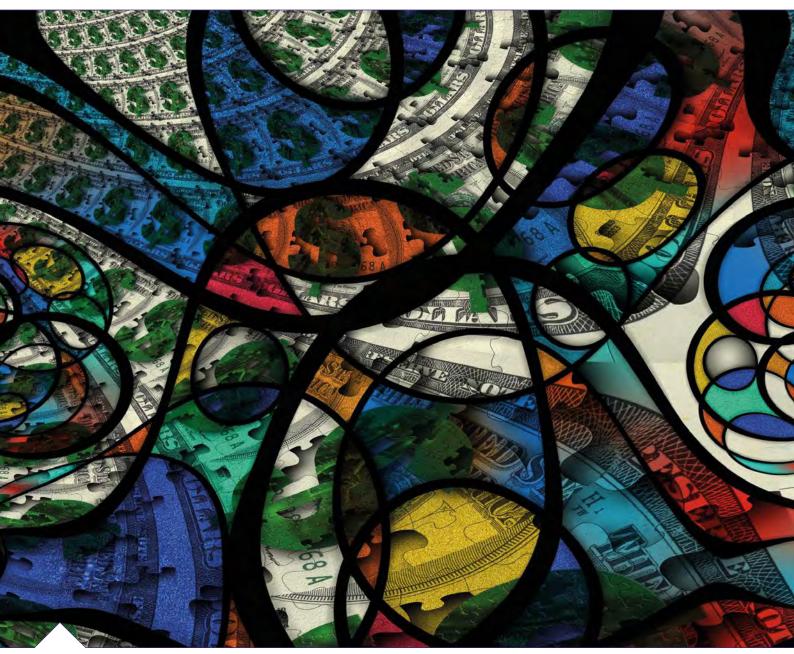
# FF banking technology

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**MONEY TALKS** Cash still playing an important role in society

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A TALE OF ADAPTATION A deep dive into the evolution of banking tech





# Nominations are now open!

We are excited to announce that nominations are now open for the prestigious **PayTech Awards USA!** 

The **PayTech Awards USA** celebrate the rapidly expanding payments technology market in the United States and the outstanding achievements in this incredible sector.

# To submit your nomination visit **paytechawardsusa.com**

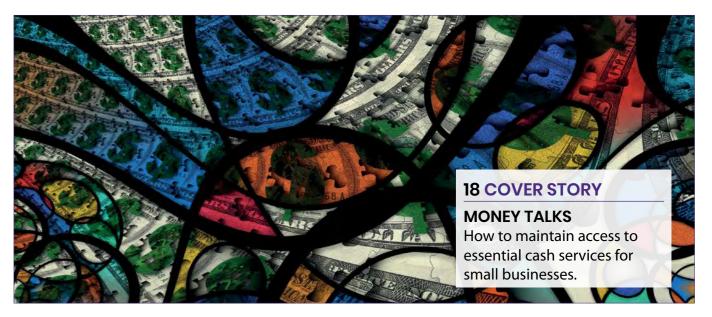
## Submit nomination







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# EDITOR'S NOTE



Tanya Andreasyan Editor

Welcome to the summer edition of Banking Technology.

As we are now over halfway into 2024, the industry is taking stock of the eventful first half of the year – the good, the bad and the ugly.

The good: several banking challengers reported healthy profits, including Oxbury, a UK-based bank for farmers, which has become one of the fastest among its peers to achieve profitability (less than three years since launch) - recording a pre-tax profit of more than £3 million in 2023.

Another two UK challenger banks, Atom and Starling, have also reported notable revenue growth and profitability (see p7).

Revolut's revenue surged by 95% over the year, to \$2.2 billion in 2023. It also secured a record profit before tax of \$545 million, with a net profit of \$428 million.

The bad: global fintech investment fell by 19% in H1 2024 compared to H2 2023 amid an "economic slowdown", according to the

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latest report by Innovate Finance, a UK-based independent industry body. The total capital invested in fintechs worldwide during this period amounted to \$15.9 billion, compared to \$19.5 billion in H2 2023.

The total number of funding rounds was also down to 1,566 from 1,661. The UK fintech community secured \$2 billion in funding spread across 183 deals, which is second only to the US (\$7.3 billion across 599 deals). And even though the UK has received more investment than all other European countries combined, accounting for 12.7% of the global fintech market, it is still a 37% decrease from the previous six months.

The ugly: the Synapse collapse saga rumbles on. The latest developments include a cease and desist order against its partner, Evolve Bank, and an appeal from US senators to the Synapse owners, partners and investors to immediately restore customers' access to their money.

Whatever happens in the second half of this year, it won't be boring.

# **NEWS ROUND-UP**

## ABA finds CDR regime "isn't delivering for customers"



The Australian Banking Association (ABA) has unveiled the findings of a strategic review into the progress of the country's Consumer Data Right (CDR) initiative.

The CDR regime, launched for Australian major bank customers in mid-2020, is an opt-in open banking service that enables consumers to share their data. If they agree, the information is transferred using secure automated data technology.

The review, commissioned by ABA and conducted by Accenture, concludes that the CDR regime, according to ABA CEO Anna Bligh, "has not fulfilled its potential".

By the end of 2023, only 0.31% of bank customers were using CDR, and more than 50% of data-sharing arrangements were either discontinued or allowed to lapse during the year, according to the report.

Despite around AUD 1.5 billion in heavy investment into the "success" of CDR by Aussie banks, Michael Lawrence, CEO of the Customer Owned Banking Association, says the initiative has made it "more difficult for smaller

banks to compete by tying up resources with little to no tangible return".

The review says that CDR is harming competition in the industry as mid-tier and regional banks face significantly higher compliance costs compared to major banks. Furthermore, it adds that these elevated compliance costs are forcing smaller banks to make "trade-offs", with "vital technology and customer projects being deprioritised".

"Australians have enthusiastically embraced digital innovations in banking such as mobile wallets and PayID, however uptake of the CDR has been comparatively low," says Bligh.

"It's time to go back to the drawing board. The current CDR regime isn't delivering for customers or enhancing competition and a new pathway forward is needed," she concludes.

Lawrence adds: "Before smaller banks commit more resources, we ask for a clear roadmap to ensure the CDR delivers on its original intent to improve competition. Forging ahead without addressing these foundational issues will further erode competition and divert essential investment away from improving customer outcomes and supporting local communities."

## BIS readies for live implementation of Project Nexus in Asia



Project Nexus, an initiative headed by the Bank for International Settlements Innovation Hub (BISIH) to enhance cross-border payments by connecting multiple domestic instant payment systems (IPS) globally, has delivered a "comprehensive blueprint" during its third phase of development, readying the way for a live implementation.

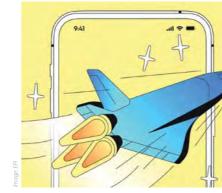
The next phase is the implementation and roll-out phase, which will engage central banks and IPS operators from India, Malaysia, the Philippines, Singapore and Thailand.

Here, Bank Negara Malaysia, Bangko Sentral ng Pilipinas, the Monetary Authority of Singapore (MAS), Bank of Thailand, Bank Indonesia (as a special observer), the Reserve Bank of India and select domestic IPS operators will work to establish a new entity called the Nexus Scheme Organisation (NSO). The NSO - to be wholly owned by the central bank and IPS cohort

dependent on specific domestic structures, with BISIH to maintain a technical advisory role through its centre in Singapore – will be responsible for the management of Nexus.

"Even with just the first wave of connected countries, Nexus has the potential to connect a market of 1.7 billion people globally, allowing them to make instant payments to each other easily and cheaply," comments BIS general manager, Agustín Carstens.

## **EPI launches digital wallet solution Wero in Germany**



The European Payments Initiative (EPI) has launched Wero, its digital wallet and instant account-to-account payments solution, with its initial rollout taking place in Germany. The solution is now available for customers of the German Savings Banks Association (DSVG) and DZ Bank, the central institution of the Volksbanken Raiffeisenbanken Cooperative Financial Network in Germany.

Further down the timeline, the EPI says it plans to launch Wero in Belgium through bank-insurance group KBC by the end of July, followed by a go-live in France scheduled for either September or October. These phased launches will lead up to a full-scale launch among the EPI's member banks, which includes banks from the Netherlands, the UK, Spain and Italy, "within the next six months". The first recipients of Wero will initially be able to use the service to complete person-to-person (P2P) transactions in under ten seconds via either a QR code, email address or phone number. Its remit will then be expanded to include the ability to transfer and request money to and from third parties, and to complete cross-border payments between users.

By 2025, Wero is expected to be able to support direct in-wallet payments to SMEs, online merchant payments via a QR code and the management of recurring payments, followed by in-store payment, expense sharing, programme integration and BNPL capabilities the following year.

## Visa and Mastercard to extend interchange fee caps in Europe

The European Commission (EC) says Visa and Mastercard have voluntarily agreed to extend the current caps for inter-regional interchange fees in the European Economic Area (EEA) until 2029.

In 2019, the world's two largest payment networks agreed to slash inter-regional interchange fees, also known as multilateral interchange fees (MIFs), by an average of 40% for transactions made in Europe using cards issued outside the EEA in response to an EU antitrust investigation. These commitments were due to end in November this year, but in a statement made last week, the EC declared that the two firms have voluntarily agreed to continue with the caps for another five years.

The Commission states that the fee caps for card present (offline) transactions will remain at 0.2% for debit cards and 0.3% for credit cards. Meanwhile, for card not present (online) transactions, the caps will remain 1.15% for debit cards and 1.5% for credit cards. "In the absence of caps, merchants would face the risk of excessive interchange fees passed on to them through their Merchant

Service Charges," the EC says.

It also reaffirms that the latest development "does not prevent the Commission from conducting investigations or opening proceedings should the Commission obtain concrete evidence showing that the current caps would not be appropriate anymore".

## Kuwait's central bank approves new instant payments system

Banks and financial institutions across Kuwait have gone live with WAMD, the country's new instant payment system that enables account-to-account money transfers using just a phone number, after the Central Bank of Kuwait (CBK) approved its launch. The system is facilitated by K-Net, which operates as a national payment gateway under the supervision of the CBK. Among the latest adopters of WAMD are the National Bank of Kuwait (NBK), Kuwait Finance House (KFH), and the country's first digital bank, Weyay Bank. The integrations signal the continued growth of instant payments across the Middle East. In Qatar, the central bank announced the launch of its instant payment service Fawran in March, while the Central Bank of the UAE (CBUAE) unveiled its Aani instant payments

system last year.



For a healthy dose of daily news on all things banking, fintech and payments head over to the FinTech Futures online news section.

This will be followed by a similar launch with Postbank and the retail arm of Deutsche Bank, Germany's largest bank, "at the end of summer".

The EPI is made up of 16 European member banks and payment service providers who have joined forces with the common goal "to offer a unified digital payment service for all European businesses and citizens", the group says.

## The Next-Generation Decision Platform

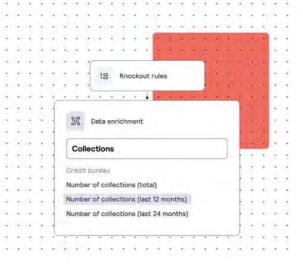
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# **FINTECH FEED**

### **THE NUMBER GAMES**

## 600%

increase in operating profit reported by UKbased Atom Bank; the challenger bank has released its "strongest ever financial results" with £27 million of operating profit for 2023, marking its first full year of profit both before and after tax

## 15%

reduction in workforce planned by a Unit, a USbased Banking-as-a-Service (BaaS) start-up as a result of a "slower than expected revenue growth"; the fintech previously raised \$100 million through a Series C round in 2022 at a valuation of \$1.2 billion

# \$2.25 million

fine issued by India's Financial Intelligence Unit (FIU) to cryptocurrency exchange Binance as issued for allegedly violating the country's Prevention of Money Laundering Act

# £33 million

paid by iBusiness Funding, a software and lending service provider in Florida, for Funding Circle's US business

# \$150 million

funding round planned by South African digital challenger TymeBank ahead of launching an IPO in 2028; according to CEO and co-founder Coenraad Jonker, the bank expects its "Series D capital raise at unicorn valuation" to be completed in Q4 this year

# £150,000

in cash paid by an undisclosed buyer for Capital Currencies, a currency exchange and international payment services provider to SMEs, and a subsidiary of Finseta (formerly known as Cornerstone FS); Finseta acquired Capital Currencies just two years prior for £586,000, with a maximum total consideration of £3 million

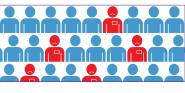
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## 120

jobs to go at small business lending platform Funding Circle as part of a £15 million savings to simplify and streamline its UK business

## 20%

of workforce to be cut by blockchain infrastructure platform Paxos, despite its claims of a healthy balance sheet, according to an internal email; the move is expected to impact around 65 positions

## **50%**

revenue increase - to £682.2 million - reported by UK challenger bank Starling for 2023; the bank also reported its third year of profitability, with pre-tax profits jumping 54.7% to £301.1 million

## 15

months was the lifespan of Apple's buy now, pay later (BNPL) service – Apple Pay Later – that enabled users to borrow \$50-1,000 and pay back the loan over four instalments spread over six weeks; the tech giant plans to offer instalment loans instead via a string of global partnerships



### **THEY SAID IT...**

"Al is going to displace jobs at an astronomically faster rate. You're really going to see that happen over the course of the next few years, not decades. I really

want us to be thoughtful about how we're using technology and how we're focusing our people to work on higher value parts of the value chain, and doing that proactively before it's done for you." Vidya Peters, CEO of Datasnipper, speaking at Money20/20 Europe

• Read the full article on the FinTech Futures website here

# TRENDING

# Jaywan to be a good FIT for UAE payment options

The Central Bank of the UAE (CBUAE) is launching a domestic card scheme – dubbed Jaywan – through its subsidiary, Al Etihad Payments.

Developed in partnership with India's NPCI International, Jaywan serves as one of the country's nine Financial Infrastructure Transformation (FIT) initiatives, launched last year, and intends to increase the availability of payment options with a specific focus on e-commerce, digital transactions and financial inclusion.

So far, the progress of this programme has been marked by the launch of the central bank's instant payment platform Aani in October, and its partnership with infrastructure and IT solutions provider Core42 to establish "global standards for the open finance sector" in April. According to Jan Pilbauer, CEO of Al Etihad Payments, the roll-out of Jaywan will be actioned "in phases", with acquirer acceptance currently being prioritised over customer issuance, and with e-commerce acceptance due to follow "later in the year".

Among the first acquirers to activate the scheme ahead of its roll-out is the Dubai-based digital commerce company, Network International, which is set to introduce Jaywan to the 60,000 merchants it serves across the UAE.

Nandan Mer, Group CEO of Network International, describes the launch as "a vital step to digitalising the UAE economy".

### "[The roll-out of Jaywan is] a vital step to digitalising the UAE economy."

Nandan Mer, Network International

## Wero in as Germany sees an end to Paydirekt

A group of banks in Germany are reportedly preparing to end their support of Giropay operator Paydirekt in favour of the new European Payments Initiative (EPI).

Paydirekt was launched in late 2015 by a consortium of major German banks, including Deutsche Bank, Commerzbank, Sparkassen and Raiffeisenbanken, to enable online shoppers to pay directly from their bank accounts.

The system later merged with the online payment system Giropay, founded in 2006, and peer-to-peer (P2P) payment service Kwitt in 2021, to further unite domestic mobile and online-based payment capabilities across Germany as a direct competitor to the likes of PayPal.

However, the future of the merged company was called into question in June with a spokesperson telling Finanz-Szene:



"There are currently votes at shareholder level on the future of Giropay or Paydirekt GmbH as the operating company."

Speculation of the system's potential demise coincides with the imminent arrival of Wero, the EPI's digital wallet solution which is set to launch in Germany, France and Belgium by mid-2024, according to a recent statement.

In addition to its pan-European connectivity, with its launch to be "followed by the Netherlands and other countries in the years to come", Wero also promises to deliver "secure and fast payments, P2P transactions, online shopping capabilities and loyalty programmes".

This is supported by the account-to-account (A2A) infrastructure also being developed by the EPI, as well as the acquisitions of Currence's iDEAL solution and Payconiq International (PQI) last year.

"As physical and digital experiences continue to converge, we're pushing the boundaries of what's possible." Jorn Lambert, Mastercard

# Mastercard eyes online biometric passkeys

Mastercard has affirmed its "global commitment" to phasing out the requirement for manual card entry during online purchases as part of its renewed effort to make e-commerce "safer and more accessible for everyone".

The payment network currently leverages "tokenisation, streamlined guest checkout and payment passkeys", with the overarching aim of facilitating "a consistent experience across devices, browsers and operating systems" and phasing out manual card entry for e-commerce in Europe by 2030.

In practice, this effort will see Mastercard replace traditional card numbers with a "secure token" through its tokenisation service (introduced back in 2014), improve the integration experience of its online checkout solution, Click to Pay, among merchants and bank partners, and eliminate the need for passwords by introducing biometric-powered payment passkeys for online transactions.

"As physical and digital experiences continue to converge, we're pushing the boundaries of what's possible," states Mastercard CPO, Jorn Lambert.



# FINTECH FUTURES

# Nominations are now open!

Nominations for the **Banking Tech Awards** are open to banks, financial institutions, software providers, teams and individuals from across the world

This year will be our biggest awards to-date as we are excited to be celebrating our 25th anniversary!

The awards ceremony is set to take place on 4 December 2024 and will be held at the fabulous Royal Lancaster Hotel in London.

To learn more about the awards and see the full list of categories, visit **bankingtechawards.com** 

## Submit nomination



# Australia to take holistic approach to regulation

The Reserve Bank of Australia (RBA) is to commence a review of the country's retail payments regulation with a focus on "encouraging the payments industry to address efficiency, competition and safety issues itself".

Ellis Connolly, head of payments policy at RBA, says the review will take place once the Australian government completes its evaluation of the current Payment Systems Regulation Act 1998 (PSRA), which also outlines the scope of the RBA's regulatory powers.

This initial hurdle will seek to update the definitions of a payment system and participant "so that newer players can also be regulated if necessary", as well as assess "some systems and participants that are increasingly prominent in online retail payments", such as payment gateways, payment facilitators, digital wallet providers and buy now, pay later (BNPL) services.

The completion of this remit will be followed by "a holistic review of retail payments regulation" conducted by the RBA,



Connolly confirms, with a specific focus on the transparency and cost of payment services for consumers and merchants, surcharging frameworks, mobile wallets and cross-border payments.

The central bank will look to reform various policy issues relating to the card payments.

These include: the cost of card payments for end users (including scheme fees and international card transaction costs); how the least-cost routing of online debit card transactions can be achieved to the benefit of lower merchant costs; the promotion of competitive payment services among e-commerce platforms; and the introduction of tokenisation standards for online card payments.

For BNPL, Connolly says the RBA plans to readdress certain no-surcharge rules for service operators, which would in effect enable retailers to pass operational costs on to BNPL consumers.

"In 2021, the RBA concluded that merchants should be allowed to surcharge BNPL services," he said. "The RBA's view at the time was that any benefits of no-surcharge rules in terms of supporting new entry into the payments market was outweighed by the costs in terms of efficiency and competition in the payments system.

"However, it was not clear that the RBA had the power to require the removal of these no-surcharge rules. After the reforms to the PSRA, the RBA plans to revisit this issue as part of a broader review of whether the RBA's surcharging framework remains fit for purpose."

## Vipps MobilePay doesn't like its buttons pushed

Vipps MobilePay, a Nordic mobile wallet comprised of Norway's Vipps and Denmark's MobilePay, has unveiled that its 11.6 million users can now transfer money between Norway, Denmark and Finland.

The joint enterprise describes this move as a "top priority" ever since Vipps and MobilePay's merger in 2022.

In an endeavour to say "goodbye to long IBAN numbers and tedious button-pushing", users within the three listed countries are now able to tap into P2P payment capabilities by using their phone numbers, says Rune Garborg, CEO of Vipps MobilePay.

"This is the first of many steps we are taking to bring the Nordics even closer together," adds Garborg.

Transferring funds cross-border will cost users 4% of the transaction amount. However, individuals sending money within the same country and currency will not be charged.

The firm also revealed plans to expand the service from just P2P transactions to enabling payments to the 325,000 merchants and institutions that use Vipps MobilePay across the three countries.

Moreover, Vipps MobilePay hints that "in the fall of 2024" Swedes will be able to tap into the solution following Vipps' entry into the Swedish market.

# **DORA** and your uncle Joe

### By Leda Glyptis

I should know better than to get into conversations about politics with people whose opening statements include four factual inaccuracies presented as gospel.

And I should know better than to enter conversations about technology with people who start their sentences with "you don't understand".

Because they have two things in common, these conversations and these people.

Firstly, they are not about what they are about. If you actually have the conversation, you will spend an hour you won't get back saying words about facts but really talking about emotions with people who have made a choice... and then put an explanation on it. Like a hat. And they don't want to talk about their feelings, the emotive reasons that led them to make whatever decision they made. No sir. They want to talk about their facts. Not facts. Their facts. The facts that suit their feelings. Like a hat.

The second thing these conversations have in common is that they are manifestations of the fact that most people are very good at dealing with complexity in the abstract or at a distance but when complicated thoughts come close to home and threaten to rearrange the furniture of their own mental landscape... then complexity is unwelcome.

But since we can't say that without looking ignorant we will dismiss it as

"I don't like this' is the strongest emotional driver humans ever experience. It determines most of what we do."

Leda Glyptis

wrong or not applicable in this situation. This is not entirely true but it is altogether more comfortable, so there.

The problem is... it's an election year in, like, seven countries? Probably more. So... many of us will find ourselves at a dinner table opposite uncle Joe who is very keen to explain to you why his choice to vote a certain way is not just right... but logically sound.

And maybe you can avoid uncle Joe. Maybe you can make sure you sit far away from him, don't take the bait or ensure you never get invited back by calling him a wilful ignoramus after the fourth time he cites a nonsense as fact, you counter and he moves on to the next thing pretending they are all interchangeable.

Because uncle Joe has a preference and would like that preference to be treated as true, thank you very much. It's only your opinions that are subjective, didn't you know?

We all have an uncle Joe or ten. It may be your friend's partner, your neighbour, your colleague. It may be your boss and the conversation may be eerily similar and yet not about politics. Because the same mechanism of recoiling from complexity when it gets too close to the familiar is playing itself out in offices the world over.

Uncle Joe style, we are capable of understanding complexity out there... but the closer it gets to our existing business, existing operating model, existing ways of working... the more likely we are to explain it away, cherry-pick and end up with explanations that sound compelling but are stretched, over-generalised and selective. They are fundamentally... not entirely true. Although they contain enough truth to sound plausible and be comforting in their snug fit with our preferred worldview.

Uncle Joe will justify his political beliefs like that, in the same way your CTO will justify why there are compelling reasons for the modernisation he is not

undertaking. The risks he is deferring. The can he is kicking down the road. The reasons sound sound. His reasons are actually important considerations. They are just not... reasons.

He says things about migration risk and resilience testing and system amortisation schedules. He says things that are true and sound sensible but when stacked up they don't add up to where he is trying to get to. Your CTO, not uncle Joe. Although... also uncle Joe.

"I don't like this" is the strongest emotional driver humans ever experience. It determines most of what we do. Sometimes we call it. Sometimes we pretend there is analysis at work. Sometimes the analysis comes after the fact and it proves our instinct. Glory be. Sometimes it comes after the fact and shows that we are just scared or lazy and

actually the thing we are rejecting because

powerful one. Or do we ignore the facts that don't suit and shout louder?

Well... it depends. When it comes to uncle Joe, then... probably the latter. You'd be amazed how resilient he is when it comes to bending the facts to suit his preference. But when it comes to work?

Every decision dodged... every corner cut... everything we didn't do because it was uncomfortable and a little scary and not how we would have preferred it? Every uncle Joe moment that added to our operational complexity, legacy estate and technical debt. Every decision we dodged because it was too complicated to think it through, too many variables, too many risks... every single thing we didn't do and explained away is still there. Just like the facts uncle Joe ignores. Still there.

Only unlike uncle Joe, our organisations have to reckon with the Digital Operational Resilience Act (DORA).

Some 22,000 organisations and counting, to be precise, that will have to look at their technology estate and their partnerships estate... the choices they did or didn't make... and nobody will care for their reasons and their preferences and their preferred facts. DORA is a great leveller. Do the choices you made increase your resilience and stability? Or do your choices create risks that may jeopardise the



#### FOOD FOR THOUGHT

we don't like it, is not how we perceive it. We are wrong in our analysis and therefore not informed in our choice.

Then what? Do we follow the evidence to a different choice? Do we double down on the choice saying, "sod it, this is what I choose for reasons that may not be lofty but are true"... because fear is a reason. A

stability of the entire edifice?

Did you allow complexity to accumulate around your preferred configuration of facts, systems and activities or did you tackle it head on? Does the complex thinking you avoided in order to retain things that were comfortable create complexity you now need to account for?

Did you add new technology to your estate without streamlining your operating model, because it was too complicated? (Enter left, the chorus of "you don't understand").

Did you accumulate technology operating to different release cycles and SLAs, different resiliency testing expectations and with slightly different risk modelling to boot?

Did you deal with partners and vendors over here... homegrown systems over there and governance yonder?

Did you, at times find that bringing everything together and thinking it all through to its logical conclusion was complicated, scary and would really challenge the fundamentals of how your organisation is set up today and sort of baulked away from some of those hard conversations choosing instead to believe you don't need to/have time/doesn't apply to you (delete as appropriate)?

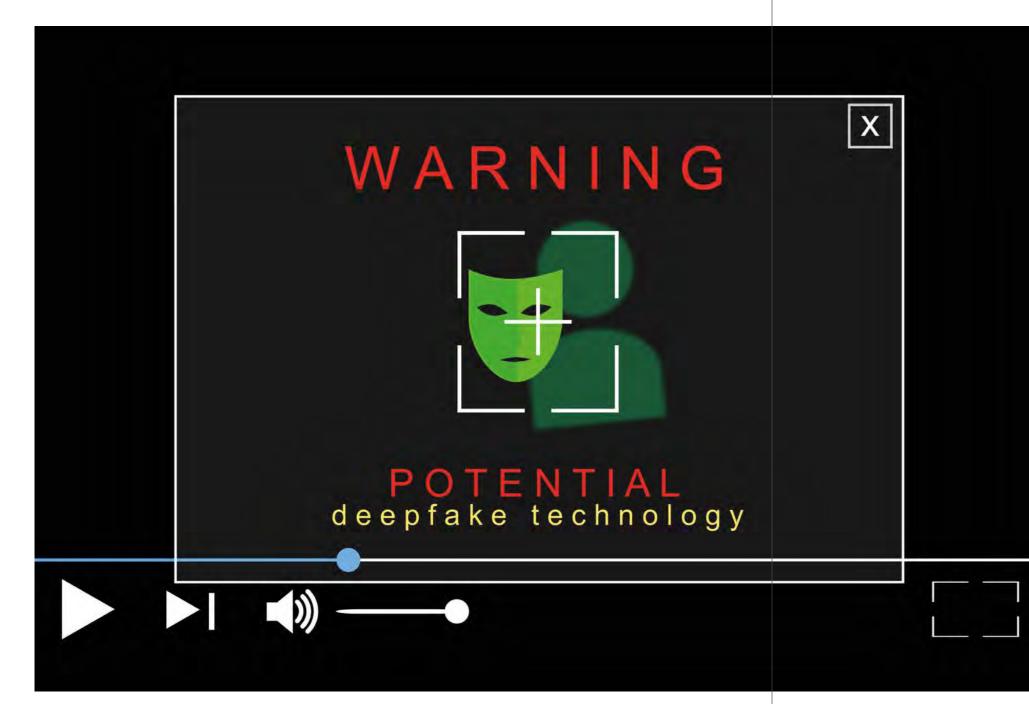
Did you, ultimately, allow uncle Joe to make some of your technology decisions?

DORA can't help you with the dinner time conversations, I'm afraid, but it will put a line through all the "you don't understand" lamentations at work once and for all.

Because DORA has no appetite to understand why your selective facts are better than the whole truth... and neither do I, uncle Joe.

#LedaWrites





# Protecting against deepfakes in the era of LLMs

By Ni Tao, freelance writer at FinTech Futures

The rise of AI has had many by-products, and the use of deepfakes in financial scams is among the most unpalatable ones.

The emergence of large language models (LLMs) has further heightened the risk of deepfake technology being exploited for fraud, in particular in the financial sector, where stakes are the highest.

A cat and mouse game is unfolding worldwide, as regulatory bodies and fintechs struggle to stay ahead of fraudsters, working tirelessly to prevent or minimise user losses.

#### **HUMAN-LIKE QUALITIES**

I recently interviewed Lei Chen from FinVolution Group, who explained that LLM-generated voices display striking human-like qualities, making it challenging to discern authenticity.

FinVolution Group is a US-listed fintech platform providing customers with credit services and anti-fraud technologies in the pan-Asian region and beyond.

Chen, vice president of FinVolution and head of its big data and Al division, adds that earlier attempts only produced voices

that sounded similar. By contrast, modern deepfake technology creates textually coherent and free-flowing dialogues that closely mimic real human conversation, raising the likelihood of deception. The recent release of GPT-40 by OpenAl highlights just how good technology is getting at mimicking human speech. Based on text-to-speech (TTS) technology, the model can parse text prompts to create highly natural and emotionally rich voice outputs. The result is an almost flawless imitation

that complicates the task of detection.

Chen views GPT-40 with both delight and concern. On the one hand, it represents yet another significant step toward realising artificial general intelligence. On the other, he is highly skeptical about the potential risks it brings.

One immediate concern around the advancement of AI and deepfake technology involves financial transactions, where the elderly and even financial professionals are at a higher risk of being deceived by fraudsters.

In February this year, an accountant at the Hong Kong branch of a multinational company unwittingly transferred HK \$200 million across 15 transactions, as per the instructions of who he believed were the company's chief financial officer and other members of staff during a video meeting - only to later realise it was a sham and that all the other people on the call were deepfake imposters.

There has been an alarming spike in similar cases in recent years.

#### **RAMPANT VOICE FORGERY**

According to a research report by Sumsub, an identity verification service provider, the number of reported deepfake-related frauds jumped tenfold across all industries globally from 2022 to 2023. Notably, fraud attempts in the

Philippines skyrocketed by a whopping 4,500 percent year on year, followed by nations like Vietnam, the US and Belgium, the Sumsub study finds.

Chen says that while fraudulent videos garner more attention globally, a bigger challenge lies in voice forgery. This is because voice cloning and recognition present higher difficulties compared to images, according to Qiang Lyu, an algorithm scientist at FinVolution Group.

Human speech, being a onedimensional continuous signal, involves more intricate processing logic than that for two-dimensional images, he notes.

What's more, human voices encompass various personal traits such as accents, intonation, speech habits and dialects making them more complex than images or videos.

Lyu believes that the processing of voices is lengthier, prone to interference and technologically more challenging.

"This leads fraudsters outside China to prefer fake videos," he says, adding that image and video cloning still dominate in overseas markets such as Indonesia, the Philippines and Pakistan, where FinVolution has a presence.

As the global tech community pivots from traditional deep learning models to LLMs, detecting synthesised voices is even trickier. Therefore, future advances in fake voice recognition will rely on LLMs for finer detail capture, Lyu claims.

FinVolution has been on the guard against voice-based fraud attempts in the markets where it operates. Last year alone, the company logged and intercepted more than 1,000 such cases in China within two to three months.

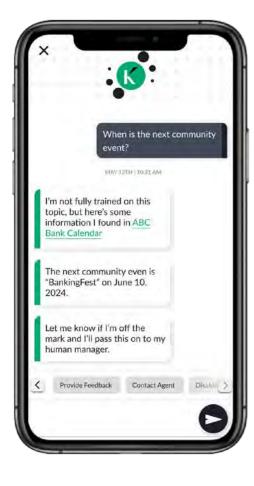
#### MODELLING THE POLYGRAPH

In the face of a constantly evolving AI battle, bolstering defence mechanisms to protect consumers and third-party

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To better spot financial hoaxes employing cloned voices, novel approaches are needed alongside the use of sophisticated questioning.

He points to the polygraph, which is designed to detect subtle tremors in conversations to probe emotional fluctuations or other tell-tale signs of lies.

Lyu suggests modelling the polygraph to capture these nuances with the aid of LLMs.

"We can sift through vast amounts of real data to pinpoint minute deceptive details," Lyu explains. "These details can then be categorised to determine if they are genuine or not."

In addition to combatting phone scams involving fake voices, FinVolution is also exploring ways to leverage voice recognition technology to better serve users and protect their financial wellbeing.

With the ascent of technologies such as digital personas and the metaverse, more individuals will have Al-powered personal assistants. This exposes them to elevated risks of identity theft.

Likewise, financial professionals will increasingly be tasked to decide whether a call is from a real person and make more nuanced judgments.

Lyu says that call centres are in greater need of capabilities to bust illicit activities and fraud. This entails gradually amassing databases of illicit activities and fraud samples.

Consequently, when high-risk calls occur, they can be promptly identified and flagged, alerting users to exercise caution during transactions.

On the front of consumer protection, FinVolution has integrated voiceprint services into its apps, enabling users to record their voices during registration.

These voiceprints can later be used for ID verification, expediting sensitive operations such as changes to credit limits.

In the case of malicious attempts to acquire user identities, traditional verification methods such as behavioural analytics or document checks may not be enough. For instance, in the Philippines, FinVolution has encountered numerous cases where local IDs are sometimes worn out, posing authentication challenges.



"Clear legislation and stringent enforcement are necessary, both in China and globally, to ensure the proper use of personal data and privacy." Lei Chen, FinVolution

In response, the fintech introduced facial and voiceprint recognition technologies to detect fake identities, assisting the local credit risk team.

#### **PROACTIVE REGULATION**

Above all, Chen emphasises the importance of collaboration with regulatory authorities in combatting deepfakes. "Clear legislation and stringent enforcement are necessary, both in China

"Clear legislation and stringent enforcement are necessary, both in China and globally, to ensure the proper use of personal data and privacy," he says. Indeed, proper acquisition and use of sensitive data like voices are at the heart of a current debate on AI ethics. Some

#### INNOVATION

commentators argue that financial and social platforms have an obligation to disclose if AI is involved in communications or mark content produced by AI. Others call for legislation to be stepped up to keep pace with technological progress.

By labelling datasets, fintechs like FinVolution are able to promptly detect instances of misuse. This proactive strategy can effectively mitigate potential damages before they escalate.

Fostering innovations in regtech is crucial. "Most commercial institutions focus on applying technology in business. They may overlook systemic risks," Chen says.

In his opinion, this is an area regulators can play an active role in, uniting ecosystem partners to drive collective progress in fighting fraud.

On the technological side, Lyu underscores the importance of data governance. Stricter regulations and security measures can raise the cost for fraudsters to access the computing power and data necessary to commit a scam.

Lyu believes it is the mission of fintechs like FinVolution to showcase superior Al capabilities.

"This can act as a potent deterrent," he says. "Persistent efforts can dissuade reckless Al usage, given our detection capabilities. We must foster a spirit of technology for benevolence."

# **Kiosks: innovation for** a new era of banking

#### **By Dave Wallace**

The other day, I spotted a rare creature in the wild – a new £50 note.

I was standing at a bar, and the person next to me, who I knew, was trying to pay for a drink with this elusive and not-oftseen denomination.

There was a bit of toing and froing between said individual and the bar staff. Eventually, they said that the bar was card only. The person turned to me and said: "That's strange. They accepted cash earlier on in the evening." And as they didn't have a card or phone, I ended up paying for the round... We discussed

what had occurred and concluded that the bar had a policy of not

this might be due to the potential for fraud due to the attraction of counterfeiting larger denominations. We also chatted about perceptions of the origins of large denominations and the stigma attached to them – in essence, people being paid for services in cash to avoid tax. As I say, it is

accepting £50 notes. We speculated that

perception and not reality. This interaction reminded me that although I may live in a cashless world, many people rely on physical money and are increasingly penalised and treated with

suspicion for doing so. SO WHAT ARE

THE FACTS? Link, the ATM network, has just published an

update to its Access

to Cash Review, which it first undertook five years ago. They interviewed more than 2,000 people. Key highlights include:

- Nearly half the UK population believes the country is moving towards a cashless society.
- · This belief persists despite significant changes in cash usage and concerns about a cashless society.
- The number of people who do not carry cash has tripled since 2019.
- Cash usage for everyday purchases has significantly declined.
- Most people carry £10 to £20 as a backup in case they cannot pay by card. Despite changes, 71% of people still rely on cash and have used it in the past two
- Daily cash withdrawals from ATMs are £209 million, down 33% from 2019.

weeks.

- 48% of people find the idea of a cashless society problematic, slightly up from 2019.
- Conversely, 39% do not find it problematic, an increase of 6% from 2019.

Despite the overall downward trend in cash usage, a lot of cash is still being withdrawn and used in circulation.

Many banks have been closing branches, especially in rural areas, reducing access to essential cash services for small businesses. SMEB, a company identifying this issue, aims to fill this gap by providing banking and cash management solutions tailored to small businesses.

According to Andrew Martin, SMEB's CEO, the concept for its new fintech solution emerged during the Covid-19 pandemic, recognising significant shifts in cash usage and banking needs.

The primary product is a self-service banking kiosk, or "cube", positioned in secure, high-footfall locations like shopping centres and community markets. These kiosks provide private areas for cash transactions, ensuring security and privacy for users. The kiosks allow SMEs to deposit cash with instant credit, with plans to upgrade the offering "to provide free access to cash and then banking services so the cube becomes a financial focal point its website.

SMEB is also an authorised payment institution, a principal member of Visa and Mastercard, and connected to open banking and ClearBank for comprehensive banking services, offering a suite of services through a "super-app" designed to streamline various financial tasks, including banking, lending, insurance and advisory services. It focuses on bricks-and-mortar businesses such as butchers, bakers, restaurants and hairdressers, which are traditionally cash-heavy.

Deployment plans include installing 250 terminals by the end of the year, with a target of more than 2,000 devices in three years. Partnerships with national retailers could potentially facilitate this.

Security is a primary focus, given the nature of cash transactions. The kiosks are installed in secure locations with existing CCTV coverage and designed for privacy. SMEB performs rigorous know your

(AML) checks to manage risk, setting credit limits based on a business's financial history and turnover.

SMEB's goal is to provide a comprehensive financial solution that goes beyond traditional banking. Integrating various services into a single platform aims to save SMEs time and effort in managing their finances. The company also envisions expanding the product to consumers, fostering a local micro-payments ecosystem and recycling cash within communities.

after a few kiosks that Yellow Pages had scattered around Southeast England. They offered access to Yellow Pages information through an interactive interface. After that experience, if you had told me that banking kiosks would be a new banking innovation 30 years in the future, I would have raised an eyebrow.

#### THE HEART OF THE MATTER



At the start of my career, I looked

However, this is an excellent example of

for the community", the company writes on customer (KYC) and anti-money laundering the changing face of banking and banking channels, giving rise to innovations using old-school technology and linking it with a new app-based approach to solve a realworld need.



**Dave Wallace** is a user experience and marketing professional who has spent the last 25 years helping

financial services companies design, launch and evolve digital customer experiences.

He is a passionate customer advocate and champion and a successful entrepreneur. Follow him on X @davejvwallace and listen to the Demystify podcast he co-hosts.

# Payments: striking a balance between speed and safety

By Sujata Dasgupta, global head of financial crime compliance advisory, TCS

Over the last decade and a half, we have undoubtedly witnessed a payments revolution – from three-day cheque settlement to instant credit, from clearing house-specific payment windows to on-demand 24×7 execution, from bank branches and internet banking to omnichannel payments.

While these tectonic shifts have immensely benefited consumers in terms of convenience and speed, they have also inevitably created opportunities for criminals to commit financial fraud and launder money quicker, with much less friction.

As consumers around the world are looking for faster and more convenient ways to make payments – both domestic and cross-border – how can financial institutions strike a balance between speed and safety to meet consumer demands while preventing fraud and crime?

#### **INSTANT PAYMENTS: AN** UNSTOPPABLE GLOBAL JOURNEY

The Council of the European Union recently adopted a new regulation to make instant payments fully available in euros to consumers and businesses in the EU and in EEA countries. This mandates all payment service providers (PSPs) to offer the facility to their customers to send and receive euro payments within 10 seconds, 24/7, across the EU and EEA.

The EU's journey with instant payments started in 2017 with the launch of SEPA instant credit transfers, which initially only saw the participation of a few banks. With growing adoption and increased demand from consumers and businesses who have witnessed the benefits of instant settlement, the EU has now passed the regulation for all PSPs to make instant payments available and affordable across the EU and EEA.

Across the world, instant payments have disrupted the finserv ecosystem of several nations, channelling a huge volume of transactions into this route. Some such examples are the UK's Faster Payments, India's IMPS (Immediate Payment Services), Africa's RPP (Rapid Payments Program) and Brazil's Pix. Australia's New Payment Platform (NPP), the US' FedNow and Canada's upcoming RTR (Real-time Rails) also promise similar successes.

#### SPEED AND CONVENIENCE: INSTANT **PAYMENTS AND THE POTENTIAL** FOR FASTER FRAUD

Instant payments are executed in real time. In most cases, funds reach the beneficiary's account within 10 seconds of initiation by a consumer. So, if a fraudulent payment is made from a customer's account, the money is lost within 10 seconds, allowing the customer no time to inform the bank

and block the funds from leaving. The criminal on the other hand would instantly receive the money in their bank account and then transfer it within seconds to some other bank, thus making it impossible to recover the funds.

Authorised push payment (APP) fraud and scams have become increasingly common across the world. Criminals use various social engineering methods to target unsuspecting consumers, convincing them to make instant payments into their bank accounts. By the time consumers realise it was a fraud, the criminals would have moved the funds across several banks and countries, with no chances of recovery.

#### **PROTECTING CONSUMERS FROM CRIMINALS IN REAL TIME**

Fraud prevention and detection for traditional payments has evolved and matured during the last decade. However,

Confirmation of Payee (CoP), first CoP/VoP can help in cases where Several PSPs have been piloting

instant payments have witnessed a phenomenal surge in a very short time, with overwhelmingly high volumes moving through these payment rails. Fraud prevention and detection mechanisms for such payments are still maturing as the industry is banking on consumer awareness on one hand and advanced technology on the other to stop instant payment fraud. introduced in the UK, serves as a strong fraud prevention method as the consumer can verify the payee/beneficiary name against the account number before authorising the payment. Similar checks are now being introduced in the EU through Verification of Payee (VoP) and IBAN name confirmation for domestic and cross-border payments within the EU. a genuine customer is authorising a payment. But what about payments that are fraudulently made by criminals through identity theft, using stolen cards and devices, account takeover and other such deceptive means? Multi-layered fraud detection models can help identify fraudsters by accumulating data from the network layer (IP address and geolocation), device layer, application layer (web browser or mobile app) and account layer (bank/card account) during the instant payment initiation journey. Anomalies aggregated in each layer can help to detect fraud even before the payment is submitted by a criminal, and in such cases, the instant payment can be blocked. behavioural biometrics tools that can track user behaviour while making a transaction - such as how the user handles the device and keypad usage. These tools can test behaviour by having the user make a payment while on an active phone call and taking instructions and can spot the use of a remote access tool (RAT) to hijack a legitimate user's session. Unusual behaviour and fraud triggers from such

tools can be used to stop such payments from execution instantly. Machine learning models are

experiencing increasing adoption in traditional payments for fraud detection, and the same are being explored for instant payments as well. While the effectiveness of ML models in fraud detection is now

well established, what will be critical for instant payments is the response time of such models – industry expectations are somewhere around 200 to 500 milliseconds.

#### MONITORING INCOMING INSTANT **PAYMENTS FOR FRAUD: A VIABLE APPROACH?**

Until now, only outgoing payments have been subjected to monitoring for fraud detection, and this is performed by the sending bank. But with the UK's upcoming PSR3 regulation, both sending and receiving banks will have to shoulder APP fraud loss reimbursements on a 50:50 basis. This will now necessitate recipient banks in the UK to monitor incoming payments for fraud as well, as half of the APP fraud loss liability now shifts to the receiving bank.

Monitoring incoming instant payments for fraud in real time will mark a paradigm shift in fraud prevention. PSPs will need to implement new systems and processes to accomplish this. As most payment formats now use the ISO20022 standard with richer data, recipient banks can verify additional fields beyond the current practice of account number alone at most banks. Verification of payee name, payment purpose, payer-payee pair history, transaction history for similar incoming payments from first-time payers and so on can trigger ML models to identify fraudulent receipts. However, the treatment of the alerted fund - whether to hold off from crediting the payee until the investigation is over or block and return the payment to the sending bank instantly - will need to be agreed as there are no such standards currently.

The UK's contingent reimbursement model for APP fraud victims set the precedent for some other regions to come up with similar models, such as the EU's reimbursement model for bank impersonation scams. So, PSR3's 50:50 model might also inspire a similar shift in liability to receiving banks in other regions soon.

As instant payments continue to expand their footprint across the world, banks and regulators globally must start collaborating on frameworks, standards and best practices for fraud prevention by both sending and receiving banks, which can be uniformly adopted in each jurisdiction.

# From castles to banking ecosystems

By Dharmesh Mistry

*"I believe that the more you know about* the past, the better you are prepared for the future." - Theodore Roosevelt.

The history of banking software is a fascinating tale of adaptation, driven by the relentless march of technology and ever-changing customer demands.

This journey began with monolithic fortresses built in mainframe languages like COBOL, which transitioned through the component-based era dominated by Java and C++ and finally arrived at the dynamic world of microservices.

This issue, I take a deeper dive into this

evolution, exploring the strengths and limitations of each stage so that you can appreciate the future of banking software.

#### **THE COBOL CASTLE: Stability**

and security in a bygone era In the very early days of computing, software was written in machine code, or first-generation language - essentially, these were instructions encoded in zeroes and ones.

Next came second-generation language, where mnemonics provided instructions. It was not until the arrival

of mainframe computers, which offered better storage and processing power and provided support for verbose third-generation languages like COBOL (COmmon Business Oriented Language), that programming computers became much more accessible.

It was not possible to run software programmes simultaneously so that different programmes could interact with each other. Hence, banking solutions were developed as monolithic applications: single programmes encompassing all banking functionalities - accounts, transactions, loans, and everything in between. Imagine a huge castle housing every department of a bank under one roof.

This approach offered:

- Stability: COBOL was a mature and reliable language, ensuring consistent operation.
- Security: Centralised data storage within a single system minimised vulnerability.
- Simplicity: Development and deployment were straightforward due to the unified codebase.

However, these fortresses had cracks:

- functionalities became akin to adding extensions to a completed building - a complex and potentially disruptive endeavour, not least because people were already using the building.
- slow and cumbersome, hindering innovation.
- on specific COBOL vendors for maintenance and upgrades, limiting flexibility.

Remember that these systems were developed for staff as the end users. So, there was no concern for scalability, as mainframe access for a concurrent number of staff could easily be accommodated.

#### THE JAVA COMPONENT REVOLUTION: Breaking down the walls for agility

As the internet heralded a shift in the financial landscape towards a more digital future, the limitations of monolithic systems became increasingly apparent, not least because of the need to serve millions of customers rather than thousands of staff.

Enter the era of component-based architecture, spearheaded by Java. This approach broke down the monolithic structure into smaller, self-contained components, each with a well-defined function. Imagine transforming the previously monolithic castle into separate buildings - one for accounts, another for transactions, and so on. Although separate, these buildings were bound in one location, like a village with a stone wall surrounding it.

- · Improved agility: Individual components could be developed and deployed independently, allowing for faster innovation.
- Enhanced maintainability: Fixing bugs

Scalability: Adding new features or Agility: Changes and updates were

Vendor lock-in: Banks often depended

This componentised approach offered:

or updating specific functionalities became more manageable.

Vendor flexibility: Banks were no longer restricted to a single vendor for the entire system.

However, component-based systems still had limitations:

- Integration complexity: Developing robust communication channels between components added a layer of complexity.
- Scalability bottlenecks: While some components could scale independently, overall system scalability could still be hindered.
- Software flexibility: Components had to reside on the same computer to interact with each other.

#### THE MICROSERVICES METROPOLIS: A dynamic ecosystem for innovation

The need for even greater agility and flexibility paved the way for microservices architecture. This approach deconstructs the component-based system further, creating a collection of even smaller, highly focused services.

Each service has a single responsibility, such as account verification or loan approval. Leveraging internet protocols, these components no longer had to reside on the same machine. Imagine transforming the separate buildings of the component era into specialised microstructures, each handling a specific task within the broader banking ecosystem without the physical restriction of residing on one computer.

Microservices offer:

- Unmatched agility: Independent development, deployment, and scaling of individual services enables rapid innovation and experimentation.
- Resilience: If one microservice fails, the entire system isn't compromised. Other services can continue to function, minimising downtime.

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- **Openness:** Microservices rely on APIs that facilitate communication and integration with external systems, paving the way for open banking initiatives.
- Flexibility: Unlike the previous generation of technology, these services need not be on the same computer or even the same network - they can be accessed with platformagnostic APIs across the internet.

However, the microservices approach also comes with its own challenges:

- Complexity management: Coordinating and managing a multitude of services requires robust orchestration and monitoring tools.
- Testing challenges: Testing the interactions and dependencies between numerous microservices can be intricate.
- Security concerns: The architecture's distributed nature creates a wider attack surface, necessitating a more comprehensive security strategy.

#### THE ROAD AHEAD: Welcome to banking technology plus

The evolution of banking software isn't a clear-cut shift from one architecture to another. As technology continues to evolve over time, every bank, no matter how new, will eventually encompass a mix of technology from different eras.

Instead of trying to replace an entire system, many banks now realise that building around their core systems is possible. This mitigates the need for hugely risky and expensive multi-year projects while leveraging modern technology to address business needs in a much faster timeframe. This process is commonly called "hollowing out the core," essentially removing responsibility from legacy systems gradually without the need to replace their core systems.

As such, these banks are adopting a hybrid approach, leveraging the strengths of each stage. Legacy COBOL systems can be integrated with microservices for specific functionalities, creating a bestof-both-worlds scenario. As technology continues to evolve, the banking software landscape will undoubtedly keep pace,

with new advancements and architectures shaping the future of financial services. I call this new landscape 'banking technology plus'.

#### **BANKING TECHNOLOGY PLUS**

I define banking technology plus as a core modernisation strategy, which means the bank's legacy core banking system is left in place and augmented with powerful new capabilities leveraging modern technologies like cloud and Al.

These new components target only specific capabilities based on business drivers. So, for example:

- · A new product management capability can be added so that the existing core simply manages the ledger while the new component handles all productspecific rules and behaviour. The ledger would then only be a record of debits and credits.
- A new fraud capability leveraging AI and new data sources can replace a legacy rules-based fraud capability.
- diverting calls via APIs to a new credit risk module rather than using the old capability in existing technology.

Further still, virtual accounts can be created above the existing core, reducing the cost of additional accounts on the core and other loads like payment processing.

This enables faster time to market to achieve real business goals and reduces the immense risks associated with core banking replacement projects.

Over time, using this approach, the legacy banking system will perform less and less of the banking functionality, and new modules will do more and more.

"As technology continues to evolve, the banking software landscape will undoubtedly keep pace, with new advancements and architectures shaping the future of financial services."

**Dharmesh Mistry** 

Credit decisioning can be updated by

Eventually, the old banking system could be replaced if required, but at much lower risk as most of the banking functionality now resides outside.

As I identified in a previous column piece, "One core to rule them all", banking technology plus should be implemented as a Software-as-a-Service (SaaS) from a public cloud platform, thereby dramatically reducing the cost and effort of implementation, maintenance, and operation.

This issue, I've delved deep into the past to explain how I got to my "one core to rule them all" concept. I combined these requirements with a core modernisation implementation approach.

Going forward, I see a shift from costly/risky core replacement towards a more targeted, agile core modernisation approach which I call banking technology plus, which is something I will expand on in future articles.



# FINTECH FUNDING ROUND-UP

Banca AideXa, a digital lender in Italy, has secured **€16 million** in fresh capital. The funding, which comes four years after securing the "largest financing ever made for an Italian fintech start-up" of €48 million, brings the start-up's total capital raised to €96 million.

Italy's largest business association,

ConfCommercio, has now joined its investors. Launched in 2020, Banca AideXa utilises AI and open banking to offer credit and support the growth of micro and small businesses.

It says the new financing will enable it to break even, obtain €700 million in credit stock and generate €30 million in revenues.

Norm Ai, a regtech start-up in the US, has secured a \$27 million Series A funding round led by US investment manager Coatue with additional support from Citi Ventures, Bain Capital Ventures, Blackstone, TIAA Ventures, New York Life Ventures, and the former president of Blackstone, Tony James.

Norm Ai aims to serve compliance teams across businesses of all sizes with its industryfirst Regulatory AI Agent platform, which converts regulations into operational computer code. It says it enables "in-the-weeds compliance users" to review and approve content against all regulatory requirements "in minutes, not days".

The new cash injection brings the total raised by the firm over the past year to \$38 million. Some of the funds will be used to hire for roles across AI, legal and software engineering, and sales.



Climate X, a risk intelligence start-up that calculates valuations, has raised **\$18 million** in a Series A investment round led by Google Ventures (GV). Existing investor Pale Blue Dot also participated in the round alongside CommerzVentures, Blue Wire Capital, PT1, Unconventional Ventures, Western

platform

That leverages a mix of physics, digital twin and AI technologies, along with more than 500 trillion data points, providing clients with a unique risk assessment model 16 different climate hazard

Climate X says it will use the money to bolster its commercial team at its recently established New York office and mapping a path for its intended expansion throughout North America, Europe and the Asia-Pacific.

Rainforest, a US-based Payments-as-a-Service (PaaS) provider, has secured \$20 million in a Series A funding round led by venture capital firm Matrix Partners.

The round also included support from Ardent Venture Partners, Accel, BoxGroup, Infinity Ventures, The Fintech Fund, and Tech Square Ventures – all of which participated in Rainforest's \$8.5 million seed funding round completed in 2023.

Founded in 2022, Rainforest's embedded payment processing technology is built specifically to "support the unique needs of vertical software platforms". It says it grew its payment volume by 17x in the last six months.

The new cash injection, which brings the company's total funding raised to \$31.75 million, will be used to boost its staff headcount and drive its growth through new market strategies.

US-based payments infrastructure firm Payabli has raised \$20 million in a Series A funding round led by QED Investors and supported by existing investors TTV Capital, Fika Ventures and Bling Capital.

Founded in 2020, Payabli operates an API-first payments infrastructure and monetisation platform that enables software companies to build payment capabilities, including payment acceptance and issuance, into their offerings. It claims to have achieved 340% growth in revenue over the past 12 months.

The raise builds on the \$4 million seed funding round in May 2022, and the \$8 million extension the following year.

**Gynger**, an Al-driven payments platform, has concluded a **\$20 million** Series A round while also bagging a \$100 million debt facility.

The Series A was spearheaded by PayPal Ventures, alongside additional backing from BAG Ventures, Deciens Capital, Gradient Ventures and Velvet Sea Ventures.

The \$100 million debt facility is provided by impact investment firm CIM (Community Investment Management).

Founded in 2021, US-based Gynger claims to be the first Al-powered payments platform with embedded financing that's specifically designed for tech buyers and sellers. Its solution enables merchants to pay and manage their technology expenses from one dashboard.



Cross-border B2B payments platform Nium has secured \$50 million in a Series E funding round at a post-money valuation of \$1.4 billion, down 30% from its previous valuation of \$2 billion in 2022. The round was led by an unnamed Southeast Asian sovereign wealth fund and supported by VC firms Tribe Capital, BOND, and NewView Capital.

Nium plans to use the new funds on the M&A activity, hires, global network expansion and product development.

Founded in 2016 and co-headquartered in San Francisco and Singapore, Nium claims to have achieved strong revenue growth in 2023 – up more than 50% compared to 2022 – attributing its success to the expansion of its licence portfolio.

The firm currently holds regulatory licences in more than 40 countries, with recent approvals from regulators in Japan and New Zealand.

According to founder and CEO Prajit Nanu, Nium will proceed with plans for an IPO within the next 18 months, aiming to go public in H2 2025, despite the reduced valuation.

FintechOS has completed a \$60 million extension to its Series B funding round, adding to the \$60 million raised in its initial Series B in 2021.

The extension round was led by BlackRock, Cipio Partners, and Molten Ventures with additional participation from existing backers EarlyBird VC, Gapminder VC, and OTB VC.

Founded in 2017, FintechOS provides a low-code platform built to help financial services firms with their core modernisation efforts. It says its platfom can be plugged in anywhere in the tech stack to work alongside existing and legacy tech that companies want to keep, allowing them to quickly launch new offerings without completely overhauling the core.

It currently serves over 50 clients globally, with key customers including Admiral, Avant Money, Société Générale, Benenden Health, and Vibrant Credit Union

FintechOS claims to have experienced 40% year-over-year growth and a 170% increase in operating margins and will achieve break-even this year.

#### **INVESTMENT & FUNDING**

Mexican digital payments and commerce platform **Clip** has bagged **\$100 million** from investment funds managed by Morgan Stanley and from an unnamed West Coast mutual fund manager.

Clip says the investment values the company in line with its Series D round in 2021, when it raised \$250 million led by SoftBank Latin America Fund and Viking Global Investors LP at a value of \$2 billion.

Founded in 2012, Clip aims to support SMEs with a suite of products and financial services, including both software and hardware solutions. It provides digital payment solutions with BNPL capabilities, POS devices, business loan services and a range of merchant-specific APIs.

Fibe, the Indian digital lending platform formerly known as EarlySalary, has secured **\$90 million** in a Series E funding round co-led by new investors Amara Partners, TR Capital and Trifecta Capital.

The round was also supported by several of Fibe's existing backers, including Chiratae Ventures, TPG Rise Fund, Norwest Venture Partners, and Eight Roads Ventures.

Founded in 2015, Fibe has expanded beyond its core personal loan offering over the years to introduce a variety of financing solutions for the insurance, healthcare, and education sectors.

Fibe now claims to have disbursed more than six million loans since its inception.

The company also recently introduced "India's first numberless co-branded credit card"

in partnership with Axis Bank - the Fibe Axis Bank Credit Card.

fibe



# Have you seen our new FinTech Founders video series?

Our FinTech Founders series explores various aspects of funding and investment, featuring first-hand insights from fintech entrepreneurs and founders.

### Recent speakers include:



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Zilch previously raised £125 million through a Series C round in According to CEO and co-founder Philip Belamant, Zilch is "poised to triple sales volumes and achieve significant capital efficiencie lains that Zilch pursued a deal with the German bank due to its more flexible terms and that plans are underway to secure more debt agreements with other banks in the coming months Claiming to be the world's first direct-to-consumer, ad-subsidised payments network (ASPN), Zilch touts over four million customers

Swedish climate tech start-up Doconomy has raised €34 million during a Series B funding round co-led by UBS Next, the venture and innovation division of UBS, and existing investor CommerzVentures.

The round was also joined by previous backers Tenity, Motive Ventures and PostFinance, alongside new investor S&P Global.

Founded in 2018, Doconomy says it aims to ensure the "future sustainability of life on Earth by empowering individuals and corporations to assume responsibility for their environmental footprint".

The firm, which claims to serve over 100 clients across 35 markets, offers a range of climate-focused transaction and savings solutions which utilise its proprietary Åland Index.

The Åland Index is a cloud-based service designed for calculating the climate impact of financial activities, including CO2 and H2O emissions from payments and transactions.

Last year, Doconomy acquired financial well-being firm Dreams Technology that provides digital engagement tools.

Eight Roads and F-Prime Capital.

Founded in 2017, Canoe currently services more than 325 institutional investors, capital allocators, wealth managers and asset-servicing firms with its cloud-based alternative investments platform

Ascend Money, which claims to be Thailand's largest digital financial solutions

Ascend Money, the fintech arm of Thailand's Charoen Pokphand Group, has bagged a \$195 million investment led by Japan's MUFG Bank and supported by the Finnoventure Private Equity Trust I fund (managed by Bangkok-based VC firm Krungsri Finnovate). firm, provides an array of financial offerings through its TrueMoney platform, such as insurance, investing, e-payments, lending and BNPL services.

Philippines.

This is just a snapshot of the fintech funding activity worldwide. For more info on these and many other deals, head over to the *FinTech Futures* website!

Watch now

Plus more!

#### **INVESTMENT & FUNDING**

UK-based BNPL firm **Zilch** has bagged **£100 million** in securitised debt financing led by Deutsche Bank, as the company gears up for an IPO in the next two years.

Verituity, a US-based provider of verified payout solutions, has raised \$18.8 million in a funding round led by Forgepoint Capital and Sandbox Industries, with participation from Ardent Venture Partners and MTech Capital.

The company plans to into new markets, such as energy and mortgage servicing, and grow its footprint in the banking and insurance sectors.

Verituity provides a cloud-based platform that enables accurate digital payouts by linking banks, payers and payees. In 2022, it collaborated with banking giant BNY Mellon to help develop its aggregated payments platform Vaia.

US-based fintech Canoe Intelligence has secured \$36 million through a Series C funding round led by Growth Equity at Goldman Sachs Alternatives

The company, which serves more than 30 million active users - consumers and SMEs - in Thailand, also has offices in Cambodia, Indonesia, Vietnam, Myanmar and the

In 2021, Ascend Money became Thailand's first fintech unicorn after raising \$150 million, reaching a valuation of \$1.5 billion.

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# **MOVERS AND SHAKERS**



Amsterdam-based banking tech provider Backbase has appointed Chris Shayan as head of Al

The company says that Shayan's "hands-on experience with Al" will facilitate the application of LLMs to the firm's Engagement Banking platform, which is currently used by Bank Muamalat in Malaysia, Navy Federal Credit Union in the US and Danske Bank in Denmark, among others.

He joins from Vietnamese commercial bank HD Bank, which experienced "a complete digital transformation" during his two-year tenure as chief digital officer.

Before this, he served as CTO for Techcombank (TCB), one of the largest banks in Vietnam, where he led a Backbase implementation across both its retail and business banking divisions "in a record-breaking nine months".

Backbase is also launching a new Centre of Excellence in Vietnam, which will expand the firm's headcount to more than 40 employees in the country and will become a "key hub" for its R&D and customer success teams.

Payments Canada, which operates the country's payment clearing and settlement system, has named serving board member exec Susan Hawkins as its new CEO and president.

Hawkins' career includes roles at FIS, where she acted as EVP and general manager of digital banking and payments, and most recently, at TD Bank Group, where she held the position of global head of enterprise payments and EVP of US payments.

Hawkins says she takes the helm at a "pivotal time for Payments Canada and the industry", highlighting how initiatives such as the recent Royal Assent of the Canadian Payments Act are actively broadening access to the country's national payment systems.

She adds that her tenure will commence as "Payments Canada leads the final phase of a 'made for Canada' Real-Time Rail (RTR) payment system".

PayPal has named industry veteran Srini Venkatesan as its new CTO. He boasts a 30-year fintech career, joining directly from Walmart Global Tech, where he led the US omni and platforms

technology unit. Prior to this, Venkatesan acted as a VP at Yahoo, CTO at StubHub and held various director roles at eBay.

Venkatesan takes over the CTO position from Archie Deskus, who has decided to leave PayPal following a two-year tenure.

The announcement comes after PayPal revealed plans to reduce its workforce by about 9% in 2024, affecting approximately 2,500 positions, as part of efforts to "right-size" the business.

London Stock Exchange Group (LSEG) has named seasoned industry figure Pascal Boillat as its new COO.

Based at the firm's New York office, he replaces David Shalders who held the position for over four years.

Boillat joins after a brief hiatus from the industry. Over his notable 35-year career, he served as group executive, enterprise services and CIO at the Commonwealth Bank of Australia. He also spent two years as group CIO for Deutsche Bank and prior to that, led global capital markets operations technology at Citi Group.

Takis Georgakopoulos stepped down from his role as global head of JP Morgan Payments, a position he has held for the last seven years. He will be joining US banking tech heavyweight Fiserv as its new senior advisor, EVP and a member of the management committee, effective 3 September 2024.

Georgakopoulos first joined JP Morgan back in 2007 and sat on the organisation's operating committee.

In the light of his departure, Umar Faroog and Max Neukirchen have been appointed as co-heads of global payments. Farooq has served as CEO of Onyx by JP Morgan, the bank's blockchain-focused business unit, for the past three years; Neukirchen is global head of payments and commerce solutions.

Open banking payments network TrueLayer has named industry veteran Lisa Scott as its first chief strategy officer. She moves from fintech Banked, where she initially served as the firm's chief product and marketing officer and then as CEO for Europe.

Scott also worked for Lloyds TSB, as head of loyalty credit cards, and spent more than a decade at PayPal, departing as senior director for product marketing.

Broadridge Financial Solutions, which provides investor communications and technology solutions to financial institutions, has announced Roz Smith as the new COO of Broadridge International.

Smith spent 18 years in various leadership roles at HSBC, where she began her career as a global banking associate, before rising through the ranks to conclude her tenure as head of strategy and change management for the non-financial risk unit of the bank's markets and securities services business.

For more news on appointments in the industry, head to the Movers and Shakers section of the FinTech Futures website.



#### "VIRTUALLY CHALLENGED"

#### Cartoon by Ian Foley

The term 'metaverse' originated in a science fiction novel and is known as the virtual reality space where users can interact with a computer-generated environment and other users.

There have been many false dawns for this technology. Perhaps the most recent one was Facebook renaming itself "Meta" and seeing a more than \$200 billion drop in value after a poor earnings result (representing the largest drop in value in US stock market history).

In the adult world, attempts at creating virtual worlds have

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Marketing Manager

made \$800 million in O1 2024.

#### ADDRESS FinTech Futures

fizzled out (e.g. SecondLife and Hopin) as consumers coming

Eras Tour), but in the world of kids and games, the market is

out of Covid want more in-person events (e.g. Taylor Swift's The

really booming. For example, the virtual world of Roblox, which

has 70 million daily active users - of which 75% are under 25 -

Recent research found that 75% of Roblox users are more

bandwagon and is launching 'The Co-worker Game' on Roblox,

which lets players experience working in a virtual IKEA store.

likely to notice brands advertising in the Roblox metaverse

compared with other platforms. IKEA has jumped on this

240 Blackfriars Road, London SE1 8BF

#### ISSN 0266-0865

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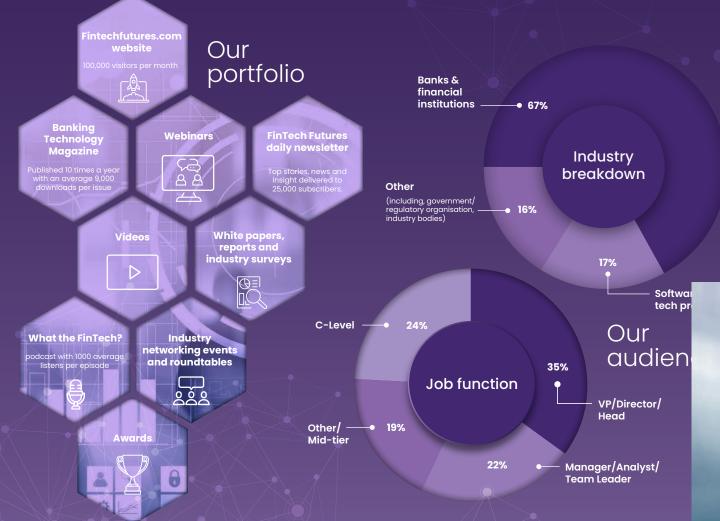
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