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Cloud Computing in Australia

The Australian Communications and Media Authority (ACMA) have released a report which outlines the increasing usage of cloud computing by Australians.

During the six months prior to March 2013 nearly 14 million people had used cloud computing services, which is up from 12.6 million a year earlier.

Businesses had also taken to cloud computing with some 900,000 small and medium-sized enterprises (SMEs) utilising the service.

The most common service used was a webmail service, such as Hotmail or Gmail. Many users of cloud computing were not aware that they had used such a service.

The benefits listed for using cloud computing included:

- Ability to access service across all devices; and
- Easier, more convenient access to services.

The main disadvantages were:

- Concerns about security
- Services not suited to business structure.

Benefits of Mobile Broadband

The ACMA has released a new research report entitled, *The economic impacts of mobile broadband on the Australian economy, from 2006 to 2013.* A full copy of the report can be downloaded here.

The research confirms that the economic impact of mobile broadband in 2013 consisted of:

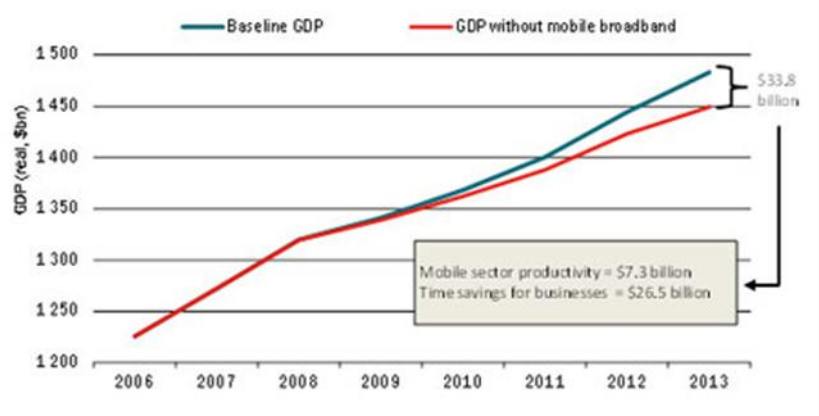
- productivity growth from the mobile communications sector that led to an increase of $7.3 billion in Australia's economic activity (GDP)
- time savings for businesses as a result of mobile broadband use that led to a further $26.5 billion increase in Australia's economic activity.

Alternatively expressed, as a result of this growth, every Australian now effectively has, on average each year, $652 more cash in their pocket.

Economy-wide impacts

- Mobile broadband increased the growth rate of the Australian economy by 0.28 per cent each year from 2007 to 2013.
- In 2013, mobile broadband increased Australia's economic activity by $33.8 billion. This is equivalent to 2.28 per cent of Australia's GDP (see Figure 1).

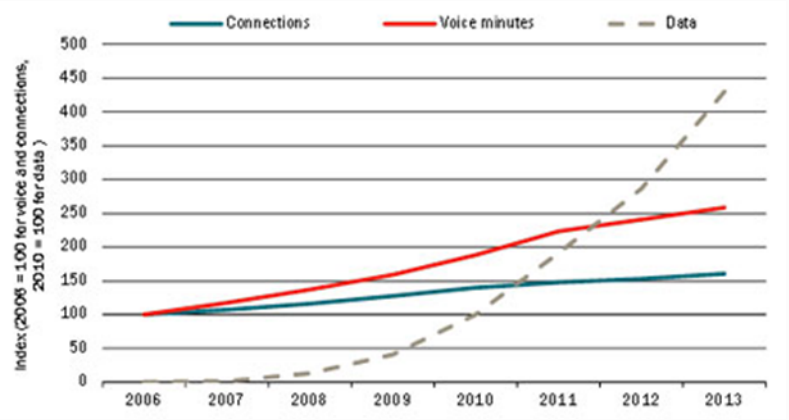
Figure 1: Economic impacts of mobile broadband



Productivity within the mobile broadband sector

- Productivity of the mobile sector increased by 11.3 per cent per year from 2006 to 2013.
- Outputs of the mobile communications sector have risen rapidly from 2006 to 2013:
- connections have risen by more than 50 per cent
- voice minutes have risen by more than 150 per cent
- data use is 1,000 times higher than what it was in 2006 (see Figure 2).

Figure 2: Outputs of the mobile sector, 2006 to 2013



Productivity from business mobile broadband use

Businesses reported that on average, mobile broadband has reduced business costs by 1.4 per cent, and saving 2.3 per cent of employees' time, in 2013. Sectors citing the largest impacts from mobile broadband are electricity, gas, water and waste services; transport, postal and warehousing; administrative and support services; and financial and insurance services.

Expected growth in mobile broadband

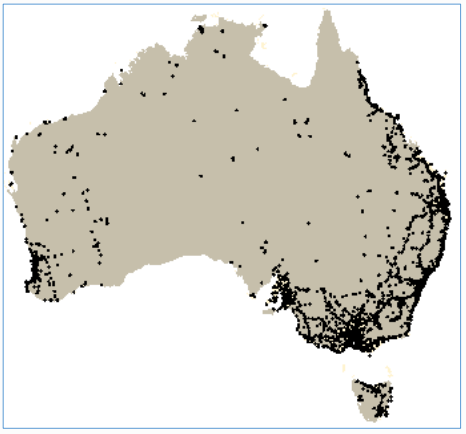
Mobile data use is expected to grow at an annual rate of 38 per cent, from an estimated monthly average of 22.2 PB in 2013 to 81.1 PB in 2017. One petabyte (PB) equals 1,000,000 gigabytes or 1,000,000,000,000,000 bytes.

4G data traffic is expected to increase at an annual growth rate of 76 per cent for 2013–17.

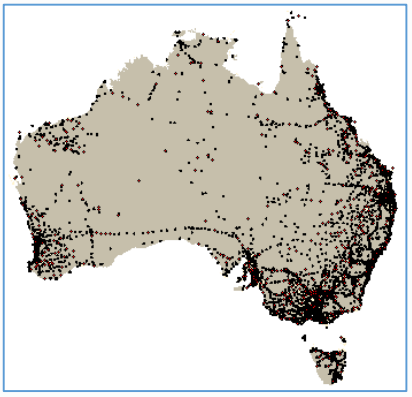
2G, 3G & 4G Technology Rollout

Telstra, Optus and VHA have built a widespread network of 2G and 3G enabled base stations (see map 4.4 and map 4.5). 4G (LTE) technology, by contrast, is still in the process of being rolled out. The first half of 2013 has seen a substantial expansion of 4G networks to cover a significant proportion of Australia's larger towns and cities (see map 4.6).

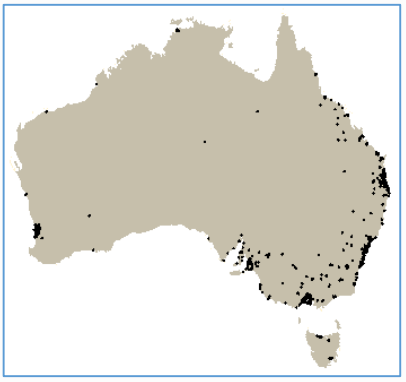
MAP 4.4 2G base station for all operators across Australia as of August 2013



MAP 4.5 3G base station for all operators across Australia as of August 2013



MAP 4.6 4G base stations for all operators across Australia as of August 2013



4G take-up has grown steadily since February 2011 (see chart 4.1), when Telstra first introduced commercial 4G.

Telstra, Optus and VHA now all offer 4G services and continue to expand their coverage. This indicates that 4G connections are likely to grow strongly over the coming years, though they are currently still at a low base in comparison to 3G (see chart 4.1**Error! Reference source not found.**).

CHART 4.1 Evolution of connections by 2G, 3G and 4G technology (excluding M2M)