



# The digital economy— developments in participation and productivity

THIS IS AN EXTRACT OF ACMA CHAIRMAN CHRIS CHAPMAN'S SPEECH TO THE RECENT DIGITAL ECONOMY FORUM HELD IN MELBOURNE.

For me, the breadth of participation in, and the scope of, this series of workshops and this forum are at long last a really important recognition that all of us have a stake in Australia's successful development of and engagement with the digital economy, with 'successfulness measured by sustainability'.

In this presentation, I want to do three things:

1. Provide you with a snapshot of Australians' participation in the emerging digital economy.
2. Touch on some of the challenges to that participation.
3. Leave you with some thoughts on the collaborative, multi-layered approach that ACMA sees as necessary in the changing media landscape.

Both common sense and social equity tell you that the development of the digital economy will depend on all Australians being able to participate, so that they can share in the benefits as citizens, producers and consumers. We need to ensure that all challenges (and there will be many) are only road bumps and not barriers to a wider participation in this digital economy.

The National Broadband Network will quite obviously, quite intentionally increase the high-speed connections of Australians, but people will also need the skills, understandings and confidence to ensure that they can engage effectively—

however, whenever, wherever they want or need to.

As the media and communications regulator, ACMA has a number of significant responsibilities that will underpin development of and engagement with the digital economy. These range from managing spectrum and numbering to online safeguards, consumer protection, and citizen and consumer education.

ACMA currently has registered and oversees 38 co-regulatory codes (28 of which are grounded in either the telco or internet space). Therefore, I want to emphasise how our co-regulatory system is well placed to involve industry itself in crafting solutions to the various challenges that are being thrown up by the evolution of the digital economy.

By touching on some of these headline trends drawn from ACMA's growing research and evidence base, I will illustrate some of the current and future challenges. This should help us to identify the respective contributions of government, business and users in making the digital economy

work for the betterment of Australia's national interest.

### HEADLINE TRENDS

We know from past studies that effective use of broadband can deliver benefits to national and local economies.

For example, ACMA's 2006–07 study of developments in the telecommunications sector estimated the net benefits to small businesses as \$176 million, while total production in the Australian economy in that time was estimated to have grown by an additional \$1.2 billion due to price and service competition in the telecommunications sector.

Some further framing statistics:

1. Individual Australians see benefits for themselves and have embraced digital technologies.
2. The internet is today part of our lives—85 per cent of Australians have internet connections; 70 per cent have broadband.

3. Broadband internet is supporting the development of the online information society and creating opportunities for business and consumers. Communication and transactional activities—email, shopping, banking—dominate Australians' online activities, but the use of online services to access entertainment—such as social networking sites, and downloading and watching audio and video content—is increasing.

It follows that use of mobile devices to access the internet will also increase. Twenty-seven per cent of Australian adults (aged 16 plus) who have an internet-enabled device have accessed the internet through their mobile phones.

4. Australians are using the internet for a range of activities. Six in 10 (aged 14 plus) use the internet to pay for purchases and bills, for banking and to make bookings. This encouragingly suggests that consumers are moving on from seeing the internet primarily as a source of information and have embraced the e-commerce possibilities it offers—another important building block for the digital economy. Similarly, small and medium enterprises (SMEs) are increasing their use of websites to improve the effectiveness of their business and e-commerce to buy and sell goods and services online.
5. Individuals' use of the internet continues to grow. New applications like blogging and social networking sites emerge at the top of online non-transactional activities. In 2008, four in 10 Australians used the internet to read a blog or visit a social networking website.

However, the levels of 'active participation' and content creation remain comparatively low.

Two in 10 Australians (aged 14 plus) belong to an online community and only one in 10 has written a blog or uploaded content.

Internationally, user-generated content is increasing and this trend is reflected among young Australians. ACMA's 2007 research shows that 42 per cent of those aged eight to 17 had authored online content—a statistic reflective of generational differences.

More than two in 10 Australians report using the internet to make VoIP phone calls in the past year, an eight per cent increase in a year.

Recent ACMA research shows that Australians are positive about the internet—seven in 10 think it has had a positive impact on their lives. Only five per cent believe it has had a mostly or entirely negative impact.

This positive attitude is very strong in

parents—96 per cent of those with the internet identify its benefits—mainly education and learning—while still acknowledging it is the most difficult communications media for families to manage.

And finally, on a slightly sobering note, a quarter of Australians perceive the internet to have had no impact on their life—perhaps the 'digital refuseniks'!? However, I think we should adopt a glass quarter-full attitude here—there is a real opportunity to engage this group.

### CHALLENGES

With opportunities come challenges, and the growing importance of the internet for commerce, communications and entertainment is raising new issues in areas such as e-security and privacy, online safety and protection—especially children's safety—and competencies and skills.

Security has become a major concern and is a real potential barrier, particularly for businesses gaining benefits from online activities. Half of SMEs see security as their major e-commerce concern and this will continue as cyber-crime becomes more sophisticated.

As we think about capabilities needed for engagement in the digital economy, we need to go beyond the professional ICT workforce and address the broader skills needs of the SME market and other users.

The Norton Online Living Report 2008 provides interesting findings about Australians' online practices. The survey, conducted in Australia, Brazil, China, France, Germany, Japan, the UK and the US, indicates that Australian adults are more confident about emailing than people in the other surveyed countries.

But with confidence comes some risky practices—three in 10 Australians have shared credit card information with people who are not friends or acquaintances. Having done so, they do not take multiple steps to minimise risks, and rely mostly on commercial solutions such as security software and virus scans. Only four in 10 use multiple email addresses and change passwords frequently.

One in four Australian children admits to conducting activities online that their parents would not approve of, such as interacting with strangers or giving out personal or financial information.

### Social disparities

We also need to understand the challenges that come from differences in the way various social groups participate in the digital economy. ACMA analysis points to a number of possible 'divides'



for Australia:

- a digital divide
- a generational divide.

On the 'digital divide', preliminary ACMA research indicates strong differences in the levels of connectedness among Australian households. Only 61 per cent of Australians with a household income up to \$35,000 are connected to the internet, compared with 97 per cent of households with an income of over \$85,000.

Turning to the 'generational divide', older Australians are more likely to report below average usage of the internet. Forty-three per cent of Australians aged 65 plus use the internet fewer than nine hours per week. In contrast, 42 per cent of Australians aged 18–24 use the internet more than 21 hours per week.

Let's turn to new strategies to deal with ongoing changes. With the unrelenting pace of change, Australia needs to be looking forward, anticipating future challenges as well as the opportunities change will bring.

In the period leading up to 2013, ACMA expects developments to continue in four broad areas:

1. **Technological developments** that will continue to provide new ways of accessing and distributing content and services.
2. **Market developments** with changing business models and industry structures.
3. **Changing consumer expectations and behaviour**, perhaps further testing community standards.
4. **The global reach of the internet**, which will enable businesses to further extend their reach from the local to the global.

### MULTI-LAYERED REGULATION

Why do I touch on these various developments in play? Because all our observations suggest that to maximise the benefits from the digital economy some new approaches to regulation are required.

A continuing objective for regulation is to ensure adequate safeguards to protect consumers and provide secure, trustworthy environments for commercial transactions, entertainment and general pursuit of interests.

This was more straightforward when national governments regulated services provided by local providers on single, technology-specific platforms. New, more flexible and multi-layered approaches are required when we are dealing with globally connected communications.

Two really good illustrations of Australia's capacity to make such a flexible response is shown in the multi-layered approach taken with anti-spam

and cybersafety regulation. Both involve a mix of:

- strong legislation
- technical initiatives
- industry partnerships
- education and awareness activities
- international cooperation.

I should emphasise that, in ACMA's view, a critical element in the success of such an approach is the co-regulatory framework—involving industry, fitting the regulatory solution to the marketplace by partnering in the development of codes and standards that address community standards and expectations, and ensuring compliance and delivery of well-crafted consumer messages.

The anti-spam strategy emphasises legislation and specific penalties. ACMA has responsibility for the administration and enforcement of the Spam Act.

The technical initiative of the strategy driven by ACMA, SpamMATTERS, allows users to report and delete spam with a click of a mouse, and the Australian Internet Security Initiative provides daily reports to internet service providers (ISPs) identifying 'compromised' IP addresses.

## ... if individuals are to assume a greater level of responsibility for their own and their families' protection in the digital media and communications environment, digital literacy will be essential.

The Internet Industry Spam Code of Practice, developed by the Internet Industry Association, with representatives from peak industry associations, consumer groups, message service providers, government regulatory agencies and corporate business, requires ISPs to provide information to their customers on means to reduce spam, and enhance technical initiatives to deal with and prevent spam.

The e-Marketing code, developed by industry, consumer groups and message service providers, established 'safe harbour' rules about how to successfully operate commercially in the Spam Act environment.

The strategy to tackle e-mail spam has been remarkably successful—Australia has fallen from around 10th in Sophos's 2004 list of spam-relaying countries to the mid-30s in calendar year 2007.

Because it is heavily reliant on the digital literacy of parents, children and schools, ACMA's five-pronged approach to cybersafety has a greater emphasis on consumer awareness and education than is the case with its anti-spam strategy.

ACMA collaborates very successfully and actively with local partners, including federal police forces and key international agencies involved in online safety. The industry is also required to develop enforceable codes of practice embedded with community protections.

ACMA's cybersafety awareness program provides information to children, parents and teachers on cybersafety risks and how to manage them.

### Sharing of responsibility

The sharing of responsibility—it's a real, socio-technical concern; a meta concept so much in debate in today's society.

A key feature of both our anti-spam and cybersafety regulation is the engagement with, and reliance on, an expanded range of stakeholders to ensure effective outcomes.

Government is the coordinator and remains responsible for ensuring appropriate levels of regulation; it is the ultimate 'guarantor' for the integrity of the legislative and regulatory framework.

Service and content providers within the co-regulatory frameworks will need to take greater responsibility for providing accessible, 'digestible' information to consumers, audiences and users about content and how different media environments work.

Organisations involved in providing education, information and advocacy about media and related issues are likely to assume a greater role in providing education, assistance and advice in the future.

Most importantly, individuals and families will also need to take more responsibility for aspects of their relationship with media and communications more generally. In particular, individuals and families will need to increase their awareness and understanding of the nature of different types of media, and how they should deal with media content they find challenging, confronting, dangerous or illegal.

### Digital literacy

Here's my punchline—if individuals are to assume a greater level of responsibility for their own and

their families' protection in the digital media and communications environment, digital literacy will be essential.

What do we mean by the term 'digital literacy'?

While there is no clear, single definition of digital literacy—which is also sometimes referred to as 'media literacy' or 'e-literacy'—there is broad agreement that it refers to the skills, knowledge and understanding needed by people to access and use digital communications and media effectively.

A digitally literate person should be able to:

- understand the nature of different types of digital services and the content they provide
- have basic capacity and competence to get connected to, operate and access various digital technologies and services
- participate confidently in the services provided by digital technologies
- exercise informed choices in online and digital media and communications environments
- have an adequate level of knowledge and skills to be able to protect themselves and their families from unwanted, inappropriate or unsafe content.

It follows that individuals or groups without those adequate digital literacy skills will find that their ability to share in opportunities and benefits provided through digital technology is limited; it will lead to digital exclusion, not inclusion.

The importance of digital literacy has been recognised in other jurisdictions—in particular, the UK, the European Union and New Zealand, all of which are moving to put policies in place to help their citizens have at least basic technical and intellectual digital literacy skills.

The OECD Ministerial Meeting on the Future of the Internet Economy has also recognised the

importance of delivering on such outcomes.

An industry regulator such as ACMA can bring particular expertise to the promotion of digital literacy. At this stage, we have concentrated on consumer education and awareness with programs to ensure community protection objectives are met for e-security and cybersafety, and that codes of practice operate effectively. This is consistent with our legislative obligations.

It is clear from research conducted both in Australia and overseas that different segments of a country's population have varying levels of access to and participation in digital media services, and different levels of skill, knowledge and confidence about using digital media.

In our view, ongoing research is vital to ensure any new policies are grounded in a sound understanding of literacy needs and what enables enhanced literacy levels.

ACMA has already provided valuable research on the take-up and use of digital media, particularly by children and young people. We aim to sustain our momentum on this important aspect of the evolution of the digital economy in Australia.

ACMA recognises the involvement of many government and non-government organisations in providing a wide range of digital- and media literacy-related information and education. We think 'joining-up' stakeholders to encourage coordinated approaches to digital literacy is important.

So we are committed to facilitating and promoting cooperation between stakeholders, particularly where there are gaps in knowledge, information or action.

In recognition of ACMA's extensive research activities relevant to media/digital literacy, Ofcom

invited Australia to be one of five international founding members of its Media Literacy Forum, held in London in May this year.

One of the outcomes of this meeting of researchers and policymakers was the encouragement of 'local chapters' for promoting media literacy. ACMA's first initiative here was its recent forum on Families and Media Literacy Research.

### The future

The key message that I want to highlight is the goal for Australians to maximise the benefits of involvement in a global digital economy. Digital literacy is important in ensuring that Australians as users (both commercial and consumer) of digital technology and services have the skills, confidence and capacity to participate productively as engaged citizens.

There is a great opportunity to build on the positive ways that Australians have embraced new technologies but, without wide and deep participation, we will not maximise the benefits of engagement with the digital economy, ensure social equity to our fellow citizens or act in our nation's interest.

I'm delighted that the Minister has provided real leadership in this space—it behoves us to capitalise on the momentum he has created. And I think ACMA has a strong contribution to make.

The full text of Mr Chapman's speech is on the **ACMA website at <[www.acma.gov.au](http://www.acma.gov.au)>** (go to About ACMA > News & media centre > Speeches).

PICTURED AT THE DIGITAL ECONOMY FORUM HELD IN MELBOURNE ARE DR GENEVIEVE BELL, DIRECTOR OF THE USER EXPERIENCE GROUP AT INTEL (LEFT); AND ACMA CHAIRMAN CHRIS CHAPMAN WITH DAVID KIRK, CEO OF JOHN FAIRFAX HOLDINGS LIMITED (RIGHT).

