



## HYPertext ON THE HOARDING?

We are now used to the idea of contactless cards which we can variously use to get into places, pay rail fares, even pay for coffee in Starbucks. However, this approach to payment is soon to see a step-change in its adoption as the technology starts to go into mobile phones. Instantly, one single device will hold a range of payment functions in addition to its mundane communications, photographic and gaming applications. In turn, this creates opportunities of great interest to those who want to market their goods and services visually, and is of potentially great use to those consumers who wish to adopt a more sophisticated means of product selection and transaction.

This is how it could work. Advertising posters would include the same technology as in a contactless card, with a recognisable target mark to show where to hold your phone. You press the 'read' button on your phone, and it collects a web address or a phone number for you to use to contact the advertiser later on. The same device could be sited outside shops so that you might order the products you see through the window when the shop is closed at night. These tags could also be included on items or objects of interest in the street, providing further information to the passer-by or tourist. Visual Marketing (as the pundits would have it) has suddenly got hypertext - the technique that powers the web!

The technology behind this is called Near Field Communication (NFC), and it is unique in that only one end of the communication needs a source of power. For payment, the power comes from the till or railway ticket barrier. For collecting product information, the phone is the source of power, and no battery or mains supply

is needed for the poster or information terminal. NFC is secure because the range is only a couple of centimetres. The use of a magnetic field rather than a radio link ensures that this is the case. The data rate is quite high, so a small picture or a page of text may be sent in less than a second.

The same technology would also allow us to connect pieces of our own equipment together. Touch the phone on to the target area of a (future) PC to download all the collected data, or to update your phone list. NFC will soon be fast enough to move images about, or it could be used as the means to start faster communications like Wi-Fi or Ultra-Wideband.

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