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FUTURE OF PAYMENTS

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BEHAVIOUR

How spending money can buy happiness

Behavioural economics can reveal useful insights into our motivations and feelings when parting with hard-earned money

Marina Gerner

Imagine you're on your way back from work and you pop into a shop. You weren't looking for anything in particular, but an hour later you find yourself walking out with a big smile and multiple bags in tow. What happened? Behavioural economists call it the effect of "shopping momentum".

We like to think we're rational consumers when it comes to our spending. After all, our financial decisions have a huge impact on our wellbeing. Think of an unforgettable holiday or a house bought at the wrong time. But in reality, we're emotional creatures, susceptible to biases and external factors.

Luckily, behavioural economics makes our irrationality more predictable. In the words of Nobel prize-winning economist Professor Richard Thaler, it's "economics done with strong injections of good psychology".

When considering paying for goods, researchers have found that buying one thing makes us much more likely to buy subsequent items, regardless of our previous deliberations. Browsing things to buy online or in a store, puts us in a mindset of "deliberation". But as soon as we buy one item, a cognitive shift to "implementation" occurs. "Our mindset changes from whether or not I should buy something to how do I buy this?" says Professor Ravi Dhar of the Yale School of Management, New Haven, Connecticut.

"If you want to resist the impulse," says Professor Dhar, "ask yourself what else you could do with the money." His studies show that people typically neglect to think of opportunity costs, or alternative things we could buy with the same amount of money. Those who do are more likely to choose the cheaper option or buy nothing at all.

Conversely, retailers can use framing techniques to get people to spend more. "Paying a lot for cashmere socks seems gross to many people," says Professor Dhar. If cashmere socks are presented among other types of socks, we're inclined to see them as socks first and consider their material second. But experiments have shown that if the same socks are presented alongside other cashmere goods, we categorise them as "cashmere" first and "socks" second, and we're willing to spend more.

There's another framing technique to increase spending. When buying a new backpack, for example, our tendency for "duration neglect" means we don't typically think about how long we're going to use it for. But if people are asked to consider how long an item is meant to last, they're likely to pay more.

Tristan Colangelo/Unsplash

Such framing techniques influence our pain threshold for paying. People are, generally speaking, loss averse and the idea of a "pain of paying" was coined some two decades ago by professors Drazen Prelec of the Massachusetts Institute of Technology and George Loewenstein of Carnegie Mellon University, Pittsburgh, Pennsylvania. Think of sitting in a taxi, staring at the meter creep higher and higher. It's painful.

But what kind of a pain is it exactly? A brain imaging study led by Professor Nina Mazar, a behavioural scientist at Boston University, found that the pain of paying is not like a physical pain. It's more similar to distress or anxiety on a neural level; it can help keep our spending in check.

However, not all payments are equally painful. Research tends to revolve around three key factors. The first is payment method. Paying by card is less visceral and therefore easier than paying with cash. In one study, people were willing to pay twice as much to bid on tickets for a basketball game if they could pay by credit card rather than in cash. Contactless payments and phone payments make parting with money even easier.

The latest example of separating purchasing from paying are checkout-less Amazon Go shops, where people don't consciously pay at all. Hundreds of cameras around the store are able to detect which customers take off the shelves and automatically charge their Amazon account when they leave.

The second factor is our disposition. People who are tightwads and who make up about 25 per cent of the population, according to one study, experience more pain when it comes to paying than spendthrifts who make up 15 per cent.

"Tightwads experience a lot of distress when they make purchases, especially the optional kind, and that prevents them from spending the money they think they should spend on certain things, and they sometimes kick themselves afterwards," says Scott Rick, associate professor of marketing at the University of Michigan.

On the other side of the spectrum, spendthrifts hardly experience any pain at all. "They just can't stop themselves," says Dr Rick. Spendthrifts are largely insensitive to payment methods, but for tightwads, contactless methods and framing techniques, for example if a fee is described as "small", make a difference.

The third factor is whether we consider a product virtuous or frivolous. Buying fat-free yogurt feels different from buying ice cream with sprinkles. Only the latter gives us pangs of guilt.

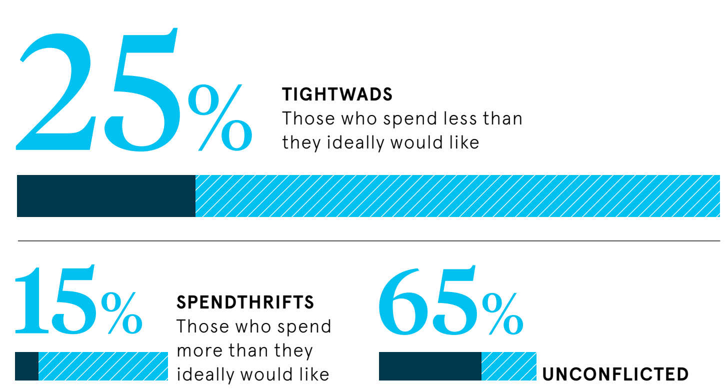
Virtuous items are those we consider necessary and they're more likely to induce shopping momentum than vice items, which make us pause because of the momentary guilt. So buying milk leads to more subsequent purchases than buying ice cream.

But there's an effective way for companies to counter the guilt we feel when buying "vice" products. It's an age-old method: coupling vice products with charitable donations. In one study, 48 per cent of people were likely to opt into a donation when buying theme park tickets, but only 32 per cent did so when buying a six-month supply of toothpaste.

So if a vice product is coupled with a charitable donation, people's guilt is balanced by the warm glow we experience when we give to charity and the moral satisfaction we purchase. Our pain of paying is assuaged, while both the company and charity benefit.

CONSUMERS AND THE PAIN OF PAYING

Widely cited survey of 13,000 respondents



Scott Rick et al, *Journal of Consumer Research* 2008

B2B PAYMENTS

Streamlining the payments supply chain

Late payments can have a disastrous ripple effect on the supply chains of small businesses and there is big room for improvement


Matt Porteous/Getty Images

Ouida Taafe

Business-to-business (B2B) payments matter as small companies live or die by their cash flow. Indeed, the importance of getting paid on time is one of the main reasons why small businesses are willing to shoulder the cost of card payments.

Before cards came along, onerous amounts of time and money were spent on chasing what was owed with written invoices. However, though card payments have brought benefits, the scourge of late payments, which puts 50,000 small UK firms out of business each year, according to HM Treasury, has not gone away.

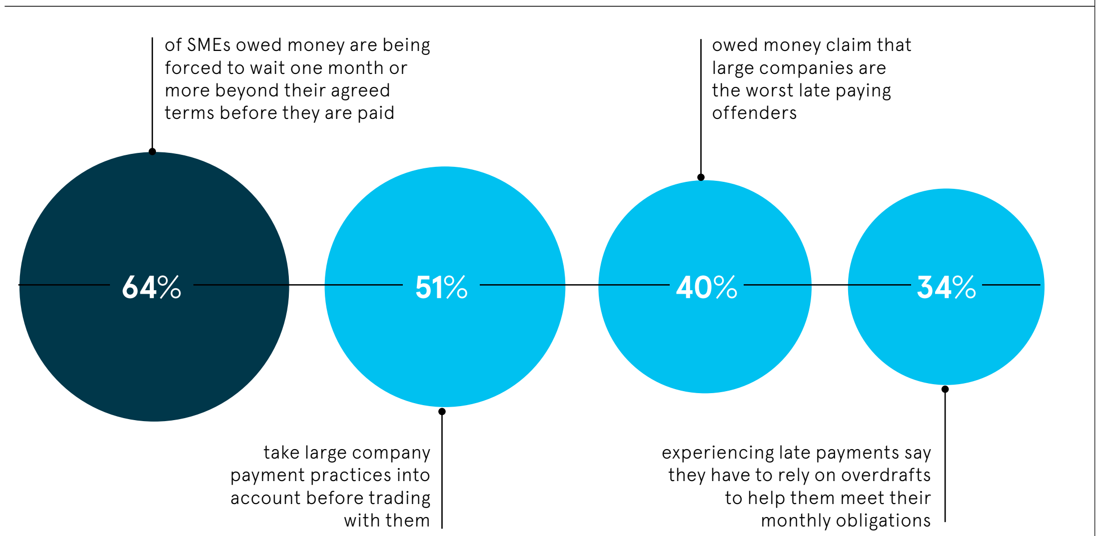
"Our members face an absolute late-payments crisis," says Craig Beaumont, director of external affairs at the Federation of Small Businesses (FSB). The figures seem to bear this out. At the end of 2018, 43 per cent of UK small and medium-sized enterprises (SMEs) had to deal with late payments and, on average, they faced a bill of £9,000 for recovering the money owed, according to the UK retail payments authority Pay.UK. The cumulative administration bill was around £4.4 billion.

However, the problem ripples out much further than additional cost to one firm, though these can be very high, including bankruptcy. Affected firms can struggle to pay their own suppliers on time, which hits the economy as a whole. It's often forgotten that SMEs employ around 60 per cent of all those in private-sector jobs in the UK, roughly 16 million people, and account for 52 per cent of private-sector turnover, according to the FSB. That is why any problems in B2B payments are more than just a hiccup.

Since the financial crisis, there has also been a notable increase in self-employment. According to the Office for National Statistics, 75 per cent of businesses had no employees apart from the owner(s) in 2018. Such firms find it particularly hard to deal with a lot of admin.

The FSB lays the blame for B2B payments woes squarely at the door of large businesses. It is not alone. The Forum of Private Business, a trade body representing around 25,000 SMEs, recently put out a to-do list for the incoming prime minister. Top of the 18 requests was to make 30 days a legal requirement for the payment of invoices once work is completed and provide the small business commissioner with the ability to fine consistently poor payers. However, ensuring big firms play by the B2B payments rules is not the only problem that needs solving nor, perhaps, the only way to help SMEs.

LATE-PAYMENTS CRISIS



Pay.UK 2018

> At the moment, late payments are seen as a minor infraction. We want them to be seen as a public embarrassment

"There are a number of reasons for late payments," says Sam O'Connor, chief executive of Coconut, which provides bank account, tax and accounting software to the self-employed. "For self-employed people who service small businesses, clients may have relatively immature finance processes and not be great at managing payments well. It can also be hard for a sole trader to stay on top of late payments, so some might slip through the net. Dealing with accounting and tax admin is low down on the list of priorities when you're trying to run a business."

Mr O'Connor says that one of the major hurdles in improving payments processing has already been taken thanks to the arrival of mobile point-of-sale (PoS) machines. "They have transformed how people get paid. Before that, it was either via invoice or cash, which are harder to manage," he says. However, PoS machines still use cards, which come with fees.

The next step forward, Mr O'Connor argues, could be direct account-to-account payments that will "either eliminate or drastically reduce payment fees". This will be made possible by open banking, the requirement that, if customers ask for it, banks must share account data with other financial services firms. Those firms can then use the data to offer payment services, including B2B payments.

Swoop, one of the fintechs recently awarded a £5-million government grant under the Banking Competition Remedies Scheme, aims to be a one-stop money shop for SMEs and sees payments as central to good cash-flow management, says the chief executive Andrea Reynolds.

Ms Reynolds is bullish on the benefits data capture can bring via open banking, but warns "technology can only go so far". There also has to be political will to make firms pay on time.

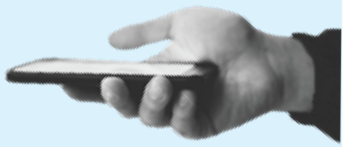
However, she says the ability open banking will give SMEs to see what they are being charged for B2B payments, to shop around and find new solutions to cash-flow problems is already making large banks much more engaged in offering new financing solutions as part of a wider marketplace. "Swoop has three live projects with banks at the moment. Banks are now looking at open banking as an opportunity, not just a matter of compliance," says Ms Reynolds.

Banks are not the only large firms who see opportunities in B2B payments. The FSB's Mr Beaumont points out that they took part in a roundtable with the Chancellor of the Exchequer in July, alongside PayPal and other firms. "At the moment, late payments are seen as a minor infraction. We want them to be seen as a public embarrassment," Mr Beaumont concludes.

Five ways to simplify B2B payments

01 Public risk scores

Fintech Swoop is developing a risk score for potential business partners. The score will give SMEs instant insight, on their mobile, into whether a particular firm has a good track record of fair-dealing. The score will reflect publicly available data about the client company, such as any county court judgments against it, as well as anonymised data on its payment patterns gathered from open banking information.



02 Account-to-account payment

Invoices that can be paid electronically get paid faster. Currently, this means paying card fees. Open banking will make it possible to offer account-to-account payments that are either free or undercut card payments and can be done more or less instantaneously over the faster payments network. Users should be able to present their clients with an open banking-enabled invoice from early next year.

03 Real-time cash-flow data

Large corporates have financial professionals to manage payments. SMEs, in contrast, are often too small to have dedicated in-house staff and put a lot of reliance on banks, which can levy steep, and not transparent, charges. Under open banking, it will be possible to have a mobile dashboard with real-time data on cash flow, with automated nudging to chase and make payments, and help with optimising payment methods to avoid charges.

04 Foreign exchange transparency

When small firms make B2B payments in foreign currencies, they do not have access to the spot foreign-exchange price banks use nor the near-wholesale terms big companies command and often pay hefty charges on top. Open banking can bring SMEs transparency on the costs of both international payments and foreign currencies, and give them the opportunity to shop around with a few clicks on a mobile app.

05 Scheduling payments

Small firms facing cash-flow issues will be able to use open banking to help better schedule their own payments and get improved access to short-term financing. Say, for example, they have an invoice due in 30 days, they could set up scheduled payments or use their own and market data to organise short-term, bridge funding that goes beyond traditional products, such as invoice financing, to something more customised and market responsive.

Commercial feature

Q&A

How to future-proof your online payments

As payments innovation continues, regulations are becoming more complicated. **Bradley Riss**, chief commercial officer of Checkout.com, explains how to thrive in this changing world

Q How are online payments changing?

A It's not uncommon to see an Alipay or WeChat Pay logo outside Asia as retailers realise they can win more customers by supporting their preferred payment method. "Buy now, pay later" payments have also shown high adoption, helping retailers to maximise basket size and allow access to premium products by spreading out or deferring the payment. Meanwhile, Payment Services Directive 2 imposes a requirement for strong customer authentication, or SCA. There's confusion around exactly what that means with regulators across Europe differing on the enforcement of the regulations, and both retailers and issuing banks showing varying degrees of readiness. When coupled with emerging payment methods, it makes for a complicated landscape to navigate.

Q Can brands keep up?

A Online brands want to focus on their core offering and customers, not get distracted by new payment methods or how to comply with new payment regulations. Of course, they know that offering the best checkout experience, including the payment method customers want to use, provides a competitive advantage, so they can't ignore these changes either.

Q What are the benefits of improving the payment process?

A With the right payments solution, retailers can improve conversion, reduce costs and curtail risk. For example, on risk reduction, some payment types have lower reversal and chargeback rates, reducing exposure to bad actors. Plus, as retailers become increasingly global and look to grow their customer base through market expansion, they must think about unique, local payments landscapes. Solutions that allow retailers to accept any type of local payment from any country can meaningfully support a company's long-term growth, while streamlining internal payments operations.

Q How can online retailers and services stay up to date?

A It's critical to find a payments partner that can seamlessly and successfully support hundreds of currencies, any payment method and navigate nuanced regulations. Checkout.com offers a unified payment platform, so no matter what payment method you want to offer, it is a part of our repertoire. These include Alipay, Klarna, Union Pay, Visa, Mastercard, Apple Pay, Qiwi, iDeal and many others. In theory, a retailer could offer these by working directly with each payment service, but it's an absurd amount of work. You could be looking at 20 payment methods in a region, each requiring integrations, unique reporting formats and settlement flows. Instead, we provide everything via one integration, with back-office and settlement services normalised irrespective of the payment method or market. We service both startups and established global giants, such as Samsung, Virgin, adidas and TransferWise.

Q What about stability?

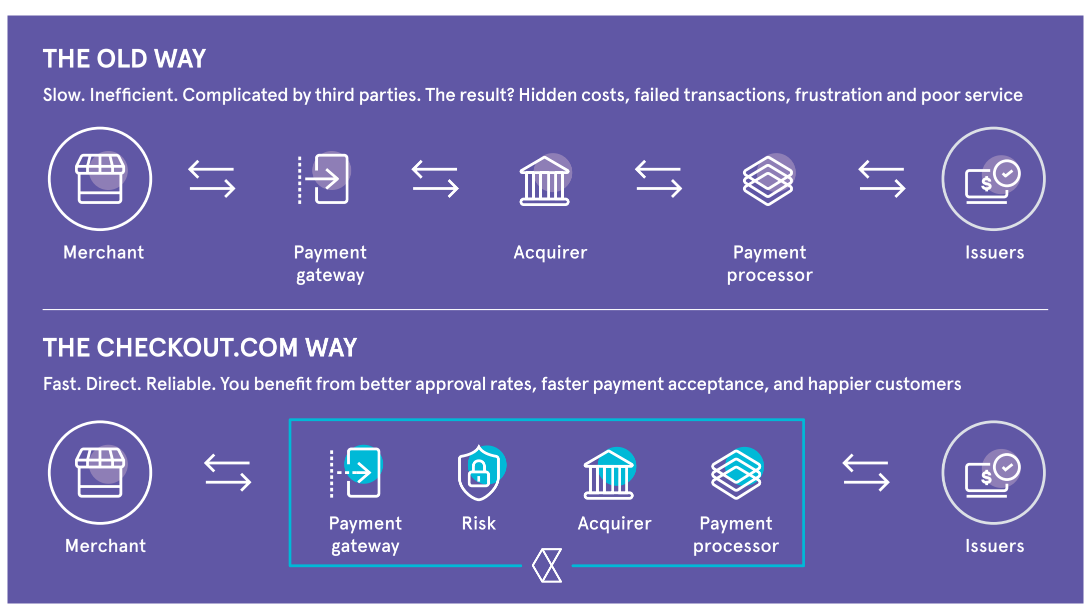
A Most payment systems run on technologies built before the first smartphone was available. As payments increase, so does the strain on these systems, leading to interruptions. The Financial Conduct Authority has been vocal about the negative impact of outages, noting that systems failures in the industry are increasing. This instability is unacceptable, but avoidable. We built our platform around a modern architecture, leveraging the latest technological standards. There are no finite limits on what we could process and stability is an asset when compared to the wider industry.

Q Finally, what is your advice for retailers when it comes to payments?

A We'll see new payment methods, new card processing features. This could make life harder for companies. But if you partner with a provider that can help you offer the payment choices your customers want, and with the agility to adapt and capitalise as the sector evolves, you'll be at the forefront of online retail, no matter how the market changes. A payment partner can help your business cope with the torrent of requirements. Our model is based on our clients succeeding and the core reason why businesses choose us to help them enhance and expand their payment functions.

To find out more please visit checkout.com

checkout.com



CASH

Are we sleepwalking into a cashless future?

Without access to cash or the right support in a transition to digital payment, the older generation will suffer


MmeEmil/Getty Images

Alexandra Leonards

The plump purses and coin-heavy pockets of a once cash-centric society have long been replaced by sleek plastic cards and shiny mobile devices. The UK is experiencing what feels like a natural and inevitable movement towards a cashless society. The changeover has been easy for most, but digital payment has only been designed with financial inclusion of the mass market in mind, not for those heavily reliant on cash.

For the older generation, who often depend on cash, this new-found dominance of digital payment is an upward struggle. Regardless, its growing dominance shows no sign of slowing. In fact, a straight-line trajectory of existing trends would see a complete end to cash use by 2026, according to a report by the Access to Cash Review. Although it's unlikely that cash will actually disappear entirely, the report does say that in 15 years' time cash could account for as little as one in ten transactions.

It's the rising ATM and bank closures, a growing rejection of cash in shops – often a consequence of those branch closures – and a broad movement towards digital payments driving the decline in cash use across the UK.

In Sweden, the most cashless country on Earth, payments can now be made on messaging apps and thousands of its citizens have microchips implanted into their hands for speedy purchases. These purchasing methods might sound cool, if not a little scary, but they contribute to the fact that cash features in only 15 per cent of purchases and this carries consequences for the elderly in Sweden.

Access to Cash Review warns that Sweden demonstrates the "dangers of sleepwalking into a cashless society". Namely, millions could be left without financial inclusion, facing heightened risk of isolation, exploitation, debt and rising costs.

"The problem we have is that as we use less cash and if we don't reform the infrastructure, those costs are borne by the retailers," says Natalie Ceeney, chair of Access to Cash Review. "They may decide to go cashless because they feel they have no choice; what happens if local authorities or utility providers do the same?"

Cash is a key part of national infrastructure, not just a commercial issue. This means it's the duty of a number of bodies to ensure there is financial inclusion for older people.

"Ensuring that older people aren't left behind should be a joint responsibility," says Gill Moffett, policy manager at Independent Age. "Although many older people are happy to use cards and mobile banking, it is vital that those who do need or want to use cash aren't disadvantaged or forgotten about."

Earlier this year the government launched its Joint Authorities Cash Strategy Group, aimed at safeguarding consumers' access to cash. It's a start, but there's still much more to be done.

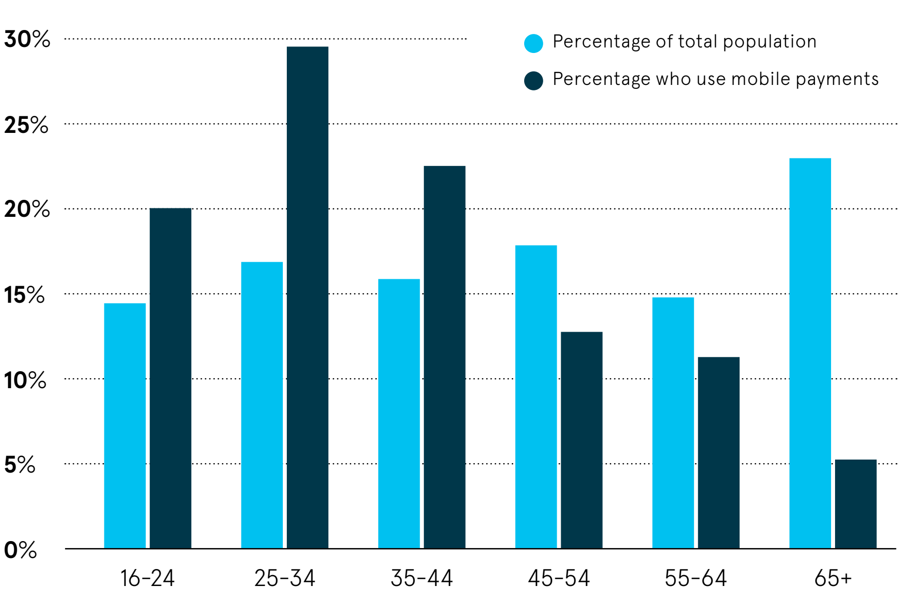
The Emerging Payments Association says that cash is not a long-term fix for financial exclusion, nor a sound foundation for 21st-century economies. If this is true, there needs to be the right support in place for elderly people to make the transition to digital payment. Regulators must work with businesses to introduce and uphold the concept of inclusive digital design.

"You should not expect people to fit around changes, but design technology so the changes work for them, then you will start to see greater take up of new technology and see more people benefit from it," explains Joel Lewis, policy manager at Age UK. "Older people can become accustomed to changes and many embrace it, but there needs to be an understanding that for many this change will be gradual."

If the UK is destined for a future of bank closures, contactless cards and a rejection of cash, then banks, fintechs and government bodies must take responsibility for the impact this will have on the older generation. Cash must survive for the eight million adults who would struggle in a cashless society and digital technologies should be designed with financial inclusion for all in mind.

MOBILE PAYMENTS WEIGHTED TOWARDS YOUNGER PEOPLE

Distribution of mobile payment users and the total population in the UK by age



UK Finance 2018


NemanjaMiscevic/Shutterstock

Singapore's epayment lessons for seniors

Singapore's government body, Infocomm Media Development Authority (IMDA), is helping its senior population learn how to use epayments and empower them to use technology securely and confidently. This is part of Singapore's wider initiative to help its citizens take part in the digital economy.

Seniors are guided by volunteers to download relevant mobile apps and learn how to log into their epayment accounts. Alongside this, they learn about different epayment modes, such as transferring money through mobile apps, paying for food and beverage items by scanning QR codes, and topping up travel cards with debit cards. They also learn about staying safe online and are given useful cybersecurity tips.

"IMDA is continually refining our Silver Infocomm Initiative to better equip seniors for the digital economy and society, and this epayment learning journey for seniors is our latest addition," says Koh Li-Na, senior director, digital readiness cluster, IMDA. "Using technology appropriately allows seniors to connect with their family members, access eservices and enjoy the convenience of etransactions and epayments."

IMDA organised 50 sessions throughout 2018 at different locations, in collaboration with various community groups, and reached out to 2,000 older people.

Riding high with unicorns

As fintech consolidates, a new crop of billion-dollar unicorns is on the horizon, writes **Clay Wilkes**, chief executive of Galileo

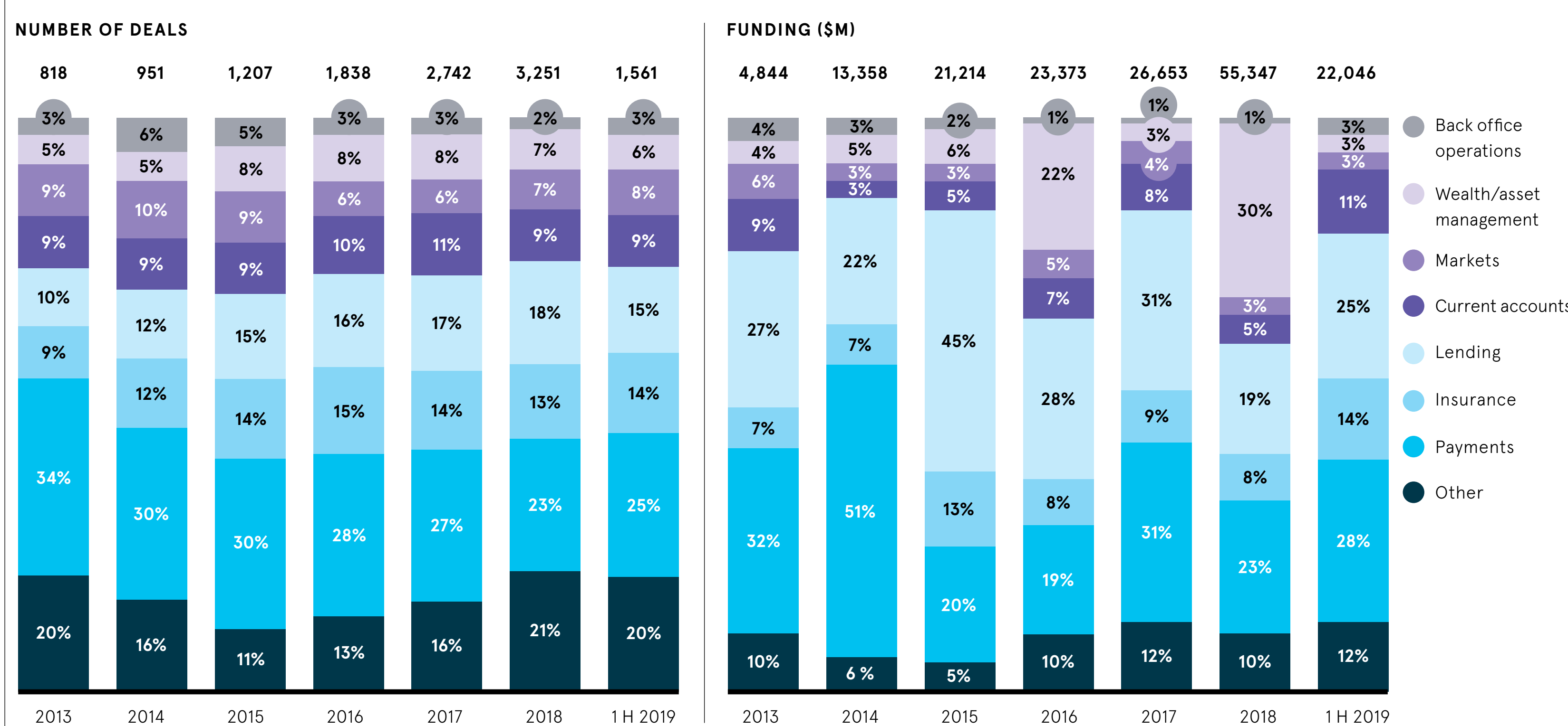
Financial technology (fintech) is making a significant impact on our daily lives, from how we pay for public transport to providing alternatives to big banks and making international money transfers cost effective. There are 11,500 companies across the globe whose primary focus is fintech, with about 3,000 focused on payments fintech, getting money from one person, business or government to another.

For a decade, fintech has been the darling of venture capitalists (VCs). In the first half of 2019, investors poured $15.1 billion into fintechs globally, with 54 challenger banks alone attracting nearly $1.5 billion. Why so? Firstly, because investors recognise the tremendous opportunity inherent in disrupting traditional banking. And, secondly, because successful fintechs have generated stratospheric valuations. Every VC wants in on the next Stripe ($22.5 billion) or Adyen ($19.5 billion).

The trajectory of fintech is about to change, however, and the result will be fewer fintech businesses overall and more fintech unicorns, privately held startups with valuations exceeding $1 billion. Within three to five years, the number of fintech businesses is likely to drop by half, while valuations of the remaining companies and the number of unicorns among them will soar.

GLOBAL FINTECH FUNDRAISING

Investment volumes and deal activity by fintech category



Accenture analysis of CB Insights data, 2019

Fintech consolidation

While fintech investment will be robust for the next decade, VCs will become more discriminating about the companies they invest in. The "two developers in a garage" model of fintech innovation may not be dead, but those garage startups will face increasing difficulty obtaining funding. Consequently, the fintechs that disappear because they've exhausted their funding without gaining market traction, and there have been many, aren't as likely to be replaced by newly minted ones.

Other fintechs will be acquired, some scooped up by traditional banks to strengthen their payments operations. Still others will merge to create larger, stronger businesses. And the strongest will continue to receive support from investors, who will focus increasingly on proven companies in their later funding rounds.

This transition is already underway because a maturing fintech environment doesn't need 11,500 participants. Although we never want to lose the entrepreneurial spirit of two developers in a garage, consolidation will increase the efficiency of fintech investments, creating businesses that can scale, achieve profitability and fulfil their mission to improve how consumers, businesses and governments handle their money.

Fintech consolidation will have the important corollary effect of consolidating financial data into fewer hands, which is a positive outcome if the data is handled securely and consumers control their information. Companies with access to the data will have an advantage over those that don't, strengthening the market positions of the "haves".

Galileo, for example, will grow this year to process roughly ten million financial transactions daily. Using advanced technologies, combined with artificial intelligence, we'll use the immense amount of anonymous data generated by these transactions to reduce card-based fraud losses to less than half the industry average. Similarly, other large fintechs will use their own big data to fuel positive innovation.

> **Challenger banks are helping consumers understand that although they need banking services, they don't need traditional banks**

Unicorns rising

Strong, ongoing investment will boost the number of fintech unicorns. Three years ago, there were 27 worldwide, with a combined $16.9 billion valuation. Today, there are 48, valued at $187.0 billion, with seven added during the first half of 2019. And there's a strong pipeline of fintechs; in the United States alone, 40-plus are on the cusp of unicorn status.

So, what does a payment fintech unicorn look like? Here are three UK-based examples.

Monzo ($2.5 billion), a challenger bank launched in 2015, offers an alternative to traditional banks with a completely mobile banking service that attracts 55,000 new customers a week. The company recently announced it's expanding to America, where it will take on not only traditional banks, but native challenger banks, including Chime and Varo.

Revolut ($1.7 billion), another challenger bank launched in 2015, enables customers to hold cash in multiple currencies. As of late-2018, it holds a European banking licence and offers banking services, currency and cryptocurrency exchange, and peer-to peer payments. Like Monzo, it has US expansion plans.

TransferWise ($3.5 billion) launched in 2010 to solve the problem of high-cost international money transfers. Its founders, both of whom had been paid in foreign currencies, were tired of giving up 5 per cent of their income to currency conversion, so they created a low-cost, fully mobile alternative. Today, TransferWise has five million customers and processes $4 billion a month in currency transfers.

Not surprisingly, two of these unicorns are challenger banks and all three are Galileo clients.

Challenger banks

During the first half of 2019, challenger banks attracted $2.5 billion, an average of $45.45 million across 55 deals, from VC firms. To put this staggering number into perspective, it surpasses 2018's record investment of $2.3 billion for the entire year. Investors recognise that challenger banks are deconstructing banking, unpacking the services consumers want and delivering those services in a digital, easy-to-consume format at attractive price points. Challenger banks are helping consumers understand that although they need banking services, they don't need traditional banks.

Challenger banks have some of the largest audiences among fintechs. If they continue to expand their bases while keeping customer acquisition costs low, they'll continue to attract investment and, potentially, displace traditional banks for everyday consumer financial needs.

Follow the money

The key to the future of fintech is following the money. And the smart money is backing fintechs, particularly companies with a proven track record of creating value by unshackling banking and payments, and offering convenient, cost-effective services.

Later this year, for example, expect financial products that address banks' low, zero or negative interest rates. Look for all types of companies, beyond traditional banks and even fintechs, to offer new, incredibly convenient payment options. APIs (application programming interfaces) are enabling this next wave of payments innovation, which will lead to massive adoption, like the explosion of mobile apps a decade ago.

We're only beginning this fintech journey; there's much more to come.

Commercial feature

How better payments will change our lives

SWIFT is working with financial institutions to transform the global payments ecosystem, and it's making day-to-day life easier for everyone

A vast change is taking place within the structures that enable payments across the world. Faster payments initiatives, such as those launched in the UK, America and Australia, have been seen at the domestic level, as have local and regional open banking initiatives from Europe to Singapore.

The same is happening on the global level and soon every payments system will be exchanging information on international payments in a standardised way, further increasing efficiency and reliability.

Some of the pressure for financial institutions to deliver more effective payments stems from the convenience provided by digital services in our everyday lives. Digital tools are enabling faster communication, simpler access to information and more direct connectivity.

"We expect a seamless user experience in everything we do, whether we are at work or in our personal lives," says Harry Newman, head of banking at interbank payments co-operative SWIFT. "We all agree payments should be instant and convenient for the people making them. It's fair to say that the old world of international payments was built some time ago and that's why it's being upgraded to deliver a modern experience."

This is an enormous task. "Broadly speaking there are two approaches," says Mr Newman. "You can create a closed-loop system where all participants follow one set of rules. This makes efficiency gains relatively easy to achieve, however you quickly run into a dead end as your reach is limited only to parties within that closed system.

"Or you can develop an open ecosystem, as we have done together with our network of over 11,000 financial institutions, which allows value to be transferred globally from any account to any account, regardless of currency or regulatory jurisdiction."

An open cross-border payments system is inherently complex, as it is comprised of many players and requires adherence with multiple sets of rules and jurisdictions. However, whether it's businesses transferring large sums across borders or retail bank customers making micro-payments, users expect a fast, convenient and consistent experience regardless of their location.

Global unity

SWIFT has a long history of engaging with financial institutions to develop an open ecosystem and the organisation is leading the way in ensuring it continues to meet the needs of end-customers. Most of these institutions are already in the process of modernising their payment systems and moving towards real-time transactions. To achieve this, the industry has come together around collaborative initiatives such as SWIFT's global payments innovation (gpi).

Many institutions are also developing relationships with fintech firms that have the capacity to experiment with new technologies and ideas, then apply their learnings together in the real world. The challenge is in connecting hundreds of individual firms in such a way that the system hangs together, but still allows individual banks to create unique service offerings.

"If I move a payment quickly, then goods can ship quickly; the supply chain shortens and the amount of capital involved reduces, which has a very significant impact on trade. But it only works if you are getting the data to the end-recipient in the right form, in a standardised way and with sufficient information in the message for it to be processed automatically," says Stephen Lindsay, SWIFT's head of standards.

Building systems individually and then connecting them after the fact risks creating gaps in communication between the different platforms, particularly as they evolve. For financial firms to work effectively with one another and fintech partners, and to have the capacity to adopt innovative new approaches as they arise, they must be able to communicate seamlessly.

Seamless communication also enables firms to leverage cloud service providers to manage data in a secure way or application programming interfaces (APIs) to support the movement of data. "The whole basis of using cloud infrastructure and APIs is that businesses can innovate by partnering with other players, particularly newer technology companies, and use APIs to link between systems," says Mr Newman. "This is how you get innovation quickly."

A common language

Mr Lindsay adds: "Future-proofing our current designs and technology means we must have a common and consistent way of describing payments and the additional data that goes along with them."

To this end, SWIFT has engaged closely with financial and non-financial companies to facilitate adoption of the ISO 20022 messaging standard for use in payment schemes, from instant payment models to the massive real-time systems used by central banks, nearly all of which are now converging on ISO 20022.

"As international trade increases and value chains get longer, you have more players involved with the data," Mr Lindsay notes. "This international standard, ISO 20022, ensures the data remains consistent no matter what technology is used to make the payment itself."

The end-game is to have the major traded currencies in the world for both cross-border and domestic payments running on the same rich, common standard. As firms increase the level of automation they employ in processing transactions and trade, the reliability and depth of data that is included within a payment message will also increase the ability to use machine-driven processes.

Real-world impact

The end-to-end transparency and speed of international payments has already come a long way in the two years since SWIFT introduced gpi. SWIFT gpi members – more than 3,500 financial institutions are sending more than $300 billion via the service daily – can now provide their customers with full transparency on where their payments are, what has happened to them and ultimately when they reach the end-beneficiary.

"We know approximately 50 per cent of all payments are reaching the beneficiary in under 30 minutes, many of these in just minutes or even seconds, and nearly 100 per cent of them are made within 24 hours. So we've already taken huge strides towards delivering instant global payments," says Mr Newman. "As more and more banks improve their back offices, we will see this trend continue for the world's payments."

Industry-wide adoption of ISO 20022 is set to enable this even further. Richer and better use of data will open up many new efficiencies, including in the area of compliance. With about 10 per cent of global payments being stopped due to sanctions-screening – the vast majority of which are false positives, SWIFT estimates – a more effective reading of payment messages will have a material impact on the cost of doing business and the speed of payments overall.

The result of these tectonic shifts is that financial institutions are able to deliver improved service levels to their clients, with transparency on processes and fees, faster payment speeds, and certainty when funds have been delivered.

"At the end of the day, the winner in all of this is the end-customer. And financial institutions that embrace the opportunities are able to innovate more to offer new and better client experiences," Mr Newman concludes.

> Whether it's businesses transferring large sums across borders or retail bank customers making micro-payments, users expect a fast, convenient and consistent experience regardless of their location

For more information please visit www.swift.com/futureofpayments

A NEW STANDARD FOR PAYMENTS

The ISO 20022 standard has already been adopted for payments in more than 70 countries, bringing increased speed, reliability and service levels to the payments experience, with more to come

2018
SWIFT community supports adoption of ISO 20022 for cross-border payments and cash reporting

2019
First ISO 20022 cross-border usage guidelines published

2020
SWIFT cross-border ISO 20022 testing goes live (September)

2021
- Start of four-year co-existence period for SWIFT customers (November)
- Migration of major European market infrastructures to ISO 20022 (November)

2023
USD and other major currencies adopt full ISO 20022

2025
Adoption complete – all cross-border payments and reporting messaging will be ISO 20022-based

2018 2020 2022 2024 2026

BIOMETRIC PAYMENTS

Singapore: a testbed for biometric payments

A multitude of factors are fuelling Singapore's appetite for biometric payments, but what does the future hold?

Amy Hawkins

Convenience at the touch of a button is the mantra for services you can order through your phone. Whether it's taxis or food delivery, there's an app to bring it to your doorstep. Now the biometric payments sector is catching up.

The world leader is Singapore where 61 per cent of financial companies have adopted or are in the process of adopting biometrics, according to a survey by identity data intelligence company GBG.

A study by Visa in Singapore found that 88 per cent of those surveyed had used fingerprint biometrics, while 56 per cent had used facial recognition, and 50 per cent and 49 per cent respectively had used iris scanning and voice recognition. Mastercard has trialled a "selfie password", but in Singapore the most popular type of biometric payment is fingerprint.

Tomasz Kurczyk, digital transformation director at AXA Insurance in Singapore, says the use of fingerprint scans at airports has contributed to its popularity in other sectors. "All residents travelling in and out of Singapore use automated passport control gates with fingerprint-based authentication," he says. "This definitively drives confidence in general public acceptance of biometric technology."

Indeed, the Visa study found that 97 per cent were interested in using biometrics and 96 per cent were comfortable using such methods to make payments. The most popular reasons for using biometrics were perceived convenience and speed.

A startup making waves in the biometric payment space is Touché, which provides fingerprint scanning devices and a cloud-computing service that stores customer data. As well as streamlining the payment process, Touché offers businesses personalised, detailed data for marketing campaigns and loyalty management schemes.

The company has partnered with OCBC Bank in Singapore and Mashreq Bank in the United Arab Emirates, and has its sights even further afield. Japan is planning to implement biometric payments in the run up to the 2020 Olympics as it prepares for an influx of up to 40 million visitors.

Touché's technology works by users scanning two fingerprints on a device that is provided to merchants free; vendors have to pay a monthly subscription fee for the cloud-computing service that stores the data. The user's fingerprints are linked to credit card information and shopping history. This is especially useful for the tourism industry when travellers face possible problems using their credit cards or making foreign-currency transactions abroad.

Having all your payment information literally at your fingertips is convenient and saves having to carry around different cards. But it is not without potential pitfalls.

"We need to remember that we can change our credentials, for example a passport, but once your biometric data is leaked, we can't modify it," warns Mr Kurczyk. He cites previous data breaches from technology companies as a reason why consumer trust in biometric authentication might be limited.

"Biometric data must be treated as the most sensitive level of personal data," says Shirish Jain, payments director at Strategy&, the strategy consulting arm of PwC in Singapore. Mr Jain says encryption, tokenisation, controls and monitoring are especially important when it comes to biometrics.

Touché points out that all its data is encrypted, but for users in countries where fingerprint scanning is not already ubiquitous, there might be challenges in convincing people to link their financial and biometric data. However, a 2019 study by the UK's National Cyber Security Centre found that 23.2 million accounts that had been hacked used the password "123456", which suggests many people already prize convenience over security.

Garnering interest in biometric technology is one thing, but actually making biometric payments a reality is another. Mr Kurczyk notes: "In countries where there is a high penetration and adoption of card-based payments, there is a limited customer benefit improvement potential to justify the investment in biometric technology over simpler solutions, such as QR codes."

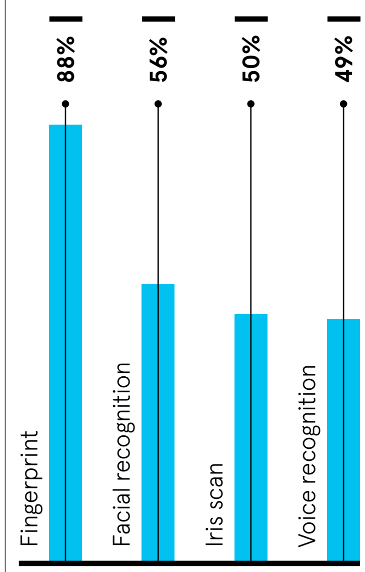
But for many, fingerprint payment is easier than more complex technology. Mr Jain says that because biometric payments do not mandate technical literacy, they could be of benefit to people in "digital financial isolation", especially in less developed nations with limited access to banks or ATMs.

Brad Jones, chief executive of Wave Money, a mobile financial services company in Myanmar, agrees. "We think biometrics can be a game-changer in a market where financial literacy is low," he says. "It can also break barriers and provide financial services to those people who can't read, write or have disabilities."

Even in Singapore, biometrics have yet to become ubiquitous. "I haven't heard people talk about it much," says Nataniel Tan, a Singaporean doctor who works in the UK, but visits Singapore regularly. "I usually pay by contactless, except for the hawker stalls, then it's with cash." But Dr Tan would be interested in using the technology: "As a layman, I would think it's safer than having a card and more convenient."

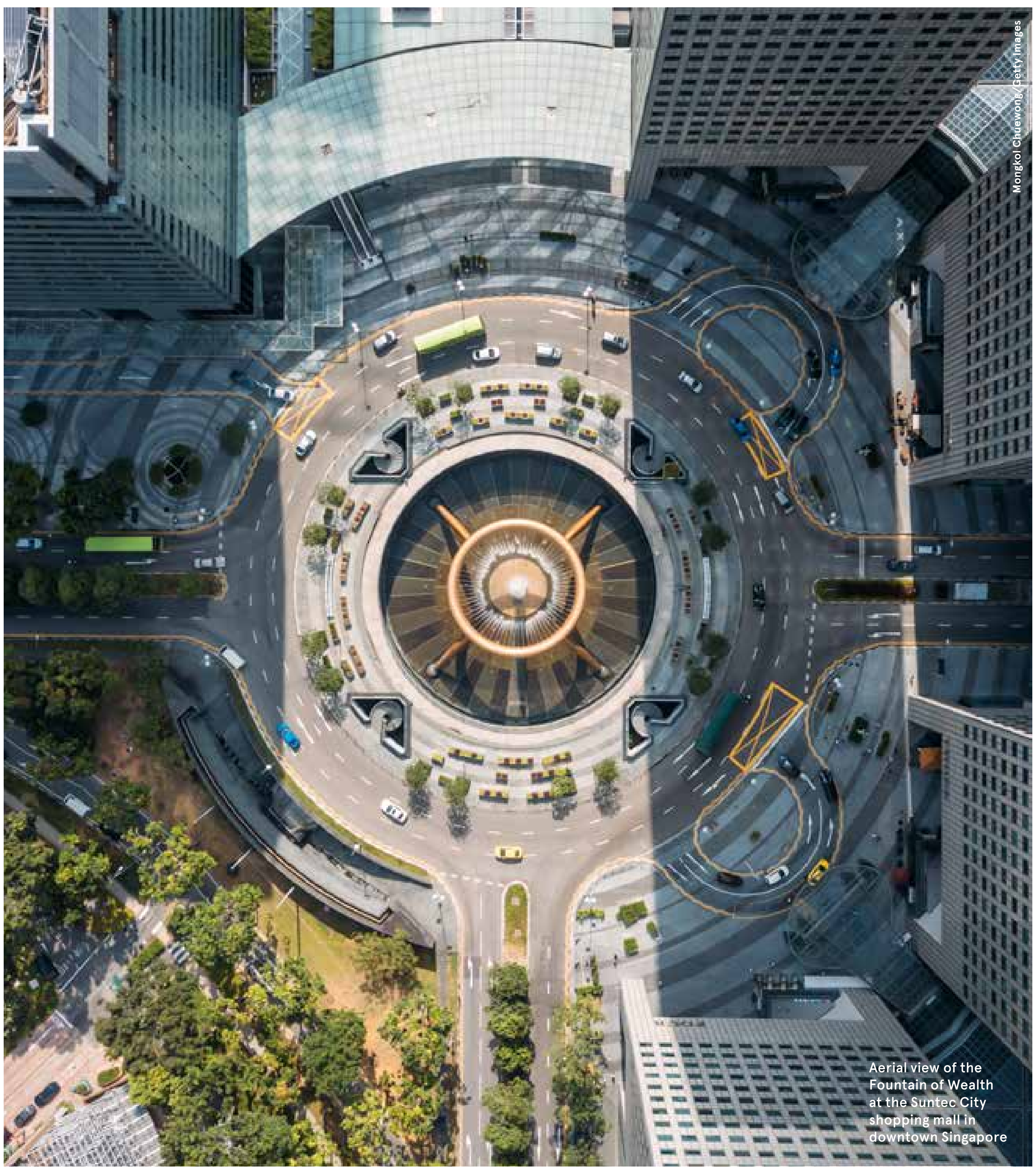
CONSUMER APPETITE FOR BIOMETRICS IS HIGH

Percentage of Singaporeans who have used the following methods of biometric payments

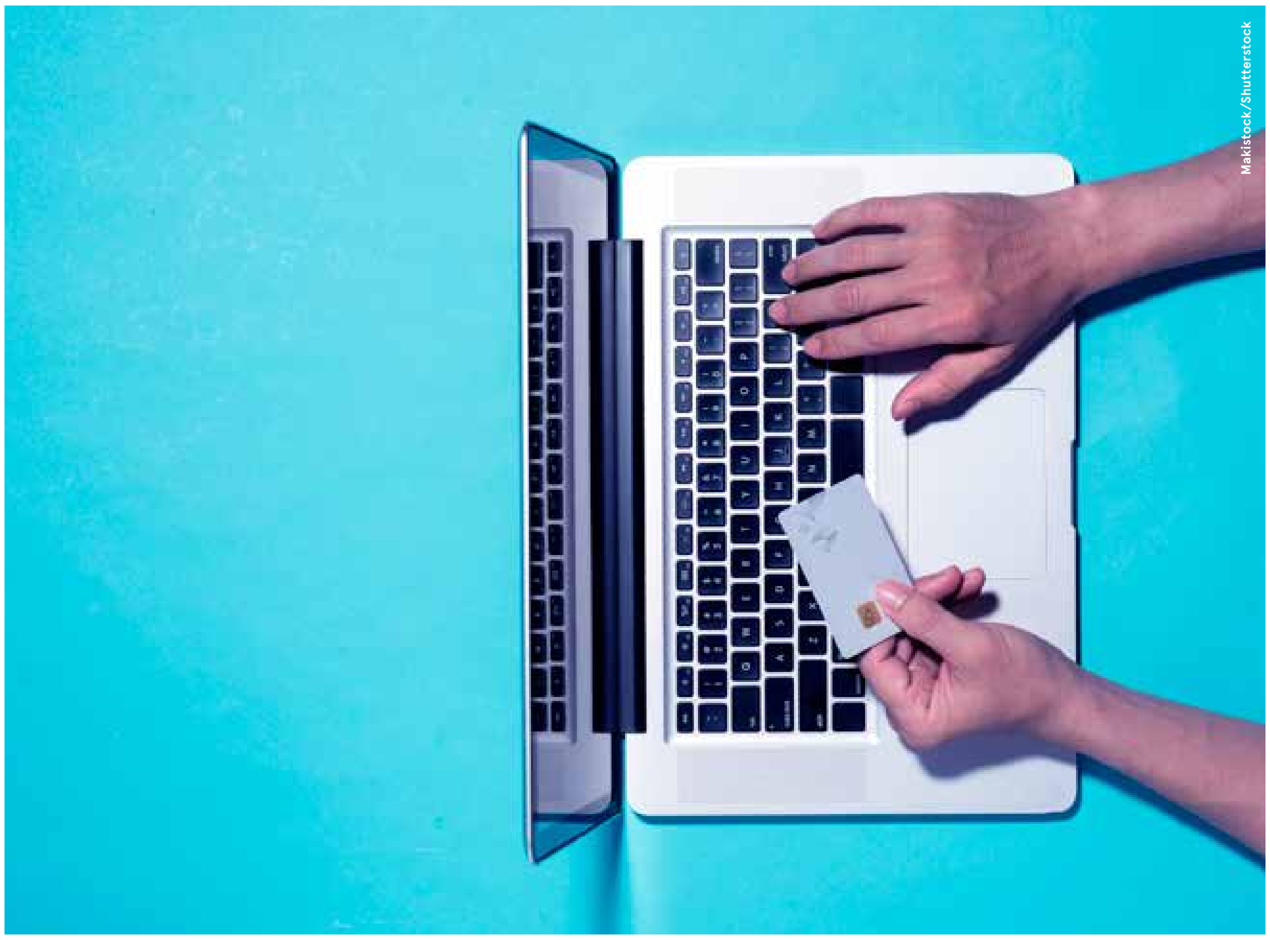


Visa 2018

> Biometrics can break barriers and provide financial services to those people who can't read, write or have disabilities



Aerial view of the Fountain of Wealth at the Suntec City shopping mall in downtown Singapore



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ONLINE

Balancing convenience and trust in online shopping

New Europe-wide rules to enforce online security checks are designed to make ecommerce safer for customers, but companies fear it could have a big impact on sales

Paul Amery

Payments are fundamentally about trust. And as we all conduct more of our shopping online, there's a fine line between convenience and safety. The more seamless online payments become, the more easily the wheels of commerce turn. But get online shopping security wrong and the whole system might seize up as fearful buyers withdraw from purchases.

In Europe, there have recently been worrying signs that the system is out of balance and digital fraudsters have been gaining the upper hand.

According to the European Central Bank, so-called card-not-present scams accounted for 73 per cent of all fraud in the euro payment area in 2016, costing €1.3 billion. These scams highlight one of the biggest problems in the digital economy: the centralised storage of customer identity and card data in online databases creates a honeypot for hackers.

By breaking into such systems and harvesting clients' personal information, debit or credit card numbers and security codes, fraudsters can conduct their own illegitimate purchases.

If your card provider spots a dodgy-looking deal – "Did you buy a £5,000 sofa in Madrid yesterday?" – they should get in touch and refund you.

But apart from the psychological shock of finding yourself the victim of a hack, the costs of poor online shopping security filter down to consumers in the form of higher card fees and interest rates.

To help address card-not-present fraud, new strong customer authentication (SCA) rules are due to come into force this month across the European Union. The idea behind SCA is that adding a second identity check, in a process called two-factor authentication, can help ensure much better online shopping security.

The additional check may be a text message sent to your phone asking you to confirm a purchase, an email, a code generated by a hardware token, or even a biometric check of the purchaser's fingerprint or face, conducted by smartphone.

But the introduction of the new SCA rules, which form part of the EU's Second Payment Services Directive, has generated some worrying comments about the possible knock-on effect on online commerce.

Payments company Stripe recently claimed that Europe's online economy could suffer a €57-billion hit after the SCA rules take effect, equivalent to a 10 per cent reduction in overall digital shopping volumes.

Other reports are even more alarmist. A survey, conducted by Germany's EHI institute, suggested online merchants are seeing more than a third of shoppers abandon shopping carts as a result of SCA, largely due to the complexity of the new checkout process.

Other European payments specialists are more sanguine, however, citing a recent decision by the EU to avoid an abrupt introduction of the new identification rules.

"In many countries, SCA will not be a 'big bang', but phased in gradually," says Ron van Wezel, senior analyst at consultancy Aite Group. "In the UK, the Financial Conduct Authority and UK Finance have published a migration plan that extends the deadline to March 2021. With this handheld approach, the risks to ecommerce sales are properly managed in my view."

> "In the Nordics, two-factor authentication is already common and it doesn't impact sales, as long as the customer experience is smooth

Mr van Wezel points out that some European countries have already adopted more advanced online shopping security systems without too much fuss.

"In markets such as the Nordics, two-factor authentication is already common and it doesn't impact sales, as long as the customer experience is smooth, for example using biometrics," he says.

But for the time being, we may all have to get used to a confusing free-for-all when it comes to the means by which card providers satisfy themselves of our identity.

"The belated decision to delay SCA is a relief," says Tim Richards, head of digital payments at Consult Hyperion. "Beyond this, the bigger issue is the lack of standardisation."

Regulators have decided not to specify any minimum technical standards for SCA, which means those handling payments are free to choose their own verification mechanisms, whether text message, email, use of a hardware dongle, mobile phone app or biometric check.

"Every issuer, acquirer or merchant has lots of freedom to implement SCA in their own way. This will create confusion in the market," says Mr van Wezel.

But others see the new SCA rules as fertile ground for tech experts to improve online shopping security and gain new business.

"We see huge opportunities in mobile-based authenticators and behavioural biometrics," says Mr Richards.

And challenger banks, such as Monzo, Revolut and Starling, which have invested heavily in user-friendly mobile savings and spending apps, also seem well positioned to gain future market share in online payments.

€57BN

estimated loss in economic activity in the first year after SCA takes effect

Stripe/451 Research 2019

OPINION

‘Providers explore how they can enable newer technologies and help their customers address market needs faster’

A team of experts at Money20/20, the financial services and fintech industry’s leading event, has identified the major ways our industry is being innovated and the impact this has across sectors. One of which explores how commercial models, value chains, and mergers and acquisitions (M&A) are changing how the industry operates.

Recently, they examined the dramatic changes taking place within the business-to-business side of financial services. For example, point-of-sale (POS) terminals used to be closed systems with limited third-party access to the hardware. Over the past few years, these systems opened up with an app-store mentality to enable innovative third-party companies to design their hardware.

Opening up the POS hardware platform has had major implications on value chains delivering services. In the past, there was tremendous value in obtaining access to the POS hardware, which could be monetised over a long period. Now, broader access pushes value creation towards other elements, such as functionality, something that has also been seen in back-end payment and account-processing relationships. Ultimately this has allowed technology providers to explore how they can enable newer technologies and help their customers address market needs faster.

The way companies are pursuing new opportunities is changing as well. Simply put, there are three major options: build, partner or buy. A decade ago, there was a greater focus on building within the framework of the company. For example, innovation groups within banks and payment networks would work with the mainline businesses to help deliver new offerings to the market.

Unfortunately, innovation groups many times lost internal battles for resources and focus when paired with massive mainline businesses. This affected how innovators within banks saw their place in the institution and how corporate leadership structured organisations, ultimately leading to reorganisations and departures which further reduced focus on these internal groups.

Five years ago, we saw banks heavily developing relationships with innovative startups. Tactics for this strategy included being active corporate venture capitalists, supporting accelerators, running hackathons and actively engaging externally. These strategies allowed banks to be involved with many more opportunities than they could have, had they tried to build these within the organisation.

While some institutions saw success, others did not and have pulled back on several of these activities. There were many market tests and proofs of concept, but fewer than expected achieved substantial scale. Additionally, from the perspective of the startups, they often had to jump over massive hurdles and expend significant resources to work with the banks, which also resulted in limited volumes. While there have been many successful partnerships, the initial euphoria has been tempered. Investment activity still continues, but typically in a more measured manner.

Finally, there has recently been a rapid increase in M&A activity. Over the past year, there have been several blockbuster mergers across the ecosystem, such Fiserv and First Data, TSYS and Global Payments, and SunTrust and BB&T. They are driven predominantly by scale and creating larger players that have greater access to markets and greater negotiating power. There has also been significant acquisitions activity by payment networks, such as Mastercard and Visa, that have been seeking interesting fintech companies to build technologies, capabilities, and help deliver new services and products to market.

This year, Money20/20 USA will have more coverage of these trends to help individuals and companies understand the current state of the industry, take advantage of trends and stay at the forefront. The fintech orchard is still filled with low-hanging fruit, but with limited ability to take bites, companies should determine which will have the greatest impact.

Learn more and register to attend at us.money2020.com ●

Sanjib Kalita
Editor-in-chief
Money20/20

Commercial feature

The future of payments should revolve around you

Technology is setting new standards for customer experience that payment operators often struggle to reach, but in a digital era this is no longer negotiable

Gmail, Uber, Spotify, Airbnb, WhatsApp: all are digital disrupters that did not exist 15 years ago, but today are essential to our lives. These technologies have set a new bar for customer experience, driving higher expectations for payments and commerce.

Intuitive, seamless and personalised end-to-end journeys that place customers at the centre of each transaction are the new norm. So winning the hearts, minds and wallets of our customers requires a shift from traditional products that “get the payment job done” to holistic solutions that empower people and businesses to take control of their financial lives.

For more than 25 years, Mphasis has partnered with banks and financial institutions of all sizes to ignite digital innovation, empower transformation and unlock disruptive advantages through technology.

The company’s global head of payments, Andres Ricaurte, affirms that customer experience has been a key tenet in this journey.

“Banks have an inherent advantage that they need to capitalise on,” he says. “Current accounts, mortgages, credit cards, all kinds of policies and financial products, generated through relationships that span many years, they all represent terabytes of powerful data that banks have access to and can use to create unique profiles and personalised payments, financing and commerce solutions for every single one of their customers.

“It is a richer value proposition than pure tech operators can provide.”

Network of you

Whether buying coffee, riding public transport, streaming music or purchasing groceries, payments represent the key through which we open and unlock the network of services that makes our lives work. This is something Mphasis calls the “Network of You”.

“We’ve implemented the Network-of-You model with many of our clients by transforming decades-old payments systems and processes into next-generation, artificial intelligence-powered platforms that turn every payment transaction into a moment of meaningful customer value,” says Mr Ricaurte.

“Just because you are not Netflix, it doesn’t mean you cannot deliver Netflix-like customer experiences by leveraging the power of new technologies.”

While becoming a digital business can be a daunting task for most enterprises, Mphasis’s proven Front2Back™ Transformation framework focuses on iterative transformation levers that deliver chunks of value quickly, while creating the foundation to shrink and eliminate legacy applications.

“It is an ongoing cycle through which our customers can start launching new products in a matter of weeks, while implementing programmes that systematically reduce legacy costs and create savings which can be leveraged to further accelerate their digital agenda,” says Mr Ricaurte.

When business gets personal

Payments transcend our daily consumer lives. They are also the lifeblood of any business, and enhancing the visibility, predictability and flexibility of payments is key to ensuring sustainable cash flows. This is not always an easy task, particularly when businesses are part of complex supply chains with multiple payment terms and currencies.

“Especially in this uncertain global environment, it is more important than ever to help businesses create a holistic picture of their financial, operational and commercial networks,” says Mr Ricaurte.

By extending the Network-of-You philosophy to the business landscape, Mphasis is partnering closely with corporates and business-to-business payments providers to bring together disparate systems, processes and payment solutions into a single, actionable control panel that puts businesses at the centre of their network.

The Network of You accelerates the hyper-personalisation of the payments industry, which Mphasis sees as the future. It goes hand in hand with a digital transformation that will strike banks and enterprises whether they keep up or not, and a customer-centric business world which will call for even greater seamlessness, efficiency and context awareness across all payments and commercial transactions in the years to come.

B2B STATISTICS FROM BOTTOMLINE TECHNOLOGIES’ *2019 BUSINESS PAYMENTS BAROMETER*

92% of financial decision-makers in the UK admit to paying suppliers late

70 % of UK businesses feel unprepared for upcoming payment initiatives such as PSD2, Open Banking, ISO 20022

£240,092 is the average loss through fraud for financial decision-makers in the UK

> Just because you are not Netflix, it doesn’t mean you cannot deliver Netflix-like customer experiences by leveraging the power of new technologies

For more information please visit www.mphasis.com

Mphasis
The Next Applied

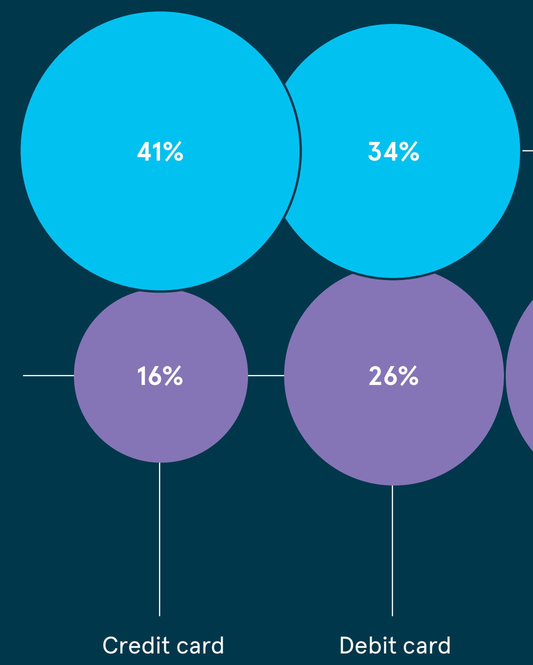
AMERICA

WHERE CASH AND CARDS ARE STILL KING

The payments story in North America is one of contrast. It is home to the global behemoths of Silicon Valley, several cryptocurrency giants and some of the most disruptive technology startups in every field; yet it remains behind much of the developed world when it comes to mainstream adoption of modern payments technologies, such as biometrics, mobile wallets, contactless and even chip and pin. Signing for a card payment is still very much commonplace, but why is this? Mature technology infrastructures have some part to play, sure, but one of the key reasons is consumer attitudes and established preferences for cash and cards

CARDS AND CASH DOMINATE NORTH A

Share of point-of-sale transactions using the following metho



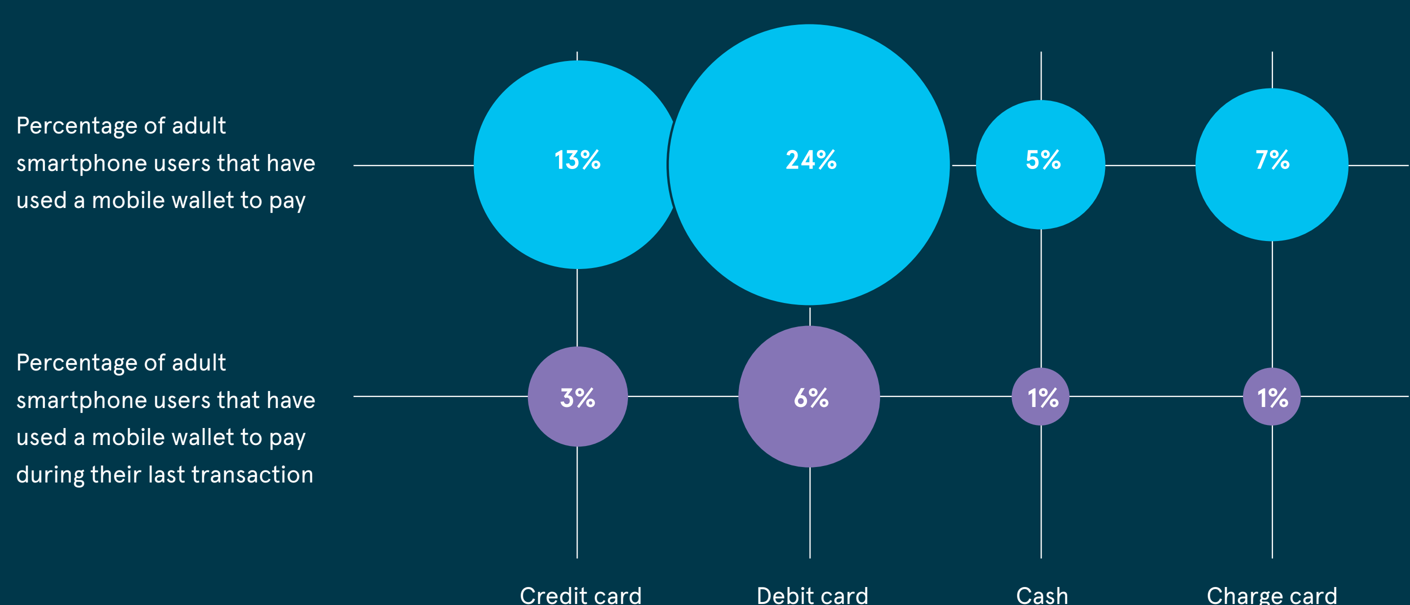
TOP PAYMENT METHODS IN THE UNITED STATES

Percentage of consumers who used the following methods in 2018

NORTH AMERICA REMAINS BEHIND THE GLOBAL SURVEY WHEN IT COMES TO FINTECH ADOPTION

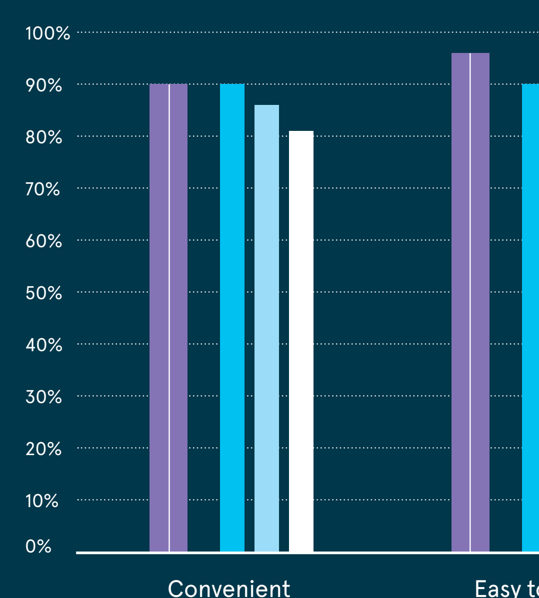
Percentage of the digitally active population who at least one fintech service

EY 2019



CASH TRUMPS OTHER PAYMENT OPTIO

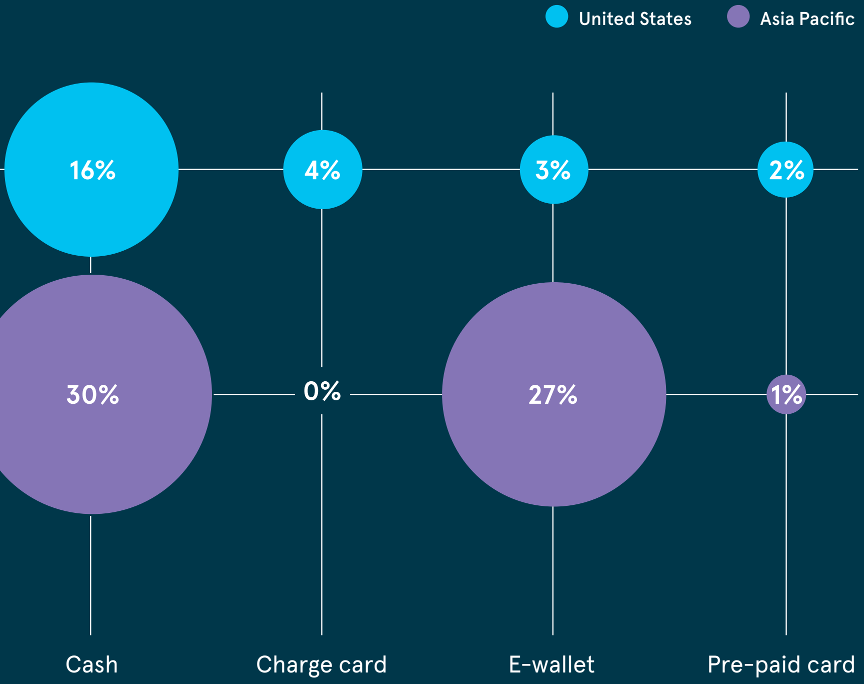
Percentage of US adults who agree with the following statem



AMERICAN PAYMENT METHODS

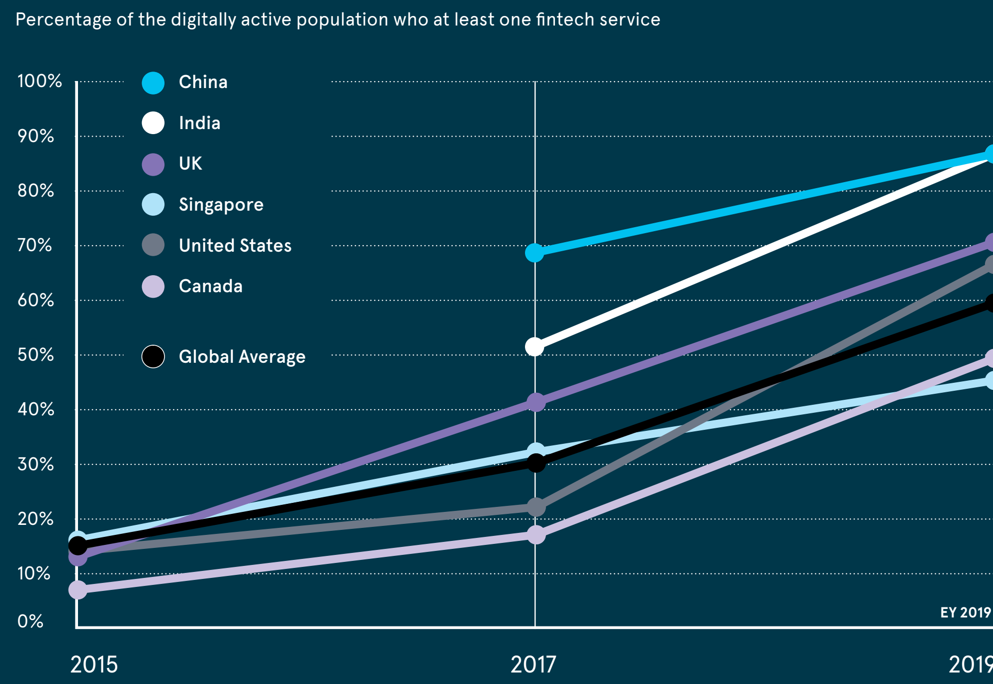
Worldpay 2018

ods in 2018

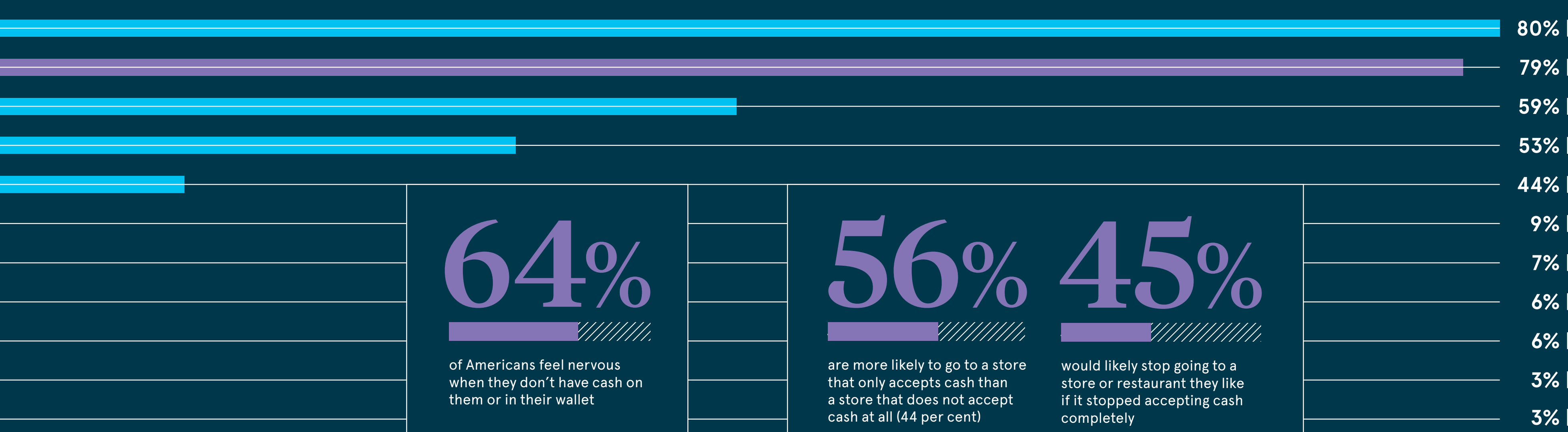


NORTH AMERICA REMAINS BEHIND THE GLOBAL SURVEY WHEN IT COMES TO FINTECH ADOPTION

Percentage of the digitally active population who at least one fintech service



Bain 2018



64% of Americans feel nervous when they don't have cash on them or in their wallet

56% are more likely to go to a store that only accepts cash than a store that does not accept cash at all (44 per cent)

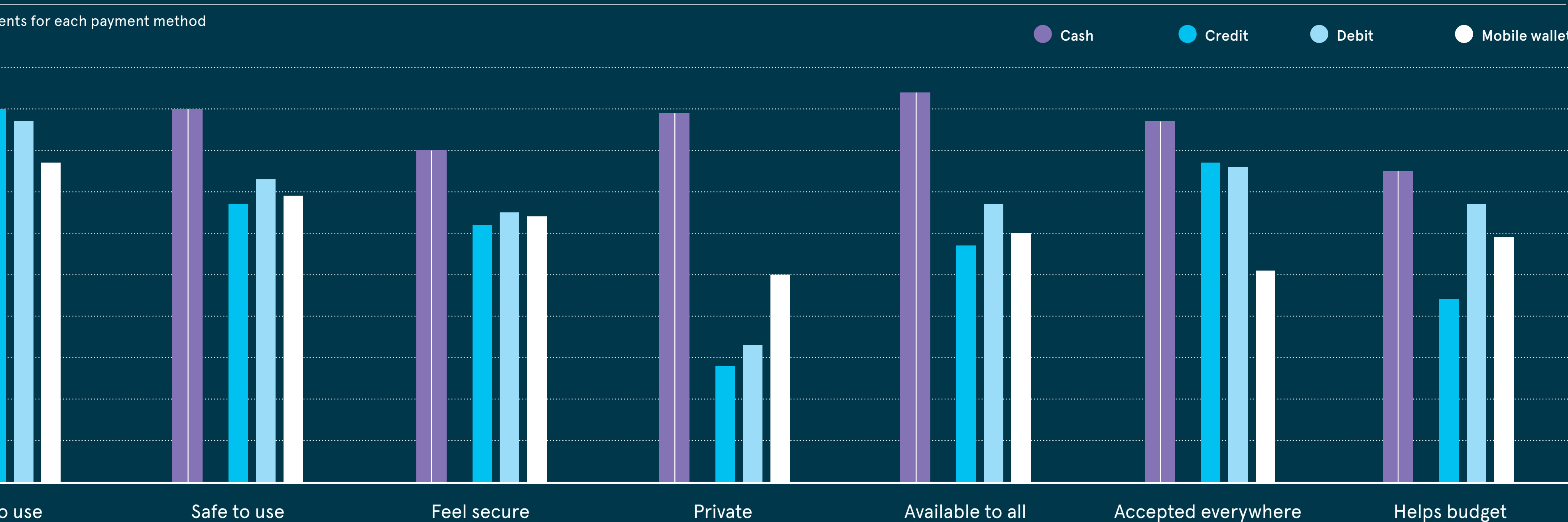
45% would likely stop going to a store or restaurant they like if it stopped accepting cash completely

Cardtronics 2018

ONS

Cardtronics 2018

ents for each payment method



Commercial feature

Evolution of payments in the 'now economy'

Enabling a smooth payments experience for customers is crucial to maximise sales and growth potential in an omnichannel world. But as payment innovations and consumer expectations continue to evolve, how can companies keep up?

The payments landscape has transformed significantly in recent years, driven by developments in technology and fast-changing consumer expectations.

The role payments play has advanced rapidly in the last two decades. From the pioneering introduction of chip and PIN in the early-2000s to the current rise of fingerprint and facial scanning alternatives, the growing sophistication of authentication capabilities is making it more secure, not to mention seamless, to purchase goods online and in-store.

Shoppers' habits are evolving, particularly driven by Generation Z's desire for instant gratification, fuelling what is being termed as the "now economy". Consumers want to be able to buy whatever they want through any channel they choose, whenever they want, and they want it delivered today. As a result, payments companies have had to work hard to help interweave various functionalities that enable a smooth customer experience, which of course helps to maximise sales.

Particularly for online ecommerce businesses, friction in the checkout process is a common barrier to delivering a great customer experience. The consequences of failing to enable frictionless payments can be very damaging, resulting in cart abandonment.

In a study of UK retailers by Klarna and Ovum, more than half said friction at the checkout is the main reason for consumers abandoning a sale, while four in ten said it's because certain payment methods are missing. Separate research from Splitit found 87 per cent of consumers will abandon their shopping if a checkout process is "complicated".

"Abandonment is one of the key problems for any online retailer because if you don't have a smooth payment experience, with popular payment methods included, you lose the customer and the sale," says Seamus Smith, chief executive of Sage Pay. "We have to bring consumers on the journey and educate merchants on what information is needed to ensure transactions can go through. This is the help businesses are looking for."

The other problem that merchants have to deal with is the expectation from consumers to be able to buy and return in different channels. For example, they buy something online, collect it at their local convenience store, but return it in-store. Businesses need to be able to handle payments and refunds seamlessly between these channels.

The payments industry is having to respond to these challenges and expectations by building solutions to address the multitude of ways people wish to spend money. For example, with subscription-based services, which have exploded in popularity in recent years, new capabilities have been developed and used, such as tokenisation.

This particular technology has meant companies can store an embedded token to represent a user's account, rather than a card number, minimising the risk of fraud as well as automatically updating customers' details when a card is replaced, lost or stolen, saving consumers time and preventing businesses from losing out.

Companies typically start out with quite simple payment needs, often just wanting a means to accept money from their customers. But business growth can create payment complexities that small business owners just don't have time to deal with. Unless they have a payments partner that handles the emerging complexities as they scale, they will soon run into challenges and face issues with delivering the experience customers expect.

> “Niche integrations enable a much better user experience. We put payments at the heart of that conversation

Fortunately, the advent of cloud computing and other technologies has lowered the barrier to entry for software solutions that previously only large organisations could afford. At the same time, numerous software providers are focusing on developing niche solutions to help merchants in particular sectors run their businesses more efficiently. Sage Pay implements the payments capabilities into the back-end of these solutions.

"There are niche software capabilities being developed that service a much broader range of customers or merchants, and the price point of those services is coming right down," says Mr Smith. "It's becoming a lot easier to set up and run a business because there will be a piece of software you can buy that helps you get everything up and running, providing all the integrations into the services you need, allowing people to get started with minimal hassle or time."

One such company that Sage Pay works with is ROLLER Software, which develops all-in-one software for attractions, entertainment and leisure venues. A ROLLER Software client, Jump In Trampoline Parks, now enjoys fast, frictionless payments across its nine UK parks thanks to the payment integrations with Sage Pay.

Jump In's system is set up to accept payments through online bookings, customer service representatives, and onsite terminals and kiosks, and has resulted in 40 to 50 per cent time savings for the business. Meanwhile, it is able to keep up with the latest trends, such as accepting payments through wearable wristbands, as well as access the expertise to enable its growth plans.

Fast and frictionless payments have delivered up to

50%

time savings for Jump In

"We play a vital role by providing a very supportive service to small and medium-sized enterprises to help them get up and running with payments," says Mr Smith. "The larger businesses often only give a one-size-fits-all solution, but when it comes to the bespoke, niche integrations that enable much better user experiences in particular scenarios, we are on hand to help businesses on that journey. We put payments at the heart of that conversation."

As the internet of things and technologies such as 5G and artificial intelligence become a reality, the payments market has to keep up with these trends and be present in every scenario. Sage Pay works consistently to ensure it can accept as many different types of payment methods as possible, as well as developing the latest integration capabilities, so its clients can always keep up as consumer behaviour continues to evolve.

CREDIT CARDS

Apple's big bite into credit cards

Apple's move into the credit card industry may not put banks out of business anytime soon, but its customer experience delivery could set it apart from the more established rivals

Jack Apollo George

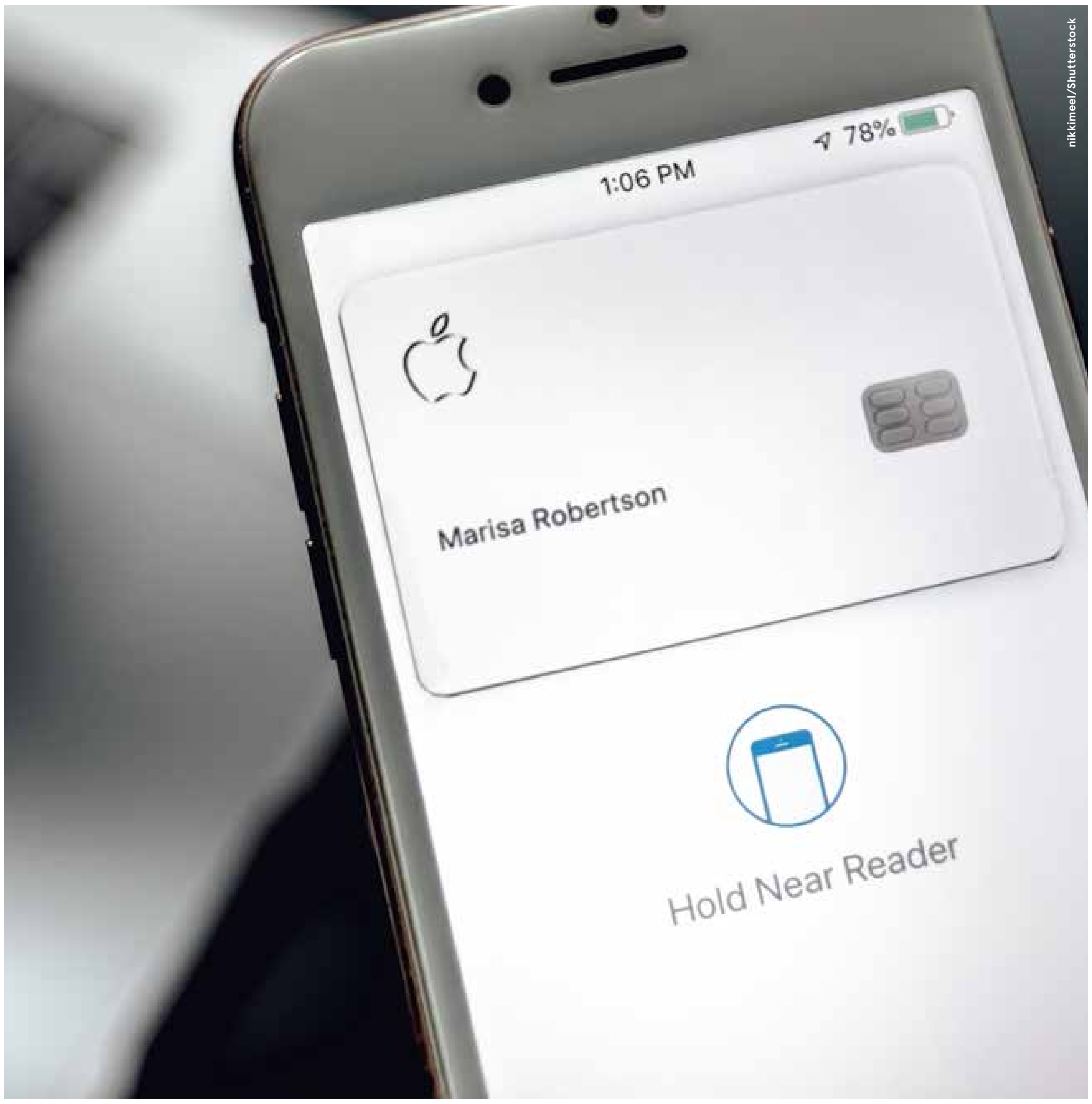
When you think about disruptive payment technologies, it is artificial intelligence, machine-learning and real-time transactions that come to mind, not physical credit cards. But in August, Apple – a company worth more than the GDP of most countries in the world – released the Apple Card.

Undeniably stylish, the Apple Card is characteristically simple: a weighty and laser etched piece of metal to accompany a smorgasbord of financial rewards. Its stated goal is to "help customers lead a healthier financial life". But why does a tech company, better known for its defence of curved edges than its derision of collateralised debt, think it can serve that role?

In a capitalist economy, where finance depends on the flow of credit, money is mostly imaginary. The wealth we hold, or aspire to acquire, is not actually there. If we all went to the bank to withdraw our savings, there would not be enough bank notes. The principle currency in our globalised economy is not the dollar or sterling, no tangible quantity of copper and paper, but trust.

If trust is the currency of the payments industry, then you would be hard pressed to find a more competitive potential entrant than Apple. While other big tech companies face calls for regulation amid fears of psychological regulation, Apple can confidently claim that "transparency, privacy and trust" are "all the things [it] stands for".

That isn't pure fluff. In the aftermath of the San Bernardino mass shooting in 2015, when Apple chief executive Tim Cook steadfastly denied the FBI access to the messages on the perpetrator's iPhone, he wrote: "The government is asking Apple to hack our own users and undermine decades of security advancements that protect our customers." For the Cupertino-based company, its users' privacy was non-negotiable.



nikkimeel/Shutterstock

Apple offers both a physical titanium card and a digital Wallet version

The Apple Card also has clear perks: up to 3 per cent cashback, no late fees whatsoever and easy payment tracking on a neatly designed app. By tapping into its user base, Apple could broaden the appeal of credit cards which are too often seen as either toys for the super rich or burdens of the perennially indebted.

Alongside a trusting audience, Apple has also created a hardware ecosystem that the other digital behemoths can only dream of. With such recognisable and influencer-friendly products, Apple can use every celebrity and hip coffee shop regular as billboards. By existing on top of the successful Apple Pay technology, the perks of the Apple Card can be enjoyed without even using the shiny metal card. You can just tap your phone on any enabled reader and get cashback into your account.

The potential that Apple has to leverage its dominance of the smartphone market in the payments sector seems to be putting other companies on the defensive. Though it is impossible to read too much into such things, representatives from HSBC, Deutsche Bank, Bank of America, Starling Bank, McKinsey and American Express all refused to offer comment for this article.

But a scare story imagining that Apple is going to put banks out of business doesn't quite cut it. PayPal, a relative veteran in the world of digital wallets and one of the best known fintech brands, actually helps businesses to accept Apple Pay in-store. This is despite the fact that PayPal also has a credit offering and a physical debit card of its own. In the payments industry, collaboration is often more useful than competition. More choice for customers means more opportunities for incumbent companies to grow.

Indeed, Revolut, one of the leading fintech companies in Europe and a normally more disruptive voice, only echoes Apple's own language when asked about the launch. "We believe that tech companies are best positioned to help people lead a more healthy financial life, so we welcome the news that Apple are looking to break into the finance space. At the end of the day, more choice can only be a good thing for consumers," says Chad West, director of marketing and communications.

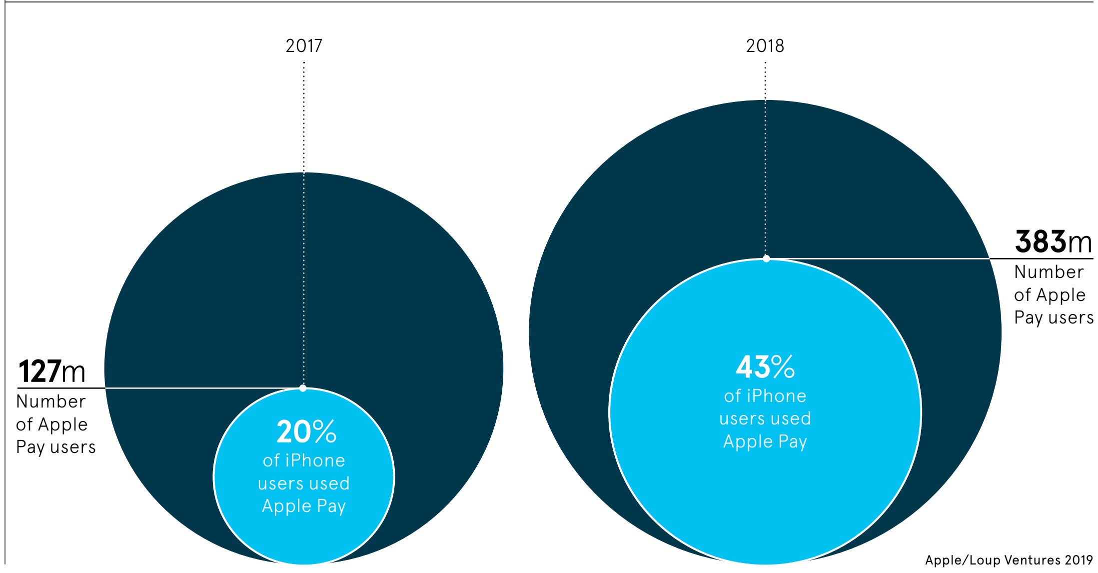
The twin horsemen of trust and iPhone mean that Apple can pitch themselves competitively without even offering anything particular innovative. By simply taking up more of a prominent position in the payments industry, they will push the companies around them to adapt.

Nathan Snell, chief innovation officer at nCino, a major cloud banking service that works with the likes of Santander and BNP Paribas, sees the disruptive potential as an opportunity for learning. "If financial institutions want to remain competitive, they must improve on the things consumer-focused tech giants continue to do well: seamless digital experiences, a near-maniacal focus on the customer and personalised, convenient service," he says.

The real threat from the Apple Card is not that it offers something financially innovative, but rather it can simply sell similar products better.

> "We welcome the news... At the end of the day, more choice can only be a good thing for consumers

APPLE'S PRESENCE GROWING



Apple/Loup Ventures 2019

OPINION

‘There is every reason to expect the UK will remain the world’s leading fintech startup hub’

Over the last few years, we have been warned of the possible negative effects of Brexit on the UK fintech and payments landscape, with the potential for loss of access to the European Union through the bloc’s passporting arrangements, as well as loss of talent.

A recent study by the Digital Finance Forum revealed that although 63 per cent of fintech company founders say the UK is the global leader in the sector, only 33 per cent are optimistic that this will still be the case in five years.

However, despite these concerns, the UK payments and fintech sectors are still going strong. Investment in UK fintech rose by 120 per cent to $3.5 billion from 2017 to 2018, according to Innovate Finance.

And this is showing no sign of slowing down. In fact, there is every reason to expect the UK will remain the world’s leading fintech startup hub for many years to come. Investment figures for the first six months of 2019 were certainly representative of this, reaching a record level for a half-year of $2.9 billion and on track to exceed the 2018 total.

The UK has become a true hub for technology-driven innovation in finance in recent years. The combination of forward-thinking regulators, tech talent and a well-developed network of support for tech startups have all helped lay the foundations for this success.

The UK’s Financial Conduct Authority (FCA), for example, is helping the most forward-thinking startups test their products, services and business models in a live market environment through their regulatory sandbox. This means startups and innovative companies have the support and freedom they need to develop the next generation of business-to-consumer and business-to-business solutions, from regtech to new ways to pay and new financial services tools, without worrying about falling foul of penalties.

This approach has been so successful that now other regulators are following suit. Singapore has begun a similar initiative, as have authorities in Phoenix, Arizona, who are working with the FCA to develop a sandbox of their own.

In addition, the UK Competition and Markets Authority is driving innovation and competition through its own open banking initiatives. By harnessing the power of open banking, it is pioneering the creation of opportunities for new third-party providers to create services that go even further towards meeting customers’ evolving needs.

And the work doesn’t stop there. Plenty is being done by the government to nurture these seeds to create future sector growth.

The UK’s Department for International Trade (DIT) is working to promote UK fintech by establishing its Five Fintech Bridges, which are agreements with other fintech hubs across the globe, from Singapore and South Korea, to China, Hong Kong and Australia. These deals will go a long way towards helping UK payments and fintech firms overcome barriers to these international markets through collaboration with local regulators, sowing the seeds for impressive international expansion.

The DIT is also supporting growth closer to home by partnering with us for this year’s PayExpo, providing startups with access to the broader payments and fintech community. We are working with the DIT to invite early-stage payments and fintech startups to attend, speak and showcase their solutions for free to a wide international audience of their peers, as well as prospective investors, partners and customers.

Whatever happens in the coming months regarding the UK’s future relationship with the EU, entrepreneurs in the fintech and paytech sector can rest assured that the support and infrastructure is there to help their budding startup businesses to grow and thrive into the future.

By taking advantage of platforms such as PayExpo, startups can be confident they have the guidance and tools they need to navigate political uncertainty and access investment and customers, so they can carve their own niche in the global payments and fintech market.

Learn more and register to attend at www.payexpo.com ●

Andrew Earle
Event manager
PayExpo

CUSTOMER EXPERIENCE

Standing out in a seamless future

If truly seamless payments promise to be barely noticeable in our day-to-day lives, customer experience may be the only way financial services can differentiate themselves

Duncan Jefferies

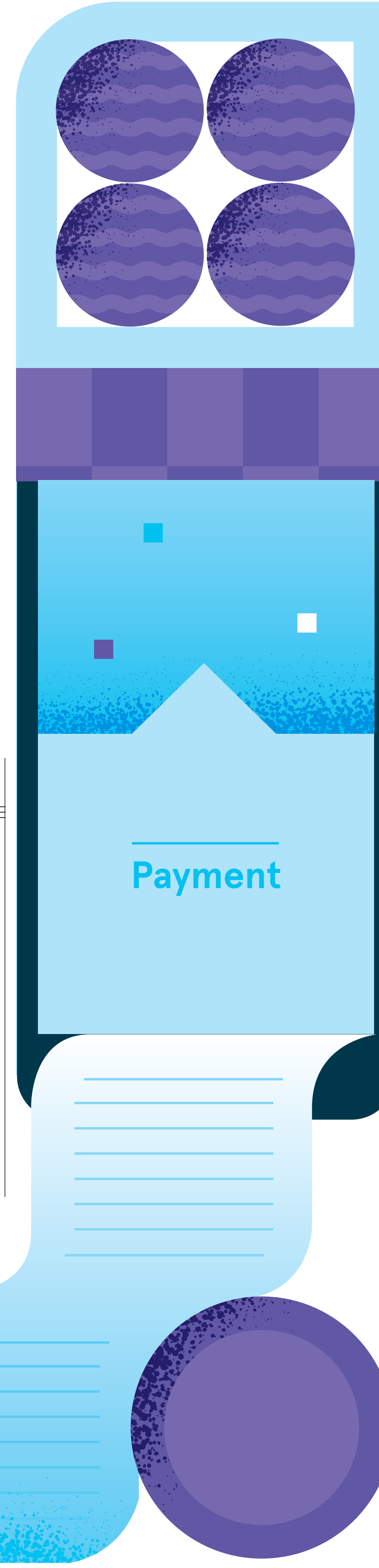
Amazon Go, the check-out-less grocery store launched by the tech giant in January 2018, could be about to go mainstream. After a much-hyped US trial in Seattle, the company has rolled out the concept in Chicago, New York and San Francisco, taking the total number of trading and planned stores to 18.

None of them have queues, because none of them have checkouts. You simply use the Amazon Go app to enter, take the products you want and go. Amazon can automatically detect when products are taken from the shelves and keep track of them in a virtual shopping cart. When a customer leaves the store, the company sends them a receipt and charges the items to their Amazon account.

But if the frictionless payment technology behind Amazon Go becomes the norm rather than a novelty, it will mean fewer opportunities for payments companies to interact visibly with customers. So how will they differentiate themselves in a world where people are barely even aware that a payment is being processed? And what role will customer experience play?

Digital wallets and mobile payment platforms, such as Google Pay and Apple Pay, have shaken up the payments landscape over the past few years and many consumers now reach for their phone rather than their card when they want to pay. Meanwhile, the likes of Uber and Amazon have pushed invisible and one-click payment experiences firmly into the mainstream.

“The average consumer now expects a slick and seamless payments transaction on everyday low-value items,” says Simon Kent, global head of financial services at A.T. Kearney. Nevertheless, expectations around frictionless payments still exist on a spectrum. “Surprisingly, consumers have

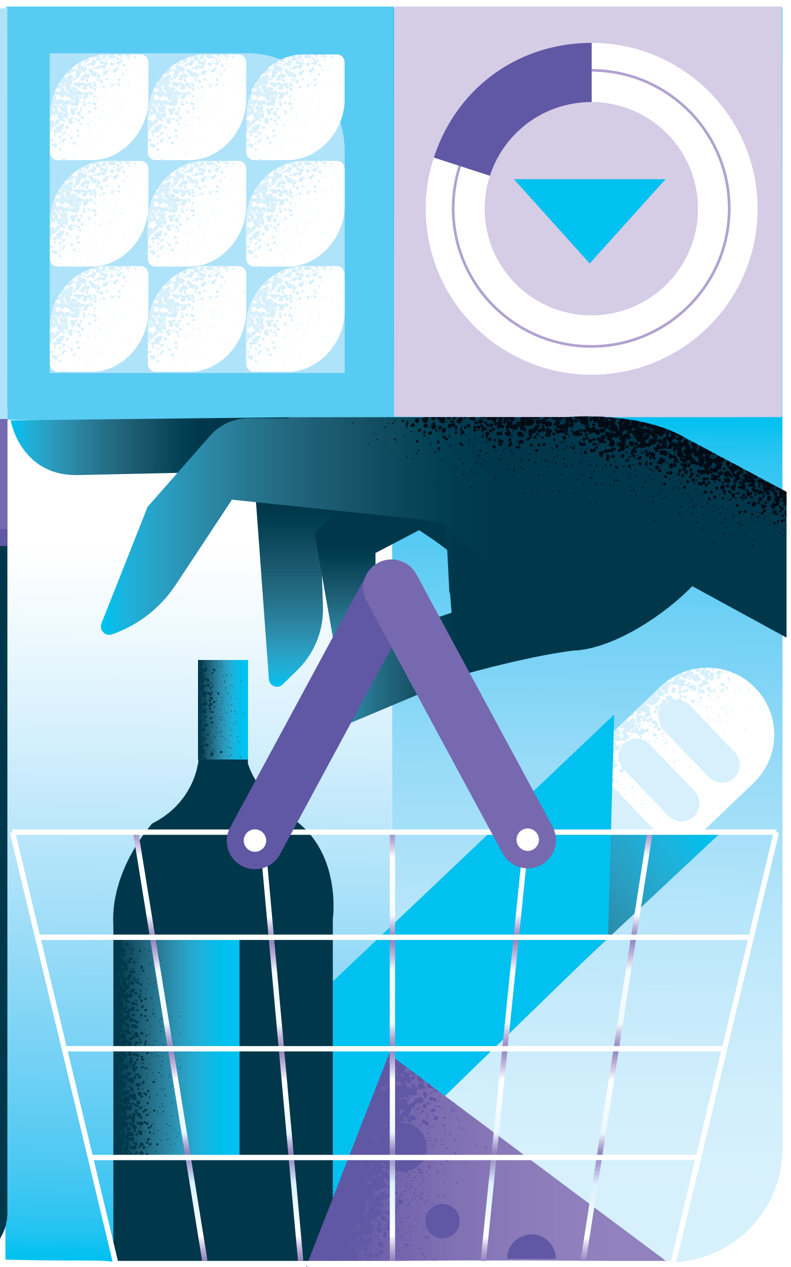


BANKS INTERESTED IN REAL-TIME PAYMENTS

Retail banks were asked about their attitudes towards real-time payments

We are developing/interested in new services for consumers based on immediate payments	88%
Payments via immediate payments will improve our customer service	86%
Immediate payments will drive revenue growth for our organisation	85%
We are developing/interested in new services for small businesses based on immediate payments	79%
Immediate payments will save our organisation money	78%
The business case for investing in immediate payments is weak	49%
I see no benefit in immediate payments	16%
I have never heard of immediate payments	10%

Ovum 2018



> Frictionless payments will mean fewer opportunities for companies to interact visibly with customers

different expectations for larger-value items, where they expect slightly more friction to ensure their details and financial data are handled safely and securely."

Wearables like smartwatches and wrist bands are also increasingly defining customer experiences at the checkout, and voice payments are on the rise too. "There's a real move to make payments more instant," says Mr Kent. "It's already the norm in the UK, but is likely to be adopted globally in the near future."

Myles Dawson, UK managing director of Adyen, a global payments company, believes expectations will rise when it comes to international payments and experiences. "Tourism is increasingly important, especially as the number of global travellers grows. With this comes the expectation that the payment methods used at home should be supported abroad," he says.

"Merchants across the globe will be expected to accept a growing number of international payment methods, for example Chinese payment methods like UnionPay, Alipay and WeChat Pay or iDEAL and SEPA for the Benelux regions."

It's still too early to tell whether financial products such as Apple's Card or Facebook's Libra cryptocurrency will be a success, but social media is likely to transition from a marketing channel for brands to a sales channel in the future. "For example, if I see a post of something that I like on Instagram, I should be able to click a buy button and checkout in one click without leaving Instagram," says Mr Dawson. "Having the payments infrastructure in place is a crucial part of making that possible."

A world of frictionless payments, while appealing to consumers, could also be appealing to criminals. "Real-time or automated payments, and zero friction, are a tempting target for fraudsters, so it's vital the industry stays a step ahead," says Gregor Dobbie, chief executive of Vocalink, a Mastercard company. "Alongside this, as consumers rely more and more on always-on electronic payments, maintaining our existing high levels of resilience and service is incredibly important."

Every breach of a customer's data or takeover of their ewallet account will put a dent in their trust of new payment services. "We will likely see the rise in the use of biometric security technology spurred on by regulatory upheavals like strong customer authentication, which will require consumers to double-authenticate payments over £30," says Iain McDougall, UK and Ireland country manager at Stripe, which offers online payment processing for internet businesses.

The new era of open banking will also unleash more innovative payment services. For instance, we could see more payment systems that use artificial intelligence (AI) to make choices on our behalf. "This could mean, for example, automatically paying bills in the order which best suits the customer's finances," says Mr Dobbie. What's more, AI and the increased data available in a world of seamless payments could speed the shift from mass mailing or email loyalty campaigns to genuinely personalised offers. "The challenge is how you give the most relevant offer while also respecting people's data privacy, undoubtedly a hot topic at the moment," he adds.

As more vehicles are connected to the internet, in-vehicle payment systems and frictionless forms of toll-charging, parking and fuelling could become the norm. So-called "programmatic commerce", whereby consumers allow purchase decisions to be made on their behalf by connected devices, could also have an impact on customer experience expectations, though Mr Dobbie says stories of your fridge buying milk for you are "possibly a little oversold".

Although they might not be ready to embrace appliances that do the shopping, consumers seem more willing to try new financing options at the point of sale. "Instalment payment options present a clear benefit to consumers who want to take advantage of the offer of credit, but are not convinced by the potentially high cost and less structured repayment plans of credit cards," says Claire Gates, chief executive of Paysafe Pay Later. "This is not only useful for those that need to spread the cost of a purchase, but also addresses the growing demographic of millennials who either do not have a credit card or value the utility of instalment payment for certain purchases."

A range of options, such as 0 per cent interest, means customers can pay for items in a way that suits them, says Michael Bevan, chief executive of consumer finance specialist Duologi. "Applications can also be processed in the same time that it takes to authorise a debit card payment, in around four seconds," he says.

That's a big change from the long, drawn-out experiences associated with old-style in-store credit, though it remains to be seen how these new financing options will tie in with the kind of frictionless payment experiences promised by Amazon Go. However, it's already clear that to succeed in future, payment providers will need to ensure they offer customers something that's fast becoming the norm: the freedom to pay anywhere, with anything, anytime you like.

WEARABLES

Why the Scandis are bucking the trend with wearables

Swedbank and Nordea have partnered with Fidesmo to allow customers with Mastercard debit cards to tap-and-pay for small purchases via wearables

Wearable devices were seemingly bypassed by biometrics in the payments evolution, so why are big banks investing now?

Sophie Charara

It's now unusual to go a week without a new data breach, but this summer there was a security story with a twist. A million biometric fingerprint scans, mostly unencrypted, were leaked from the unsecured internet database of a South Korean company. The usual advice in similar data breaches is to switch passwords and update software, but how can victims change their fingerprints?

Concerns like these go some way to explain why payment wearables shouldn't be counted out just yet, despite on the surface seeming less advanced than biometrics.

In fact, there are signs that fintech startups and banks in a number of regions, including Scandinavia, are concentrating their efforts on relatively simple tap-to-pay watches, straps, trackers and jewellery for payments. In August, two of Sweden's leading banks, Swedbank and Nordea, announced they would start allowing customers with Mastercard debit cards to tap-and-pay for small purchases via wearables, with no new account needed.

Both banks signed up to Fidesmo Pay, a similar system to Apple Pay, to facilitate this and Fidesmo's chief executive and co-founder Mattias Eld says these schemes are now live, along with a joint-venture in Sweden and Norway with leading partnership bank SEB.

"Additional banks and markets will be launched later this year," says Mr Eld. "If you want to have a solution based on fingerprints or biometrics, by design you will have a more complex and advanced device or wearable. We fill the space of connecting any device to the banks, some may include fingerprints and some may not."

Simple near-field communication or NFC-enabled wearables that allow these contactless card-like payments hold a number of advantages over smartphones with biometric sensors and cameras. For one, they're easy to set up and use with a fairly seamless user experience. As CCS Insight senior analyst, specialising in wearables and virtual reality, Leo Gebbie puts it: "Biometric payments are simply a less developed offering right now."

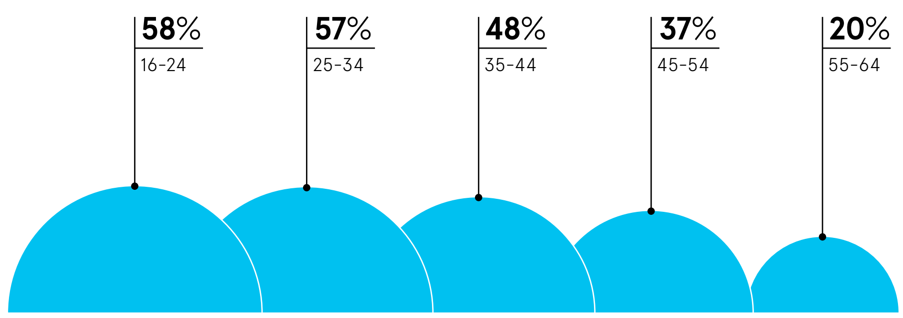
Apple has seen success with Apple Pay on the hugely popular Apple Watch series, though with the launch of the Apple Card with Goldman Sachs, it's clearly exploring all avenues. Elsewhere, Fitbit just added its rival Fitbit Pay to the main model of the new Versa 2 smartwatch, not a special edition as previously.

However, Mr Eld believes it's "important to offer an ecosystem of services that are independent of the device manufacturer" as this could help open up wearable payments to new kinds of manufacturers which are more fashion oriented.

According to CCS Insight's data, only 26 per cent of smartwatch owners currently use their wearable device to make payments, but Mr Gebbie expects this to continue to rise "as more smartwatches add features such as NFC" and overall smartwatch shipments grow to 80 million units in 2019.

APPETITE IS STILL NOT UNIVERSAL

Percentage of global consumers willing to make a payment using a wearable device by age



Transaction Network Services 2019

Beyond Scandinavia, there's a stark contrast between the UK and China's approach to biometrics, which may affect trends in wearable payments. "The UK has seen some trials of biometric payment cards, but these have been restricted to small-scale trials, whereas paying with a smartphone or smartwatch is increasingly commonplace," says Mr Gebbie. "However, in markets such as China, biometric technologies like face recognition are being implemented more widely."

Then there's the security angle. "While biometric payments are designed to increase security around transactions, this doesn't mean data is entirely immune to being compromised," says Michael Sawh, editor of wearable tech site Wareable. He points out that with payment wearables, users aren't required to hand over any sensitive data, but the two methods could also "work in tandem to offer a robust and secure payment setup".

So are there any downsides to payment wearables compared with more futuristic face and fingerprint-sensing authentication options? Wearables are an extra cost, for one, and aside from long-lasting devices with swappable batteries, require daily charging. There's also the possible issue of social etiquette when using smartwatches and wearables to pay; the Apple Watch is a regular sight on the London Underground, but that is not indicative of the UK as a whole.

Arguably, apart from Apple, Fitbit and Samsung, wearables and associated services can be unreliable. Barclaycard merged its bPay and Pingit payment apps earlier this year and Swedish smartwatch Kronaby, which partnered with bPay, filed for bankruptcy in February. "Outside these major players, the wearables space is very unpredictable," says Mr Gebbie. "It is very difficult for these smaller players to break through and generate meaningful sales."

With the world's biggest tech companies seemingly committed to both biometric and NFC-based proximity payments, it seems safe to predict that it's not an either-or scenario.

Smartrings are coming

Most of the big players in wearable payments focus on smartwatches and smartwatch bands for tap-to-pay tech. But a number of smartrings with discreet designs and contactless payment capabilities are breaking through.

"Smartrings are no longer a wearable novelty, with startups like Motiv and McLear building the technology into its connected jewellery," says Wareable's editor Michael Sawh.

Motiv has an ambitious plan to use the wearer's ECG to verify their identity whereas the zirconia ceramic K Ring acts as a prepaid Mastercard wearable. The £90 McLear smartring, meanwhile, works with Visa and Mastercard.

A word of caution from CCS Insight's Leo Gebbie: "Smartrings allow people to make payments with a tap of the finger. However, it's early days for these devices and currently they are far less common than smartwatches."

Home Credit reinvents credit card for Russia

The consumer lending business has been ripe for disruption, but even established players can become disruptors if they are tech-savvy and leverage what they already do well

Consumer credit has come a long way since the 1950s' launch of Diners Club, the world's first payment card widely accepted by merchants.

One of many followers in the footsteps of Diners Club is Home Credit, a consumer lender established in 1997, which is active across eastern Europe and southeast Asia. Home Credit became a credit card issuer by gradually tracking the growing financial needs and rising financial literacy of its clients in countries where consumer borrowing was a novelty.

"Since the mid-2000s, interest-free instalments have become popular in Russia. People could buy a TV, smartphone or household appliances without down payment or overpayment and pay for their goods in equal instalments," says deputy chairman of Home Credit's Russian unit Artem Aleshkin.

"Then the boom of traditional credit cards began, which makes it possible to pay arrears without interest in the grace period. The next stage of market development was the appearance of an instalment card, which combines the advantages of both products: instalment plan and credit card."

Writing its own chapter in Russia's credit card history, Home Credit launched its new credit card called Svoboda, which means freedom, in 2017. The card is Home Credit's take on the growing popularity of "buy now, pay later" solutions that fintech companies such as Sezzle, Splitit or Afterpay offer online retailers in the United States, Australia and other developed markets.

They let buyers split their bills into interest-free monthly instalments using their existing credit or debit cards. The buy now, pay later startups collect fees from vendors, who can increase sales by attracting shoppers cautious of accumulating debt. Buyers, however, face fines for late payment. In Russia, the Svoboda zero-interest credit card is also an answer to escalating concerns of rising consumer debt.

According to the country's central Bank, Russians have doubled their personal debt in the last five years. Governor of the central bank Elvira Nabiullina has downplayed the problem while setting stricter regulations to slow consumer lending. The rules include interest rate caps, notably a 1 per cent daily limit on payday loans.

"It is wrong though to think we are facing risks to financial stability," Ms Nabiullina told an economic conference in St Petersburg earlier this year, as she highlighted the central bank's measures to prevent personal loans from spiralling out of control.

Svoboda cardholders can use the card to pay both online and in-store for goods or services at Home Credit's partnered shops. Home Credit pays the partners fully in exchange for commissions and lets its card clients spread payments up to 12 months. More than 60,000 vendors all over Russia are co-operating with Home Credit and its buy now, pay later Svoboda shopping card.

Interestingly, the card has a dual spending limit. Most of the line of credit is for zero-interest purchases at partner shops. The rest, which has a standard interest rate and 51-day payment grace period, can be used elsewhere.

"We want our clients to be able to use the card to pay regardless. For example, it could be for lunch at a restaurant that hasn't partnered with us yet," says Mr Aleshkin. In this way, Home Credit aims to reach the milestone of a million issued Svoboda credit cards by the end of 2019.

Over the years, Home Credit has built up its partnerships with stores and service sellers, including online retailers. Startups such as Sezzle have a long way to catch up on this scale of business.

Home Credit benefits from having started as a short-term consumer loan provider at bricks-and-mortar stores for people needing to bridge the gap between their available cash and the cost of desired goods, mainly electronics, mobile phones and furniture. As these shops went online, Home Credit followed. It also partnered with ecommerce companies such as Ozon.ru. Just like the US giant Amazon.com, Ozon.ru started as an online bookshop for Russian speakers and grew into the country's largest online everything store.

From its headquarters in Prague, Czech Republic, Home Credit currently serves almost 120 million borrowers in ten countries, including Russia, China, India, Vietnam, Indonesia and the Philippines.

It has continually improved its credit approval technology using vast troves of proprietary and third-party data.

> "Home Credit holds key positions, with a large customer base and long-term partnerships with retailers and manufacturers

"When their loan application is approved, clients can link the virtual version of the Svoboda card to their digital wallets, such as Apple Pay or Google Pay, in our mobile app," says Mr Aleshkin. "They get the physical plastic card later either through a courier or they can pick it up at one of our branches."

With the basic revolving loan concept unchanged, credit card companies and banks have looked for new ways to stand out and attract customers. They have added tweaks or extra services, such as different grace periods for outstanding debt repayments, insurance or free airline miles rewards.

The 1990s saw the internet and a boom in the use of credit cards for online payments. The digital revolution sweeping the financial services sector has, however, not spared the consumer credit industry and has opened the door to peer-to-peer lenders seeking to bypass traditional banks. It has also allowed consumer goods manufacturers to skirt retailers and reach their customers directly.

Conventional banks have stepped up their efforts to retain existing clients and attract new credit card customers, expanding rewards for big spenders and offering new clients extended periods with zero or low-interest rates when they transfer their outstanding balances from other banks.

As the competition heats up and more "buy now, pay later" platforms appear, tech-savvy consumer lenders such as Home Credit can shine. In this race, Home Credit holds key positions, with a large customer base and long-term partnerships with retailers and the manufacturers of consumer goods.

For more information please visit www.homecredit.net

Comparing the market

How do credit cards, instalment payment cards and "buy now, pay later" payment solutions stack up against each other?

Credit cardholders have a set number of days before they start incurring interest liabilities. They have to settle the debt in full within the grace period to avoid paying interest. Traditional cards issued by Home Credit offer a 51-day grace period.

Home Credit's Svoboda card spreads the balance payment into interest-free instalments over three to twelve months. Clients make monthly payments in equal parts in exchange for not incurring interest on their card balances.

The Svoboda instalment card has two spending limits for partner and non-partner shops. The card can be used at non-affiliated vendors as long as they accept Visa cards. Clients can use the Svoboda card in the same way as any other traditional credit card.

Buy now, pay later services such as Sezzle allow clients to make purchases only at affiliate online shops and service providers.

Banks issue instalment cards. Their use gets recorded in the credit history of their holders. Buy now, pay later solutions such as Sezzle are not reflected in their users' credit history.

Dhiraj Singh/Bloomberg via Getty Images

A sign for PayTM digital payments displayed on the windscreen of a rickshaw in Bengaluru, India

INDIA

Have mobile payments hit a wall in India?

Cashless transactions are surging across India, but mobile payments could stumble over a series of obstacles

Edd Gent

Cash is still king in India. But rapid adoption of technology and a concerted push from the government are starting to change things. Mobile payment systems are booming, though how big their reach can be in India remains uncertain.

Reddy, 27, who goes by a single name, has first-hand experience of the pace of change after starting to accept digital payments at his Bangalore grocery store six months ago. Initially less than a tenth of transactions were made digitally, he says, but today almost all are. "It's gone full reverse in six months," Reddy says. "Almost 99 per cent of customers are using cashless."

Non-cash transactions are predicted to grow by 20 per cent by 2023, according to a recent report from KPMG, faster than in digital payments poster child China. Much of this growth will be driven by mobile, says Manish Jain, partner at KPMG India's digital and fintech arm.

2016 was a watershed year for mobile payment systems in India. August saw the rollout of the Unified Payments Interface (UPI), which lets mobile apps complete instant transfers between bank accounts. The service suddenly made a fragmented market of siloed mobile wallets interoperable, says Mr Jain.

Already rapid smartphone growth received a boost a month later when Reliance Jio entered the telecoms market with ultra-low 4G tariffs, forcing the entire industry to slash prices. Then in November 2016 the government caused a cash crunch by taking India's high-denomination notes out of circulation overnight to curb "black money", cash from illicit sources or hidden from the taxman.

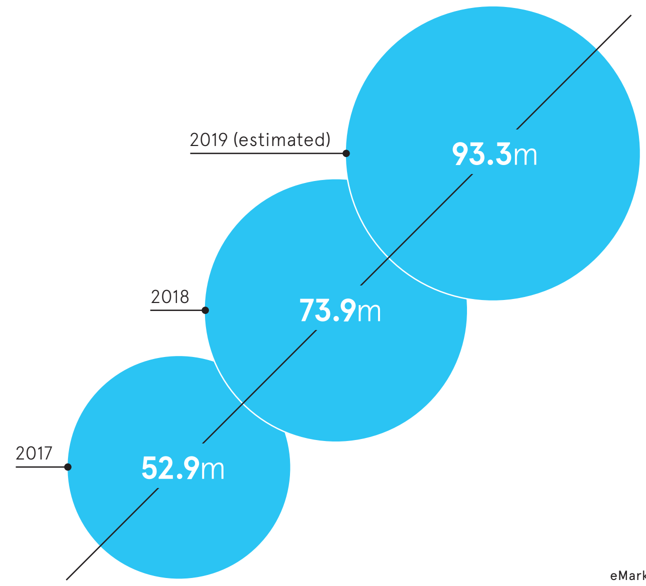
"Everybody, from the street vendor to the beggar, used mobile payments at that point in time," says Mr Jain. "It was a very big learning experience for the entire country."

UPI usage leaped from 103,000 transactions to 1.97 million in just three months at the end of 2016; last month it crossed the 900-million mark. Mobile payments are now ubiquitous in major cities with even the smallest stores displaying a host of QR code stickers for different providers.

> "Everybody, from the street vendor to the beggar, used mobile payments at that point in time

POPULATION OF MOBILE PAYMENT USERS IN INDIA

Based on point-of-sale transactions, not ecommerce payments



eMarketer 2018

But while that expansion sounds impressive, industry consensus is that digital payments still only account for 10 to 15 per cent of all retail merchant transactions, says Vijay Mani, partner at Deloitte India, with mobile predicted to play second fiddle to cards, at least in terms of value.

What's more, only a quarter of Indians own a smartphone with the capabilities to use banking apps and popular payment services such as PayTM, Google Pay and PhonePe, though with 40 per cent of Indians under the age of 18, the percentage of adults using them is likely to be considerably higher.

The National Payments Corporation of India (NPCI), which built UPI, has also created the *99# service that allows feature phones without internet connectivity to make mobile payments and store money in digital wallets. But while similar technology has taken off in African countries, such as Kenya and Tanzania, it has failed to catch India's imagination.

Part of the reason is that transaction charges from telecoms providers are too high. Renita d'Souza, who researches mobile payment systems in India for New Delhi-based think tank Observer Research Foundation, says there was a missed opportunity post-demonetisation to promote the system's use by subsidising these charges and raising awareness.

"Mobile payments using non-smartphones must go hand in hand with smartphone payments," she says. "Only then will the scale of cashless transactions increase in the near future."

But there are also fundamental differences between India and places like Kenya, says NPCI chief executive Dilip Asbe. While much of Africa suffers from a lack of banking infrastructure, making mobile banking a much-needed alternative, more than 80 per cent of Indians had a bank account in 2017, according to the World Bank's latest *Global Findex*.

A government programme running since 2014 to open a bank account for every Indian, has relied on a "business correspondent" model, says Mr Asbe, where banks provide an agent, often a local shopkeeper, in rural areas with a mobile device that lets them function as a mini-branch and carry out digital transactions on customers' behalf.

But the World Bank report also found nearly half of accounts were inactive and only about a third of account owners reported making or receiving a digital payment in the previous year, suggesting simply providing access to banking won't spur adoption of digital payments.

Nonetheless, Mr Asbe thinks booming smartphone adoption in smaller cities could see this change rapidly. Expansion is driven largely by content delivery, he says, while there's also corresponding growth in UPI use. "In three years max, I would not be surprised if every Indian has a smartphone," he says.

The challenge for mobile payment systems isn't just getting services into customers' hands though; a sustainable business has to be developed. In Tanzania, mobile money transfer between accounts makes up the bulk of UPI transactions, says Deloitte's Mr Mani, with only about 20 per cent going directly to merchants and earning providers commission.

"I think there's no compelling reason for the ordinary man in the street to fish out his or her mobile phone to buy a loaf of bread," he says. That's leading fintech firms flush with venture capital and eager to capture market share to offer large discounts and cashback to keep people engaged, says Mr Mani, but the low margins on payments make recovering that investment tricky.

The long game for most mobile payment systems is to create "super apps", says KPMG's Mr Jain. These act as a gateway to services such as ride-hailing or food delivery and most crucially financial services. By collecting fine-grained transaction data on customers, companies hope to sell financial products, including insurance and micro-credit, to customers who previously had limited access to such services.

"There is a clear incentive for people to use super apps and there is a clear incentive for the ecosystem to adapt to them," says Mr Jain. "So the value creation is already there. I think it's all about adoption."

Commercial feature

International payment pitfalls businesses want to leave behind

For many UK-based companies, whether using suppliers abroad or growing their international workforces, making and receiving international payments has become a regular activity. But a range of payment pain points and knowledge gaps can create serious challenges

Sustaining a global footprint of any scale requires businesses and public sector bodies to take a smart and long-term approach to their global payments, to avoid some serious and potentially costly pain points.

Traditionally, foreign payments have been left to well-known providers but now, with the help of new technology, rival providers are entering the market, tackling the common pitfalls and enabling organisations to pay the right person the right amount, at the right time, anywhere in the world.

There are myriad reasons why an organisation might need to make payments in local currencies around the world. These can include international expansion, setting up a technology or other specialist team abroad, working with new suppliers elsewhere and needing to pay pensions to ex-employees who have retired in other countries.

"Foreign payments are frequently needed by organisations and the importance of minimising pitfalls is not solely the responsibility of finance departments," explains Lisa Cowan, director of growth strategy at Equiniti's business payments division. "With departmental heads acting on strategy, it can introduce new payment needs."

Currently, companies tend to utilise multiple partners and in-country providers when making international payments. This can require the finance teams to use a host of systems to manually build payments directly with each provider, taking into account varying formats and requirements. Additionally, their banking partners or brokers may not offer full currency coverage to small or medium-sized organisations, or support contractors' newly preferred payment methods such as delivery into digital wallets or card accounts.

"Not having access to a single platform that will serve international and domestic payment needs is a major pain point organisations face in this area and is starting to cause friction for businesses as they manage multiple partners," says Ms Cowan. "On top of this, businesses want the transparency and security of a bank, but with the ability to make payments quickly to a wide range of locations in local currencies.

"Given that not all banks or financial institutions offer the truly wide range of currencies that businesses can require, a number of these organisations now use our services so they too can support clients of all sizes to execute payments in multiple additional currencies."

There are two additional challenges for businesses making payments abroad. First are the potentially unexpected fees applied to their transactions, as well as foreign exchange risk, which is especially critical for payments being agreed now, but drawn down at a future date. Then there is compliance with local regulations.

"In-country nuances need to be considered, particularly when they're relevant to taxation and accurate salary payments. Many businesses do not have the time, resources or expertise to address these efficiently," says Ms Cowan.

As a result, the industry is looking to tackle these problems, compliantly serving multiple countries and currencies, in a simpler format and without unexpected costs. A company leading the way with its single business payments platform is Equiniti. The payment provider works with numerous organisations, including large banks, providing access to an extensive network of 180 countries and 133 currencies.

Equiniti's business payments division, which is regulated by the Financial Conduct Authority and is compliant with Electronic Money and Payment Services Regulations, offers comparable security and transparency to an established bank, while providing easy access to account managers with extensive in-country expertise. Its single, online business payments platform enables clients to make business payments confidently to the right person, at the right time and for the right amount, anywhere in the world.

> There is a strong demand in the market for a single platform on which all international and domestic payment needs can be served

A London council recently worked with Equiniti to streamline its previously paper-based overseas payment processes. It introduced a tailored digital solution to deliver payments to foster carers, who are often adult relatives or family friends of children it retains responsibility for, but who live abroad.

Meanwhile, a pharmaceutical firm brought in the provider to establish a single, end-to-end payment process that reaches more than 1,800 employees in 15 different countries.

Elsewhere, a leading university enlisted the help of Equiniti to create a single payroll and payments solution, enabling it to easily and cost-effectively pay its employees in Dubai, some of whom are UK citizens and others nationals of the United Arab Emirates.

As international payments present increasing demands on businesses, the issue of how to make overseas payments without unnecessary complexity is growing in significance. In addition to finance teams, everyone is taking note, from technology staff, sales force personnel and product developers, to supply chain leaders, payroll managers, human resources directors and chief executives.

"There is a strong demand in the market for a single platform on which all international and domestic payment needs can be served," says Ms Cowan. "That is currently a gap not readily served by traditional banks or foreign exchange providers. Businesses are looking for a way to transact on one, easy-to-use platform, without incurring unexpected costs, yet with the reliability, transparency and security of traditional financial institutions."

Equiniti has focused on making its business payments platform easy to integrate with organisations' existing systems and authorisation workflows, and ensuring it is adaptable and flexible, with extensive reach and backed by proper customer support. It also provides data validation within the system to ensure payments are processed successfully.

As the need for international payments becomes more prominent to support business growth and supplier strategies, many companies will continue to face a range of pain points. The business payments team at Equiniti is making sure they can avoid these problems and enable companies to successfully pay people and organisations, no matter where they are in the world.

To find out how organisations are avoiding the common pain points of international payments please email payments@equiniti.com or visit equinitiglobal.com

EQUINITI

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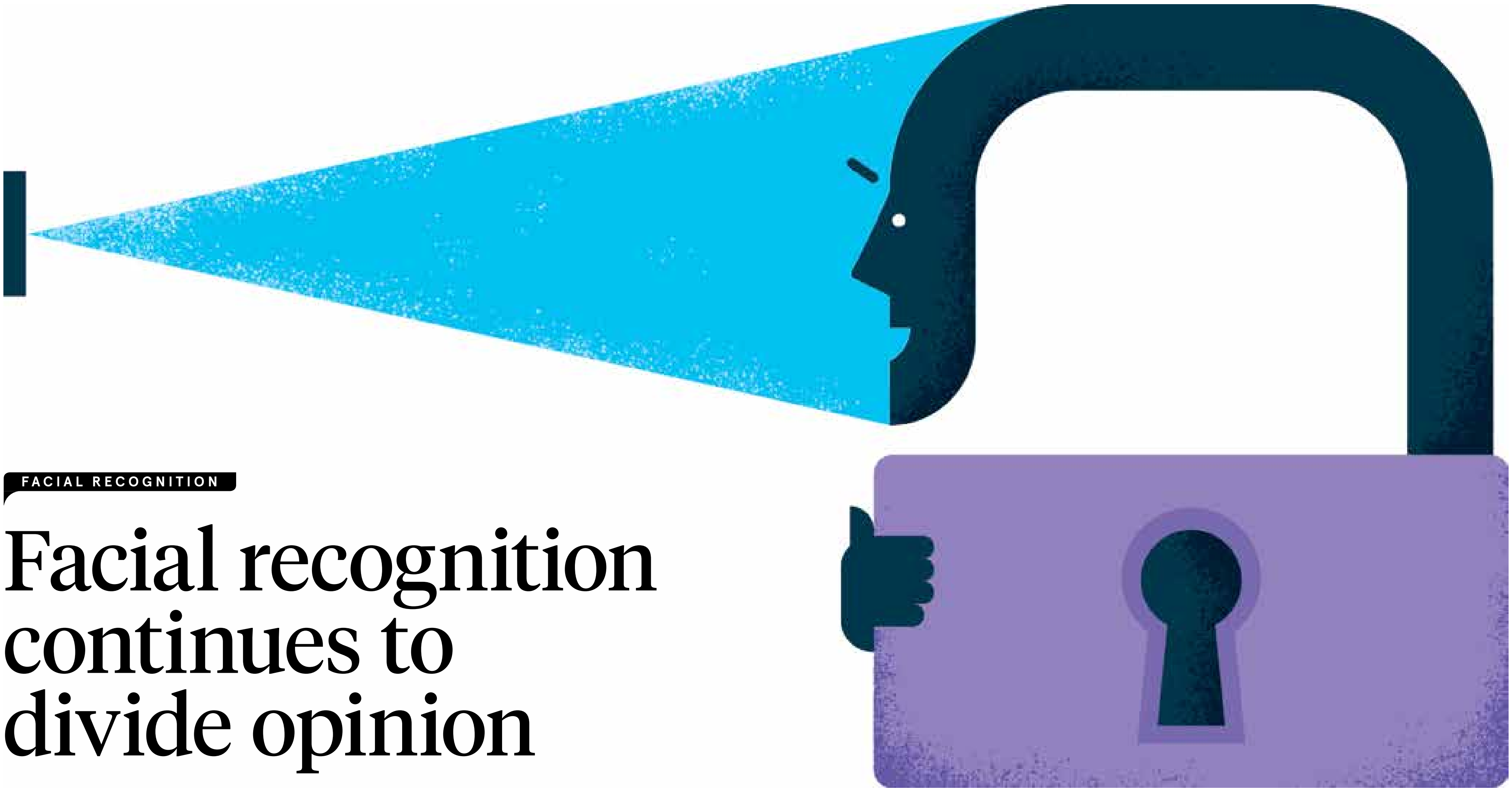
transactions are processed each year
Accenture

45%
of companies are fully satisfied with their firm's business software for payments and banking
Accenture

55%
of corporates work with more than five banks for payments
Nordea



FACIAL RECOGNITION

Facial recognition continues to divide opinion

Data is the most valuable commodity of the modern era. Global tech giants thrive on collecting it and making a profit from it. So the march towards facial recognition payments may seem unstoppable. However, the idea that our faces are being harvested and stored digitally is raising far more than a few eyebrows. Here are the pros and cons

Emily Hill

Pros

Of course, there are many pros when it comes to facial recognition payment, especially from the industry's point of view. After all, devotees of the iPhone are already using it if they have the latest model, making it already the new or latest normal.

"It appears consumers are becoming more accepting when they are trading biometrics for convenience in the private sector in terms of faster and more secure payments," says Gus Tomlinson, head of strategy at GBG, a global leader in identity data intelligence. "Most prominently, we have seen Apple enabling facial recognition to unlock phones, the first step in extending strong authentication to access apps."

When it comes to giving out your facial characteristics, why would you worry if you've already given away your thumbprints to your phone, photograph album to Instagram, contacts book to Facebook and so on?

"Currently, convenience still beats other concerns," says John Erik Setsaas, vice president of innovation and identity, at digital identity fintech Signicat. "People use Google for mail, maps, documents and searching, even though we know Google collects information and creates a profile."

But when it comes to facial recognition payment we're in unregulated territory as legislation lags behind the latest technology.

The industry should, perhaps, be looking to France where the first standard regulation applicable to biometric systems at work was introduced. It prescribes specific requirements for processing biometric data to control information systems in the context of business tasks.

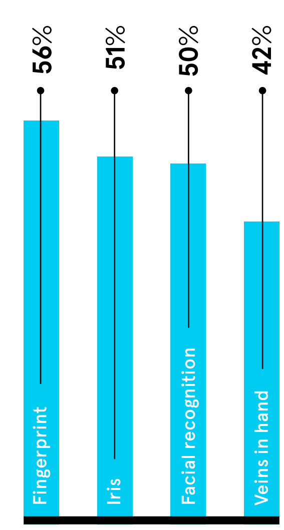
This is in stark contrast to the situation in India where the world's largest biometric identification programme comprehends roughly a billion registered users (the entire population is 1.3 billion) and facial recognition privacy concerns are very serious.

"Upon its creation, Aadhaar was largely viewed as a well-intentioned initiative that could stem government waste and protect citizens' identities," Mr Tomlinson explains. "Today, many view it as a mass-surveillance tool that infringes privacy rights."

Currently, the European Union's General Data Protection Regulation is meant to prevent abuse of our privacy. Geoff Anderson, chief executive of UK cybersecurity startup PixelPin, urges companies using biometric payment technology to get ahead of potential future problems. "The appeal of biometrics is obvious: it's easy to use, almost impossible to lose your facial characteristics and also quite sci-fi," he says. "We're at the relatively early stages of the biometrics life cycle, so what we do now will really set the agenda for its future use."

FACIAL RECOGNITION IS NOT THE FAVOURED OPTION

Adults in the UK, United States and Australia willing to use the following when making a biometric payment



An invasion of privacy?

Anyone interested in payments technology should take note of a court case launched in Cardiff concerning automated facial recognition used by the state. This is the first major legal challenge in the UK regarding facial recognition privacy concerns and was brought by office worker Ed Bridges, who believes he had his image captured by police while he was shopping last Christmas.

"By the time I was close enough to see the words 'automatic facial recognition' on the van, I had already had my data captured by it," he told the *BBC*. "That struck me as quite a fundamental invasion of my privacy." Mr Bridges is supported by the civil rights group Liberty.

"It is just like taking people's DNA or fingerprints, without their knowledge or their consent," says Megan Goulding, a lawyer working on the case.

Understandably, this has prompted negative headlines and it seems a balance must be struck between the use of biometrics by the state and its potential benefits in the payments sector.

"The technology will, as technology does, continue to be developed," says Andrew Hartshorn, information law specialist at law firm Shakespeare Martineau. "I think its use is likely to be curtailed going forwards, or rather used in limited circumstances, where use is more focused, with less scope for widespread invasion of privacy."

Cons

There is obviously a lot of excitement around facial recognition technology and its implications for the future of payments, and rightly so. But it's important to temper enthusiasm with caution. It is vital, therefore, the industry concentrates on the privacy concerns that are most pertinent, so the risks to the consumer don't exceed potential gains.

"While the benefits are endless, businesses must also consider the risks that arise from deploying face recognition systems as they need to take appropriate steps to comply with the law," says Tamara Quinn, partner at international law firm Osborne Clarke. "Facial recognition and video surveillance are covered by a complex web of regulations, which isn't easy to navigate, plus there is reputational risk if companies aren't seen to be taking privacy seriously."

It's also important to understand the potential for fraud. Customers might think that because their face is unique, they don't have to worry as they would if relying on a password or PIN number to authorise payments.

Last month, it was revealed that the biometrics data of more than a million people had been exposed from a database owned by the biometric security company Suprema. This included facial recognition collected by London's Metropolitan Police.

> "We're at the early stages of biometrics, so what we do now will set the agenda for its future use

"Combined with the personal details, usernames and passwords, the potential for criminal activity and fraud is massive," according to one of the researchers who brought the situation to light. So biometrics is not immune from the difficulties faced when it comes to fraud.

"Biometrics is not fool-proof and, just like your credit card, details can be stolen and cloned," says Mr Anderson. "A picture of your face can enable anyone to steal your identity. Until the reliability and security of biometrics can be proven, it should only be an opt-in choice for users. What absolutely must not happen is a rush to implement biometrics as the de facto means of authentication; let's not run before we can walk."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