CCi Digital Futures Report

The Internet in Australia

ARC Centre of Excellence for Creative Industries and Innovation
Swinburne University of Technology

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Highlights

This report presents findings from the first survey undertaken by the Australian component of the World Internet Project. This survey is a major piece of research undertaken by the ARC Centre of Excellence for Creative Innovation at Swinburne University’s Institute for Social Research.

This report provides an overview of our work, presenting results for each of the questions asked. We will also be publishing further papers examining relationships between our key variables – exploring, for example, differences between users with broadband access at home and those on dial-up connections and the differences that age, gender and education levels make to people’s use and experience of the internet.

Analysis we have already conducted shows that broadband does make a substantial difference to peoples’ use of the internet. The internet is more highly valued by those with broadband connections and they use the internet for longer and for a greater variety of purposes. Younger people have been quick to integrate the internet into their lives, they use the internet more and particularly for entertainment.

Most Australians are internet users…

The overwhelming majority of Australians are internet users. When we talked to them almost three quarters of Australians had used the internet in the past three months. Just under four in five home connections are broadband.

Internet use varies greatly between different groups. Men, students, employed persons, younger people, higher educated and higher income individuals are all more likely to use the internet than women, retired people, home-makers, older people, lower educated and lower income individuals.

… but there is still a digital divide.

A fifth of the population have never used the internet, while just fewer than one in ten Australians are ex-users. Ex-users and non-users have different reasons for not using the internet. Ex-users are more likely to cite being too busy or not having a computer or internet connection while non-users are more likely to say they are confused by the technology or have no interest in the internet. While broadband access is growing it is worth noting that more than four in ten Australians do not have broadband access at home.

The internet in Australia is maturing and broadband is still growing

The internet is a fairly mature technology in Australia. A majority of internet users are ‘experienced users’, having used for between six and ten years. Just under one in five are ‘old hands’ (10 years or more). A very small proportion of users had taken up use in the last year. On average men have been online 16 months longer than women.

Broadband access however, is still in a rapid take-up phase. People with broadband access at home use the internet more than those on dial-up connections.

For the majority of people home access accounts for most of their internet use followed by work. Other locations do not account for a high level of use across the population although for the people who use them they are of course important.
The internet is an important way for people to keep in touch

Overall internet use has increased the time people spend communicating with friends and family. On the other hand, for a significant proportion of people their internet use has resulted in less time spent face-to-face with household members.

Email is the most popular means for communicating online. Over three quarters of our sample check their email at least once a day. Instant messaging is also a popular communications tool with one in five users messaging daily. Most people do not make phone calls over the internet but those that do use it very regularly.

The internet changes media use

For users the internet is now their most important source of information. Just under seven in ten users described the internet as ‘important’ or ‘very important’ compared to a third for television and less than a half for newspapers or radio.

Internet users spend less time watching television, listening to radio and reading newspapers than non-users.

Television watching is the media-related activity most affected by internet use. Four in ten users say they watch less television since access while less than a quarter feel they read newspapers or books less.

Around six in ten users would visit an online news service if either a large international or large local story was breaking. Overall, internet users rate the internet as reliable an information source as newspapers and more reliable than television.

The internet is a major source of entertainment

The internet is an increasingly important source of entertainment, however it is yet to really challenge television or even radio for most users. The proportion of users who describe the internet as a very important source of entertainment is just slightly less than the proportion for television which points to the potential of the internet in this realm. We would expect that as broadband improves in both speed and coverage that entertainment uses will become increasingly important.

Downloading or listening to music online, surfing or browsing the web, finding out information about food such as recipes, looking for information about restaurants and visiting sites dedicated to particular artists are the most popular entertainment-related internet activities.

Internet users are more likely to access their movies and music off-line than online. Even in terms of digital music, users are more likely to copy their own or a friend’s CD than to buy online.

Almost half of our internet users would not consider downloading music or movies instead of buying hard copy at any price. Only around one in twenty users (4.7%) would be prepared to pay a price comparable to an offline version.

The internet enables people’s creativity

Users are positive about the impact of internet use on creativity and productivity. A half felt internet access had improved their work performance and less than one in twenty thought it had deteriorated. Most felt that their internet use had enabled them to share creative work they liked with others, just under a half to share their own creative work and nearly a quarter of users felt that access had encouraged them to produce their own creative work and share it with others.
Few internet users have a personal website or blog. Around a quarter post their photographs online while one in twenty post video footage.

**The internet changes politics**

Just under a half of users agreed that the internet has become important for the political campaign process. Close to a third of non-users said they did not know if this was the case while just over a third agreed.

Overall non-users were more sceptical about the internet's capacity to empower citizens than users. Perhaps more importantly, a sizeable proportion of non-users simply didn’t know what impact the internet was having on politics.

**People shop online but they have reservations**

Just under a half of our sample of internet users purchased at least one product a month. Those who used the internet to purchase spent on average $200 per month online (the median amount spent was $100).

More than eight in ten users research products online. Making travel bookings, paying bills, banking and purchasing event tickets were all popular online activities.

A majority of users are ‘very’ or ‘extremely concerned’ about credit card security online. In relation to privacy issues involved with e-commerce the figure is just under a half.
Introduction

This report presents findings from the first survey of the Australian component of the World Internet Project (WIP), a collaborative survey-based study of the social, cultural, political and economic effects of the internet and other new communications technologies. Founded at UCLA in the United States in 1999, and now based at the University of Southern California’s Annenberg Center, the WIP has more than 25 partners in countries and regions all over the world (see Appendix III for a list of partners).

The Australian partner for the WIP is the ARC Centre of Excellence for Creative Innovation (CCi) at the Institute for Social Research, Swinburne University. CCi was established in July 2005 and has an ambitious research agenda organised around three key themes: creative innovation; innovation policy, and creative human capital. A central question motivating our research at the Centre has been: How does Australia build a ‘creative’ economy and society, suited to the economic, social and cultural conditions of the 21st century? This problem lies behind our interest in a better understanding of the dynamics of the internet: we believe that broadband and other ‘new internet’ technologies will be vital enablers for the emergent creative economy.

Our survey of 1000 households conducted in August 2007 is the first step in filling a substantial gap in our understanding of the dynamics of the Internet in Australia. While there are widely available data on the numbers of Australians who access the internet, where they access the net and whether they have broadband or dial-up access (for example see ABS, *Household Use of Information Technology 2004-05* Cat No 8146.0), there is almost no detailed, publicly available data on what people are doing online in Australia and how this varies across different sub-populations. Of particular interest are the differences between those users relying on dial-up access and those with broadband access (the *Household Broadband Adoption Report* undertaken for DCITA in January 2004 provides some older, basic information on this topic.)

The role of broadband in the wider development of the creative economy leads us to a concern with the creative uses of the net, and especially the ways that consumers of information are gradually also becoming producers of content. Creative applications of networked content tend to require comparatively high levels of technical skill on the users’ part, and are markers of growing digital literacy. The increasing presence of user-generated content on the net also implies that users are gaining more from their online experience. So what are the characteristics of those people who are producing online content now? Is this creative activity related to age, gender, experience and skills or speed of access?

There are also a series of further issues we are keen to pursue: the diffusion of broadband in Australia and reasons hindering take-up; the effects of internet usage on the consumption of other media; the uptake of social web technology; video usage; news consumption online and how it is changing; and the impact of the ‘always on’ element of broadband as people move from gaining news online to entertainment.
1 Who uses the internet in Australia?

According to the ABS, in November 1998, just under one in five Australian households had access to the internet. This proportion had almost doubled two years later and has continued to climb steadily. In our survey undertaken in 2007 we found that almost three quarters of households had internet access.

This section investigates who uses the internet and who doesn’t. Since the popularisation of the internet and the advent of the world wide web there has been considerable public policy interest in this issue. As the technology has matured and adoption deepened, interest has focused on where people access the net and the type of access they have.

1.1 Current users and non-users

In 2007, eight out of ten Australians say that they have used the internet. The vast majority of these people (72.6%) are current users while 7.8% have used the internet but do not currently. Only one in five of our respondents had never used the internet.

1.2 Connection type in the household

Just under eight out of ten home internet connections are now broadband. (For the purposes of this report broadband is defined as any connection that is not dial-up.) As we demonstrate later in the report, the type of connection a user has can significantly influence their experience of the internet. As broadband access becomes standard, the relative disadvantage of dial-up access will increase.
**Digital Divides: Users and Non-users**

One of the most basic questions about the internet through its development phase has been who is using and who is not? While a substantial minority of the population are still non-users, the relevance of this question remains. This section examines the characteristics of the two groups.

### 1.3 Use by lifestage

Lifestage is one aspect that influences internet use. The fact that the vast majority of the employed population (86%) uses the internet regularly indicates that today computer and internet skills are essential to people’s professional lives. This is also true for students.

More than a third (37.5%) of homemakers and primary carers have not used the internet during the last three months while 27% of unemployed people are non-users or ex-users of the internet. (All 37 unemployed respondents have however completed a secondary or tertiary level of education, which suggests that for many of them unemployment may only be a transitional phase.) Finally, retired people have the lowest user rate of 38%.

### 1.4 Use by age

Another factor that has an effect on internet use is age. The likelihood that Australians use the internet on a regular basis decreases gradually with increasing age.

Almost all of our youngest respondents (18 to 24) are on-line (95.1%), as are 90.6% of 25 to 34 years old, and still the great majority of Australians in their mid-thirties to end-forties (83.7%). Those between 50 and 64 years of age are more than twice as likely to use the internet (66.1%) than those over 64 (29.8%).
1.5 Use by gender

Unlike lifestage and age, gender has only a minor effect on internet use. A slightly larger proportion of men (74.3%) than women (70.9%) are on the internet. Overall, 49.4% of the respondents who currently use the internet are female and 50.6% male.

1.6 Use by income

Internet use is directly related to income. The higher the income the more likely a person is to access the internet regularly. Just over four in ten of our respondents living in our lowest income households used the internet while 92.5% of those in the highest bracket did so.

1.7 Use by education

Education level also influences internet usage. Not even half of the population with basic education (anybody who did not finish high school) only (47.5%) is on-line. The chance that those with tertiary education (89.7%) use the internet is 20 percent higher than for those with only secondary education (69.5%).
Occupation, like education, is strongly related to internet use. Most of those Australians who perform predominantly intellectual or office work (93.4%) are internet users. Two thirds of tradespersons (64.4%) and 84.9% of clerical, sales and service workers use the internet. 71.6% of those who hold a position in production, transport or alike are on the internet.

There is a divide between city and country people in terms of internet use. Just over three quarters of respondents in capital cities used the internet compared to 65.4% of those in non-capital city areas. In addition capital city dwellers were more likely to have a broadband connection exacerbating the difference in connectivity between urban and rural Australia.

Whether people are born in Australia or overseas has little effect on internet use. People born overseas are slightly more likely than those born in Australia to use the internet (76.7% to 71.6%). This finding highlights some of the great benefits of internet access for Australians born overseas who wish to stay in touch with relatives or keep up to date with information from their country of birth.
**Reasons for non-use**

It is remarkable how quickly and widely Australians from diverse cultural and social backgrounds, circumstances and age groups have become internet users. Nevertheless, at this stage, the internet is not an almost-universal communications medium comparable to television, or an almost-universal information service like the telephone. Concerns about the digital divide remain despite the reducing costs of computers and uptake of home access. As internet access and use has become more popular so concern for those without access has grown. Clearly factors such as income, education and level of employment all play a part in explaining whether someone does or does not use the internet.

Understanding this divide also requires knowing why people don’t access the internet. School age children who don’t access the internet because it is too expensive pose a different policy challenge from older people who don’t access the internet because it doesn’t interest them.

### 1.11 Primary reason for not using the internet, users and non-users

While the primary reason that non-users (34.8%) do not access the internet is that they simply do not take an interest in or see the use of the internet, many ex-users (27.6%) are not online because they do not have a computer or internet connection themselves. For the vast majority of both non-users and ex-users of the internet cost is not the reason for their decision not to use the internet, although this needs to be interpreted cautiously given the proportion who cited no computer or internet connection as the main impediment.

### 1.12 Primary reason for not using the internet, males and females

Female non-users were more likely to say that lack of interest or not having a computer or internet connection was the main reason for their non-use than males. Perhaps surprisingly men were more likely than women to say that their non-use was due to not knowing how to use the technology (24.4% to 15.6%).
The key difference between urban and rural non-users was that the former were more likely to cite lack of interest as the key reason for their non-use (36.0% to 27.4%). Rural users were no more likely than urban users to mention cost as the main reason for non-use.
2 Internet access basics: how long, where and what type?

This section provides some basic information about Australian internet use. We look at how long people have been accessing the net, and in what ways, or, in the case of former users, when they stopped. We also look at where in the house people use the internet, and the type of connection they have at home.

2.1 Years of use

There are signs of saturation of internet use with only 1.4% of users having begun in the last year. Just half of users have been using the internet for between five and ten years with a further 18.7% having over ten years experience of the net.

2.2 Years that users have had broadband access

Unlike internet use of any type, broadband access is still in a rapid take-up phase with a considerable proportion of recent adopters. Almost a quarter (23.9%) of those respondents with broadband access had acquired it within the previous twelve months while more than five percent had had it less than three months.
2.3 Year in which ex-users started using the internet

We asked ex-users when they first started using the internet. A small proportion of ex-users were early adopters of the internet, first accessing it before 1995. The majority of ex-users were later adopters, first using the internet in 2002 or later.

2.4 Last year of internet use

Over half of our ex-users (53.9%) had used the internet in 2007 so their period of non-use had been fairly short. Just over 10% of ex-users had not accessed the net since 2004.

2.5 Years of use by gender

On average, male users have been online longer than female users by about 16 months. A higher proportion of males were early adopters. Nearly a quarter of male respondents had been using the internet for more than 10 years compared to almost half the proportion of females (24.1% to 13.8%).
There is a clear difference between capital and non-capital city households in relation to broadband access. While 83.0% of internet connected households in capital cities had broadband access only 70.9% of rural households had such access. This difference is amplified by the lower overall internet penetration rates in rural Australia.

Most internet use takes place in people’s homes with our users averaging nine hours per week from home, followed by work use (5.4 hours) and school, college or university access accounting for just over an hour. It should be remembered that although some locations are not much used on average, for particular users they can be very important.

Ex-users’ main location of use when they were accessing the internet shows a marked difference to current users. While the main location was home (44.9%), the next most common location was a friend or relative’s house (19.2%). Work (17.9%), education facility (10.3%) and public facility (6.4%) all had significant use.

This result provides some insight into why people stop using the internet. These people are more reliant than overall user population on third parties for their access and therefore reliant on these relationships remaining stable.
2.9  Where in the house

Exactly half of those accessing the internet at home do so in a room designated as a study suggesting the strong relationship between the home adoption of computers and internet access and the increasing prevalence of the home office. Where people don’t have a study, access takes place in living rooms, lounge rooms and bedrooms and for a smaller proportion of users in the kitchen.

2.10  Wireless internet use

Just over a quarter of our internet users access the internet through a mobile device. This translates into around one in five of the population as a whole. On average our users spent less than an hour a week accessing the internet through a cell phone or mobile device and just over six hours using a wireless network on a computer.
2.11 Use of wireless computer by location

By far the most popular location for using a computer with a wireless internet connection is at home (56% of users). The vast majority of these users have a wireless network suggesting that for most people the advantage of wireless internet connectivity is being able to use the net around the house and to share a single connection between users.

2.12 Home use by connection type

There is clearly a relationship between higher internet use and broadband connections. Interestingly living in a broadband connected house doesn’t make you more likely to use the internet- 6.3% of respondents in houses with a dial-up connection did not use the internet while 6.9% of those with broadband never used the internet themselves. However, if you do use it you are likely to spend longer online if you have a broadband connection. More than a half of broadband users (54.8%) spent more than five hours online a week compared to less than a third of dial-up users (32.2%).
3 **How do people use the internet to communicate with friends and family?**

The impact of the internet on people’s communication and social networks has been an area of great interest. Often debate has been polarised between those who see the internet as a communication tool of extraordinary scope and those concerned with its possibly negative effects on face-to-face interaction.

This section examines how people use the internet for communications and its impact on social networks.

**Influence of the internet on social networks**

We asked a series of questions about how home internet access had changed people’s contact with various social groups. Our respondents were almost entirely positive about internet access and communication.

Respondents on the whole did not consider that internet access had decreased their contact with any group.

Overall people were much more likely to say that internet access had increased their contact with various groups rather than decreased it. Nearly four in ten respondents felt that their contact with people who shared hobbies or recreational activities had increased. The group that was most likely to have decreased was ‘people who share your political interests’ with 6% of respondents feeling that they had decreased contact. This result, together with some related findings, may be further evidence of the comparatively undeveloped state of internet political activity in Australia.

A bare majority of respondents felt that use of the internet had increased their contact with family (51.5%), with 44% saying that levels of family contact had not changed. A larger majority reported increased contact with friends (61.4%). On the other hand, when asked about time spent face-to-face, sizeable minorities felt that they spent less time with household members (27.5%) and friends (12.5%) since being connected to the internet.

3.1 **How has internet access affected your contact with people who share your hobbies/ recreational activities?**

The majority of respondents (55.6%) said that their contact had remained the same. A sizeable minority (38.7%) felt that their contact had increased with seventeen percent saying it had greatly increased.
3.2 **How has internet access affected your contact with people who share your political interests?**

Four out of five respondents said that internet access had no impact on their contact with people who shared their political interests. One in eight felt it had increased their contact while 7.2% said that it had decreased their contact.

3.3 **How has internet access affected your contact with people who share your religion?**

This question had the highest proportion of 'not applicable' responses in this series (30.6%). For those whom the question was applicable, 82% felt that the internet had no effect on their contact with one in ten answering that it had increased their contact.

3.4 **How has internet access affected your contact with your family?**

The majority of respondents (52.1%) thought that the internet had increased their contact with family members. The vast remainder of the rest of respondents (44.2% overall) thought their contact had not changed with less than 4% saying that contact had decreased.
How has internet access affected your contact with friends?

An even greater proportion thought that their contact with friends had increased through internet use (61.9%). Very few respondents felt their contact had decreased (2.3%) with 35.8% saying that contact had stayed the same.

How has internet access affected your contact with people in your profession?

The majority of respondents for whom this question was applicable felt that the internet had increased their contact with people in their profession. Very few felt that it had decreased with 43.4% saying it had stayed the same.

Since being connected to the internet have you spent more or less time face to face time with household members?

Nearly a third of respondents (31.1%) reported spending less face to face time with household members since connection to the internet. Almost two thirds (65.8%) said that this hadn’t changed since connection with very few (3.1%) claiming that their offline interaction with household members had increased.
3.8 Since being connected to the internet have you spent more or less time face to face time with friends?

Much fewer respondents thought that their face to face interaction with friends had decreased since gaining internet access (12.9%). Over eight in ten respondents said there had been no change while 6.4% said that they had seen more of their friends since access.

Ways of communicating online

This section looks at how often, and in what ways, Australians use the internet to communicate.

3.9 How often do you check your email?

Over three quarters of our sample check their email at least once a day, with more than a quarter checking several times. Just under 4% do not use email at all suggesting that email is still the most ubiquitous application on the web.
3.10 How often do you send attachments with your email?

Most people send emails with attachments at least once a week (63.9%) while 16% of those with access to the internet never send attachments.

3.11 How often do you post messages on discussion or message boards?

Just under a quarter of users (23.3%) posted on discussion or message boards with around half doing so at least weekly.

3.12 How often do you instant message?

More than one in five (20.8%) of our sample used instant messaging at least once a day. Despite this, a clear majority of internet users were not messaging (58.7%), with a further 20.2% of respondents messaging weekly or less often.
3.13 How often do you participate in chat rooms?

Most users do not participate in chat rooms. Just under nine in ten of our sample never use chat rooms and only 2.3% use them daily or more often.

3.14 How often do you make or receive phone calls over the internet?

Again this is a minority activity with 82.8% of our users having never made an internet phone call. However there are a substantial proportion of people who are regular users of this service. Eleven percent of users made a phone call over the internet at least once a week and just under five percent did so daily.
4 How does the internet effect people’s media consumption?

One of the major debates sparked by the development of the internet has been the future of the mass media. The ease of updating and adding stories to sites and the ability of users to access content whenever it is convenient make the internet a powerful medium for disseminating information.

The ramifications of the internet as an increasingly important source for news and information for other sources is unclear. This section examines these issues and makes comparisons between internet users and non-users in their off-line behaviour.

To place the role of the internet as an information source in context we asked participants about the importance of various media as a source of information. This section assumes a clear delineation between internet consumption and that of traditional media that does not exist in practice. Where respondents are asked about newspaper reading or television watching they we are asking about their off-line behaviour. As the internet develops this distinction will become increasingly difficult (or perhaps even meaningless) to make.

4.1 For information in general how important is television?

Television is an information source for a majority of people whether they are internet users or not. However, there is a difference in how important television is as an information source. Just under one in five (19%) of non-users describe television as very important compared to 8.5% of users.
4.2 For information in general how important are newspapers?

Again a majority of users and non-users describe newspapers as at least somewhat important for information (77.1% and 79.2% respectively). Non-users are both more likely to describe newspapers as ‘not at all important’ and as ‘very important’. This highlights the diversity of the non-user group who as we saw in section 1 are more likely to be older, less educated and have less income than users.

4.3 For information in general how important are magazines?

Magazines were not considered important for information by a majority of respondents. Internet users were more likely to consider them as important sources of information (37.9% compared to 31.4%).

4.4 For information in general how important is radio?

The results here follow the television theme. Over eight in ten non-internet users (81%) consider radio at least ‘a somewhat important’ information source compared to just under three quarters of users (74.1%). Non users are more likely to regard radio as ‘very important’ (23.0% to 14.5%) and ‘important’ (35.8% to 31.4%).
### 4.5 For information in general how important are interpersonal sources?

Almost nine in ten users and non-users (89.0% and 89.1% respectively) regard interpersonal sources as at least ‘somewhat important’ sources of information. Over a third of non-users thought they were ‘very important’ compared to over a quarter of users (33.6% to 26.9%).

### 4.6 For information in general how important is the internet?

For users the internet has become a very important source of information. It is more important than the traditional media of newspapers, radio and television. Just under seven in ten users described the internet as ‘important’ or ‘very important’ (68.5%).

For television the corresponding figure is 32.6%, for newspapers 46.6% and for radio 45.9%.

The difference is even more marked when we look just at the ‘very important’ rating. The proportion of users rating the internet as ‘very important’ (36.6%) is more than double that for radio (14.5%), newspapers (13.8%) and more than four times the figure for television (8.5%).

### Time spent on media

This section examines the amount of time people devote to various media during a week and how internet users think that internet access has affected their use of various media.
4.7 On average how many hours a week do you spend watching television, listening to radio and reading books?

On average, internet users spend around a third less time watching television and listening to radio (approximately 7 hours a week). They also spend less time reading newspapers (3.3 hours to 4.8 hours). They do however spend more time listening to recorded music (11.2 hours compared to 8.6 hours).

4.8 How has being connected to the internet changed the amount of television you watch?

More than four in ten internet users feel that they watch less television since becoming connected. A small proportion (4.0%) feel that they watch more television with a clear majority (54.1%) watching the same amount.

4.9 How has being connected to the internet changed the amount of time you spend reading books?

Almost two thirds of internet users believe that they spend the same amount of time reading books as they did before accessing the net. More than one in ten believe it has increased while just under a quarter (23.3%) think that they read less often.
4.10 How has being connected to the internet changed the amount of time you spend reading newspapers?

Over two thirds of internet users felt that they spent the same time reading newspapers (offline) since internet connection (68.6%). Just under a quarter (23.7%) felt they spent less time reading the newspaper and 7.7% thought their newspaper reading had increased.
Use of the internet for information seeking

This section looks at how people seek information online.

4.11 If a large local story was breaking, would you visit an online news service to get information?

A majority of internet users would use the internet to find information on a large local news story that was breaking. Less than 4 in 10 users would not.

4.12 If a large international story was breaking, would you visit an online news service to get information?

More than 6 in 10 internet users would visit an online news service to get information on a breaking international story. This highlights the growing importance of the internet as a global news source.
4.13 How often do you look for local community news on the Internet?

A majority of users look for local community news on the net (57.1%). Well over a third do so at least weekly (35.1%) with 16.2% looking on a daily basis.

4.14 How often do you look for national news on the internet?

Two thirds of users look for national news on the internet (66.0%). More than a quarter of users look on a daily basis with a further 21.8% looking weekly.

4.15 How often do you look for international news on the internet?

The pattern for international news is very similar to that for national. Slightly fewer people use the internet to search for international news (64.6%). A quarter search on a daily basis (24.9%) with 18.5% looking weekly.
4.16 How often do you check weather forecasts on the internet?

Most internet users check weather forecasts online (62.6%). Twenty two percent do so daily while a further 22% check weekly.

4.17 How often do you look for sports information on the internet?

Most people do not use the internet to check sports information (53.2%). Just under one in ten do so on a daily basis while 20.7% look for sports information weekly.
Trust in Media

The ease with which information can be posted on the net by large numbers of people raises the issue of reliability and trust. This section examines this issue by looking at internet users’ and non-users’ perceptions of reliability of information on the web and on other forms of media.

4.18 How much of the information on the world wide web is reliable?

There is a clear difference between users and non-users on this question. Over a quarter of non-users said they did not know how reliable information on the web was compared to just over 5% of users. Very few users thought no information on the web was reliable (0.3%) while 3.3% of non-users believed this. More than three-quarters of users (78.4%) thought that at least half of the information on the web was reliable compared to just over a half of non-users (51%).

4.19 How much of the information on the television is reliable?

There is very little difference between internet users and non-users on their perception of the reliability of information presented on television. Very few believe all information is reliable (1.4% and 0.7% respectively) or none of it is reliable (3.0% and 2.9%). The most popular response for both groups was ‘about half’ (39.7% and 38.3%).
4.20 How much of the information in newspapers is reliable?

Internet users are slightly more likely than non-users to think that information in newspapers is reliable. Almost a quarter of non-users (24.1%) feel that only a small portion of information in newspapers is reliable (17.8% for users) while almost four in ten users (39.1%) think that most of it is reliable compared to 29.2% of non-users.

4.21 Internet user’s perceptions of reliability across media

Overall, internet users rate the internet as reliable an information source as newspapers and more reliable than television. More than four in ten users thought that at least most of the information in newspapers was reliable (41.3%), compared with 38.6% for the internet and 29.5% for newspapers. On the other hand, three in ten (29.0%) thought that only a small portion or none of the information on television was reliable. For newspapers this figure was 18.9% and for the internet 16.4%.
5 How do people use the internet for entertainment?

The increasing prominence of Youtube in particular in the last few years has underlined the importance of the internet as an entertainment medium and its potential. Much corporate effort has been put into exploring the convergence between the internet and other entertainment platforms such as television and radio.

This section looks at how Australians are using the internet to entertain themselves and to investigate and carry out their hobbies and other recreational pursuits.

5.1 For entertainment in general how important is television?

Television is an entertainment source for a majority of people whether they are internet users or not. However, there is a difference in how important television is as an entertainment source. Over a quarter (27.7%) of non-users describe television as very important compared to 17.2% of users.

5.2 For entertainment in general how important are newspapers?

An overwhelming majority of non-users and users do not consider newspapers to be an important source of entertainment. Non-users though are more likely to consider newspapers as an important (19.7% to 12.9%) or very important (9.1% to 3.7%) entertainment source.
5.3 For entertainment in general how important are magazines?

Magazines were not considered important for entertainment by a majority of respondents. The key difference between users and non-users was that almost four in ten users thought magazines were not important at all as a source of entertainment compared to just over a quarter of non-users (26.7%).

5.4 For entertainment in general how important is radio?

Radio is still an important source of entertainment for people with over a quarter of non-users describing it as very important (27.4%). While not as important for internet users (only 12.1% consider it very important), almost three-quarters of users consider radio as at least somewhat important (74.1%) for entertainment.
## 5.5 For entertainment in general how important is the internet?

The internet is a more important source of entertainment for users than papers and magazines. Over half (55.4%) of internet users rate the internet as at least somewhat important for entertainment compared to 48.3% for newspapers and 44.1% for magazines.

While the internet is still yet to really challenge television as an entertainment source (more than eight in ten internet users rate television as at least somewhat important), the proportion of users who rate internet as a very important source of entertainment is very close to that for television (15.8% to 17.2%).

### Use of the internet for entertainment

This section looks at how people use the internet for entertainment purposes.

### 5.6 How often do you play role playing games (eg Second Life) on the internet?

More than nine in ten internet users never play role playing games online. Of those that do a high proportion play daily (30.9% of players but only 2.5% of internet users)
5.7 How often do you play action games on the internet?

A slightly higher proportion of users play action games than role playing games (11.6% compared to 7.7%). Just under two percent of users play action games daily while a further 3.3% do so on a weekly basis.

5.8 How often do you download or listen to music online?

Almost exactly a half of users download or listen to music online. Nine percent of users listen daily while a further 17.6% download or listen weekly.

5.9 How often do you download or watch movies, TV shows, video clips etc (eg Youtube)?

Three in ten users download or watch video of some kind online. While usage is not high, intensity is. Just under two thirds of those users accessing video online do so at least weekly. This represents just under one in five of all users (19.0%).
5.10 How often do you listen to a radio station online?

More than a quarter of users (26.6%) listen to a radio station online. Few however do this regularly—only 2.3% of users listen on a daily basis and 8.3% listen weekly.

5.11 How often do you bet, gamble or enter sweepstakes on the internet?

Less than one in twenty of our respondents used the internet to gamble (4.7%). No respondent claimed to be gambling on a daily basis and only 1.8% said they gambled weekly.

5.12 How often do you surf or browse the Web (without any definite purpose)?

Most people spend at least some time on the internet just browsing and the majority of these people are doing so at least weekly. Just under fifteen percent of users surf or browse on a daily basis while a further quarter of users do so weekly.
How often do you look at sites with sexual content?

More than one in five of our respondents (21.6%) look at internet sites with sexual content. Almost one in twenty (5.4%) do so on a weekly basis while 1.8% do so daily.

How often do you look up information about restaurants on the internet?

Just over four in ten internet users are using the net to look up information about restaurants (40.6%). Just fewer than three in ten are doing so at least monthly (5.9% weekly and 21.6% monthly).

How often do you find information about food such as recipes?

Well over half of our sample had used the internet to look up information about food including recipes. Somewhat surprisingly 1.4% of users were doing so daily with a further 12.8% looking weekly. Just over a quarter of users were looking for food-related information on a monthly basis.
5.16 How often do you visit sites dedicated to your favourite artists (eg authors, musicians)

Just under half of our sample had used the internet to visit a site dedicated to a favourite artist (46.3%). This was an activity that a similar proportion of users did on a weekly basis (13.8% at least weekly), monthly basis (17.2%) and less than monthly (15.2%).

5.17 How often do you download or listen to podcasts?

Downloading or listening to podcasts is still a minority activity amongst internet users with more than eight in ten users having never done this (82.6%). A few users regularly download or listen to podcasts (6.2% at least weekly and 5.4% monthly).

**Downloading entertainment**

This section presents findings from a series of questions that asked respondents in more detail about their downloading of music, movies and other entertainment.
5.18 Where do you usually buy your music?

The vast majority of internet users still usually buy their music from a ‘bricks and mortar’ store. Less than one in ten (8.1%) usually buy online.

5.19 How often do you use file-sharing services like bitTorrent?

Just under a quarter of users access file-sharing services. Of those that do, many are intensive users. Almost one in ten use a file sharing service weekly with a further 3.9% doing so on a daily basis.

5.20 Why do you use file-sharing services?

The most important reasons for using file sharing services are that they are free and simple and practical to use. Just under a half of file sharers said that free content was very important while 38.8% cited ‘simple and practical’ as very important. Being able to try before you buy (33.5%) and accessing hard to get content (31.6%) were also considered very important by users. The sense of community generated by file sharing was not considered important by as many users (11.3% rated it very important and 21.6% as important).
5.21 How has the ability to download music from the internet influenced your purchases of music?

Just under three in ten users (29.9%) said that being able to download music had decreased the amount of music they buy. Of those, one in five (19.5%) said that it had decreased a lot. An even higher proportion of file shares said that they now buy more music (32.9%) although they were less likely to say it had changed ‘a lot’ (9.1%).

5.22 How has the ability to download movies from the internet influenced your total consumption of movies via purchase from stores, video rental and visits to cinema?

File sharers on the whole did not think it had affected their consumption of movies from ‘traditional’ sources. Almost two thirds (64.9%) said it had not changed while 14.5% thought it had increased. Just over one in five (20.6%) felt their consumption had decreased.

5.23 How has the ability to download television programs from the internet influenced the amount of time you spend watching broadcast television?

Exactly a quarter of users felt that they watched less broadcast television due to being able to download television programs. Just over one in ten (10.5%) thought they watched more broadcast television with around two thirds watching the same amount (64.5%).
5.24 Where do you get your digital music?

Copying their own CDs is the main way that people currently get their music in digital form. Twenty-two percent of users ‘often’ get their digital music in this way while a further thirty percent do so ‘sometimes’. The next most popular source of digital music is copying friend’s CDs (10.2% ‘often’ and 34.8% ‘sometimes’). Just over a quarter of users report downloading for free (25.9%) and just under a quarter use a file sharing site (24.7%). Only 16.8% use an online music store to get digital music.

5.25 Why do you use pay services to get music from the internet?

A majority of respondents using pay services to get music claim ‘choice’ (51.6%), ‘simple and practical’ (50.0%) and the fact that it’s legal (50.0%) as either ‘very important’ or ‘important’ in their decision to use pay services to get music from the net. More than four in ten users cited ‘price’ (42.6%) and ‘sound quality’ (41.8%) as key motives while less than one in five were attracted by bonus content (16.4%).
5.26 From where do you get your digital movies?

Copying a friend’s dvd is the most popular way for internet users to get digital movies (4.3% often do this while 15.8% sometimes do). The next most popular way is by copying their own dvds.

5.27 If a boxed DVD or CD set was on sale for $40, for what price would you consider downloading a digital copy instead?

Almost half of our internet users (48.2%) would not consider downloading music or movies instead of buying hard copy at any price. A further 2.5% would only do so if it was free to download while almost one in ten (9.9%) don’t know whether they would download and if so, what they’d be prepared to pay. Those who would countenance downloading would on average be prepared to pay $20, or half the price of the off-line version. Around one in twenty users (4.7%) would be prepared to pay more than $30 or around the same as off-line.
6 How do people use the internet for creative purposes?

The role of broadband in the wider development of the creative economy leads us to a concern with the creative uses of the net, and especially the ways that consumers of information are gradually also becoming producers of content. Creative applications of networked content tend to require comparatively high levels of technical skill on the users’ part, and are markers of growing digital literacy. The increasing presence of user-generated content on the net also implies that users are gaining more from their online experience. So what are the characteristics of those people who are producing online content now? Is this creative activity related to age, gender, experience and skills or speed of access?

Creative uses

This section looks at a number of online activities that can be broadly categorised as involving the creation and distribution of content.

6.1 How often do you work on a personal website?

Overall, nearly one in eight (12.1%) of our sample keep a personal website. Two thirds of these people (8.3%) update their site at least once a week.

6.2 How often do you work on your blog?

A smaller proportion of our sample kept a blog. Less than eight per cent did so and less than half of these people (3.3% of all users) updated it more than once a week.
6.3 How often do you post pictures or photos?

Just under a quarter of users posted pictures or photographs (24.8%). More than one in ten are doing so weekly or more often (11.7%).

6.4 How often do you post videos?

Just under one in twenty users post videos online (4.8%). Of these people, around a third (1.8% of total users) post videos weekly while a further 1.7% of users do so monthly. Only 1.5% of users keep a videoblog.

Attitudes to the impact of the internet on respondents’ creativity and productivity

6.5 How do you feel your internet access has affected your work performance/productivity?

Respondents on the whole were optimistic regarding the effect of internet use on their productivity. A half of users felt that internet access had either improved their productivity a lot (22.2%) or somewhat (28%). Under five percent felt the internet had negatively influenced their productivity.
The internet enables me to share creative work I like with others

Again respondents were quite positive about the use of the internet for creative purposes. A majority of internet users agreed that the internet enabled them to share creative work they liked with others with just over a quarter of users disagreeing with this contention.

The internet enables me to share my own creative work with others

Just under a half of internet users (46.3%) agreed that access had enabled them to share their own creative work with others, while a third (33.2%) disagreed.

The internet has encouraged me to produce my own creative work and share it with others

In the final question of this series we asked whether internet access had actually encouraged the respondent to create their own work and share it. While a majority of respondents disagreed with the proposition nearly a quarter of respondents agreed. Given the strength of the proposition this indicates that the internet has played a positive role in encouraging creative pursuits.
7 How does the internet change politics?

Given the timing of the Federal election we were particularly interested in the outcome of the series of questions we asked about peoples’ attitudes to the internet and politics. Overall non-users were more sceptical about the internets’ capacity to empower citizens. Perhaps more importantly, a sizeable proportion of non-users simply didn’t know what impact the internet was having on politics and the role of citizens.

7.1 By using the internet people like you can have more political power

Both users and non-users were generally sceptical that internet use could give you more political power. Over a third of users (35.4%) however, agreed with this proposition with 17.9% of non-users agreeing. One in five non-users did not know whether this statement was true or not.

7.2 By using the internet people like you will have more say about what the government does

Just under a third of users agreed that the internet can give users more say about what government does (31.8%) with 17.2% of non-users agreeing with this proposition. The most striking difference between the two groups though was the proportion of non-users who did not know whether the internet could give people like themselves more say about what the government does.
7.3 By using the internet people like you can better understand politics

In answer to perhaps the least controversial proposition that we put to respondents in this series of questions ‘that the internet can help to better understand politics’, a bare majority of users agreed (50.3%), while only a quarter of non-users agreed (25.9%). Just over a quarter (26.6%) of users disagreed with this proposition.

7.4 By using the internet public officials will care more what people like you think

There was not such a large difference between users and non-users on the impact of the internet on how much public officials care about what people think. Both were equally sceptical of this notion with a quarter of users and a fifth of non-users agreeing with this statement. Again a much larger proportion of non-users did not know if this was the case or not.

7.5 The internet has become important for the political campaign process

The final statement in the series was particularly interesting given that it was asked in the lead up to a federal election. The most marked result here was the very high proportion of non-users who did not know (28.1%) whether the internet was important or not. This gap between users and non-users is a potentially serious issue. We know that political parties (and pundits) are increasingly using the net as both a complement to, and substitute for, off-line activities. That such a large proportion of the population not only doesn’t access the net but doesn’t know how important it is for the political campaign process does potentially undermine these citizens’ participation in the political process.
8 How does the internet change commerce?

From its very early days, there has been much speculation and interest in commercial and retail applications of the world wide web. Many books have been written advising on strategies to maximise online sales. There have been spectacular success stories such as amazon and of course ebay. This section presents findings on consumer activity online and peoples’ perceptions of online transactions.

How much?

This section looks at the extent of online commerce amongst our respondents.

8.1 In an average month, how many times do you purchase products or services over the internet?

Just under a half of our sample of internet users purchased at least one product a month (46.2%). Of those that do purchase online, just under 65% purchased one or two times a month (29.9% of users overall). At the other end of the scale, 2.6% of users purchased eleven times or more in a month.

8.2 In an average month, how much do you spend on products or services purchased over the internet?

Those people who use the internet to make purchases spent just over $200 a month on average. This figure though is skewed by a small number making quite large purchases (the median was $100). Almost one in ten people who purchase online are spending $500 or more a month (9.9%).
8.3 How often do you use the internet to get information about products?

The vast majority of users (82.9%) research products on the internet. For just under half of users this is regular experience with 12% getting product information daily and a further 31% doing so on a weekly basis.

8.4 How often do you buy products online?

More than four in ten users (43%) never use the internet to buy products. On the other hand around one in ten (10.4%) do so at least weekly. Close to half of users (46.6%) are purchasing monthly or less often.

8.5 How often do you make travel reservations/bookings online?

Two-thirds of users make travel bookings online. Understandably for most people this is an occasional activity with almost half of users doing this less than monthly (48.6%). A very small proportion of people (0.8%) make bookings daily and a further 1.8% do so weekly.
8.6 How often do you pay bills online?

Just less than six in ten users pay bills online (59.2%). Intensity of use is quite high with over a third of users (34.7%) using the internet to pay bills on weekly basis or more often.

8.7 How often do you use your bank’s online services?

Two thirds of users bank online and the majority of those that do are frequent users. Almost four in ten users are banking online weekly (38.7%) while 15.4% are daily users.

8.8 How often do you invest in stocks/funds/bonds online

The majority of users do not invest online (85.5%). A significant minority are investing weekly or even daily (4.1%) with 5.1% making online investments monthly.
8.9 How often do you purchase event tickets online?

Just under half of internet users purchase event tickets online (49.4%). For most this is an occasional activity with over a third of users doing so less than monthly (34.2%).

**Tactics**

This section examines the interaction between online and off-line purchasing.

8.10 How often do you look at goods on the internet but when it comes time to buy, you purchase from local stores?

A majority of our sample had used the internet to research goods before buying them from a local store (65.1%). Just over a quarter of users said they did this often (25.5%).
8.11 How often do you look at goods in local stores but when it comes time to buy, you purchase online?

People are much less likely to do the reverse ie research offline and buy online. Only a quarter of our users reported doing this and less than one in twenty (4.8%) did it often.

Concerns about internet security

This section reports on people’s concern about security issues associated with e-commerce.

8.12 How concerned would you be about the security of your credit or bank card information if you bought something online?

While a majority of users are ‘very’ or ‘extremely concerned’ about credit card security online, they are less concerned than non-users. Understandably a high proportion of non-users (13.7%) don’t know whether or not to be concerned about purchasing online. Only one in five (20.1%) of non-users are only ‘somewhat’ or ‘not at all concerned’ compared to 47.4% of users.
If you bought something online, how concerned would you be about the privacy of your personal information such as name and address, phone number, purchasing habits?

Again non-users are more likely to be concerned about privacy issues involved with e-commerce. Less than a quarter of non-users were ‘not at all’ or ‘somewhat concerned’ compared to over half of users (51.5%). Fifteen percent of non-users didn’t know whether to be concerned or not.
Background to the World Internet Project

In its first findings report, the then UCLA study team set out their guiding objective as follows

Our goal is to explore how the Internet influences social, political, cultural, and economic behavior and ideas, as measured by the attitudes, values, and perceptions of both Internet users and non-users. (UCLA 2000: p1)

They went on to outline how thought their work could contribute:

We hope our findings about the Internet will have broad implications for government policymaking, corporate planning, and social and cultural study. To begin this project now is critical if we hope to fully understand the Internet as it evolves. Had this type of research been conducted on the evolution of television as it emerged in the late 1940s, the information would have provided policy makers, the media, and ultimately historians with invaluable insights about how broadcasting has changed the world. (UCLA 2000: p1)

The first report produced by the US partners was concerned with a number of emerging questions around the social, economic, political and cultural dynamics of the Internet. Who was online, who was not, what were users doing online? How was the Net changing patterns of media consumption, consumer behaviour, and communication patterns? What social and psychological effects were apparent?

From its beginnings, the main research activity of the project has been a sample survey of internet users and non-users. The survey is administered in different ways by the different partners. Most partners undertake the survey by telephone with a significant minority opting for face to face interviews. Samples are collected on various bases, with some partners choosing cluster samples and some engaging in stratification to make sure that their sample reflects the population on key variables. Sample sizes range from 900 respondents to 4,000. In addition the minimum age of respondents varies from 12 up to 18 years.

Given the range of countries involved in the collaboration there are significant differences in the stage of internet development. There are large differences in internet penetration and the prevailing forms of access. For example in many countries public access points are becoming increasingly less important while in developing countries public access points are still the main means for people to access the internet.

A related issue is that of broadband take-up. This is becoming the key issue in many countries in which the internet is a ‘mature’ technology, but there is no consensus regarding what constitutes broadband and this definitional problem is exacerbated when looking across countries. Similarly the evolution of the internet has varied between countries in terms of technologies adopted.

Public policy framing of internet development also varies between the partner countries. Regulating the perceived negative effects of the internet is given more emphasis in some jurisdictions while others are more interested in the economic benefits of the net.

Just as importantly for a project such as this, there is great variation in the amount and type of research conducted on internet use and its impact in the various partner countries. In the US for example, the Pew Internet and American Life project, commenced in 1999, is a major ongoing survey-based project examining the internet and its impact on households and communities. In Australia, however, research on the social impact of the internet has been piecemeal at best. While there are many surveys that have been conducted on internet use and non-use in various countries, the World Internet Project is the only attempt to undertake coordinated survey work across countries. The combination of longitudinal data and international comparison makes this project extremely useful for identifying and tracking trends.
In the United States there has been a lot of survey research concentrating on the diffusion of new technologies. The Department of Commerce’s *Falling Through the Net* project, begun in 1995 and since re-badged as *A Nation Online*, is the best example of this type of research. It began in response to concerns about the digital divide more generally and is now focused on the issue of broadband diffusion. The research includes some limited consideration of uses of the internet by individuals and households but does not investigate ‘social impact’ in any detailed way. In this research the positive effect of the internet is assumed.

The Pew Internet and American Life Project is a more ambitious and larger project that aims to ‘explore the impact of the Internet on families, communities, work and home, daily life, education, health care, and civic and political life.’ This project is a series of thematically linked investigations of the impact of the internet. Recent reports have included a study of bloggers and online banking. In contrast to the US World Internet Project this approach enables more detailed investigation of particular issues and uses but doesn’t provide as clear an overview. The focused nature of these surveys doesn’t facilitate the investigation of the relationship between various online (and off-line) activities and uses.

All partners in the WIP have their own funding source although the US partner in particular has played a key role in advising new partners and meeting with prospective funders. Another challenge to the development of the project has been in developing a consistent approach for partners with greatly varying funding arrangements both in terms of quantum and funding mix. This year will see the first international report published out of the project that will include data on a dozen countries.
Appendix 1

About the CCI

The ARC Centre of Excellence for Creative Innovation (CCI) was established in July 2005. It is the first Centre of Excellence funded outside the science, engineering and technology sectors.

The Centre has an ambitious research agenda organised around three themes:

- **Creative Innovation**: Content, IT, Design, BPM, Enterprise
- **Innovation Policy**: Innovation Policy, Law, Economics
- **Creative Human Capital**: Industry, Education, Workforce, Consumers

and six research programs:

1. Crisis in Innovation
2. Creative Workforce
3. Citizen-Consumer
4. Enterprise Formation and Sustainability
5. Legal and regulatory impasses and innovations
6. International Creative Content Cultures and Australian Advantage

CCI offers a coherent plan to address a set of definable gaps and problems in the national innovation system. How does Australia build a ‘creative’ economy and society suited to the conditions for content creation, business sustainability, employment, vocation, identity, and social structure and communication emerging across the globe in the 21st century? The basic value proposition of the Centre is that Australia needs to build an innovation system customised to support a creative economy and society.

The structure of the Centre’s research can be conceptualised as a ‘value chain’ that starts with sizing the dimensions and dynamics of the sector, seeks to promote education and training for a creative workforce, creates ways of addressing bottlenecks in content generation and dissemination, assists in improving the business structures and practices of creative enterprises, examines policy settings and regulatory regimes for better outcomes for creators and consumers alike, and engages at depth with Australia’s place in the region and with crucial export markets and cultural partners.

CCI has taken the strategic decision to build even wider collaboration than usual in our fields, bringing a range of excellent humanities, creative arts and technical and social sciences research perspectives to bear. CCI has research and industry partners in six Australian states and territories. Our researchers work across programs which are deliberately structured to cross disciplines and focus on key stages and lacunae in the innovation ‘value chain’.
Appendix 2

Research methods

Sampling design and procedures

The telephone interviewing was conducted by Swinburne University’s Life & Social Sciences CATI Centre and managed by Ms Gordana Bruce.

A random sample of 1,000 Australians was interviewed. Australian phone numbers for each state and territory were extracted from Australia on Disk. Mobile numbers were excluded from the final number pool. The numbers were classified into urban (capital city) and rural (balance of state/territory) based on the Australian Bureau of Statistics selection of postcodes within the Major Statistical Regions of each state/territory.

There were three quota requirements – age (5 groups) x gender x location (capital city / balance), resulting in 20 quota groups. The number of respondents requested in each quota group, and the actual number of respondents is presented in Table 1.

Sample numbers were further grouped by state and territory urban (capital city) and rural (balance) regions, with proportionately greater numbers in NSW, VIC and QLD. This was done in order to provide data that was more representative of the Australian population. The number of respondents required in each location was calculated based on approximately 64% of the population living in capital cities (based on requirements provided by the client, as shown in Table 1). The number of surveys completed in each state/territory location is presented in Table 2.

It should be noted that parts of rural Vic and NSW were experiencing severe floods for several days during the time of the survey. No calls were made to these regions during that time.

Survey dates and call times

- Calls were made between 12th June and 4th July 2007
- Week day calls were made between 2pm and 8pm on Mondays, Tuesdays and Wednesdays; between 10am and 8pm on Thursdays and 10am and 5pm on Fridays.
- Saturday calls were made between 10am – 5pm
- Sunday calls were made between 11am – 5pm
- No calls were made on Saturday 23rd June and Sunday 24th June due to system maintenance.

Interviewers

- Calls were made by 31 different people.
- There were 5 supervisors (one supervisor on duty each shift) who made some calls during their shift. All supervisors are current Swinburne students employed as research assistants. They have long-standing dedicated expertise in interview technique.
- The majority of calls were made by 26 interviewers. Most interviewers are current undergraduate and postgraduate Swinburne Social Science students.
- All interviewers were trained and monitored by our supervisors.
Table 1: Quota categories for WIP Sample

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Note: M = Male; F = Female

Table 2: Number of respondents in state and territory urban and rural locations

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<th>ACT</th>
<th>NSW</th>
<th>NT</th>
<th>QLD</th>
<th>SA</th>
<th>TAS</th>
<th>VIC</th>
<th>WA</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td>30</td>
<td>183</td>
<td>15</td>
<td>128</td>
<td>55</td>
<td>19</td>
<td>146</td>
<td>66</td>
<td>642</td>
</tr>
<tr>
<td>Rural</td>
<td>–</td>
<td>90</td>
<td>16</td>
<td>69</td>
<td>33</td>
<td>23</td>
<td>87</td>
<td>40</td>
<td>358</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>273</td>
<td>31</td>
<td>197</td>
<td>88</td>
<td>42</td>
<td>233</td>
<td>106</td>
<td>1000</td>
</tr>
</tbody>
</table>

Note: Urban (capital city); Rural (balance)

Survey length

- Across all 1000 interviews, survey time ranged from 3 minutes to 89 minutes (M = 24 minutes).
- Interviews for internet users ranged from 12 minutes to 89 minutes (M = 28 minutes)
- Interviews for non-internet users ranged from 3 minutes to 36 minutes (M = 13 minutes)

Interviewing operational criteria

Callbacks: The number of callbacks for each telephone number was set to a maximum of 7 in the CATI software. Therefore, each number could be called a maximum of 7 times in repeated attempts to reach a potential respondent before being automatically removed from the active phone numbers in the sample. The timing of each callback attempt was programmed into the CATI software to allow for maximum contact potential.

Response rates: The Swinburne CATI Facility developed the following approach to the calculation of response rates. We believe this method gives a detailed account of all call categories.

“Telephone listing report” definitions

- Active – These numbers are still available in the system. For example, there are 229 answering machine numbers that the system is holding in memory that would be brought up again if the survey were continuing.
• Dead – These numbers are finished with and would not be used again. This file includes the completed surveys and any numbers that have been sent to the ‘kill’ file because they are unusable for the purposes of the survey.
• Invalid numbers are numbers that are not connected
• Failed screen are participants who failed the screening criteria (they must have been under 18 years old)
• Total Tries – This is the total number of calls made by the interviewers, including all categories of calls = 26,682

**Calculation of response rates**

• Numbers used = 14,039 (dead12,232 + active 1,807)
• Of these, 4,288 were ineligible (from dead file: invalid 3,542 + business 416 + fax 316 + failed screen 14)
• Of the remaining 9,751 eligible calls, 4,591 were non-responses
• No answer = 992 (766 active + 226 dead)
• Answering machine = 1,014 (797 active + 217 dead)
• Engaged = 112 (91 active + 21 dead)
• Appointments = 47 (active)
• Number called too many times = 216 (dead)
• Miscellaneous = 13 ( “blank - server” active )
• Age quota full = 1,685 (dead)
• Sex quota full =419 (dead)
• End session = 93 (active)

This leaves 5,160 valid responses
• 1000 completed
• 3919 refused
• 241 language barrier

If the language barrier responses are deemed ineligible, this leaves 4919 eligible responses.

The response rate is then the proportion of completed calls from the total valid eligible responses (1000 / 4919) = 20.33%
Appendix 3

The World Internet Project: international contacts

Argentina
Institute of Applied Economics & Fundacion de Investigaciones, Economicas Latinoamericanas
www.fiel.org.ar

Australia
Institute for Social Research
Swinburne University of Technology
www.sisr.net

Bolivia
Universidad NUR
www.nur.edu

Canada
Canadian Internet Project
www.cipic.ca

Britain
Oxford Internet Institute
www.oi.ox.ac.uk/microsites/oxis

Chile
P. Universidad Catolica de Chile
www.wipchile.cl

China
Chinese Academy of Social Sciences
www.wipchina.org/index.php

Columbia
CINTEL – Centro de Investigacion de las Telecomunicaciones
www.cintel.org.co

Czech Republic
Masaryk University Brno
www.fss.muni.cz/ivdmr

France
Center for Political Research at Sciences-po
www.cevipof.msh-paris.fr

Germany
Deutsches Digital Institut
www.deutsches-digital-institut.de

Hungary
ITHAKA, TARKI – Social Research Center
www.wiphungary.hu
Iran
University of Alzahra, www.Alzahra.ac.ir

Israel
The Research Center for Internet Psychology (CIP)
www.idc.ac.il/communications/cip/en

Italy
SDA Bocconi, Bocconi University
www.sdabocconi.it/home/it/

Japan
Toyo University
http://media.asaka.toyo.ac.jp/wip/index.html

Macau
University of Macau, www.umac.mo

Mexico
Tecnologico de Monterrey www.cem.itesm.mx

New Zealand
Institute of Culture, Discourse and Communication,
Auckland University of Technology
www.aut.ac.nz/research/research_institutes/ccr/projects/world_internet_project.htm

Portugal
CIES-ISCTE, http://cies.iscte.pt

Singapore
Singapore Internet Research Centre,
Nanyang Technological University
www.ntu.edu.sg/sci/sirc

South Korea
Yonsei University, www.yonsei.ac.kr

Spain
InstitutoServilab, University of Alcala
http://www2.uah.es/servilab/

Sweden
World Internet Institute, www.wii.se

United States
Center for the Digital Future
USC Annenberg School for Communication
www.digitalcenter.org