



A new way to pay

Right now it is estimated that 77 per cent of the world's population owns a mobile phone. Millions of people use mobile devices every day to check their bank accounts, and authorise online transactions – but are mobile payments in-store the next logical step?

The roundtable took place at The Royal Exchange in London and was chaired by Wil Cunningham, an independent consultant working for Lloyds Banking Group. The panel consisted of: **David Kightley, retail programme delivery manager, M&S; Craig Borrett, cash card and inventory manager, M&S; Matthew Denby, account manager for Telefonica UK; Symon Vegro, sector head - connected markets, Telefonica UK; Patrick Juan, director of solutions, Ingenico; Andy Tudor, head of multi-channel solutions, Retail Assist and Paul Clarke, VP of global e-commerce and mobile products, Elavon.**

PJ: Electronic payments are an evolving world, there is a lot of innovation right now in the industry; NFC, contactless. What's going to happen to the relationship between the card and the point of interaction? What that means for retailers and what you can do with that technology, are important questions. Payment used to be done face-to-face, now that is not always the case. We will be talking about mobile commerce, what is m-commerce and what does it mean in the context of mobile payments? There is disruptive technology currently coming on to the market, we will help make sense of all these disruptions.

WC: What should be considered and or implemented in order for this technology to take off and which technology will work best for merchants and consumers?

PJ: Let's start with status; what exists in the market. In the UK we have been helping Barclays roll out what their view of contactless is. It started about three or four years ago. We developed a contactless chip and PIN device which was for Barclays and tried to use that to kick start the Barclays revolution evolution. Looking at the take up of contactless in the UK, it is actually not great, but this year we are seeing more major retailers rolling it out, McDonald's is the largest to roll out contactless chip and PIN in all their restaurants across the UK.

MD: I've had a Barclaycard for the last two years and I used it for the first time last Friday in a McDonald's. It was the first time, actually I've tried it before and it didn't work, but I tried it this time and it worked. I was thinking I have had this thing for two years. So actually as a consumer only because McDonald's have really pushed the advertising for this and it's starting to become more relevant.

PJ: And you have the largest retailer of all Tesco trailing this technology in some stores around the UK, obviously in London and M25, but there is new technology being used outside that area as well. As chip and PIN device vendors what we are seeing from all our FPs coming from most of the retailers is that contactless is a requirement now.

MD: One of the barriers that I have come across with my customers is that they feel the £15 transaction is too low. For me that makes sense somewhere like McDonald's, but for M&S probably not.

PJ: Yes, now that is the status, but there is new technology coming up, for instance the double tap with smartphones. The idea with NFC is to put your credit or debit card inside your phone. O2 know about that and new standards from Visa and MasterCard allow you to actually use that in all circumstances, because right now there is a perception that contactless is only below £15. But when your credit card is on the phone, and the transaction is above £15, the idea is to use the phone to validate the identity of the cardholder. The process is being defined that first you tap with your phone, you choose the card you want to pay with and the device will recognise the card and the phone and then it is going to ask the application to check the identity of the customer by entering the PIN on the phone.

The £15 limit is obviously a barrier. There's no point in having a credit card in your phone if you can only buy newspapers or whatever, because you will have to keep the same plastic card in your physical wallet as well. If the industry wants to make this work then we have to come up a solution. If it's above £15 or you have not done a PIN entry for a while, the device will ask the phone to check the PIN, so you enter the PIN on your phone and then you have a second tap that verifies that PIN.

SV: So what's the consumer value of that compared to plastic chip and PIN reader?

DK: If I think about it from our perspective with a joint food and clothing business rather than say from a food perspective, if your lunch transaction is under £15 then I can see the benefit. The other side, no, there's no benefit; all you're doing is replacing what was in my wallet with something in my phone.

SV: Your phone is the one thing you always carry with you. So from a value added perspective, the loyalty, having everything in one place, the management of your payment as opposed to the technology.

PC: If we take the payment speed for contactless and compare that to chip and PIN and to mobile, what is the variation?

PJ: Well there is always some constraint, for instance the interaction between the chip and PIN card and the contactless device is no more than 150 milliseconds; that is just the interaction

between the device and the card to say if it has been accepted or declined. A transaction includes putting the card in the chip and PIN device, entering the PIN, so that will obviously depend on the end user.

PC: So a mobile payment in comparison to a contactless card, is the transaction slightly longer?

PJ: Yes it is longer, there is a process. What is missing in terms of contactless and NFC is a number of mini stakeholders. You have education of the retailers and their staff, the education of the public, of the cardholder. You've had contactless devices in Prêt and EAT for a long time. I know where to find them because I know what I'm looking for, but actually it has only been very recently that they have been displayed on the top of the desk. They brought in that system about two years ago, they trained some staff and I assume because of turnover of staff those trained staff are not there anymore. It is important to educate the cardholder, but even more important to educate the staff behind the counter.

MD: Yes, I think you're right, if the cashier doesn't know what it is then they don't encourage you to use it.

DK: What's the device cost to the merchant going to be? My point is that you haven't got the investment in the chip and PIN device itself, you've got the NFC investment from a retail perspective, because actually the smartphone itself is bought by the consumer.



"Electronic payments are an evolving world"



PJ: Indeed, there is a cost to the retailer because they have to deploy these contactless or NFC capable chip and PIN devices. It's only now, as I said earlier on, that we are seeing the largest retailers pushing for contactless devices. It's an interesting thing happening. First of all at Ingenico we're trying to help solve this kind of problem by providing a product that you can upgrade to contactless in the field later on. So that's something that a retailer could deploy, change the chip and PIN device and deploy a normal chip and PIN device without contactless and then, say, take up contactless in a year's time or two year's time. We help the industry to deploy this type of thing. People are starting to think about what they can do with contactless and one of the main reasons why people are going to use contactless is not the payment. It is the coupons, it is loyalty.

WC: What will be the main challenges to retailers? And what opportunities could retailers exploit?

DK: For us there are a few things, first of all the speed of the transaction. To be able to come in and not queue; it's something that works well with self scanning. But also the opportunity to earn loyalty, which is obviously massive for any retailer. The challenges around it are ensuring it's cost effective in terms of the cost of transactions. We've already seen the changes to the price tier of contactless payments. When MasterCard and Visa first put their price structure forward there was a lot of feedback from retailers about the cost of transactions. But I think the biggest challenge in retail, in terms of introducing contactless and mobile payments, is the chicken and egg scenario; who's going to go first? We are starting to see some movement now from the likes of Tesco and McDonald's and what they are doing, but I think some card issuers have been at the forefront of this, obviously Barclaycard, others are gathering pace but others seem to be very, very slow.

MD: I think education around contactless cards needs to be a bit better and hopefully that tipping point will come in moving to mobile because there's a whole world of opportunity there. I think that we will encounter the same sort of challenges there around people being aware of what's out there.

CB: I think in terms of the £15 transaction, in terms of low value transactions, high footfall, food on the move areas, cafes etc there's great opportunities. But I think when you move towards clothing the mobile payments are going to be more appealing than contactless.

DK: So, say we've got a deal on coffee, buy a sandwich get the coffee free, so if that customer has a loyalty card the points or the deal can be put directly onto their phone and therefore tap into that side of it.

CB: Also perhaps from a card perspective you could look at things such as prepaid contactless which is issued with in-house cards. For example Starbucks' cards, things like that, you could see something where that's actually a card scheme that's branded like an M&S card and therefore has loyalty options within that as well. so you buy a certain amount of cups of coffee and you get one free.

SV: So would you expect that person with the mobile phone to tap it on a touchpad and then have another device on the till to redeem his voucher?

PJ: No, it has to be integrated. Usually the chip and PIN device is the natural point of interaction between the cardholder, the consumer, and the till and the retailer, so that will be the right place to do that. You can be much cleverer now, we are proposing chip and PIN devices that use colour now so it means the interaction between the cardholder and the retailer is a bit nicer.

PC: As David said earlier though, for the retailer it's about that natural transition to the next stage of technology, because the investment typically for any retailer is a five to seven year implementation of infrastructure. So actually in terms of barriers or potential challenges there is this lifecycle swap over, so devices that are coming to market now that are multi-functional that have the opportunity to take mobile payment but also to carry on taking the traditional chip and PIN style transaction, well that's actually quite attractive. It's about offering the consumer the choice because it will be a cultural thing for the consumer, potentially based on generation that will require different ways



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to engage in terms of payment. I think the opportunity for the retailer with the mobile wallet and mobile interaction is absolutely to understand more about the customer, because you have the opportunity to know what type of payment they're using and proactively push offers to them if they are willing to engage with that.

PJ: Actually there's been a trial in Spain, in a town near Barcelona, of NFC technology which was organised by Telefonica and La Caja, which is a large bank in Spain, and also Ingenico were providing the devices. I think that they were Samsung mobile devices. There were about 1,500 mobile phones given out across the population of that town, across different ages and actually everyone used it. There wasn't a trend that saw the younger generations using these devices to pay. I think one of the largest users was 73-years-old. So don't overplay the idea of a generation gap.

MD: I think one of the best places for adoption of this sort of technology is in bars and pubs, it's so easy. And even from the point of view of running a bar, if you can process payments a lot quicker you can serve customers more quickly.

SV: If you think about when you actually use cash now, I think I probably use cash if I'm in a bar or a pub or something like that. I think using your card can take too long in the pub, but if you had a contactless system then it would make sense to just swipe your card to buy a round.

DK: I can say without hesitation what will drive us in this area is our customers. It's great from our perspective that we're doing this roll out that will give us this capability, but actually we will not push to say; 'we want you to spend this way because we will get loyalty benefit from that' our job is to make our customers' journey as good as possible so that they come and spend more in our shops. Our customers will be the main driver of this, clearly from Craig's perspective we need to make sure that it stacks up in terms of cost and everything associated with that, and equally from a loyalty point of view we will piggyback on that and really exploit the opportunity. But fundamentally our consumers will dictate to us and say; 'I want to use this capability or not' and clearly what we have been seeing in the last couple of years is that they don't want to, for whatever reason, at the moment in a large scale. Or maybe it's not that they don't want to it's that they are not aware of it. When they are aware of it and choose to do it, we will provide that capability.

CB: We take only about seven per cent of our transactions on card, the rest of it is cash. And of that seven per cent we're talk-



ing about half a per cent from contactless. That is very low, but I think the perception is that taking a card out for the transaction is very slow. Hopefully with contactless the time to transact will be a lot less and more people will move to using contactless.

DK: In terms of value ad to the consumer, I think it's going to be the tipping point. Even in terms of what we have done so far as an industry, we need less around card schemes and technology and more around what does this mean for me as a consumer? Because I don't think any of us are talking to our customers about what the benefits of this are necessarily, so I think that's one thing that we as an industry need to do more, is talk about the tangible benefits of this, rather than saying; 'oh isn't it neat'. Even things like, it will speed up queue time, I'm not sure how much the consumer cares, they do when they are in a half hour queue but 10 seconds here or there is not a big difference.

SV: In terms of NFC I think the Smartphone is much broader than just payment though. That is one way in which the device can be used but there's clearly so many more applications.

PJ: Yes, the payment is not the main reason why people want to use a smartphone to do things. There is also the treasure hunt concept, a retailer can put NFC stickers on posters anywhere they want; in their shop or in the centre of town or in the shopping mall and consumers can collect these treasures by tapping their phone against the NFC sticker and redeem them at participating retailers.

MD: At the moment you can scan barcodes in newspapers and things like that, but NFC is going to be the next step. So if you



want more information about something being advertised, say a BMW, you just tap your phone and it will take you to their website.

AT: NFC isn't the only thing that's going to drive mobile payments and that arguably could change the face of retail to an extent. Is there an opportunity to directly sell goods to customers through applications and never visit stores, pushing offers to customers through mobile phones? If you listen to the Googles of the world and where they see the future headed, from their point of view is getting into the point of sale space, the retail space, and using mobile as means to allow them to do it.

DK: I think it's a difficult balance because consumers like the tangible experience of shopping, they like the look and feel of the product, but if you enhance that experience through the use of mobile so you've got enriched information about products etc and help support the sale, then I think that's absolutely what we should be aiming for.

AT: I think the reason why John Lewis were so keen on installing WiFi in their stores was exactly that so that you can do all your research in the store, because they still want you to go into the store.

WC: So if we do eliminate queues, what are you going to turn the rest of the shopping experience into for your customers?

DK: I think first of all there will be some consumers who will take the opportunity and don't go into a shop, but yes the opportunity to up-sell and sell more is more obvious, but equally there will be some consumers who are happy to buy off their phone and never go into a shop. But the opportunity for us once you have people in the shop in terms of up-selling is that there is everything else that the consumer wants within that large department store, there's a cafe etc. So if you can reduce that

queue time then you make everything more appealing. People will come and buy this and then finish their day off by having a meal in our restaurant.

WC: I suppose it goes beyond that as well, because you will have captured what that consumer does every time they come into the store and therefore you can work out what more you can sell to them next time.

DK: That depends to a certain extent on what approach you take to your customers. I can only speak for M&S. It is all about what our customers want in that mobile world, and we don't know what it is they want yet. Do they want a text or is that too intrusive? We would need to evolve and develop that interaction with the customer as this technology develops.

WC: When I shop on Amazon and they tell me, 'oh you bought this, maybe you'd like this, this and this as well', nine times out of 10 I'll buy it.

PC: I think it helps to drive impulse purchases, it is the same with some of the stuff you see in magazines, so if you see a bottle of wine from M&S and you can scan a code and buy it using your mobile wallet, it gets delivered the next day and you don't have to go to the store. So I think not only does NFC work in-store but for lots of other types of commerce that perhaps we are not looking at.

MD: The other thing is will NFC kill impulse purchases in-store. The amount of times I'm queuing in M&S and the queue is snaking around all these rows of sweets and chocolates and things and people are grabbing stuff off the shelves as they queue. but if you're going through very quickly, have you lost that?

CB: It really depends what kind of shopping experience you want as a customer. For example an M&S local store in the centre of



"NFC could arguably change the face of retail."

London has unbelievable footfall during the day in terms of people buying sandwiches. They are in there on their lunch break, they don't want to spend hours in there, they want to get in and get out, therefore if something like the contactless solutions does speed up the queue, or self scan tills and things like that, are a real benefit. But if you went into an M&S to buy clothes you might not want that experience, you might not want to be rushed. Not everyone wants the same thing, there are going to be consumers who are after something else.

PJ: We are introducing a new product this year which is actually a chip and PIN device that can take contactless payments which you can couple with an iPhone or an iPod touch. So you take your iPhone and you slide it into a sleeve and then you have one, single device. On one side you have your iPhone with all your applications and on the other side it is a chip and PIN device. The product has been designed for the retailer and can come with a barcode scanner. In a shoe store right now the process is not great, if you want to try a pair in a size seven, first you have to ask; do they have it? They have to go into the back, find out and bring it back. With this type of device you can scan the barcode, see if they have that size in stock, and then if the shoe fits you can buy it on the spot.

MD: For me what would be great is using this type of technology at Christmas in HMV or somewhere like that. You can just walk down the aisle, find what you want and buy it on the spot without ever having to queue up.

PJ: For the retailer in the end it is the return on investment, because there is still an investment to be made there; to buy the applications and integrate them. But there are quite a lot of people who have these vertical applications in the US now.

WC: Payments in the cloud. What are the main challenges, considerations and areas of implementation for retailers moving to the cloud?

PJ: Not all retailers will take their payment systems in house; some of them will use services and different service providers. Ingenico has its own payment service. There are considerations, first of all security; it has to be a PCI DSS compliant solution and data centre. We are using a payment service called Axis in France for the likes of McDonald's and other large customers. This is our managed service payment gateway. You have to look at security and PCI DSS and at the volume of transactions ongoing and availability is paramount, it has to be replicated in real time. All the standard IT considerations have to be taken into account.

WC: Has anybody actually done it large scale, either banking or mainstream retailers? Companies who have started up in the last four years, it is easy for them because they haven't got any technology legacies and all these different interfaces. If you have been around for 40 years it's very different.

PJ: There is a payment gateway in the cloud, as in supported by the Amazon cloud or the Google cloud or Microsoft cloud, I haven't seen someone taking the risk of putting a payment gateway in that area, but because I haven't seen it doesn't mean that it's not there.

DK: I'm not an expert on this at all, but I struggle to see the benefit. I mean what benefit would we be getting moving to this?

AT: If a retailer outsources to a rack space type scenario, you get economies of scale, from their perspective it is the retailer who would actually be able to reduce their costs.

PC: From a payment perspective, we have a number of gift loyalty type solutions they all, at the moment, sit on the application, a standalone terminal piece of kit. So every time you want to add to that or update and change it, you have to do so in a physical environment. So if you don't want to do that, here you can have that dumb terminal talk to the cloud and actually have it deliver new products more quickly and more cost effectively.

PJ: Ingenico are working on a solution to bring this kind of web technology to the chip and PIN device, it's a browser, like Firefox or Explorer, which will run pages. There are some constraints, it has to be secure PCI DSS compliant, but you can also do a chip and PIN or a contactless transaction. It also needs to be fast, when you are at home and you pay on the web you don't really care, but when you are in-store it needs to happen quickly. If you lose your broadband connection at home, you will just pay later when the connection is back, but when you are in a shop and the payment gateway is lost you still want to be able to pay. The technology is based on standard web technology, the browser browses pages in the terminal market language, you can prompt an existing application into the pad and we've developed infrastructure so that value ad service, as well as payment, can be delivered in that way.

DK: It's also a real opportunity to join up your payment gateways across your channels. But I think payments are always going to be a bit nervy. On points that aren't perhaps as critical you might see a move to the cloud sooner rather than later.