ExterionMedia

Interactive Solutions

NFC taps into the consumer

What is NFC?

NFC stands for *Near Field Communication* and allows the transfer of data between a smart device with pre-installed NFC hardware and an NFC tag or transmitter/receiver.

NFC enabled smart phones, or similar devices, establish radio communication by touching them together or bringing into close proximity with a tag. This physical opt-in action makes it more secure and less intrusive than Blue-tooth. NFC is widely viewed as one of the interactive technologies of the future as it offers one of the quickest and most versatile forms of data exchange, relaying everything from video to monetary transactions. Present and anticipated applications include contactless transactions, data exchange, and simplified setup of communications like Wi-Fi.

Why is NFC so important for Out-of-Home media?

The opportunity to convert our assets into direct selling channels will be greater than ever thanks to the rapidly increasing use of NFC enabled smart phones.

- 9 out of the top 10 OEMs now have NFC-enabled handsets commercially available (ABI Research 22 November 2012)

- NFC handsets increased ten-fold in 2011 to 30 million units. Growing at an annual growth rate of 87.8% (Berg insight March 2012)

- By 2016 46% of total mobile phones will be NFC-enabled compared to 5% in 2011 (Marketsandmarkets January 2012)

- 285m NFC-enabled mobile phones will be shipped in 2013, reaching 1.5bn handsets by 2017 (ABI Research 22 November 2012).

87.8%

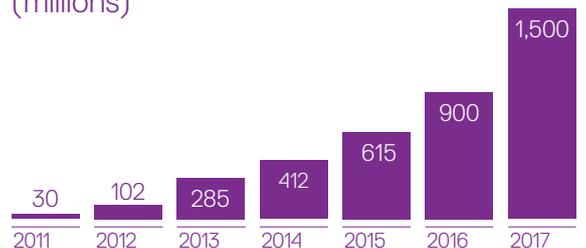NFC handsets increased ten-fold in 2011 to 30 million units. Growing at an annual growth rate of 87.8%

Berg insight March 2012

The growth of NFC handsets by year (millions)

2011	2012	2013	2014	2015	2016	2017
30	102	285	412	615	900	1,500

ENGAGING AUDIENCES

1.5bn

285 million NFC enabled mobile phones will be shipped in 2013 reaching 1.5 billion handsets by 2017

ABI Research 22 November 2012

46%

By 2016 46% of total mobile phones will be NFC enabled compared to 5% in 2011

marketandmarkets January 2012

How does it work?
The technological features

NFC tags require certain information to be programmed:

- Unique identifier

- Web address/product landing page

- Connection information.

NFC can also be used in social networking situations (such as sharing contacts, photos, videos or files, and entering multiplayer mobile games)

The actual amount of data varies depending on the type of NFC tag used - different tags have different

memory capacities. For example a URL (web address) or a telephone number can be stored.

A standard Ultralight NFC tag can store a URL of around 41 characters, whereas the newer NTAG203 NFC tag can store a URL of around 132 characters.

NFC tags can be locked so that once data has been written, it cannot be altered. For most tags this is a one way process so once the tag is locked it cannot be unlocked.

However, encoding and locking are two separate actions. NFC tags can be re-encoded numerous times until they are locked.

NFC uses

Ticketing

Identification

Time & attendance

Loyalty & memberships

Physical access

Cashless payment

Transit

Secure PC Log-on

9/10

9 out of the top 10 OEMs now have NFC enabled handsets commercially available

ABI Research 22 November 2012

NFC can work in three different ways

1. **Card emulation** – One of the most prominent uses for NFC, underpinning the push for contactless financial transactions. This usually requires the entry of the customer's pin code to verify the transaction. In working with existing contactless infrastructure, an NFC-enabled mobile can be used for tickets and contactless payment.

2. **Reader/writer** – At present the most common use for NFC as it's one of the most simple and enables devices to interact with RF tags to read smart posters

3. **Peer to peer** – Allows two or more devices to communicate without the need for a physical connection or complex configuration of wireless long-range communication. Works with existing contactless infrastructure, so for example an NFC-enabled printer and mobile phone can connect to print photos.

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NFC vs. QR codes

NFC works just like QR codes, but only requires the consumer to turn on the NFC capabilities on their phone settings and tap a tag, rather than having to download an app and scan a code (unless the advertiser includes an app as part of the consumer journey). But QR codes have some advantages; they don't require the user to be so physically close, are free to print and are able to be read by most current smart phones with a suitable app, whereas only Android, Windows and Blackberry smartphones currently have NFC capabilities.

However, the user experience with NFC tags is generally better so in the instances where the additional cost is less relevant overall, such as on wristbands, brochures or posters, it would be the preference.

From an execution point of view, it's advisable to combine both NFC tags and QR codes to capture a broader audience (both NFC enabled phone users and iPhone users).

Anatomy of NFC

NFC tags contain small microchips with little aerials that can store a small amount of information for transfer to another NFC device, such as a mobile phone.

How are they used?
The consumer experience

NFC applications should only be used with assets that allow a close proximity with the audience (5–10cm).

Some of these assets include:
- Posters (static and digital)

- Street furniture

- Buses

- Underground

It can also be combined with additional marketing material that includes:
- Direct mail pieces
- Brochures
- Packaging
- Loyalty cards.

The consumer experience really varies according to the creative execution and the advertisers' choice of campaign objectives:
- App download
- Drive consumers to social media channels
- Music download
- Movie trailers watch
- Immediate purchase
- Product gallery (landing pages)
- Find store
- Loyalty card.

Tap to win:
- Collect and redeem (discount voucher, tickets)
- Enter competition
- Treasure hunt
- Instant win (scratch cards, roulette wheel, tumbler, static content).

What's the proposition?
Benefits for stakeholders

Consumers:
- Immediate access to information, products or offers
- Ability to make purchase with no dwell time
- Increase loyalty and engagement with the brand
- Follow on consumers' natural behaviour on using their smart device to engage with NFC.

Advertisers:
- Connecting physical and digital worlds
- Connect with consumer and prompt immediate purchase/payments
- Connect with consumer directly via their smart devices

- Monetising Out-of-Home advert
- Drive new revenue
- Drive footfall
- Increase loyalty
- Get recommendations (link to social media channels)
- Product sampling/trials
- Measurable (NFC campaigns can give unprecedented insights by tracking the number of taps, asset location, social tracking, time of engagement, session time, mobile network, connection speed, mobile operating systems, handset manufacturer and model).

Challenges to overcome

NFC tags are fairly affordable, however it's important to consider carefully what NFC is offering to consumers. The consumer journey needs to be well thought through creatively with a clear call to action that's easy to understand and carry out.

How to get the best results?
Our advice

The possibilities really are endless, whether communicating promotional materials on advertisements or providing vital information to employees on a jobsite, NFC technology will allow quick and easy engagement that's not available with traditional means. Both businesses and individuals can benefit from using NFC technology. By integrating credit cards, travel tickets, and paper coupons all into one device, a customer can board a train, pay for groceries, redeem coupons, and even exchange contact information all with the wave of a smart phone. Faster transaction times mean less waiting and happier customers, while fewer physical cards to carry around means customers are less likely to lose one or have it stolen.

NFC technology can be best used to support feature rich campaign content as well as offers or loyalty schemes.

To download this product sheet and find out more visit
www.interactiveeurope.com

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