

Enabling Mobile Payments

A view from the industry

Piran Partners LLP

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Enabling Mobile Payments

There were plenty of Near Field Communication (NFC) demonstrations at the Mobile World Congress 2012 this February and if the handset manufacturers are to be believed we will see plenty more in the near future. But what is the outlook for consumers adopting mobile NFC?

What is NFC?

Many shops now allow you to pay for products by swiping your NFC-equipped card or touching your NFC-enabled phone, all without needing a PIN. A chip in the device is activated when it passes near to a reader deducting money from your account. At present daily transactions are limited to £15 or so.

Other applications include transferring money between owners of NFC-equipped phones or mass transit ticketing. The aim is that your mobile phone becomes your digital wallet.

The Digital Money Forum see the NFC-phone as the heart of your future digital life

NFC is not just about payments

LG will start bundling sticky NFC tags with their NFC-equipped phones. So for example you could have one in your car, that when touched would turn on the phone's bluetooth and set the satnav to take you home. Or in the office to turn on silent mode.

Other applications include claiming points, in place of carrying your loyalty cards, or receiving personalised money-off coupons.

The Digital Money Forum see the NFC-phone as the heart of your future digital life, acting as your identity confirming that you are, in fact, you whether accessing email or the TV football you've paid for.

However the challenge is the classic one. The retail infrastructure, NFC handsets, applications and customer acceptance all have to be in place to drive adoption. Then add in the commercial challenge of persuading retailers and users of the benefits of NFC,

and the growth of NFC is not a given as previous contactless money trials have demonstrated, such as Mondex almost 20 years ago.

To NFC or not to NFC?

Some retailers have decided not to wait for NFC taking the not unreasonable view that NFC is just a 'transaction' method – akin to handing over cash or your credit card – and an immature one at that.

With the Starbucks app, your credit card details are held by the retailer and your smartphone offers up a QR-code for scanning at the point of sale. Buying an accessory at an Apple store in the US is even simpler. Using EasyPay you take a picture of the product's bar code buying the product there and then using your existing iTunes account details.

And the latest Barclays Pingit app allows Barclays current account customers to transfer money to other users whose mobile phone number are in your phone's address book (and have given their bank account details to Barclays).

Even the VISA representative on their stand at MWC 2012 stated that they were experimenting with both NFC and non-NFC approaches to gauge customer acceptance and take-up.

4-party model

What all these apps have in common is that they use the traditional four-party payments model with card issuing banks (in effect your bank), acquirers (who ensure merchants get their money, and often provide the retailers' point of sale terminals too), merchants and the consumers.

Depending on the retailer's turnover, market sector and the value of the transaction, a Merchant Service Charge is levied by the acquirer. These range from 1.6% to 2.8% of transaction value for credit card transactions, and 20 to 50 pence per debit card transaction.

In return the retailer knows that they can take any card bearing the scheme's logo and that they will be paid, regardless of where or with whom the consumer banks.

The acquirers provide the link between the retailers and the issuing banks, authenticating consumers and providing liquidity to the retailers. Given that consumers typically don't settle their credit card bills for up to 45 days after any purchase, the fees reflect the cost of providing this float, together with a risk premium for default and fraud and of course the acquirer's margin.

An Interchange Fee is charged by the issuers, ranging from 0.6% to 1.3% of transaction value for credit card purchases and 1 to 18 pence for debit card transactions.

NFC Benefits?

Despite the trillions spent by consumers annually worldwide (£416bn on credit and debit cards in 2010 in the UK alone from 8.5bn transactions: UK Cards Association) NFC's economics aren't clear. Proponents argue that NFC will improve the checkout experience through faster payment processing and reduce fraud. This despite the introduction in Europe since 2004 of Chip and PIN cards.

Business cases are notably scarce though – mostly on the build it and they will come approach.

At present, unless fees are reduced for NFC-generated payments or the medium offers quantifiable benefits for direct marketing, retailers' rationale for adopting NFC aren't so clear cut. Perhaps the key exceptions are mass transit providers such as London Underground where the proprietary Oyster ticketless system is being phased out in favour of NFC so as to reduce costs.

ISIS

This appeared to be the original premise of ISIS – the AT&T, Verizon and T-Mobile US joint venture mobile payments network set up in 2010. The plan was that the service would allow users to receive personalised coupons and make purchases just with a smartphone, and then the fees would accumulate on the user's

phone bill rather than being charged to a credit card.

Given the US's lack of chip and PIN cards and associated retail infrastructure, plus a history of

closed three-party schemes like Diners and Discover Card, such an approach could possibly have worked. But in 2011 ISIS changed direction. According to The Wall Street Journal then:

"The group has adopted the less ambitious goal of setting up a 'mobile wallet' that can store and exchange the account information on a users' existing Visa, MasterCard or other card, people familiar with the matter said. The carriers are scrambling to find other ways to make money from the transactions.

To get as many users as possible, the carriers are now in talks with Visa and MasterCard to have them participate in the system they will embed in phones..."

So much for replacing the credit card companies.

Where next?

Non-financial 'interactions', rather than transactions, are perhaps the most likely early driver for NFC: everything from tapping an NFC tag to 'like' a restaurant on your way out. or the LG examples mentioned earlier.

Adoption will clearly be helped by smartphone manufacturers adding NFC across their ranges, whilst retailers will probably end up adopting NFC through the normal replacement cycle of their point of sale infrastructure.

That leaves the mobile operators.

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In the UK, Vodafone, Everything Everywhere and Telefonica have formed a joint venture to "deliver the technology required for the speedy adoption of mobile wallet and payments" aiming to offer a single point of commercial contact and technical standards for merchants, banks and advertisers to use.

At its heart is the Trusted Service Manager designed to enable over-the-air provisioning and management of accounts to any NFC-equipped mobile phone. In other words it manages how a bank's payment application or ticketing app gets securely onto a consumer's phone together with the consumer's details.

Mobile telco JVs in the UK and US are also responding to the threats posed by the likes of Google

On the phone side the payment applet, sitting either within the SIM or in a separate Secure Element, confirms that the data is going to the correct phone and authenticated user, and once downloaded that the bank knows that the data has been delivered correctly.

Individually the parties will launch their competing services in 2013 on a range of phones, following the 'soft' launch in 2011 of the Orange Barclaycard Quick Tap service on a single Samsung phone.

Interestingly Three has taken a case to the EU claiming they have been unfairly locked out of the JV and that it's "anti-competitive and akin to a joint selling arrangement". They obviously see membership of this group as offering a competitive, and commercial, advantage.

Of course the various mobile telco JVs in the UK and US are also responding to the threats posed by the likes of Google; introducing their Wallet service with Sprint in the US last year, and launching in Europe during 2012. Google aims to make its revenue by delivering coupons and other targeted offers, much of it through its Google Offers service.

2015 onwards

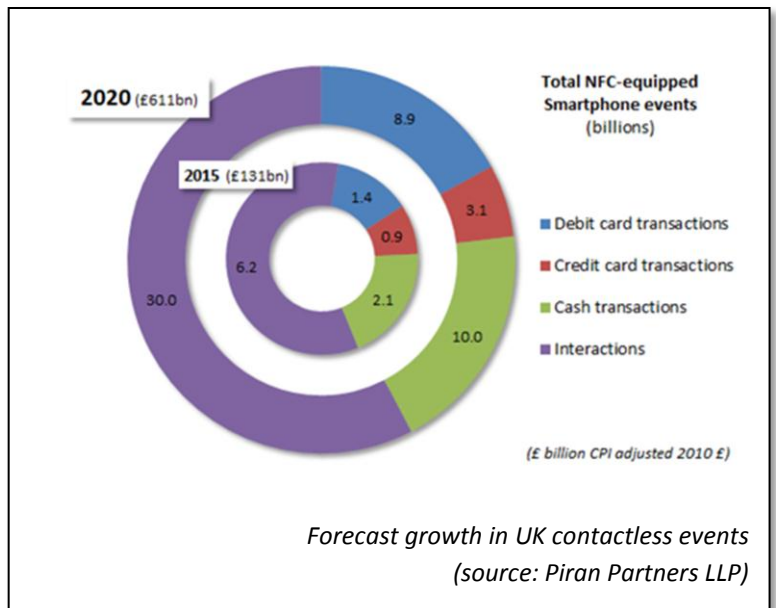
By the London Olympics there should be 100,000 NFC-equipped points of sale, out of a UK-wide base of some 1.1 million.

So realistically it's likely to be 2015 or 2016 at the earliest before mass market adoption – associated with major merchants (such as Tesco) having

converted their points of sale estate; the availability of a wide range of handsets, and; more importantly consumer trust in making payments via their mobile phones.

Even if today's non-NFC systems from Starbucks and others don't derail the shift to NFC, they may help train consumers to think of their phones as an eventual replacement for plastic cards. But that doesn't mean that for the foreseeable future, consumers will not still have a choice of payment means whether by cash, card, app or NFC (or even cheque).

Of course that leaves Apple...





About Piran Partners

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We work with MVNOs, mobile operators and organisations throughout the mobile value chain from retailers through to equipment suppliers.

Our Virtual Partner Programme has successfully delivered 20 mobile agreements on behalf of European and Middle Eastern clients. And our Programme Management practice has been engaged in major transformation programmes for established network providers.

Piran Partners' founders are industry veterans with over 20 years experience each of the TMT industry. We pride ourselves that all our partners and associates are carefully selected based on their proven practical experience in the industry.

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