

# FUTURE OF PAYMENTS

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## OPEN BANKING

# Payments shake-up is a Brexit farewell

Europewide regulation is set to transform payment services, promising consumers a new deal

SAM SHAW

With the proliferation of payment services since the financial crisis and a hitherto stranglehold on competition by the major banks, it's no surprise the regulators have stepped in.

At present, gathering information to share with another party usually requires "screen scraping" of unstructured data and reformatting into structured data compatible with Excel or a database so it can be read.

But from January 13, 2018, the European Commission's Revised Payment Services Directive (PSD2) will mandate all European Union member states, including the UK, and the European Economic Area to use open application programming interfaces (APIs), allowing financial transaction information to be shared with explicit permission from the account holder.

Its intentions are improved competition, cost-effectiveness and a more level playing field across the payments industry, while increasing customer protection. PSD2 serves to expand the reach of the first directive in 2009.

According to David Song, European developments manager at UK Finance, two main areas to be affected are payment initiation services, which reflect the market growth of e-commerce and mobile payments, and account information services, showing the growing trend towards consumers using multiple providers that increasingly need to talk to one another.

While in the UK card payments are fairly commonplace, the Continent is more inclined towards bank transfers. Around 60 per cent of the EU population does not have a credit card, according to the European Commission, and as such restrictions exist; many cards simply won't work in other countries.

According to Experian, services such as iDEAL in the Netherlands, MobilePay in Denmark, Sofort in the wider EU and Pingit in the UK continue to drive down costs, especially for lower-value payments due to the lower overheads for merchants of being able to accept credit card payments. Gone are the days of Visa and Mastercard being the dominant twin schemes.

PSD2 also waves goodbye to card payment surcharging, affecting roughly 95 per cent of card payments in Europe, saving consumers approximately €730 million a year.



PSD2 is set to disrupt the payments industry across Europe, but are banks ready?

Ge Drossaert, chief commercial officer at challenger bank and fintech provider Fidor, says while tier-1 banks have the firepower to evolve into open banks, he expects to see more tier-2 banks partnering.

"We are seeing this in France and the Netherlands, in order to future-proof their businesses," he says. "I see PSD2 as a trigger for co-operating with fintechs rather than seeing them as a threat."

Across Europe there are "pockets of activity", says Ms Harwood, such as the Berlin Group and various French organisations starting to point towards common standards.

Yet she firmly believes the UK is blazing the global trail. "The US and Canada are looking to the UK as they develop their own approaches," says Ms Harwood. "While the US banks have been using APIs for some time, the standardisation being developed across the UK is unparalleled."

Mr Drossaert adds: "We have seen the National Payment Platform launching in Australia and recently the banking sector in Japan is being called on to pin their colours to a mast – are they open banks or not?"

As the use of third-party APIs is now standard in much of day-to-day life, from eBay in the retail space to Uber, which integrates with Google Maps' API for location and PayPal's API for payment, the use of open APIs for payments seems a no-brainer, yet not without risks.

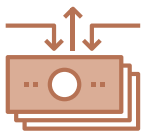
According to the Open Data Institute, fraud currently costs the UK economy more than £570 million a year and it suggests that by pulling in data from multiple sources, third-party fraud detectors could aggregate data "to spot patterns that a single product provider wouldn't see".

Concerns also exist around excessive choice. Where consumers are used to dealing with a handful of payment providers, the sweeping changes bring other threats to light.

Guillaume Pousaz, chief executive and founder at payment provider Checkout.com, says: "Transparency over the number of legal entities that have access to sensitive financial data will cause the consumer a great deal of confusion."

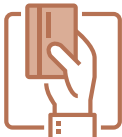
"Keeping track of who has access to your financial data is going to be difficult as companies inevitably weave in terms and conditions without the consumers' full understanding."

This, in a world where absent-mindedly clicking "I Agree" to unread Ts&Cs is the norm, swiftly becomes an area on which to keep a watchful eye. ●



70%

market share of UK personal accounts is held by the big four banks – Lloyds, RBS, Barclays and HSBC



95%

of all card payments in Europe are affected by surcharging, which will cease post-PSD2



60%

of people in the European Union do not have a credit card

# Current accounts get upgrade as challenger banks shake up everyday payments

Traditional banks are missing a trick by undervaluing everyday payments and short-changing customer interaction, fuelling the rise of digitally native challengers



**M**obile has transformed the way customers manage their day-to-day finances and spend money, resulting in them interacting with their banks far more frequently through apps and other online services. The UK will be home to more than 43.6 million smartphone users by the end of 2017, m-commerce sales are now worth billions and payments are increasingly integrating with social media applications such as WhatsApp and Facebook.

Through multiple mobile touch-points, consumers are giving more of themselves to their banks than ever before. But traditional banks are failing to translate this unprecedented wave of interactions into a more engaging customer experience due to a reluctance to invest in current accounts, an area they consider complex and a drag on profitability.

"For many banks, everyday payments are far from their core focus because current accounts have been considered loss-making products," says Anne Boden, chief executive at Starling Bank, an app-only bank founded three years ago. "They've been more interested in the products they can cross-sell or up-sell like mortgages, loans and ISAs. So while people are engaging so much more with banks, banks are not responding."

Current accounts are people's day-to-day banking centres and represent the central part of their financial lives. But providing an exceptional user experience requires significant investment in a nimble and resilient infrastructure. It's hard for traditional banks to do this because of the infrastructure and processes already in place, and starting a new bank was previously too complex and expensive. Nearly two-thirds of UK adults now bank via mobile, but 43 per cent believe products no longer fit their lifestyle.

However, changes in regulations have allowed more companies to not only break into the payments industry, but disrupt it with a fresh and innovative approach. The biggest winners of these developments are customers because new challengers such as Starling have everyday payments built into the heart of their operations.



Starling users can receive real-time mobile notifications for income and outgoings, making them instantly aware of their finances. Spending is automatically categorised and portioned with percentage values allocated to individual merchants. Daily spending can be checked at a glance and payments can be set up in an app with the option to add images to keep track of them visually. Meanwhile, in-app security means users can instantly lock their card if lost, unlock it again if found and con-

**"We are helping people to manage their money in a modern, efficient and secure way, all from their mobiles**

trol where it can be used, online, offline or at ATMs.

"We've built our own systems from scratch, and with the resilience and infrastructure necessary to provide both a great service for customers as well as a means of engaging with them through the process," says Ms Boden. "We are helping people to manage their money in a modern, efficient and secure way, all from their mobiles."

"Banks have existed for decades with legacy technology built on top of other legacy technology, so naturally they are not going to transform

overnight. Creating a mobile-only current account from scratch means we have completely different ambitions when it comes to technology and providing the best service for our customers."

Starling isn't just shaking up consumer payments, but also the business-to-business payments industry with Starling Payment Services, the only sponsor bank offering real-time faster payments access. Its on-boarding time from initial inquiry to sending the first payment using its published application programming interfaces or APIs is under 12 weeks, including extended due diligence, risk committees and contracts.

The bank is also building a network of other fintech products and startups that can integrate with its APIs through the Starling Marketplace, Europe's first fully regulated connective platform. This will make Starling the gateway to financial products offered by other fintechs, startups, payment service providers and corporates.

"Very soon, payments will be synonymous with the way we live our lives. There will be no physical, visible objects attached to activities, including banking," says Ms Boden. "We'll be paying for purchases without having to check out at tills and we'll travel without taking out a card, using technology such as Apple Pay and Android Pay to make payments."

**For more information please visit [www.starlingbank.com](http://www.starlingbank.com)**

## CASHLESS SOCIETY

# Cash is still

Progression towards electronic payments continues, but could we ever do without some cash?



CLARE GASCOIGNE

**T**he cash machine celebrated its 50th birthday this year; it was 1967 when Barclays opened its first ATM in Enfield. More than 80 per cent of cash withdrawn from banks is obtained through cash machines, but it is cash itself that could be on the way out.

After all, it is two years since the UK passed the tipping point of more electronic than cash payments. And by next year, more than 20 per cent of online transactions are likely to be made through mobile devices, according to PwC.

Nor is the UK alone. Governments across the world are pushing the drive towards a cashless society, hoping to reduce issues such as fraud or funding for terrorism, decrease the black economy and improve tax revenues. Last November, for example, the Indian government abolished 500 and 1,000 rupee notes overnight in a bid to stem fake currencies and corruption.

"Government plays a big part in becoming cashless," says Senthil Ravindran, head of the fintech lab for banking and financial services at Virtusa, a technology company. "It is easier for a government to tax a salary going through a bank; digital payments help a government collect tax."

Financial institutions are just as keen as the traceability of electronic payments brings huge bene-

“

This is a massive change in behaviour that we're going through; there will be bumps along the way

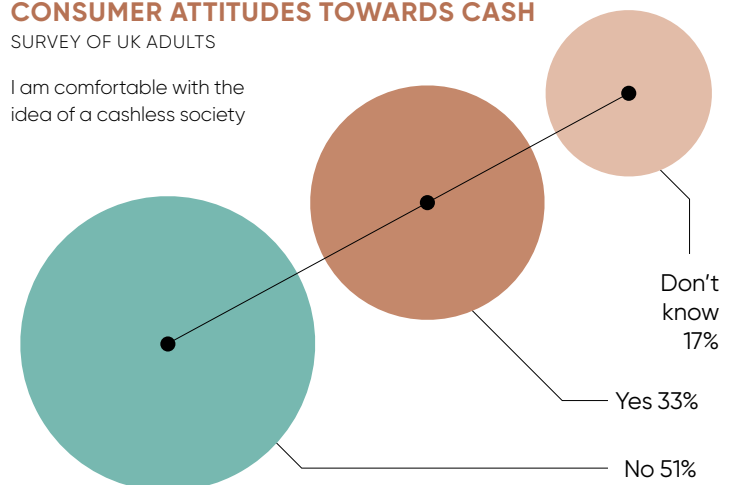
fits, from automatic reckoning to a greater knowledge of the customer. For the consumer, it is convenience and speed that are the draw.

According to Andrew Stenton, managing director at Civica Pay-

## CONSUMER ATTITUDES TOWARDS CASH

SURVEY OF UK ADULTS

I am comfortable with the idea of a cashless society



Mintel 2017



# popular in an electronic world



ments, a technology company: “People expect to make payments easily and securely, at a time which is convenient and via a channel of their choice. Cash is becoming an increasingly expensive commodity to manage, for all parties involved. In fact, today, half of Britain’s population keeps less than £5 on their person at any one time.”

But not everyone is so happy. According to a recent report from Mintel, a market research company, only a third of consumers would be comfortable with a cashless society. There are about two million people in Britain without a bank account, according to the Financial Inclusion Centre. Such individuals cannot access the cheaper costs that come with direct debits or online shopping and as a result on average pay an extra £1,300 a year.

In India, according to a report from the World Bank, as much as 97 per cent of transactions involve cash, a factor that could account for the push-back that greeted the demonetisation.

There are, of course, certain jobs that rely heavily on cash. Any sector where tipping is a common practice will find its economics changed by the use of purely electronic payments, where it can be hard to ensure the gratuity goes to the right person.

More alarmingly for some, reliance on electronic payments brings a lack of privacy, both for good or for ill, and a potentially dangerous reliance on technology which has, after all, been known to go wrong. Lose your wallet to a thief and you

lose your cash, but lose your password to a cyber criminal and you might lose your life savings.

But does the absence of a bank account and the decline of cash always mean the poorer half of society misses out? Not necessarily. Look at the rise and rise of the mobile payments industry. M-Pesa, a mobile phone money transfer service, has revolutionised payments in countries such as Kenya and Tanzania. Services such as Pingit and Paym in the UK are side-stepping not only cash, but plastic as well.

“The cashless revolution has three interconnected elements – e-commerce, digital cash and smartphones,” says Simon Black, chief

executive at PPRO, an electronic money specialist.

In the UK, however, about 25 per cent of people don’t have smartphones and broadband access can be patchy, especially in some rural areas. That combination can make mobile payments difficult, leading to financial as well as digital exclusion.

Mr Black says: “This is a massive change in behaviour that we’re going through; there will be bumps along the way. It’s a gradual transition and the way to protect people who are resistant to change is to make sure there isn’t a cliff edge where suddenly you can’t pay with cash.”

Five years ago there was a lot of resistance to the tap-and-pay idea; it took time for everything to fall into place, from the issuing of new cards to the upgrading of retailers’ card machines. Now contactless payments are the norm for many of us.

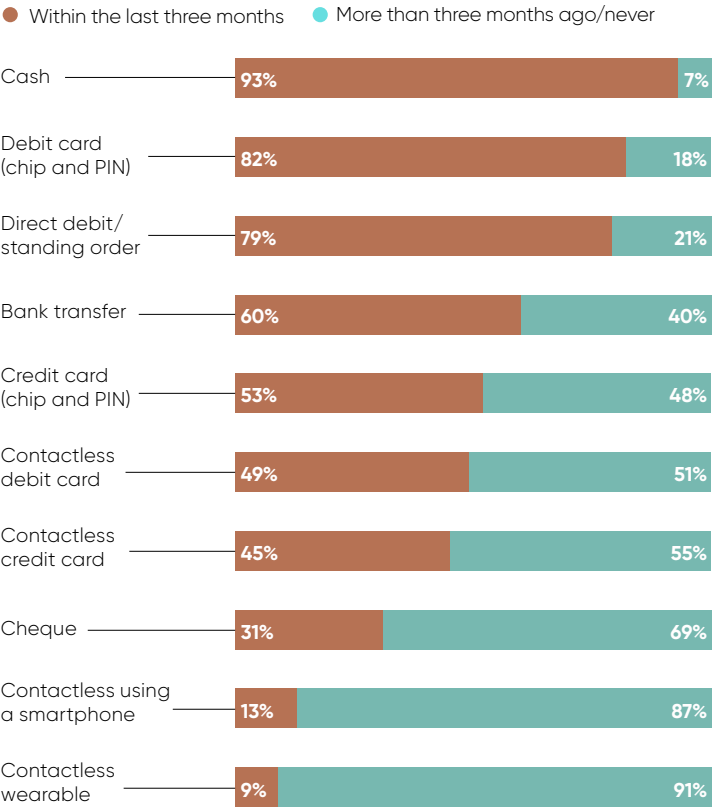
One country that stands out in the cashless revolution is Sweden, where the use of cash has fallen by 40 per cent since 2009. Bills and coins now represent a mere 2 per cent of Sweden’s economy. Last year the central bank, the Riksbank, began an investigation, due to be completed at the end of 2019, into whether to issue an e-krona.

According to deputy governor Cecilia Skingsley: “The Riksbank will continue issuing banknotes and

“The fact that contactless smartphone payments don’t offer added convenience over contactless card payments will remain a significant barrier to uptake

## USE OF PAYMENT METHODS

WHEN UK ADULTS LAST USED THE FOLLOWING PAYMENT METHODS, IF AT ALL



Percentages may not equal 100 due to rounding Mintel 2017

coins as long as there is demand for them in society.” But she adds: “If the market can make use of the new technology to launch new and popular payment services, why shouldn’t the Riksbank be able to do the same?”

The appetite for e-krona appears to be limited. One survey, from Tieto, a Swedish digital payments firm, found that only a tenth of those polled were in favour.

So it seems there is no one-way street for payment systems. “Despite widespread ownership of both smartphones and cards, many people continue to show a preference for cash,” says Patrick Ross, senior financial services analyst at Mintel. “It’s clear there isn’t all that much

difference in terms of the convenience of these options. The fact that contactless smartphone payments don’t offer added convenience over contactless card payments will remain a significant barrier to uptake.”

Cash still has its uses and for some countries, including the UK, is an indispensable part of life. Others, regardless of the level of economic development, are happy to dispense with it. The replacement for cash may be plastic, but there again may be mobile phones. The advent of virtual currencies may add an extra element to the debate. But in the end, the convenience and reliability of cash makes it hard to give up. ●

### CASE STUDY SINGAPORE



It is three years since the city-state of Singapore launched the Smart Nation initiative, designed to bring technology into every aspect of people’s lives. But according to prime minister Lee Hsien Loong’s annual National Rally Day speech in August, six in ten financial transactions still involve cash or cheques.

So what’s been the problem? After all, Singapore is a digitally literate society with a global financial reputation.

With many payment options, consumers have to carry several cards. Also retailers have to operate several payment terminals, and are charged high transaction fees by

credit card companies and banks to process electronic payments. Add in a high proportion of small business and sole traders, and it’s easy to see why Singaporeans still prefer cash.

Compared with China, Singapore’s payments system looks outdated; 43 per cent of Singaporeans use cash most often, compared with only 25 per cent in China, according to a recent report from PayPal. But the government has plans to change the use of cash. In July, the Monetary Authority of Singapore launched PayNow, a peer-to-peer funds transfer service operated with a mobile phone.



## COMMERCIAL FEATURE

# Bitcoin moves towards the mainstream

From the unknown to the undeniable, cryptocurrencies are rapidly transforming the financial system and are set to alter our everyday existence, according to leading blockchain personal finance platform **Wirex**



It was not so long ago that the realms of cryptocurrency were firmly the reserve of online enthusiasts, relegated to the deepest corners of the web. Fast forward to 2017 and rapid advances in digital technology are changing the face of financial services, with digital currencies at the very heart of the transformation.

Bitcoin, the most famous cryptocurrency, and its peers have seen their popularity soar amid growing demand from consumers for a financial solution that is not at the mercy of national governments.

You only need to look at the dizzying heights bitcoin has reached since its debut in 2009 to see that this trend shows no signs of slowing. From an uncharted concept, bitcoin is poised to become part of consumers' everyday existence.

Unsurprisingly, it has been hailed the new gold among investors, with its safe haven appeal amid growing geopolitical tensions and lacklustre markets, sending prices rocketing. While it may not have a physical form, the rewards for those who have invested are very real. For most of 2010, bitcoin traded at 6 cents; today the currency sits comfortably around the \$4,000 mark, having quadrupled in value this year alone. It is a phenomenon that the world can no longer afford to ignore.

For Pavel Matveev, chief executive of the world's biggest blockchain personal finance platform Wirex, we are only at the beginning of the story.

"The rising demand we are witnessing is testament to the growing need for a form of currency that reflects the modern world and the technological revolution we are undergoing," he says. "Bitcoin, and cryptocurrencies in general, have the potential to change how millions of people around the world conduct their financial situation on a daily basis. We have moved beyond the early-adoption phase and are rapidly moving towards the mainstream."



The numbers speak for themselves; in the three years since Wirex's inception, the company has accumulated more than 800,000 customers across 130 countries and recently celebrated transacting \$1 billion of business.

"The implications of cryptocurrencies are huge," says Mr Matveev. "Financial experts are agreed that their evolution has set in motion huge changes for the financial exchange system and we are seeing increasing numbers of people demanding the option to use digital currencies alongside traditional payment methods."

While the lack of regulation surrounding cryptocurrency has posed one of its greatest challenges to date, it has also been its biggest asset. Bitcoin operates on a distributed ledger, with every creation or transfer archived for maximum transparency, but unlike fiat currencies, bitcoin and its comrades are free of government manipulation. In an era of recession, quantitative easing and experimental monetary policy, it is easy to see why this is particularly appealing.

What's more, it is devoid of the ties that come with traditional banking methods. The beauty of bitcoin payments is that they are peer to peer; individuals can transfer money directly to one another at a faster rate and international payments are considerably cheaper, especially so for lower sums of money. In an increasingly globalised world, this more efficient alternative is proving alluring.

According to Mr Matveev, sending money across borders via bitcoin is an improvement on the outdated, expensive and often frustrating financial infrastructure of conventional methods.

“It's time to combine cryptocurrency with traditional currencies in our daily finances

He says: "Firstly, both parties require their own bank account and this might be problematic, or indeed impossible for some people or in some more remote parts of the world. Secondly, individuals must contend with high transfer fees."

"Bitcoin has the power to provide financial services to hard-to-reach communities and democratise financial services for all, in a way traditional currencies cannot. We believe that geographical limitations in finance should be a thing of the past."

Such is its growing attraction that in April Japan became the first country to recognise bitcoin as an official payment method. Its decision to do so placed it firmly at the head of the pack and has set in motion what could well be a global trend.

In June, the International Monetary Fund released a report in which it found that "boundaries are blurring" and recognised the ability of fintech to innovate the financial system.

"Japan's decision marked a triumph for cryptocurrencies," notes Mr Matveev. "It has helped to instill confidence in businesses to incorporate bitcoin into their offerings, and provided consumers with greater flexibility and choice. We believe that everyone should be part of the financial revolution; it's time to combine cryptocurrency with traditional currencies in our daily finances."

Wirex has been at the forefront of the bitcoin evolution as the first to combine the speed and flexibility of blockchain finance with the acceptance of fiat currency, all in one account. The company offers secure digital wallets and pre-paid Visa cards used by customers around the world to convert quickly between bitcoin and national currencies, including pounds, dollars and euros. It will soon launch the first contactless plastic cards for use with a cryptocurrency platform.



**PAVEL MATVEEV**  
CHIEF EXECUTIVE  
WIREX

Its popularity stems from its ability to provide better foreign exchange rates, faster KYC (know-your-customer) verification and far quicker delivery times from card printing facilities located around the world.

Mr Matveev says: "In recent years, consumers have been dealt a series of shocks from the recession to Brexit, of which the latter's consequences are still unknown. Cryptocurrencies ensure land borders have no impact on consumer's financial freedom. While banks make their services complicated or difficult, the use of digital wallets and cards makes global payment technology simple."


According to Worldcoinindex, there are now more than 500 cryptocurrencies in existence and earlier this year bitcoin's market capitalisation surpassed \$50 billion for the first time.

As Warren Buffet once said: "Someone is sitting in the shade today because someone planted a tree a long time ago." It's clear that enthusiasm, determination and demand will continue to push cryptocurrencies to the fore. For Wirex, we are only on the cusp of what promises to be an exhilarating financial revolution.

For more information please visit [wirexapp.com](http://wirexapp.com)

 **130+**  
countries

 **800k**  
customers

 **1m+**  
customers  
estimated by  
the end of 2017

# Can banks afford to ignore this?

The financial sector is investing in blockchain, while not fully embracing it, as bankers wait to see if it's really the future of payments

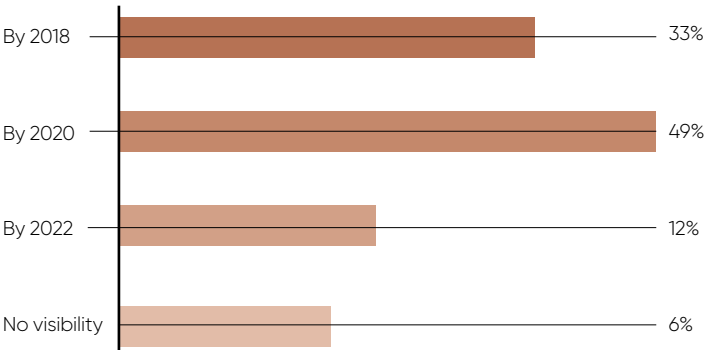


JON CARD

Blockchain has been the “next big thing” for payments for some time. The concept of a dependable and trusted source of data about customers, transactions, ownership of assets and other kinds of payment information is not lost on bankers. Also secure, blockchains are not held on any single server, but distributed across a global network of computers. Every time the information is amended by a user with a cryptographic code, the copies of the blockchain on all systems are updated. This decentralised approach makes them effectively unhackable and immutable.

A recent survey of bankers by Infosys Finacle found that more than 80 per cent expect to see commercial adoption of blockchain by 2020, with about half already investing or planning to invest during 2017. Half of the banks surveyed are even working directly with fintech companies on the technology. There are clearly many potential uses of blockchain technology, including combating identity fraud and money laundering, improving know-your-customer systems, and speeding up cross-border payments, letters-of-credit processes and the granting of loans. But the financial sector is not yet ready to commit fully to this new era. For blockchain technology to be effective, it requires sharing data, while the banks’ business models depend on storing and utilising it. “Banks still see the data they hold about an individual as a source of competitive advantage. They are not yet able to sit around a table and share that insight and intelligence with other banks as they think they

BLOCKCHAIN ADOPTION IN BANKING  
WHEN GLOBAL FINANCIAL SERVICES LEADERS EXPECT TO SEE COMMERCIAL ADOPTION OF BLOCKCHAIN



Infosys Finacle 2017

will lose that advantage,” says Tony Craddock, chief executive of the Emerging Payments Association, whose organisation represents payment providers across the world. “There are lots of incumbents, legacies and particular interests that are going to prevent the adoption of the new technology.”

However, banks are investing in disruptive fintechs because they know technology has upended other sectors before and could do the same to them. “That’s the risk. If you’re an incumbent, the risk of being disrupted by new players is very significant. That’s why banks are investing significantly in blockchain because they don’t want to be left out,” Mr Craddock explains.

Blockchain startups are coming to the fore, often with the support of major banks and investors. Circle, which enables users to make payments via text message, has received \$136 million of investment from a consortium of backers, including Goldman Sachs, IDG Capital Partners, Breyer Capital and Accel Partners. It has also partnered with Barclays Bank in the UK as it doesn’t have a licence to hold consumers’ money. But the vision of its chief executive Jeremy Allaire is revolutionary and highly disruptive – it wants to make all payments free.

“We can share content and make calls for free with Facebook, Skype and Google, and we believe, because of blockchain technology and AI [artificial intelligence], we can provide that kind of experience for payments. We don’t think there’s going to be a model for charging for payments in the future – that’s just gone,” he says.

Some blockchain startups want to create new kinds of transactions. TrustMe, led by chief executive Antony Abell, is pioneering a new form of property investment based on blockchain. Through a new marketplace, due to launch this year, people will be able to buy and sell shares in London property for as little as £250. “London property is prohibitively expensive. It needs to be democratised,” says Mr Abell.

The business is targeting homeowners in need of equity release. However, Mr Abell says his new model could also make it easier for young people to get on the property ladder. “Up to 49 per cent of the property could theoretically be paid for by

someone else, without you having to pay any interest on it,” he says. “The younger generation could, theoretically, move into a property owning 51 per cent, with the balance being paid for by investors who just want it for its stored wealth. That could change everything.”

Jon Matonis, vice president of corporate strategy at blockchain research company nChain, was also a founder of the Bitcoin Foundation. He was an early backer of blockchain and cryptocurrencies, and his enthusiasm is undimmed. The efficiency savings blockchain offers to payments reconciliation mean it is too tempting for the banks to ignore, he says.



There are lots of incumbents, legacies and particular interests that are going to prevent the adoption of the new technology

“Prevailing wisdom states that there is a potential \$20 billion in cost-savings to be realised by banks via improved blockchain reconciliation processes. That is not a revolution in finance – it is a revolution in reconciliation,” Mr Matonis says.

But the reputation of the financial sector is still recovering following the 2008 crash. Could a more visible and comprehensible banking system, based on new technology such as blockchain, prevent another crisis? Mr Matonis says the stability of the financial sector could be improved, but technology alone won’t prevent a crash.

“Blockchain can drive more accurate accountability, with near real-time clearing and settlement, so potential problems are not hidden from market participants and allowed to induce catastrophic misallocation,” he says.

However, Mr Matonis says the banking sector needs to commit to using blockchain technologies for the majority of their clearing work before the safety benefits can be truly realised. “We are a long way from that state of affairs,” he says. ●



CARD FEES

# Brussels ban could actually put up prices

Shoppers love plastic, but paying by card can sometimes cost more, which is why the European Commission is slapping a ban on additional fees

OLIVIA GAGAN

The UK has been a nation of enthusiastic debit and credit card users ever since their widespread introduction in the 1960s. The earliest charge cards debuted a decade earlier in the United States; they were made of cardboard and were designed to allow diners to settle their restaurant bills at the end of the month.

Today, of course, our plastic-hewn cards do more than merely settle

restaurant tabs, with the card industry handling billions of transactions every year. According to the UK Cards Association, UK businesses accepted 15 billion card payments totalling £647 billion in 2016.

Despite such ubiquity, shoppers can still find themselves charged extra to pay by card. Well-known card fee culprits include airlines, ticketing websites and government agencies. Their surcharges are often confusingly rebranded as “administration” or “card-handling” costs and slapped on as a surprise at the final point of purchase rather than announced upfront.

Consumer rights campaigners Which? estimate the cost of processing a debit card transaction to be no more than 50p, but surcharges often bear little relation to this figure. The Treasury’s last estimate of the total value of surcharges incurred on UK debit and credit cards was around £473 million a year, leading to concerns that surcharges have been used by some merchants as an additional source of revenue.

At present, customers must simply accept the charge or not buy the product. When researching this piece, one purchase at a post office and another in a corner shop incurred extra card charges of 70p and 60p respectively, both representing well over 20 per cent of the total transaction cost. Neither

person manning the tills could explain what the charges represented, but from January 13, 2018 this will all change.

Under new rules issued by the European Commission, retailers will be banned from using surcharges to pass the cost of card payment processing on to customers.

While most retailers already absorb the cost of card processing into the overall price of a product, others who use surcharges and operate on thin margins, such as airlines and travel agents, may find their bottom line affected. The series of events and players involved in making a single card payment goes some way to explaining why these retailers feel surcharges are necessary.

For the customer buying something with a card is usually a single action, a tap or a click, over in seconds. But what takes place behind the scenes to enable this involves a chain of companies in a process which has remained largely unchanged for decades.

Whenever a card is used, the retailer will typically use a company known as an “acquirer” to process the payment. The acquirer will pass the card details to the card scheme, such as Mastercard or Visa. The card scheme then passes this information on again to the issuer of the customer’s funds, which is usually a bank or financial insti-

tution. Once the issuer authorises the payment, the card scheme will pass the payment back to the acquirer, which in turn finally pays the merchant.

With all these moving parts come fees. Retailers have to pay the acquirers a merchant service charge for their work and in turn acquirers must pay an interchange fee set by the card schemes. Each part of the chain has its own margins to make and it is the costs involved in this

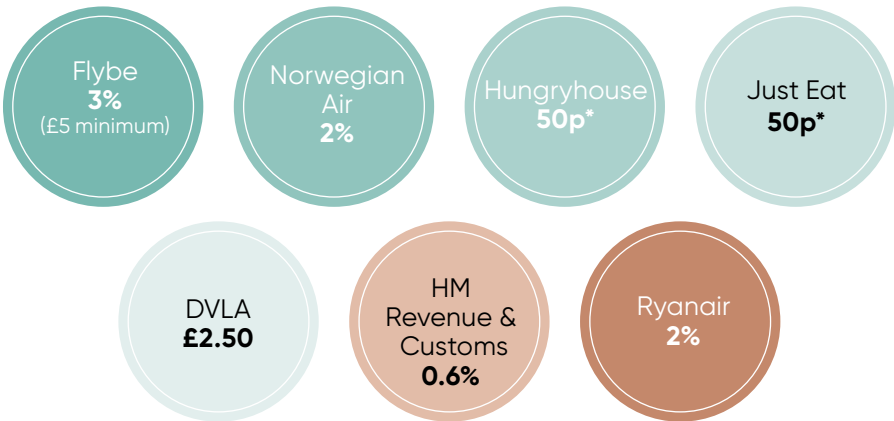
process which have fuelled some retailers’ arguments that they should be allowed to apply surcharges to card payments.

Principal policy adviser at UK Finance Briony Krikorian-Slade likens this process to the costs of using road or rail infrastructure. “Essentially, retailers are contributing to the costs of running the system, which benefits all parties,” she says.

Retailers who use card surcharges will have to decide whether or



## CURRENT CREDIT CARD SURCHARGES SELECTED RETAILERS AND LEISURE COMPANIES



\*Restaurants pay the fee in some cases

BBC research, July 2017

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INSIGHT  
BYPASSING THE CARD FIRMS



Diana Layfield, Google's vice president of product management, presenting the TEZ app at the launch event in Delhi

The longstanding reign of a handful of card industry companies may explain how little the payments system has changed over the decades. Membership director of the British Independent Retailers Association Robert Jarrett notes: "Mastercard and Visa are in competition to secure the business of banks, and the companies that process transactions have their own margins to make. The lack of competition in the market means things don't change." However, rival companies are racing to develop methods which sidestep the card system. In September 2017 Google launched Tez, a smartphone app which

allows shoppers in India to pay using their mobile phone, with the cash taken straight from their bank account. PayPal also offers the ability to make direct bank payments. In Europe, such schemes have yet to be widely embraced, and a lack of clear regulation has made retailers and customers alike nervous of such offerings. However, new rules and support under the European Commission's forthcoming Revised Payment Services Directive will allow third parties such as Google to initiate payments directly from bank accounts, rather than running on the card industry's processes.

“It is likely that retailers will look to pass on the cost of accepting payments in other ways

not to adjust their prices in the incoming surcharge-free era. Law firm Hogan Lovells' Emily Reid and James Black specialise in consumer finance. They say the surcharge ban "looks like good news for consumers, but it is likely that retailers will look to pass on the cost of accepting payments in other ways". Ms Reid and Mr Black suggest this could play out in increases in the headline price of goods, higher unrelated charges, charging more for delivery for instance, or introducing new charges altogether. However, the ban is part of a series of EU measures intended to make the cost of card payments cheaper and more transparent. Brussels has also placed a cap on interchange fees to reduce costs for acquirers, which in turn should reduce fees for retailers. Exactly how the surcharge ban will be enforced is unclear. Retail-

ers are already banned from making a profit from surcharges under UK consumer rights legislation enforced in 2012, but as the aforementioned trips to the newsagents and post office show, such rules can be hard to enforce. Mr Black says: "It is difficult to say with certainty, but the fact that those [2012] regulations have been followed up with the caps on interchange and now the ban on surcharging for most consumer transactions suggests they had little effect." Local trading standards authorities will be responsible for enforcing the ban, and Which? finance expert Gareth Shaw says these enforcers will need to keep a close eye on how the new rules play out online and shop floors next year. "It is crucial that the regulator closely monitors the charges that payment schemes impose on retailers, so that consumers don't pay over the odds and this new law serves its purpose," says Mr Shaw. But retailers must accept that card fees or no card fees, as a nation, we now favour plastic over cash. According to the UK Cards Association, cards were used to pay for 76.4 per cent of all UK retail spending in 2016, a figure Ms Krikorian-Slade says is expected to rise in 2017. If retailers want to remain competitive in this landscape, they will need to find ways to absorb the cost of the UK's surcharge-free future. ●

# Consumers embrace new ways to pay

As we rapidly embrace digital payments, businesses need to be flexible if they are to thrive in the changing landscape, says global payments provider **Paysafe**



The growing popularity for alternative methods of payment is transforming the traditional shopping experience. A boom in digitalisation, coupled with growing demand for versatile, more efficient payment methods, is spelling a new era for commerce.

Fifty years on from the launch of the first ATM, the financial ecosystem is virtually unrecognisable. Where coins once jangled happily in consumer's pockets, their popularity is on the wane, with card payments surpassing cash payments for the first time in 2016.

While cash undoubtedly still has its role to play, today's consumer has come to expect a multitude of payment options. From digital wallets, prepaid cards and cash vouchers to payment apps such as Apple Pay and Samsung Pay, and the advent of cryptocurrencies, consumers have a wealth of choice. It's a trend that businesses must adapt to or risk being left behind.

New research by Paysafe, a leading global payments provider, has revealed that more than half of UK, US and Canadian consumers expect to use digital



formats of cash in the next two years. *Lost in Transaction* found that a third of people in the UK only visited a cash machine once a month or less and feel increasingly comfortable paying with the "tap and go" method.

Oscar Nieboer, chief marketing officer at Paysafe, says: "Today, people have more ways than ever to spend cash online or offline and this challenges businesses to reimagine the shopping experience to allow for behaviours and payment models unthinkable a decade ago."

The evolution of mobile technology has undoubtedly triggered this shift, with nearly a quarter of those surveyed in the UK now using mobile wallets and perhaps, more surprisingly, 12 per cent opting to pay with cryptocurrency. The findings echo developments in the United States, where almost a third of consumers use mobile wallets.

Unsurprisingly, the introduction of contactless in 2007 paved the way for this demand, with three out of five consumers now preferring to tap and go, and it's not difficult to see why. In an age where most things can be found at the click of a finger, a payments environment where cash is merging with digital formats is redefining the shopping experience. Its appeal is not limited to British shores either, with 71 per cent of Canadians preferring contactless methods of payment and 49 per cent of Americans also citing it as more convenient, despite it not yet being introduced in the US.

While the sheer speed of developments can undoubtedly pose a challenge for businesses, those who fail to stay on top of this changing landscape risk becoming obsolete.

Mr Nieboer explains: "In order for businesses to succeed, they must offer choice, convenience, reach and flexibility in their payment solu-

“As the line between online and offline blurs, merchants need to invest in emerging technologies to stay ahead of consumer demand

tions. Businesses thrive or die on their ability to forecast market trends and adjust accordingly."

Millennials are at the forefront of the march; for them a cash-free society is not tomorrow's world but today's. Across the UK, US and Canada, those under the age of 34 were most comfortable looking online while browsing in-store simultaneously, while three quarters of 18 to 34 year olds in the US and Canada said they preferred shopping online rather than in-store.

Daniel Kornitzer, chief product officer at Paysafe, says: "It's our younger generations forging the path to a cash-free society. As the line between online and offline blurs, merchants need to invest in emerging technologies to stay ahead of consumer demand."

According to Paysafe, a business's success relies on them understanding and adopting the emerging payment technologies their customers prefer and this rings especially true for smaller companies.

Mr Nieboer adds: "Being able to provide similar payment and security capabilities as their larger competitors can help level the playing field for smaller companies. It will be those merchants seizing the opportunities before them who will be best placed to capitalise on their customer journey."

For more information visit [www.paysafe.com](http://www.paysafe.com)



**75%**  
of 18 to 34 year olds in Canada and the US said they preferred to shop online rather than going into physical stores



**85%+\***  
of 18 to 34 year olds expect to use a mobile wallet more over the next two years, representing a generational shift



**46%\***  
are dual-browsing – looking for better deals on their mobile while browsing in a physical shop

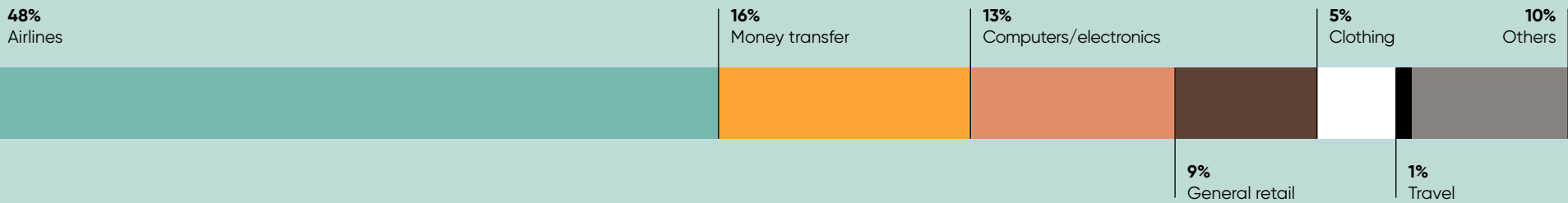
\*UK, US and Canadian consumers



# FIGHTING FRAUD ONLINE

As the value and volume spent online continues to surge, payment fraud is an escalating problem for merchants and card issuers worldwide. According to Juniper Research, card-not-present transactions account for 60 to 70 per cent of all card fraud in many developed countries and, without appropriate preventative measures in place, can result in billions of dollars-worth of lost revenues each year

## FRAUDULENT ONLINE TRANSACTIONS BY MERCHANT SECTOR



RSA Security 2016

## USE OF FRAUD PREVENTION TOOLS BY CARD ISSUERS

Currently using Plan to use in the future

- A

Transaction screening (software driven)
- B

Rule-based alerts
- C

Analytics (predictive, pattern matching)
- D

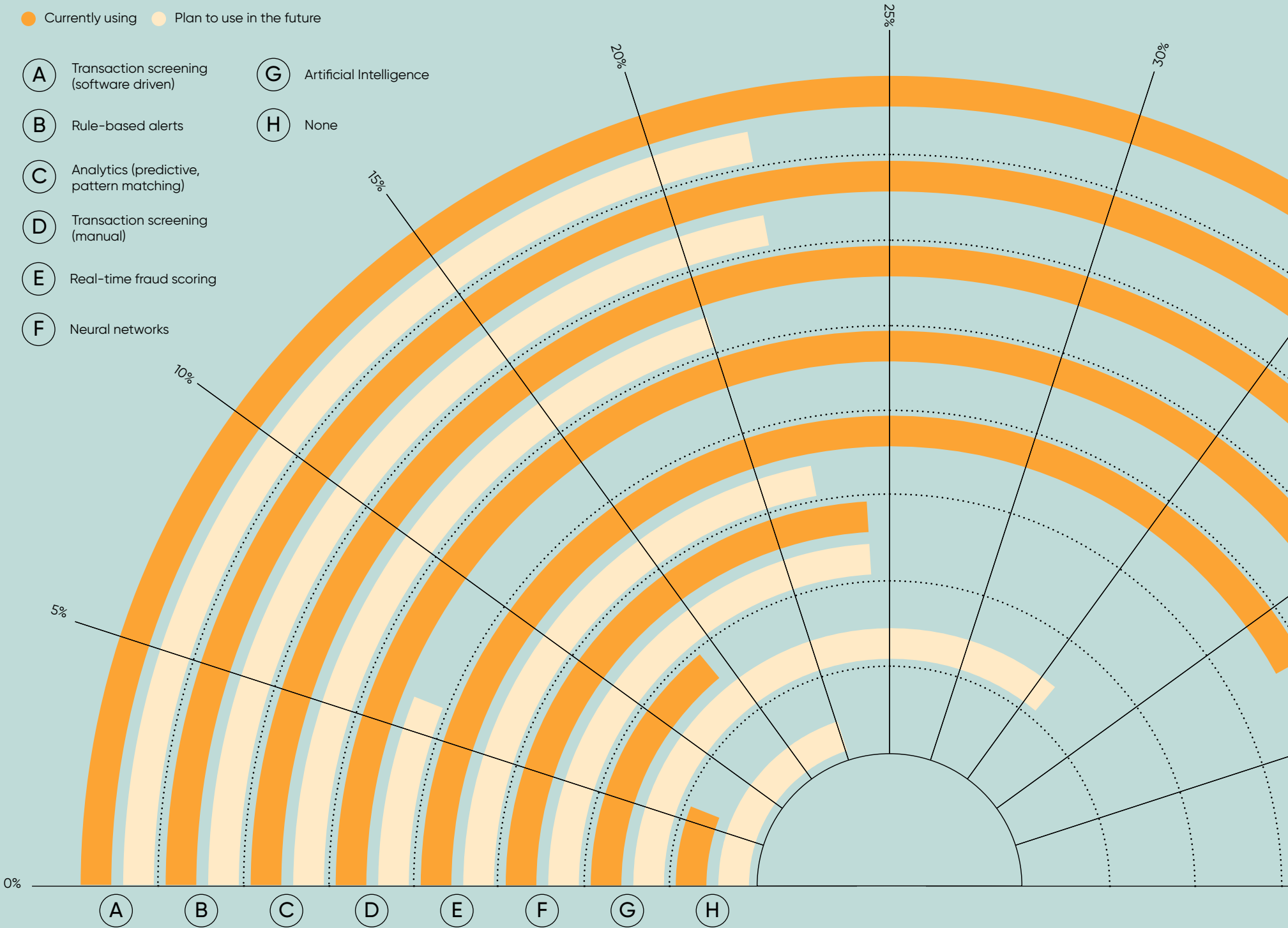
Transaction screening (manual)
- E

Real-time fraud scoring
- F

Neural networks
- G

Artificial Intelligence
- H

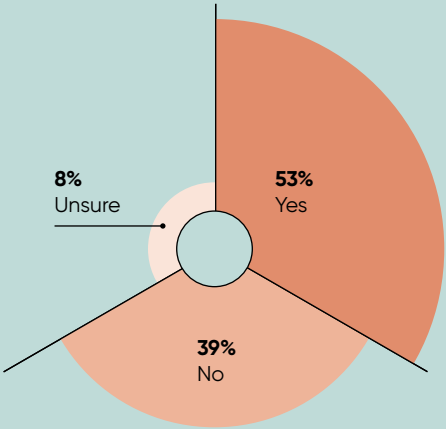
None



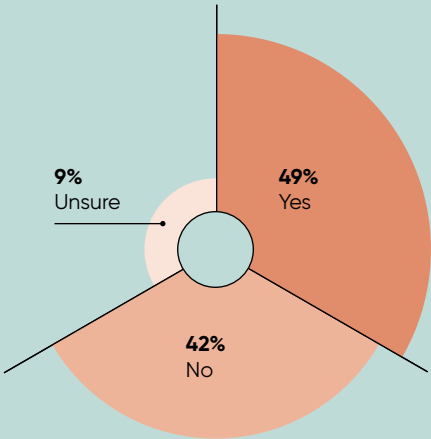


MERCHANT FRAUD PREVENTION

Do you have a common set of fraud prevention capabilities across all channels?



Do you have a common set of payment security capabilities across all channels?

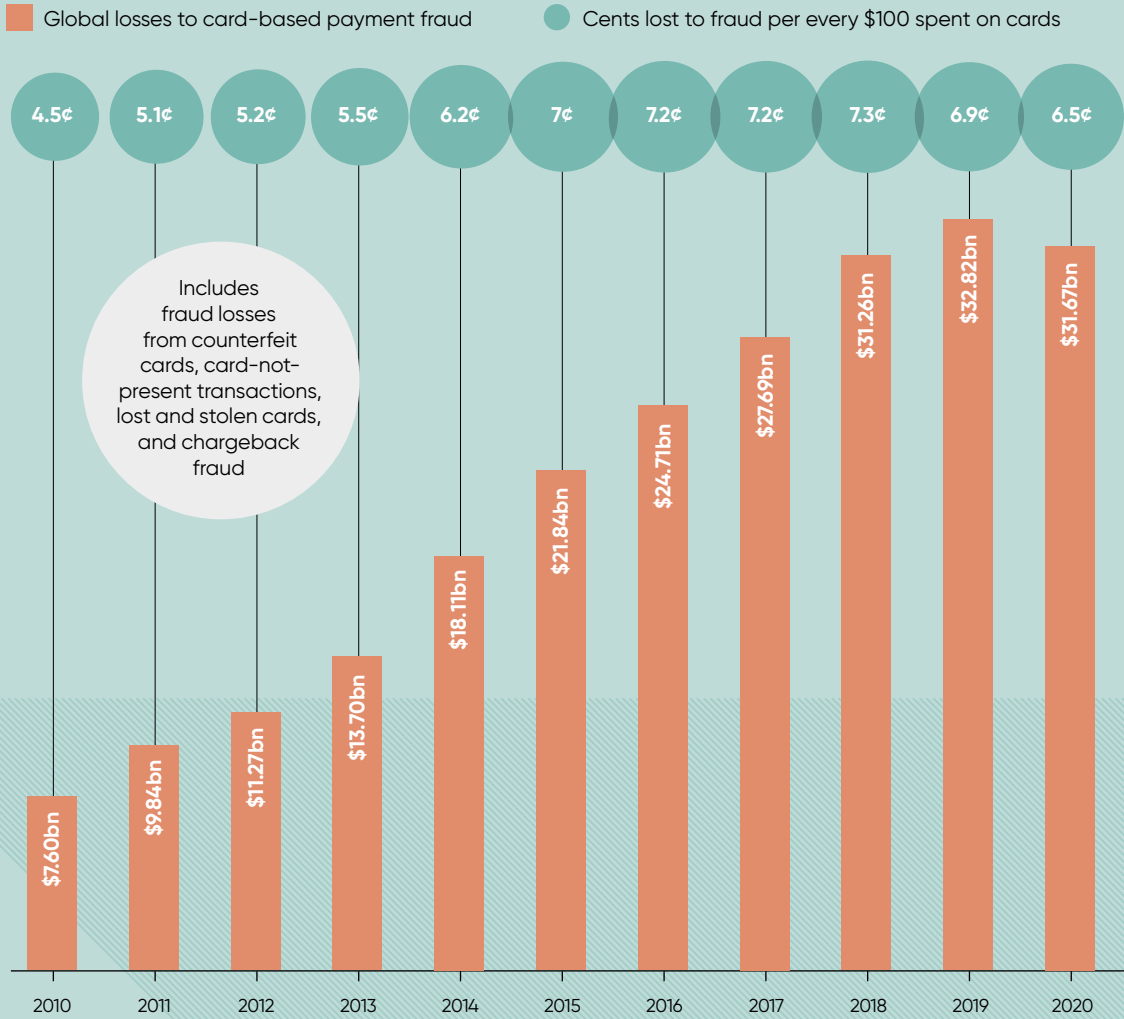


ACI Universal Payments 2016

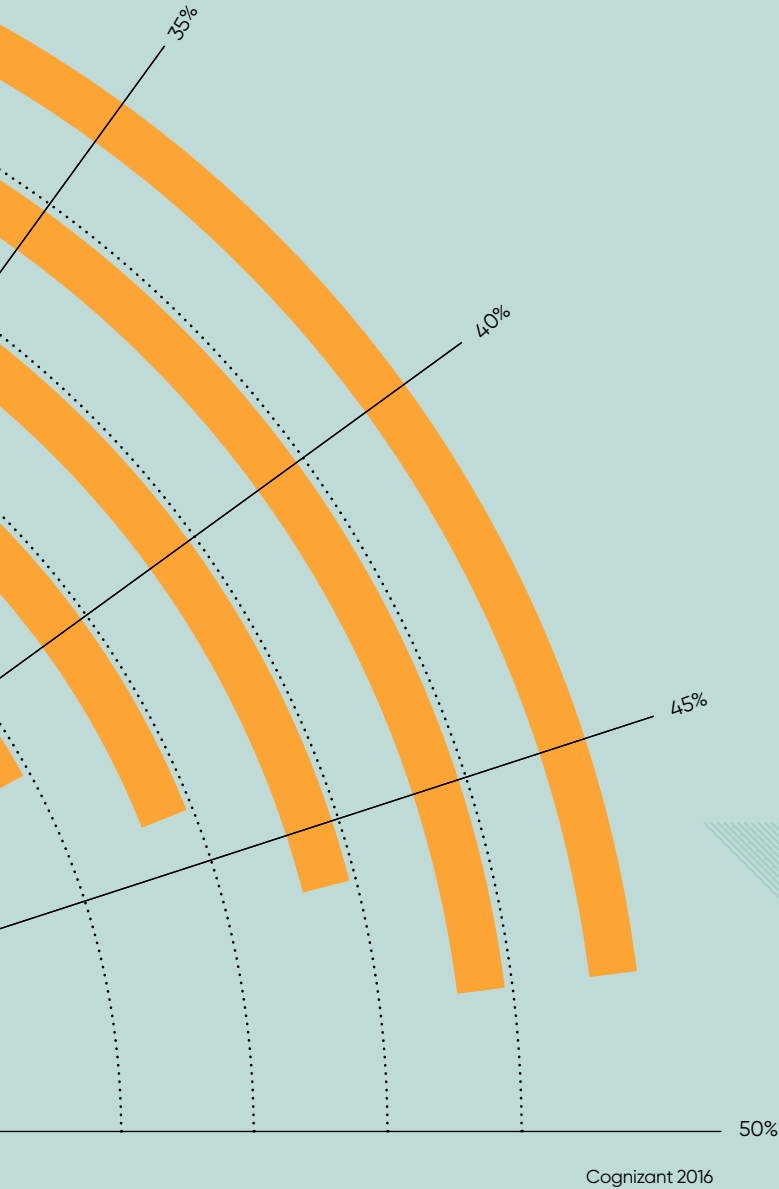


Tender Armor 2016

CARD FRAUD WORLDWIDE



Nilson Report 2016





## COMMERCIAL FEATURE



# Instant payments give consumers the experience they've longed for

Consumer demands for instant gratification, coupled with a rapid pace of innovation and new regulations, are transforming the global payments landscape, leaving traditional financial institutions playing catch-up



The ubiquity of smart devices combined with fintech innovation has driven a dramatic behavioural shift in how consumers wish to make payments. With an ever-increasing number of payment options available, and the smooth digital experiences that consumers have become accustomed to, there is now a much higher expectation for speed and ease of use for payments.

In a world where people crave instant gratification, it's clear consumers don't want to wait for a credit card payment to clear or for a bank transfer to complete. Transferring money through traditional methods simply takes too long for today's always-connected culture, signalling significant growth in solutions that enable instant payments.

Two thirds of UK consumers have made a contactless payment since the technology was introduced ten years ago, according to Visa, while benchmark data from ACI Worldwide and Aite shows that 14 per cent of UK consumers now regularly use their smartphone to pay. This grows to 25 per cent in other parts of Europe and 56 per cent in Asia. But this is just the tip of the instant payment iceberg.

"Most instant payments are 100 per cent secure, providing reassurance for those who are reluctant to put

card details in the public domain," says Koen Vanpraet, chief executive at PaySec, whose parent company Sappaya owns an ecosystem of service providers that specialise in instant payments. Sappaya's payment gateways, including PaySec and Pago, aggregate the best payment solutions for a given territory, while its cashless payments solution, tappit, is changing the way events and entertainment venues accept cash.

**“ Payments need to be fast, secure, cheap, easy and instantaneous, and the future will be defined by a huge increase in customer choice**

"Instant payments are also far less costly than card transactions, avoid the risk of chargebacks for the merchants and are also facilitating new trends such as cashless NFC [near-field communication]," Mr Vanpraet adds. "Improved technology gives consumers what they have long been demanding – a simple and quick way to complete transactions."

This rise in instant payments and

the evolving consumer attitudes have triggered substantial investments in functionality, coverage, security and customer experience by the fintech industry. Alternative payments are disrupting the market and ensuring credit cards are not the only option for consumers and merchants, while pressuring legacy financial institutions and banks into embracing the new world of commerce.

Meanwhile, regulatory bodies and existing card schemes are stepping up their efforts to deploy new laws and industry standards that better protect clients, and foster more partnership and industry-wide collaboration. PSD2, the European Union's Revised Payment Services Directive, provides larger and safer access to a broader set of payment options and functionality. It will enhance the creation of open standards and a set of technology products that will be more user friendly, integrated and comprehensive.

The new directive will further increase competition in the payments industry as it breaks open banking and allows other players into what was previously something of a closed shop for high street banks. This will lead to more choice for the consumer and further localised regulation. Consumers will be able to handle more financial transactions

and payments through the same interface or app.

While 89 per cent of consumers are unaware of how PSD2 will affect them, one in five surveyed by Intelligent Environments said they think it will be more convenient than ever to manage their money and that they're looking forward to being able to manage multiple bank accounts from a single app.

"By forcing existing banks to open their platforms to third-party payment providers, PSD2 will allow more fintech companies to connect to bank data and applications," says Mr Vanpraet. "The result will be a more comprehensive, efficient and consumer-friendly environment, which will foster the usage of instant payments even more."

Fast and secure instant payment like direct bank transfers and direct debit, as well as cashless on-the-go devices, such as wearables and mobile wallets, are set to take off massively in the next three years. Usage of these payment methods won't necessarily slow the use of traditional credit cards, but they will certainly grow much faster.

The payments industry has changed more in the last decade than it did in the whole previous century and it's on an exponential curve. The industry is very fractured and that trend will continue, especially in light of PSD2 and the rise of cryptocurrencies. This revolution is happening in every country around the world, not just Europe, so it will take a long time for real patterns to emerge, and providers and technologies to win out.

As the relative share of instant payments rises in the coming years at

the expense of traditional payment methods, card schemes and banks will continue to invest in providing faster solutions and new payment options to keep up with the market.

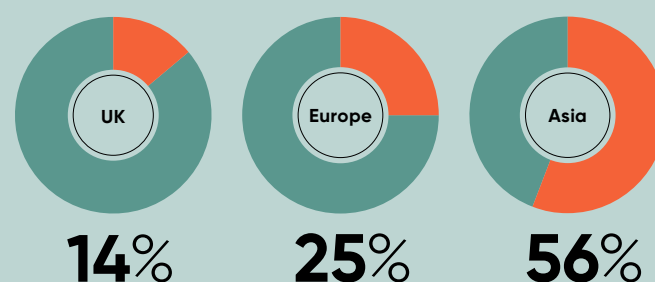
Consumers in underdeveloped countries that lack traditional infrastructures will jump straight to the latest innovations, but more mature countries will have to go through a technology development cycle to migrate to the new landscape.

"While the West dawdles its way to a payments evolution, countries such as China and Indonesia are having a revolution with a raft of new solutions that work without banks," says Mr Vanpraet. "Whether it's WeChat's payment solution that includes peer-to-peer payments, LINE in other parts of Asia or Indonesia's Go-Jek wallet, which can be used to pay for rides, shopping, food delivery and even a massage, underdeveloped countries are the ones pushing the envelope because the need is so much bigger."

Payments need to be fast, secure, cheap, easy and instantaneous, and the future will be defined by a huge increase in customer choice. Consumers will spend how they want, when they want and won't have to pay for the privilege. They will start turning away if the payment process is not what they want, so ecosystems like Sappaya will be critical in providing the products and much-needed support for merchants in meeting these expectations.

For more information visit  
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## CONSUMERS NOW REGULARLY USE THEIR SMARTPHONE TO PAY





PEER-TO-PEER PAYMENTS

# Who will win battle for P2P payments?

Competition to dominate person-to-person payments is hotting up, but three contenders are making a strong claim

SHARON THIRUCHELVAM

Whether splitting the bill at the restaurant, reimbursing a friend, sending remittances or paying for goods and services on the resale market, peer-to-peer (P2P) payments made informally from one person to another are a long-standing feature of the payments industry. Whereas once we paid by cheque, cash or bank transfer, today we pay by app, message or phone.

The value of mobile person-to-person payments is set to increase 40 per cent globally to \$540 billion by the end of 2017, according to Juniper Research. In the United States alone, the total transaction value of mobile P2P payments will grow 55 per cent to \$120.38 billion, a figure that is expected to double by 2021, says eMarketer.

The race is now on for companies to extend their geographic and demographic reach, and mop up numbers. In 2017, bigwigs from banking and tech will attempt to

muscle in on the scene, where hitherto nimble P2P startups have had competitive advantage.

The focus for providers will be monetising the service, especially as the space grows crowded. In the past, companies operated mobile P2P for free, but at a loss, as the service offered a low-friction way to onboard consumers, according to BI Intelligence research. However, as subscribers grow and the service starts to eat into firms' traditional revenue streams, finding ways to monetise will become crucial.

"P2P payments is a razor-thin margin business. It's not something you make a lot of money with unless you have huge scale," says Aurélie L'Hostis, analyst at Forrester Research.

For consumers, the context will be crucial. "It's a question of convenience and education," says Ms L'Hostis, who argues that those companies that eventually come out on top are likely to offer an ecosystem of integrated services, among which payments is a complementary addition to the others.

ZELLE

While the P2P app Venmo was becoming a household name in the US, you'd be forgiven for wondering if American banks were ignoring the fintech revolution entirely. Behind the scenes, however, consultations had been ongoing since 2011 and finally came to fruition with the launch of Zelle in 2017, a new P2P payments app that has the backing of more than 30 US banks, including Bank of America, Wells Fargo and J.P. Morgan Chase.

Usable by anyone with a Visa or Mastercard debit card account, regardless of their financial service provider, the move demonstrates how banks are taking mobile more seriously. Zelle offers crucial advantages over the P2P market incumbents, most notably speed. Money transferred through the network will be available to the recipient immediately, in contrast to most services



which usually take at least a day to complete transfers to a bank account.

"Banks realise that if they are not offering a P2P service themselves they will start losing visibility among their customers who use these apps frequently," says Ms L'Hostis. So far

Zelle has already achieved impressive numbers and looks set to bring P2P payments into the US mainstream. In the first half of 2017, it enabled 100 million transactions, worth \$33.6 billion, more than double Venmo's value over the same timeframe.



APPLE

Apple is harnessing its customer base to provide a message-based payment service that cuts out apps entirely. As part of a forthcoming update to its mobile operating system iOS11, the new feature enables users to send and receive from within its iMessage app or tell Siri to pay someone, using the credit and debit cards they already have saved in Apple Wallet.

Users will receive money in a new Apple Pay Cash account, and that digital money can be used for purchases using Apple Pay in stores, apps and on the web, or transferred to someone else or transferred from Apple Pay Cash to their bank account.

Apple is endeavouring to keep up with PayPal, as both are eyeing a full bank-like payment service, which analysts consider to be the natural next step for payment companies. The Apple Pay Cash card that will be delivered with prepaid payment card company Green Dot will only work across its own devices, which could be a potential drawback.

WHATSAPP

There was a time when US tech companies would accuse Chinese counterparts of copycatting their designs and innovations. But today, especially in mobile payments and platform diversification, US tech giants look to China and the likes of WeChat, owned by Tencent, and Alipay, a subsidiary of Alibaba, for their future cues.

Following WeChat's lead, WhatsApp is preparing to introduce payments to its messaging app, making it the latest service to let users transfer money to one another with a text. Based on the observation that you are more likely to send frequent payments to people you frequently have contact with, social media payments enable a frictionless service in the same context where conversations about those payments will most likely



be taking place – a messaging app.

WhatsApp, which has more than a billion users a day, is trialling the immediate bank-to-bank transfer service in India, which would give approximately 200 million users the

ability to transfer money through the app. Social media payments are set to proliferate across Europe soon thanks to the recent relaxation of European Union laws that govern who can offer digital payment services. ●



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## ‘Access is life-changing – we’re denying access to payments accounts to those we should support’

**TONY CRADDOCK**

Director general  
Emerging Payments Association



The UK’s payments industry leads the world. We were first with real-time clearing of payments with Faster Payments, near-ubiquitous contactless payments nationwide and a 21st-century payment systems strategy involving the whole community.

But if you are unemployed due to sickness for example, you can’t open a bank account easily. If you’re one of the 500,000 UK startups that set up each year, where the entrepreneur may not have funding yet, accessing banking services is near impossible.

And if you’re a regulated payments company launching a new service for small and medium-sized enterprises (SMEs), you can’t open an account to hold client funds easily via any major UK bank.

Because while the UK has a supportive regulator, outstanding paytech talent and risk-friendly investors, world-class payments is not accessible to three main constituents.

Firstly, it’s shocking that many consumers don’t have access to financial services to make their lives better. Banks are closing branches nationwide. The Financial Inclusion Committee discovered that the annual poverty premium paid by those who are financially excluded is £1,300. Over a lifetime of 80 years, that’s more than a £100,000 penalty for being poor. And the *Financial Inclusion Monitoring Report 2015* highlighted that 1.5 million adults in the UK don’t have a bank account.

Secondly, the UK’s five million SMEs are not able to access the latest technology, often because they don’t know an alternative is available or because the banks do not allow access.

Finally, there are flaws in the traditional system. Despite being regulated entities, for example, most payments companies must do their banking with another bank. The other bank is not set up to do this flexibly or cheaply and is often competing directly. This channel conflict isn’t conducive to a mutually beneficial relationship or to having the best products designed to meet the needs of customers.

Many regulated payments companies don’t fit with the risk profiles of the big banks, so services are being withdrawn with little or no notice. This derisking threatens companies and countries.

The UK’s fintech companies can provide the answers. But the banks tend not to know what to do with their solutions. The Revised Payment Services Directive or PSD2 is designed to force banks to adopt open banking by allowing third parties access

to customer data via secure application programming interfaces. It also sets out to reduce the influence of the payment schemes. However, the legislation is in danger of reinforcing the dominant role banks play with consumers because they are still at the core of the transaction.

The Emerging Payments Association (EPA) is dedicated to overcoming access challenges. We’ve already influenced the Bank of England to open its real-time gross settlement accounts to non-banks.

We’re also developing a way for payments firms to demonstrate they are financially inclusive, through an accreditation kitemark supported by BACS.

We’ve lobbied government to appoint a minister for financial inclusion. In July, MP Guy Opperman was appointed as the first minister for pensions and financial inclusion. And we are exporting our experience to parts of the world where financial and economic exclusion is currently a massive economic drag on society. Three new EPA communities, in Africa, Eastern Europe and China, are launching shortly. This will enable us to show leadership in moving money efficiently for everyone.

But more needs to be done. We need to give consumers access to a quick-and-easy payment sign-up process for all. Accounts should have jam-jarring and segregation of funds, simple and transparent fees, and lower costs.

We need to give businesses access to flexible, cost-effective payment accounts that allow them to trade globally, use customer data and remove the financial management burden. And we need to give regulated payments companies access from banks that want to service them enthusiastically rather than reluctantly.

In tomorrow’s world of payments, enabling access is everything. With the government’s support and co-ordinated action across the community, the UK can lead the world.



# BIOMETRICS

CATH EVERETT

A KFC store in the eastern Chinese city of Hangzhou hit international headlines when it introduced a new way for customers to pay for their food – a Smile to Pay facial recognition system, which is among the first of its kind in the world.

The system, which is the brainchild of Chinese e-commerce company Alibaba's Ant Financial affiliate, is targeted at young people, who are expected to account for most of the country's anticipated growth in consumption over the next decade.

To use Smile to Pay, customers need to have signed up to the Alipay app first. A 3D camera is situated at the point of sale to scan customers' faces to verify their identity and the system also includes a so-called "liveness detection" algorithm.

Jeremy Light, managing director of Accenture Payment Services in Europe, Africa and Latin America, explains the algorithm's benefits: "One of the weaknesses of facial and voice recognition software is that it can be spoofed, so you have to ensure people are in a live environment. But Smile to Pay is smart because, not only is it great marketing, but it also makes customers move their faces so you know it's not just a photo."

Although using biometrics technology to enable secure payment in retail stores is far from common practice today, Mr Light does expect it to become widespread over the next few years, spurred on by the growing use of mobile technology as the primary way in which consumers interact with the world.

Since Apple first introduced fingerprint recognition on its iPhone in 2013, the use of biometrics in the mobile apps space has leapt mainly due to the technology's convenience, which means people no longer have to remember multiple passwords.

On the back of this situation, Eddie Grobler, executive vice president of ACH (automated clearing house) systems and integration at Mastercard's Vocalink, expects the use of biometrics software to become mainstream within the next three to four years and to increasingly "converge into the payment space" in the process.

Another significant factor likely to spur adoption, meanwhile, is the fact that both banks and payment service providers like the technolo-



VCG/VCG via Getty Images

Customer using an Alipay facial recognition portal at KFC's K PRO restaurant in Hangzhou, China

## Smile if you want your chicken...

Metrics related to human characteristics to authenticate identity and payment may take a little more time to measure up to expectations



15%

of European consumers prefer facial recognition as a biometric payment method; 53 per cent prefer fingerprint scanning

Visa 2016

gy, which is considered more secure than using traditional PIN numbers. It also reduces the need for creating costly one-time passwords and is seen as a useful means of complying with increasingly stringent payment regulation.

As a result, providers such as Mastercard are jumping on the bandwagon. Although not rolled out by any UK banks as yet, its Identity Check Mobile system will enable cardholders to authenticate online payments or access bank services using a selfie, eye scan, voice or fingerprint.

The vendor has likewise trialled a biometric card in South Africa

and Bulgaria, which enables cardholders to use their thumbprint rather than a PIN to authorise an in-store payment.

But Matt Lewis, research director at information security consultancy NCC Group, believes it will take time before biometrics software is as ubiquitous in retail as it is in the mobile arena.

"People haven't necessarily thought through the logistics, but you need to implement complex back-end infrastructure to store biometrics data, and in the UK there are a lot of regulations around data protection and privacy," he says. "So adoption is likely to be much

slower in this area due to the added regulatory hurdles."

Mr Light, on the other hand, believes that the real future lies not in any single form of biometrics software, but in a KFC-style mix of flavours. This approach involves combining traditional biometrics technology such as face recognition with newer artificial intelligence-based behavioural biometrics. This software works passively in the background to recognise, for example, how you hold your phone or key in your PIN, to prevent spoofing.

"The market is maturing and there's still a way to go. But with-



Smile to Pay is smart because, not only is it great marketing, but it also makes customers move their faces so you know it's not just a photo

in two years, every bank that matters will use some form of biometrics and, increasingly, there'll be passive biometrics in there as the technology significantly increases accuracy," he says.

By combining traditional and behavioural biometrics, a Spanish client last year slashed the fraud rate for mobile banking by a huge 90 per cent, Mr Light says.

Although single biometrics may be quicker to use, the problem is they can lead to false positives, incorrectly accepting a match between the stored biometric template and a third party, and it is this inaccuracy that is currently the single biggest inhibitor to the technology's adoption, says Mr Light, although he does acknowledge that things are improving.

But Mr Lewis is not convinced that biometrics will be the silver information security bullet that some hope for.

"I think we'll see a bit of a bell curve. Initially it should help to combat a lot of fraud as it's not as straightforward to fake biometrics as is to find out someone's password. But over time criminal gangs will find ways of attacking systems because there's so much money in it and they're highly motivated," he says.

The biggest concern here is, once such deeply personal information is stolen, it is impossible to change or revoke. But because such a situation is "so disastrous for the user", Mr Lewis believes the fear factor could likewise inhibit take-up.

Mr Light has a positive outlook. "In future, biometrics will become the payment authentication method of choice. It's the goal of banks to get rid of passwords and get away from having 50 per cent of transactions challenged, which means that people simply use other cards. So it's definitely the way forward – in fact, it's inevitable," he concludes.●

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\*Source- National Audit Office, 2017

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GLOBAL PAYMENTS

# Sparking a remittance revolution

Global business money transfers have been slow to digitise and have fallen behind consumer payments

JAMES HURLEY

Tracking a global payment should be as easy for businesses as it is for consumers to monitor the progress of a parcel delivery.

Anish Kapoor, chief executive of Accesspay, a Manchester-based company that is aiming to make business payments easier and faster, says such a facility would “transform the way in which both sender and receiver manage their cash, and the ability for them to access short-term funding”.

He says: “Imagine being able to see what payments were on their way to you, before they had even hit your bank account. Your bank would then be much more willing to loan you funds against these payments in transit, completely changing the way in which trade finance works.”

So why, as Mr Kapoor puts it, is there still an unbelievable level of friction when it comes to business-to-business (B2B) global payments?

To rub salt in the wound, consumers who want a better and cheaper alternative to the usual suspects when changing currencies are becoming spoilt for choice.

Venture capital-backed services, including Revolut and Transferwise, have dramatically undercut

banks and traditional foreign exchange firms, and modernised the service for consumers.

Even these companies admit it’s a different story when it comes to business payments. Stuart Gregory, head of business at Transferwise, says: “Banks have been ripping businesses off on foreign currency for decades.”

Business payments have been slower to digitise simply “because it’s harder for technology companies to meet business needs than those of consumers”, Mr Gregory argues.

“Because of the volumes of money involved, more verification processes are needed and the product needs to offer more functionality such as the ability for multiple pay-outs to be made at once and recurring payments,” he explains.

Sinead Fitzmaurice, co-founder of Transfermate Global Payments, a company which is aiming to improve cross-border payments for businesses, says the rapid rise of so-called peer-to-peer currency services has naturally focused on consumers first.

“Building a true B2B international solution can be slow and complex, which in a funded industry can frustrate investors,” Ms Fitzmaurice says.

“A B2B platform brings a complete host of other requirements, such as multiple beneficiaries, layered authorisation, the ability to plug into and pull from the accounting software, and also providing guidance on the currency swings, not just ensuring the money flows from A to B,” she says.

In terms of speed of money transfers, the UK already has a local fast payments scheme embedded across the traditional financial system, through which payments can be made in less than a minute or two, and other developed countries are following suit.

However, Alan Chang, head of operations at Revolut, says cross-border B2B transfers provided by banks can still be painfully slow as



“ Digitisation is definitely on the increase as the consumer requirement for instant gratification bleeds into businesses

well as relatively expensive. It can take up to a week depending on the combination of sender, beneficiary, currency, bank and jurisdiction, he says.

When it comes to expense, Mr Gregory offers the example of a UK company that needs to pay a German supplier. He says: “There is typically an upfront fee for the transaction, plus an extra charge taken in an exchange rate mark-up. The supplier may also be hit with a fee to receive an international payment when the money lands in their account. That really adds up.”

There is, however, agreement that things are changing, not least with the likes of Transferwise, Revolut and Transfermate launching lower-cost and faster ways of companies moving money.

“Digitisation is definitely on the increase as the consumer requirement for instant gratification bleeds into businesses,” says Mr Kapoor. And Mr Gregory says that alternative global payment services for businesses are “about to rocket”.

With more businesses expecting to trade online without friction, payments are going to have to catch up, he says.

Transfermate’s exporting product, for example, allows a company to send an invoice to their overseas supplier through its platform by “inviting them to pay”. Transfermate then controls the transaction end to end, eliminating the chain of sending and receiving fees that would be taken when

using the global banking system. The technology links up with each party’s accounting platform.

Ms Fitzmaurice expects banks to adopt solutions like hers to sell as a “value-add benefit” to their corporate clients.

If a remittance revolution is about to reach businesses, are those companies that like to rely on the old, cumbersome ways of doing things as an excuse for shoddy payments practices about to run out of excuses?

Not necessarily, says Mr Gregory. “For businesses suffering from late payment of invoices, faster payments at least mean no additional delays once the payment has been processed,” he says. “But if companies are im-

posing longer payment terms for cash-flow reasons, they can still do so. In fact, it’s easier for them to manage because they don’t have to factor in anything from a few days to a week for the money to arrive once it has been sent.”

Mr Kapoor is certain that “the current model of businesses stretching credit terms will continue”. However, there are some middlemen who are likely to need to adjust their business models. “There are whole industries that exist right now to deal with delays in money moving from A to B in these sectors,” he says.

For most though, the benefits of quicker, cheaper and more efficient global payments are due to far outweigh any downsides. ●





# Seize the big opportunities of a smaller world

Today's connected world feels smaller than ever and the opportunities for companies that engage with global trade are immense, says **Karen Penney**, vice president and general manager of American Express Commercial Payments UK



**KAREN PENNEY**  
VICE PRESIDENT AND GENERAL MANAGER  
AMERICAN EXPRESS COMMERCIAL  
PAYMENTS UK

Uncertainty seems to be the big theme of current times. But behind the headlines about political or macro-economic volatility, positive trends are emerging. International trade in goods, for instance, is growing, up 2.4 per cent in value in 2017 from 1.3 per cent in 2016.<sup>1</sup> The economies of every state in the European Union are forecast to grow over the next two years, the first time growth has been forecast across the whole EU in almost a decade.<sup>2</sup> Globally, economic activity is picking up. In April the International Monetary Fund raised its forecast, estimating 3.5 per cent growth in 2017, up from its earlier estimate of 3.1 per cent.<sup>3</sup> All this signals plentiful opportunities for businesses in terms of expanding their reach, acquiring customers and growing revenues.

**Optimism reigns but inaction is rife**  
Businesses seem to sense the improving economic climate and small and medium-sized enterprises (SMEs) in the UK are a case in point. According to the recent American Express *SME Global Pulse*, they're almost twice as likely to be positive (33 per cent) about the global economy than negative (19 per cent). Confidence about exporting is reflected in turnover projections. The number of UK SMEs generating 50 per cent or more of their

revenues from exports will more than double from 21 per cent today to 44 per cent over the next three years.<sup>4</sup>

In this globalised world, trade opportunities may be bountiful, but some UK companies are simply not getting involved. This is despite a major push by the government, since 2014, to boost UK exports up to £1 trillion by 2020. The ICAEW found that the percentage of UK businesses engaging in international trade has remained stable for three years at 53 per cent since 2014<sup>5</sup> and of the 47 per cent of non-exporters, almost none have plans to sell overseas in the next 12 months.

## Dealing with the complexity of cross-border payments through innovation

Why the hesitancy? Naturally, there are challenges to trading successfully in a globalised world, including regulations, taxes, tariffs and language differences. Concerns around payments also create a barrier, both for sellers and for customers. In fact, payment security is among the top two barriers to cross-border trade.<sup>6</sup> Reliable payments are critical to a business and, for exporters, there are several vital questions that perennially need answering: How and when will I be paid? How do I guarantee this payment? How do I pay a supplier? What about exchange rates?

The payments landscape was, until recently, relatively static. Banks dealt with more than 90 per cent of transactions and 69 per cent of international transfers were electronic.<sup>7</sup> This is now changing with the emergence of new challengers in the form of non-traditional providers. These additional options give organisations more flexibility, although fragmentation of the payments landscape is a challenge in itself.

Overall, the most problematic issue with international payments is sheer complexity, which doesn't necessarily need to be the case as commercial payments companies such as American Express help to simplify processes and remove hurdles with seamless, end-to-end solutions. Based on our long history in business payments, we are targeting exporters with a barrier-free solution. We aim to help companies gain the confidence to go out into the world, secure in the knowledge that any complex elements around payments are taken care of. International payments shouldn't be a hassle. And we are one part of an ecosystem that exists to support exporters. This in-

cludes organisations including the UK Department for International Trade and its Exporting is GREAT initiative.<sup>8</sup>

## Firms large and small can benefit from end-to-end solutions

Bristol-based BrizTech<sup>9</sup> is one such company seizing the opportunities that arise from globalisation. The firm is an international retailer of custom-branded Google Cardboard VR headsets under the brand BrizTech-VR, selling both to retail and business customers. The aim is to carve out a slice of the booming augmented and virtual reality market, worth \$3.9 billion in 2016 and expected to rise to an estimated \$108 billion by 2021.<sup>10</sup>

Owen Carter, director at BrizTech, explains: "We're a small business and everyone has to wear multiple hats; no one is dedicated solely to payments. We needed a simple solution like American Express International Payments that required as little admin as possible and helps us settle international payments to our suppliers swiftly. It allows a frictionless transfer between us and our overseas manufacturers, meaning our clients get their orders more quickly. It also helps us take payments from overseas clients which in turn helps our cash flow. Knowing that American Express is handling our payments for us, we're able to focus on our core

business, work on new products and expand into new areas."

Larger firms with more complex payment arrangements also see benefits by reducing friction in terms of international trading. Marketing technology provider Performance Horizon operates in 215 countries with more than 215,000 marketing partners and affiliates on its platform. Effectively it is the glue that enables partner and affiliate marketing programmes to succeed, for example making sure a hotel comparison site is paid for referring a customer to a hotel brand.

Chris Blaxall, chief financial officer at Performance Horizon, says: "Our business is global so we need a global payments infrastructure. We make thousands of payments every day with billions of dollars crossing our platform every year and a traditional bank simply can't give us the solution we need."

Performance Horizon also opted for an American Express international payments solution, in part because of the number of currency pairs available, and the flexibility of the offering which has adapted to meet their needs as the business has grown. Delighted with the outcome after three years of dealing with an end-to-end solution, Mr Blaxall points out: "We have zero outstanding payments and our brand cus-

tomers know that their partners have been paid, which is a very big plus."

## Concerns about payments shouldn't impede cross-border trading

Making payments and getting paid becomes all the more complex when it comes to doing so in different currencies and varying business cultures. However, it's not something that should hold businesses back when thinking about trading internationally and seizing the opportunities of globalisation. A smaller world makes it easier to get closer to more potential customers. That's the message American Express wants to give the UK's current and prospective exporters. Our goal is to reduce the barriers to trade and smooth the path to global success for tiny companies, giant enterprises and everyone in between.

<sup>1</sup> World Trade Organization, April 2017  
<sup>2</sup> European Commission Winter Forecast, February 2017  
<sup>3</sup> Bloomberg, IMF's 2017 global growth forecast is 3.5 per cent, April 2017  
<sup>4</sup> Oxford Economics and American Express, *SME Global Pulse*, April 2017  
<sup>5</sup> Institute of Chartered Accountants for England and Wales, January 2017  
<sup>6</sup> Export.gov, *Barriers to Cross-Border Trade*, November 2016  
<sup>7</sup> American Express, 2017  
<sup>8</sup> Export.great.gov.uk  
<sup>9</sup> Briztech.co.uk  
<sup>10</sup> Digi-Capital, *The reality of VR/AR growth*, January 2017



“ We aim to help companies gain the confidence to go out into the world and start trading, secure in the knowledge that any complex elements around payments are taken care of

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## DEVELOPING WORLD

# Mobilising money for the poor



Mobile money has transformed the lives of millions in developing nations and is kickstarting poorer economies, particularly in Africa and the Middle East

OLIVER PICKUP

"The unbankables" may sound like a gawp-inducing television programme. It is, in fact, the name given to adults who do not have a bank account. There are two billion unbankables in the world, according to the most recent figures, published by *Global Findex* in 2015, and the vast majority of them live in developing countries.

Indeed, the database's findings suggest that the Middle East and North Africa, where four out of every five grown-ups are without an account at a formal financial institution, are lowest in the rankings; Sub-Saharan Africa and South Asia are only a little higher.

Under closer inspection, in several individual countries the level of un-





Hugh Mitton / Alamy Stock Photo

bankables is as high as 95 per cent. There is no need for alarm about their supposed financial exclusion, however, for the mobile money revolution, which has gathered pace over the last decade, has prevented the alienation of poorer communities.

In a pleasing paradox, made possible thanks to fintech advancements, those millions of unbankables now have at the swipe of a finger on a smartphone a faster, safer, cheaper and more convenient way to send and receive cash when compared to most developed countries. They have been able to leapfrog top-tier economic nations, who are lumbered with financial legacy systems.

Digital payments have drastically reduced costs and, by recording transactions in previously informal, cash-based societies, they have spurred economic growth in areas that desperately need it. The

payment landscape across the developing world has been reshaped because of mobile money and the traditional banking behemoths have been bypassed.

Dr Pinar Ozcan, associate professor of strategic management at Warwick Business School, has studied the emergence of mobile payments across the globe and concludes that the industry is thriving in spite, not because, of cross-sector commercial partnerships. “It is a perfect example of titans from different industries clashing over how to deliver a new concept, rather than working together,” she says.

“For mobile payments to work, the banking giants and network operators needed one another. Their inability to agree caused the commercialisation of mobile payments to be stalled in developed countries for 15 years. In developing coun-

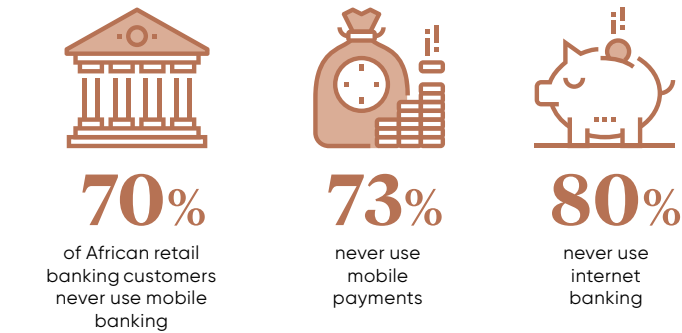
Shop assistants selling mobile phones in Kawangware, Nairobi, Kenya; the proliferation of smartphones across Africa is preventing the alienation of poorer communities without access to banking

tries, where few people have bank accounts but many possess smartphones, that interdependence was not required and mobile operators have led the way.”

One of the biggest success stories is mobile phone-based financial service M-Pesa, launched ten years ago by Vodafone for Safaricom, the largest network operator in Kenya (*pesa* means money in Swahili). Suddenly, for a small fee, members could transfer money between mobile phones without a bank ac-

“The payment landscape across the developing world has been reshaped because of mobile money and the traditional banking behemoths have been bypassed

AFRICAN BANKS HAVE A MAJOR OPPORTUNITY



Survey of 33,000 retail banking customers across 18 African markets, KPMG 2016

count. It was a game-changer in the developing world and hugely popular. In less than two years, M-Pesa had attracted 6.5 million Kenyan subscribers and by year five that number had swollen to 17 million.

The mass-scale adoption of M-Pesa spawned a multitude of unforeseen benefits. Digitalising money transfers reduced crime in previously cash-based societies, for instance, and in 2014, largely because of mobile money activities, which were previously in the informal cash-based sector, Kenya revised its GDP upwards by 25 per cent.

Little wonder M-Pesa has extended its network to include Afghanistan, South Africa, India, and more recently in Romania and Albania, but there is still plenty of room for innovation and potential for mobile money growth, in both the developed and developing worlds.

“Mobile money has enabled an ecosystem of immediacy, relevance, and accessibility in payments and financial services across Africa,” says Rachel Balsham, co-chief executive at MFS Africa. “But the African markets are highly fragmented; there are 54 countries, with up to four mobile operators in each one. Interacting with mobile wallets across networks and countries can require dozens of complex and time-consuming integration projects. The next step is cross-border interoperability.”

This is where MFS Africa is shining as one of the most innovative companies in Africa as it has 170 million mobile wallets connected to its network, though there are other examples. London-headquartered online remittance service Azimo (derived from the Swahili word for help) can “transfer money to over 190 countries at the click of a button”, says chief executive Michael Kent. “Because we only work online, our transfers are up to 90 per cent cheaper than traditional providers and around 20 times faster, so we save people huge amounts of money and time.”

In India, too, mobile money is revolutionising the way people live and boosting the economy, but it is a work in progress. On November 8 last year the government, concerned that 40 per cent of its 1.3 billion population is unbanked, took action by demonetising 86 per cent of the country’s total currency.

The move, partly designed to crack down on the use of illicit and counterfeit cash to fund illegal activity and terrorism, has been vindicated. Exactly a month after the

demonetisation was announced, daily e-wallet transactions had shot up from 700,000 to 6.3 million and the RuPay card business had expanded by 316 per cent.

“Given that by the end of this decade, 63 per cent of people in developing countries are predicted to have access to smartphones, it’s a compelling business opportunity for banks and an area that demands attention to ensure a better financial future for people in these markets,” says Simon Paris, deputy chief executive of fintech leaders Finastra, whose organisation is working with the World Trade Board to determine how to help extend financial inclusion through innovation.

“There are some great use-cases for mobile payments now where governments are marrying mobile infrastructure with the pains of the unbanked, disconnected or most in need. This includes helping pregnant women in remote areas to access state subsidies digitally to reduce the risk of infant mortality and reducing the time it takes for social security payments to arrive for farmers in remote villages.”

Michael Tomlins, chief executive of Infomedia, points to the huge growth of mobile payment ecosystems in Japan and China, and the rise of WeChat, Alipay and direct carrier billing (DCB).

“In China, mobile payments are now worth \$5.5 trillion, roughly 50 times the size of mobile payment market in the US,” he says. “In Japan, DCB – charging digital and physical purchases direct to a consumer’s phone bill – now accounts for 50 per cent of all online purchases. These innovations in China and Japan show that mobile-first payments are the future for countries without a legacy card infrastructure.”

Mr Kent of Azimo adds: “By 2030 nearly all the two billion people who don’t have a bank account today will be storing money and making payments with their phones. As they become financially ‘on grid’ they can spend, save and do things that most of us take for granted.

“As other products get built on mobile money platforms – think insurance, credit, saving and wealth management – users in developing countries will be put back in control. They will be able to improve the management of their financial resources, and ultimately their lives and those of their families.”

Perhaps “The unbankables” would make a decent TV programme, after all? ●



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