

Straight Talking - Augmented reality: Ready for business?

By Clive Longbottom, Service Director, Quocirca Ltd

AR takes a person's physical environment and uses technology to provide enhanced information around it. As in many areas, defence has been a major area for early development, with heads-up displays for example, but the advent of the GPS-enabled cameraphone with in-built compass is bringing AR to the forefront of the consumer environment.

It may sound like science fiction - but we at Quocirca believe this technology could become an exciting and powerful tool for businesses and consumers alike.

The emerging AR applications span tourism, business networking, engineering and healthcare. Most seem innovative and fun - and may even have a modicum of real world usage.

Are you a tourist looking at a wonderful building you know nothing about? Point your cameraphone at it, and you'll see a raft of information.

Shopping on your local high street? Use the cameraphone to see what shops have special offers you might be interested in.

Lost in a new city? Point the camera and see an overlaid map, with directions to the nearest train station, restaurant or bank.

Then there's gaming. Nintendo's Wii showed some pretty nifty almost-AR features with its remote controls, and Microsoft's upcoming Project Natal looks to be taking this to the nth-degree and opening up a whole new world not only in gaming AR but also in desktop and mobile-based AR.

All good stuff, maturing pretty rapidly and coming to a phone, console or PC near you in the very near future.

So what about AR for business use? Can this tech provide useful information for organisations and their employees?

How about all those business cards that you get - why not add more information to them? James Alliban, an employee at UK creative agency Skive, has created an application that recognises a standard business card and then overlays other information - such as the person's current projects and interests - on top of it.

The app may have some promise - though people may prefer to use social networking sites to keep tabs on what people are now up to, rather than trying to find that one business card.

Speaking of social networking, Swedish mobile firm TAT has demonstrated an application which aims to help business people manage the various 'personas' they inhabit online.

The app, Recognizr, allows an individual to take a photograph of himself using his cameraphone, and then drag icons representing the social networking sites they associate with this persona onto the picture. This may be LinkedIn, Twitter and Plaxo for a work persona, or Facebook and YouTube for an after-hours one.

Recognizr users can then glean information about each other. How does this work?

Imagine a Recognizr user is speaking to an audience at an industry conference...

A member of the audience wants more information on the subject being discussed and on the presenter. The audience member points his cameraphone at the speaker, and facial recognition technology identifies him. The app then brings up a constellation of site icons superimposed around the real-time head of the presenter.

After the conference, the speaker could change their persona - and the same audience member could call up a different constellation of sites relating, for example, to the speaker's leisure time activities.

The downside here is that to be useful the app requires a broad group of people to install it, and so it probably falls more into the 'fun and vaguely useful' category.

Another example of AR, this time in the world of engineering: Imagine a field service engineer sent off to fix a valve in a sewage plant. The plans show that the valve is an ABC Co. globe valve, type ABC GV 36b. The field engineer has all the details for this item, and has all the spares for it. At the plant, he finds that the valve was replaced a year ago with an XYZ Inc. needle valve, type XYZ NV 22x. No details available on that - and no spares.

AR to the rescue. Using a cameraphone, the engineer takes a picture of the valve, and an AR app identifies it. The engineer can then access all the details he needs - including the requisite plans layered over the picture of the valve itself, location of spares, expected timescales for non-available spares and a guided overlay of how to take the valve apart.

Moving on to sales, AR could make a sales person's work a lot easier. Rather than carrying around a finite amount of samples that will never please all customers, she can take an AR environment with her. This means she can not only show prospects an item in any colour or size but - for clothing - could allow the customer to virtually try it on. For cars, AR allows shoppers to step inside a virtual car, push buttons and turn knobs and have the 'car' respond accordingly - all without visiting a showroom.

How about in healthcare? A surgeon with a set of specialised glasses can use AR to superimpose extra textual and graphical information across their view of an operation.

AR tools could identify anomalies the surgeon may be unaware of (such as the presence of an enlarged organ), or explain new techniques the surgeon has not yet been trained in.

These examples are just the beginning. Of course, for AR to live up to its potential, businesses will need to filter out the noise from those jumping on to the bandwagon with AR that isn't really AR.

The main drive to AR uptake will undoubtedly be through the consumer but the technologies and approaches developed in this market will quickly spread through to include the business environment and become major tools in everyone's day-to-day lives.

About Quocirca

Quocirca is a primary research and analysis company specialising in the business impact of information technology and communications (ITC). With world-wide, native language reach, Quocirca provides in-depth insights into the views of buyers and influencers in large, mid-sized and small organisations. Its analyst team is made up of real-world practitioners with first hand experience of ITC delivery who continuously research and track the industry and its real usage in the markets.

Through researching perceptions, Quocirca uncovers the real hurdles to technology adoption – the personal and political aspects of an organisation's environment and the pressures of the need for demonstrable business value in any implementation. This capability to uncover and report back on the end-user perceptions in the market enables Quocirca to advise on the realities of technology adoption, not the promises.

Quocirca research is always pragmatic, business orientated and conducted in the context of the bigger picture. ITC has the ability to transform businesses and the processes that drive them, but often fails to do so. Quocirca's mission is to help organisations improve their success rate in process enablement through better levels of understanding and the adoption of the correct technologies at the correct time.

Quocirca has a pro-active primary research programme, regularly surveying users, purchasers and resellers of ITC products and services on emerging, evolving and maturing technologies. Over time, Quocirca has built a picture of long term investment trends, providing invaluable information for the whole of the ITC community.

Quocirca works with global and local providers of ITC products and services to help them deliver on the promise that ITC holds for business. Quocirca's clients include Oracle, Microsoft, IBM, O2, T-Mobile, HP, Xerox, EMC, Symantec and Cisco, along with other large and medium sized vendors, service providers and more specialist firms.

Details of Quocirca's work and the services it offers can be found at
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