

## The revolution is mobile

by David Thodey, CEO, Telstra

High-end smart phones - such as the iPhone and Android phones - generate about 14 times more data than basic mobile devices and wireless broadband customers consume ten times more data than these devices. Most of this traffic goes to social networking sites. Simple interfaces, powerful devices, an explosion of digitised data and applications, and faster, more affordable mobile data are driving this traffic. It is also the beginning of a new medium - text-based communication is being replaced by video.



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Australians have always loved communications technologies. From the bush telegraph to broadband, Australians have been early adopters and enthusiastic adherents of new technologies. In the 1950s, for instance, we sent more telegrams per-capita than any other nation on Earth. The love affair shows no sign of abating, either. The past year in Australia has seen wireless broadband services increase by 162 per cent and 3G mobile services increase by 43.6 per cent. The average time people spent online at home jumped by 21 per cent, and traffic on broadband mobile networks are doubling every eight months.

The increasing number of smart devices and the increased data appetite of smart device users are driving much of this traffic increase. High-end smart phones - such as the iPhone and Android phones - exhibit around double the usage of other PDA devices, which consume seven times more data per unit than basic handset devices. Smart phones are not the only cause of data traffic; wireless broadband customers consume ten times more data than high-end smart phone users.

Where is that extra data traffic heading? It's going to social networking sites such as AirG and Facebook. Interestingly,

iPhone and Android device users have similar appetites for data. In addition, approximately one-fifth of 3GSM subscribers are using WBB (*wireless broadband*) cards or USB dongles.

As a consequence, the mobile Internet is bigger than anyone predicted. All of which begs the question, what will be the mobile Internet's killer app? Every great leap forward in telecommunications needs a killer app - an application that proves or defines or unlocks the core value of a new technology. 'Killer app' is, after all, just another term for innovation. The

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Net’s killer app was email. The Web’s killer app was search engines. As for the mobile Internet, the killer app is its convenience - being able to get the Internet from the device that is always with you, your handset.

Only time will tell what impact the iPad - and the plethora of other tablet devices that follow in its wake - will have on the mobile Internet. Tablets like the iPad may well provide the killer platform for apps, and, in the process, do for the mobile Internet what the iPhone did for mobile phones. There’s no doubt the iPad is fundamentally changing the print media, entertainment and publishing industries, opening the mass market door to other devices such as Amazon’s Kindle and Plastic Logic’s QUE ProReader.

But why is all this happening now? What has changed to cause the prodigious rise in the number of people using the mobile Internet? I think there are three primary drivers of this change: simpler interfaces on more powerful devices, an explosion in the amount of digitised data and applications, and faster, more affordable mobile data prices.

The simpler interfaces, combined with powerful processing power, make devices like the iPhone and Android irresistible. Although innovative smart devices are not innovation - they are mobile platforms for innovation. What makes smart devices tools for innovation is the explosion in the amount of digitised data and applications, underwritten by faster, more affordable wireless data networks.

The three forces of simple interfaces and powerful devices, more data and apps than ever before, and faster wireless networks are heralding a new era of growth in mobile networks. We are on the cusp of a tsunami of data that will make future applications such as immersive 3D environments accessible in businesses and homes for everything from business meetings to remote education and healthcare.

We are on the verge of what economist Kenneth Boulding called a “break

boundary” - where the old text-based means of communication is being replaced by a new primary medium, video. What we are seeing is the creation of a hybrid medium - a convergence of video and text - as our primary source of communication. The written word is morphing with the capabilities of video.

What does this historic shift mean for the way we live and work? It means that everything that can change will change. It means we will be able to take our information with us seamlessly, from smart device to smart device, as we go about our daily lives. It means students living hundreds and even thousands of kilometres away from a school or university will be able to sit in on classroom lectures remotely, with a world of information literally at their fingertips. It means more people with chronic illnesses will be able to be cared for at home using remote diagnostics, analysis, real-time data transfer and immediate diagnosis. It means mobile workers won’t have to return to their head office for mundane paperwork, and more business people will be able to hold face-to-face meetings via video conference, rather than flying interstate or overseas.

There’s no doubt the mobile Internet revolution is creating new opportunities for consumers, businesses and the telecommunications industry. However, we’re yet to see the full impact of next generation communications.

We won’t have fully made the leap into the next generation of technology until we have either delivered a totally new customer experience, such as the digital telephony 2G (*second generation*) delivered, or the data that 3G (*third generation*) delivered, or achieved a quantum change in the cost structure to deliver the service. Creating a new customer experience or a new cost structure are the true measurements of technological progress.

That leap forward is close at hand. The mobile Internet is moving towards a 4G(*fourth generation*)-like experience, but it’s not 4G yet. And, let’s be clear, the rise of the mobile Internet and the coming

leap to 4G does not spell the end of wired networks. Wired networks will not go away, it’s just that, increasingly, wired and wireless networks will - from a user’s perspective - become difficult to tell apart.

These are exciting times for our industry. We are at the beginning of a new era - an era that will finally provide information on any device and any location at any time. ●



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