

# Mobile Payments: The importance of trust and familiarity and the need for co-operation

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## **Report Content**

|  |    |
|--|----|
| Synopsis.....  | 2  |
| Background: The Plethora of Choice.....                    | 2  |
| Consumer Readiness for Mobile Payments .....               | 3  |
| Adoption Funnel: Trust, Consideration and Preference ..... | 5  |
| Drivers of Adoption .....                                  | 6  |
| Co-operation: The Quickest Road to Drive adoption .....    | 7  |
| Further information and contact.....                       | 8  |
| APPENDIX .....   | 9  |
| Methodology .....  | 9  |
| Definition of Mobile Payments .....                        | 10 |
| Terminology.....   | 10 |
| Other Data Sources .....                                   | 11 |

## Synopsis

Recent research conducted by GfK shows the appeal of close proximity mobile payment services varies greatly across different markets and target groups. Mobile payments are seen to have two core consumer benefits: convenience and wider ecosystem integration. Whilst the convenience of quickly paying for small items in store is a key benefit, the full potential of NFC will be realised when mobile payments are integrated with other smartphone services, such as those based on a user's location. However, with this level of service development, and potential security risks, what will drive consumer adoption of mobile payment services?

Overall, at a global level, trust and familiarity drive preference of mobile payment providers. Each brand category brings different benefits to the world of mobile payments. Financial brands add a layer of trust that mobile brands have yet to nurture in the financial world. Network carriers have a well-rehearsed customer support network and the connectivity infrastructure to make mobile payments fast, reliable and secure. And for mobile manufacturers and OS providers, it's the integration of physical payments with the virtual world of apps and services.

Creating a service consumers trust ultimately means leveraging the trust placed in financial brands, but it is also vital to have a presence in the mobile sector. Those brands that can evoke the trust of a financial brand and familiarity of a mobile brand will be in the best position to drive adoption of their mobile payments service.

Therefore, the co-operation of different sector specialities is the quickest route to link the virtual and commercial world with the physical to exploit the full benefits of NFC technology and mobile payment services.

## Background: The Plethora of Choice

Near Field Communications (NFC), the technology that supports close proximity mobile payment services, has been around for many years, but service provision is only just beginning to emerge as a reality for consumers in most countries. Every year since 2006 there have been reports that have forecast increasing volumes of NFC enabled mobile handset shipments. Each time these reports are revised downwards and NFC enabled mobile phones and services have failed to materialise. One of the reasons for this delay to market has been the critical question: 'Who owns the relationship with the customer?'

The race to deliver mobile payments to a mass market consumer audience is an important one with many different brands from different industries involved. From financial corporations to telecom companies, brand and sector are carefully and strategically positioning themselves to maximise their opportunities for success.

For financial institutions, a move into mobile is a critical evolutionary step. It will modernise their service offering and refresh their brand image after much negativity during the recent financial crisis. Mobile network operators, on the other hand, are eager to enter this fledgling sector to diversify their revenue streams from their core business of voice, text and data. Smartphone operating system (OS) providers are also keen to be involved, as NFC represents an important data source, bringing together online and offline purchasing behaviour, which will enhance the value of their ecosystem to

marketers. Finally, mobile device manufacturers wish to leverage their scale and develop a service offering that strengthens their relationship with the end user.

As a result, many brands are setting off on a new course yet to be defined or fully understood. They are forming new partnerships along the way and competing against brands they have never faced before. Whilst service propositions are still being crafted and alliances forged, GfK is interested in the consumer's view of this brave new world of personal finance. Following GfK's experience in this field, it is evident that for some consumers the prospect of adding payment functionality to their smartphone is an exciting convenience. However, there are drawbacks that create barriers and caution among consumers - most obviously the prospect of security and personal data theft.

This report sets out to measure how sceptical consumers really are across a selection of key countries around the world. Although most of these countries are on the verge of having the option to use mobile payments for the first time, we have also included South Korea which has been using mobile payments for many years now. Ideally we would have preferred to include Japan in this research, as it is the benchmark country when it comes to mobile payments. However, given the recent tragedies, consumer research was not feasible so we included South Korea instead.

Consumers will be presented with a plethora of mobile payment services over the next 12 months. Thus, the research conducted has measured levels of trust, consideration and preference within brand and industry categories. The report will identify overall drivers of brand and category preference and, more specifically, among smartphone owners and early adopters.

## **Consumer Readiness for Mobile Payments**

Research conducted by GfK in April 2011 tested the appeal of mobile payment services in nine markets. Of these, South Korea was the only nation that offered established mobile payment services to the consumer market. Consumer appeal for mobile payment services varies across the nine markets, which, broadly speaking, fall into two categories: countries with established financial payment infrastructures, and countries whose financial infrastructure is young and still developing.

The South Korean market has benefitted enormously from government-backed investment and reforms in the technological and financial infrastructure of the country. This has meant that the telecommunications and financial network is highly advanced, paving the way for mobile payment services as early as 2002. Although China and Brazil are very different economies to South Korea, they share with it the opportunity to invest in new technological and financial infrastructures, rather than evolve legacy systems. China is currently laying huge fibre optic networks and investing heavily in internet protocol (IP) services and the rolling out of 3G networks to their vast installed base of mobile phone users. In terms of mobile payments, several large scale trials are being run by major mobile network operators – although, despite much excitement, nothing has yet been launched. Given the speed at which China is developing, it is little wonder Chinese consumers find mobile payment services the most appealing (82%) of all the countries studied. Some of the key benefits to consumers of mobile payments are convenience, speed and simplicity: the standardisation and widespread acceptance of this kind of payment process among a population that relies heavily on mobile would only heighten its appeal in China.

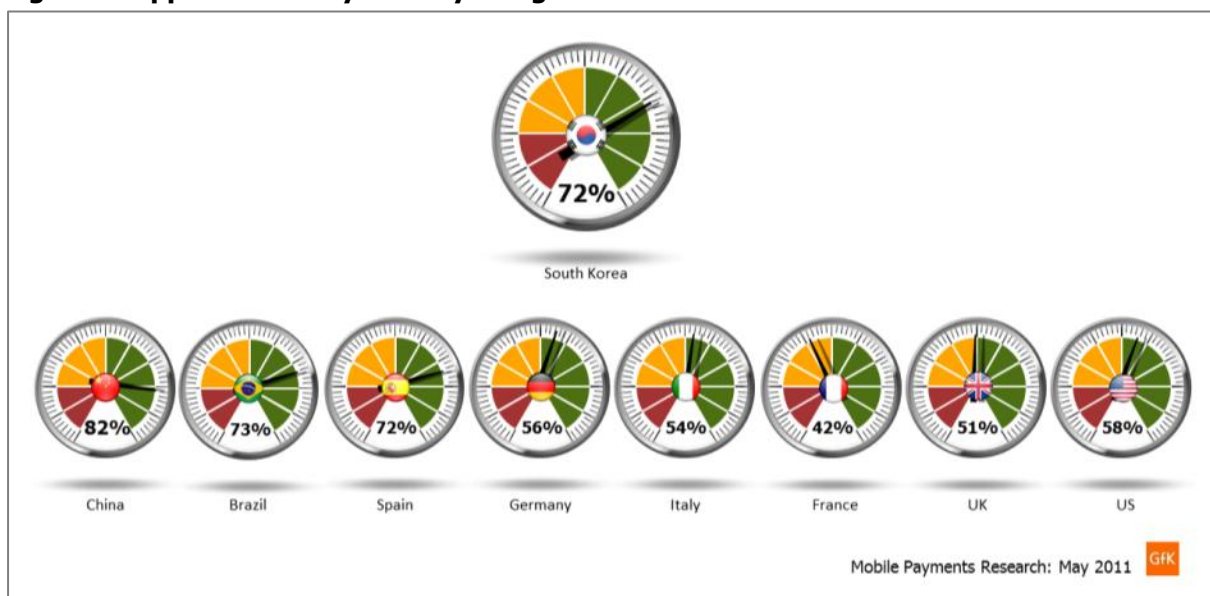
Similar to China is Brazil, the world's fifth largest country in both land and population. For consumers in Brazil, mobile is a hugely important channel for day-to-day information and tasks. As such an

upgraded national payment system supported by mobile phones is a highly appealing prospect, which was reflected in this research (73%).

In more developed markets like the US and Europe, financial systems have been established for much longer. The process of paying for products in store is already a fairly convenient one, with most shops accepting credit and debit cards. The introduction of mobile payment services in these markets therefore receives a more mixed response from consumers. The appeal of mobile payment services is lower than developing markets, with circa one in two people finding the prospect of using mobile payments appealing.

Figure 1 (below) shows the varying appeal scores for mobile payments across the countries we tested (see appendix for appeal score calculations)

**Figure 1: Appeal scores by country using South Korea as a benchmark**



The one country that not only has a well-established financial and telecommunications system but also high levels of appeal is Spain. There is a lot of momentum in Spain for mobile payments, with consumers having quickly adopted smartphones and Spanish banks having trialed mobile payments for some time with much publicity. In addition, Spain's leading mobile network carriers have signed a NFC collaboration deal that aims to unify the consumer experience and simplify NFC services.

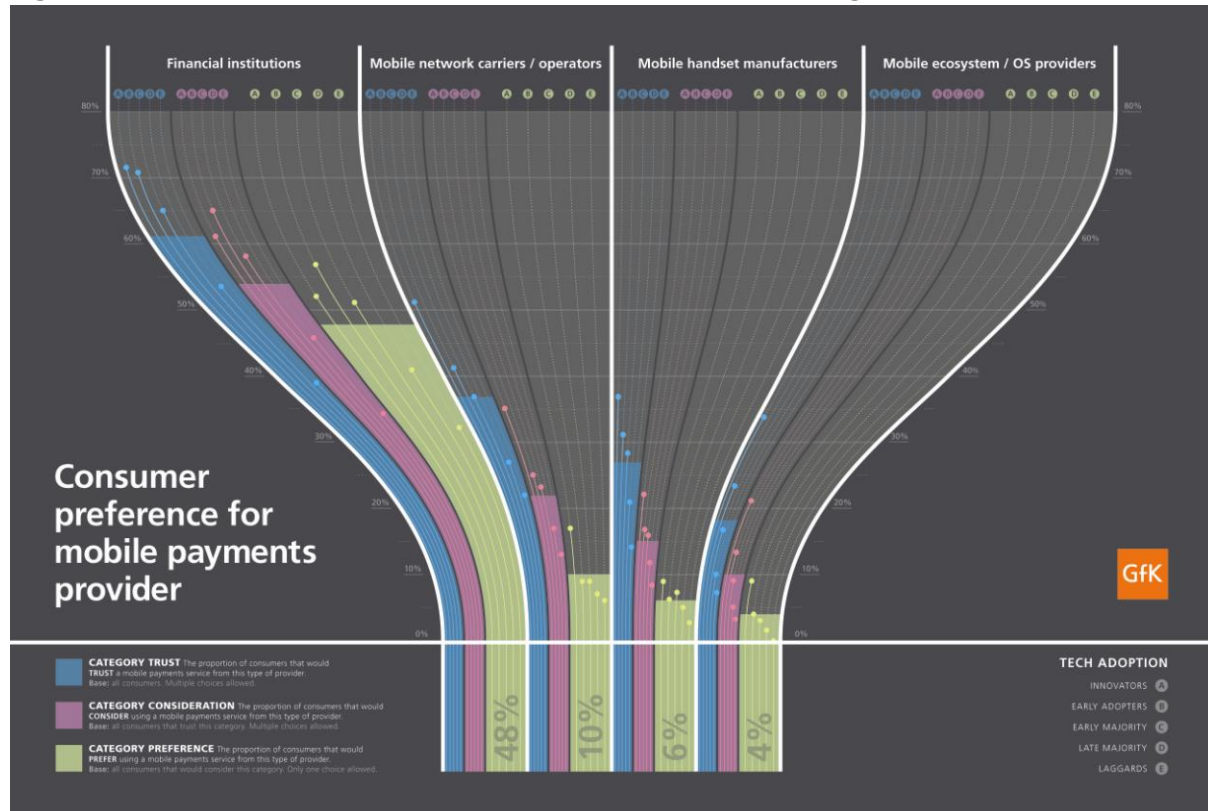
There are, however, real signs of promise for the future, when we look at the aggregated appeal score, on both global (62%) and country level. In particular, certain key groups show higher levels of appeal for mobile payments, offering fertile ground for future take up. These include smartphone owners (72%), younger consumers aged 16-24 (75%) and innovators/early adopters (74%).

A significant universal finding from the research is that trust is the biggest driver of service preference and is most important at driving adoption of mobile payments. With so many new brands entering this market, developing this trust is essential, especially for many undecided consumers in developed markets whose current system is working well.

## Adoption Funnel: Trust, Consideration and Preference

With trust being a key driver of adoption, GfK's research measured the level of trust consumers placed in high profile brands in the financial, mobile and telecommunications industries. The data visualisation below shows global consumer trust (blue), consideration (purple) and preference (green) scores for each industry category. Each category is ranked from left to right in order of consumer share of preference. Within the trust, consideration and preference scores, there are some interesting variations between the different categories of consumers (seen bottom right), which have been broken out within each bar.

**Figure 2: Trust, Consideration and Preference of Business Categories**



The research data shows that the financial institutions brand category has the most trust, consideration and preference among consumers. Furthermore, the disparity between trust and consideration, and between consideration and preference, is lower than that experienced by mobile and telecommunications brands.

Mobile network carriers have the highest levels of trust, consideration and preference out of all the mobile brands, but they are still quite far behind financial brands. As we might expect, the data in Figure 2 shows significant increases in all three metrics for innovators and early adopters, whereas the late majority and laggards show decreases. The uplift in trust among innovators for mobile OS providers in particular is considerable, going from 18% global average to 34% among this group.

When we drill down into the data further we find that, of the financial brands, banks have the highest levels of trust, consideration and preference. Even after the dark cloud of the recent financial crisis, banks (in this case, high street banks) still seem to evoke a high degree of trust. We cross referenced this finding against consumer satisfaction scores for current accounts on GfK's definitive Financial

Research Survey (FRS).<sup>1</sup> The data in this study has remained stable throughout the recession, fluctuating no more than three percentage points since January 2007, with a satisfaction score of 65.7% in March 2011. Consumers still trust banks to process payments and reliably manage their personal finances. With this in mind, it is no surprise that consumers trust and prefer financial institutions most with processing their payments on mobile phones, which seems a natural progression.

The research data shows that whilst mobile and telecommunication brands have significantly lower trust, they can improve this by partnering with a trusted financial institution. Network carriers moving to partner with banks and credit card providers create an uplift in perceived levels of trust among consumers. With network carriers offering mobile payment services alone, only 24% of consumers would feel assured using their service. However, a service in co-operation with a bank sees this rise to 32%.

## Drivers of Adoption

Before we look at how the drivers of adoption vary, it is worth looking at the benefits of mobile payments in more detail. These fall into two broad categories:

- **Convenience.** Close proximity mobile payments allow a consumer to touch their phone against a NFC reader to pay for their items. The process is quick and if the transaction is under £15, the user does not have to enter a PIN. For small purchases, like newspapers or a coffee on the way to work, mobile payments offer a quick and simple method of paying for items, which in turn reduces queues and congestion in store.
- **Ecosystem integration.** With payments being executed with a mobile phone there are a number of benefits over using just a contactless card, which ultimately offer the same benefits stated above. Firstly, all the mobile phone offers a user interface (UI) where the consumer can interact with their account. Apps can be developed that could theoretically provide account information, purchase history and the current balance for the account. If the app could also interact with other applications and mobile services such as location based services, consumers could receive promotions and offers on products of interest in stores nearby, based on previous purchases. In addition, product recommendation engines can be developed by either suggesting products based on previous purchases or linking a user's account to their social networks to receive tips on what their friends have bought.

Whilst, on the one hand, all of this might sound extremely appealing, on the other, it could sound like one big security risk. Security – one of GfK's four 'TechNeeds'<sup>2</sup> - is a huge issue, which is why one of the key drivers of mobile payment service preference is brand trust. Which brand do consumers trust to process mobile payments and keep their most personal data safe from fraud and theft? As we've seen already, globally, most consumers place their trust in financial institutions. However, there are three interesting brand differences worth highlighting:

Firstly, Nokia in China is among the most trusted brands of any category in the research, receiving a score of 38% - much higher than its global average of 14%. In addition, when we break down Nokia's global preference score, most votes of preference come from China. The reason for this level

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<sup>1</sup> GfK NOP Financial Research Survey (FRS), 6 months rolling Jan 2007-March 2011, 60,000 adults interviewed annually  
<sup>2</sup> GfK Business & Technology, TechNeeds

of Chinese consumer preference is, again, trust, with one-in-two people in China stating trust as the main driver of preference. Nokia has built a strong brand in China over the years, based on delivering reliable mobile solutions to a large proportion of the Chinese population. This shows that whilst financial brands may lead on trust, mobile companies with strong brand equity can leverage it in an area that is not their core business or current specialism.

Secondly, Apple, which also has a very strong brand which drives higher levels of trust among their existing customer base. This raises their global trust average of 11% to 38% among iPhone owners. Those that own iPhones are already used to using their iTunes account to pay for apps and media content. As these Apple consumers have already experienced this kind of remote financial transaction, the step to paying for physical products with their iTunes account is less of a stretch.

And finally, PayPal, whose experience in delivering remote mobile payment services to consumers places it in a strong position in both financial and mobile spheres. As a brand it boasts high levels of trust and consideration. But, most interestingly, it has the highest brand preference of all those tested in this research. At a global level, trust usually drives mobile payment service preference. However, for PayPal, the drivers are completely different. The fact that consumers have already used PayPal to send or receive remote mobile payments before drives consumer preference for the brand when it comes to proximity based mobile payments. Closely following this familiarity of PayPal's remote service (30%) comes the fact it is deemed a specialist in processing payments generally (21%). Trust (17%) remains important for PayPal, but is only the third most important stated purchase driver.

These three brand examples show that whilst financial brands have built up high levels of trust, mobile-based brands such as Nokia and Apple, and relatively new financial brands like PayPal, have the potential to quickly disrupt this seemingly comfortable position.

## **Co-operation: The Quickest Road to Drive adoption**

The future of mobile payments is not just about convenience and simplicity, even though this is a strong driver of appeal in more developing markets like China and Brazil. Once the infrastructure is in place, and security fears are allayed, the secondary benefits will be harnessing the power of smartphones by integrating physical payments in the real world with the virtual world of the mobile ecosystem. Examples of key services to be integrated with mobile payments would be location, online price comparison, special offers and opt-in targeted promotions.

Last year GfK published a report that assessed the importance of mobile ecosystems in driving loyalty in the smartphone market. The research in this report primarily focused on the availability of content, apps and services on smartphones and, increasingly, tablet PCs. By creating an exciting line-up of content, smartphone OS providers could generate higher levels of loyalty to their 'ecosystem'.

With the arrival of mobile payments, the mobile ecosystem becomes more than just content and apps in a digital world. By integrating offline purchase data into this ecosystem, the line between digital behaviours and purchases in the physical world begins to blur, especially when core smartphone services such as location are integrated with purchase data. This was perfectly summed up by Jeroen van Dinther, Principal Consultant Retail Innovation at Wincor Nixdorf, in a recent interview with GfK:

*"The best thing that NFC can offer is that it links the virtual commercial world with the physical commercial world."<sup>3</sup>*

Jeroen makes a strong point which links back to the question posed at the beginning of this paper: 'Who owns the relationship with customer?' It is our view that no one brand can own this relationship by itself. To make mobile payments work, to advance the benefits beyond just convenience and capitalise on the benefits gained from an integrated ecosystem, several brands need to be involved.

Financial brands add a layer of trust that mobile brands have not yet nurtured in the financial world. Mobile carriers have a well-rehearsed customer support network and the connectivity infrastructure to make proximity based payments fast, reliable and secure. Mobile handset and OS providers have developed strong mobile brands, and have already made the use of services and payment of items via the mobile phone a simple, integrated and common behaviour. By tapping into all of these strengths, a mobile payments solution would quickly gain momentum with consumers and put an end to continued delays NFC based services have received in recent years.

## **Further information and contact**

For country specific or brand data relating to this research please contact the author below:

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<sup>3</sup> Jeroen van Dinther, Tech Talk Magazine

## APPENDIX

### Methodology

GfK conducted 8603 online interviews in the following countries; UK (n=853), US (n=1004), France (n=1000), Germany (n=999), Italy (n=1103), Spain (n=997), Brazil (n=987), China (n=659) and South Korea (n=1001)

The sample in each country was designed to be representative of the online population. In the UK, US, France, Germany, Italy, Spain and South Korea internet penetration is high enough to capture a sample that is broadly representative of the population as a whole. However, in China and Brazil the interviews collected online will not be representative in the same way. The research conducted in Brazil and China will be representative of the online population but this population is far more advanced in their views on technology, live in more urban areas and are likely to be wealthier than the population as a whole.

For the overall global data we have applied target weights to the Brazil and China sample to make it comparable with the other countries. The weightings applied have been applied to the respondent's attitudes to technology. We have taken data captured offline to the 'technology adoption' question and used these proportions as target weights for this study. The effect of this weighting has reduced the stronger levels of appeal and general positive attitudes to technology and innovation that is over-represented among an online audience in these countries.

GfK wanted to include countries that represented many parts of the world whilst also including countries where smartphone ownership is rising and where the development of mobile payment services offered potential. We also decided to include South Korea as a benchmark country, as mobile payments have been available since 2002.

We also conducted a depth interview with Jeroen van Dinther, Principal Consultant Retail Innovation at Wincor Nixdorf. We ran this interview to gain a deeper understanding of the technology that supports close proximity mobile payments (NFC/RFID) and how retailers are preparing to support the adoption of this technology. We thank Jeroen for his time and the full interview can be read here: <http://viewer.zmags.com/publication/c8fb8afd#/c8fb8afd/2>.

### Definition of Mobile Payments

The definition of mobile payments that was used in this research covered two types; sending money from one phone to another in close proximity or paying for items in store by touching a mobile phone against a reader. The following illustration and definition was shown to respondents before the survey began:



- Mobile payment services allow you to send money to other people when the two mobile phones are in close contact.
- In addition, you'll also be able to pay for items in store. Once you're at the checkout you tap your phone on a reader to pay for the items.
- The money is debited either directly from the account you have linked to the service. That could be your bank account, credit card, mobile phone bill, an account provided by the service provider or a specially designed pre-pay account.

### Terminology

**Appeal Scores:** To measure the appeal of mobile payment services we used a semantic five point scale; 1. Not at all appealing, 2. Not very appealing, 3. Fairly Appealing, 4. Very appealing, 5. Extremely appealing. To minimise the cultural bias in the response to semantic scales our appeal scores are made up of all those who find mobile payment services appealing, the top three points in the scale (3-5).

**Drivers of adoption:** To determine the driver so of adoption we used the stated response to a direct question. We did not derive the drivers using any statistical methods.

**Global report or findings:** The research findings from all countries covered in this study; UK, US, France, Germany, Italy, Spain, Brazil, China and South Korea

**Mobile Network Carriers:** Also known as operators.

**Proximity payments:** A payment made with an NFC enabled device or card touched against a reader to transfer a payment. NFC is using RFID tag emulation and communication technology for proximity payments. A contactless card is always the same RFID tag and is using RF technology, not NFC. Most of the readers in proximity payment scenarios are therefore RFID readers, unless they also support P2P (peer-to-peer) communication between the reader and a presented NFC device.

**Remote payments:** A payment made from one subject to another over the air. To make the payment the sender does not need to be in close proximity to the receiver as the payment is typically sent via a service such as PayPal over a cellular network.

**Smartphone:** This report defines a smartphone as a mobile device that has a QWERTY or touch keyboard AND an open (to third party developers) operating system such as Android or iOS. For the more technical minded reader a full definition is detailed below:

*Smartphones are devices which have a full Touch screen and/or complete keyboard (Qwerty/Qwertz) plus an open operating system (open OS). Solely sensitive keys on the edge of the screen do not count as a touch screen. Also solely predefined sensitive positions on the screen (egg. virtual numbers for the dial function –LG KS360- or egg. photo functionalities) do not count as a touch screen. The touch screen has to work that way that it is wholly sensitive. Mobile phones with a virtual Qwertz/Qwerty keyboard which is available on the screens, often fulfill this criteria but have to be checked carefully. Open operating systems are egg. Symbian OS (S60 and above), Palm, Apple iOS, WebOS, Windows Mobile, Windows Phone 7, BREW MP, Maemo, Android, Bada, Pocket PC/WINCE or Stringer. By definition Blackberry/RIM has always to be handled as open operating system, with no regard to further programming details. An indication for an open operating system is the availability of developer kits and an open source code.”*

Through years of experience researching the mobile/telecoms sector we know that many people do not know whether they have a smartphone or not. As smartphones are becoming increasingly popular among a broader base, respondents find it even more difficult to identify which operating system their smartphone runs. However, a very large majority of respondents know the brand of mobile and its model. Once we have captured this information we then derive whether the respondent has a smartphone or not and which operating system it uses by cross-referencing the brand and model against the GfK Retail and Technology global sales database. This, in our view, is the most accurate means of gathering this data.

#### Other Data Sources

GfK NOP Financial Research Survey (FRS), is the UK's longest running financial survey that monitors consumers' behaviours and attitudes towards financial products



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