P03 The payments industry is in flux as smartphones revolutionise how we pay

P07 Banks are reasserting themselves in the payments sector by building up trust

P12 Beauty industry boss Joel Palix shares his company's online strategy

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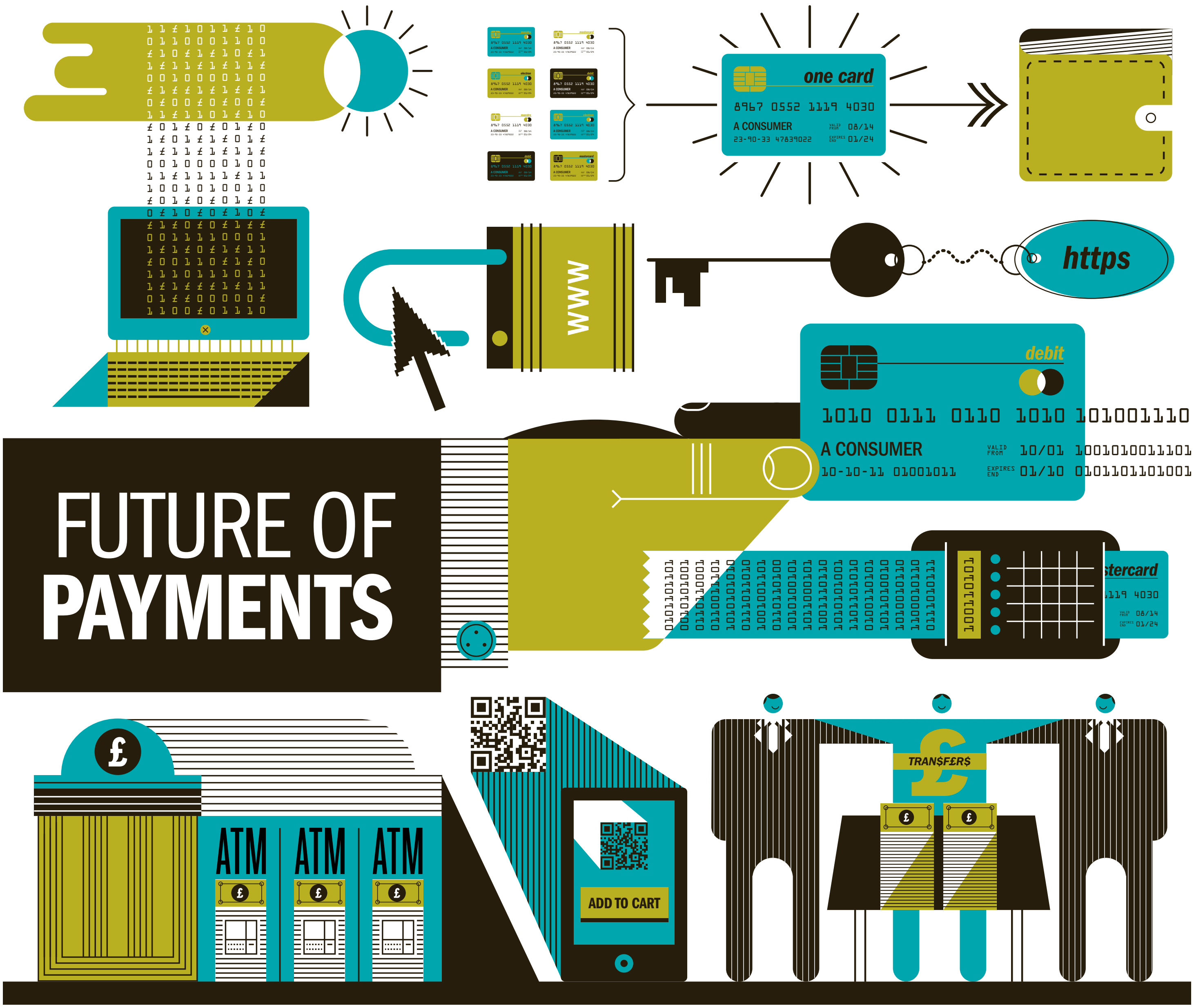

FUTURE OF PAYMENTS

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Overview

CASHING IN ON THE CHANGING CHECKOUT

$1.3trn+

forecast value of global mobile payment transactions by 2020

Source: Juniper Research 2014

50%

rise forecast in the number of consumers purchasing physical goods remotely via their mobile handsets by 2016

Source: Juniper Research 2014

The payments industry is in flux as smartphone technology revolutionises the way we pay, and presents new opportunities for business leaders, retailers and consumers alike, writes **Nic Fildes**

The cashless wallet, like the paperless office, is one of those concepts that has been discussed ad infinitum yet still appears to be a long way from becoming reality. For all the leaps forward in payments technology, from near-field communications embedded into smartphones to the plethora of chip-and-PIN apps and attachments vying for the attention of small businesses, most of us still have wallets stuffed with coins and notes that we exchange every day.

Yet consumer behaviour is quietly changing. PayPal, eBay's payments arm, processed a whopping $27 billion worth of transactions through mobile phones last year proving that most of our online auction bidding is now done via an app, not a website

Weve, the mobile phone industry's joint venture to target mobile commerce and advertising revenue, said it had revenue of £13 million in its first year as a fully formed company - as opposed to a startup situated above a jazz club in Soho - and has high hopes of taking a share of the mobile display advertising market projected, by the Internet Advertising Bureau, to be worth £611 million by 2015.

Meanwhile, the push for contactless payments is slowly making its presence felt. There are 20 million Barclays cards in British pockets that can be used to wave through payments of less than £20 and contactless accounts for around 1.7 per cent of the 958 million monthly transactions made via plastic every month.

Thus it is apparent that, as the technology becomes easier to use, more secure and trusted, and more widely deployed by retailers at the tills, then consumers are willing to use it, albeit with the bridge of an existing technology they know and already use, such as a plastic card, a smartphone or the mobile app version of a popular website.

EFFICIENCY

Yet why are retailers, mobile phone companies and payment processors so determined to do away with cash at a time when the Bank of England is introducing fancy new 12-sided pound coins and putting Jane Austen on the £10 note? Weve, for example, has sucked up £38 million in investment so far and returned a £25 million loss in the first year, which sounds like tough going.

The answer is two-fold: efficiency and opportunity. Tesco has estimated that it is six seconds quicker to process a transaction by waving a card at the terminal rather than fishing cash out of a wallet or waiting to tap a PIN number into the terminal. Six seconds sounds like a marginal improvement, however it could have a profound impact on the length of queues, not just at the supermarket till, but at coffee shops, petrol stations, cafes - pretty much anywhere you find lines of angry, impatient consumers.

Happier customers tend to return, but there are also clear benefits for the retailers themselves who can process more transactions per till and eventually cut costs by reducing the number of checkouts and people working at them.

That doesn't just apply to retail behemoths such as Tesco or Pret A Manger. Visa Europe conducted a European survey and found that merchants in France, Germany, Britain and Poland overwhelmingly regarded mobile point-of-sales systems as a key selling point. Half in Germany believed it would increase sales, while 45 per cent of Italian small businesses said it would also increase cash flow, the lifeblood of any micro-business.

> Work still needs to be done to convince consumers that plastic transactions with no PIN are secure

Work still needs to be done to convince consumers that plastic transactions with no PIN are secure. That lack of trust remains an Achilles' heel for the payments industry despite UK Cards Association numbers showing that less than £70,000 was pilfered from lost or stolen cards last year, representing 0.016 per cent of total fraud.

Speed at the till is only half the story. The Holy Grail for advertisers is to couple loyalty schemes, such as Nectar and Tesco's Clubcard, more closely to payments across a consumer's entire spending history and there is no better place to harvest that consumer data than from a smartphone if it is being used as a payment tool.

MOBILE

Around 90 per cent of people with a smartphone now use their mobile device to plan a holiday either searching flights, booking hotels and checking in online, and of course paying for it. That provides a golden opportunity, not only for companies advertising travel services, but also those selling everything from insurance to sunscreen or luggage.

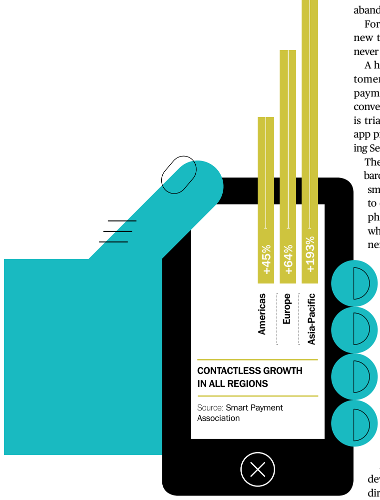
This is still a nascent market and most people do not want to give up information about their habits in case they are inundated with unwanted and mostly irrelevant advertising material. Striking a balance to use payment information and buying patterns with appropriate and relevant marketing material will be the key challenge for all stakeholders looking to push more transactions on to smartphones.

For more articles related to the future of payments please visit www.raconteur.net

Small and Medium-Sized Enterprises

NEVER LEAVE CUSTOMERS WAITING TO PAY

Innovative methods of payment can drive growth among smaller businesses, as **Charles Orton-Jones** reports



CONTACTLESS GROWTH IN ALL REGIONS

Source: Smart Payment Association

This summer will see an absurd phenomenon. The sun will shine, the temperature will soar and, at music festivals and World Cup parties, thirsty punters will saunter over to the beer tent where they will stand in line for what feels like hours. You don't need to have a Harvard MBA to despair at this. Customers are desperate to buy. They are ten feet deep and waving their money at the counter. But no one will take the cash.

Tragically, the same is true at pretty much any store you walk into. Customers want to pay as fast as possible. Instead they need to stand patiently in line.

Online it's worse. They may have to input an address, credit card number and other extraneous nonsense to check out. A lot of people just abandon their virtual carts.

Fortunately, there is a deluge of new technology to make sure you never lose another customer.

A hot new trend is to use the customer's smartphone to make the payment in-store. The high street convenience store co-operative Nisa is trialling the new Mini Checkout app produced by Retail Merchandising Services.

The app allows shoppers to scan barcodes using the camera on their smartphone. When they are ready to complete their purchases, the phone generates a final barcode which is read by the store's scanner on the way out. The app is linked to the customer's bank account, so the transaction needs no extra input from the customer.

The fee? Compared to credit card fees of 2.5 per cent per transaction, Mini Checkout takes 1.5 per cent.

The technology is being targeted at small and medium-sized enterprises (SMEs) that lack the resources to man multiple tills or experience surges in demand creating queues.

A similar technology has been developed for purchasing goods directly from billboards and adverts. PowaTag is a smartphone app which reads QR (quick response) codes placed in adverts. Customers use their phone's camera to scan the QR code, input a pin and the product being promoted is sent to their address. Bank accounts are linked to the app, so there is no need for the customer to mess around with sort codes or expiry dates.

Marketers will appreciate knowing precisely which promotions triggered a sale. The entrepreneur behind the technology is irrepressible serial entrepreneur Dan Wagner, who has signed up 365 global brands, including Laura Ashley, adidas and Carrefour.

Later this year PowaTag will be joined by a startup called Magic, launched by London-based Tedipay. Magic uses smartphone scanning to let consumers pay for goods as they shop and will include an option to tie-in loyalty points, which are automatically awarded and deducted during the payment process. The cost to retailers is £20 for the hardware and £5 a month for access to the loyalty component of the software, plus a per-transaction fee.

Upgrading your till is a worthwhile investment. The new generation of tills are based on mobile OS technology. Caffe Vergnano coffee chain recently started using the Android-based Clover Station till, created by a lavishly funded Silicon Valley startup.

The Clover Station looks like an iMac G4 desktop computer with an 11.7-inch touchscreen and comes with an app store, making it easy for merchants to add extras, such as customer loyalty schemes, discount schemes based on customers' previous purchases, and table management apps for restaurants. The product is targeted at firms which believe iPad or Android tablets are the most desirable option, but still want to be able to swipe cards, take cash, print receipts and need a barcode scanner built in.

International customers are routinely treated as second-class citizens. China is the world's second largest e-commerce market, yet few British retailers are set up to handle Chinese orders. Samsung, Fossil and C&A use Computop Paygate for global payment processing.

45%

of SMEs in Italy say mobile points-of-sale would enable them to get paid quicker

Source: Visa

37%

of all payment cards shipped to issuers worldwide in 2013 featured contactless technology

Source: Smart Payment Association

78%

of point-of-sale terminals in Europe are forecast to be NFC-enabled by 2017

Source: Juniper Research 2014

Computop chief executive Ralf Gladis says the trick is to know which methods the Chinese want to use. "The leading payment scheme for e-commerce in China is Alipay which is part of the Alibaba Group who run B2C [business-to-consumer] and C2C [consumer-to-consumer] marketplace Taobao, similar to eBay," he says.

"With 48 per cent of market share, Alipay is very much comparable to PayPal. It claims to process up to 34 million payment transactions per day. Given that Europe only counts around 320 million inhabitants, the fact that Alipay grew from 550 million to 700 million consumer accounts in 2011 demonstrates the sheer size and growth of e-commerce in China."

GERMANY

Mr Gladis adds that selling to Europeans needs the same thinking. "The German consumer expects options that include credit card, debit card and PayPal, as well as payment methods such as giropay or immediate transfer," he says.

"A key success factor in Germany is payment on invoice which comes with high default risks that need to be addressed correctly. The French predominantly use one card, the Carte Bancaire or Carte Bleue, and that option needs to be available if an online retailer wants to sell successfully in France. If you want to do business in The Netherlands, the Dutch often use iDEAL online wire transfer, with the remaining purchases made by credit cards and PayPal, and a small number by Lastschrift."

With such a plethora of options, it may seem tough for small and medium-sized firms to cover all bases. In fact, experienced payment partners will help even small firms cope with the full gamut. The alternative is to leave willing customers unable to pay or inconvenienced - which, as snaking queues of beer aficionados this summer will testify, is both needless and annoying.

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Ubiquitous Payments

UNIVERSAL SYSTEMS WILL AID GROWTH

With a fog of electronic payment options, which platform will become dominant is unclear. What is certain, however, is any economy that wishes to remain vibrant must move towards more ubiquitous, frictionless payment systems, writes **Dave Howell**

Electronic payments are accelerating. According to the UK Cards Association, in March UK consumers spent £109 million using contactless payments. However, as the electronic payments landscape is so fragmented, choosing which service provider to partner can be difficult.

"The acute challenge for those businesses investing in electronic payment services today is balancing the customer experience with the requirements for security and resilience," says Deloitte partner Stephen Ley.In particular, development of a secure, fast and convenient mobile payment method is vital. Will Jones, president Europe, the Middle East and Africa at Monitise, says: "In February, Yankee Group predicted the mobile economy is evolving at an even faster rate than expected and that by 2017 it will be valued at $3.1 trillion, $200 billion more than the $2.9 trillion Yankee Group forecast in October 2012."

Moving away from legacy payment systems also has massive economic benefits. "Within a country, frictionless electronic payments aid economic growth as individuals, small businesses and large organisations can make and track payments," says Jonathan Vaux, director of new digital payments and strategy at Visa Europe.

Payment systems are moving away from their traditional banking heritage. Service providers, such as iZettle, Square, Yandex Money, Alipay and mPowa, are all making inroads to become universal payment providers in their respective regions. What they all have in common is they can be delivered via multiple platforms.

The growth of contactless payments in Europe, which currently stands at 220 per cent annually, is a clear pointer that this technology is rapidly achieving traction.

PARTNERSHIP

The recent partnership between the three leading mobile phone operators and MasterCard, dubbed Weve, is telling in that it offers a payment provider which is well respected coupled with mobile connectivity. "MasterCard's vision of a world beyond cash, maps neatly on to our own vision of a world powered by mobile," says Weve chief executive David Sear.

New payment initiatives from the banks, such as Paym, could be disruptive as they expose large proportions of the population to electronic payments for the first time. Having a simple and safe method of paying family and friends delivers critical mass that other payment systems can benefit from. Paym could move electronic payments from a novelty to an essential service.

> The growth of contactless payments in Europe, which currently stands at 220 per cent annually, is a clear pointer that this technology is rapidly achieving traction

The Payments Council's *Pay Your Way in 2025* report concludes that 42 per cent of UK consumers believe they won't need a wallet or purse by 2025. More than half believe they will be paying by fingerprint scan.

Moving to electronic payments has been shown to result in higher economic performance and efficiency in all nation states that have adopted these systems. On a macro-economic level, the European Central Bank concludes: "If card payments increase by €1 million, which corresponds to an increase in the card penetration ratio of 1.2 per cent in the European Union, then the level of GDP would increase by 0.07 per cent or about €6 million."

Researchers at economics organisation Global Insight go further and say that a move to frictionless payments can offer potential savings of 1 per cent of GDP annually. Increasing the electronic payments share of transactions by 10 per cent could result in 0.5 per cent of additional real consumer spending, says Global Insight.

A Visa International/Global Insight report concludes: "Real economic growth is driven by the combination of technology, capital, materials, labour resources and entrepreneurship - all real economic factors. But real economic transactions and payments cannot take place without an efficient, interoperable payment system. The clear implication is that electronic payments are critical in facilitating the growth process and that it is in the economic interests of all countries."

Familiarity breeds confidence in consumers. It is vital for consumers and businesses alike to have a clear payment options without the barrier of several apps from various vendors. Reducing confusion, when it is time to pay, is therefore essential for national economic growth.

Commercial Feature

Blending new and old

Financial institutions need to support traditional payment mechanisms while moving to embrace new digital channels demanded by customers – having the right technology in place is essential

fiserv.

David Abbott, payments lead, Fiserv

In today's hyper-connected world, where consumers and businesses alike are looking for the next best technology, financial institutions are finding themselves increasingly caught between the old world and the new. They are supporting existing methods for payments, banking and commerce, while at the same time aiming to take advantage of all the opportunities presented by digital channels, such as mobile, tablets and wearable devices.

To lead and redefine the delivery of financial services, financial institutions must create a technology roadmap that not only maximises return on investment and decreases total cost of operations, but also creates a new and personal experience for the end-customer. In addition, those who lead the charge must ensure high adoption rates of the new technology-enabled channels in which they invest.

"The evolution of mobile banking from 'viable' a few years ago to 'demanded by customers' in the near future is now almost certain, and it is here that financial institutions are increasingly looking to differentiate themselves and their products," says David Abbott, payments lead for Europe, the Middle East and Africa at technology provider Fiserv.

"The ability to move seamlessly between devices, applications and channels will attract clients who find it increasingly simple to change their banking supplier. Payment habits will change. Costs and processing time will reduce. All this will take place without compromising on security or damaging customer confidence.

> The ability of new payment providers to set expectations and influence the behaviour of consumers is challenging financial institutions to think differently

"With differing technologies on offer and many options to pursue, the challenge for banks is to leverage their own experience and the creativity of their technology partners to produce solutions that deliver outstanding customer experiences."

One example of the balancing dilemma faced by banks in the UK, and other countries such as Australia, India and Brazil, is managing the cost of processing paper cheques, while investing in automating and accelerating electronic funds transfers (EFT).

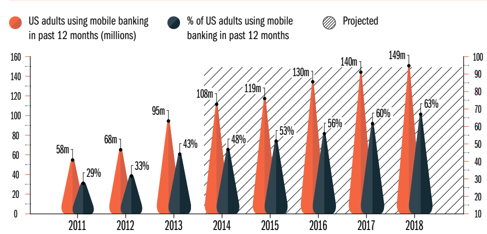
Automating and accelerating EFT is done through the development of low-cost national real-time payment and clearing systems. All these countries are engaged in a process designed to remove the need to deposit paper cheques at bank branches while keeping the payment instrument alive for those who need to use them.

Proposals for the abolition of the venerable cheque in the UK met strong resistance from public and private-sector organisations, as well as some sections of society, particularly older customers.

Cheques continue to be so useful to some that the UK government is investigating the introduction of a remote deposit capture solution for electronic imaging that enhances the current paper-based process. The solution enables cheques to be processed quickly and easily using smartphone cameras, as part of a mobile banking app.

MOBILE BANKING SERVICES CONTINUE TO GROW IN DEMAND

Forecast of US Adults' Mobile Banking Adoption 2011-2018



Source: Javelin Strategy & Research, December 2014

"Once remote cheque deposit is available, which it looks likely to be in 2015, we should see the implementation of a process that combines one of the newest technologies available with one of the oldest payment instruments around," says Mr Abbott. "The 'wow' factor and viral marketing are not traditionally where banks have scored highly, but killer apps, such as mobile cheque capture, make a huge difference when it comes to influencing customer behaviour."

This technology is creating a hybrid model as banks realise they can reduce costs and improve the overall customer experience by blending new technology with traditional payment instruments. "We see this co-existence of new and old as a vital transitional step towards totally eradicating the high cost of paper processing for the UK's banks," he says. "This is just one example of the benefits that an always on, always connected mobile world can offer its stakeholders.

"We have been very active implementing mobile deposit capture solutions in the United States, and have seen countries like Brazil, India and now the UK, start to embrace it.

"Implementing remote capture in the UK will extend the life of cheque processing on one level. On another, it offers a real insight into the future of banking as customers embrace mobile devices to execute a range of financial transactions, including bill payments, cheque capture and instant funds transfers."

Time is short for adoption. The line of non-banks looking to support the growing digital payments ecosystem continues to multiply. If banks get the calculation wrong, they risk greater disintermediation by these competitors. Competition has always been fierce in payments and it remains so as new entrants exert disruptive influences on the old order.

"PayPal has leveraged eBay, Amazon has optimised its marketplace, while iTunes and Starbucks have all created highly focused payments communities," adds Mr Abbott. "The ability of new payment providers to set expectations and influence the behaviour of consumers is challenging financial institutions to think differently."

The banking industry and regulators have responded to the challenge with initiatives, such as Faster Payments and Paym. "These real-time products demonstrate that the establishment is still able to drive low-cost, high-speed payments innovation that works in the interests of the wider community," says Mr Abbott.

"Institutions need to act now to put in place the architecture and infrastructure they will need to ensure they take advantage of our always on, always connected world. New payment products and banking services require time to develop and implement. That may require workshops, closed user groups, private trials and then public trials before roll-out. No time has ever been wasted in thoughtful preparation or experimentation, so the time to start is now."

To find out more about how Fiserv can position your business for future success, visit www.fiserv.com

Banks

Banks are reasserting themselves in the payments sector by building up trust, security and accessibility, as **Dan Barnes** reports

TRUST

Non-banks have squeezed themselves into the payments business. PayPal has thrived in the online market, reporting a net total payment volume in the first quarter of 2014 of US$52 billion, a 26 per cent increase year-on-year. At the point of sale, Square in the United States has gained a lot of traction since its launch in 2009, reporting a growth in annualised transaction processing to $15 billion half way through 2013, up from $10 billion at the beginning of the year.

These interventions have not completely cut banks out of the market as a bank account is still typically used as a store of value, from which funds are transferred.

Revenue and loyalty
P08

"Until customers say they don't trust banks to perform the payment and banking function, then banks will not be fundamentally disintermediated," says Matthew Leavenworth, director of global payments at Bank of America Merrill Lynch. "This does not mean, however, that banks should sit back and do nothing. With this trust from clients, we have a moral imperative to innovate. Our clients want us at the table."

Sameer Gulati, principal at management consultant McKinsey, says: "Banks are not being one-to-one disintermediated, but they are being distanced from the customer relationship, the data and the liquidity. If the primary payment moves funds from the current account to PayPal, some of the funds that sit with the banks and feed that payment process are also starting to transition away. Once the interest-bearing balance is under threat that really makes banks worry."

INNOVATION

New operators in the payments space are launching every year; the revenue model is steady if a firm's model succeeds and the development costs for technology are not astronomical. In fact, it is the innovation around payments that provides the real effort. The transfer of funds cannot be made any more efficiently without a core change to the payments infrastructure that is used by all electronic payments systems. The areas of potential improvement for banks or non-banks are around simplifying initiation of a payment or improving the experience of making that payment.

"The genius is the simple aspect of things; there is a fine line to balance between ease of use and security," says Bennett Bradley, head of payments at US retail and commercial bank BB&T. "What has become increasingly important, has been the education of clients around why we have to use certain devices or measures."

Necessity tends to drive innovation in the banking sphere. The attacks on September 11, 2001 in the US led directly to a regulation that allowed the digital images of cheques to be accepted in lieu of their paper copies. So-called Check 21 came into force in 2003 and necessitated the development of remote cheque capture and remote deposit transfer technologies, to replace the shuttling of paper cheques across the country by private jet, an unworkable model for the industry when flights were grounded after the attacks.

Mr Leavenworth says: "Clients using our remote deposit capture application to capture cheques for deposit at their local offices do have the potential for increased cash flow. The [cheque] images can be entered through the cheque clearing stream more quickly and remote capture normally offers a later deposit deadline which enables customers to capture additional cheques that could not be submitted within the same timeframe through a more traditional banking channel. These two drivers enable banks to be in a position to grant the client faster access to the funds associated with those cheques."

Analyst firm Forrester reported that in 2012, 13 per cent of US adults, who had used mobile banking, reported depositing a cheque by taking a picture with their mobile device. However, the advantages of such developments can be specific to a market. For example, Mr Gulati notes that the proportions of unbanked consumers in the US (10 per cent) and the UK (2 per cent), along with the geographical differences, make for different requirements around digitising paper-based payments.

> Consumers may have fallen out of love with bankers for different reasons, but they still have a lot of trust in banks

Ben Green, head of mobile and payments at Santander UK, says: "Most of the mobile-banking [customer] base in their mid to late-20s do consume cheques, but do they want to send pictures of cheques to the bank? I am not convinced they do. The technology is available and there is an argument that it could speed up the cash flow for small businesses, but the volumes are small."

Where banks on both sides of the pond share a vision is in more fully capturing the customer experience, by integrating payments channels both internally, to create a complete picture of customer activity, and externally, to deliver a seamless customer experience when working across multiple channels. This omnichannel strategy reflects the need to service clients effectively wherever they feel most comfortable.

DIGITAL-ONLY

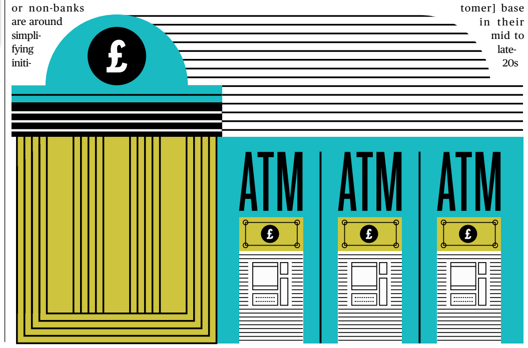
"The mindset of customer segments towards branches is varied," says Mr Gulati. "Our research shows that if you ask the majority of under-35 year olds whether they want to bank digital-only, the overwhelming majority say 'yes'. But if you ask them if they would sign up to just one bank that had no physical presence, the numbers change quite dramatically. We conclude that they do not want to have to go to a bank branch, but they feel fundamentally uncomfortable without having that option, even today."

The need for trust will keep retail customers focused on the bank as part of the payment chain, away from pure-play payment providers, says Mr Green.

"If you gave people the option of holding £10 with a bank or with new payment brand they might go either way; if it were £1,000 that flexibility disappears," he says. "Consumers may have fallen out of love with bankers for different reasons, but they still have a lot of trust in banks."

For banks to recapture the part of the transaction process that is being lost to non-banks, an omnichannel strategy offers a framework for them to keep a hand on the payment all the way down the line.

"The whole point of omnichannel is to give the customer a choice in the way they interact with us, while being treated in exactly the same way across touchpoints, and therefore to build trust and engagement," says Mr Green.



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Understanding the Consumer

HOW TO MAXIMISE REVENUE AND LOYALTY

The payments industry has arguably never had better incentives to find more convenient ways for consumers to pay for goods and services, writes **Miya Knights**

Although the payments landscape is still dominated by cash and cards, payment service providers are looking for ways to respond to changing consumer demands, help merchants speed transaction throughput and add value in terms of providing extra consumer information.

Despite this, evidence suggests that more traditional payment methods still dominate. But perceptible shifts in the popularity of the likes of cash, and credit and debit cards strongly suggest consumers are open to new and improved methods of payment.

The Payments Council, which guides strategy among payment institutions in the UK, found although cash still makes up the largest proportion of daily one-off transactions - three in five purchases - they are very small in value. Only ten years ago, UK consumers used cash to pay for 75 per cent of store purchases. That proportion has now dropped to just over half.

In that time, debit cards have taken over in terms of the way consumers now prefer to pay for small value transactions - enabled by the Faster Payments scheme - as a speedy alternative. In fact, last year the Payments Council predicted debit card spending in the UK could almost double over the next decade, totalling £664 billion from 14 billion transactions. This compares with credit card spending projections of £204 billion from 3.1 billion transactions.

Chris Dunne, payment services director for VocaLink, which manages the UK payments infrastructure including the LINK cash-machine network, says consumers have embraced debit card payments because they are easier to track and show up on consumer bank accounts almost immediately. Despite this, he says, there is still much room for improvement.

"Card payments require a five-point ecosystem, involving the consumer, merchant and acquiring banks, so that even if it may look like payments are moving faster out of the customer's account to the merchant's, they're not," he says. "Payments still take time to get to the merchant."

MULTIPLE CARDS

Recent research carried out by VocaLink among UK consumers found they were more open to digital payment methods that eliminated the need to carry multiple cards, just as they have been keen to abandon coins and notes. They want the same immediacy of a payment showing up on real-time account balances that comes with debit cards, and can help with monitoring and budgeting.

But they also want to use one single system for all purchases that also eliminates the need to share bank details with merchants. You only need think back to the most recent Target data breach in the United States, which saw an estimated 98 million citizens' card details compromised, to understand this consumer caution.

In response, VocaLink has launched Zapp, a mobile payment scheme that relies on passing a token between between the merchant and consumer in order to authorise payment without having to exchange any bank details. "Although the [payments] process is nowadays electronic, the industry is still reliant on legacy systems that are largely 20 or 30 years old," adds Mr Dunne.

Like VocaLink, most payment innovators are focusing on mobile devices and their ability to offer multiple layers of pass-code and even biometric security to provide the single system consumers have been asking for to both initiate transactions and track their spending. In fact, the payments infrastructure provider found many consumers check their balance several times a day and 70 per cent of smartphone owners check their bank balance using a mobile app.

Given the time it takes merchants to get paid, it is not surprising that another survey, carried out by Accenture at the end of last year, found 45 per cent of UK consumers said retailers have made it easier for them to use a mobile device to complete a purchase, up from 30 per cent of those participating in a similar 2012 survey.

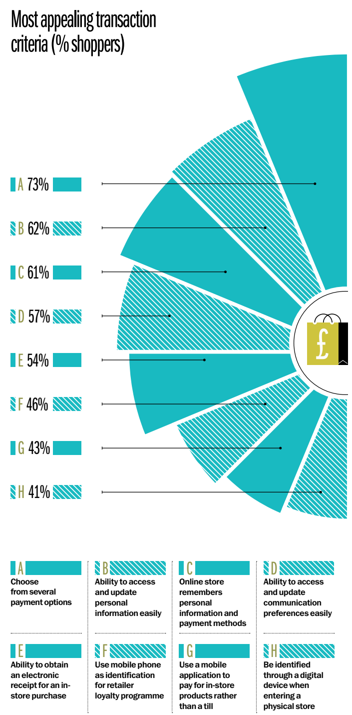
While new payment competitors may threaten the traditional role of the high street bank, research from professional services firm PwC shows that 61 per cent of consumers still trust banks with their money over new providers. And Zapp research confirms that 81 per cent of consumers say they are more likely to adopt such services if they are provided by their bank.

PAYMENT APPS

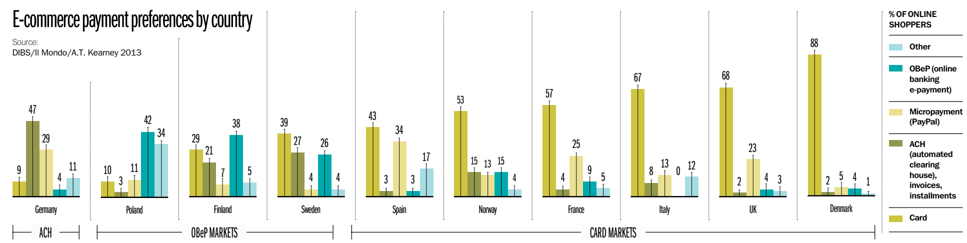
Telefonica, for example, abandoned its O2 Wallet service earlier this year, just 18 months after it launched. It required registered users to transfer funds into its app before using it. By contrast, Barclays Bank continues to offer its payment app Pingit, which enables users to link their bank accounts to their mobile numbers in order to transfer funds to each other and a selection of retailers.

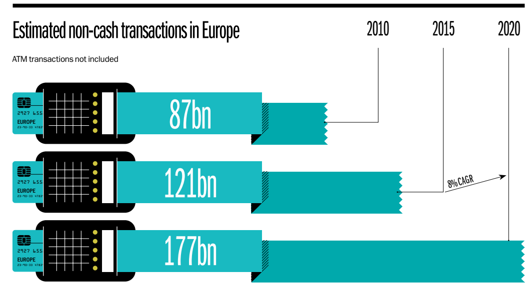
> Consumers want to use one single system for all purchases that also eliminates the need to share bank details with merchants

E-COMMERCE PAYMENT CHOICES

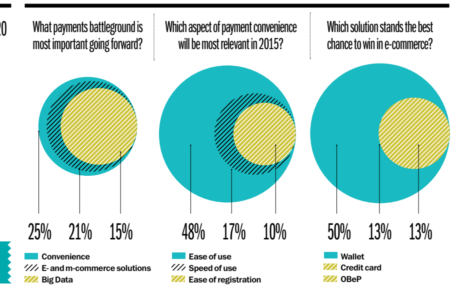


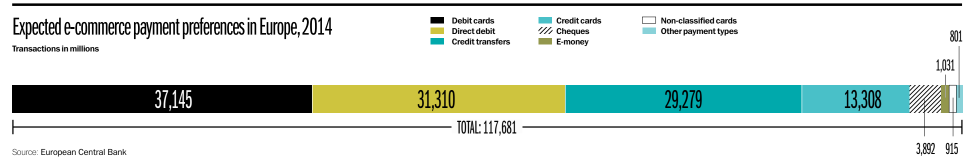
Source: Capgemini





Source: A.T. Kearney





Source: European Central Bank

Other providers looking to crack the mobile payments market include Orange's Quick Tap, Moneto and PayPal. But even the PayPal scheme, despite its recent partnership with Samsung to use biometric identification built into the handset maker's smartphones, still requires users to entrust the electronic payments company with bank or credit card details. This is why Zapp launched with five UK high street lenders, including Nationwide and Santander.

Mr Dunne says the challenge with mobile payment systems that rely on existing card systems is they can take a long time to get off the ground in terms of testing and acceptance procedures. "Smaller innovative providers can be more nimble, but create little islands of usage that restricts take up," he adds.

Stephen Whitehouse, retail and commercial banking partner at PwC, says despite customers' appetite for new and innovative digital banking offerings, and the fact they are willing to pay for these, the majority of banks still only provide basic mobile and internet banking services. "Banks are clearly missing a trick if they don't start to invest in their digital offerings and only see digital as a way to reduce costs," he says.

Paym, another new payment method launched in the UK this April by the Payments Council, is attracting a lot of attention because it relies on mobile phone numbers to route payments, and has the backing of nine high street banks and building societies, which means it is supported by 30 million customers across the country. And a reported 300,000 consumers signed up to use the service in the run-up to its launch.

Adrian Kamellard, the Payments Council's chief executive, says: "Paying someone back just got easier for millions of people." But, designed to facilitate interpersonal payments, he adds that Paym would serve as "another safe and easy option to pay friends and family". As such it does not necessarily address demand for secure payments for goods and services.

The emerging markets for mobile payments also rely heavily on mobile manufacturers, the underlying wireless communications infrastructure and its standards. Analyst firm Ovum flags up the slow adoption of near-field communication, for example, citing challenges it presents issuers, developers and other third parties.

Eden Zoller, principal analyst with Ovum's consumer practice, says consumers will not adopt multiple digital wallets. "The best positioned will be those associated with the financial brands that consumers trust most and are familiar with. It is digital wallets of this kind that have the best chance of achieving scale and also attracting the advertising dollars needed to bolster the business model," he concludes.

Beyond the Transaction

PAYMENT DATA DELIVERS

Electronic payment systems are an asset that any business can use to drive loyalty and deliver a deeper understanding of their customers, as **Dave Howell** reports

Loyalty as a business advantage cannot be overstated. Just a 5 per cent increase in the number of loyal customers can improve turnover by as much as 90 per cent, according to the *Harvard Business Review*.

Electronic payment systems have a basis of data that can be acted upon, but it's the ability to tailor a customer relationship that offers the most power.

As Philip McHugh, chief executive of Barclaycard Business Solutions, says: "Data drives relevancy, which then drives consumer purchase. Electronic payments can provide valuable insight and data analytics, which can help provide improved personalisation, relevancy and timeliness of products and services offered to consumers."

PayPal is a good example, as the mobile app also contains GPS (global positioning system) information that allows businesses to push local services to the customer where they can pay with PayPal. DBS Bank in Singapore does just this using data analytics that can match customer locations to make personalised offers. This geospatial insight into consumer behaviour is transforming how businesses communicate and understand their customers.

BIG DATA

The gold standard is the Tesco Clubcard that has been leveraged by the company to massive success. The level of insight that the card offers is massive and allows Tesco to see buying patterns that influence every aspect of its business. Electronic payment systems are set to eclipse this success, as they reach further and offer more depth with consumer profiling.

The granular view of consumer spending that electronic systems presents is unprecedented. Big data principles can be applied by any business to gain a 360-degree view of their customers that, on a practical level, produces rich data that can be acted upon. This data enables enterprises to see customer preferences, why they switch brands, what they will buy next and why they recommend one product or service over another.

"The big data era brings the analytics of the now," says Karthik Krishnamurthy, vice president, enterprise information management, at Cognizant. "Real-time insights about each customer are based on advanced statistical analysis and machine-learning techniques on very large datasets of granular payment data.

"The granular data lays the foundation for mass-personalisation in lieu of the old segmentation methods. As each customer's response is processed, it is analysed to provide inputs about campaign effectiveness, brand loyalty, changing spending habits and profit or loss."

Shane Fitzpatrick, president and managing director of Chase Paymentech Europe, adds: "Data mining requires a combination of business acumen, analytical creativity and technical expertise. By developing the right processes and culture, businesses can identify where the real value lies within its data."

This is being demonstrated by Uber that has developed an app, which not only allows users to manage their travel, but also make payments seamlessly. This level of integration is evolving for the entire retail sector which will eventually be able to integrate point-of-sale, mobile and online sales data, plus a raft of other consumer profile information from social media, for instance, to gain commercial insights into how, why and where customers shop.

Starbucks, for example, claim that 10 per cent of in-store sales are driven by its mobile wallet app. The insight that these transactions gives the company is a goldmine of information that can inform every new communication the business has with individual customers.

DATA ANALYSIS

Current electronic payment systems may offer a somewhat bruteforce approach to data analysis. They are able to show consumer purchasing history, but few can analyse in depth why a consumer bought an item from a particular retailer. This is where big data can make a huge difference, as it takes several data sources and combines them with payment information to give insight into consumer behaviour that has not been possible for retailers in the past.

Understanding payment behaviour and how this can be used as the basis for adding value to services is at the core of what electronic payment data can offer. The merging of key data sets, including geospatial and geo-demographic data, is creating an environment which, when payment information is also included, results in customer profiling that can direct real-world promotions and campaigns.

Ones to Watch

HOT NEW STARTUPS

It is easy to forget that PayPal, now arguably the dominant online payment system, was an obscure brand at the turn of the century. No wonder that a host of companies, from banks to telecoms companies to traditional payment processors, are desperate to crack the next wave of innovation which is likely to be pioneered by a startup company with a different take on how consumers want to pay in the future. **Nic Fildes** has our five hottest ones to watch

PAYLEVEN

WHAT THEY DO
Chip-and-PIN system for smartphones.
WHY THEY ARE ONE TO WATCH
This young company was developed in Berlin's Rocket Internet incubator just as Square and iZettle started to catch the eye. The Payleven system, a terminal that connects to a smartphone via Bluetooth, targets the same customer segment as its rivals - the tens of thousands of small merchants that have been priced out of the market for chip-and-PIN readers. It does not support as many cards as iZettle, but has high hopes for a new terminal to be launched later this year that will bring contactless payments to small businesses and market traders by embedding near-field-communications technology.

TRANSFERWISE

WHAT THEY DO
International transfer service.
WHY THEY ARE ONE TO WATCH
Peter Thiel, the PayPal co-founder who also hit gold when he backed Facebook, put London's TransferWise on the map when he invested in the then-obscure startup last year. It was set up by Skype's first employee and it uses peer-to-peer networks to transfer money at a better rate than the banks. It has mounted an eye-catching marketing campaign on London bus stops to raise its profile, while also reaching out to other startups with free transfers. It has already processed £1 billion of funds and saved its customers £45 million in the process.

MONITISE

WHAT THEY DO
Software used by banks to enable mobile payments and accounts.
WHY THEY ARE ONE TO WATCH
Monitise is a genuine pioneer in mobile payments and has the pedigree - plus the backing of Visa and MasterCard - to see its vision through. The British company is no longer a startup, having been set up in 2003 by former rugby player Alastair Lukies, but it has maintained its small-company mentality and growth agenda despite brining major investors on board. It now has 350 banks on its books, a cash war chest of £100 million to pursue its global ambitions and has even won over risk-averse investors.

COIN

WHAT THEY DO
Plastic card that merges credit, debit and loyalty cards.
WHY THEY ARE ONE TO WATCH
Coin won't launch until the summer, but the notion of "one card to rule them all" has caught the imagination in Silicon Valley. The Coin card replicates the data held on electronic strips on up to eight debit, credit or loyalty cards and allows users to switch between functions with the click of a button. Osama Bedier, the former head of Google Wallet, is an investor as is Square's Jack Dorsey. Concerns over data security and whether a flat smartphone battery - it works via Bluetooth - could leave users without access to their cards, need to be overcome.

POWA TECHNOLOGIES

WHAT THEY DO
Smartphone payment processing and augmented reality.
WHY THEY ARE ONE TO WATCH
Flamboyant entrepreneur Dan Wagner failed to make it big during the first technology boom, but is determined that Powa will make its mark in payments. The mPowa mobile payment system, salvaged from the remnants of the notorious tech bubble casualty Boo.com, now includes software to allow users to buy goods simply by pointing a smartphone at them. A large US fund pumped $76 million into Powa last year which Mr Wagner believes will provide it with the muscle to expand rapidly around the world.

Commercial Feature

Favourites for world payments in Brazil...

When you sell in Brazil, you need a partner with real local knowledge, says **Souheil Badran**

Digital River
World Payments

If you are looking for a huge new market to crack, you'll struggle to find anywhere more attractive than Brazil. It is the fifth largest country in the world, has the sixth largest population and is seventh in terms of internet usage. E-commerce is developing at a rapid rate, with 100 million consumers and rising. And if you succeed in Brazil, you have the perfect leaping off point for marketing to the rest of Latin America.

In fact, you may already be trading with Brazil without really realising it. Brazilians love shopping overseas and having goods shipped back to them. So what do you need to know in order to make the most of Brazil?

First, you need to master the local quirks. Take the concept of credit. In the UK if a customer wants to buy a laptop on credit for £1,200, they'll use a credit card. In Brazil this is less common. Instead there is a tradition of paying by instalments. The customer might pay £50 a month over two years, interest free. If you don't accept payment by instalments, you'll be leaving money on the table.

Secondly, be aware that Brazilian taxation is not simple. There are national taxes and local taxes, and two varieties of taxes for imported goods. For transactions executed in a foreign currency cross-border, the cardholder will be charged 6.38 per cent Financial Operations Tax or IOF.

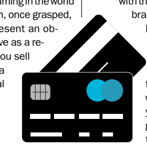
PwC rates Brazilian tax forms as the most time consuming in the world to complete. In truth, once grasped, the taxes won't present an obstacle, but they serve as a reminder that when you sell in Brazil, you need a partner who has real local knowledge.

Digital River has been facilitating payments for 20 years, with more than a decade in Brazil. From our office in São Paulo, we help some major brands thrive across Latin America, particularly in Brazil. In addition to e-commerce and e-marketing, digital payments is one of our primary areas of expertise. We provide the full spectrum of payments services, so you can start accepting payments from customers no matter what their preferred payment or where in the world they are located.

> From our office in São Paulo, we help some major brands thrive across Latin America, particularly in Brazil

We also offer practical advice based on our long experience in local markets. In Brazil, we can help you deal with logistics. What is the best way to send your goods to Brazil? How will you deal with returns? Our consultants can help you craft the perfect policies.

In terms of fraud, we can make sure you trade with real confidence. How can you know whether you are sending goods to a real address or a parking lot used by fraudsters? We work closely with the two largest credit card brands in Brazil, Cielo and Redecard, to ensure our clients have access to the latest advice and data regarding fraud. Our knowledge will help make sure that you aren't also declining good payment transactions in error.



$30bn

in online transactions processed in 2013

Souheil Badran is the senior vice president and general manager of Digital River World Payments, leading all aspects of the company's global payments strategy, including strategic development, sales and marketing, product management, operations, mergers and acquisitions.

Through Digital River World Payments, Digital River offers online merchants more than 180 international and local payment options, and over 170 transaction and display currencies. A selection of payments customers includes Expedia.com, Morinda, PayPal, Skullcandy, Wix.com and Spotify. In 2013, we processed more than $30 billion in online transactions. www.digitalriver.com

Read more on Brazil on our blog at bit.ly/digitalriverbrazil or by scanning the QR code

Interview

Beauty industry boss **Joel Palix** tells **Edwin Smith** of his company's online strategy

ONLINE BEAUTY FEELS UNIQUE

There are some similarities between the virtual and physical worlds, feelunique.com chief executive Joel Palix concedes.

"From time to time you need to make a significant investment and completely renovate your store," he says. And, for Europe's largest online beauty retailer, the decision already seems to be paying dividends.

The company's website was totally revamped towards the end of last year to provide a seamless experience that is tailored to each consumer, no matter whether they're using a desktop computer, tablet or mobile device.

By the time of the busy post-Christmas sales, more than half of all traffic and sales on the site was coming from mobile or tablet devices; just ten months previously the proportion had been less than a third.

Mr Palix, who has held senior roles at some of the biggest players in the beauty industry all over Europe, including Clarins and Yves Saint Laurent Beauté, says that changes to the site and mobile strategy were partly driven by the company's bias towards female customers.

Some 85 per cent of purchases from feelunique are made by women and the company's own research shows that women are 20 per cent more likely to use a mobile device to buy online. "For any e-commerce site, mobile is no longer just an option," says Mr Palix. "For us, doing it well is an absolute must."

However, statistics from a recent study by IMRG, the UK's online retail industry body, suggest that many of feelunique's peers are lagging behind. Some 27 per cent of multichannel retailers do not have a mobile-optimised website. That figure rises to 43 per cent among online-only retailers.

And there is much at stake. A study by the Centre for Retail Research forecast online retail sales made with mobile devices to increase by 62 per cent in 2014, reaching a total value of £7.92 billion. That's 17.6 per cent of all UK online retail sales.

GEEKS

It's all a far cry from Mr Palix's first experience of e-commerce, launching Clust.com in 1999 in the earliest days of the online retail revolution. Back then, he says, most of the people who shopped online were men: "geeks shopping for electronics from their desktops".

Today, feelunique's offering is shaped by different trends. Mr Palix observes that, while the site's traffic tends to show two peaks, one in the morning and then again in the evening, it's during the evening peak that purchases are more likely to be made. This type of "browse and buy" behaviour has been characterised as "am to pm" shopping where "analysis moments" happen in the morning before "purchase moments" later in the day.

The company's assessment of consumer behaviour also suggests that, despite migrating away from bricks-and-mortar over the last 15 years, retail has not lost its social element. The discussions have merely begun to happen in a different way.

Mr Palix says shoppers are increasingly sharing links and pictures of products online - often using their mobile devices - to sound out friends, and be reassured their decision to buy is a good one. They might then actually make a purchase later in the day, using a different device.

This is why one of the major goals of the revamp to feelunique's online and mobile offering was to provide a smooth, user-friendly experience that reflects shoppers' habits. "More and more we're trying to offer a seamless journey," he says. "So what is ordered or viewed on one device, can be easily accessible on another device. We try to create an environment that is more personalised."

Out of Africa P14

As the leading player in its sector and a company that sells the majority of its products to customers using a mobile device or tablet, it's perhaps surprising that feelunique doesn't have an app. Mr Palix acknowledges this, but stresses that, if and when the company does decide to launch one, it will be on his its own terms.

"We are always talking about this internally," he says. "But we never reach an agreement about what the killer app would be. We like to achieve excellence in everything we do, so we are not going to do an app just for the sake of doing an app."

The business does, however, have two bricks-and-mortar stores, in Guernsey and Jersey. Mr Palix says they are the consequence of "selective distribution agreements" that the company must strike with brands in order to stock certain products, rather than the beginning of a concerted push to become a fully fledged omnichannel concern.

Looking to the future, he expects the way that feelunique's customers pay for their purchases to remain relatively stable. Innovations, such as digital currency, are not sufficiently close to being useful on a large scale. Conversely, he predicts there will be changes in the way people interact with the site and the type of mobile devices they use.

MOBILE SITE

"In terms of mobile, I think e-commerce players will see big transformations because the devices will continuously evolve. Maybe at some point you will have an augmented reality screen whereby your mobile will be able to project an image as big as the screen on a desktop. The whole concept of 'a mobile site' might one day become obsolete - that could be transformational," he says.

In fact, while mobile devices are particularly suited to use in some contexts, the distinction between the different ways in which consumers browse and shop is already starting to dissolve.

"Mobile is just perfect for certain situations. If you know the type of product you want and you just want to reorder it - that's very simple to do on mobile. Or if you want to start researching the products or asking friends, you can use it during commuting time when that's the type of device you have in your hand. But I really see mobile as just one of the devices people use," he adds.

For Mr Palix, the best mobile strategy is one that is incorporated into a holistic, cohesive view of how a company interacts with its customers. And that should be driven by one overriding consideration. "As a retailer, we want to be on every device possible," he says, "because our goal is to make the customer's life as easy as possible."

> Shoppers are increasingly sharing links and pictures of products online to sound out friends, and be reassured their decision to buy is a good one

Commercial Feature

Global emergence of real-time payments

The UK's Faster Payments Service and Singapore's FAST are the blueprints for worldwide adoption of real-time payments says **Marc Terry**, managing director, commercial services at VocaLink

The concept of real-time payments is something that the UK has become increasingly familiar with over the last six years. This is thanks to the implementation of the Faster Payments Service in 2008, which has successfully put the bank account back at the heart of the payments process.

Demand for the Faster Payments Service in the UK has grown, with more than one billion payments securely processed in 2013, as more consumers and businesses appreciate the benefits of real-time payments. As a result of its success, other countries have been prompted to review their processes and adopt new payment methods.

At present, global economic communities find themselves at varying levels of development. Some parts of the world are spearheading change and leading the way in real-time payments, while others are falling behind.

The UK in particular is advanced in terms of its innovative front-end payments initiation and central real-time infrastructure for low-value payments. This has helped to meet the needs of consumers, merchants, businesses and government, while generating lucrative revenues for commercial banks.

Elsewhere, South Korea is advanced in terms of maturity of mobile-initiated payments services, while countries in the Middle East, which have a strong reputation for innovation, still have some way to go to overcome a fragmented payments ecosystem, with high cash volumes, some closed-loop payments innovations and a number of legacy payment infrastructures. Australia is looking to implement a new payments platform and the United States recently announced it is in the industry consultation phase.

As more countries share their experiences and learning, it is becoming increasingly clear that regulatory, association or central-bank driven initiatives are required to ensure that payment infrastructures and services meet end-user needs in a cost-effective manner, striking the balance between industry collaboration and competition.

In order to be successful, improvements are also required in central payment infrastructures and access to these for all users, predominately using digital technologies.

CREATING THE BLUEPRINT

VocaLink, the UK-based international payment systems provider that developed the UK's Faster Payments Service, believes that countries looking to adopt a real-time payments solution should, in the first instance, look to implement a payments roadmap to provide a clear guide on how they plan to offer payment services to consumers, businesses, merchants and government.

In addition, any plan should ensure that the core principles of a payments system are adhered to, namely that they are convenient, secure, 24/7, cost effective and electronic. There should also be consideration given to initiatives that provide an alternative to cash and cheque usage.

Creating a single blueprint for implementing such a programme is not easy, but we can look at economies that have introduced such systems and learn from their experiences, for example Singapore.

The Monetary Authority of Singapore started a process to introduce a real-time domestic payments system similar to that of the UK's Faster Payments Service, which would meet the needs of the digital age and shed its reliance on paper.

VocaLink, in partnership with BCS Information Systems (BCSIS), the Singapore-based leading payments solution provider, were chosen to overhaul the payments landscape in Singapore by supplying a new and innovative real-time payments platform, known as FAST.

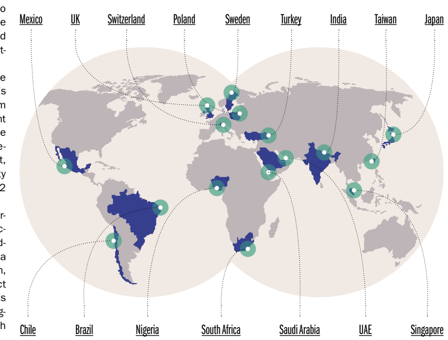
Keen to deliver rapid change to the payments landscape, Singapore's implementation of such a system was mapped out against a very tight deadline. There were also multiple stakeholders and sets of requirements in the Singaporean project, including 24/7 service availability and the adoption of the ISO 20022 messaging standard.

The latter was particularly important as it demonstrated a tacit acceptance that the payments standard is becoming global, providing a solid foundation to drive innovation, including customer-centric product innovation. Just as importantly, this adoption of an international messaging standard provides a platform with regional interoperability.

The project has been an overwhelming success due to meticulous planning, careful co-ordination and regular communication with the many stakeholders, including the central payments provider and individual members of the financial services community. The new payments system received the backing of the majority of the leading financial institutions in Singapore – 14 banks in total – and was implemented in under two years.

Looking back on the project, Ricky Lim, managing director at BCSIS, comments: "It is encouraging to see that so many transactions have already been processed using the technology.

GLOBAL MOVEMENT TOWARDS REAL-TIME SYSTEMS



> As consumers across the globe adopt a 24/7 mobile lifestyle, it is critical that the underlying payments infrastructure is capable of meeting the technological demands of the digital age

There is also enormous scope to grow digital services within the parameters of ISO 20022 which FAST uses."

Singapore has become the new benchmark, a blueprint for how real-time payment systems such as FAST can, and should, be implemented around the world.

WHAT DOES THE FUTURE LOOK LIKE?

As demand increases and global economies explore the benefits of real-time, many will look to Singapore as an example of how to effectively implement a modern payment system.

However, there is still much more that can be done, such as exploring how economies and their individual real-time payment systems can communicate with each other to speed up global transactions.

A correlation between the development of payment infrastructures and personal access to technology is also a key consideration. Mobile technology continues to develop at a rapid pace, creating consumer demand for alternative ways to pay. Maintaining this close association will have its challenges, but also offers long-term advantages.

So, as consumers across the globe adopt a 24/7 mobile lifestyle, evidenced by the fact that m-commerce is growing ten times faster than e-commerce, it is critical that the underlying payments infrastructure is fit for purpose and capable of meeting the technological demands of the digital age. Using the Faster Payments Service and FAST as blueprints, we expect to see more markets embracing real-time payments.

To find out more, please contact Deborah Souter, head of external communications at VocaLink: 0870 920 8651 or Deborah.Souter@vocalink.com

Emerging Markets

OUT OF AFRICA

The mobile banking revolution in Africa offers a blueprint for service providers to empower the more than one billion people in other emerging markets, who have cell phones but no bank accounts, as **Nic Fildes** reports

30
SECONDS AVERAGE TRANSACTION TIME OVER M-PESA
Source: Vodafone

84
COUNTRIES HAVE MOBILE MONEY SERVICES
Source: GSMA

There should have been no surprise that the breakthrough in mobile payments emanated from the Valley. However, it was Kenya's Great Rift Valley and not California's Silicon Valley that pioneered a behavioural change which even the most tech-savvy Westerners are only starting to adopt.

The mobile banking revolution in sub-Saharan Africa was born out of necessity. A lack of traditional banking infrastructure has stifled the economy in many countries where citizens have been unable to get loans, even tiny amounts of debt, due to the lack of banking services. The vast majority of transactions are still made using cash.

Yet one part of the economy has boomed as the mobile phone industry has rushed to invest in African networks.

Vodafone saw the potential to develop a system for use on basic mobile phones to disperse micro-loans in rural areas. What started as a development project quickly transformed into a genuine business model as M-Pesa (Swahili for cash) was launched by the British network's Safaricom unit in Kenya in 2007. The system became a full-blown banking service allowing people to transfer money between phones, pay for items and even receive wages all on a handset so basic that the most advanced app on the phone is the game *Snake*.

M-Pesa exploded in popularity and the concept has expanded to all corners of the world since. Morgan Stanley, the US investment bank, estimates that 40 per cent of the Kenyan economy now passes through the M-Pesa system with 17 million people using it. M-Pesa has quickly added millions of customers in other markets, including Tanzania and India.

Michael Joseph, head of M-Pesa for Vodafone, says: "This is a product for the unbanked - it is for people at the bottom of the pyramid and it's a true mobile wallet."

MOBILE MONEY

Mr Joseph says M-Pesa reduces churn for the network as people are unlikely to up sticks to a rival if they do their banking from their phone which makes it hard for traditional payment providers to compete as mobile companies can offer the service for free as it increases loyalty. "We can make the transaction fee as low as we want because our product is voice and data. Other companies would need to make money from it; we just need to break even," he says.

The success of mobile money services has had a widespread social impact. It has replaced collection plates in churches and is now used to distribute aid money to people who really need it. Soldiers in the Congo are being paid straight to their mobile phones and have realised they had not been receiving a full salary, when it was paid in cash, causing tension in the ranks. Mobile payment systems have also been used to trap kidnappers, who demanded to be paid straight to their phones, and officials taking bribes on to their handsets.

Enrique Velasco-Castillo, an analyst with Analysys Mason, says: "M-Pesa solved a critical need for people in some emerging markets - the ability to send money to family or friends in other parts of the country that were underserved by financial institutions. Also, services such as M-Pesa use very simple, yet widely available, communications mechanisms, including text messages, which means people can access them from even the most basic handsets."

There is no surprise that M-Pesa has also been the subject of much imitation with 220 payment services popping up around the world since it took off. Morgan Stanley says MTN's Mobile Money in Uganda has transferred a quarter of a billion dollars since 2010, accounting for 11 per cent of the country's GDP. MTN's revenue related to mobile money transactions rose 75 per cent in the first half of 2013 with 25 million transactions handled a month.

Millicom, the Swedish company, sees a huge opportunity for mobile money given 80 per cent of the population in markets where it operates, from Rwanda to Paraguay or Honduras, is unbanked. It expects its revenue from mobile payments to rise from $40 million in 2012 to the $1-billion mark by 2017.

The impact of such thriving activity has not gone unnoticed in the West. Shaygan Kheradpir, chief executive of Juniper Networks, who was previously head of technology and operations at Barclays, noted the success of the system and took inspiration to launch the British bank's Pingit money-transfer service. "You can't buy a beer in Nairobi without M-Pesa. We were not doing that here. They were leapfrogging us. So we developed Pingit. With the smartphone, the cloud and payment system you can reimagine it all," he says.

Indeed M-Pesa has just been launched in Romania, arguably the first time a payment technology developed for the sub-Saharan African market has been taken up in Europe.

Yet a number of fledgling services have proved unreliable and have security problems. In some cases, the consumer has proved indifferent. The Central Bank of Nigeria, for example, launched its own mobile payments platform, but only 13 per cent of the population had used it two years after launch.

"We expect significant consolidation to take place in the coming months," says Mr Velasco-Castillo. "Although there are many players, new and established alike, vying for a segment of the payments market, it is a low-margin and high-volume industry in which only the most established and trusted companies can survive in the long term."

Opinion

A QUESTION OF REGULATION AND SECURITY

Within the payments industry, who is responsible for educating the key stakeholders, members of the public, and innovators around the most pertinent regulatory changes, security issues and adoption challenges facing the sector? What is the most essential issue to communicate in 2014? Four thought-leaders each offer an answer

RUTH WANDHÖFER
GLOBAL HEAD REGULATORY AND MARKET STRATEGY, CITI TREASURY AND TRADE SOLUTIONS

With many areas of banking now being subject to ever-increasing levels of regulation, it is not only nice to know what is coming down the pike, but rather essential to the survival of the business.

We have seen significant developments across Europe over the last seven years and the speed of change is now faster than ever before.

From an increased focus on conduct of business and consumer protection, regulations now move towards the objective of more competition in the payments value chain.

Non-bank payment service providers (PSPs) have already become increasingly important players in the European payments market and the European Commission, chiefly responsible for proposing financial services legislation in Europe, is striving to provide more opportunities for these players to offer ancillary services in the payment value chain.

All providers, banks, non-bank PSPs, infrastructures, IT providers and payment schemes will need to stay close to the ever-changing regulatory agenda and, most importantly, will have to ensure they play a role helping to shape the rules of the 21st century together with policy-makers.

The alternative, to wait and see, and then comply, is likely to lead to sub-optimal policy outcomes where a lack of technical and structural understanding of policy-makers, combined with political and media-effective ambitions, risk creating unbalanced and often unintended outcomes.

ADRIAN KAMELLARD
CHIEF EXECUTIVE OF THE PAYMENTS COUNCIL

Because of the complexity of payments, it makes sense that education and communication is undertaken on a collaborative basis across the industry. Every payment intrinsically involves two parties, and customers want and expect flexibility, reliability, security and consistency. They expect this regardless of the channel and the service.

What goes on behind the scenes will have to match these expectations. This is why it is so important that we, as an industry, provide consistency and common standards across the board.

A collaborative approach helps prevent payments strategies developing in silos and enables solutions to be considered that could potentially address two or more problems simultaneously, benefiting customers as well as creating easier access for new providers.

Prime examples are the design and delivery of innovative industry services for customers, such as the Current Account Switch Service, the new Code of Best Practice on Misdirected Payments, and our mobile payments service Paym.

Each of these customer-focused projects required co-ordination across more than one scheme or payment type, to not only safeguard customers' needs, but to ensure each of the finished products adhered to high security standards, and was delivered to reduce costs for banks and new entrants.

Our buzzword for 2014 is collaboration - on all levels, to ensure the integrity of payments in the UK, but also continue to ensure that payments meet the needs of all those using them.

ADRIAN BASCHNONGA
GLOBAL TELECOMMUNICATIONS LEAD ANALYST, EY

As new forms of electronic payments come to the fore, the different entities providing these services must isolate their specific and shared roles in educating customers.

Many consumers remain anxious about the security credentials of new payment mechanisms, despite the apparently obvious upsides in terms of convenience.

At the same time, the field of innovation is widening, with banks, mobile operators and technology specialists all staking a claim to new payment solutions. This in turn raises the prospect of further customer confusion.

New services that allow money to be transferred via smartphones will require participating banks to reassure their end-users, while industry consortiums must clearly communicate the benefits of new nationwide mobile payments schemes.

Furthermore, new payment mechanisms, such as mobile payments at the retail point of sale, will require service providers from a variety of backgrounds to educate merchants as well as consumers. In such scenarios, appropriate guidance must address the privacy of customer data as innovations in location-sensitive marketing are combined with new ways of paying.

Looking ahead, the emergence of new organisations providing payments will challenge existing definitions of financial institutions, putting policy-makers under greater pressure to communicate changing regulatory frameworks.

ANDREA LEADSOM
ECONOMIC SECRETARY TO THE TREASURY

Payment systems enable a huge number of vital activities in our lives, from receiving our salaries, to writing cheques to charities, to putting in place the deposit on a new home.

Given their central place in our everyday lives, it is essential that our payment systems deliver the level of service consumers expect. And, given the importance of payment systems for banking, it is essential that they are open to new banks and challengers who want to offer something new and distinctive for their customers.

The government has taken action by creating a new Payment Systems Regulator, under the Financial Conduct Authority (FCA), on April 1 this year.

The new regulator has a strong remit to promote competition and innovation, for the benefit of British consumers and businesses. The regulator will become fully operational next spring, but we are not waiting until then to deliver benefits for consumers.

The work the Treasury is doing on cheque imaging will allow customers to have the option of depositing a cheque by photographing it on their smartphone, rather than having to queue at a branch.

And the FCA has committed to a full review of the costs and benefits of account number portability as part of its review of the seven-day Current Account Switching Service, beginning in September.