# QR codes and the mobile web

Australia is experiencing a massive increase in the use of mobile devices and clients now expect to access library services and resources immediately, in context, when it is most relevant or bookmarked for later use. QR codes are a simple way to achieve this by connecting the physical and digital worlds using a mobile device.

## What are QR Codes?

QR codes are barcodes for the 21st century that can be scanned by a web-enabled mobile device and link you to digital content such as a website, video, podcast, quiz, pdf, or almost anything! They can hold much more information than a regular barcode and have been used in a wide variety of contexts like music, museums, games, marketing, libraries, and education. In all contexts, they connect users in a physical space to contextualised digital content.



# Trend watching: what the experts say

QR Codes are a new technology recognised as a part of two emerging trends discussed in the recent ANZ Horizon Report (2009) on emerging technologies in education.

#### 1. Mobile content and augmented reality

Emerging within the next two to three years, this trend includes the development of educational gaming programs using augmented reality layers and making use of geolocation technology. QR codes are included in this category because of their ability to deliver mobile content when a connection between the physical and digital worlds is required.

#### 2. Smart Objects

Emerging within the next four to five years, Smart Objects are technology that connects the physical and digital worlds and includes QR codes, RFID, smart cards, and microchips. QR codes are included in this category because they combine "the ability to collect and transmit information with the means to immediately use that information" (Horizon, p.22, 2009)

#### The physical and digital spaces of UTS Library

At UTS Library, we are trialling QR codes in a number of ways.

We are placing them on objects in the physical library such as self-check machines and scanners where assistance may be required. This allows clients to take a photo of the QR code and immediately watch a short demonstration of the service they are trying to use. Traditionally, instructional and promotional materials have been text-based, however with the addition of QR codes these resources are now enhanced with more dynamic content.

QR codes can be used on promotional bookmarks and brochures to connect clients to online content in context. For example, at UTS Library we are using QR codes to enhance our library 'Z card' which is a fold-out brochure introducing new clients to library services and resources. The QR code links to a short video explaining how to get started and make the most of library services and resources.

QR codes can also be used online to link to specific mobile content. For example, UTS Library is launching a mobile website in January 2010 which runs on a range of mobile platforms including iphone/itouch, Android, Windows Mobile, and Opera mini. A simple way of promoting the mobile site to clients is to place a QR code on the library home page. The QR code links clients to the new mobile site and they can immediately move around the library searching and browsing at the shelf rather than at the PC terminal. Similarly, databases are starting to provide mobile

platforms and QR codes could be used in the OPAC to link clients directly to mobile databases rather than having to type in a long URL. While these ideas are simple, they provide library clients with easy access to mobile content and services.

## Moving forward

At UTS Library, we are raising client awareness of QR codes so that clients can use this new technology more effectively. We will monitor this pilot project by tracking usage statistics of the

content we link to and engaging in discussion with clients through our social networking sites. We see the addition of QR codes to our promotional and instructional material as a way to enhance traditional services rather than replacing them altogether.

More information can be found in this poster presented at the UTS Teaching and Learning Forum and at the HCTD Mobile Research Workshop both held in November 2009: <a href="http://www.slideshare.net/MissSophieMac/qr-codes-and-the-mobile-web">http://www.slideshare.net/MissSophieMac/qr-codes-and-the-mobile-web</a>. The ANZ Horizon Report can be found here: <a href="http://www.nmc.org/pdf/2009-Horizon-Report-ANZ-Edition.pdf">http://www.nmc.org/pdf/2009-Horizon-Report-ANZ-Edition.pdf</a>

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