

Smartphone Interpretation Technologies



The modern smartphone has evolved rapidly to become the mobile 'hub' from which users of all ages can run their busy work, social, leisure and family lives easily.

81% of smartphone owners keep them on all the time to browse the web, download applications, network with each other socially and use their smartphones to find out about almost anything and everything around them.

Smartphone 'contactless' technologies are the future of brand and event interaction, but there are several requirements of these new mobile technologies, such as QR codes and Near Field Communication (NFC), to deliver effective benefits to users. The essential factors for their success are good public awareness, that they are simple and easy for most people to use, that the information they link to can be accessed using most mobile devices, and that they can link to a range of online and offline content that is perceived as being immediately useful at that time.

Free NFC and QR reader 'apps' are available to download and mobile web browsing costs and monthly payment plans are getting cheaper by the month. By using practical Mobi-Scan on-site guidelines mobile technologies such as NFC Tags, QR codes and Augmented Reality (AR) offer significant benefit for fast, low-cost and effective user interaction at multiple points of interest.

Near Field Communication (NFC) Tags

NFC Tags can be embedded in objects and are in passports and Oyster cards. NFC Tag scanning is in the latest Android, Blackberry, Windows 8 and Nokia mobiles.

Tag data is stored on a pinhead sized chip linked to an antenna built into a paper-thin NFC Tag.

Scanning works by 'tapping' an NFC phone near an NFC Tag (usually within about 1 to 3 cm).



- More than a million NFC-enabled Android devices are now being sold every week
- NFC Tags can link to text, mobile web links or be used for NFC contactless payment
- Google launched 'Google wallet' in 2011 so NFC can be used for instant mobile payments
- Android Beam lets users tap phones together to share contacts, apps, maps, sites etc
- Whilst Apple iPhones cannot scan NFC Tags, the new Apple Passbook uses NFC payments
- Many sectors are now starting to use NFC Tags, usually in combination with QR codes

Quick Response Codes

Quick Response (QR) codes, the most popular contactless technology, are two dimensional barcodes that can be scanned by a smartphone's built-in camera and QR reader application to access online or text based information.

With **94% of the UK public owning a mobile** and **58% having an advanced smartphone**, these devices can quickly scan QR codes and also use apps to scan newer NFC Tags and Augmented Reality.

Use your mobile - please scan the QR code to find out more



QR codes are free to create, easy to site, distinctive to spot and have low printing costs. Online and on-site South Downs QR code research, undertaken with 150+ respondents, showed that **91% of people were aware of QR codes** and **67% had scanned a QR code** with a smartphone. **82% of respondents also found it fast and easy to scan a QR code** to connect to text, website pages, video, audio, online games and other online and offline content.

QR codes were placed at key points of interest along the South Downs, with each mobile page link visited directly from a QR code. In fact, once people knew what QR codes were, what they linked to, and scanned them for the first time, they responded favourably to them. As a result of this research a new trail added NFC Tags and AR to South Downs signs.



Smartphone Scanning Benefits

Compared to information leaflets or notice boards QR codes, NFC Tags and Augmented Reality links are easy to site on posters or small signs, and can be easily stored and replaced if damaged.

The majority of large outdoor sites or events, such as a sports event, entertainment or pop festival or the South Downs National Park, can't always offer easily accessible visitor information points for users all around a large site. So, when people want instant information about something they've discovered or want to know about at a site, they can use their mobile to scan a nearby QR code quickly and easily, to obtain more details about any particular point of interest.

QR codes can be produced to any size, so they're easy to spot, from large codes that can be scanned from a distance to small codes on a programme guide or on signposts or way-markers.



NFC Tags can be included in posters or built into signs, hang-tags, entry wristbands or even coasters! The mobile website pages can also be updated with each season, or changed for each outdoor event.

Used cleverly, QR codes and NFC Tags act as a personal tour guide, giving details at key points all around a site, in a quick self-service way.

For more information go to www.mobi-scan.co.uk and visit the 'QR Code NFC and AR' website page.

