



Mobile payments

On the shoulders of contactless payments

August 2011



The “chicken-or-egg” dilemma of any new payment method is that merchants do not invest unless many clients use it, and clients are reluctant unless many merchants accept it. New m-payments might have it easier once merchants gradually upgrade their terminals to accommodate contactless applications. Consumers flock to smartphones anyway. This lowers the entry barriers for new mobile payment solutions but does not guarantee a smash hit. [chart 1](#)

The trend towards smartphones is unmistakable. Already 20 to 40% of consumers own a smartphone. More sophisticated applications (e.g. games, social networking, GPS navigation), cheaper phones and a bigger choice of data plans will fuel further adoption. [chart 2](#)

Credit and debit cards may go contactless. German savings banks (Sparkassen) announced their plans to equip all 45 m debit cards with NFC (near field communication) chips by 2015 to facilitate contactless payment of small amounts at the point of sale. Major credit card firms are also pushing the issue. Visa Europe reckons there will be 20 m contactless cards in UK by the end of this year (plus 10 m in the rest of Europe). [chart 3](#)

Contactless is basically an assault on cash. Currently, most Europeans use cash when buying low-value items such as snacks or newspapers. Contactless payments schemes are keen to change this. A large fast-food chain, for instance, has announced it will accept contactless payments for amounts of less than £15 in its 1,200 British restaurants beginning this year. [chart 4](#)

There is interest among merchants – not excitement. Surveys indicate that about 30% of merchants in Germany and a similar share of major retail chains in the US plan or consider offering contactless payments options. The needed card readers could also be used to process payments via mobile phones if the parties agree on a compatible standard. [chart 5](#)

Mobile phones may let consumers choose from a variety of payment options. A clear advantage of (future) smartphones is that they may be able to serve as a single access point to a potentially large selection of payment options: pre-paid wallets, credit and debit cards, coupons, loyalty schemes, etc. [chart 6](#)

Consumers are still reserved, but media barrage takes its toll. Most consumers have to be convinced of using mobile payments because established payment options satisfy their needs – at least in Europe and the US. [chart 7](#)

Margins will be thin. Consumers are unwilling to shell out for the privilege of mobile payments. Neither will merchants accept much higher fees. New revenues might come from combining m-payments with advertising and coupons but consumers will only accept so much advertising on their phone and may react huffily when their privacy is infringed. Moreover, given that entry barriers might be low, a whole armada of new mobile payment options may compete to substitute cash giving each little leverage over prices. [chart 8](#)

M-payments: More of an addition than a revolution. The most likely scenario (as of now) appears to be that mobile payments create a flurry of additional options to initiate a payment and combine it with other services. The pace will be set by merchants who first need to upgrade their terminals. This needs substantial investments and will only happen over time. Some consumers will use m-payments because they love technology, others might want them to cash a coupon and many might not care at all. [chart 9](#)

www.
dbresearch.com

Author

Thomas Meyer
+49 69 910-46830
thomas-d.meyer@db.com

Editor

Antje Stobbe

Technical Assistant

Sabine Kaiser

Deutsche Bank Research
Frankfurt am Main
Germany

Internet: www.dbresearch.com

E-mail: marketing.dbr@db.com

Fax: +49 69 910-31877

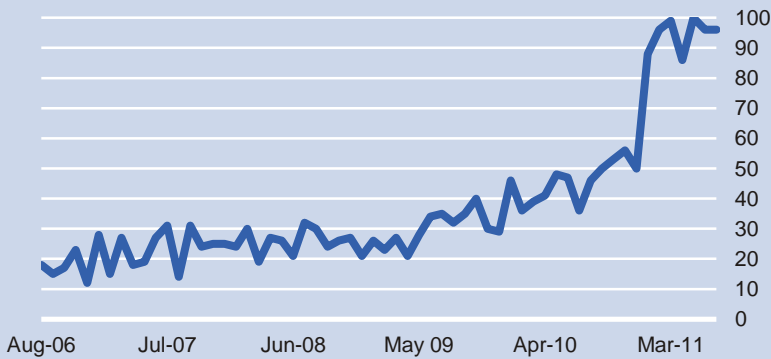
Managing Director

Thomas Mayer



Interest is rising this year

Search volume at Google for "mobile payments", US



Search volume is relative to total and scaled between 0 and 100. Related terms included.

Sources: DB Research, Google Insights for Search, 2011

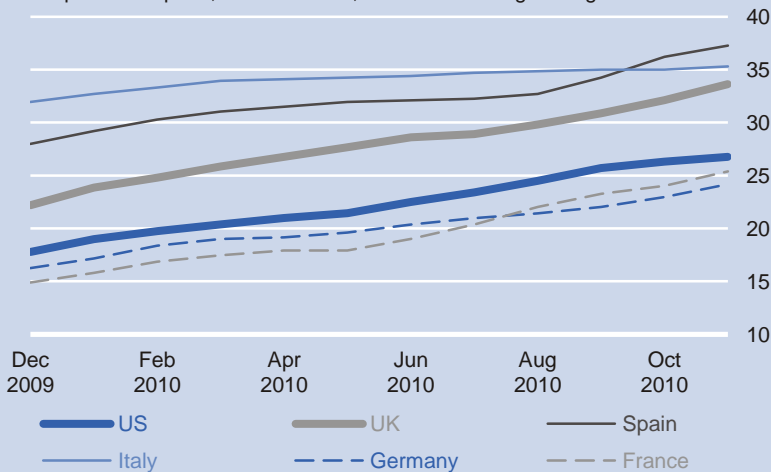
1

The “chicken-or-egg” dilemma of any new payment method is that merchants do not invest unless many clients use it, and clients are reluctant unless many merchants accept it. New m-payments might have it easier once merchants gradually upgrade their terminals to accommodate contactless applications. Consumers flock to smartphones anyway. This lowers the entry barriers for new mobile payment solutions but does not guarantee a smash hit.

Mobile payments or m-payments are considered here as payments initiated using a mobile phone (excluding voice). They may use NFC (near field communication) chips at the point of sale (few phones are endowed with NFC as of now) but other technologies (e.g., barcodes) are possible as well. Contactless cards are debit or credit cards with integrated NFC chips. See also the [E-Banking Snapshot 34](#) for more information. [back to front page](#)

Mobile phones are getting smarter

Smartphone adoption, % consumers, 3 months moving average



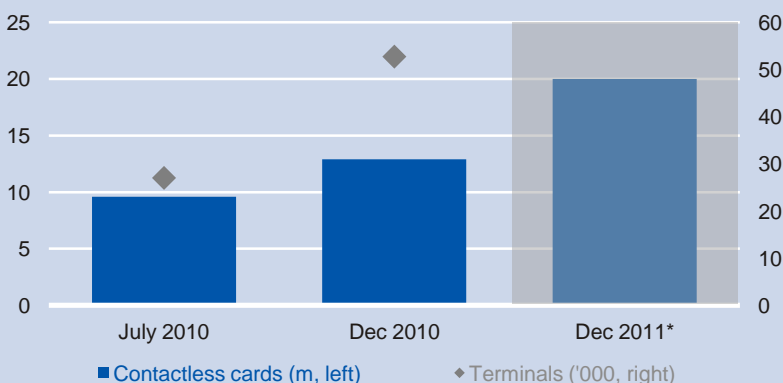
Source: comScore, 2011

2

The trend towards smartphones is unmistakable. Already 20 to 40% of consumers own a smartphone. More sophisticated applications (e.g. games, social networking, GPS navigation), cheaper phones and a bigger choice of data plans will fuel further adoption. [back to front page](#)

Don't touch – we're British

Adoption of contactless cards in the UK



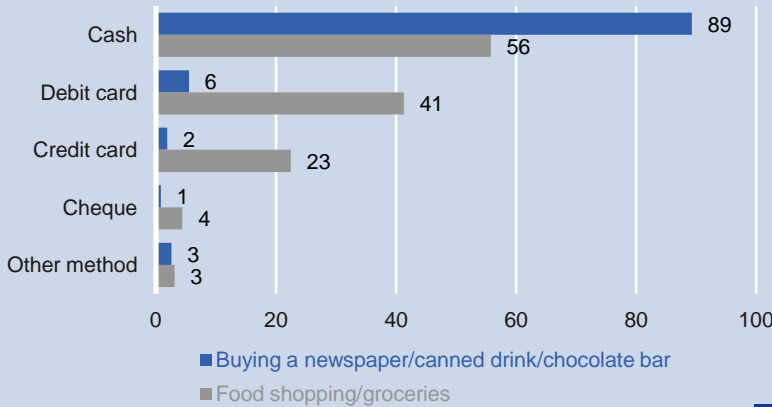
*Estimate by Visa Europe. Sources: UK Cards Association, Visa Europe, 2011

3

Credit and debit cards may go contactless. German savings banks (Sparkassen) announced their plans to equip all 45 m debit cards with NFC chips by 2015 to facilitate contactless payment of small amounts at the point of sale. Major credit card firms are also pushing the issue. Visa Europe reckons that there will be 20 m contactless cards in UK by the end of this year (plus 10 m in the rest of Europe). [back to front page](#)

Cash is king – time for a revolution?

How do Europeans usually pay at the POS? (%)



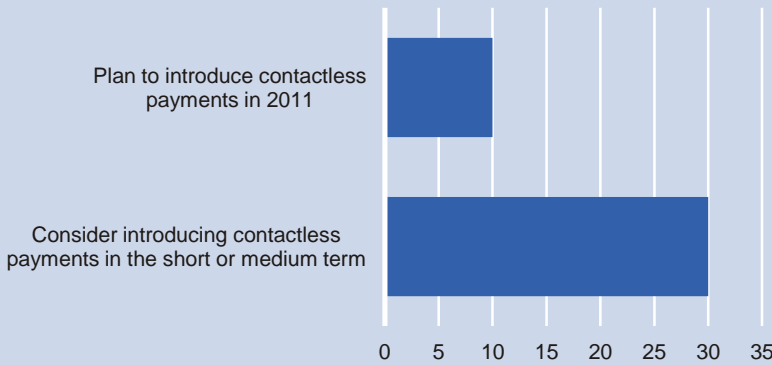
Source: Forrester Research Inc, 2008

4

Contactless is basically an assault on cash. Currently, most Europeans use cash when buying low-value items such as snacks or newspapers. Contactless payments schemes are keen to change this. A large fast-food chain, for instance, has announced it will accept contactless payments for amounts of less than £15 in its 1,200 British restaurants beginning this year. For larger grocery bills, credit cards are already popular in the UK but not much in Germany. [back to front page](#)

That may be optimistic

Share of German retailers, %



Basis: 448 retailers in Germany representing 58,000 shops

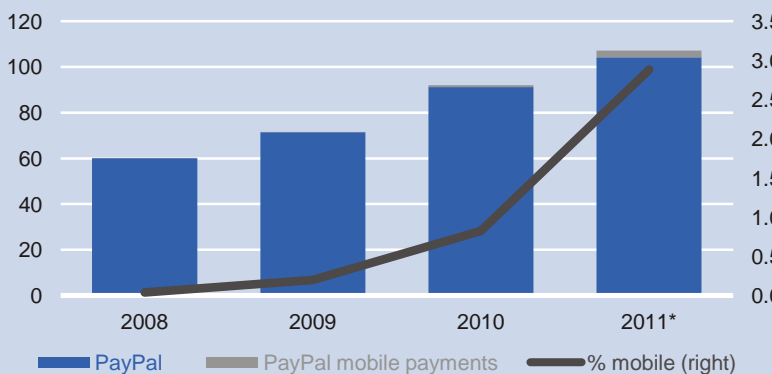
Source: EHI Retail Institute, 2011

5

There is interest among merchants – not excitement. Surveys indicate that about 30% of merchants in Germany and a similar share of major retail chains in the US plan or consider offering contactless payments options. The needed card readers could also be used to process payments via mobile phones if the parties agree on a compatible standard. [back to front page](#)

3% of payment volume initiated via phone

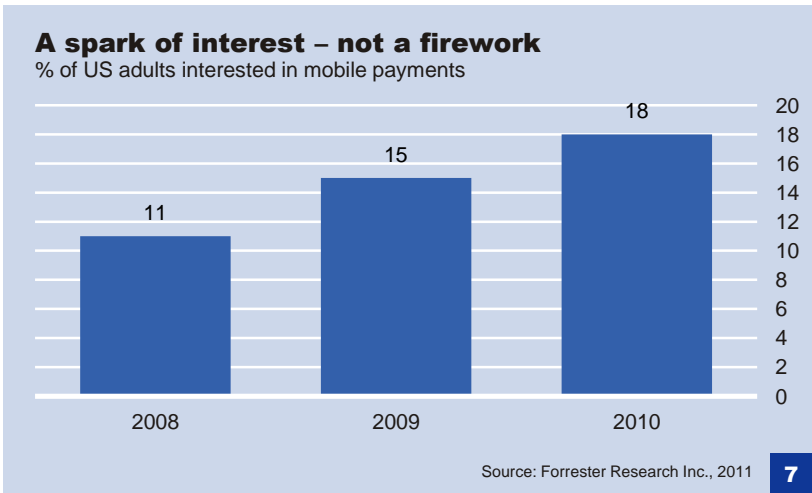
Transaction volume at PayPal, USD bn (left)



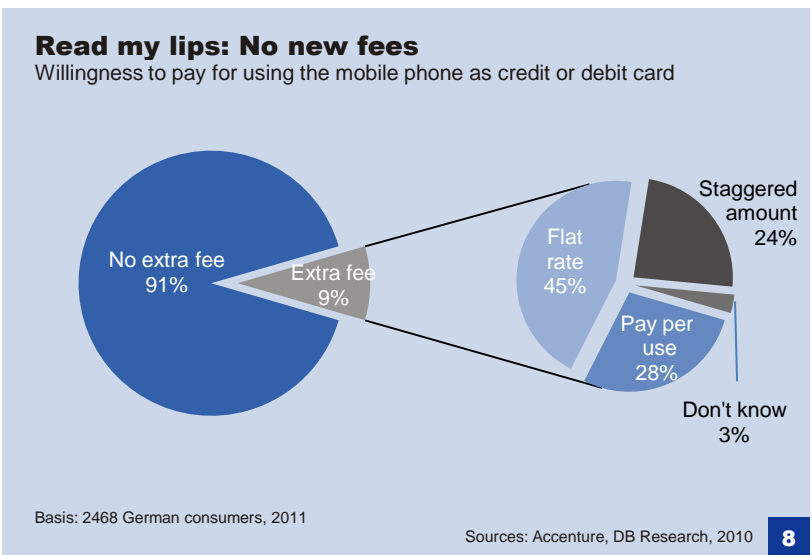
* Extrapolation (PayPal), estimate (mobile). Sources: DB Research, PayPal, 2011

6

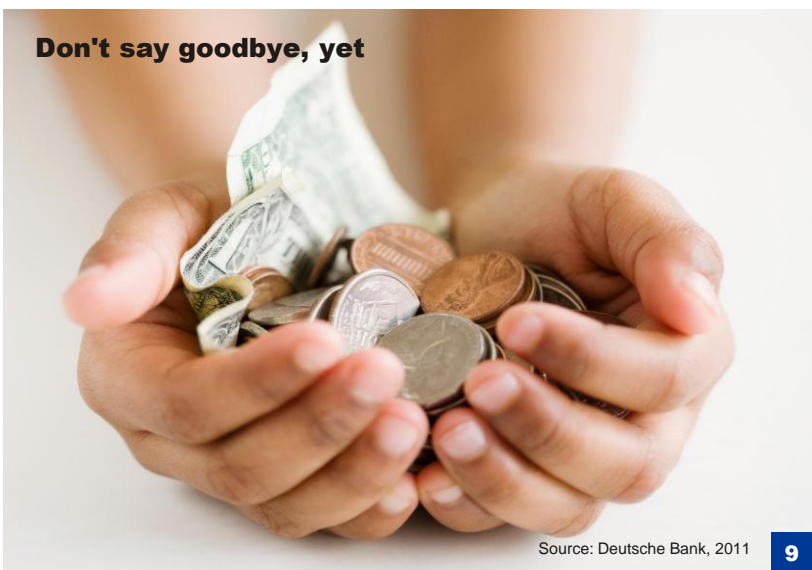
Mobile phones may let consumers choose from a variety of payment options. A clear advantage of (future) smartphones is that they may be able to serve as a single access point to a potentially large selection of payment options: pre-paid wallets, credit and debit cards, coupons, loyalty schemes, etc. PayPal, for instance, lets clients already initiate payments via phone which accounts for 3% of transaction volume. [back to front page](#)



Consumers are still reserved, but media barrage takes its toll. Most consumers have to be convinced using mobile payments because established payment options satisfy their needs – at least in Europe and the US. Yet the constant talk about mobile payments also sparks some interest, albeit from a low base. According to a survey sponsored by BITKOM, 19% of Germans are interested in using m-payment instead of debit or credit cards. In the US, 18% of adults are interested in m-payments. Consumers are more eager to use m-payments when there is a clear value added, e.g. when paying for parking. [back to front page](#)



Margins will be thin. Consumers are unwilling to shell out for the privilege of mobile payments. Neither will merchants accept much higher fees. New revenues might come from combining m-payments with advertising and coupons but consumers will only accept so much advertising on their phone and may react huffily when their privacy is infringed. Moreover, given that entry barriers might be low, a whole armada of new mobile payment options may compete to substitute cash giving each little leverage over prices. [back to front page](#)



M-payments: more of an addition than a revolution. The most likely scenario (as of now) appears to be that mobile payments create a flurry of additional options to initiate a payment and combine it with other services. The pace will be set by merchants who first need to upgrade their terminals. This needs substantial investments and will only happen over time. Some consumers will use m-payments because they love technology, others might want them to cash a coupon and many might not care at all. [back to front page](#)



© Copyright 2011. Deutsche Bank AG, DB Research, D-60262 Frankfurt am Main, Germany. All rights reserved. When quoting please cite "Deutsche Bank Research".

The above information does not constitute the provision of investment, legal or tax advice. Any views expressed reflect the current views of the author, which do not necessarily correspond to the opinions of Deutsche Bank AG or its affiliates. Opinions expressed may change without notice. Opinions expressed may differ from views set out in other documents, including research, published by Deutsche Bank. The above information is provided for informational purposes only and without any obligation, whether contractual or otherwise. No warranty or representation is made as to the correctness, completeness and accuracy of the information given or the assessments made.

In Germany this information is approved and/or communicated by Deutsche Bank AG Frankfurt, authorised by Bundesanstalt für Finanzdienstleistungsaufsicht. In the United Kingdom this information is approved and/or communicated by Deutsche Bank AG London, a member of the London Stock Exchange regulated by the Financial Services Authority for the conduct of investment business in the UK. This information is distributed in Hong Kong by Deutsche Bank AG, Hong Kong Branch, in Korea by Deutsche Securities Korea Co. and in Singapore by Deutsche Bank AG, Singapore Branch. In Japan this information is approved and/or distributed by Deutsche Securities Limited, Tokyo Branch. In Australia, retail clients should obtain a copy of a Product Disclosure Statement (PDS) relating to any financial product referred to in this report and consider the PDS before making any decision about whether to acquire the product.

ISSN Internet: 1619-4829 / ISSN e-mail: 1619-6465