.

Like PayPal, Visa is targeting net-zero greenhouse gas emissions in its supply chain by 2040. It plans to do this by participating in the CDP Supply Chain programme, which encourages suppliers to measure their emissions, set reduction targets and report on their progress towards these. Visa also uses its supplier code of conduct to state its expectations of them in this respect.

Use tech that's sustainable by design

Payment providers using digital assets and blockchains can choose the most sustainable partners from the start.

Young acknowledges that the crypto sector has been put under scrutiny from the environmental lobby – justifiably so, because the process of verifying transactions consumes huge amounts of energy. But she adds that providers have been working on more sustainable methods.

"We see great potential for crypto to forge new paths to zero carbon," she says. "For example, the XRP Ledger blockchain is achieving carbon neutrality by confirming transactions through a low-energy consensus model." ●

INSIGHT

'While big reg may be behind us, there is still a lot of regulatory work to be done'

Andrew Delaney and **Angela Wilbraham**, of financial services insights company the A-Team Group, discuss what the sector must do to get ahead of the regulation curve

Q To what extent has the pandemic changed the regulatory landscape in financial services?

A The financial services marketplace believes that the era of big regulation is over. No one in it expects to see another Mifid 2, Dodd-Frank or major incarnation of the Basel capital adequacy rules, which have dominated the thinking of big financial institutions with respect to compliance over the past decade.

The whole industry has been in a heightened state of regulatory oversight since the global credit crisis of 2007. That sparked a slew of new rules designed to prevent further failures of strategically important institutions such as Lehman Brothers, whose demise had a huge knock-on effect across the world.

Despite the doom and gloom of the cost-of-living crisis, the war in Ukraine and the continuing effects of the pandemic, banking and finance executives are at least looking forward to working in an operational environment where their daily activities and investments in technology and data aren't dominated by their regulatory obligations.

But, while big reg may be behind us, there is still a lot of regulatory work to be done.

The industry is bracing itself for a 'refit' of the rules governing regulatory and trade/transaction reporting, for example. Regulators across the board – from the European Securities and Markets Authority to the Commodity Futures Trading Commission in the US – are revisiting their requirements for firms that are obliged to report their trades to market for greater transparency and investor protection.

For several financial institutions – some of which scrambled to put reporting solutions in place the first time around – this is an opportunity to do the job properly.

Q What are the most significant and urgent challenges facing the industry?

A There is a growing emphasis on tackling financial crime. During the Covid lockdowns and the global shift to working from home, financial crime mushroomed. Online fraud, bounce-back loan fraud, market manipulation, money-laundering and the funding of terrorist activities have all been on the rise. New sanctions have been put in place that prohibit regulated entities from dealing with clients and counterparties in Russia or with Chinese military companies.

For financial institutions, all of this translates into a greater emphasis on understanding whom they are doing business with, whether it's trading with a counterparty, raising funds for a client or investing in a new business. The 'know your customer' regime has emerged as a serious challenge for institutions, which are required to identify the beneficial owners of the entities they engage with.

And then there's ESG investing. With the EU leading the way, asset owners and the firms that manage their investments are being forced to understand the ownership and supply chains of the companies they deal with. So far, no single standard approach has been agreed upon, with myriad emerging rules and regulations threatening to trip market participants up with their nuances of approach.

Q What can companies do to ensure that they stay ahead of the regulation curve?

A While all organisations need to comply with regulations, differentiation can come from the quality of the underlying data that feeds their regulatory reporting. But data can feed in from numerous third-party service providers as well as from various internal platforms and, indeed, spreadsheets, often with different data formats, delivery timeframes and distribution methods.

This is even more of a challenge when it comes to ESG investing, where much of the required information is not available and synthetic data of questionable quality is created to try to fill that gap.

To deal with this tsunami of data, many firms are modernising their data infrastructures and finding that cloud, software-as-a-service and other managed services models are giving them the scale and flexibility they need to derive analytical value.

So, while big reg may well be behind us, financial institutions are dealing with several big challenges – some regulatory, some market-led and some operational – that are certain to keep them busy for the foreseeable future. ●

Andrew Delaney, chief content officer
Angela Wilbraham, CEO, A-Team Group

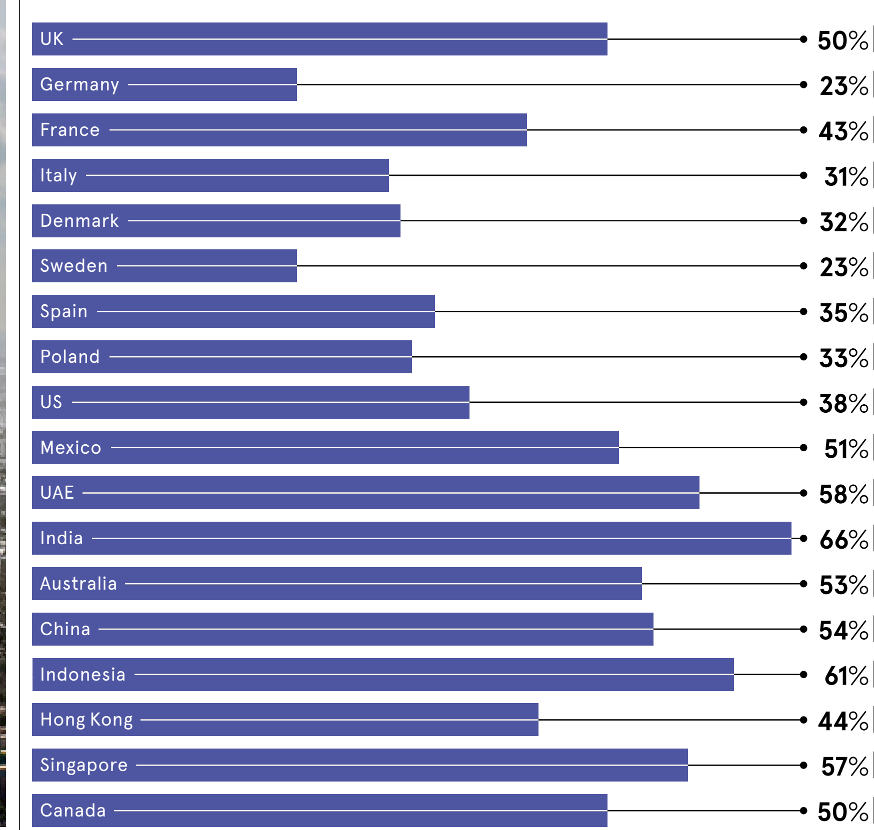
SUSTAINABILITY

Stress-test blues

BANKING'S ROLE IN TACKLING CLIMATE CHANGE

Percentage of global consumers agreeing with the statement "financial services companies have a significant role to play in helping the world to become more sustainable"

YouGov, 2022



A recent Bank of England study has concluded that financial businesses need to work harder to manage climate risks. To what extent should regulation play in encouraging them to do so?

Sam Haddad

In May, the Bank of England published the results of its first ever climate stress test, which sought to explore the financial risks posed by the climate crisis and the transition to net zero to the largest banks and insurers in the UK and the broader financial system.

The Bank's Climate Biennial Exploratory Scenario project (CBES) covered two types of risk associated with the climate crisis: those that arise while moving from a carbon-intensive economy to a net-zero one (known as transition risks); and those arising from higher global temperatures if insufficient action is taken (physical risks). The CBES then tested companies under three possible scenarios: one in which early action against the climate crisis is taken, one where late action is taken and one where no action is taken.

> Acting at pace and scale is going to reduce the risk of stranded assets

The ensuing research report reveals that, although British banks and insurers have been making "good progress in some aspects of their climate risk management" they still need to do much more "to understand and manage their exposure to climate risks".

The report notes that climate risks "are likely to create a drag on the profitability of banks and insurers, particularly if they are unable to manage these risks effectively". It also states that "the early action policy path has the highest probability of success in terms of limiting climate change", whereas acting late would "leave governments more exposed to the risk of policy coordination failure".

Oscar Warwick Thompson, head of policy and communications at the UK Sustainable Investment and Finance Association, supports the need for early action by banks and investors in the energy transition to minimise climate risk.

"The Climate Change Committee's recent progress report said that we are off track in terms of delivering net zero," he notes. "Acting at pace and scale is going to reduce the risk of stranded assets [from carbon-intensive industries] and future losses on companies' balance sheets for investors and their clients' portfolios."

Warwick Thompson also warns of the transition risks to any financial business arising from consumers' expectations about its efforts to decarbonise.

"If a company is not being seen to take action, people are less likely to buy its products and services," he stresses, pointing to another key transition risk: the shifting regulatory and policy environment. "As that becomes clearer and more robust during the move towards net zero, firms that haven't adequately responded to, or accounted for the impacts of, these regulations in their portfolios run the risk of their investments becoming less valuable over time."

Dr Daniel Tischer is a senior lecturer specialising in green finance at Sheffield University Management School. He says that "it's always a question of being a first mover or a laggard: if you divest early on, you should get out OK. But, if you leave it until the very end and you're the last bank in town, then whatever you're trying to sell will be worthless."

> It's always a question of being a first mover or a laggard

Tischer adds that there is a lot of diversity and staggered positions among fund managers in terms of how they approach divesting from carbon-intensive industries, but he warns there will always be those looking to profit from the chaos.

"There are lots of sensible people out there, yet there are also lots of people who have other motives," he says. "Destabilisation creates profits, so in that sense you can see how people are playing with the narrative for their own gain."

Tischer believes that many banks and other financial actors were on the right track before Russia's invasion of Ukraine this year. "They were attempting to do the right thing by investing and supporting firms that were positioning themselves away from polluting industry practices," he says, citing the example of Allianz Insurance, which was relatively vocal on the issue. But he worries that the energy security crisis has set things back.

"Looking at the UK, we're seeing more investment going into taking gas out of the North Sea to reduce the impact of the windfall tax. That is a very problematic approach and completely the wrong incentive to give corporations. It sends the signal that fossil fuels aren't dead and gives that market a new lease of life," Tischer says. "Why didn't we encourage them to get a tax reduction for any £10bn they put into renewable energy in the short term? BP has made it clear that it's keen to invest in renewables, for instance."

Warwick Thompson thinks that banks and investors can still play a key role in steering oil and gas majors towards positive climate action in the medium term.

"The profits enjoyed by some of these companies have been considerable," he observes. The UK Sustainable Investment and Finance Association would advocate "using these huge balance sheets as an opportunity to transition to a more sustainable model in the future. When oil and gas majors are looking to raise funds in the bond market, investors can use their stewardship to pressure them, in effect, to carry out their own public policy."

The UK is ahead of the game in green finance, so its financial institutions are well placed to take advantage of the energy transition, Warwick Thompson argues.

"We've been world leaders in sustainable finance for years. A big part of that has come from promoting an advanced regulatory framework," he says. "In 2019, we were one of the first jurisdictions to legislate to reduce emissions to net zero by 2050 and the first of the G20 nations to bring in the Task Force on Climate-Related Financial Disclosures framework for the largest companies."

This means that some businesses are required by law to cover climate risks in their annual reporting. But he warns that much of this progress is now at risk owing to delays to key pieces of legislation on green finance, including the sustainable disclosure requirements.

"There's a sense that the government wanted to minimise the regulatory burden on business," Warwick Thompson says. "But more regulation gives investors a better idea of what's going on in a business – and better disclosures will incentivise the flow of capital into that business."

Whoever the next prime minister is, the hope is they'll reaffirm the UK's role as a leader in green finance. As Tischer says: "The narrative that 'this is a threat, but also a great opportunity for us' should be much more forthcoming."

Commercial feature

How AI and machine learning is transforming the finance function

Technology is helping automate repetitive tasks and giving accountants more time to focus on their clients, says Dext's **Paul Lodder**

There was a time, in the not-too-distant past, when accountancy and bookkeeping was a never-ending slog of data entry, with accountants having to wade through big stacks of invoices to manually type everything into the accounting system. It was dull, repetitive and unrewarding work that could take hours.

Now, with the emergence of artificial intelligence and machine learning technology, data can be extracted from a pile of invoices in a matter of minutes.

"With technology like Dext Prepare you can take a picture of an invoice and it will process that information automatically, categorise the transaction and then publish it to your accounting software," says Paul Lodder, vice-president for accounting product strategy at Dext, an accounting software developer. "AI and machine-learning tech solutions are really cutting out all of these repetitive, mundane tasks and doing it for you."

520 hours

are currently spent by accountants every year doing repetitive tasks that could easily be automated

Atlantic-IT, 2022

30 seconds

is now all the time it takes to extract receipt data, with 99% accuracy

Dext, 2022

2 hours

to extract bank statement data, down from 2 days

Dext, 2022

Lodder calls this a new era of 'no hands accounting'. Not only does it free up accountants to focus on higher value work, it also reduces the risk of errors.

"When you've got that human element and when you've got high volume, mistakes creep in," he says. "You can easily put numbers in the wrong way around If you're typing quickly. That doesn't happen when you use technology, the software is reading and extracting what it's seeing on a document. It can't get tired and it won't get distracted."

While the time saved from automating tasks can be used to increase the volume of work finance teams can handle, it can also help companies improve work/life balance and reduce employee stress.

"If you've got more capacity, it doesn't mean you have to suddenly do more work—we've just gone through a horrible couple of years, people are exhausted, so you can use that extra capacity to actually just finish early on a Friday and give the whole finance team an afternoon off because you've got everything completed," says Lodder.

For accountancy and bookkeeping firms, tech can help free up more time for business development and building relationships with clients, while also giving accountants the tools to provide more strategic advice and therefore add more value.

"If you're using technology to process transactions quicker, you've got access to insights much earlier than before, which means you may be able to pick up on opportunities or issues and things that are of a concern, so you can have more valuable conversations," says Lodder. "That's important because, if you're not talking to your customers, if a competitor comes along who shows a bit more interest, they may move. So it doesn't matter what conversations you're having, it's the fact that you've got the ability to have more conversations that matters."

Adopting technology also ensures that data is available in real time rather than having to rely on periodic reporting where numbers are likely to be already out of date.

"If your year end was December, but you don't do your accounts until March, a lot can happen in those three months and you haven't got visibility in that period because not everything is being processed," says Lodder.

By using real-time reporting, numbers will always be current so that businesses can make the right decisions at the right time based on accurate data, he says.

"I want to be able to recognise if a trend is forming and what direction it is going," Lodder says. "I don't want to be aware of something three months after the event. So up-to-date numbers mean that you're more forewarned—it doesn't matter if you're a finance team or whether you're working with clients—you've got all of that information to hand at any point in time so that you don't have to make a snap decision based on not having the full picture."

For instance, if a company wanted to take out a loan, basing that decision on three-month old data risks saddling the company with debt it can't afford or debt it doesn't need.

This technology is also allowing accountants and bookkeepers to expand their virtual finance function offerings. In the past, bookkeeping would typically involve a client having to drop off all of their records at the accountant or bookkeeper's office. Now everything can be done online, streamlining the workflow process and making it more cost efficient.

> With the emergence of artificial intelligence and machine learning technology, data can be extracted from a pile of invoices in a matter of minutes

"Clients don't need to drop anything off anymore, they can take photos and email documents directly and with open banking, you can now connect the bank account as well," says Lodder. "Technology is driving the virtual finance function and accountants are now offering their services not just in one small geographic area, they can expand their client base to anywhere in the world."

With the accounting sector struggling with recruitment and retention issues, technology is also making it easier for firms to outsource bookkeeping work to service providers in countries where fees are cheaper. At the same time, firms may simply want to outsource bookkeeping to create more capacity for accountants to focus on other work.

"In the UK, you could be paying a qualified accountant to do bookkeeping work who is highly skilled and who would be better off actually doing more of the high value work for clients, and you can outsource that bookkeeping work overseas at a much lower cost," says Lodder. "The technology means the work continues to be real time and, using software like Dext Precision, you can make sure everything is accurate."

The trend for using automation to make the finance function more efficient accelerated during the Covid-19 pandemic and shows no sign of slowing down even as people return to the office.

"Technology is an opportunity, it's not a threat," says Lodder. "A lot of the processing work that is currently being done manually will be completely automated in the future. That doesn't mean that people aren't needed though. Technology can't do everything, but it can certainly replace a lot of repetitive tasks, and that's how it creates opportunities. If you don't embrace it, then you risk getting left behind."

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