The future of cash

WHAT WILL NEW FORMS OF PAYMENT SUCH AS MOBILE AND BIOMETRIC MEAN FOR NOTES AND COINS? ALEX HAWKES INVESTIGATES

In the late 1960s, most Britons were paid in cash. By 2018, the UK Payments Council estimates that 92% of payments that we receive as individuals will be paid to us directly. The body also reveals that the use of debit cards to pay for goods grew fourfold between 1999 and 2009 – four times as fast as overall spending.

It is tempting to think, given the pace at which electronic transfers are moving, that cash – in the form of notes and coins – is on its way out. But if it is dying, it is enduring a long and lingering death.

New forms of payment – including on mobile phones and through our fingerprints – are coming in. But many are problematic. And while some experts predict an end to cash, there is no agreement. And no agreement either on what will replace it.

Exciting developments

The truth is that notes and coins are enduring. Cash spending between 1999 and 2009 rose 7%, according to a report produced for the UK Payments Council in 2010.

Nevertheless, in 2009, the body predicted that the volume of cash transactions would decline gradually over the next five years (although it said the value of those transactions would remain stable).

Cash is relatively less important than it was – with electronic payments through debit and credit cards taking over. UK Payments Council figures show that in 1999, 91% of pints in the pub were bought in cash. By 2009, cash accounted for just two-fifths of those payments, while debit cards paid for more than half.

"You would have to go some way to say cash is rising in popularity. The question is, how far is it declining?" says Mike Walters, head of UK corporate payments at Barclays.

Globally, the trend is similar. Non-cash payments grew 7.2% a year around the world between 2001 and 2007, according to a 2012 study by Jakub Górka, assistant professor in the faculty of management, banking and money markets at the University of Warsaw.

But cash remains resilient and in some cases its use is growing in real, as well as nominal terms, according to Górka, even if its share of payments is declining.

"Cashless payments are particularly popular in Scandinavian countries," Górka observed. "In 2008 in Finland, Norway and Sweden, the share of cash payments was below 50%. In the value of retail transactions, the share of cash is relatively smaller than in the number of transactions. In the country that probably has the most cashless society in the world, Iceland, banknotes and coins accounted for only 9% of the purchased value at points-of-sale. Other transactions were mainly conducted using debit and credit cards."

But Górka also noted that in Central and Eastern Europe, 93% of payments were made in cash in 2008.

Technological revolution

There are a whole host of technologies looking to eat cash's lunch. In Britain, a growing number of consumers have 'contactless' cards, which can be used to make small payments of up to £20. They are popular with retailers because they speed up payments.

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Separately, there is an initiative by the banks to move to mobile payments – where individuals can transfer payments to one another in the same way as they would send a text message. The banks are linking mobile phone numbers with bank accounts, meaning you will not need to remember a sort code or account number to pay friends and family.

More ambitious schemes envisage a future of biotech payments where you could settle a bill merely by scanning your fingerprint or iris. Futurologists are imagining a world where you can leave your wallet, mobile or any other forms of ID behind, and still pay for goods and services just by virtue of bringing yourself.

Challenges

Payment systems are changing, in some cases dramatically. But in other ways, things have happened more slowly than expected.

Barclays issued its first contactless cards in 2008. In October 2012, there were just over 3.6 million transactions through the contactless system. By contrast, there are more than 20 billion cash transactions in the UK every year.

The problems that contactless cards face are issues for other new systems, too. Security is a key one. More than half the respondents in a survey of British consumers by First Data Corporation said they were concerned over the security issues raised by a wave-and-pay (without a PIN) system.

You cannot pay for anything costing more than £20 using the cards, and everyone has to enter a PIN after a certain number of transactions, but consumers still have misgivings

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about the technology. With biotech payments, deeper security issues are also an issue.

Ad Van Der Poel, head of payments and receivables at Bank of America Merrill Lynch, says that he ran a programme that used biotech payments – fingerprints in this case – for local supermarkets. "Usability was extremely high, but change takes time, and back then, we found that security was not particularly reliable." People would be charged for someone else's shopping, in other words.

Ubiquity is another issue for contactless cards that applies elsewhere, too. Consumers are unlikely to switch to a new payment system until they feel they can use it to pay everywhere.

"Most emerging technologies are not at scale. It's difficult to read which ways [of making a payment] will become ubiquitous," Walters says.

In December 2012, there were 143,000 contactless terminals in the UK. But there are 2.8 billion cash machines. With the new mobile payments system being worked on by the UK Payments Council, there is the advantage that everyone will switch at once, when the banks switch on the system next spring.

There is inevitably an infrastructure cost to switching to a new technology. "You have to replace all payment terminals. With biometrics, you have a whole infrastructure you need to rip and replace," says Barry Kislingbury of software company Misys.

The only place in the world where biotech payments might be considered a possibility is in India, says Ian Watkinson, head of EMEA Payments at Bank of America Merrill Lynch.

"The Indian government has established the largest biometric identity programme globally. All 1.2 billion Indian residents who participate will have their fingerprints and iris scanned and stored on a database. The scheme will provide enrolled individuals with a unique identity. It will also provide the basis for facilitating banking transactions and the purchase of goods and services." >

AFRICA LEADS THE WAY

- **Next spring, UK consumers will all get the chance to do something that Kenyans have been doing for years – making payments with their mobile phones.**
- **The Kenyan M-PESA system has 17 million registered users. Exchanges allow people to either add credit to their phones or to take cash out. They can also make payments to others using their phones, without having to carry cash around.**
- **The M-PESA system in Kenya is popular because so few people have bank accounts, and carrying cash around is very risky. It shows why context is king with payment systems.**
- **Kosta Peric, head of innovation at SWIFT, the financial messaging provider, says it is a system precisely catered to the needs of less-developed parts of the world where people are 'unbanked'. "In India, for instance, 98-99% of people have mobile phones, but only 35% has a bank account."**
- **M-PESA gives Kenyans security – something they otherwise lack. By contrast, most Britons have bank accounts and the UK system will enable people to make payments directly from their accounts by linking a mobile number to an account number.**
- **The UK Payments Council has fairly modest ambitions for the UK mobile banking system, seeing it as a way for people to transfer money between each other (without having to remember sort codes and account numbers) and possibly to recompense tradesmen, rather than as a way of paying for goods on the high street.**

Cash costs money. For governments, there is the risk of loss of tax revenue through the cash economy. But could organisations move away from cash?

RETAIL OPPORTUNITY

- **For some retailers, mobile payments present an exciting opportunity – to send us more and better-targeted marketing material.**
- **Ad Van Der Poel at Bank of America Merrill Lynch suggests that if you paid for your Big Mac with a mobile phone payment, McDonald's could send your phone a chunk of the next burger – as part of a kind of electronic loyalty card.**
- **Likewise, if retailers knew you were in the shop, they could push through a pop-up message advertising an offer in a different aisle.**
- **"There are so many opportunities. Marketeers love the mobile device," he says.**
- **Smartphones hold out the opportunity of knitting together a means of communicating with clients with a payment mechanism – a huge opportunity in mobile marketing to push an idea and close the deal almost simultaneously.**
- **There will be other advantages, too, says David Hodgkinson, a principal adviser in KPMG's customer and channel consulting team.**
- **"Individuals can get more interesting discounts and offers, and retailers don't have to give away their customer data," he explains.**

Privacy is an issue for biometric systems that doesn't apply so much with other types of payment. Some children in the UK already pay for their school dinners by submitting their fingerprints for payment. But in 2010 the European Commission demanded that Britain justified the fingerprinting of children for cafeteria spending and other uses, citing privacy concerns.

Biotech payments, if not applied across the board, could have specific uses, some experts believe. Walters suggests that fingerprint payments might work well at music festivals – where people do not want to carry cash in their wallets. "In a festival, that's a fantastic solution, rather than carrying a wallet. From a security perspective, that's very appealing."

A future without cash?

Cash costs money. For retailers, there is the cost of tills, security and the fact it is not in their bank accounts. For governments, there is the risk of loss of tax revenue through the cash economy. But could organisations move away from cash entirely?

"Retailers do about a third of their transactions in cash. You would have to be really brave to turn your back on that," says Walters. "You will find businesses where cash makes up a smaller proportion moving away [from cash] – like a car dealership."

He also plays down the cost. "The interesting thing here is, if you have built an infrastructure that allows you to take cash, if you take £5,000 or £8,000, it doesn't make a huge difference."

We are steadily moving away from cash in a thousand small ways, however. The world of corporate expenses is one.

Instead of petty cash, says Walters, "You give employees a card and allow them to spend, then you can turn it off and you can block certain stores. You can cap the amounts per day, too. And payment cards are good for cost centre allocation."

But a move away from cash is not necessarily a global phenomenon. Kosta Peric, head of innovation at financial messaging group SWIFT, points to Russia, where cash is still very important. "You cannot say cash will disappear. It depends on which country, which region and to what purpose you are talking," he says.

And most experts are noticeably coy about predicting the end of notes and coins. Tim Tyler, a product manager for Misys, suggests that "there won't be cash in 30 to 50 years" – a time frame that seems so long it's hard to take seriously.

Tyler points out that there will always be people who want cash – particularly, but not exclusively, those who want to stay below the radar. He points to local barter schemes, for example, the Brixton Pound, which is a very confined form of currency in south London. They play into what he says is a "lack of trust in the banking industry". They are a kind of counter-culture move to encourage local spending – and also an implicit rejection of the broader banking system through which governments and others can track individuals' spending. "Some people like to store things under their mattress. They want to physically see cash," he says.

Even if the future is cashless, there is even less agreement on what the replacement will be. Walters suggests that there may not be one form of replacement technology for cash, but many. "There are different types of user case environments rather than one silver bullet replacement for cash."

But one thing's for sure. Whatever we use to pay with in 50 years' time, the technology will need to take retailers, and consumers, with it.

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