Mobile vs. Card:
Form or Function?

Will smart phones replace cards as payment instruments? Industry observers are divided: some say it will never happen, others disagree only about when it will.

To start with, let's examine the case against. Nay-sayers believe that the m payment evangelists have to answer important questions that stand in the way of a wide-spread shift:

- "Why would customers stop doing something as convenient as taking a card out of a wallet?"
- "How do you make phone payments as secure as card payments?"
- "Who's going to pay for it all?"

"Why would customers stop doing something as convenient as taking a card out of a wallet?"
Unpacking these arguments in turn, let's start with convenience. The case here is that customer habits change only slowly – that it took many years before purchasers acquired the card habit – and that in many markets they still, by a long margin, prefer cash. But what made the change happen? Incentives. Incentives for everyone, in the form of days' grace before the purchase hit a card statement and had to be settled, incentives in the form of convenient credit, incentives in the form of rewards in many cases. For a select few, there were incentives in the form of status – the platinum/titanium/black card. In many markets, they were enough to change the habits of a lifetime. In some, as noted, they were and are not enough: customers fear losing financial control, worry about security, rather enjoy peeling notes off a wad of cash.

For mobile to replace credit card, it will have to offer at least these benefits, or offer something even more compelling. And its advocates are quite sure that it can: they point to the tidal wave of new phone apps that use bar codes to initiate and authorise payments, GPS technology to alert customers to bargains nearby, mobile wallets to collect, store and redeem rewards points, real time balance and transaction alerts – the list is as endless as entrepreneurs' ingenuity. Surely, the argument runs, one of them, or a combination is going to provide the disruptive technology that will tip the scales.

"How do you make phone payments as secure as card payments?"
Very naturally, customers worry about the possibility that access to their card or bank accounts can be hijacked, that these very clever technologies make them more vulnerable rather than less.

In a rather scary demonstration in the US recently, a security consultant used readily available kit to read a contactless card in volunteer's wallet, used the data to create a fake card, and a reader to mimic a terminal to debit his account – all without even touching the volunteer. Imagine the opportunities, they said, for a cyber thief in a subway.

Of course, the networks rushed to pooh-pooh the idea, pointing to security features that minimise risk. But hackers are skilled at finding loopholes: until the industry wised up, they lurked outside stores with unsecured wireless terminals, read the transmitted data and pocketed substantial sums in fraud. And it's true to say that the industry recognises the risk: otherwise, why are there caps on the value of contactless transactions?

Not only is there a risk issue, there's an issue with how it's handled. Banks have long since put in place policies that safeguard customers against fraudulent transactions. Mobile phone operators, a key element in the processing chain for m payments, have a long way to go before they provide the same level of protection. Until this is fixed, it's a flaw that will not play well with consumer advocacy groups.

And fixing it will cost money. Which brings us to the final question:

"Who's going to pay for it all?"
Just to take one example – what's in it for the merchant? Why should he carry any incremental costs for upgrading his terminal hardware or software? Back in the day when card salesmen were busily trying to convince merchants to accept cards, they had a value story to sell: compared with cash, cards had higher transaction values, and offered better security. Will real time location-specific offers from m payments beat that? For sure, there are some exciting experiments: Square, for example, provides merchants with a card reader which simply plugs into a smart phone, but there's a flat rate for all cards of 2.75%, which means that the focus has to be on smaller outlets. Right now, the jury is still out on whether there is a compelling m payments case which covers the entire merchant community.

More broadly, the need to link together phone manufacturers, terminal manufacturers, software companies, payment platforms and telcos is proving a challenge. In the US, for example, Isis is a mobile payment network joint venture linking AT&T, T-Mobile and Verizon, while Google Wallet brings together Visa, American Express, Discover, MasterCard, Nexus and Sprint. All of them face the difficulty of deciding who does what and who pays for it. At a time of frantic experimentation, there's also a worry about committing too soon to an approach which may be obsolete tomorrow. As a consequence, almost all the players are backing more than one horse.

Opinions also differ about the importance of the so-called Crackberry Generation: plenty of evidence that they are enthusiastic adopters of new technology – but when will they have the financial fire-power to push m commerce to the tipping point where it becomes the norm?

This nervousness – and, who knows, among banks an understandable focus on rebuilding balance sheets – has led to very divided opinions about contactless, often seen as a way station en route to m payments. On this side of the pond, for example, almost all Barclaycard credit and debit cards are contactless, while HSBC has yet to issue one.

And yet…who can forget the example of m payments pioneer M PESA, which from a standing start, now processes more transactions in Kenya, its launch territory, than Western Union does globally? Significantly, it has expanded from person to person payments into consumer to business payments: M PESA subscribers can now use their phones to pay supermarket bills. Maybe this is a pointer to where m payments will really take off: in the huge emerging markets where traditional banking habits have yet to be established. And when it does, can more established markets afford to be far behind? According to Barclays Capital, U.S. m commerce hit $5.3 billion in 2011, up 83 percent from the year before. Want to take any bets?

This piece benefits from insights gained during conversations with David True (www.broadlycurious.com)