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Harnessing innovation in digital payments

Driven by the pandemic, the last two years have seen rapid evolutions in the digital payments landscape, creating opportunities and challenges for merchants and payment providers alike. These evolutions have changed not only what we buy and where we buy it, but also how we prefer to pay—and now those consumer behaviours are shaping the future of payments.

According to a report by PwC, we saw “seven years of online growth in seven weeks”¹ that inspired a huge conversion to digital. Given the importance of digitisation in our financial lives, electronic payments are today playing an ever more central role, and digital continues to forge convenience. Shaping that transformation and aiming to nurture consumer loyalty, retailers are orchestrating in-store capabilities with a fulfilling ecommerce presence, serving consumers’ expectations and shaping their omni-channel experience.

Merchants and consumers expect choice at the checkout. Key players, like Barclaycard Payments, continue to invest in, evolve their payments offerings and lead in unifying commerce. The pace of change and appetite for convenience is vividly observed in the nature of new consumer habits. That’s where fintechs have stepped up, innovating with ever more features and capabilities supporting customer and business segments with fully personalised customer services.

Merchants and consumers also expect convenience at the checkout. While Barclaycard Payments continue to lead in unifying commerce through evolving our offerings, fintechs have also stepped up. As scaling fintechs provide ever more features and capabilities to support customers and business segments with fully personalised services, there are opportunities to collaborate and partner.

It’s vital for payment providers, and those involved in the associated technology, to keep track of emerging trends in order to stay ahead. Finance options embedded in the payments journey, such as Buy Now Pay Later (BNPL), are one such trend and are increasingly common. In Barclays’ recent whitepaper (*Understanding a fast-moving payments landscape*),² more than eight in 10 of the merchants we surveyed predicted an increase in demand for BNPL in the next 12 months. Further BNPL regulations are anticipated to give consumers greater peace of mind, and could fuel even greater adoption. As players in the BNPL market adapt to the new regulations, they may find their business models impacted and must avoid adding friction to the customer journey.

Another development, also highlighted in our whitepaper, is the ubiquity of digital wallets, which are now accepted by almost as many merchants as cash is. This a remarkable uptake. Close to half of businesses receive over 30% of their takings through digital wallet payments. For one in seven, this rises above 40%.

Barclays Bank Pay³ is an exciting development in this space. It uses Open Banking APIs to create a next-generation, cardless digital payment experience for consumers and also makes more data available to the banking industry, supporting product innovation and improvement.



In the wake of a decline in the use of physical cash and heightened interest in digital assets, we’re observing with interest the growth of new blockchain-based payment ecosystems. Transformative opportunities exist, for example to reduce transaction fees and streamline cross-border payments. But mainstream adoption of crypto-payments is limited while the regulatory landscape evolves and complex user experiences impact trust and accessibility.

What characterises current developments in payments is a thorough understanding of consumers and their behaviours in a post-COVID, digitally-infused world, where experiences and interactions are personal, real-time and immersive, enhanced by best-in-class security features. Enterprises and fintechs who understand these elements and innovate payments with the latest technology are a catalyst for economic growth.

I hope you enjoy this edition of Rise Insights with its exciting look ahead to future changes in the payments market, the opportunities and the technologies.

1. PwC
2. Barclaycard
3. Barclays

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1 Global payment trends

Every day, millions of us pay for a myriad of goods and services in a variety of ways. Behind the scenes, technology powers our digital transactions. But what's powering the technology? The answer very often is innovation, sparked by the expectations of consumers or businesses, which creates opportunities for financial institutions, fintechs and governments.

In this section, Barclays experts review the emergent trends they're observing in the UK, US and India.



Payment innovations in the UK: Much more than just BNPL

Digital payments, from consumers or businesses, have never been more prevalent in the UK. The payments space is a hotbed of disruption and innovation, facilitated by new forms such as digital assets and new methods like Buy Now Pay Later (BNPL).

What's more, a new wave of market development from Open Banking, Payments Services Directive 2 (PSD2), Strong Customer Authentication and an anticipated New Payments Architecture for the UK may bring some substantive change to the UK's payment landscape.¹

The COVID-19 pandemic accelerated the digitisation of everything, creating some lasting shifts in consumer behaviours, including the accelerated adoption of contactless payments. In the UK, over a quarter of all consumer payments were made via contactless methods in 2019.² As of 2021, there are about 10 million contactless mobile payment users in the UK.³

COVID-induced lifestyle changes, higher mobile reliance and the lower cost of developing software have also given rise to many innovators within the payments space that has traditionally been dominated by incumbent financial institutions and credit card providers. UK fintech companies have collectively raised £20.8 billion in equity funding, with a staggering £7.65 billion in 2021 alone.⁴ Out of the top 50 UK fintechs, about 40% of them are payments-related companies.⁴

Consumer payments

Thanks to a series of innovations, payments in the UK have a pretty good user experience compared to some other countries. The Faster Payments scheme settles net three times every business day through the Bank of England's (BoE's) Real-Time Gross Settlement (RTGS) system and provides real-time payments 24/7.⁵

But a few innovations are significantly changing the consumer payments landscape.

Mobile wallets

Mobile wallets have contributed significantly to adoption of digital payments in the UK. They provide the benefit of convenience to consumers, while ensuring security through face or biometrics verification. This has allowed big techs like Apple and Google to take advantage of their mobile ecosystems and drive large-scale adoption and improved user engagement. By the end of 2020, Google Pay had 214,000 monthly active users in the UK⁶ and six out of 10 UK respondents used Apple Pay in store between August 2020 and August 2021.³ Mobile wallets will likely continue to grow, further accelerating the shift away from cash.

BNPL

The alternative credit solution, Buy Now Pay Later (BNPL), lets merchants increase their conversion and offers customers a cheaper solution to manage their cash flow. BNPL has already taken market share from credit cards and is poised to grow further, given that market's revenue was valued at \$138.43 billion in 2022 (projected to reach \$263 billion by 2028)⁸ and BNPL currently constitutes only about 12% of that (with an enormous growth potential). BNPL is projected to grow from \$22.86 billion in 2022 to \$90.51 billion in 2029 at a Compound Annual Growth Rate (CAGR) of 21.7%.⁷

As millennials increasingly switch to BNPL and pay off credit card debts faster,⁹ banks will need to rethink their credit card proposition for future generations. Furthermore, the evolution of BNPL players in ecommerce marketplaces will have implications for the propositions of traditional banks and acquirers.

New consumer solutions using Open Banking

With Open Banking, new solutions are being built on new platforms – such as Plaid, Truelayer, and Yapily. Payment journeys are being radically simplified, from uploading cash to a pre-paid card to making account-to-account payments. Value-added services are being wrapped around payments by service providers. For example, Snoop allows customers to manage and pay from all their bank accounts in one application.

New consumer applications built around Open Banking rails can also augment user experiences in other parts of financial services. For example, ApTap allows banks to offer bill management tools to their customers, improving their bill-paying experiences using an incumbent's

mobile banking application. Credit Kudos, a fintech that Apple recently acquired, accesses customers' payment history to assess creditworthiness.

Open Banking presents new opportunities not only for new fintechs but also financial services incumbents. Banks could look to partner up with fintechs to enhance the overall customer experience, winning customer trust one payment at a time.

Business payments

As globalisation has taken centre stage in the global economy, business owners are sourcing from and connecting with suppliers globally. The surge in a myriad of counterparties in many locations has driven the need for better B2B payments solutions, which are evolving rapidly.

In the middle of the COVID-19 pandemic, the number of internet businesses rose sharply. For example, Stripe onboarded roughly 1,400 new companies each day throughout 2021.⁹ However, according to a marketing agency survey, only one in 10 companies have no issues with their payment solution provider.¹⁰ B2B payments require routine, periodic transactions that cover a wide range of functions, such as accounts receivable, accounts payable, payroll and more. A new generation of business owners now expects the same seamless user experience and abundance of options from their B2B solution as they get with their consumer applications.

Future B2B payments solutions will look nothing like traditional ones, with several emerging trends driving the change.

1. The Bank of England

2. UK Finance, UK Payments Markets 2021

3. Statista

4. Beauhurst, The Fintech Top 50, 2022

5. The Bank of England

6. IBIS World

7. Globe News Wire

8. F inextra

9. Stripe

10. Tug

More ISVs and verticalisation

The advent of cloud technology gave rise to Software-as-a-Service (SaaS) business solutions with independent software vendors (ISVs) initially addressing specific customer needs. As ISVs grow, they can become a core operating system in a niche market. The need for growth then pushes them to move into adjacent services. As a result, the more established ISVs expand vertically into the entire value chain in their particular market, replacing third-party payments and, possibly, financing solutions. An example of this trend is Toast, which started out as cloud-based restaurant software to manage orders and bookings. But subsequently, it branched into payments processing, workflow orchestration, lending and more.

Because of this evolution and their ability to deliver customised solutions that meet industry-specific needs, ISVs continue to be successful in the business payments market.

The power of the ecosystem

Besides having multiple payment methods, business owners are also looking for other types of services that will make their lives easier, whether that's accounting software, payroll systems or other facilities. But building one solution that solves all their needs might be a stretch, especially if their client base consists of hundreds of business owners, each with particular needs. More prominent fintechs are leveraging the power of the ecosystem and forging partnerships to provide that one-stop-shop experience for their clients — some partner with incumbent banks to further enhance their offering. For example, Stripe works with a bank partner network to offer Stripe Treasury. Others take a marketplace approach. For example, Shopify offers ShopPay with additional third-party services from their marketplace.

What about banks? Well, every business requires a bank account. As well as providing and integrating payments, incumbent banks could also cross-connect services to relevant clients, building a unique value-add. As the saying goes, "if you want to go fast, go alone; if you want to go far, go together."

Digital asset payments

Digital assets could be one of the most disruptive trends for consumer and business payments in the not-so-distant future. Here are some key developments in this area worth watching.

CBDCs

A Central Bank Digital Currency (CBDC) has the potential to alter the entire payments architecture in the UK. The BoE has proposed a platform-based retail CBDC model, maintaining a centralised central bank liability ledger.¹¹ This construct is akin to 'digital cash' and will rely on third-party service providers to offer wallet services. However, there are still concerns, such as privacy, that require further clarification before the CBDC can be implemented more broadly.

The EU has also started their Digital Euro consultation with some European nations running proofs of concept. Any CBDC adoption will likely shape the future European payment landscape.

Fiat-backed stablecoins

Fiat-backed stablecoins that are privately issued, e.g. USDC by Circle, seek to offer an alternative payments system by leveraging blockchain technology. Policymakers see the benefits of this technology implementation but believe that stablecoins require some regulatory oversight to be a viable long-term solution.

In both cases, traditional financial institutions should partner with both public and private sectors to provide end users with the best products and services.

Cryptocurrencies

There's been a lot of momentum around cryptocurrencies as an alternative payment method. According to a Mastercard survey, 82% of small businesses have changed how they send and receive payments, and one change was crypto-payments.¹² A total of \$2.5 billion worth of crypto-payments were made through Visa's crypto-backed cards in Q4 2021 alone, and 62% of merchants plan to introduce digital coins, tokens or NFTs as part of their loyalty schemes.¹³

To date, a few vendors have started accepting payments in cryptocurrencies, for example Philipp Plein, the world's first fashion company to accept payments in 15 different cryptocurrencies. On the flip side, Stripe is testing a way for users to receive payouts in USDC stablecoins, starting with a group of creators on Twitter. This alternative payment method could potentially reduce the cost and time of cross-border transactions in the long run.

Adopting new payment methods might require significant cultural and fundamental belief changes in traditional financial institutions. But all payments service providers have always needed to adapt to clients' changing requirements. While the changes could be painful in the short term, it might be required for longer-term survival.

A future landscape

Payments are vital to local and global economies, and we can expect the rapid innovation we have seen in this space to sustain into the future. In this context, payment providers will need to make continued investments in building compelling value propositions, a flexible operating model, and a robust technology stack to win the next generation of customers.

There will also be a need for traditional incumbents to focus on where they can add the most value, working with other providers in the ecosystem to offer fit-for-purpose solutions. Barclays and Rise will be at the forefront of this change, fostering partnerships and innovation to build and adapt to new ways of paying.



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Digital payments in India:

The story behind the numbers

India has traditionally been a cash-dominated society. However, between 2010 and 2015, we experienced a gradual shift from cash towards debit card usage.

Between 2015 and 2016, digital payments saw a rapid adoption curve due to a confluence of multiple sectoral tailwinds, such as high-speed internet access, demonetisation of cash notes, unified proof of identity setup, private funded product innovation and, above all, creation of next-gen payment solutions. Some of these include Unified Payments Interface (UPI), National Electronic Toll Collection (NETC) and Bharat Bill Pay Service (BBPS), which seamlessly drove interoperability between siloed payment systems across banks.

Over the past few years, these factors have resulted in volumes of digital transactions growing at a rapid pace, with a Compound Average Growth Rate (CAGR) of 30%.¹ Among all solutions, UPI has been a runaway success, which started in 2016 with 21 banks. Today, UPI has nearly 274 participating banks with 4.2 billion monthly transactions worth INR 7.7 trillion (as of Nov 2021).¹

India's payments growth trajectory used to be primarily dictated by traditional financial institutions (FIs), but the newer digital-payment pathway has been led by non-traditional players and fintechs on the back of FI-agnostic infrastructure. Amid changing C2B and B2B trends, this has pushed traditional financial providers such as SBI, ICICI and HDFC to rethink their value proposition.

Consumer demand is sky-high...

UPI technology has spearheaded the digitisation of consumer payments in India with approximately 41 billion transactions made in 2021.² It's currently the largest consumer payment system in the country, with an array of public and private players leveraging its technology: BHIM, Paytm, PhonePe and BharatPe.

Going forward, consumer-to-business (C2B) payments can expect to evolve in the following ways.

Fintech apps are driving consumer adoption in a variety of ways: bill payments, wealth management, investments backed by partnerships with legacy service providers, etc. For example, Paytm, one of India's biggest digital payments players, has tied up with multiple mutual funds and loan providers to act as a single-shop marketplace for customers' financial needs.

Buy Now Pay Later (BNPL) is also growing at pace and has gained significant traction, with estimates projecting an increase in market size from the current INR 363 billion to INR 3,191 billion¹ by 2025. While the exponential growth has attracted a lot of eyeballs, the regulatory environment is expected to tighten around these offerings due to potential risk of bad debt accumulation and user-protection concerns.

1. Indian payment handbook 2021, PWC

2. Financial Express

316

UPI txn. volume CAGR (2016-2021)¹

56%

BBPS txn. volume CAGR (2018-2021)¹

163

NETC txn. volume CAGR (2018-2021)¹

Increased digital payment penetration due to contactless mobile payments. This trend will be driven by QR codes and SMS-based payments for feature phones, along with an increase in the payment limit per transaction to INR 5,000.

The emergence of affordable Point of Sale (PoS) technology and rising consumer inclination towards digital payments has encouraged smaller mom-and-pop shops to go digital (an increase of 300,000 PoS terminals from January 2021 to September 2021).

But as with all innovation, there comes risk: in a recent government survey, failed transactions are the top concern for 41% of people, followed by data privacy (34%) and poor internet connectivity (30%).³

... so businesses continue to innovate at pace

With much of the digital commerce growth in India currently coming from consumer payments, it has become imperative for businesses that accept those payments to implement digital ecosystems with specialised and integrated services to ride this wave of growth. In fact, India's business-to-business (B2B) ecommerce market is expected to grow at a CAGR of 80% to reach \$60 billion by 2025,⁴ fueled by growth in SME adoption of online payment platforms and marketplaces.

Much of this growth is expected to stem from the National Payments Corporation of India (NPCI), which owns the UPI interface. In 2018, UPI 2.0 was launched and included new features, such as invoice verification and linking of overdraft accounts. With this innovation, businesses were required to integrate their payments gateway with UPI to digitise and streamline their payments ecosystem. Fintechs such as India-based Razorpay are providing businesses with a UPI-integrated platform offering streamlined vendor payments, tax payments, BNPL, and access to working capital through their neobank, RazorpayX.

However, the issue remains that NPCI is India's sole digital-payment infrastructure provider. As such, the Reserve Bank of India (RBI) is fostering collaboration between different payments players to spark further innovation. For example, RBI-backed New Umbrella Entities (NUEs) aims to encourage the development of consortiums including banks, fintechs, big tech and large corporates to help transform the digital payment market. Focus areas for the NUEs in India's SME B2B market include real-time payment confirmation, automatic payment reconciliation, real-time loan offerings, micro and offline payment management.

As for the future, more of the same—innovation

In the next few years, the growth of digital payments in both C2B and B2B spaces will continue scaling established technologies as well as encourage the emergence of new technologies to ensure nationwide coverage in a cost-effective manner. To maintain the pace, all stakeholders—regulators, payment-solution providers, financial institutions (fintech and banks) and service providers—must collaborate to the benefit of all businesses and customers.



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Case in point: United Payments Interface

The digital payments space in India is really taking off. Case in point: Unified Payments Interface is India's digital, real-time mobile payments system, which is one product that falls under the umbrella of the National Payments Corporation of India (NPCI).

What makes UPI stand out globally is its interoperability. Say you're using an app like Paytm to pay someone who's using Google Pay and both have accounts with different banks. No problem—by just scanning their QR code or providing a UPI ID or mobile number, you can directly transfer money to their bank account from yours. Previously, bank account details—or a credit or debit card—were required for digital transactions where merchants needed to pay a 2% charge to payment service providers. Not anymore.

We're seeing exponential growth...

Ever since its launch in August 2016, UPI has achieved phenomenal growth: from INR 30 million (\$390,000) per month in transaction value to INR 9.6 trillion (\$125.5 billion) in March 2022. In 2016, 21 banks were live on UPI, but as of March 2022, this number has grown to 314. It has become the preferred mode of payment among customers, making up 60% of India's retail payment volume.

To enhance security, UPI has baked dual-factor authentication into the recipe. A UPI ID is linked to a user's mobile number as well as a bank. Top it off with an easy KYC process and the popularity of the Aadhar card, an individual

12-digit ID biometric system owned by 99% of India's population, and you can understand UPI's impressive growth. Fintech players such as Phonepe and Google Pay have dominated with a combined market share of almost 80% in UPI payments and have already surpassed other payment forms like credit cards and debit cards. And there is still room to grow.

33%
of the Indian population
own a feature phone

99%
own an Aadhar card



Take a look at UPI123Pay

NPCI recognised that the growth of its product offerings needed to coincide with a burgeoning population of feature-phone users (400 million people, or 33% of India's population).¹ To further improve the adoption of cashless and digital payments and to promote financial inclusion, NPCI launched UPI123Pay in March 2022. It comes with these easy-to-use features:

- **Onboarding through voicemail:** You initiate a secure call to a predetermined number and complete UPI onboarding formalities
- **Missed call pay:** You can access your bank account and perform routine transactions by responding to a missed call while you're at a merchant
- **Native app for payments:** Lets you use a native payment app provided by your feature phone manufacturer
- **Sound-based technology:** Uses soundwaves to enable contactless payments

To further boost digital payments, NPCI now wants to enable small-value offline transactions through UPI. Called UPI Lite, it will allow users to send payments using the same familiar user interface in the usual way, except that they will take place while users are offline. In the initial

stages, UPI Lite will only be partially offline—the money is debited from the user's account even though they're not connected to the internet, but only gets credited to the receiver's account when they are online. In the future, both debit and credit will be possible offline.

This trend will continue

India's rapid innovation in its digital payment ecosystem will continue to expand. Established companies like NPCI and fintechs alike are leading the charge on this exponential growth trajectory. Stay tuned to India's digital economy, because there are more exciting changes to come.



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Investors drive rapid evolution in traditional US payments

Twenty years ago, credit card companies migrated cards from lackluster plastic to sleek metal. These new cards became an unconventional status symbol and beacon of advancement within the payments industry.

Today, we are on the precipice of another shift – from the physical to the digital. The COVID-19 pandemic accelerated a shift to ecommerce and contactless payment methods like digital wallets. Additionally, VC funding in the digital payment sector has fueled innovation, making the sector the highest valued in fintech at over \$1.2 trillion.¹ Together, these forces generated an uptick in consumer demand, leading to explosive growth across fintechs offering alternative payment methods to cash, cards and Automated Clearing House (ACH).

While a cashless society with real-time-payments is not imminent, the growth trajectory of digital payment methods foreshadows a departure from the current landscape and a need for traditional financial institutions to respond.

"Digital wallets will represent +50% of ecommerce and +30% of in-store transaction volumes globally by 2025."

FIS²

Consumers are opening their digital wallets

The major trend in consumer-to-business payments is how the proliferation of digital wallet providers has disintermediated traditional financial institutions from both the consumer and end merchant, eroding their stickiness. FIS predicts continued growth for digital wallets, representing +50% of ecommerce and +30% of in-store (via contactless POS) transaction volume globally by 2025, with the US expected to lag the Europe and APAC regions. According to the report, "this growth will be driven by digital wallets offering superior checkout solutions, flexibility in underlying payment methods, their anchor role in ecommerce marketplace ecosystems and local wallets consolidation into regional and global super apps."² Consequently, traditional players have an imperative to prepare and adapt. What are the most pressing considerations of this?

First, issuers are likely to see compression on interchange revenue as they share proceeds with wallet providers (e.g. Apple Pay) and are sitting across the negotiation table with behemoths like PayPal and Klarna whose leverage supersedes that of most merchants when it comes to negotiating rates. This loss in revenue means less available capital to fund card loyalty programmes that are critical to acquisition and retention. Any contraction of

1. Statista, 2021

2. FIS, The Global Payments Report, 2022



benefits or devaluing of reward currency will reduce the attractiveness of a card and put pressure on other sources of card revenue like annual fees or interest and fee revenue. Previously, loyal card holders might have re-evaluated their current relationships against the value presented by digital wallet providers in terms of convenience, flexibility and loyalty programmes (e.g. Vibe by Klarna or PayPal Pay with Rewards). We see this as more of a challenge for issuers offering cashback cards or more general reward programmes compared to co-branded partnerships or premium Travel and Expenses benefits as the latter's singularity and richness are difficult to replicate.

Second, card issuers need to consider how long card holders will remain loyal or when their loyalty will shift to favour the wallet provider over the issuer. Predicting when such a shift might occur will be especially important for retaining high value customers such as high spenders and reliable revolvers (i.e. card holders who only partially pay off their balance, therefore incurring monthly interest charges, without threat of default). Similarly, banks need to consider what makes customers want to deposit funds into the wallet's ecosystem rather than into their bank checking or savings accounts. Proactively solving for these

scenarios will help traditional financial institutions determine when to partner ("if you can't beat them, join them") and when to defend their territory and meet evolving customer needs in-house.

These decisions need to be made swiftly as wallet providers are rapidly expanding their offerings, becoming ubiquitous both online and offline and therefore becoming a one-stop shop for money movement. Take PayPal as an example. Individuals can receive their paycheck early via direct deposit, pay their friends in real time, buy or sell cryptocurrency, turn online and in-store transactions into interest-free Pay-in-4 (Buy Now Pay Later, BNPL) installments all through a user-friendly, digital UI.

Third, traditional financial institutions need to understand what role they will play as the concept of credit is reinvented. With the explosion of BNPL, consumers are turning away from the high APRs on credit cards and the lengthy process of obtaining traditional loans. The ability to offer no- or low-interest just-in-time financing, early in a consumer's shopping journey, either through partnerships with BNPL providers or embedded products offering payment choice flexibility, will be essential.

Fintech innovation is supporting SMEs

What about business-to-business payments? Digital payments are also on the rise here, as fintechs pave the way for buyer-supplier payment innovation and card acceptance. By most estimates, card penetration in B2B is in the low single digits as ACH has traditionally been king. However, as the lines between merchant acquiring, payment processing and SaaS have blurred, players such as Stripe, Freshbooks and Bill.com are accelerating digital payments across B2B and unlocking significant efficiencies and cost savings, especially for small businesses.

The beauty of what these B2B fintechs have done is how they've become indispensable to the success of small-to-mid-size enterprises (SMEs). Instead of merely acquiring and processing, they have expanded their customer value proposition to include PoS and business management software, marketing support, fraud and digital identity services and more. By solving for the expense of SME operating needs, fintechs have made the cost to switch from one player to another unpalatable.

US B2B card payment volume is expected to grow by 8.3% YoY³ compared to total B2B transaction volume growth of 3.9%. This represented a \$137 million dollar opportunity for digital disrupters who are positioned to seize it.

As this trend continues, issuers can open up acceptance with new merchant partners and expand the value proposition substantially for small-business-owner card holders. What's more, with the rise in digital payments, traditional financial institutions are well positioned to offer add-on services to fintechs'

existing offerings to combat fraud, expedite cross-border payments and offer secure, flexible and digital working capital, as examples.

How traditional finance can play a part

On both the C2B and B2B side, traditional financial institutions are hampered in going head-to-head with incumbent players in the fintech space. Compliance layers, tech uplifts and human capital gaps are simply too great to precipitate the speed-to-market required to keep up with innovation. Moreover, VC investment in fintechs is an accelerant that will continue to fuel innovation and consolidation, giving even more influence to large players, who are already resembling super apps.

Those institutions can't be all things to all customers, and will need to decide where to play based on the burning needs of their customers or persistent pain points to their core business. Partnering with fintechs to offer innovative solutions and value-add services to customers is preferable to building capabilities anew. To support this, traditional financial institutions need to prioritise internal elements like the streamlining of decision making and the upgrading of IT infrastructure to ensure speed to market, frictionless (that is, API) integration with third parties and a seamless digital UX for the end customer.

Small-to-mid sized fintechs, with an appetite to allow a partner institution to influence their architecture, especially as it relates to compliance and risk controls, are the optimal allies. Traditional financial institutions benefit by quickly gaining access to innovative solutions that will expand their customer value proposition or realise a critical efficiency.

Additionally, access to a new customer base offers potential cross-sell opportunities, lowering the cost of the acquisition. Early stage fintechs benefit from incumbent expertise (e.g. in fraud prevention), a trusted brand name, access to customers and distribution channels, and payments infrastructure (e.g. network rails or virtual cards)—all of which have high barriers to development. As such, these partnerships represent a balanced, mutually beneficial alliance for both parties.

All change comes with opportunity. Traditional financial institutions may not be bellwethers of evolution in the payments industry, but as digital payments take off in the US they have a lot to offer to, and gain from, the ecosystem as a whole.



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The investor view

What attracts investors to the new era of payments? How do they assess the rapidly evolving digital scene? We asked three investors for their thoughts.



Investing in API-driven payments

Nish Patel, Managing Partner at Inertia Ventures, talks open APIs for payments with **Tanya Krishnakumar**, Platform Manager at Rise New York.

Tanya Krishnakumar: Talk to us about open APIs. What are the data sharing and data security policies and procedures to consider?

Nish Patel: APIs are connections that allow computer programs, especially machine learning models, to interact directly with datasets, consumers and organisations. By publishing the specifications of its APIs, a company makes it easy for outside software developers to adopt the company's technology stack, thereby expediting the adoption of the company's product and increasing market share. An open-API policy confers speed and attracts developers and tech-forward partners.

Any time you introduce new, accessible technology, you have to remember that responsibility and governance comes with that. This can include screening for SOC 1 and SOC 2 compliance. System and Organization Controls is defined by the American Institute of Certified Public Accountants and is mandatory for any US technology-based service organisation that stores client information in the cloud. SOC 1 focuses on internal controls related to financial reporting. SOC 2 focuses on information and IT security. As a company scales, it becomes increasingly critical to hire a compliance or security officer to maintain this and other types of governance. These are vital roles given that open API integrations inherently and exponentially increase the surface area of attack vectors.

Other considerations include abiding by GDPR in the EU and CCPA in California. The industry consensus is that other states will adopt similar data privacy procedures. Privacy consent management and protocols surrounding the handling of personal data have never been more important, especially as a single data leak today may pose an existential threat to a startup.

TK: How have you seen payments-focused APIs create new business opportunities for companies who adopt them?

NP: Payment-focused APIs have unlocked new revenue drivers for companies in ways that have made us start to view fintech as less of a vertical and more of a horizontal. These APIs have allowed companies in completely disparate industries (including ecommerce, logistics and real estate) to embed financial products directly within their own platforms. These can take the form of Buy Now Pay Later (BNPL) products, credit cards, underwriting risk in increasingly intelligent ways, factoring or bridging cash flows, and more. Never before have we been able to process these high-compute and high-volume of transactions with such speed and ease of access.

TK: When investing in a company that employs an open API strategy, what innovative solutions do you look for?

NP: APIs open up data silos by forming interoperable connections with them. By unifying data this way, better and faster decisions can be made. We like companies that can become core aggregators of APIs with unique ways of processing and sharing data.

As investors, we not only look for companies that have robust open-API infrastructure with clean and rich documentation, but companies who focus on bidirectional open APIs (both pulling in data as well as repackaging it with machine learning to send out again). We are especially interested in companies whose machine learning models replace human discretion in decision-making with auditable models that improve through usage.

For example, we've invested in Spotter Labs, a freight-automation platform for freight brokers and carriers, which automates the matching of freight to trucks and helps carriers harvest surge pricing in freight markets. In addition to sourcing loads from freight brokers via an API, Spotter Labs dispatches a bot that comes up with optimal combinations of loads for each carrier on the platform and suggests them to the carriers via an API. If the loads are approved, the bot books them via the brokers' transactional APIs. In the future, Spotter Labs aims to automatically offer attendant services, including factoring, invoicing, driver communication and tracking. Operating in the vast, \$800 billion market of long-haul trucking, Spotter Labs is attempting to radically rethink load matching, payments and financial services from the ground up, using APIs.

TK: Can you give us an example of a business you have invested in and that has employed a creative or differentiated API-driven strategy?

NP: One of our portfolio companies, Pipe, directly integrates with a company's banking, payment processing and accounting systems to underwrite its customers instantly, without disrupting any existing workflows or customer relationships. This effectively makes it a trading platform that treats recurring revenue streams as a liquid asset, allowing companies to interact with institutional investors in their marketplace, and transforming their revenue streams into upfront capital, instantly and without dilution. The key is its robust API integrations—by plugging into a company's Stripe and Shopify systems (to see transactions and revenue), Plaid (to see banking info and runway) and other internal systems, they can unlock the multi-trillion dollar and otherwise illiquid asset class that is streams of recurring revenue.



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The BNPL space: Invest now, profit later

Lucas Timberlake, General Partner at Fintech Ventures Fund, talks investment strategy with **Tanya Krishnakumar**, Platform Manager at Rise New York.

Tanya Krishnakumar: Let's talk about the benefits of Buy Now Pay Later (BNPL). What are the specific benefits to consumers?

Lucas Timberlake: BNPL offers consumers the ability to purchase higher-cost items in manageable payment plans, typically spanning from three months to several years. Let's say you are in the market for a new television but are concerned about increasing your credit card balance and accruing interest charges. This situation is where BNPL providers, such as Affirm, Afterpay and Klarna come into play. Often, BNPL products have no-interest rate options for these payment plans. Typically, BNPL does not require a hard credit check and is more flexible with credit score requirements, which make these products advantageous for consumers with limited or poor credit history.

As a result, many consumers choose to use BNPL versus a credit card for large-ticket items, although certain credit card companies are now offering flexible (e.g. no interest) plans on purchases above a certain amount in order to compete with BNPL providers.

TK: Given that BNPL is relatively unregulated versus other areas of consumer finance, what do you see as the future regulatory impacts to this credit sector on consumers as well as issuers?

LT: I believe there will soon be further regulations of the sector. For instance, the Consumer Financial Protection Bureau (CFPB) opened an inquiry into some of the top companies in the BNPL space in December 2021. The CFPB has the following three concerns about the space:

1. The ability for consumers to accumulate large amounts of this type of debt
2. Regulatory and disclosure considerations by BNPL providers, given the grey areas surrounding their instalment products
3. Harvesting of consumer data

It is too early to say exactly what will come from the CFPB's inquiry, but I do expect that stricter federal regulations will come into play over the next few years. We are already seeing state regulators, most notably California, classify BNPL providers as lenders, which means that they are required to become licensed with the state's Department of Financial Protection.



TK: When investing in a new BNPL-focused company, how does the saturation of BNPL products already available affect your thinking?

LT: We are looking at early-stage companies that are new entrants to their respective markets, so market competition in the BNPL space factors heavily into my thinking as an investor. Since the ideal customers for BNPL providers are large ecommerce players, I look for ones that have already adopted one or more BNPL options and which are well-funded or publicly traded. Furthermore, given the market saturation in this space, I'm most interested in companies that provide BNPL for brick-and-mortar merchants and high-ticket items or services—such as home repairs and elective surgeries—where there is less competition and room for new entrants. I also believe that BNPL for SMEs is also an interesting, less crowded space, where we will also see future innovation.

TK: When you consider current financial products (e.g. credit cards), how might the BNPL landscape of tomorrow affect those same products in the future?

LT: Many of the major credit card issuers are currently offering a BNPL feature, but it is not yet being widely marketed. I believe we'll see more credit card companies increasing BNPL options for purchases in excess of \$100, but right now, that threshold of purchases with a credit card still typically carries an interest rate, making them less attractive than a BNPL instalment plan. I also expect that we'll see some M&A in the space, where a credit card company will acquire one of the incumbent BNPL providers. In short, banks and credit card companies will be forced to adapt, as BNPL will impact the profitability of one of their most lucrative products – the credit card.



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Pay attention to the details

before investing in digital payments

Lana Tahirly Abdullayeva, Founding Director at Chez FinTech, talks investment strategy with **Tanya Krishnakumar**, Platform Manager at Rise New York.

Tanya Krishnakumar: When thinking about the future of payments and where it's headed, what kind of business models should investors consider?

Lana Tahirly Abdullayeva: The digital-payments world has become increasingly exciting in recent years, due to globalisation, digitalisation and the escalation of online activity. Still, many business cases remain focused on old transaction patterns and traditional thinking. For generations, the models were monolithic, linear and vertically integrated.

New players are taking payments outside of the legacy space, introducing alternative considerations of money concept and value exchange. They're unshackling themselves from the known structures, unbundling the traditional value chain, and choosing which layers they want to play in, thus shifting economic models.

Big investment opportunities can come from fintechs that are:

- **Customer-focused** – they aren't just attracted by the online payments excitement, but leverage nuances of the volume triggers, such as customer needs and behaviours
- **Founded upon the nonlinear digital-native models** that offer a rapid growth, high degree of adaptability, and increased customer reach at lower acquisition costs

• **Customer experience-focused**, merging with other sectors in the embedded finance propositions

TK: When making new investments in payment companies, what regulatory policies should one consider?

LA: Over and above the digital enablement, there are two critical components: the underlying market-wide infrastructure and relevant licence to operate. Understanding your business reliance on those are just the entry steps.

Nearly half of startup failures are attributable to a disastrous unfamiliarity with the markets they seek to enter, licence options and the wider ecosystem. New models introduce new inherent risks and require relevant governance structures, rules and standards.

As with any technology revolution race, while the regulatory landscape and financial market infrastructures (FMIs) are sprinting, they still need to catch up to the changes:

- Inadequate domestic payment infrastructures are slow at upgrading to real-time capabilities in many countries
- An increased variety of retail payments still mostly rely on card rails
- Cross-border capabilities and multi-currency access are lagging



Customers expect borderless streaming of integrated services and the ecosystem needs to catch up to enable that. There's more industry-wide work to do and working in sync with this evolution would maximise your investment value.

TK: Which companies and trends have you seen that created a path to deliver value to the end market?

LA: What excites me the most is the emergence of an inclusive ecosystem with the democratised access for new customer-centric players. They are leveraging technology and data to simplify products, joining dots to serve customer needs holistically, creating more choices for customers, and putting control in their hands!



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3 Emerging payment risks

The way that we pay is changing massively. What are the real-world implications of this that the financial services sector needs to consider now, and how will transactions become more convenient while staying secure?



The metaverse: Open for business

No matter which industry you're in, you've likely heard someone mention the 'metaverse'. Problem is, many people don't have a handle on what the metaverse actually is.

Broadly speaking, the metaverse has been referred to as a virtual world that relies on a combination of augmented and virtual reality (AR and VR), gaming and digital payments like those enabled by cryptocurrencies and non-fungible tokens—all told, a trendier version of cyberspace. While the collective understanding of the metaverse will surely evolve over time, one thing is clear—just like traditional commerce, the metaverse will rely on a backbone of digital payments in the form of cryptocurrencies that will carry with it legal risks and regulatory considerations.

Pay to play in the metaverse

Before tackling some of the risks and applicable laws concerning payments in the metaverse, it's important to note that, within it, payments are typically rendered with cryptocurrencies like Bitcoin or Ethereum in exchange for other digital goods like non-fungible tokens (NFTs). Two popular activities driving this value exchange include play-to-earn gaming and the trading of digital collectibles or art.

Play-to-earn games allow players to earn cryptocurrencies that can be exchanged for fiat currency or NFT-based items as they play. Outside the context of play-to-earn, there are entirely separate NFT markets designed to facilitate the purchase and sale of virtual real estate, digital collectibles and art NFTs. Across

all categories, monthly sales of NFTs was \$6.84 billion in March 2022¹—and one should expect continued exponential growth in conjunction with the development of new metaverse-based experiences.

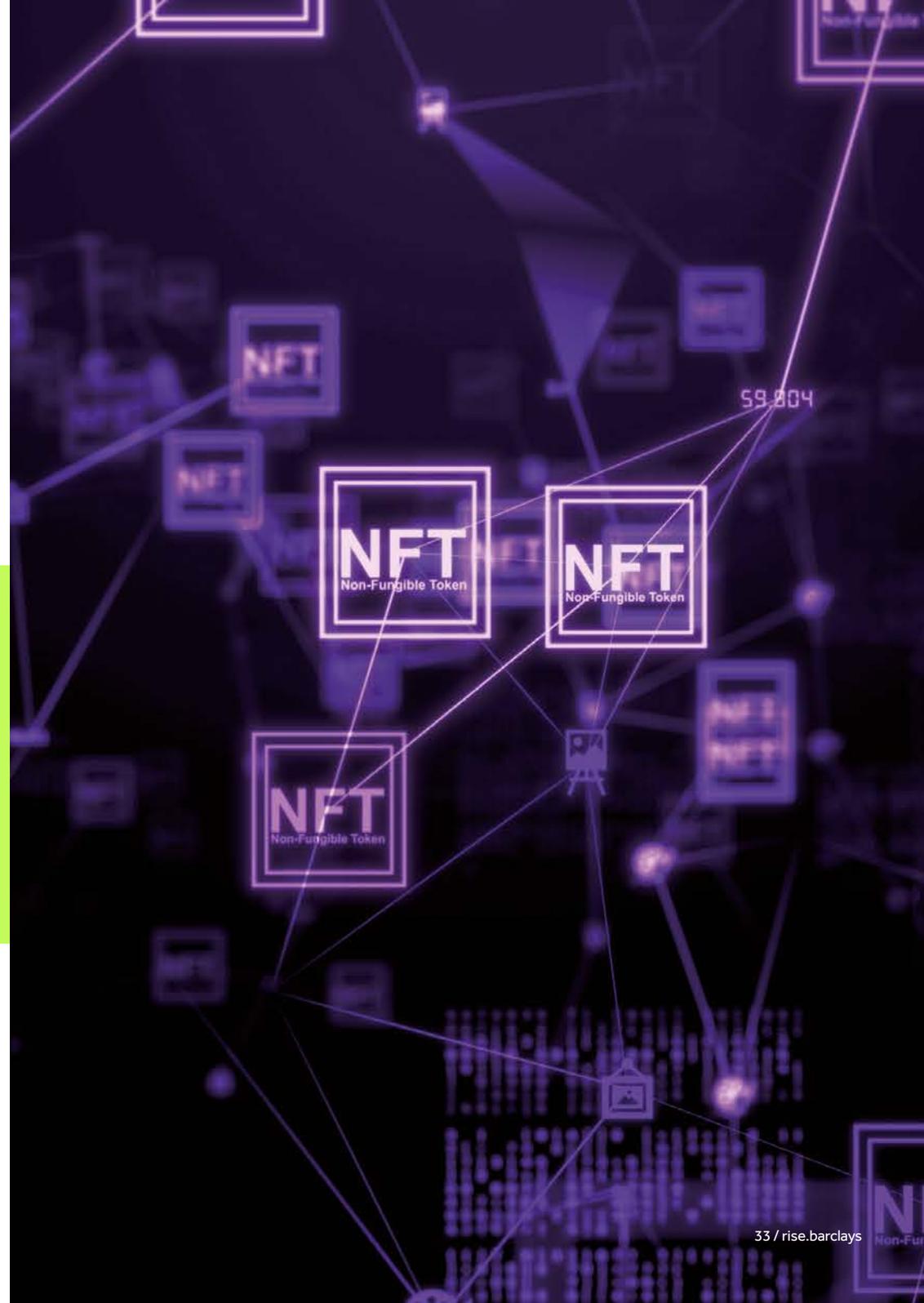
"As the metaverse grows, so must the cybersecurity measures needed to ensure trust and safety."

Ari Redbord

Head of Legal and Government Affairs,
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Virtual worlds can seem like the Wild West...

The metaverse, while virtual, is still vulnerable to the real-world risks associated with any other platform that facilitates payments. One unique risk to users is the irrevocable nature of cryptocurrency payments. Unlike in traditional financial transactions where a third-party processor can help users recover or remedy lost funds, payments involving cryptocurrencies are final and include little recourse for individuals who are fraudulently induced to make payments to an illicit actor's wallet.

Another potential risk includes systemic vulnerabilities that could undermine the security of payments made in a particular game or platform. Blockchain-based gaming platforms are vulnerable to hacks just like any other programme—and the harm could extend far beyond losing control of a player's account. It could lead to a loss of significant player funds in the play-to-earn context. For example, in March 2022, hackers attacked the Ronin blockchain, an Ethereum-linked sidechain used for popular blockchain play-to-earn game Axie Infinity, and stole approximately \$625 million.² As the metaverse grows, so must the cybersecurity measures needed to ensure trust and safety.

Lastly, because players are interacting with others all over the world, there are serious risks of inadvertently facilitating the sale of NFTs or other digital goods that are used to finance illicit activities or terrorist organisations.

... which is why you need a sheriff in town

There is a common misconception that the metaverse and cryptocurrencies are unregulated. But most cryptocurrency businesses in the US—from exchanges to brokers and custodians to ATMs—are regulated just like other money service businesses (MSBs) by the Financial Crimes Enforcement Network (FinCEN), a component of the US Treasury Department. In fact, any transfer of value is subject to the Bank Secrecy Act (BSA), the US anti-money laundering framework.

If you are a cryptocurrency business operating in the country, you are required to have robust compliance controls in place that include licensing, policies and procedures, compliance professionals, KYC requirements and blockchain intelligence like TRM Labs to monitor transactions, screen wallets, and trace and track the flow of funds in order to mitigate the risk of illicit activity. For example, if a sanctioned cryptocurrency address is going to interact with an exchange or other crypto business, that business gets an alert. Or, in the event of an exploit, such as the 2016 hack of crypto exchange Bitfinex, law enforcement, through the use of blockchain analytics tools, are able to track and trace the flow of funds across blockchains in order to seize back the funds.

Other legal regimes can also apply to payments activity in the metaverse. Creators and developers should expect that promises used to falsely induce purchasers to buy an NFT (sometimes referred to as a 'rug pull') would likely fall within the purview of state and federal consumer protection regulatory bodies. If the deceit was egregious enough, penalties could result in criminal charges from local law enforcement.³

2. Cointelegraph

3. United States Department of Justice

Developers planning to use the metaverse to hide activity that would otherwise fall under these regulations should also take note. The global Financial Action Task Force (FATF) has indicated that if an NFT is simply a collectible, then it is not likely subject to AML regulations. But, if an NFT can be used for payment or has characteristics of certain investments, then its issuer or marketplace could be required to build an AML compliance function, and the SEC would probably have something to say about the product too. The problem is that, today, the use case for NFTs is as collectibles—from Bored Apes to CryptoPunks—that also transfer value and are used as investments. But NFT use cases continue to evolve and we are likely to see a world in which everything from healthcare records to land deeds are hashed to an immutable blockchain.

So, in both the real and virtual worlds, the law is clear that fraud is illegal. It's the risk faced by the consumer that's different due to the current realities of the two payment mechanisms. At the moment, you need to rely on law enforcement to recover losses from a fraud in the metaverse, and that's a much slower process than calling a credit card company when you've been defrauded in the real world.

While the nature of the metaverse—permissionless, programmable, cross-border value transfers at the speed of the internet—may make it attractive to illicit actors who can transfer 'skins' (things that alter a player's visual appearance within a game, from clothing to physical appearance) and NFTs at unprecedented speed and scale, the open nature of the blockchain allows law enforcement, compliance professionals and other investigators to monitor transactions and trace the movement of funds in unprecedented ways using blockchain intelligence tools.

The balance between opportunity and risk

The metaverse has generated lots of hype about the opportunities to connect people and experiences in virtual worlds using cryptocurrency payments and NFTs, but it also presents nascent legal and regulatory risk. Just as with traditional forms of payments in physical cash or with fiat, policy makers and regulators will look to apply similar laws and regulations to transactions involving cryptocurrencies and NFTs.

Over time, regulators will need to determine whether new regulations need to be written to curtail unique risks associated with consumer services and financial transactions in the metaverse. But already today, creators and developers should carefully consider the legal implications of facilitating payments in the metaverse, because while the conduct may be virtual, the enforcement of these laws and the consequences will not be.



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Managing digital payment fraud risk at scale

The world of digital payments (including electronic funds transfers, virtual currency payments and other digital payment methods) has undergone massive change in recent years, with innovative platforms emerging, allowing for greater ease in the payment experience, as well as increased speed and privacy.

However, this exponential growth has also revealed vulnerabilities that challenge digital payment platforms, including those emerging in the virtual currency space. Market demands for a frictionless experience, immediacy of settlement, low- or no-cost processing, and global accessibility are all features for which a myriad of firms have designed their solutions to address and form the basis of their competitive proposition. At the same time, however, such innovations have given rise to today's latest financial crime trends.

Fraud always adapts with new technology...

Digital payment processors grapple with similar fraud issues to banks and traditional payments providers, but in a different way. As an example, think of the contrast with a traditional bank/ payment method that often entails human interaction versus a strictly digital experience. In the case of elder abuse scams, a fraudster may impersonate the victim's grandchild over a phone call to get the victim to send the fraudster money via a money services business. The success of such scams is often contingent on an untrained counterparty, but can be easily foiled by an educated teller asking the right questions before agreeing to process the payment. On the other hand, digital payment

processors do not require consumers to interact with an employee of the bank or payment firm to send a payment, and the instantaneous nature of transactions makes it increasingly difficult to identify potential instances of fraud on the front end, as well as to recover funds.

Virtual currency-related fraud and financial crimes regularly top trending news thanks to:

- High-visibility ransomware attacks designed to cripple corporate infrastructure¹
- Hacks of virtual currency exchanges and other service providers in which hundreds of millions of dollars of funds are stolen²
- The use of virtual currencies to power the economy on the dark web³
- Recent OFAC designations aimed at targeting all of the above⁴

The decentralised, global nature of the blockchain networks on which virtual currencies sit puts sanctions risks into acute focus, even for firms with a primarily domestic customer base.

While there are a number of real-world examples of these and many more emergent financial crimes risks in the digital age, firms of

1. Cointelegraph 3. US Department of Justice
2. Forbes 4. US Department of the Treasury



all types and sizes have rushed to embrace digital payments, including an emerging trend over the past two years to bring virtual currencies into the mainstream payments landscape.

... but you can capitalise on the benefits while managing risk

First, firms must recognise that there is variation within the wide spectrum of risks that may apply to their products and services. For example, a permissioned payments network meant to facilitate instant, low-cost transfers between member banks that leverage blockchain technology carries a vastly different risk profile from a public, decentralised virtual currency network. Truly real-time payments enabled to API connectivity require differing levels of fraud control from traditional batch payment processing.

Broadly, in the same way as firms should look to technology in their product evolution journeys, so too should firms embrace technology in their control framework. The convergence of technology and financial services has given traditional firms and fintechs alike access to unparalleled data, enabling the use of Artificial Intelligence and Machine Learning to identify trends, raise alerts and take action to address emerging risks. Real-time data analytics can enable automated risk decisioning, such as applying a transaction limit, requiring additional authorization, or interdiction if a red flag is

present. When creating a low-friction offering, firms can deploy technology to automatically introduce friction at key points in the payment flow to dampen the exploitation of their offerings and detect or prevent incidents in real time.

Real-time data analytics also enables firms to conduct event-driven due diligence and review of their customers, as opposed to traditional risk-based review cycles occurring every one to three years. While risk-based periodic review cycles may provide for operational predictability, it does not enable firms to react to risks as they occur. Event-driven diligence, enabled through the use of data analytics and risk-based triggers, helps firms to maintain a more current understanding of their customers and respond to risks before it's too late.

As part of their mitigation approach for products and services related to virtual currency, firms should look to complement traditional transaction-monitoring capabilities based on behaviour patterns with blockchain analytics, which can provide the ability to screen wallet addresses to identify known connections with bad actors (including OFAC designated wallets, darknet marketplaces, ransomware perpetrators, and more) and investigate on-chain transaction relationships. Some blockchain analytics providers have developed oracles that any virtual currency business (including DeFi protocols) can use to confirm that a wallet is not on a sanctions list before enabling it to transact.

Just remember—risk management must be dynamic, not static

While the availability of risk management tools and technology can help to identify and mitigate risks in the digital payments landscape, there is no one-size-fits-all solution. As the environment continues to evolve and change, it is important to upskill and continually train risk management personnel; providing them with detailed training on the firm's digital payments products, services and technology, so they can appropriately evaluate new products and services, and apply a right-sized risk management approach.

Firms should engage with their regulators at all stages of the product lifecycle to understand requirements, trends and, ultimately, permissibility of certain offerings. While the Office of the Comptroller of the Currency explicitly outlined in November 2021⁵ that their permission is required for banks under their supervision to engage in virtual currency activities, regulatory engagement is good practice for any financial institution, regardless of their primary regulator.

To that end, a comprehensive assessment of the specific risks of a firm's digital payments products and services against its control environment can be a powerful tool to articulate the firm's unique risk profile to regulators, as well as educate stakeholders who may be less familiar with emerging technologies. A comprehensive risk assessment, regularly refreshed to account for product, service and other material changes to the firm's risk landscape, is therefore a critical component of a successful digital-payments risk-management programme.⁵

The challenges of the rapidly changing digital payment ecosystem may seem daunting, but a well-tailored, risk-based approach to compliance can mitigate financial crimes risks. No two platforms are the same in their risk profile and the unique challenges of nascent technologies like frictionless payments and blockchain require a tailored approach inclusive of robust risk assessment, regulatory engagement, and compliance technology to enable responsible business growth.

The views expressed by the authors are not necessarily those of Ernst & Young LLP or other members of the global EY organisation.



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Simplifying cross-border payments for SMEs

Think of cross-border payments as a checklist of real-time, prepayment requirements: account numbers, routing codes and beneficiary names. But there's more: checks to prevent fraud and money laundering must also happen instantly.

It's little wonder that cross-border payments have always been inherently challenging for SMEs. Especially when you add in the volatility of currency fluctuations, highly complex processes and systems that lack sufficient integration, as well as myriad lenders, brokers and financial institutions that go along with cross-border payments.

Thankfully, there are many companies that can help make international payments simpler and faster for SMEs. But before solving any problem, you first need to identify and understand the different parts of it.

Being stuck in a one-horse town

Traditionally, SMEs turned to their banks to make cross-border payments. But those banks often lacked the resources to service them cost-effectively, leaving only one option for international payments: wire transfers sent on the SWIFT network. In the absence of other options, SMEs see their money tied up in transit, often for days, which means that they can't put that money to work in the digital economy. Additionally, in a payment's journey from Point A to Point B, there are often many correspondent banks that each take their cut, with a receiving bank that may well charge for receiving an international payment.

It doesn't have to be this way. Fintechs can help banks offer their SME clients a seamless way to make international payments. For example, take Currencycloud's partnership with UK-based Starling Bank. By leveraging Currencycloud's technology, Starling's customers now have the ability to hold, receive and pay out in multiple currencies—essentially being 'local' in the US, UK and EU.¹

Flattening the curve on fees and volatility

The instant payment market is expected to reach almost \$30 trillion by 2026.² Instant payment rails cater well to these types of transactions and will continue to be attractive for SME payments as maximum sending limits rise. In 2019, the European Payments Council increased the EU's SEPA Instant Credit Transfer limit from €15,000 to €100,000. In 2020, the Clearing House (US) increased the general transaction value limit in the real-time payments network to \$100,000 from \$25,000. While, in February 2022, the UK's Faster Payments limit rose significantly from £250,000 to £1 million.

But since many SMEs only move money internationally via SWIFT wire transfers between the largest global banks, there's a concern. While many banks have signed up to

1. Currencycloud
2. Juniper Research



SWIFT Global Payments Innovation (gpi) to speed up payments, some only offer a wire service that is slow and expensive, especially on lower-value payments. And when overall trends in this space show smaller payments will be made more often, SMEs will require an alternative.

Banks can charge up to 4% to move money internationally, yet a staggering 80% of SMEs are unaware how much it actually costs to make an international payment.³ This lack of transparency also extends to accessing a complete view of exchange rates, payments history and market data, which are crucial for intelligent decision-making and reporting.

Forty-three percent of SMEs³ have admitted they would find trading internationally more appealing if there was more transparency with the associated costs of making international payments. The process is opaque for many SMEs. What is charged at the point of sending funds and what arrives at the other end is not the same amount.

"Solution providers allow fintechs and financial institutions to offer up-front pricing, fee transparency, FX capabilities and the ability to track payments."

Piers Marais
Product Director,
Currencycloud

FX risk management is an additional issue faced by SMEs who are trying to model their cash flow and budgeted rates. Say a business has to pay an invoice to a supplier in Turkey at a future date, but they have no idea how much to put aside due to rate volatility. An FX trader forward locks the exchange rate at an agreed-on price for a future purchase or sale for a particular period, so the business knows exactly what it will cost. The problem is, the FX market isn't 24/7 in a global digital economy that is.

Back-end solution providers such as Currencycloud allow many fintechs and financial institutions to offer up-front pricing and fee transparency as well as 24/7 FX capabilities, FX forwards and the ability to track payments. One emerging alternative is for SMEs to set up their own international account with a multicurrency IBAN in their organisation's name. As a result, SMEs can manage corporate cash flows and view trading history, market data and statistics, all in one place, any time of day.

Payments can be as simple as ABC—or API

Rather than stitching together a patchwork of fragmented financial service providers they rely on to get to market, SMEs can implement a global, transaction-based API platform specifically tailored to their needs. Through a single white-label or API integration, SMEs can access the latest technology advancements on multiple payment endpoints, leaving them to focus on delivering enhanced customer propositions to grow their business instead.



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Revolut is a well-known startup that outsources some of its access requirements when establishing new routes and new currencies via Currencycloud API integration. Revolut is driven by producing the best possible customer experience, and prioritise giving them this over building the infrastructure on which it runs—particularly when expanding into new regions.

Tearing down the wall

For too long, SMEs have run up against a wall of delays, fees and volatility when making cross-border payments. The good news is real changes are being delivered through emerging technology and fintechs' entrepreneurial spirit. Through innovation (and the growth of contactless payments as a result of the COVID-19 pandemic), the industry is evolving rapidly and those walls are coming down. The demand for more instant payments and reduced costs is growing. We anticipate cross-border payments will look very different in the next 10 years—they will be faster, easier and more transparent—and that is good news for SMEs.



4 The payments of tomorrow

Fintechs from the Rise ecosystem take a look at what the future might hold, from how banks could collaborate to how brands can get smart with the metaverse, and even why the humble gift card could develop into something much more powerful.



The next big payment innovation might be in your junk drawer

Consumer expectations have changed, as have their behaviours. According to several sources, we saw five years of digital adoption happen in the first eight months of the COVID-19 crisis.¹

That's an incredible rate of acceleration, especially when you look at the US market which, according to Plaid's annual report on fintech adoption in 2020, saw only 58% of US consumers use fintech.² Compare that to just one year later, when the figure increased to a whopping 88%.

With this shift into financial technology and the public's general comfort with the user experience in a digital or mobile environment, many behaviours are clearly here to stay and many may have already served their purpose. But what's certain is that consumers expect to be able to pay with your financial tool when and how they want; online, on mobile and in-store... and increasingly via social media.

It's not cheap or easy to keep up with changing technology, especially for retailers with their potentially disjointed hardware, their online stores operating differently from their bricks and mortar, and frequent difficulties interfacing their ad technology with their payment technology across platforms. So how do we fuel acceleration without breaking our payment systems and processes (or costing more than it's worth to overhaul)? It may not be as hard as you think.

Don't reinvent the wheel

Look at some of the biggest innovations in frictionless payments in recent history: Peer to Peer (P2P) payments, Point of Sale finance (PoS, also known as Buy Now Pay Later, BNPL), Buy Online Pick Up In Store (BOPIS) and the resurgence of QR Codes.³ (QR codes never went away, but they're now native to mobile devices, thus creating a seamless experience.) What do they all have in common?

They repurpose or rebrand existing, often friction-filled, technology in a payment stack:

New technology	Leveraged from
P2P	Automated Clearing House (ACH) payments
PoS	Instalment loans
BOPIS	Online payment acceptance and in-store inventory
QR codes	Existing QR codes

But there is another payment tool at your disposal that you may not be thinking about—gift cards.

Did you say gift cards?

Also known as prepaid cards, stored value, or closed-loop payments, many think of gift cards as a last-minute gift for a family member/friend. But companies should really start to think of them as tools for customer acquisition, loyalty, and a way to cut back on transaction fees. In fact, with the growing trend of customers buying a gift card for their own use (to help with budgeting or to take advantage of a promotional offer), we could start thinking of them as less as a 'gift' and more in terms of a 'self-use' tool. What would you do differently if you stopped calling it a gift card and instead thought of it as your own branded currency or payment? The opportunity to use gift cards to advance payments and the customer experience is actually staggering.

Consider the following:

A gift card can be both a physical and digital payment method and, chances are, you already engineered a seamless omnichannel experience.

A gift card can carry artwork—think of it as advertising space. Those of us in the gift card industry often refer to this as “the tiny billboard in your pocket.” Imagine using gift cards to encourage the purchase of specific products or drive customers to specific locations. You could also use it to help with back-ordered inventory: “Sorry, we are out of that, but here's a gift card with the exact amount it will take to purchase and ship to you when it's back in stock.”

Gift cards let brands re-evaluate the way they look at paid advertising. Many brands are locked in the increasingly inefficient and expensive Google and Meta platforms. Companies could go from the friction-filled experience of paying for clicks and impressions on ads to only paying when a customer purchases a gift card —

because the 'ad' is the gift card itself. Brands can create locked-in spend and real attribution at the earliest point in their customer journey, and make efficient use of their advertising budget that they can track and even monetize further.

Consumers think of gift cards as free money.

According to a study conducted by Fiserv, pre-pandemic, the average consumer was spending \$59 more than the original face value of a gift card.⁴

It can be a cheaper transaction than credit and debit card rails. Starbucks is a great example of this—they went from customers swiping credit cards, let's say, five times a week on their way in to work, to topping up a gift card every \$20 via Paypal. That makes for some incredible savings and it makes for a truly powerful payment tool.⁵

The goal is to keep customers coming back

Not many companies really take advantage of their gift card programmes like Starbucks, which has been compared to some of the largest banking institutions.⁶ Think about the last time you walked into Starbucks—how frictionless was not only your payment, but your entire experience? Just remember—it all started with their gift card. Frictionless payments need a familiar customer interface and from there you can enable not only effortless payments, but an entire experience that keeps customers coming back.



Holly Glowaty
Co-Founder & Chief Partnerships Officer, Prizeout

[in](#) hollyesch

1. McKinsey

2. Fortune

3. Noble Studios

4. Fiserv

5. Skift Table

6. Payments Journal

Crucial collaboration:

The shared future of payments

If technology seems to be moving faster than ever, that's because it is. This speed of development is particularly apparent in the payments arena, where every generation of breakthroughs provides the base upon which subsequent technologies are built.

Having that base hastens new development exponentially. That's the law of accelerating returns.¹ And this reality creates equally exciting and challenging opportunities for the financial services industry.

The keys to keeping pace with the dizzying speed of technological change are efficiency and scale. And the history of the financial services industry illuminates a time-tested method for accomplishing both: organising resources into shared utilities and consortiums.

"To keep pace, financial services firms are beginning to band together once again."

Amber Buker
Director of Insights,
Alloy Labs Alliance

Banks have a history of banding together to advance technology...

In 1973, the SWIFT messaging network was developed by a group of banks in response to the growing trend of globalisation and the corresponding demand for international banking and payments. Prior to SWIFT, the primary tool for completing international business transactions was the Telex messaging system. But Telex suffered from a fundamental flaw—it sent payment messages in free-text form, leaving room for ambiguity and inconsistency. In the late 1960s, it was common to send 10 or more Telex messages to accomplish a single cross-border transaction.

Attempting to address Telex's shortcomings, several banks worked independently to develop their own electronic data interchange systems. But after years of fighting for dominance, it became clear that global banks would have to join forces to create a single, shared messaging system if they were to succeed in growing international payments. In 1971, 68 banks from 11 countries commissioned feasibility studies and formed working groups to explore the proposition. Two years later, SWIFT was formed, with 239 banks representing 15 countries.



Just as international commerce drove the need to create SWIFT, the explosion of credit card usage led to the formation of Visa.

Thirteen months after the launch of Bank of America's first credit card in 1958, the product was adopted by a remarkable two million cardholders and 20,000 merchants.² Soon after, Bank of America began to franchise its card technology in other states, but the lack of a centralised transaction clearinghouse caused serious problems. The result was a 20% delinquency rate and rampant fraud.

Dee Hock, the eventual organiser of Visa, described the situation in his 2005 book, *One From Many*, writing, "[s]ince each bank was both a merchant-signing bank and a card-issuing bank, they began to play tit-for-tat, while back rooms filled with unprocessed transactions, customers went unbilled and suspense ledgers swelled like a hammered thumb. It became an accounting nightmare."³

Hock had a front-row seat to the disarray in his role as vice president of a Seattle bank that was licensing the Bank of America credit card. After recognising the issues caused by the lack of a central clearinghouse, he approached Bank of America with a solution: instead of owning and managing the entire enterprise, create a consortium of licensee banks that would run the program as a single, coordinated card network responsible for managing the settlement process.

Bank of America agreed to give the idea a shot and ceded much of its control. In doing so, it grew a behemoth network that coordinated all the non-competitive aspects of the business. After inception, this payment system became known as Visa International (to be rebranded as Visa in 1976).⁴ By 1970, Visa had recruited its first 3,000 bank members. The rest is history.

2. The Washington Post

3. *One From Many*, by Dee Hock

4. Wikipedia

... so why not keep the band together?

Fifty years later, the conditions for cooperation are similarly ripe. We've seen a 10x improvement in internet speeds in the last decade, driving significant growth of digital payments. The COVID-19 pandemic accelerated the use of ecommerce and contactless transactions. And new technologies, including real-time payments, embedded payments and cryptocurrencies are rapidly gaining adoption. To keep pace, financial services firms are beginning to band together once again.

A recent cooperative effort is being led by New York Community Bancorp, a \$57.9 billion asset bank, and Figure Technologies. The groups are working together to mint a USDF stablecoin that would enable them to settle transactions in real time on the Provenance blockchain. They are working with JAM Fintop Capital to recruit other banks into the project to realise the benefits of network effects. The goal is for all network banks to have faster transactions, efficient onboarding and access to significant amounts of transaction data.

Meanwhile, the Alloy Labs Alliance—a shared innovation lab for community and mid-sized banks—has been leveraging a consortium model since 2018. The group's most recent innovation is its CHUCK™ Payments Network,⁵ which launched in December of 2021. To build CHUCK™, 12 of the Alliance's member banks worked together with a technology partner (Payrailz[®]) to build an open payments hub designed to keep a bank's brand front and centre, while allowing customers to send and receive payments of any kind, on any platform.

The idea for CHUCK™ was conceived when member banks discovered their customers were leveraging third-party payment apps at a rate that far outpaced the use of bank-led products like Zelle. Instead of trying to change customer preferences, the group decided to focus on building a product that would grow engagement with the bank's app while honoring and enabling customer choice.

"This is a network for community banks, by community banks," says Julie Thurlow, CEO of Reading Cooperative Bank in Massachusetts. "[It] provides community banks with the fast, flexible infrastructure they need to remain competitive over the long term."⁵

"Paradoxically, by combining forces institutions can attain the scale and efficiency they need to remain independent."

Amber Buker
Director of Insights,
Alloy Labs Alliance

Jason Henrichs, chief executive of Alloy Labs Alliance, furthers: "[With CHUCK™], banks can add their own branding to the network. We are also plugging in other networks and payment rails. Just as you would change out the drill bits in a drill (using a chuck), we can add and change out the rails."⁶

Payments will continue to progress to the tune of collaboration

In a world dominated by the law of accelerating returns, every business should be looking for force multipliers—ways to do more with less—as has proven to be a successful formula in banking. Paradoxically, it is by combining forces that institutions can attain the scale and efficiency they need to ultimately remain independent.



Amber Buker
Director of Insights,
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Why the metaverse is good for companies and brands

Many deep discussions about the metaverse are taking place. Is it too nebulous a concept for most companies and brands to embrace? Is it a new frontier, a promised virtual land full of opportunities and excitement? I'm a firm believer in it but only as part of a bigger picture, a balanced approach that needs to be adopted by all players.

The metaverse is arguably as ground-breaking as ecommerce when that first began to be realised, but companies and brands need to see it as a key component within their overall strategy, not just as a technology gimmick or another communications channel.

Bear in mind that every year, some \$54 billion is spent on virtual goods, which is almost twice the amount people spend buying music.¹

And it's also worth noting that the metaverse is not a new, untried phenomenon. Think about the success of Sims, which has people playing in a virtual world for hours a day. Modern iterations such as Fortnite and Minecraft have millions of followers, and support massive virtual economies.

Excite your community

The big draw, the underlying excitement for us and our customers, is the ability to engage with people on a level that has just not been possible up to now.

Take the example of the community of esports fans, who extensively use the metaverse to compete in or view online sports. There are

expected to be almost 286 million such fans by 2024 which, to give this context, is over 86% of the US population.² Now this huge community, just one within the metaverse, is out there, waiting to be engaged. They might have watched in the stadium, visited the race track or watched on television, but now, in the virtual world, they have a greater sense of belonging than ever before. They are ready to relate and engage.

Now it's up to the brands to reach out and complete the engagement with innovative sponsorship and rewards programmes. For example, branded Formula 1 racing car skins can be sold to esports participants who could then customise their car with their favourite racing team colours and then participate in races as their digital persona.

Formula 1 motorsport teams are very good at this—they imagine the many ways to engage with their fans, and grow their following from the physical world into the digital one. This is why the metaverse is so important for them and sets the example for others to follow.

1. J.P. Morgan
2. Statista



Bridge worlds with the right currencies

Taking the next step, if we award points for winning at a competition, then we need a metaverse currency to make purchases. Imagine being able to bridge the virtual world and the real world of fiat money, so if you win races your points are immediately available on a card branded with the Formula 1 team whose skin you are racing in. You could win rewards in the metaverse and spend them in the real world, in a physical store or through ecommerce. And if you win enough points, you could even race their real Formula 1 racing driver in the metaverse.

This bridge between the metaverse and the real work is crucial. You might spend real money in a physical store, say on some Adidas trainers, and if they were a sponsor of a racing team, you might have earned rewards that can be spent in the metaverse.

Here's the key point. By using physical stores, ecommerce platforms and the metaverse, you have created a virtuous circle with all of those strands working off one another.

These worlds exist right now. Brands, sports teams and retailers need to engage with consumers in the metaverse, through ecommerce and in-store, and they need the tools to do that. That means being able to offer viable virtual currencies, exchangeable to real currencies, which are then available to spend in real life. Above all, they must be useful to people.

Align your brands

Now is the time for brands in the digital and real world to become aligned. There's no reason why you can't wear the same Adidas trainers in the virtual world, as you wear in the real world.

Brands must view the metaverse as an opportunity to create a unified and harmonious experience. They need to give people a physical experience (in a shop), immerse them seamlessly in the metaverse and then lead them into a virtual in-house experience, as the retail brand Marks and Spencer are doing with their augmented reality wayfinding app.³

Your bridge ensures that commerce works, that payments work and that there's no reason you can't have a great digital exchange within the metaverse, so that when physical goods, or even digital goods, get delivered there is a real money transaction at the back of it.

"There's no reason why you can't wear the same Adidas trainers in the virtual world, as you wear in the real world."

Nigel Verdon
Co-founder and CEO,
Railsbank

Make NFTs work for you

Another thing to consider is non-fungible tokens (NFTs), which currently have a market cap of some \$41 billion.⁴

NFTs let you have a fractional ownership of real works of art, which you can experience in the metaverse, with your name up there, and also experience them in the physical world. Consider all the art assets owned by, say, the V&A Museum in London. Most (90%) of them are not even displayed. The metaverse allows such institutions to display more exhibits, which can become goods when they're financed through NFTs. Compared with some of the more questionable NFT offers around at the moment, there's real money in that.

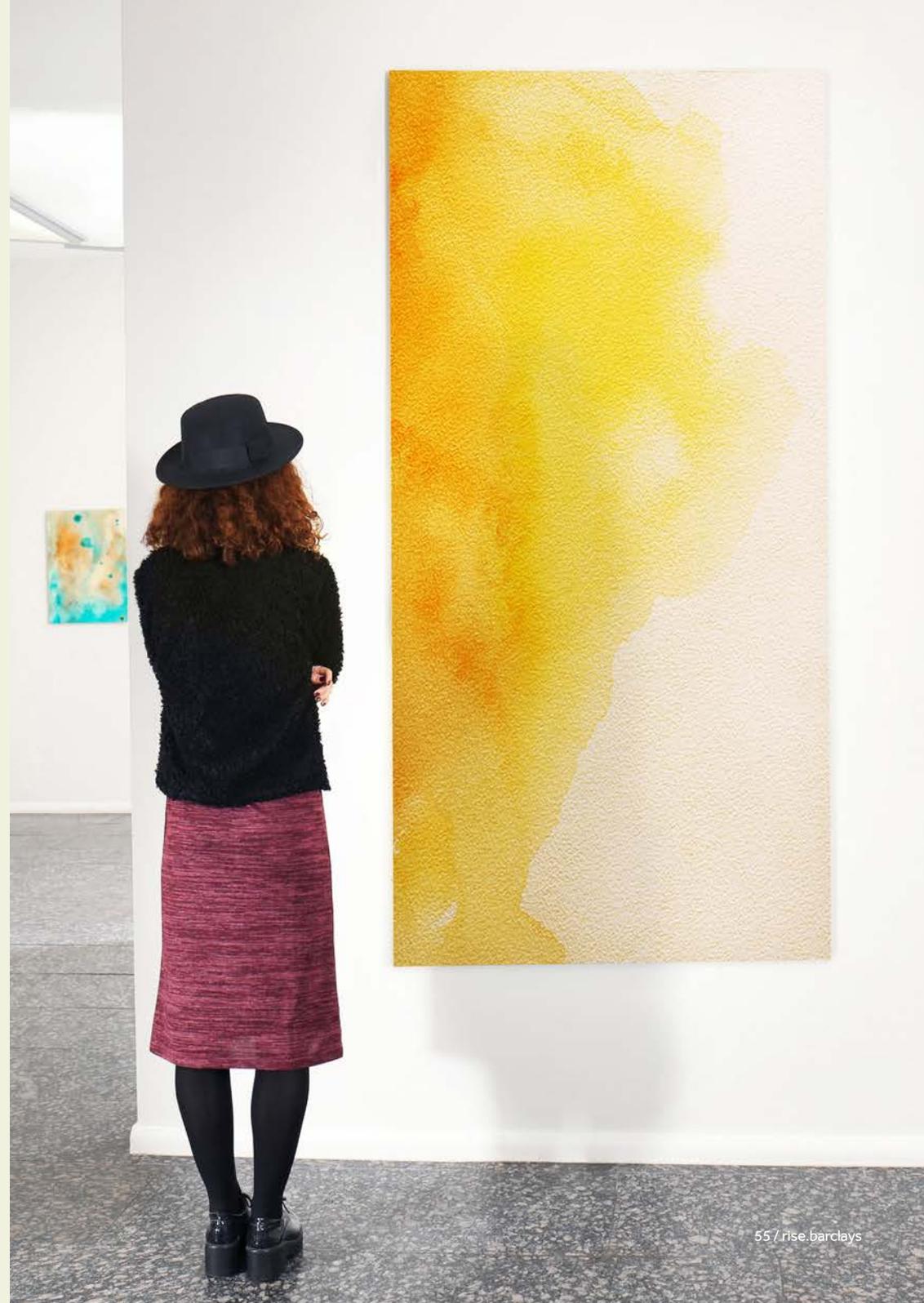
Payments are the key here. They provide a means of commercialising metaverse opportunities in the real world. NFTs are not much use to you 'on the outside' unless you turn them into something physical. Payments—real money—are that key, the way to commercialise NFTs.



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[railsbank.com](#)

3. The Grocer
4. Forbes



Digital payments: Launching the era of Bank Pay

Historically, the payments space hasn't been known for being a hotbed of rapid innovation.

Over the past 70 years or so, cash, cheques, cards and bank transfers have been the mainstay of payments. And, while digital wallets, contactless payments and faster payments systems have hinted at the change to come, the reality is that we've simply digitised existing offline payment methods rather than invent new ones that are truly suitable for a digital world.

With Open Banking, we can now say with confidence that a new era of payments is upon us. The first indication of this has come with payment providers innovatively using standardised banking APIs to get the most use out of faster, more streamlined, payment rails, such as Faster Payments in the UK, FedNow in the US or the SEPA Instant Credit Transfer in the European Union.

The second significant change is the arrival of Variable Recurring Payments (VRPs) in the UK and PayTo in Australia. VRPs work by pulling funds directly from your bank account, with instant confirmation giving merchants real-time visibility over their recurring payments, but with the flexibility and ease of use of classic direct debit. This step change can lay the foundation for a digital bank pay revolution that will allow account-to-account payments to become the norm.

At the end of 2019, GoCardless and Starling took the first live VRP transaction through the Open Banking Implementation Entity's regulatory sandbox. And, in May this year, NatWest announced its own UK rollout of Open Banking-initiated VRP transactions as part of a wider pilot with GoCardless and other third-party-providers.

This is significant because it is the adoption of VRPs by big-name financial providers that will see open banking payments transition into the mainstream. Can you imagine a future where payments can be made directly from one account to another safely, in real-time, and without the need for costly intermediaries or cumbersome historic processes? That is what VRPs will bring - and they will change the face of payments forever.



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Case study: Plum

The Plum money-management app provides a platform for investors of all experience levels, but it had an issue with failure rates. Customers weren't able to seamlessly move money from their bank accounts to Plum, and it compromised the growth of their platform.

To improve the customer experience, GoCardless implemented:

- Automated billing that provides account-to-account payments that are more cost-effective than cards, which can also expire or get canceled
- Payment-intelligence data, which executes payment retries to eliminate failed payments. With machine learning, we identify when a customer is likely to have payments in their account, and automatically retry payments on that day

In the future, GoCardless will implement VRP technology to eliminate repeat authorisation protocols that create unnecessary friction in the customer experience.

The results have been substantial. Seventy percent of Plum customer payments now go through GoCardless, and total monthly 131% since 2019. On the back of implementing GoCardless machine learning technology (Success+), Plum's payment failures dropped from 3.6% to 0.48% in just three months.

About GoCardless

GoCardless is on a mission to take the pain out of getting paid for businesses of all sizes. We've created a global bank pay network to rival credit and debit cards and which allows businesses to send and receive both one-off and recurring payments. We're proud to count more than 70,000 businesses around the world as our customers and by using the billions of dollars of transactions across our bank pay network, we can make predictions that help improve the metrics our users care about - such as managing and reducing payment failures, or combatting fraud.

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BARCLAYS

Rise London

Momentum is building in London!

Our members continue to have great fundraising and growth success, founders are winning awards and we continue to see more and more people come through our doors.

Aside from an increase in attendance at our in-person events, we have also been busy launching our two new offerings: Rise Start-up Academy and Rise Connect. Rise Academy has now kicked off with its first cohort and Rise Connect is live and quickly growing the global digital community. The wider London fintech scene is also in full swing, including the Innovate Finance Global Summit, which had over 1,500 people in attendance.

Collaboration and regulation were key themes...

There is a strong shift in the ecosystem toward greater collaboration between fintechs and more historic players in the space. During last year, 30% of all IPOs on the London Stock Exchange were in fintech.¹ At the same time, the UK saw \$11.6 billion of investment in the space, a 217% increase from the year before.² With this amount of capital pouring into high-growth startups, 2022 is the year for founders to get to work, and leverage such opportunities.

As expected, one of the biggest Innovate Finance Global Summit presentations was by John Glen, the Economic Secretary to the Treasury. He announced the introduction of new legislation that will bring certain stablecoins into the UK payments framework, as well as other projects to address broader crypto-regulation and decentralised autonomous organisations

(DAOs).³ We also heard from Julia Hoggett, the CEO of the London Stock Exchange (LSE), who spoke about how the LSE recognises that capital markets are evolving and that they need to prioritise being the conveyor of capital for all companies.

But the future is always a hot topic

Of course, no conference is complete without a lively discussion about Web3 and Metaverse. There were many inspiring discussions about how all of the changes we are seeing in the ecosystem can foster new opportunities and what we can expect in the future from the creation of new 'land' in the Metaverse, digital twins and NFTs.

Talking of the future, Rise London is thrilled to kick off its brand-new Crypto series of events. They will run once a month, both in person and online, for the remainder of the year.

At Rise London, we're thrilled to see such growth in the fintech space. It's driving the evolution of the wider financial services ecosystem as more companies and institutions are looking to become increasingly innovative so they can leverage the activity and funding opportunities.



Anastasiya Kizima
FinTech Platform Lead,
Rise London

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Rise India

The Indian fintech scene has continued its great start to 2022!

In Q1, the vibrant Indian startup ecosystem raised \$11.7 billion across 506 deals. As of May, India is home to 100 unicorns, of which 20 are fintechs, as well as 23 soonicorns. Setting a first-quarter record, 14 startups, three of which are fintechs, entered the unicorn club with a total valuation of \$18.9 billion.¹ According to Inc42, the top sectors for startups were enterprise tech, ecommerce and fintech.

Fintechs and M&A deals are getting hotter...

Fintechs continue to attract investors—81/506 deals. In Q1, a record 100 startup M&As completed. Rise India alumni marked their presence in these trends. Banking and financial intelligence solutions provider Karza was acquired by Perfios for \$80 million², Edtech startup Financepeer raised \$31 million in Series B funding³ and embedded financing platform Fundfina raised \$1.3 million as part of its seed round.⁴ We're also pleased to share that Rise alumnus Monetago (a fintech that provides a secure financing platform) won a Best Fintech in Startup Award in the Trade category.⁵

...and so is the view on security

With the penetration of digital payments increasing, there have been concerns around payment security, but India's central bank has taken crucial steps to secure card transactions. They have mandated all authorized card networks to issue tokens against card details for all transactions on a particular platform. The guidelines are set to come in force from 1st July 2022. With that in mind, we hosted the

first Rise Presents of the year on tokenisation and its impact on the country's payment space. More than 200 people from the Rise ecosystem took part!

Women in tech have played a key role and will continue to do so. For International Women's Day 2022, Rise India designed an hour-long Ask Me Anything session for women professionals from our ecosystem, at which their queries and concerns were addressed by the guest speaker, Vinita Ramtri (Global API Head, HSBC). Web3 has been the talk of the town for the last few quarters and we're now witnessing lots of new business models and products being developed. That's why we organised a session for our ecosystem members on how to build, launch and scale Web3 companies.

At Rise India, we're closely watching what the rest of 2022 holds for the fintech industry. We're excited to play our part in helping the dynamic Indian fintech ecosystem reach new heights!



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1. Inc42

2. The Economic Times

3. The Economic Times

4. Entrepreneur India

5. Business Wire

Rise New York

It's been an exciting first half of 2022!

Together with partners like Empire Startups, RevTech Labs, the Department for International Trade and assorted media, Rise New York hosted over 3,500 attendees for in-person New York City FinTech Week events. So far this year, a larger share of funding went to earlier rounds than at the close of 2021 as investors continue diversifying with many smaller bets to hedge tech stock exposure.¹ Supportively, it's a great time to be in the New York City fintech community.

It's a new era in payments...

The pandemic drove massive growth in e-commerce and the integration of payment technologies. New channels were created for almost every business as fintech companies offering Banking-as-a-Service and Buy Now Pay Later (BNPL) integrations boosted customer loyalty and eased customer pain points. Over one-third of Gen Zs and 14% of millennials used BNPL payment options last year, as well as 18% of Boomers.² Digitally-native fintech solutions offer strong non-financial brands the opportunity to serve as their customers' trusted payments partner. As a result, those solutions increased brand loyalty and transaction size for their partners.

... but it's also a race to the top

Partnership, as well as speed, will determine who wins and loses in the race to own the customer journey for the future of payments. Beginning in 2023, the FedNow Service will be released in phases to provide safe, efficient and instant

payment services 24/7/365.³ However, much like New York City, fintech doesn't sleep and there are already entrants to the payments ecosystem building real-time capabilities safely and securely across a variety of bank networks and service provider partners. The RTP network is a real-time payments platform from The Clearing House that all federally insured US depository institutions are eligible to use. "Instant payment capabilities offer a more efficient future, from payroll integrations to wholesale B2B payments and even embedded finance opportunities for bank partners and clients in the RTP ecosystem," says Peter Davey, Senior Vice President and Head of Product Innovation at The Clearing House. "New York City is uniquely positioned with so many financial service firms in one place as a ripe market for payments improvements from fintechs. As the RTP network continues to grow, The Clearing House continues to add capabilities, such as DDA Tokenization and Document Exchange payment messaging linkages, that make the network even more valuable to users."⁴

These exciting payments innovations strike the balance for ease of use, speed and security, which are all great signals for market adoption in 2023 and beyond!



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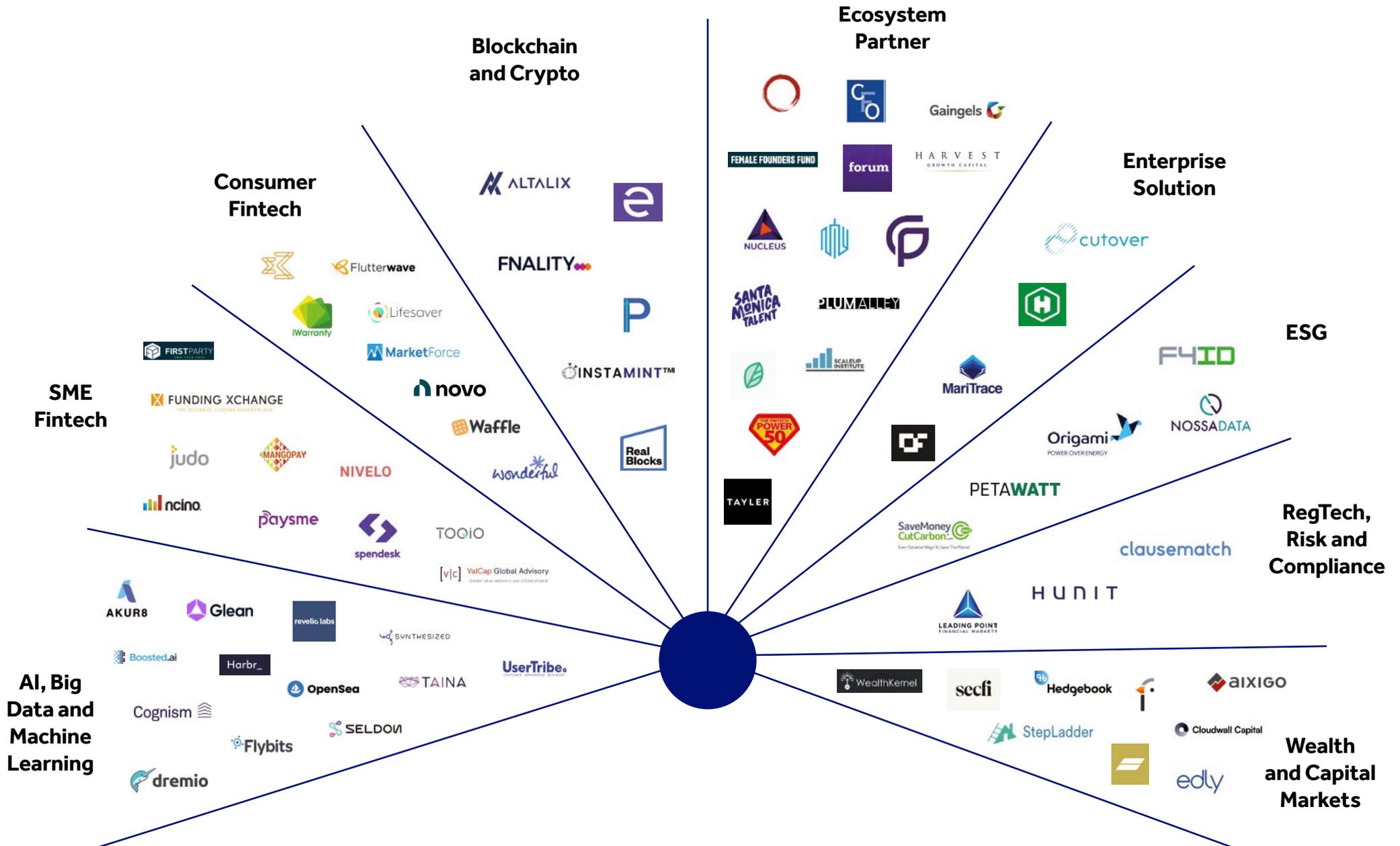
1. This Week In Fintech

2. QED Investors

3. The Federal Reserve

4. The Clearing House

Rise global network



This infographic shows companies resident at our Rise locations. The information is accurate at the time of publication.

rise

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About Rise, created by Barclays

Rise, created by Barclays, is a global community of the world's top innovators and entrepreneurs working together to create the future of financial services. By connecting technology, talent and trends, the mission of Rise is to accelerate innovation and growth in the financial services industry.

To join our community, or keep in touch with the latest from Rise, visit or follow us on:

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