National Seniors
Australia

20 March 2012

Senator Catryna Bilyk
Chair
Joint Select Committee on Cyber-Safety
PO Box 6021
Parliament House
Canberra ACT 2600

Dear Senator Bilyk

Inquiry into Cyber-Safety for Senior Australians

National Seniors Australia welcomes the Committee's consideration of cyber-safety for senior Australians and wishes to offer comment on the issues being considered by the Committee.

By way of background, National Seniors Australia is the country's largest organisation representing the interests of those aged 50 and over, with around a quarter of a million members nation-wide. This broad-based support enables National Seniors to provide a well informed and representative voice on behalf of its members and contribute to public education, debate and community consultation on issues of direct relevance to older Australians.

We note that internet usage among older Australians is growing rapidly and many are among the early adopters of new cyber-technology. However, our research and feedback from members indicate that some older Australians still have high levels of concern about cyber-safety, to the extent that they are either limiting the ways in which they use the internet, or not using it at all.

The report *Older Australians and the Internet: Bridging the Digital Divide,* released in September 2011 by the National Seniors' Productive Ageing Centre, focussed on older Australians who never or rarely use the internet and identified the barriers facing them in accessing the internet. It also suggested the kind of support needed to overcome these barriers. A copy of this report is enclosed and the original research study on which it was based can be accessed in full at www.productiveageing.com.au.

Significantly for the Committee's work, the research showed that concerns about security and viruses were the third most significant barrier to older people using the internet, trumped only by 'confused by the technology' and lack of knowledge and skills. Of those surveyed, 64 per cent were deterred by concerns about security and viruses (74 per cent said they were confused by the technology and 76 per cent cited lack of skills as a barrier). By comparison, the next most significant barrier was lack of knowledge about what the internet actually does, a barrier for 56 per cent of respondents.

In similar vein, participants in a 2010 community forum 'Older and Online' organised by National Seniors identified internet security as an issue of ongoing concern they wished to explore further.

As noted in our response to the Legislative Issues Paper on Personally Controlled Electronic Health Records (PCEHR), privacy and security are 'make or break' issues for older Australians in relation to PCEHR. PCEHR will only be able to deliver the anticipated benefits for patients, healthcare providers and the healthcare system if all parties have a high level of trust and confidence in the entire system. The creation of such trust and confidence will be significantly influenced by the extent to which the issues, including privacy and security, are appropriately addressed.

The internet has become an essential tool for living and current online technologies can be specifically tailored to suit the needs of older people. The potential for the internet to benefit older people can only be expected to expand. However, to encourage more older Australians to use the internet, they need additional support to ensure they have the knowledge and skills to do so safely and with confidence.

National Seniors believes that providing up-to-date information about the range of cyber-safety issues specifically tailored for older people would greatly assist in building their confidence and knowledge. While there is a great deal of information already available online about cyber-safety, we note that much of it tends to be narrowly focussed (such as the Australian Competition and Consumer Commission's website, SCAMwatch).

In our view, the Australian Communications and Media Authority's cyber (smart:) site (www.cybersmart.gov.au), designed for use by school age children, teachers and parents, provides a useful model of comprehensive, targeted information on cyber safety. Such a website designed specifically for older people, in tandem with a telephone hotline for those not yet confident in using web-based information, could also be of use to a wider audience.

In summary, awareness and education are integral to addressing older people's fears and concerns about online technologies. National Seniors proposes:

1. More targeted government-sponsored cyber-security and safety campaigns,

2. More government-sponsored training courses and materials which allow for and address older people's lack of basic skills and high levels of anxiety, and

3. A hotline and website providing information on cyber-safety issues, such as virus protection, scams and privacy protection.

If you have any questions about our submission, please contact Dr Sarah Macneil, Senior Policy Advisor, on (02) 6230 4588.

Yours sincerely,

Peter Matwijiw
General Manager Policy and Research

Older Australians and the Internet:

Bridging the Digital Divide

September 2011

National Seniors Australia

Productive Ageing Centre

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FOREWORD

In recent years, the internet has become an essential tool for living. Whether making bookings, receiving updates on superannuation or shares, downloading university lectures or filling in government forms, the internet is the first option for more and more Australians. More people use internet-based communications to stay in touch with friends and family quickly and cheaply. Health and business services are increasingly migrating to the web, seeking lower costs and easier access.

It is a profound shift in the way we live, but some older Australians are finding it hard to keep up. Older people with low internet skills are unable to conduct business or access important services over the web. They can be isolated from their community and family at a time in their lives when feeling connected is very important. In short, they are often on the wrong side of 'the digital divide'.

Previous research and existing data on internet connections and usage suggest that many older Australians will not have the skills, interest or resources to take advantage of the National Broadband Network. This study set out to explore how the web could improve the daily life of older people. It has identified the barriers to internet use that exist for the over 50s, and what kind of support is needed to overcome these and bridge the digital divide.

The full report is available at www.productiveageing.com.au. This shorter version highlights the dimensions of digital exclusion amongst older people, awareness of and skills in internet usage, barriers to going on-line and what support is needed.

Peter Matwijiw
General Manager Policy and Research
National Seniors Productive Ageing Centre
September 2011

ACKNOWLEDGEMENTS

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INTRODUCTION

Why it matters

Governments and businesses are shifting more of their services to the web. The Australian Government's National Broadband Network project recognises this reality, and aims to provide fast and affordable broadband to most Australians. This is particularly important for older people, allowing them to more easily access doctors and health advice over the internet, no matter where they live. It can increase their independence while living at home by facilitating on-line grocery shopping, bill paying and banking. As the population ages, e-health technologies can be used to manage chronic conditions such as diabetes and dementia in the home rather than in aged care facilities, reducing costs substantially.

Internet access is also important from a personal perspective. Keeping in contact with family through email, cheap phone calls or social networking sites is especially important for seniors who may live remotely or who are unable to drive. The internet allows easier participation in community events and with interest groups, an important part of productive ageing. As a matter of fairness, everyone should be able to take advantage of the internet.

Researching the problem

This research project explored what older Australians who never or rarely use the internet ('non-users') know about the types of online products and services available to them, and how they might use these to improve their daily life.

The project aimed to:

- explore non-users awareness of, and interest in, the benefits of the internet;

- identify how the internet can improve the daily life of older people;

- review the effectiveness of support and services designed to educate and encourage older people to engage with the internet;

- recommend strategies that would help non-users gain knowledge and skills to use the internet in ways that would benefit them.

To achieve these project aims, eight research questions were asked:

1. To what extent are non-users aware of what the internet offers?

2. To what extent are non-users interested in using the internet?

3. Do non-users find particular online products and services more useful than others?

4. What barriers are preventing non-users from using the internet?

5. To what extent do non-users believe the 'internet is complicating their daily life' and the 'internet would improve their daily life'?

6. To what extent are non-users aware of internet support and services that are available to them?

7. What support and services do non-users need to use the internet?

8. Are there particular demographic features of non-users that influence the above? (Addressed as part of Questions 1 to 7)

Data was collected via a survey completed by 149 members of National Seniors Australia, in-depth interviews with six members to develop case studies of their internet experiences, and a review of existing research. As the project was located in Brisbane, case study participants were from South-East Queensland and Northern New South Wales.

The review of existing research sourced literature, data and policies about older people's access to and use of the internet; barriers facing older people accessing the internet; the potential of the internet to help older people; and methods to engage older people with the internet.

Key findings – Highlights

The research produced important findings related to the project aims. Some highlights from these findings are presented below.

To what extent are non-users aware of, and interested in the types and benefits of online products and services?

• 53% of participants indicated their interest in the internet was 'moderate' or above and 46% indicated their interest was 'nil' or 'low'.

• Almost two-thirds of participants indicated they had 'very low' internet skills.

• Many participants were aware of most online products and services listed in the survey.

• The online products and services of most interest to participants were those that would enable them to generally search and browse the internet, find information on health topics, communicate with friends and family, search timetables/directories, make bookings and appointments, and make cheap phone calls.

How can the internet improve the daily life of older Australians?

• Just over one-third of participants indicated the internet would improve their daily life, stating reasons like "I would like to be able to email people, get onto Skype and talk to people in various countries", and "if I didn't use the internet it would be a problem because there would be a whole chunk of information I couldn't access".

• Only 22% of all participants indicated not using the internet was complicating their daily life because of reasons like "I feel isolated from family and friends" and "there are times when you want to find out about a product or service and there is only a website no phone number".

How effective are support and services designed to educate and encourage older people to engage with the internet?

• Only 17% of participants were aware of internet kiosks, 24% were aware of seniors computers clubs, and 11% were aware of TAD Australia Connect (now ONE seniors). They were more aware of U3A classes (48%) and classes offered by their local TAFE institution, library and/or community centre (62%).

• Those participants who engaged in activities to develop their internet skills were more likely to indicate receiving help from other people rather than attending internet classes or reading books and other resources.

• Some participants who had attended classes were critical about the effectiveness of the classes.

What are the main barriers older people face in using the internet?

- The review of existing research identified the barriers of geographical, financial or physical constraints, illness, lack of transport, the inability to use online resources (i.e. lack of skills), no time or interest, and concerns about information security.

- This project identified the main barriers as lack of knowledge and skills, confusion about the technology, and concerns about security and viruses. Over 40% of participants identified 'cost' as a barrier.

- Participants who were female, or receiving an income of $30,000 or less a year, or receiving an age pension/other Government support were most likely to indicate 'cost' as a barrier preventing them from using the internet or improving their internet skills.

- Participants living in regional areas were more likely than participants living in metropolitan and rural/ remote areas to indicate 'not interested/ not useful' as a barrier.

What strategies will raise non-user awareness of online products and services, and give them the skills and knowledge needed to use those services that they believe can improve their daily life?

- Strategies to raise non-user awareness of the internet and develop their internet skills and knowledge should focus on:
  - increasing their awareness of those online products and services that most interest them;
  - addressing the barriers identified above;
  - providing the types of support and services that older people prefer.

- Participants identified support and services they need to help them to use the internet, which include one-on-one help, classes, equipment, a help line, and clear instructions.

- The review of existing research identified strategies such as free, convenient and better learning facilities; less expensive computers and internet connections, and training courses and materials that incorporate older people's lack of basic skills and high levels of anxiety.

- The Australian Government's investment in the National Broadband Network will improve access for older people who prefer to use the internet from home. However, the barriers of lack of skills and cost may restrict access.

- Free internet kiosks and digital hubs will address the barrier of cost and lack of training in those areas that benefit from these initiatives. However, they are unlikely to fully address the barriers of lack of transport to reach these facilities, ineffective classes and instructional materials, low awareness of the existence of these services, and the need for extra support for older people who access the internet from home.

- The Australian Government and other relevant stakeholders could work together to develop a national action plan similar to the European Commission's Action Plan for Ageing Well in the Information Society, focused specifically on improving internet usage and access by older people (European Commission, 2011).

Case Study – David Martin, Scarborough, Queensland

Background: *David was born in Grafton. His father was a primary school teacher, which meant that David went to school in different locations before settling in Sydney. When World War II broke out, he volunteered for the air force. David trained to become a pilot, flying transport aircraft across to Papua New Guinea and the islands nearby. After the war, he moved with his wife to Tamworth to work in her uncle's nursery. He later became the owner of the nursery and florist shop and also became president of the town's Rotary Club. Some years later, he joined Yates Seeds and then John Sands. When David retired at the age of 63 years, he and his wife moved to Newcastle. After his wife died, he moved to Brisbane to be closer to his son's family, and settled into a retirement village in Scarborough in 2009. He enjoys socialising, reading, playing sports, and taking various trips organised by the retirement village. He says: I have been lucky having very good health and I can still drive my car and this enables me to visit various places close at hand and visit my family who are only 20 minutes away. Although it can be a life that can be very quiet and you have a lot of time to yourself, you can also be involved in many society outings. I have been very happy the six months I have been here. David turned 92 in 2010.*

Experience with computers and the internet: *I have never been exposed to computers and the internet. I thought it is not necessary to become involved with it. When I see a computer opened up and the various processes used, it looks extremely complicated and I have always wondered if I could handle the computations and memory.*

Awareness of the internet: *It appears it can open a whole new world of knowledge that is almost unending, the scope it can cover, and it looks to me if someone can get over the first hurdle of being able to use it physically it would probably be very interesting, occupy a lot of time, and be able to learn a tremendous amount. You can use the internet for banking, check up on various accounts, and people with shares can read company reports.*

Interest in the internet: *I would probably use it if someone provided me with a lot of help. I haven't thought too much about the range of uses it has but I know I have some shares and I know I would be very happy to look up reports associated with those. I would also obtain more information about various things that come up on the television or in the paper.*

Services/groups that help older people learn about the internet: *I think there are several ones. University of the Third Age has programs but whether they start right from the beginning, which is what I would have to do. I would wish to have someone who started me right from the beginning from a complete lack of knowledge to being able to understand the computer. My concern about classes is that they may be too advanced or not make it simple enough for an absolute beginner. I may be wrong in that. One feels as though they need a personal tutor, someone who is very patient to understand what it is like not to know anything about such a thing. Getting an older person to teach me is better as some of the younger ones may jump over things that you want to learn more about. I don't want to be the one in the group asking questions and feeling as though you are dumb. I'd need a computer, and someone to help me set it up, plug it in, begin training me either on my own or with a group of like-minded people.*

Internet and daily life: *I don't think it would improve the way I live but when I have time it would open up some opportunities to learn more about various factors of life. I live a fairly relaxed and happy lifestyle so I have never really thought I have been missing out on a great deal. It is something I would certainly like to be involved in to see what it is all about. It doesn't hurt the way I live but it might deteriorate a bit from full knowledge because a lot of companies no longer send out reports by mail. This means the knowledge of the investor of that company is a lot less. If they could keep in touch, I would know exactly what is going on.*

EXISTING RESEARCH –
WHAT IT TELLS US

This section presents findings from a review of existing research that identified literature, data and policies relevant to this project.

The push to increase participation by older people in the internet has become a global effort. Population ageing here and overseas will continue to place strain on government services and resources across the world. The Australian Government in its Intergenerational Report 2010 estimated the number of older Australians aged 65 to 84 years will double and the number of very old people aged 85 years and over will quadruple by 2050. The growth in the older population corresponds with an escalation in health care costs (Kiel 2005, 19). Australia's Productivity Commission (2005) predicted that ageing alone will account for about half of the increase in health expenditure as a proportion of Gross Domestic Product. At the same time, older Australians are working for longer and retiring later, a trend expected to continue as the qualifying age for the Age Pension increases from 65 to 67 years by 2023.

The online medium can be harnessed to improve not only national systems and services, but also the daily life of older Australians. Whilst older people are less likely to use the internet than younger generations, this age group's adoption of the web has risen over the past decade. Personal correspondence and access to health information are two of the major reasons for internet usage amongst older people. Online services and products can thus be utilised to promote individual self-sufficiency and reduce the strain on governments.

1. Participation by older people in the internet

For older people constrained by age-related limitations, the internet can provide opportunities to maintain independence (Kiel, 2005). However, statistics from the Australian Bureau of Statistics (2008) show older people are the least likely to have access to the internet (see Figure 1).

Figure 1: Internet access by age and sex, 2006
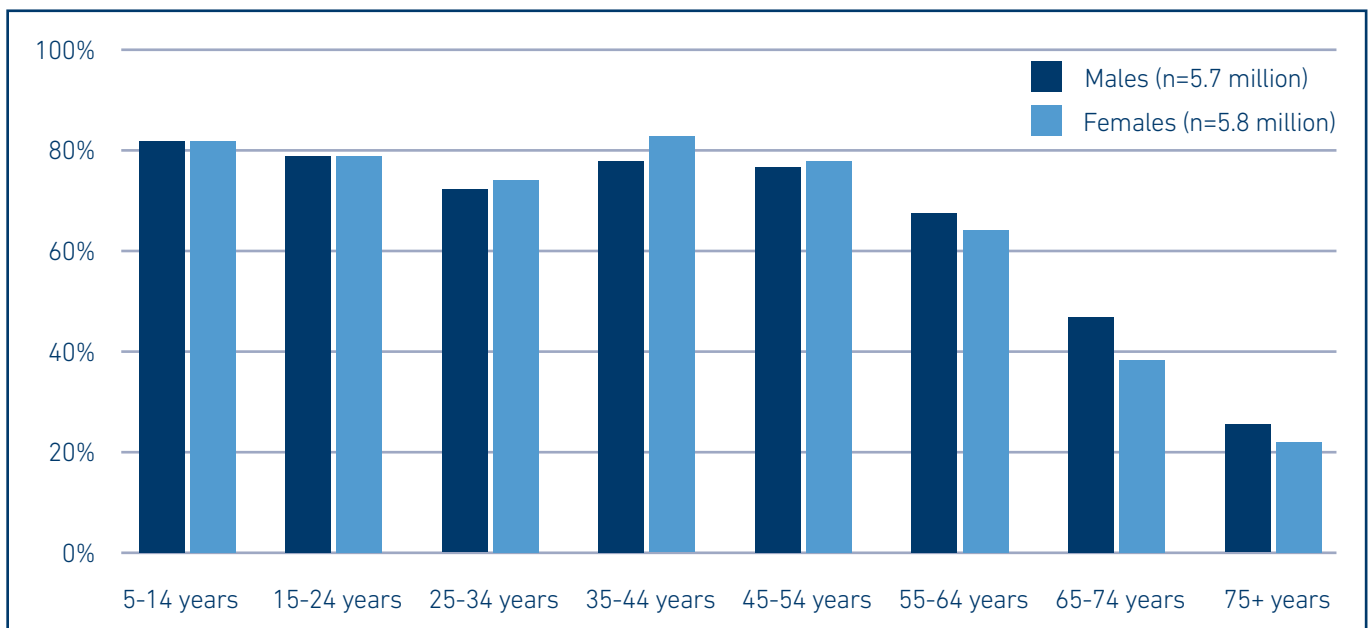
Source: ABS, 2008

Although the proportion of older Australians aged 65 years and over who use the internet remains well below that for younger age groups, their usage has increased significantly – from 30% in 2007 to 40% in 2009 (see Figure 2). And the proportion of older Australians aged 50 years and over purchasing goods online has increased from 49% in 2007 to 63% in 2009.

Figure 2: Internet usage by age, 2007 and 2009
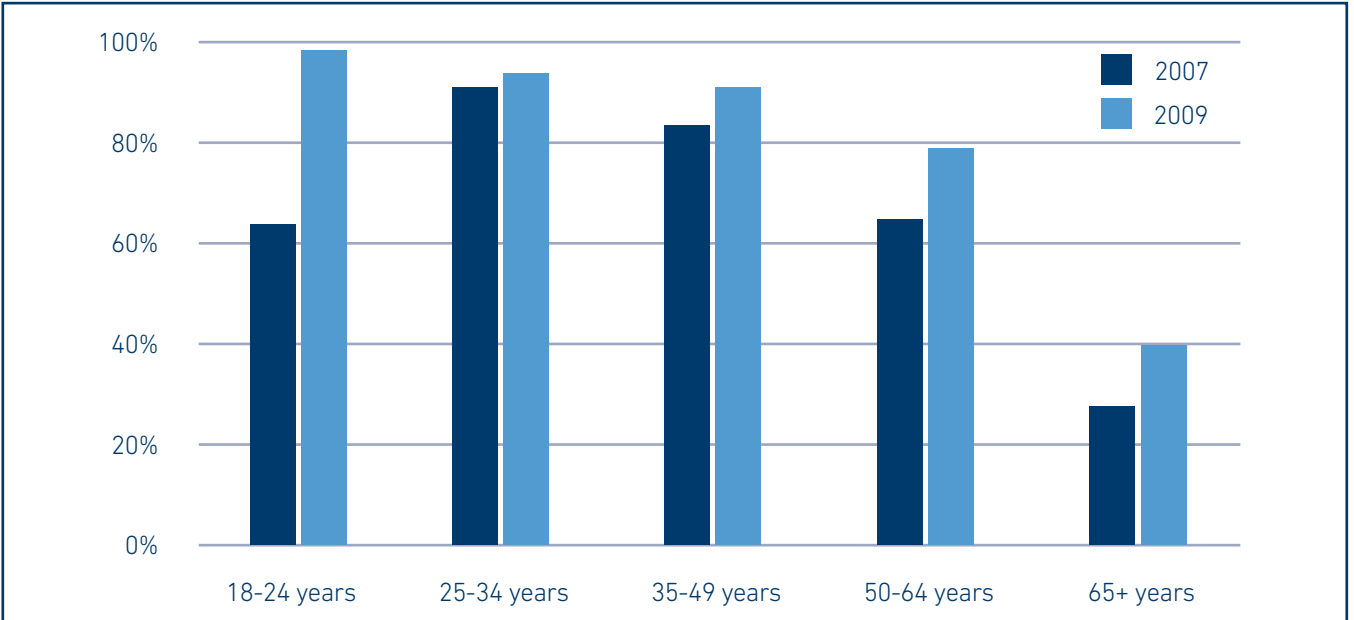
Source: Ewing and Thomas, 2010

2. How older Australians use the internet

Based on a survey of 1,000 Australians, of which 411 were people aged 50 years and older, Ewing and Thomas (2010) found:

- older people were most likely to use the internet on a regular basis to check email, search or browse the web, send attachments with an email, use a bank's online services, and check weather forecasts.

- older people were much less likely than participants aged 18 to 65 to use the internet to visit social networking sites.

Table 1 shows online activities that older Australians undertake on a regular basis (i.e. weekly, daily, several times daily) and those they do not.

Table 1: Activities undertaken regularly* online by Australians aged 50 years and over (% of internet users)

	50 years and over	18 years and over
Check email	94.9%	94.4%
Search or browse the web	61.5%	76.4%
Send attachments with an email	57.6%	64.6%
Use a bank's online services	52.5%	61.7%
Check weather forecasts	46.3%	54.7%
Look for national news	40.1%	52.5%
Look for international news	38.1%	47.3%
Get information about a product	37.4%	55.2%
Pay bills	37.4%	40.0%
Look for general information on a site like Wikipedia	33.5%	44.9%
Find or check a fact	31.1%	43.3%
Look for local/community news	31.5%	41.4%
Instant messaging	26.8%	40.0%
Look for sports information	24.9%	32.9%
Look up definitions or words	21.8%	33.7%
Find information about food e.g. recipes	21.8%	24.8%
Look for travel information	20.2%	22.3%
Play games	16.7%	23.3%
Make or receive phone calls over internet	16.3%	17.5%
Check information about local events	16.0%	23.3%
Look for health information	14.8%	20.5%
Download or listen to music	13.6%	33.1%
Get info for school-related work	13.6%	31.9%
Visit social networking sites	13.2%	37.7%
Download or watch movies, TV shows, video clips (e.g. YouTube)	11.7%	28.9%
Buy things online	10.5%	18.9%
Visit video sharing sites	8.9%	37.7%
Look for jobs, work	8.9%	17.5%
Look for jokes, cartoons or other humorous content	8.9%	16.1%
Invest in stocks/funds/bonds	8.6%	6.3%
Post messages on discussion or message boards	8.2%	20.2%
Download or listen to podcasts	8.2%	11.4%
Visit sites dedicated to artists	7.4%	17.6%
Post pictures or photos	7.4%	16.4%
Listen to the radio online	7.0%	10.5%
Update status	5.8%	21.2%
Read blogs	5.8%	16.6%
Work on personal website	5.8%	8.4%
Look at religious or spiritual sites	5.4%	4.6%
Comment on other people's blogs	5.1%	19.4%
Look at information about restaurants	4.7%	10.3%
Participate in distance learning for an academic degree or job training	4.3%	9.2%
Participate in chat rooms	4.3%	7.8%
Look for information on family history	4.3%	2.4%
Bet, gamble or enter sweepstakes	3.9%	3.8%
Make travel reservations	3.5%	5.2%
Work on blog	1.9%	5.8%
Purchase event tickets	1.6%	2.9%
Post videos	1.6%	1.9%

Source: Ewing and Thomas, 2010. *Regularly = weekly, daily, several times daily

3. Barriers facing older people using the internet

According to the Australian Bureau of Statistics (2008), 51% of Australians aged 55 years and over did not have access to an internet connection in 2006 compared to 29% for all Australians aged five years and over. For pensioners or lower income earners, household access to the internet can be a financial burden.

Whilst internet access in Australia is widely available through community centres, libraries, and generally friends and family, older people are often isolated from such resources. Due to geographical or physical constraints, illness, lack of transport or being a long-term care giver (Swindell, 2002), older people can become cut off from social networks and opportunities to interact with online-based resources.

Older people can also face knowledge-based barriers when attempting to locate and retrieve information from websites. An older person's lack of online search skills and strategies is a significant barrier (Xie, 2008).

Internet accessibility is important for information-based websites, but also for online communities. Jaeger and Xie (2009) argue site designers and developers should be responsible for creating all-inclusive websites. They stated online communities without equal access to older people "are effectively creating discriminatory practices about who has the ability to communicate online through social networks".

Social stigma and personal attitudes towards the internet can also prevent older people from becoming web-users. According to Millward (2003), older people tend to feign a lack of interest to conceal incapability or confusion about the internet. For some older people it is less stigmatising to have 'no interest' in information technologies, than to be unable to use online resources.

Ewing and Thomas (2010) identified 'no interest' and 'lack of skills' as the primary reasons why non-users do not access the internet; and the reasons of 'no interest' and 'no time' for ex-users.

The Australian Human Rights Commission (2000) identified barriers restricting the ability of older people to access the internet that are similar to most of those already discussed:

- cost of access to computers and internet connection;

- limited public access facilities for people who cannot afford their own equipment;

- limited sources of resources, assistance and information where adapted or customised equipment is required by older people;

- lack of awareness and training;

- people with vision impairments, slower connections and older equipment not being able to access web pages;

- concerns regarding privacy and security of internet transactions;

- internet sites that were hard to use for older users.

A survey of 436 public websites in Europe conducted in 2005 found only 3% of sites were fully compliant with accessibility guidelines (European Commission, 2008).

4. Potential of the internet to help older people

For older people, internet-based services and products can provide users with avenues for learning, networking, and participating in civic or political causes. Thus, the internet ultimately offers older people a means to improve self-sufficiency and prevent social isolation, and can help preserve their independence.

e-health

The internet-based form of health care, widely known as e-health, is a valuable tool for improving self-management skills amongst older people. According to Xie (2008), one of the primary reasons for older people to use the internet is to access health information. The system of e-health enables individuals to access health-related information, services and products from their own home. But as pointed out by Hirji (2004) "the first step in rendering online health information available and useful is ensuring that health consumers are actually using the internet". Thus the industry of e-health, and its potential to benefit older people, is largely dependent on narrowing the digital divide through increased internet accessibility.

Online resources can be used to combat the inaccessibility of health services, especially for patients facing physical or geographical constraints. With patients now encouraged to take a more active role in their healthcare (Xie, 2008), the right websites can provide patients with relevant information and data. The Australian Government's 2010 announcement of funding of $467 million for the national e-Health records system is part of this digital health trend.

The internet's ability to educate and involve older people in their own healthcare is ultimately beneficial to both individuals and the community. At the personal level, taking more control by retrieving medical information promotes self-confidence and reduces anxiety (Shapira et al., 2007). Others argue that improved self-sufficiency can also empower patients and improve the quality of their healthcare (Xie, 2008). Enhanced independence may in turn prevent or forestall the entrance of older people into nursing homes or hospitals, and decrease health care costs.

Social Networking

Social networking sites and online or virtual communities offer another means to improve the lives and well-being of older people. Unlike the information-orientated realm of e-health, social networking sites concentrate on building levels of communication between community members. Such sites can allow internet users to form new relationships that would otherwise be prevented due to physical, social or geographical barriers (Swindell, 2002). Participants may use social networking sites such as Myspace or Facebook to maintain contact with family or existing friends.

Social networking sites can benefit older people in "combating loneliness, offering mental stimulation and entertainment, providing access to information around the world and improving contact with family and friends" (Millward, 2003). Ultimately, virtual communities can combat social isolation by offering a new channel for older people to form support networks, maintain contact with friends and family, and participate in different parts of the community.

Adult Learning

The process of learning to use the internet can present positive experiences and generate future opportunities for older people. According to Kiel (2005), learning to use the internet generates cognitive stimulation which is therapeutic in preventing intellectual decline. Whilst training is necessary, older people with adequate online skills can use the internet at their own pace and for their own purposes.

Engagement with the internet also presents new platforms for further forms of adult education. The Australian-based online University for the Third Age (U3A) presents one such opportunity.

From cognitive stimulation and sharing information to building new social networks, internet-based adult education courses, such as those offered by U3A online, present not only educational but social opportunities for isolated older people.

According to the Australian Bureau of Statistics (2008), 950,000 older people used computers or the internet for informal learning purposes in 2006 – the second highest of all types of informal learning they participated in.

Other services and products

Aside from e-health, social networking and educational opportunities, the internet offers a range of services and products which can improve the standard of living for older people. Online shopping and banking can assist older people to overcome physical handicaps and remain independent for longer. More older people are now shopping online. The participation of older people in the online shopping market and e-banking will inevitably expand with increased internet training for older users, wider accessibility and more easy-to-use applications.

5. Strategies to engage older people with the internet

Within Australia and overseas, governments, organisations and companies have adopted measures to increase internet accessibility and usability.

- Public centres and facilities can play active roles in introducing older people to the internet and cultivating online skills and strategies. One company in the UK, Hairnet, has created a 'Silver Surfers Day' to educate people over 50 years of age about the internet (Jim, 2005).

Run in libraries, colleges, pubs and community centres, the day aims to teach older people how to shop, bank and research online, as well as the skills necessary to e-mail and access e-government services.

- The National Institute on Ageing (NIA) and the National Library of Medicine (NLM) have set about establishing web access guidelines to cater for older people, taking into account how age-related physical and cognitive changes affect computer use (Jaeger and Xie, 2009).

Other initiatives and recommendations to encourage internet use by older people include:

- free, convenient and better learning facilities (including better publicity of these facilities);

- less expensive computers and internet connections;

- training courses and materials that incorporate older people's lack of basic skills and high levels of anxiety;

- more reliable and accessible technical support services for seniors;

- providing more targeted government-sponsored cyber security and safety campaigns; and

- consultation with seniors on e-government matters.

The Australian Government is attempting to address the digital divide by investing in the National Broadband Network, and establishing Broadband for Seniors Kiosks. It is also establishing the Digital Communities initiative, which will establish digital hubs in 40 communities across Australia (Australian Government, 2011).

Survey Results

1. Demography of survey participants

As stated earlier, the main data collection method for this project was a survey of members of National Seniors Australia who do not or rarely use the internet. Findings from an analysis of the demographic characteristics of the 149 members who completed the survey are as follows:

*   40% were aged between 65 to 74 years;

*   70% were female;

*   51% lived in a metropolitan area;

*   38% lived in Queensland;

*   33% indicated technical and further education was their highest qualification and 29% of participants indicated higher education was their highest qualification;

*   52% had previously worked (or were currently working) as a manager, administrator, professional, or associate professional;

*   71.1% had retired from the workforce and 37% of these participants had been retired for more than 10 years;

*   40% sourced income from the age pension;

*   55% received income of less than $30,000 per year.

2. Computer and internet access and skill level

Survey participants indicated whether they had access to a computer and the internet as well as their skill level in using computers, the internet and other technologies. The analysis of the data found:

*   85% had used a computer and 68% had a computer in the home;

*   48% had used the internet and 40% had an internet connection in the home – many with broadband, some with a dial-up connection and some having both;

*   95% had previously used other technologies such as mobile phone, remote control, digital camera, video recorder, phone banking, answering machine, ATM and GPS;

*   66% had 'very low' internet skills;

*   50% had 'very low' computer skills;

*   Participants with 'very low' internet skills were most likely to have 'very low' computer skills (90 out of 98 participants);

*   Participants who do not have a computer at home are more likely to have 'very low' internet skills (40.6% of participants) than 'low' internet skills (11.9% of participants);

*   Participants with 'very low' skills were most likely not to have broadband access at home (72.8% of participants (Table 2).

Table 2: Internet skills and home broadband access

	Very low internet Skills	Low internet Skills	Total
Yes (has broadband)	25 (27.2%)	18 (50.0%)	43
No (no broadband)	**67 (72.8%)**	18 (50.0%)	85
Total	92	36	128
Chi-square value: 6.043		**Significance (p):** .014	

3. Awareness of and interest in the internet

Survey participants indicated their awareness of particular online products and services as well as their interest in these products and services (see Table 3).

Table 3: Participants' awareness of, and interest in selected online products and services (% of participants)

	% of participants **aware** of the product/service	% of participants **interested** of the product/service
Paying bills online	89.9%	31.5%
Banking online	89.3%	28.9%
Accessing personal records from Centrelink, banks, insurance companies, super/investment funds, health care providers, etc.	75.2%	49.0%
Investing in stocks, funds and bonds	68.5%	18.1%
Finding information on health topics	84.6%	65.8%
Accessing medical records	38.9%	53.7%
Making bookings and appointments	69.8%	61.7%
Selling, buying, and researching products and services	78.5%	49.0%
Communicating with friends/family using email, Skype, MSN, Facebook	88.6%	65.2%
Sharing information with people who have similar interests and hobbies	72.5%	49.0%
Taking educational courses	68.5%	37.6%
Finding out the latest news, sports and weather	81.9%	49.6%
Playing games, and downloading movies and music	81.9%	40.3%
Searching timetables/directories e.g. transport timetables, program/venue information, yellow/white pages, travel maps/ directions	76.5%	65.8%
Setting up own profile to share your stories, views and photos with others	66.4%	24.2%
Searching for jobs	66.4%	13.4%
Making cheap phone calls	51.0%	63.1%
General searching or browsing the internet for topics of interest e.g. art, family history, geology	82.6%	70.5%
Dating	66.4%	7.4%

Lower awareness of products/ services	Products/services of most interest
Higher awareness of products/ services	Products/services of least interest

- Overall, participants' awareness of most online products and services listed in Table 3 was good, with 64% of all participants indicating their awareness of what the internet offers was 'moderate' or above;

- Participants were most likely to indicate their interest in the internet was 'low' (34%) or 'moderate' (36%);

- Participants were most interested in using the internet for general searching and browsing, finding information on health topics, communicating with friends and family;

- searching timetables/directories, making bookings and appointments, and making cheap phone calls;

- Participants had lower awareness of using the internet to access medical records and make cheap phone calls, even though they were interested in them;

- Although almost 90% of participants were highly aware that they could pay bills and bank online, less than one third of participants indicated these online products and services were useful to their daily life.

Comments by case study participants explaining their interest or lack of interest in the internet:

"I would probably use it if someone provided me with a lot of help. I haven't thought too much about the range of uses it has but I know I have some shares and I know I would be very happy to look up reports associated with those."

"If someone could show me exciting things on there that I could get involved in then I would do it. But sitting down and trolling through millions of bits is not me. I would rather read a book, make a quilt, knit something for someone.... I am really people oriented more than anything. "

"I found the internet fairly easy to use with XP because I can use Skype, get messages to and from friends, look up quite a bit of information I am interested in, things like the weather pattern for the day, and radar pattern for my town which is only 20 minutes old. I use it to play chess against myself, and get in contact with people who design boats. I am very interested in a program or starting a program on life skills for teenagers. I am using the internet to reach people with similar interests who are running 11 similar programs."
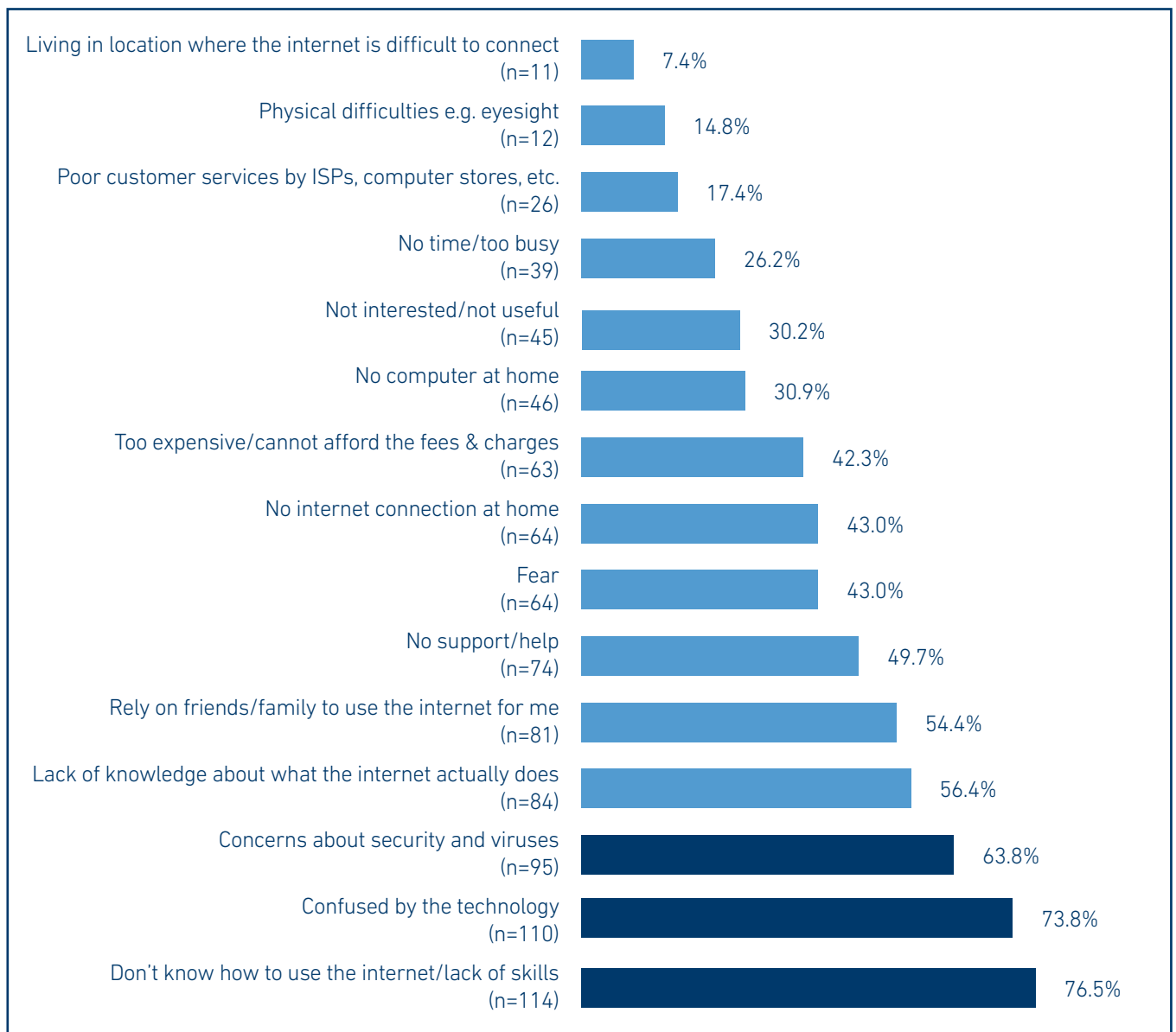
"I am active and I like writing letters. I had hundreds of pen pals when young and I love corresponding with pen and paper. I would love to be able to use the internet, mainly for emails and Skype because I have many friends and relatives overseas, all round the world. Just to talk to people that I know."

4. Barriers to internet use

This project found three key barriers are preventing non-users from using the internet:

- 'don't know how to use the internet/lack of skills',
- 'confused by the technology', and
- 'concerns about security and viruses' (see Figure 3).

Figure 3: Barriers preventing participants from using the internet and/or improving their internet skills (% of participants)

Barrier	%
Living in location where the internet is difficult to connect (n=11)	7.4%
Physical difficulties e.g. eyesight (n=12)	14.8%
Poor customer services by ISPs, computer stores, etc. (n=26)	17.4%
No time/too busy (n=39)	26.2%
Not interested/not useful (n=45)	30.2%
No computer at home (n=46)	30.9%
Too expensive/cannot afford the fees & charges (n=63)	42.3%
No internet connection at home (n=64)	43.0%
Fear (n=64)	43.0%
No support/help (n=74)	49.7%
Rely on friends/family to use the internet for me (n=81)	54.4%
Lack of knowledge about what the internet actually does (n=84)	56.4%
Concerns about security and viruses (n=95)	63.8%
Confused by the technology (n=110)	73.8%
Don't know how to use the internet/lack of skills (n=114)	76.5%

Only a small number of participants indicated 'physical difficulties' and 'living in a location where the internet is difficult to connect' were barriers preventing them from using the internet.

Other barriers identified included no interest, ineffective classes, technology, cost, fear, and physical difficulties.

The barrier of 'too expensive/cannot afford the fees and charges' is associated with gender, income, and source of income. So female participants, participants receiving an income of $30,000 or less a year, and participants receiving an age pension/other Government support were most likely to indicate cost as a barrier preventing them from using the internet or improving their internet skills.

The barrier of 'no internet at home' was associated with gender, with females (52.1% of female participants) more likely than males (31.8% of male participants) to cite this as a barrier.

The barrier of 'not interested/not useful' is associated with location i.e. participants living in regional areas were more likely than participants living in metropolitan and rural/ remote areas to indicate 'not interested/not useful' as a barrier.

5. Impact of the internet on daily life

To what extent do non-users believe 'the internet is complicating their daily life' and 'the internet would improve their daily life'?

• Almost half of the participants (or 48%) indicated they 'disagree' or 'highly disagree' with the statement, Not using the internet is complicating my daily life. Responses by some participants with this view included:

  "I would rather speak to people in person or by telephone. I find a lot of people who have computers spend large amounts of time in use and this is boring."

"I don't think not using the internet is complicating my daily life at the moment but I can see that in the future this could happen as more and more day-to-day transactions are carried out online."

• Only 22% of all participants indicated they 'agree' or 'highly agree' with the statement, Not using the internet is complicating my daily life. Responses by some participants having this view included:

"I feel isolated from family and friends by not being able to use and afford the internet for mostly email and photos."

"I have Government and other brochures that only have a www reference, not even a phone number. Seniors not able to access the internet are being discriminated against because they are being denied information that should be available to everyone."

"I feel life is passing me by and I'm missing out on things other people take for granted."

"I do a lot of voluntary work and miss out on emails sent by the organisation I work for and other relevant information and contacts. Also, my friends say they want to send me emails."

• Responses to the statement, Using the internet would improve my daily life, were mixed. 37% of all participants indicated they 'disagree' or 'highly disagree' with the statement. Responses by some participants with this view included:

"I like to have real friends in the real world who will visit me in my real home and eat my real lunch, and chat, laugh, drink wine. Don't need online friends."

"I do not want to have to pay for that every month when I would probably hardly use it. I don't have enough hours to want to sit in front of a machine, nor do I want to check it for messages. I feel sorry for people whose lives are controlled by these wretched machines."

Comments on barriers by participants

The following statements by participants have been grouped according to barriers identified.

No interest

"So many other interests to keep me occupied, even at 85."

"I prefer personal contact by letter or by phone."

"I found it stressful at times and could not get work done – housework, garden, shopping, etc."

"Much quicker and more productive to use the telephone and/or visit the institution."

Ineffective classes

"I find most seniors say "the beginners class is not a beginners class". If you have not learnt to type or done clerk-type work, you are too far behind to start with."

"I have trouble keeping up with teachers. They tend to teach people who have already learnt it".

Technology

"Difficulties with the terms. Can't get simple written instructions."

"I will be 84 in July and feel I am too old as I have difficulty with taping videos on TV."

"Impatience with downloading weekly virus protection, downloading on dial-up at previous address (time-based charges), fear doing the wrong thing and having to get help to fix it and cost thereof."

Cost

"Cost of professional advice and repair."

"Too costly for single age pensioners."

"Don't want the hassles when things go wrong or I make mistakes. Too expensive or a nuisance getting help."

"The cost involved in having a computer and the internet on a single pension is too high... I am by myself so I really can't afford the expense. I have even been offered a computer. I said no because I am concerned that it will break down and I will have to pay somebody to fix it. I am counting costs day by day, week to week. When I see a computer I am thinking how much money am I going to lose off my pension... If the cost factor was eliminated I would get a computer and then go back to U3A."

Fear

"I am afraid I will "break" the thing if I experiment. The technical side of it also terrifies me. People give me hurried verbal advice that I find almost completely useless."

"Fear of having a technician in to fix computer and perhaps use my details."

"Worried about emails I would receive."

Physical difficulties

"Arthritic finger joints/pain using mouse longer then say 10 minutes. No sight in one eye. Can only see clearly in well-lit, daylight in room."

"Poor memory and concentration."

"I use the phone. It's quick, simple and usually gets a response immediately."

- Just over one third of participants indicated they 'agree' or 'highly agree' with the statement, Using the internet would improve my daily life. Responses by some participants with this view are as follows:

"I am a Reiki master. I would like to find others. I would like to find teachers in my area."

"I would like to be able to email people, get onto Skype and talk to people in various countries."

"There is a huge advantage in being competent with the computer and the internet. For people who understand it well, the internet provides them with wonderful contacts, which is very important for old people who are losing their contacts, friends are dying or are far away, the family is far away."

Participants' views about the impact of the internet on their lives was associated with their level of interest in it. Many participants with 'nil/low' interest did not believe that using the internet would improve their daily life; nor did they think that being a non-user was a particular complication.

6. Internet support and services

To what extent are non-users aware of internet support and services that are available to them?

Participants were asked to indicate their awareness of Broadband for Seniors internet kiosks; seniors computer clubs; University of the Third Age (U3A) classes; TADAustralia Connect (now known as ONEseniors); and classes offered by their local TAFE institution, library and/or community centre. The research showed that:

- only 17% of all participants were aware of internet kiosks;

- only 24% of all participants were aware of seniors computer clubs;

- only 11% were aware of TADAustralia Connect;

- awareness levels were significantly higher for local classes (62% of participants) and U3A classes (48% of participants).

Participants sought help in using the internet via classes, help from other people and books or other resources. Results showed that 32% of all participants took part in internet classes; 54% indicated receiving help from other people to learn how to use the internet; and 30% indicated reading books, articles and other resources on how to use the internet.

The view of participants about the effectiveness of this support varied significantly, as Table 4 shows.

Table 4: Effectiveness of activities to develop internet skills (no. and % of participants)

	Internet class	Received help from other people	Books/articles/other resources
Highly ineffective	11 (22.9%)	11 (13.6%)	0 (0.0%)
Inneffective	9 (18.8%)	11 (13.6%)	12 (27.3%)
Neutral	11 (22.9%)	18 (22.2%)	17 (38.6%)
Effective	15 (31.3%)	36 (44.4%)	8 (18.2%)
Highly effective	1 (2.1%)	5 (6.2%)	7 (15.9%)
Total	48	81	44

Those who thought classes were ineffective cited poor facilities or organisation, too expensive, hard to get into, not putting lessons into practice at home, lack of follow up and varying levels of competence amongst attendees.

Participants were generally more satisfied with receiving help from other people, with half of all participants who received help indicating it was 'effective' or 'highly effective'. Responses by some of these participants were as follows:

"Explanation of sequence of steps in simple, written notes, on own computer in own home, has been most effective."

"Annette at the Catholic Presbytery taught me to send emails. She was wonderful and patient."

Participants who did not find receiving help from other people useful cited their own inability to listen or 'take in' advice, reluctance to ask for help from busy people, feeling inadequate, and directions given too quickly.

Those who thought books, articles or other resources were ineffective found them hard to understand or navigate, overwhelming and perhaps out of date.

Many participants identified the type of support and services they need to help them use the internet, which are grouped as one-on-one help, classes, equipment, a help line, and clear instructions.

Conclusion

Whilst online resources played a useful, yet not entirely necessary role in the past, the internet has now become ingrained in day-to-day life. Due to this, the push to improve internet accessibility and strengthen user-based skills has become part of the national agenda. For older generations, however, the switch to online forms of learning, communicating, accessing health information, banking and shopping can present a challenging task. They fall on the wrong side of 'the digital divide'.

Bridging this divide is an important national challenge, given the rapid ageing of the population, a corresponding escalation in health care costs, and later retirement ages.

Current online technologies can be specifically tailored to suit the needs and wants of older people. The potential for the internet to benefit this age group can only be expected to expand. Barriers to internet use can be identified, strategies put in place to reduce these impediments, and give older Australians the skills and confidence to use the internet.

These themes were explored in this research project. Many of the findings are worrying, and suggest the need for urgent action. Such findings include:

- Age is the most significant driver of internet usage in the home.

- Older Australians are the least likely age group to access and use the internet.

- Reasons for not having internet access include, but are not confined to, geographical, financial or physical constraints, illness, lack of transport or the inability to use online resources.

- Reasons for not using the internet include 'no interest', 'no time', lack of skills, cost, and concerns about information security.

- The internet can provide older people with avenues for learning, networking, and participating in civic or political causes. It also enables them to benefit from e-health, e-banking and e-shopping.

- The internet offers older people a means to improve self-sufficiency and prevent social isolation.

- There are many ways to encourage internet use by older people.

Comments by participants on type of support and services they need to help them use the internet

One-on-one help

"Someone to explain the basics one to one using my computer then someone I can contact when I have a problem – a patient, long-suffering person who will try not to make me feel like an idiot."

"I would wish to have someone who started me right from the beginning from a complete lack of knowledge to being able to understand the computer. My concern about classes is that they may be too advanced or not make it simple enough for an absolute beginner."

"I'd love to learn and I'd love someone I could sit down with one on one – to learn what each programme does and have support when I get stuck, make a mess or just didn't know what the hell this means or what to do with it."

Classes

"I would go to those free internet training centres at say, my local library, for training, preferably in a non-threatening, kindly, patient environment."

"I need more help – practise – more cheap classes need to be available within easy access from or at home."

"...most of all, economic options that allow pensioners access to the internet at good response rates. Public library facilities have dreadfully low internet capability."

"The classes at the local library were terrific but they didn't go for very long. One term is nothing. Two days later, I have forgotten everything. They really need to keep doing it as I have a slower learning curve."

"Instructors/teachers who understand people with slow learning skills."

Equipment

"All equipment, including audio, tuition and backup support."

"Lower price and connection. I wish our village would get one and pay as you go."

Help line

"Phone connection with a help line to talk you through a problem you have at the time."

"I need a contact person who would show me how to get started, advise me on cost and choice of internet companies, and be available (by phone, probably) when problems/questions arise. I have no understanding whatsoever of such things as gigabytes and broadband."

Clear instructions

"Information for oldies need to be carefully structured to suit brains with short term memory loss i.e. held in the morning, not complicated by difficulty getting there, and uses the same terms consistently."

"Every new computer program should be supplied with an operation system and a book that suits that machine and system. Should be legally compulsory. Windows series of Dummies is very well written – no buzz word. Guess what – it's on a waiting list at the library."

"I really need a program I can walk my way through and it has to have examples so I can pick up a little bit of information or repeat the sample or examples of it and then move onto the next. When that first piece is firmly fixed in my mind, I can then move onto the next piece."

"Instructions need to be simple, given slowly and the "helper" would need to be very patient."

Next steps

The Australian Government has recognised the importance of older Australians having access to the internet. The investment in the National Broadband Network will improve access for older people who prefer to use the internet from home. However, the barriers of lack of skills and cost remain.

Free internet kiosks and digital hubs will address the barriers of cost and lack of training in those areas that benefit from these initiatives. However, they are unlikely to fully address the barriers of lack of transport to reach these facilities, ineffective classes and instructional materials, low awareness of the existence of these services, and the need for extra support for older people who access the internet from home.

Further strategies are needed, and this report contains ideas and suggestions worth exploring. They include:

1. Strategies to raise older non-users' awareness of the internet and develop their internet skills and knowledge should focus on:

    *   increasing their awareness of those online products and services that most interest them;

    *   increasing awareness of those online products and services that support independent living, such as e-health, e-banking and e-shopping;

    *   addressing the barriers discussed in this report;

    *   providing the types of support and services that older people prefer, as detailed in this report.

2. The Australian Government and other stakeholders could work together to develop a national action plan similar to the European Commission's Action Plan for Ageing Well in the Information Society.

    Such a plan would focus specifically on improving internet usage and access by older Australians. The European Commission's action plan aims to break down barriers to ICT use by raising awareness, building consensus, overcoming technical and regulatory barriers, accelerating take-up, and boosting research and development. A plan for Australia could include targets to reduce the gap in internet usage between the current Australian population and older people as well as developing indicators of digital literacy and competence.

3. All organisations that use websites should design them so that they cater for older people.

    The National Institute on Ageing and the National Library of Medicine have made a start in this direction. Awareness campaigns via government and company forums could help to make accessible websites 'normal business'.

4. The Australian Human Rights Commission (2000) identified measures to enhance community access to the internet, including:

    *   Training courses and material designed in a way that incorporates older people's complete lack of basic IT skills and high levels of anxiety.

    *   Increased provision, particularly by the Australian Government, of superseded equipment through organisations such as Technical Aid to the Disabled and computer clubs for seniors.

5. The report, Where do I start? Female seniors and the internet 2011 (Council on the Ageing WA, 2011) made recommendations that are applicable to both older men and women:

    *   Widely available, low-cost training aimed at improving digital media literacy skills, and targeted promotion of the benefits of the internet and Broadband for Seniors.

    *   Better consumer protection and customer service in the communications market.

    *   Advice and assistance services to enable seniors to navigate the market.

    *   More reliable and accessible technical support services for seniors.

    *   Provision of more targeted government-sponsored cyber security and safety campaigns.

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ABOUT THE NATIONAL SENIORS PRODUCTIVE AGEING CENTRE

The National Seniors Productive Ageing Centre is an initiative of National Seniors Australia and the Department of Health and Ageing. The Centre's aim is to advance knowledge and understanding of all aspects of productive ageing to improve the quality of life of people aged 50 and over.

The Centre's key objectives are to:

- Support quality consumer oriented research informed by the experience of people aged 50 years and over;

- Inform Government, business and the community on productive ageing across the life-course;

- Raise awareness of research findings which are useful for older people; and

- Be a leading centre for research, education and information on productive ageing in Australia.

For more information about the Productive Ageing Centre, visit www.productiveageing.com.au or call 02 6230 4588.