Evaluation of
Tech Savvy Seniors Program (NSW)

Developing confidence and competence in the computer lab: the value of Tech Savvy Seniors

Authors
Roksolana Suchowerska, *PhD candidate*
Dr Jens O Zinn, *Associate Professor*
School of Social and Political Sciences
University of Melbourne

Date
14 October 2014

"I was daunted by the whole technology thing and I always thought,
I don't need this,
I don't need this.
But we do need it...
If we don't get savvy with it,
we're going to be left behind."

"Tech Savvy Seniors made me more confident and more competent I suppose, along the way. I have fewer problems now and I feel I can do most things I need."

About this report

This report has been prepared by The University of Melbourne to inform the review of the Tech Savvy Seniors program in NSW. The report has been commissioned by Telstra on behalf of both project partners—NSW Department of Family and Community Services and Telstra.

Tech Savvy Seniors is an initiative delivered by a joint venture between the NSW Government and Telstra, which provides opportunities for seniors to learn to use smartphones, tablets and computers. The program aims to help older people take responsibility for their future by increasing access to information, opportunities and services, and maintaining contact with social networks.

As well as to inform the review of Tech Savvy Seniors, findings presented in the report can be used to further our understanding of the processes that affect digital literacy of seniors in Australia and the subsequent role of digital literacy training in addressing digital inequalities.

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A guide to reading this report

The following sections structure this report:

- **First section** provides an introduction to the Tech Savvy Seniors program in the context of digital inclusion of seniors in Australia.
- **Second section** presents the Social Return on Investment in Tech Savvy Seniors, supported by an outline of how the social impact of the program was monetised.
- **Third section** describes the findings of this evaluation, regarding the experience of participating in Tech Savvy Seniors tutorials and subsequent changes to participants' usage of Information Communication Technology.

The following symbols are used to indicate key points of interest:

Key finding: A notable insight into outcomes of the Tech Savvy Seniors program.

Policy and Practice: Authors' comment about the implications of a finding for digital literacy training of seniors in the future.

Quotations: Key points presented in the words of participants, collected via qualitative interviews.

Executive summary

Over a period of 18 months, **Tech Savvy Seniors** has offered **17,000 training spots** for seniors to increase their use of Information Communication Technology (ICT). A joint partnership between NSW Government and Telstra, Tech Savvy Seniors provides digital literacy training through a network of public libraries and community colleges in metropolitan and regional NSW, with the aim of delivering health, social and community benefits.

Importance of digital inclusion	Digital inclusion helps citizens to be active and independent members of their immediate and broader communities. Digital inclusion facilitates access to information and services, and strengthens the social connections through which emotional and practical resources are shared.

Digital literacy among seniors in Australia	During the past five years, seniors across Australia have increased their frequency of internet use at about half the speed of younger age groups (ACMA 2014). Already behind in their frequency and breadth of internet use, the slower take up of ICTs is set to place seniors even further behind in the future.

Key findings

- **Most seniors who participated in Tech Savvy Seniors are keen to integrate ICTs into their lifestyles but have lacked the support to do so—**before Tech Savvy Seniors, 3 in 5 trainees (60%) were confused by the ICTs available to them and 1 in 2 trainees (52%) felt they had not had opportunities to learn about ICTs. Nonetheless, 4 of 5 trainees (83%) liked and used ICTs before attending Tech Savvy Seniors, showing a willingness to adopt ICTs through lifelong learning.

- Tech Savvy Seniors has provided a genuine opportunity for seniors to improve their digital skills and literacy—**almost 9 in 10 trainees (88%) found their trainer to be helpful, the training resources to be clear and their tutorial to be at the right pace.** Trainees emphasised the importance of accessing teaching which was geared towards seniors, learning with peers and learning ICT fundamentals.

- **3 in 4 trainees (73%) found Tech Savvy Seniors helpful in increasing their use of the internet to stay connected with family and friends,** particularly in cases where family had moved away. By helping trainees stay connected with social networks, Tech Savvy Seniors has helped mitigate risks of social isolation which can lead to a deterioration of physical and mental health (COTA 2014).

- After attending Tech Savvy Seniors, **3 in 4 trainees (77%) increased their use of ICTs to access information for personal interest or to help in decision making involved in 'active ageing'**. By comparison, only **1 in 2 trainees (50%) increased their use of online services.** Trainees were significantly more likely to have found Tech Savvy Seniors helpful for accessing online information or services if they had used ICTs before Tech Savvy Seniors or had attended numerous tutorials. This emphasises the importance of time, practice and experience of using ICTs for building the skills, motivation and trust to access online information and services.

- **Almost 9 in 10 participants (88%) found Tech Savvy Seniors to be helpful in increasing their knowledge or confidence in operating an ICT device.**

  > Yet, improved confidence and knowledge subsided quickly if participants did not adopt ICTs into their lifestyles after training. Interviewees explained that their social networks provided crucial ongoing support for developing digital literacy.

  > In cases **where the pace of tutorials was too fast or too slow, trainees generally reported Tech Savvy Seniors to have been not helpful** in developing their digital skills and literacy. This highlights the importance of preparing trainers for mixed-group learning, ensuring trainers are adequately resourced and continuing to strive to customise tutorials to the unique needs of trainees.

	Participants of Tech Savvy Seniors
Participants of Tech Savvy Seniors	Approximately 1 in 5 program participants (20%) had not used computers, tablets or smartphones prior to Tech Savvy Seniors. Considered as *complete beginners* this cohort of participants found the program most challenging and emphasised the importance of an attentive trainer and repetition.

The remaining 4 of 5 participants (80%), who had some exposure to ICTs prior to Tech Savvy Seniors, generally found the program helpful in consolidating their knowledge of ICTs, broadening their understanding of ICT devices or functions, and increasing their confidence in their own digital literacy.

Considerations for policy and practice

- Ensuring that trainers have sufficient support to meet the needs of all trainees in their tutorial is essential for the success of Tech Savvy Seniors: training providers may assess the digital skills of trainees before enrolling them into a tutorial; the number of trainees per tutorial could be decreased (particularly in beginner courses); or where appropriate, trainers could encourage peer-learning among trainees. These adjustments are likely to require increased resourcing.

- Trainees, particularly beginners, often expressed interest in continuing to attend Tech Savvy Seniors if the opportunity arose—they explained that repetition was useful for reinforcing what they had learnt. This may lead to more tutorials where trainees possess different levels of digital skills. Other strategies for reinforcing new skills may be promoted, including computer clubs and printed or online material.

- While many trainees recounted that learning to email, manage photographs and use social network sites had assisted them to connect with personal networks, fewer trainees found Tech Savvy Seniors to have helped in adopting ICTs in their community involvement (e.g. by teaching how to write administrative emails or save, amend and attach documents). Although the adoption of ICTs in community life is likely to be relevant to a small proportion of trainees, it is of large social value.

- The program is likely to have a more positive influence on the take up of online services if it increases awareness and trust of secure methods of online banking and shopping, compared with less secure methods which increase the risk of fraud.

Social Return on Investment

The impact of Tech Savvy Seniors has been monetised via financial proxies in order to provide an indication of the social return on investment in the program. As outlined in the table below, **this evaluation finds that for every $1 invested in Tech Savvy Seniors, it yields approximately $6.78 in social value.**

Conclusion

The outcomes and impact of Tech Savvy Seniors present a compelling case for the continuation of Tech Savvy Seniors, which ideally takes into account this evaluation's 'considerations for policy and practice'.

|	Social value ($)			Total social value over 3 years
	Year 1 (NPV)	Year 2 (NPV)	Year 3 (NPV)	
Complete beginners (20%)	$1,652,461	$467,221	$138,354	**$2,258,035**
Beginners & Intermediate (80%)	$11,126,792	$3,187,496	$938,204	**$15,252,492**
Total	**$12,779,253**	**$3,654,717**	**$1,076,558**	**$17,510,527**
			Program investment	$2,581,000
			SROI ratio	**$6.78**

About Tech Savvy Seniors

Tech Savvy Seniors commenced as a NSW Government initiative in 2012, by providing low cost or free training through a network of community colleges to help seniors (aged 60 years and over) learn how to use Information Communication Technology (ICT) such as computers, tablets and smartphones. The program aims to bridge the gap between seniors who use ICTs and seniors who do not, in order to deliver health, social and community benefits, particularly for older people living in regional areas of NSW.

In January 2013, Tech Savvy Seniors was extended through a joint venture between the NSW Government and Telstra, to provide seniors the opportunity to participate in up to 18 different 'hands-on' training modules offered by an extended network of Public Libraries and Community Colleges across NSW.

Between January 2013 – June 2014,
64 public libraries and 36 community colleges
helped administer Tech Savvy Seniors by offering an estimated
17,000 training spots for seniors.

An estimated 11,000 seniors have attended from 1 to more than 12 training sessions as part of Tech Savvy Seniors tutorials.

Figure 1. Locations of libraries and community colleges where Tech Savvy Seniors was offered *(Source: authors)*
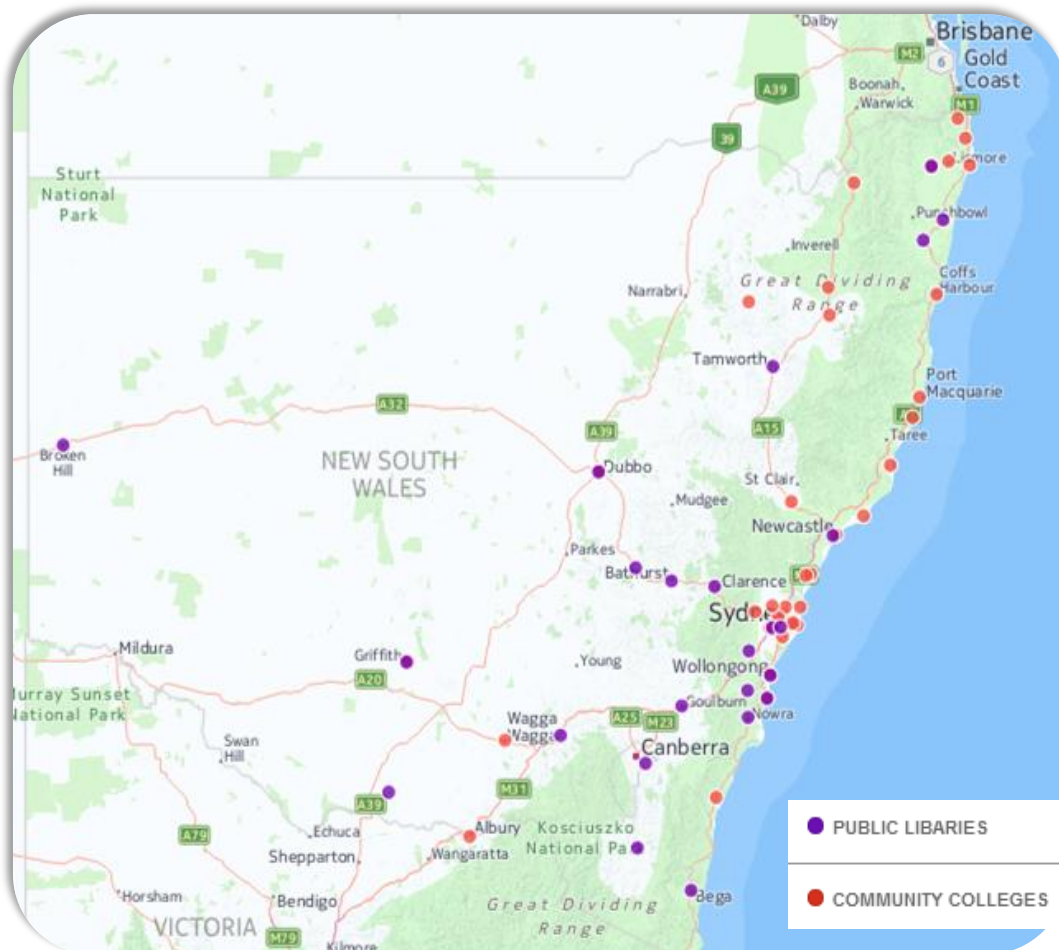
Digital inclusion of senior Australians

In the past 5 years, seniors across Australia have increased their internet use at roughly half the speed of younger age groups (ACMA 2014). Already behind in their frequency and breadth of internet use, this is set to place seniors even further behind in the future.

- Since 2008, Australians aged 65 and over have been least likely to increase their online participation. While 10 per cent of seniors have increased internet use to more than once a day, 18-34 year old age group has seen an increase of 21-27 per cent in the number of people going online multiple times a day (ACMA 2014).

- Likewise, senior Australians continue to conduct the fewest number of activities online—while they have increased their average number of online activities from 2.5 in 2008 to 3.5 in 2013, 18-34 year olds have seen an increase from 3.5 to 4.8 online activities during the same time period (ACMA 2014).

> Around half of 18-34 year olds currently use the internet to conduct six or more types of online activities, while about one in six seniors in Australia currently use the internet for the same number of online activities (ACMA 2014).

Digital inclusion is an important component of broader social inclusion because it helps citizens to be active and independent members of their immediate and broader communities. In contemporary Australia, digital inclusion enables access to information and services, and strengthens the social connections through which emotional and practical resources are shared. Accordingly, efforts to address inequalities of digital inclusion can also support processes of broader social inclusion.

Inequalities of digital inclusion among senior Australians

Less is known about inequalities in internet use among senior Australians. Across the general Australian population, factors such as gender, income and education can be used to trace varying levels and types of internet use in the Australian population.

- The ABS (2014) finds that higher income groups have a higher proportion of internet users than groups on lower incomes (with 97% of those earning $120,000 or more being internet users compared with 77% of those earning less than $40,000).

- Similarly, the higher a person's education attainment, the more likely they are to use the internet (ABS 2014).

Yet, the nature of a senior Australian's ICT use is also likely to be connected to the profile of their social networks (which usually provide support to access and use ICTs) and the senior's lifestyle. To better understand why some seniors are lagging in their use of ICTs, research needs to focus on the circumstances and dynamics that encourage seniors to create relevant and meaningful use of ICTs.

- The ABS (2014) finds that the proportion of men and women accessing the internet (across all age groups) is even, but that while older females are more likely to use the internet for functions such as social networking and games, older males are more likely to use the internet for functions such as bills, government services, education and music or movies.
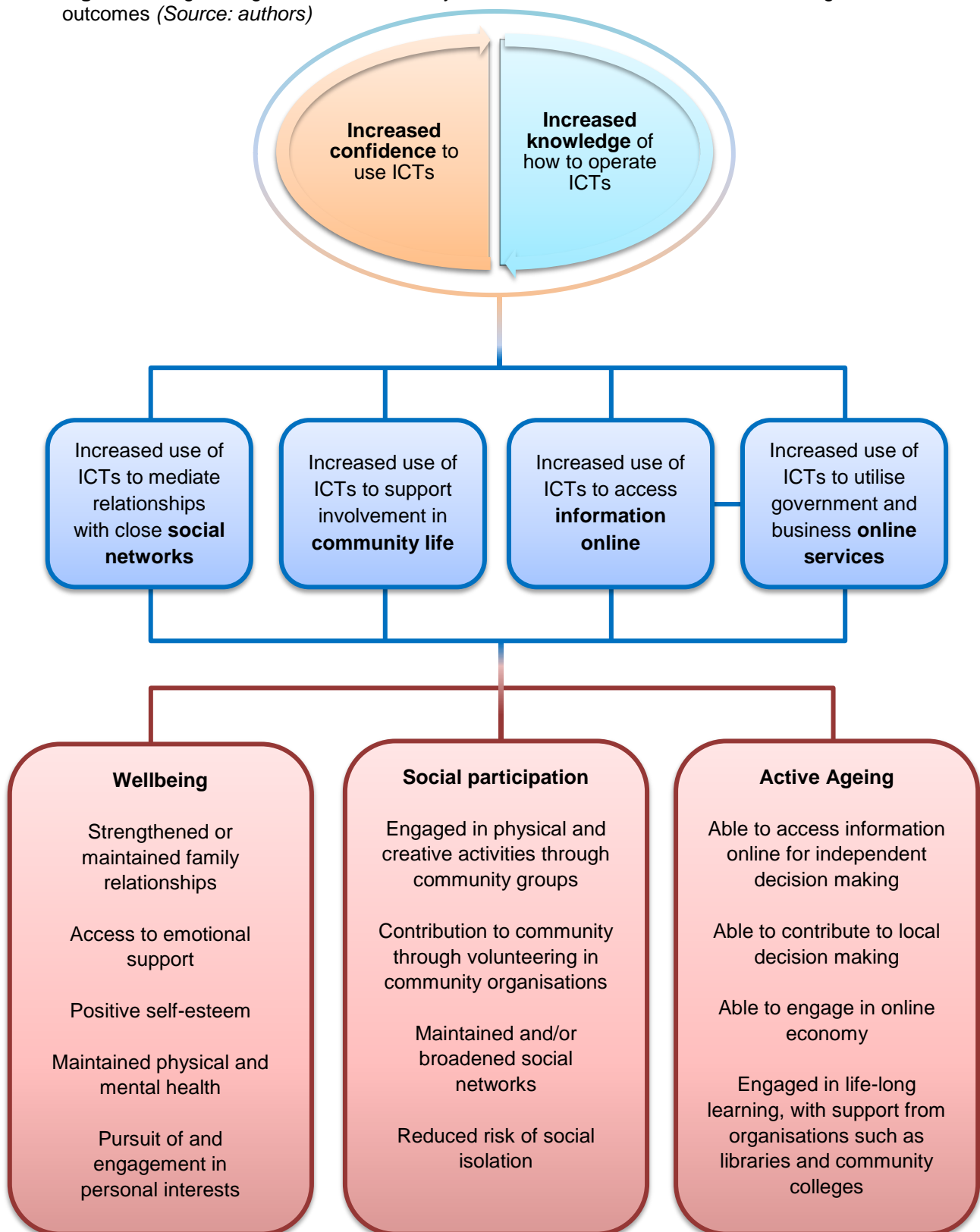
The findings raise questions about the different social circumstances and expectations that guide the use (or non-use) of ICTs among seniors, and how they might impact varying degrees of digital exclusion among seniors in the future.

How does Tech Savvy Seniors facilitate digital inclusion of seniors?

The following figure illustrates how Tech Savvy Seniors activities link to the expected short-term, medium-term and long-term outcomes for program participants and other stakeholders.

Figure 2. Program logic of how Tech Savvy Seniors facilitates short, medium and long term outcomes *(Source: authors)*

Increased confidence to use ICTs

Increased knowledge of how to operate ICTs

Increased use of ICTs to mediate relationships with close **social networks**

Increased use of ICTs to support involvement in **community life**

Increased use of ICTs to access **information online**

Increased use of ICTs to utilise government and business **online services**

Wellbeing

Strengthened or maintained family relationships

Access to emotional support

Positive self-esteem

Maintained physical and mental health

Pursuit of and engagement in personal interests

Social participation

Engaged in physical and creative activities through community groups

Contribution to community through volunteering in community organisations

Maintained and/or broadened social networks

Reduced risk of social isolation

Active Ageing

Able to access information online for independent decision making

Able to contribute to local decision making

Able to engage in online economy

Engaged in life-long learning, with support from organisations such as libraries and community colleges

CASE STUDIES

These boxes describe the experience and benefit of attending Tech Savvy Seniors from the perspective of five individual trainees.

Joan (74) attended Tech Savvy Seniors because *"I have been left behind the door with all this—***I've never had a computer; I had no knowledge of computers and with grandchildren and great-grandchildren, I just wanted to learn."**

Joan tells that she is not highly educated, having left school at 15 to later marry her childhood sweetheart and bring up three children. Since losing her husband, Joan has pursued her interest in music and helps her daughter mind her three great-grandchildren every week.

Joan learnt how to use a computer and the internet during her six Tech Savvy Seniors tutorials. Since then, she has bought a desktop computer which she uses about once a week. She goes online to connect with family—reading emails and looking at photos of great-grandchildren. She also uses the internet in her broader social participation—looking up rehearsal dates for Sing Australia, searching for information about drumming, or session times at the cinema which she frequents with her friends.

"I know that there's a hell of a lot more I could be doing with my computer but for me at this stage, at this time right now, I'm just happy with—it's there and I can use it if I want to."

With her new confidence, Joan plans to upgrade her 'dinosaur mobile phone' to a new smartphone so that she can share photos with her family.

Brian (68) has recently completed four Tech Savvy Seniors tutorials at his local public library in central NSW. Previously a project manager on a building site, Brian did not use computers in his workplace. Yet, since retiring, Brian has become involved in the Country Show Movement which requires him to use a computer at home for correspondence.

Brian prefers not to ask his children for help because *"you might do something wrong and they say 'you should have known that' and all the rest of it"*. As a beginner, he finds it difficult to understand sales people in computer stores because he's *"not up to speed and [hasn't] got the foggiest idea what the sales person is talking about"*.

As a complete beginner, Brian found Tech Savvy Seniors to be challenging.

Since attending Tech Savvy Seniors, Brian readily receives emails from his children and country show colleagues. Yet his fear of the "dreadful embarrassment" of sending an email to the wrong person is holding him back from using the computer more frequently and broadly. Although he is generally nervous and anxious with computers, Brian notes how rewarding it is when you learn something new. He recounts: **"I was excited with myself yesterday because I learned how to use the calendar; I have entered my children's birthdays between now and the end of the year."**

Charlotte (59) has attended six Tech Savvy Seniors tutorials at her local library in regional NSW. Charlotte lives on her own, while her family and friends live in other towns or interstate. Before her tutorials, Charlotte was already using email and social networking sites to stay in touch with friends, to get involved in local activism, and to attend her Alcoholics Anonymous group on Skype.

Although Charlotte has received a fair amount of computer help from friends and sometimes local businesses, she has found Tech Savvy Seniors has made a 'huge difference' to her confidence—**"just having that little bit of extra knowledge."** As well as picking up computer tips, Charlotte enjoyed the social experience of Tech Savvy Seniors, because she was able to help explain the course material to her peers.

Trevor (64), who lives in Sydney, attended one Tech Savvy Seniors tutorial about tablets just as he retired from his job as a salesperson. He had been given a tablet at work, however had not used it before he retired. Instead, Trevor used his laptop and blackberry for emailing and reading reports. Trevor attended Tech Savvy Seniors with his wife to learn more about browsing the internet, using social media and Skype, and how to operate a tablet.

Trevor describes Tech Savvy Seniors as **"a good introduction, which you can later build on to learn more or less at your own pace."** He predicts that his take up of technology *"won't happen very quickly... **it gets hard when for most of your life you do things a certain way, so to change (for us) is slow."***

Yet, since attending Tech Savvy Seniors, Trevor has used his tablet to plan a holiday for himself and his wife. He is also using the internet daily to connect with family in Melbourne and with his son who is travelling overseas. Tech Savvy Seniors introduced Trevor to Skype and Facebook—**"it's a new world... it was an eye-opener for me personally".**

Lily (67) attended three Tech Savvy Seniors tutorials about emailing and social media. Lily is keen to improve her computer skills because **"technology is developing rapidly and it's very hard to keep up."**

Lily and her husband have moved to a regional area in their retirement. While her husband has picked up work in the horse racing industry, Lily is currently enrolled in a counselling course in Sydney. Lily handwrites her assignments because she finds it more enjoyable, but her *"ultimate aim is to submit the last couple of assignments via the internet"* and to perhaps complete her practical assessments via Skype rather than travel to Sydney.

Lily hasn't put everything she learnt at Tech Savvy Seniors into practice because she has weak internet reception on her property and because she would rather *"go for a walk, swim or read a book"*. Nonetheless, for Lily, Tech Savvy Seniors helped boost her confidence, made her less frightened of the computer, and encouraged her to keep learning in the future. She says, **"I hope that they keep going with those classes because they don't make you feel stupid and they seem to have a full house most of the time. I think it's a social event too."**

Calculating the impact of Tech Savvy Seniors

The following tables provide an indication of the social value generated from stakeholder investment in Tech Savvy Seniors. The six primary outcomes of Tech Savvy Seniors (Table 4) have been monetised via financial proxies (Table 3). The financial proxies have been adjusted to account for the estimated:

- incidence of outcome (Table 5),
- proportion of outcomes that would have occurred without help from Tech Savvy Seniors (Table 7),
- contribution that people and organisations outside of Tech Savvy Seniors made to the incidence of outcomes (Table 8), and
- longevity of outcomes (Table 6).

The social value of Tech Savvy Seniors is then presented as a ratio to stakeholder investment (as outlined in Table 9).

A sensitivity analysis has been conducted on the estimates that inform the calculation of the social impact of Tech Savvy Seniors (see **Appendix 4**). The analysis assesses the extent to which the social return on investment would change if estimates (outlined in Tables 3-8) were to change.

Table 1. Social return on investment in Tech Savvy Seniors after 1 year *(Source: authors)*

	Complete beginners	Beginners & Intermediate	Social value generated in first year
Increased **knowledge** of ICTs	$48,227	$198,692	**$246,919**
Increased **confidence** to use ICTs	$120,733	$473,273	**$594,006**
Connect with **family & friends**	$328,800	$1,487,431	**$1,816,231**
Support **community involvement**	$701,940	$3,499,469	**$4,201,409**
Access **information online**	$276,931	$1,718,102	**$1,995,033**
Utilise **online services**	$175,829	$3,749,825	**$3,925,654**
Total	**$1,652,461**	**$11,126,792**	**$12,779,253**

Table 2. Social return on investment in Tech Savvy Seniors after 3 years *(Source: authors)*

	Social value ($)			Total social value over 3 years
	Year 1 (NPV)	Year 2 (NPV)	Year 3 (NPV)	
Complete beginners (20%)	$1,652,461	$467,221	$138,354	**$2,258,035**
Beginners & Intermediate (80%)	$11,126,792	$3,187,496	$938,204	**$15,252,492**
Total	**$12,779,253**	**$3,654,717**	**$1,076,558**	**$17,510,527**
			Program investment	$2,581,000
			SROI ratio	**$6.78**

Placing a dollar value on the outcomes of Tech Savvy Seniors

The following financial proxies place a dollar value on the social outcomes of Tech Savvy Seniors by capturing the different types of value that the program has created for stakeholders. Financial proxies have been identified through a combination of public cost saving, willingness to pay (contingent valuation), market value and travel cost methods in order to reflect the social value that Tech Savvy Seniors has created for various stakeholders.

Table 3. Financial proxies to measure the return on investment in Tech Savvy Seniors *(Source: authors)*

Outcome	Financial proxy rationale	Proxy value & source
Increased **knowledge** of various ICTs	Tech Savvy Seniors provided trainees with information to improve their understanding of how to use ICT devices and functions. As this outcome is not dependent on attending Tech Savvy Seniors, trainees could (and in some cases did) access similar information by purchasing relevant publications. **Valuation method:** Willingness to pay	**Proxy:** Cost of textbook about computer basics, targeted at seniors **Value:** $32 **Source:** *For Dummies* Website (2014)
Increased **confidence** to use ICTs	Tech Savvy Seniors boosted trainee confidence by facilitating incremental learning in a time and space that was fully dedicated toward this end. Trainees reported that group learning and support of trainers were important for boosting confidence around ICTs. The cost of travelling to a group learning environment indicates the value that program participants place on developing confidence around ICTs. **Valuation method:** Travel cost	**Proxy:** Average cost of travel to TSS, based on average daily household expenditure on travel for 65+ age group and average number of TSS tutorials attended. **Value:** $70 **Sources:** 2009-10 Household Expenditure Survey (ABS 2011); adjusted for inflation
Use of ICTs to stay connected with **family & friends**	The primary reasons why trainees adopted ICTs to mediate their relationships with close social networks were emotional (to stay in touch and up to date) rather than practical (to ask for help or to provide help). Emotional ties are relevant to one's state of wellbeing, confidence and esteem. The value of one's wellbeing can be considered in terms of the Medicare Schedule Fee for accessing counselling services to support individuals experiencing depression. **Valuation method:** Public cost saving	**Proxy:** Schedule Fees (Medicare) for six counselling services to support individuals experiencing a downturn in mental health **Value:** $374 **Source:** Medicare Benefits Schedule (2014)
Use of Information Communication Technology to support **community involvement**	Trainees who increased their use of ICTs for attendance of community groups often did so to access information about events or to access resources to support their involvement/attendance. Their attendance of community events is not considered to be contingent on their use of ICTs. The value of accessing this information can be considered in terms of one's willingness to pay to use a telephone. **Valuation method:** Willingness to pay	**Proxy:** Cost of local call from public pay phone, once a fortnight for twelve months **Value:** $13 **Source:** Telstra website

| Outcome
(continued) | Financial proxy rationale
(continued) | Proxy value & source
(continued) |
|---|---|---|
| Use of Information Communication Technology to support **community involvement**

(continued) | The value TSS has generated by increasing use of ICTs in administrative or volunteering roles can be considered in terms of the cost of hiring a worker for the number of hours trainees spent utilising ICTs. Survey respondents who are involved in administrative or volunteering roles in community groups indicated that they had used ICTs for an average of 4 hours in the previous week.

Valuation method: Market value | **Proxy:** Generalist Hourly Rate ($22.93), multiplied by 208 hours

Value: $4,770

Source: Social, Community, Home Care and Disability Services Industry Award 2010 |
| | For every 2 trainees who increased their use of ICTs in their volunteering or administrative roles in community groups, 5 trainees increased their use of ICTs to support their attendance of community group activities. This ratio is applied in the evaluation's social return on investment, regarding community involvement. | |
| Use of Information Communication Technology to **access information online** | Tech Savvy Seniors boosted trainees' use of ICTs to access information linked to personal interest, travel, health, local businesses, housing and government services. The cost of travelling to a library or shopfront indicates the value that program participants place on accessing information.

Survey respondents in this evaluation (who accessed information online) most commonly accessed information about two topics (from list above) between once and a few times a month.

Valuation method: Travel cost | **Proxy:** Average daily household expenditure on travel for 65+ age group, multiplied by 26 (for fortnightly travel)

Value: $378

Source: 2009-10 Household Expenditure Survey (ABS 2011); adjusted for inflation |
| Use of Information Communication Technology to **access government and business services online** | Transferring in-person or telephone transactions to online transactions can create a cost saving for the organisation offering the service or product. A 2013 Canadian Auditor General's report found the per-transaction costs among 11 selected departments were CAN$28.80 in person, CAN$11.69 by telephone and CAN$0.13 online.

Survey respondents in this evaluation (who utilised online services) most commonly accessed three types of online services. Online banking and superannuation was most commonly used once a week, while other online services were most commonly used a few times a year.

Valuation method: Public cost saving | **Proxy:** Approximate average cost saving of online transactions ($20) multiplied by estimated number of online transactions TSS trainees (who use online services) conduct in a one year period (60).

Value: $1,200

Source: 2013 Fall Report of the Auditor General of Canada: Chapter 2 – Access to Online Services |

The outcomes that have been achieved through Tech Savvy Seniors

The following outcomes identify the changes that primary beneficiaries have experienced as a result of having taken part in Tech Savvy Seniors. These outcomes were identified in consultation with program participants (during qualitative interviews) and with reference to the strategic objectives of the project partners. By being stakeholder-informed, the Social Return on Investment considers outcomes that are valued by program beneficiaries as well as program administrators.

Table 4. Indicators of outcomes of Tech Savvy Seniors *(Source: authors)*

	Indicators of change
Increased **knowledge** of various ICT devices and functions	▪ Trainee feels able to explain how to use an ICT device or function to a friend who has little knowledge of ICTs
Increased **confidence** to use ICTs	▪ Trainee is willing to learn new things on their ICT device through trial and error ▪ Trainee feels their use of ICTs is more simple ▪ Trainee feels their use of ICTs is quicker ▪ Trainee realised they knew more about technology than they thought they did ▪ Trainee would like to learn more about ICTs in the future
Increased use of ICTs to stay connected with **family and friends**	▪ Trainee regularly uses email, skype or social media to communicate with family or friends
Increased use of ICTs to support **community involvement**	▪ Trainee uses ICTs to support leadership, administrative or volunteering roles in community groups ▪ Trainee uses ICTs to look for information about events or activities organised by one's community groups **Note:** this outcome was most relevant to trainees who were already involved in community groups

Increased use of ICTs to access **information online**	▪ Trainee uses the internet to access information about topics such as:
	  > Health conditions
	  > Travel (for leisure)
	  > Local businesses
	  > House renovations or alterations
	  > Government policies, programs or services
	  > Personal interest (including family history, hobbies, news, recipes, weather, ebooks)

Increased use of ICTs to access **government and business services online**	▪ Trainee uses the internet to access government and business services, such as:
	  > myGov (a centralised login for online government services)
	  > one's account or tools on Department of Social Services or Department of Human Services websites
	  > Booking tickets for leisure events (e.g. concerns, seminars)
	  > Booking airline or transport tickets for travel
	  > Managing banking or superannuation online
	  > Purchasing items online

Incidence of outcomes

The following table estimates the incidence of outcomes based on responses received from training evaluation forms and follow up surveys.

Table 5. Incidence of outcomes of Tech Savvy Seniors *(Source: authors)*

Outcome	Outcome incidence			
	Complete beginners		Beginners & Intermediate	
	N=2,200 (20%)		N=8,800 (80%)	
	Per cent of cohort	Number of trainees	Per cent of cohort	Number of trainees
Increased **knowledge** of ICTs	80%	1,760	85%	7,480
Increased **confidence** to use ICTs	85%	1,870	85%	7,480
Increased use of ICTs to stay connected with **family & friends**	60%	1,320	70%	6,160
Increased use of ICTs to support **community** involvement	35%	770	45%	3,960
Increased use of ICTs to access **information**	50%	1,100	80%	7,040
Increased use of ICTs to utilise online **services**	10%	220	55%	4,840

Longevity of outcomes of Tech Savvy Seniors

The following table estimates how long the outcomes of Tech Savvy Seniors last. Referred to as 'drop-off', the longevity of outcomes is calculated by deducting a fixed percentage from the remaining level of outcome at the end of each year. In the absence of time-series data, the following table provides estimates of the expected drop off rate of the outcomes of Tech Savvy Seniors.

Table 6. Longevity of outcomes of Tech Savvy Seniors *(Source: authors)*

Outcome	Drop off	Rationale
Increased **knowledge** of various Information Communication Technology	50%	In cases where trainees did not have the means to practice what they had learnt (whether time, motivation or access to ICTs), knowledge subsided quickly. In cases where trainees did practice, the impact of Tech Savvy Seniors can be argued to have subsided as the attributing effect of practice increases.
Increased **confidence** to use Information Communication Technology	90%	Confidence as a result of Tech Savvy Seniors is expected to subside within the year, as factors such as regular practice maintain and foster one's level of confidence in ICT use.
Adoption of ICTs to mediate relationships with **family**, support **community** involvement and access **information** and **services** online.	70%	Integration of ICTs into one's lifestyle is considered to be proportional to the drop off of knowledge and confidence in using ICT devices and functions.

Accounting for outcomes that would probably have occurred, without Tech Savvy Seniors

The following tables estimate the proportion of outcome that would have happened even if trainees had not attended Tech Savvy Seniors. This is referred to as 'deadweight' in manuals for social return on investment. The following estimates have been made by observing trainees' experience of developing digital literacy before they attended Tech Savvy Seniors and by considering changes to the digital literacy of a comparison group.

Table 7. Accounting for outcomes that would have occurred without Tech Savvy Seniors *(Source: authors)*

Complete beginners		
Outcome	**Dead-weight**	**Rationale & Source**
Increased use of ICTs to stay connected with **family**, support **community** involvement and access **information** and **services** online.	2%	ACMA Communications Report (2012-13) traces a 2% increase during 2012-13 in the number of people aged 65 and over who are using the internet on a frequent basis.
Increased **knowledge** to use ICTs	2%	Increased knowledge about ICTs is expected to be proportional to increases in use and integration of ICTs to trainees' lifestyles.
Increased **confidence** to use ICTs	0%	Trainees boosted their confidence by learning with others, having the opportunity to relate to their peers (regarding digital skills) and being supported and motivated by a trained instructor. No 'complete beginner' trainees reported opportunities outside of Tech Savvy Seniors to learn about ICTs in this type of environment.

Beginners & intermediate		
Outcome	**Dead-weight**	**Rationale & Source**
Increased use of ICTs to stay connected with **family**, support **community** involvement and access **information** and **services** online.	5%	As above, ACMA Communications Report (2012-13) traces a 2% increase during 2012-13 in the number of people aged 65 and over who are using the internet on a frequent basis. ACMA also reports a 7% increase in the number of Australians who access government services online in the 6 months to May 2012 and a 12% increase in the number of Australians undertaking online transactional activities in the 12 months to May 2013. A breakdown by age is not provided but broader trends in the report indicate that the 65+ age group is increasing their internet use at about half the rate of younger age groups. This trend is considered for beginner and intermediate trainees because their prior experience of ICTs is expected to have helped them increase their use of ICTs by building on their existing understanding and access to ICTs.
Increased **knowledge** to use ICTs	5%	Increased knowledge is expected to be proportional to increases in use and integration of ICTs to one's lifestyle.
Increased **confidence** to use ICTs	2%	Trainees boosted their confidence by learning with others, having the opportunity to relate to their peers (regarding digital skills) and being supported and motivated by a trained instructor. One intermediate-level interviewee mentioned that she regularly participated in 'computer pals' club, which offers the group-learning environment which trainees found helpful for boosting their confidence.

Accounting for external influences

To understand the extent of social value created by Tech Savvy Seniors, it is important to also consider how much of the outcome was caused by the contribution of other organisations or people. Referred to as 'attribution', the following estimates draw on trainees' accounts of whether the success of the program has been contingent on other factors and whether they had received ICT help from other sources.

Table 8. Accounting for the contribution of support provided outside of Tech Savvy Seniors *(Source: authors)*

All program participants

Outcome	Attribution	Rationale
Increased **knowledge** of various Information Communication Technology	10%	Interview and survey data indicates that program participants also received help to learn to use ICTs from family and friends, IT professionals, libraries, books or computer stores. Trainees described additional help, however, as piecemeal and rarely in a fully supportive environment. Although supplementary help was available to most trainees, Tech Savvy Seniors was identified as the primary environment in which knowledge of ICTs was developed.
Increased **confidence** to use Information Communication Technology	5%	Trainees explained that by offering opportunities to learn with others, relate to one's peers (regarding digital skills) and be supported and motivated by a trained instructor, Tech Savvy Seniors was the dominant attributing factor to boosts in confidence.
Adoption of ICTs to mediate relationships with **family**, support **community** involvement and access **information** and **services** online.	30%	Interviewees reported that family or community members often encouraged them to adopt ICTs to communicate. In some cases, businesses required transactions to be conducted online. Interviewees explained that these contextual factors helped motivate them to integrate ICTs into their lifestyles.

The effect of outcomes of Tech Savvy Seniors on other outcomes

Consideration has also been given to whether, in creating certain outcomes, Tech Savvy Seniors has displaced other outcomes. Some interviewees, for example, expressed concern that increased use of online services would displace the number of people employed as tellers in banks or officers at government services shop-fronts.

In this evaluation, trainees' improved digital literacy is considered to have nominal displacement effects as the push to use ICTs to mediate transactions is part of a broader shift in Australia. Further, program participants described their use of ICTs to complement, rather than replace, existing practices:

"I'd always go to the doctor. I just look up information to further what he said."

"My family's in the city so we don't see them much, but every day my daughter puts stuff on Instagram so I keep up to date."

Investment in Tech Savvy Seniors

Social return on investment takes into account the full cost of delivering a program. In the case of Tech Savvy Seniors, this includes the financial and in-kind investments made by project partners, training providers, trainers and trainees to cover the cost of training rooms and computers, trainers, training material, advertising the program, traveling to training and administrative staff costs. Below is an outline of the investments made by stakeholders.

Table 9. Investment in Tech Savvy Seniors, by stakeholder *(Source: authors)*

NSW Department of Family and Community Services	**$500,000** ✓ Funding provided to community colleges to deliver Tech Savvy Seniors tutorials **$178,000** ✓ Administrative staff costs **Note:** As part of Tech Savvy Seniors, the Department also invested **more than $50,000** in events during Seniors Week (2013) and the Royal Easter Show (2013). The social value generated by these events has not been measured in this evaluation which focuses specifically on the impact of Tech Savvy Seniors tutorials delivered by libraries and community colleges.
Telstra	**$200,000** ✓ Grants provided to public libraries to deliver Tech Savvy Seniors tutorials **$240,000** ✓ Train-the-trainer courses (for trainers) ✓ Supplementary educational training resources (for trainees) ✓ Digital literacy DVDs, added to library collections
Community Colleges	**$165,000** ✓ Costs linked to trainers, marketing, purchase of new ICT devices, printing, catering, graduation ceremonies, tutorial rooms and tech support which exceeded funding received from Family and Community Services
Public Libraries NSW	**$120,000** ✓ Costs linked to trainers, marketing, purchase of new ICT devices, printing, catering, tutorial rooms and tech support which exceeded grant funds from Telstra
Trainers	✘ Time and travel costs (assumed to be covered by trainer's income from the program)
Trainees	**$1,178,000** ✓ Beneficiary's travel costs (estimate based on average daily household expenditure on travel for 65+ age group and average number of tutorials attended) ✘ Beneficiary's time (current convention in SRoI is that beneficiary's time is not given a financial value)
Total investment in Tech Savvy Seniors	**$2,581,000**

Purpose of evaluation

Purpose	The purpose of this evaluation has been to demonstrate the nature and depth of impact of the Tech Savvy Seniors program. The findings illustrate senior Australians' experiences of participating in Tech Savvy Seniors tutorials and subsequent changes to their usage of ICTs. The evaluation's findings, regarding program outcome and impact, have been monetised via financial proxies to provide an indication of the program's social return on investment.

Scope of evaluation

Objective	To calculate the impact of Tech Savvy Seniors on changes in knowledge, attitudes and use of ICTs among senior Australians who participated in Tech Savvy Seniors tutorials at their local libraries or community colleges.

Audience	Tech Savvy Seniors (NSW) Steering Committee—including NSW Department of Family and Community Services, Telstra, Public Libraries (NSW), the NSW Department of Education and Communities, Community Colleges Australia and Australian Seniors Computer Clubs Association.

Funding	The evaluation has been commissioned by Telstra on behalf of both project partners—NSW Department of Family and Community Services and Telstra.

Evaluation design	The evaluation has been designed in line with the steps and principles of identifying, investigating and measuring social return on investment, as laid out by The SROI Network (based in United Kingdom). More information is provided at **Appendix 2**.

Time period	The evaluation considers attendance of Tech Savvy Senior tutorials between January 2013 and June 2014.

Deliverable	Findings of the evaluation are presented in this written report, which assembles data collected from training evaluation forms, phone interviews and follow-up surveys to illustrate the impact of and social value generated by Tech Savvy Seniors.

Beyond scope	The evaluation does not consider incidental or promotional events which were conducted under the rubric of Tech Savvy Seniors during January 2013 - June 2014.
	The evaluation does not investigate the quality of training material or instructors used to administer Tech Savvy Seniors.
	The evaluation does not consider the social value generated by increased attendance at public libraries or community colleges (e.g. attending Tech Savvy Seniors may have led seniors to start utilising other resources that libraries and community colleges offer).

Consideration of ethics

Ethics	Ethical issues were considered throughout the evaluation—including evaluation design, data collection and presentation of report. All interviewees and survey respondents were informed of the objective of the evaluation and their subsequent participation was voluntary and anonymous.

Stakeholder analysis

Stakeholders are identified as people or organisations that experience change, whether positive or negative, as a result of the activity being analysed. The following stakeholder analysis serves as a reference point in understanding the nature of value that has (or hasn't) been created for different parties. Table 10 identifies the stakeholders who have been engaged in this evaluation.

Table 10. Stakeholder analysis for Tech Savvy Seniors (NSW) *(Source: authors)*

Stakeholder	Method of involvement	Expected change and materiality decision
Program participants This stakeholder group encompasses all individuals who attended Tech Savvy Seniors tutorials at their local public library or community college. Differences between program participants will be considered in terms of gender, age, location, number of Tech Savvy Seniors tutorials attended and level of digital literacy prior attendance of Tech Savvy Seniors.	>Feedback forms >Phone interviews >Online survey	**Expected change:** Following TSS, program participants are expected to have increased digital skills, literacy and confidence and be using ICTs to mediate parts of their social, civic and/or political lives. These changes are expected to create value for the individual, their immediate social networks as well as broader society. The three methods of engagement will create data that illustrates the nature and breadth of change. **Materiality:** This stakeholder group is considered the primary beneficiary of Tech Savvy Seniors.
Social networks of program participants This stakeholder group encompasses the family and close friends that provide emotional and practical support to program participants.	Implications for this stakeholder group considered from perspective of program participants *(above)*	**Expected change**: As a result of changes to program participants' digital literacy, their social networks and community groups are expected to benefit from quicker and easier communication. **Materiality:** Value accrued by this stakeholder group will be measured based on data provided by program participants.
Governments & businesses, whose service are utilised by program participants This stakeholder group encompasses the governments and local businesses which seek to engage with their citizens or customers online (e.g. related to health care, benefits, general goods and services).	Implications for this stakeholder group considered from perspective of program participants *(above)*	**Expected change:** Governments and businesses are expected to capitalise on changes to program participants' digital literacy, which will enable them to access information and services online. **Materiality:** Value accrued by this stakeholder group will be measured based on data provided by program participants.
Trainers Trainers are the individuals who have been employed by training providers to teach the content of Tech Savvy Seniors tutorials.	Not included	**Expected change:** As part of Tech Savvy Seniors, some trainers will have acquired new employment and some will have extended their existing employment responsibilities. **Materiality:** Value accrued by this stakeholder is considered beyond the scope of this evaluation.
Training providers Training providers are public libraries or community colleges which have offered Tech Savvy Seniors tutorials to program participants.	Not included	**Expected change:** Tech Savvy Seniors may have assisted training centres in broadening their customer/member base. **Materiality:** Value accrued by this stakeholder is considered beyond the scope of this evaluation.
Telstra Telstra is a leading provider of telephones, mobile devices and internet in Australia.	Not included	**Expected change:** Tech Savvy Seniors may have had some impact on Telstra's reputation and developed the broader 'ICTs for seniors' market segment. **Materiality:** Value accrued by this stakeholder is considered beyond the scope of this evaluation.
NSW Department of Family and Community Services The Department provides strategic policy advice to NSW Government on the implications of population ageing and older peoples' needs.	Not included	**Expected change:** Tech Savvy Seniors may have had some impact on perceptions of the Department and seniors' ability to access its online information and services (e.g. Seniors Card). **Materiality:** Value accrued by this stakeholder is considered beyond the scope of this evaluation.

About the data

Training evaluation forms

All trainees were invited to complete a double sided training evaluation form at least once during their participation in Tech Savvy Seniors. Training evaluation forms were paper-based and digitised by Family and Community Services. 1,686 responses were collected to varying levels of completeness (a response rate estimated between 10%-15%).

Although the option for respondents to 'opt-in' or not may have introduced a selection bias, the number of responses received is considered to provide a fair indication of the views and experiences of Tech Savvy Seniors participants more broadly.

Phone interviews

The University of Melbourne conducted 48 phone interviews with individuals who had participated in the Tech Savvy Seniors program and consented to be contacted for follow up research. Interviewees were asked about their experience of participating in Tech Savvy Seniors and how their attitudes and usage of ICTs had changed following participation in their tutorial(s).

Interviews were arranged by Family and Community Services. The duration of most interviews was approximately 20 minutes. Sampling was aimed at obtaining a diversity of informants, based on factors of gender, remoteness indicator, use of ICTs prior to Tech Savvy Seniors, and training facility (public library or community college).

Three times as many females were recruited for interviews as males (12 males and 36 females), reflecting the more common participation of females in the program.

Follow up survey

The University of Melbourne conducted a follow up survey of program participants who provided their contact details on the initial training evaluation form. The aim of the survey was to gather generalizable data that indicates the impact of Tech Savvy Seniors in the areas interviewees had identified to have changed following Tech Savvy Seniors.

The survey was emailed to participants who provided email addresses (N=437). Program participants who did not provide email addresses were contacted to complete the survey over the telephone (N=83) or by mail (N=33). 148 respondents participated in the survey (a response rate of 28%).

As above, the primary limitation of data collected via the follow up survey is its selection bias which was introduced by the option for respondents to 'opt-in' or 'opt out' of the survey. The survey nonetheless was conducted as practically as possible within the scope of this evaluation and can provide a fair indication of views and experiences of Tech Savvy Seniors participants more broadly.

ATTENDING TECH SAVVY SENIORS TUTORIALS

Most program participants attended Tech Savvy Seniors at their local public library or community college.

85% of survey respondents used their own mode of transport (e.g. car, walking, bicycle) and travelled for less than half an hour to training. 10% cent travelled for longer than half an hour (using own transport) and 5% took public transport. *(N= 154)*

In most cases, Tech Savvy Seniors tutorials were led by one trainer. Survey respondents who attended Tech Savvy Seniors at their public library often reported that two instructors were present at their tutorial, particularly if trainers were regular library staff.

Program participants attended from 1 to more than 12 tutorials. Most commonly, program participants attended 1 or 6 training sessions (22% and 17% respectively).

Most participants found Tech Savvy Seniors to be a supportive and resourceful opportunity to improve their digital skills and literacy:

■ 88% of participants found their trainer to be helpful, the training resources to be clear and the tutorial to be at the right pace.

Of these 88%,

■ 1 in 2 respondents (50%) said they had not previously had opportunities to learn to use ICTs, and

■ 3 of 5 respondents (60%) said they had been confused by the technology available to them.

Figure 3. Impressions of the tutorial, trainer and resources at Tech Savvy Seniors *(N=1,495)*
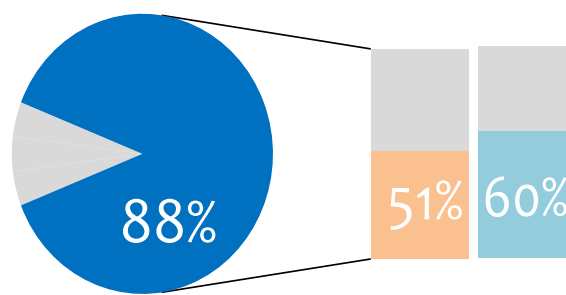
Of the 12% of trainees who expressed some dissatisfaction with Tech Savvy Seniors, about 3 in 5 participants (60%) said they liked and used technology before Tech Savvy Seniors but needed more practice. By comparison, of the 88% of trainees who had positive impressions of Tech Savvy Seniors, 4 in 5 participants (80%) said they liked and used technology before Tech Savvy Seniors but needed more practice. The difference is statistically significant.[1]

"The trainer was a bit average, but part of it was my fault because I was at a different level to people in the class. "
- Female, intermediate

"I learn better if people show me and then once I get shown, then I'm really good with using the notes."
- Female, beginner

"Usually that type of training has a mix of people who have some, medium or lots of knowledge."
- Female, intermediate

Qualitative data, collected via interviews with program participants indicate that:

The **expertise of trainers** in managing the different skill level of trainees was critical to the positive experience of Tech Savvy Seniors tutorials.

Training booklets, which provided a step-by-step guide to what was being learnt in tutorials, were useful as a **supplementary teaching aide.** Interviewees described them as helpful reference material during their tutorial and particularly at home following tutorials.

While some trainees expressed frustration at the **pace of the tutorial** being either too slow or too fast, others saw this as an inevitable outcome of the nature of learning in a group environment, which could be harnessed to support peer learning and comradeship.

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[1] χ^2(4, N=1330) = 40.80, p = .000

Impact of Tech Savvy Seniors on participants':

CONFIDENCE TO USE INFORMATION COMMUNICATION TECHNOLOGY

Tech Savvy Seniors helped trainees boost confidence in their own digital literacy—this can be likened to a process of empowerment, through which trainees began to show greater motivation or initiative to maintain and develop their digital literacy.
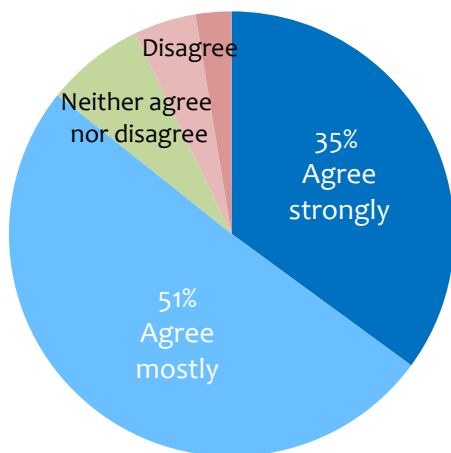
Tech Savvy Seniors helped boost trainees' confidence through the teaching style and pace (which was aimed at seniors), the learning environment (which allowed trainees to assist each other and relate to their peers) and the subject matter being taught (which covered the fundamentals of ICT devices and functions).

> *"I don't know how to put it into words. I'm a bit more confident than I was. I was quite frightened— I wasn't confident enough to look into it earlier."*
> **- Female, beginner, metro**

> *"You get a fair bit of confidence if you go to Tech Savvy Seniors: you talk amongst yourselves or to the trainers and you feel a lot more confident."*
> **- Male, intermediate, regional**

Interviewees reported that before Tech Savvy Seniors, they felt disheartened by their low level of digital literacy when family members, store owners or service providers assumed they had a higher level of digital literacy and understanding.

Tech Savvy Seniors has helped me: BOOST MY CONFIDENCE TO USE COMPUTERS, TABLETS OR SMARTPHONES

Figure 4. Impact of TSS on participants' confidence to use computers, tablets or smartphones *(N=154)*

Approximately 4 in 5 trainees (86%) felt that Tech Savvy Seniors had helped boost their confidence to use computers, tablets or smartphones.

Interviewees indicated that Tech Savvy Seniors to *not* further their confidence or knowledge of ICTs if tutorials did not meet their needs—most commonly, if the pace of the tutorial was too fast or slow, or if there were no opportunities to practice on ICT devices during the tutorial.

One's gender, age, previous occupation, location (city vs. regional) or prior use of ICTs did not significantly affect the likelihood of finding Tech Savvy Seniors helpful in boosting one's confidence.

What are the practical implications of confidence to use ICTs?

As illustrated in Figure 5, confidence holds implications for the long term impact of Tech Savvy Seniors, because confidence was expressed in relation to learning more about ICTs in the future – e.g. by engaging in 'trial and error' on their own or by setting goals for things they would like to learn in the future.

Figure 5. Nature of confidence for ICT use, gained by attending Tech Savvy Seniors *(N=130)*
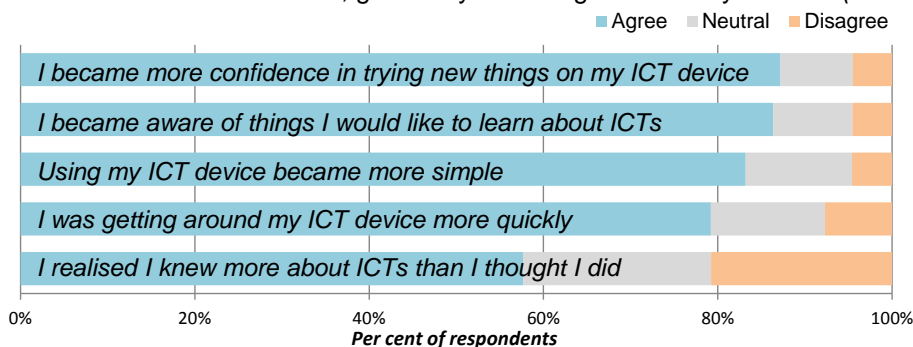
Impact of Tech Savvy Seniors on participants':

KNOWLEDGE OF HOW TO OPERATE INFORMATION COMMUNICATION TECHNOLOGY

Interviewees often recounted that they were motivated to attend Tech Savvy Seniors because they wanted to learn more about how to operate particular ICT devices – whether because they had recently acquired a device or were thinking about buying one.

Contemporary research into digital inclusion (e.g. Tsatsou 2013; Heeley and Damodaran 2009) emphasises the importance of not just assisting digitally excluded groups to access ICT devices, but also to facilitate the development of knowledge and skills to utilise the technology in meaningful ways.

> *"I'd just been given a computer. I wanted to learn how to use it. Everyone tells you how wonderful the internet is and I thought, well, I better find out."*
> **- Female, beginner, metro**

Tech Savvy Seniors has helped me:
UNDERSTAND HOW TO USE ONE SPECIFIC ICT DEVICE
(such as a computer, tablet or smartphone)
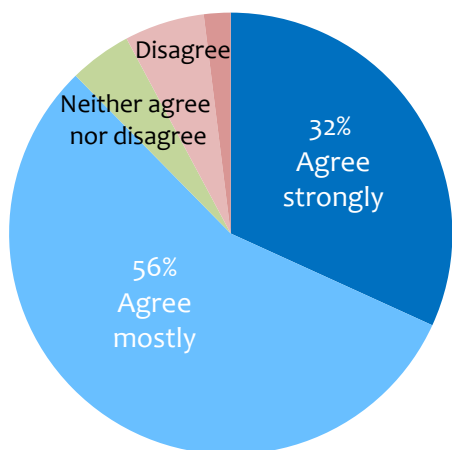
Almost 9 in 10 trainees (88%) found Tech Savvy Seniors to be helpful in learning how to use one specific ICT device, such as a computer, tablet or smartphone.

8 in 10 trainees (80%) who attended between 1-3 tutorials found Tech Savvy Seniors to have helped in understanding how to use a specific ICT device. By comparison, 9 in 10 trainees (90%) who attended 4-8 tutorials shared this view. This difference is found to be statistically significant and indicates that trainees who attend a series of tutorials are more likely to improve their digital skills.

As above, one's gender, age, previous occupation, location (city vs. regional) or prior use of ICTs did not significantly affect the likelihood of finding Tech Savvy Seniors helpful in understanding how to use specific ICT devices.

Figure 6. Impact of Tech Savvy Seniors on participants' (subjective) ability to use one specific ICT device *(N=154)*

Who feels confident in explaining how to use a computer, tablet or smartphone?

While 90% of respondents who reported they had used computers, tablets *and* smartphones prior to Tech Savvy Seniors felt very or reasonably confident in explaining how to use a computer to a friend, only 68% of complete beginners and beginners felt the same confidence.[2] This finding highlights the importance of time and practice in developing one's digital literacy. This trend was not traced in respondents' confidence levels to explain how to use a tablet or smartphone.

Figure 7. Respondents' levels of confidence in explaining how to use a computer, tablet or smartphone

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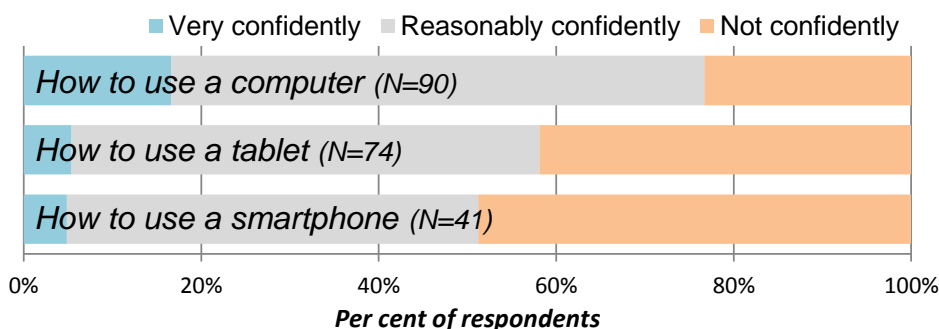
[2] χ^2 (2, N=87) = 10.28, p = .006

Impact of Tech Savvy Seniors on participants' use of ICTs for:

FAMILY & SOCIAL NETWORKS

Most trainees have found Tech Savvy Seniors helpful in their use of the internet to connect with family and friends. Staying connected with family online was most commonly done to keep in touch with people who had moved away. This speaks to the importance of digital inclusion for mitigating the risk of social isolation.

The 'family' is often considered the most basic social unit that connects individuals with the resources required for membership of society. In later stages of life, seniors begin to rely on family members in new ways, and adopt caring, financial and emotional support roles.

Greater awareness of ICTs also allowed some trainees to 'keep up' in conversations with younger family members who often assumed a basic understanding of ICTs.

> *"I've got a son in London and a granddaughter in California. Occasionally I just send an email and get a reply... [to] know that the world is still turning and they're still in it."*
> **- Male, intermediate, regional**

> *"Now when I talk to the kids about [ICTs], I know what they're talking about and we can have a conversation"*
> **- Female, beginner, regional**

Tech Savvy Seniors has helped me use the internet to: STAY CONNECTED WITH FAMILY OR CLOSE FRIENDS
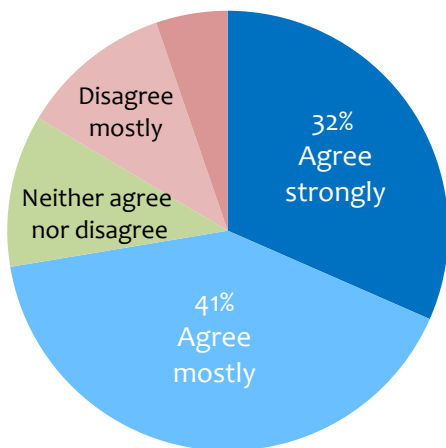
Figure 8. Impact of Tech Savvy Seniors on the use of ICTs to connect with family and close friends *(N=152)*

83% of respondents who found Tech Savvy Seniors helpful (for using ICTs to connect with family and friends) are currently using email, social media or skype at least once a week to communicate with their social networks.

Respondents from regional areas were more likely to use the internet to stay connected with people who had moved away. They were also more likely to report their children or grandchildren were living interstate and/or overseas.

One's gender, location (city vs. regional) and prior use of ICTs did not significantly affect the likelihood of finding Tech Savvy Seniors helpful in this area.

Why mediate social networks online?

The following pie charts illustrate that respondents more commonly choose to use the internet to stay connected with family and close friends (regardless of how often) to facilitate the emotional goal of staying connected, rather than practical goals of asking for or providing help.

Figure 9. Reasons for using the internet to stay connected with family and friends *(N=144)*

65%	41%	41%	26%	18%	15%
To connect with family or friends that have moved away	To strengthen relationships with people I see often	To stay in touch with people while I am travelling	To contact people I had lost touch with	To ask family or friends for help when I need it	To provide more help to family or friends
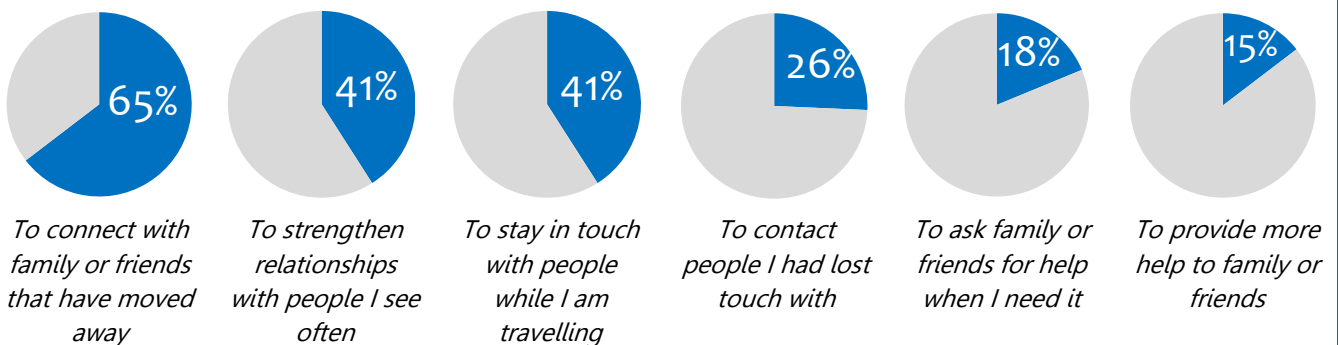
Impact of Tech Savvy Seniors on participants' use of ICTs for:
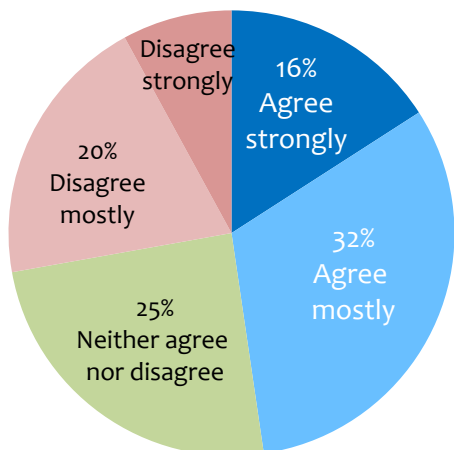
INVOLVEMENT IN COMMUNITY LIFE

Whether trainees increased their use of ICTs around their community involvement generally depended on the nature of their organisations and the role they played in the organisation—e.g. trainees who regularly attended hobby groups were less likely to find ICTs relevant to their community involvement than a volunteer in a civic organisation.

Community groups play an important role in strengthening the social fabric of society. In later years, people often participate in civic groups to both pursue personal interests and replace the social interaction that previously occurred at work (NSW Ageing Strategy). Accordingly, almost one in three seniors in NSW are volunteers, and two in five seniors in NSW participate in sport and recreational physical activities (NSW Ageing Strategy).

> *"My friends are on the internet and some are and some aren't in our embroidery group and some are and some aren't at Probus. So if anything comes to town you talk, meet and pass information on."*
> **- Female, beginner, regional**

> *"I'm on the Retirement Village Committee, Darts Committee, Lawn Bowls Committee and I'm Sports President in the local Club. It didn't worry me when I wasn't using email, but now that I'm on it, committee members are sending me all this stuff."*
> **- Female, beginner, regional**

Tech Savvy Seniors has helped me use the internet to:
ASSIST IN MY INVOLVEMENT IN COMMUNITY GROUPS

Figure 10. Impact of Tech Savvy Seniors on the use of ICTs to support involvement in community groups *(N=151)*

Almost 1 in 2 trainees (48%) found Tech Savvy Seniors helpful in supporting their community involvement.

Respondents indicated that leadership, administrative or volunteering roles were most often held in civic, religious or charity groups, while participation in health and hobby groups was usually 'attendance' in nature. This gives an indication of the relevance of ICTs to different types of community groups.

Figure 11. Changes to ICT use in leadership, administrative or volunteering roles in community groups *(N=122)*
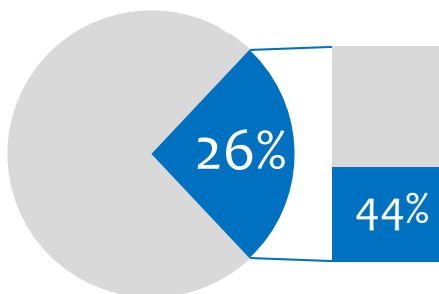
About 1 in 4 respondents (26%) are involved in leadership, administrative or volunteering roles in at least one type of community organisation. Of these respondents, 44% reported that their use of ICTs became more efficient (N=8) or more frequent (N=5) following Tech Savvy Seniors.

Figure 12. Changes to ICT use in attendance of activities organised by program participants' community groups *(N=139)*
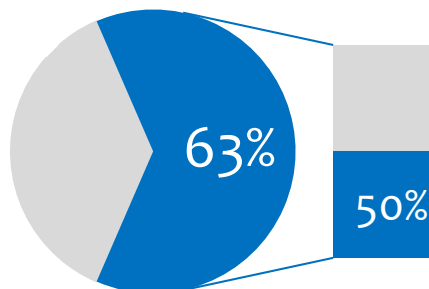
About 3 in 5 respondents (63%) attend activities or events in at least one type of community organisation – commonly fitness or hobby orientated groups. Of these respondents (63%), about 2 in 5 (40%) have found what they learnt at Tech Savvy Seniors helpful in using the internet to look for information about activities or to support their involvement, and about 1 in 10 (10%) reported they have used the internet to become involved in a new group.

Impact of Tech Savvy Seniors on participants' use of ICTs for:

ACCESSING INFORMATION ONLINE

The evaluation found a widespread increase in the use of ICTs to access information online, following attendance of Tech Savvy Seniors. Program participants reported searching for information relating to personal interest such as recipes, family history, news media, ebooks, and images for craft projects.

Program participants also reported searching for information related to health, travel, home improvement and educational resources. These areas can be linked to the process of 'active ageing', in which seniors engage in independent decision making to support their lifestyles and manage the risks they are exposed to as they grow older.

> "I've had a lot of medical issues lately— I've looked up information about diabetes on the internet. I'd always go to the doctor; I look up information to further what he said."
> **- Female, beginner, metro**

> "We're putting in a watering system today...I looked up a few of the suppliers [online], you know, to get an idea of the cost of materials and things like that."
> **- Male, intermediate, regional**

Tech Savvy Seniors has helped me use the internet to: ACCESS INFORMATION ONLINE
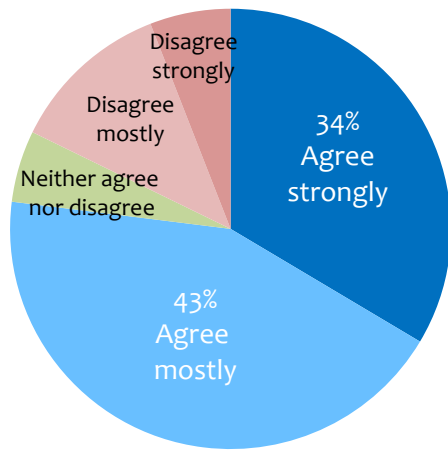
Figure 13. Impact of Tech Savvy Seniors on the use of ICTs to access information online *(N=152)*

Respondents were more likely to have found Tech Savvy Seniors helpful in accessing information online if they had used computers, smartphones and tablets prior to Tech Savvy Seniors, if they had attended Tech Savvy Seniors in the first six months of the program, or if they had attended a greater number of tutorials.[3] This highlights the importance of time in developing the skills or motivation to utilise the internet to access information.

Respondents who had not used a computer, tablet or smartphone prior Tech Savvy Seniors were significantly less likely to look up information about local businesses online or government websites.[4]

One's gender, age, household type, prior occupation, location (city vs. regional) did not significantly affect the likelihood of finding Tech Savvy Seniors helpful in this area.

What information are trainees accessing online?

Figure 14 indicates how frequently trainees are using the internet to search for information on particular topics. The frequency of internet use per topic can be considered as proportional to the nature of the activity (i.e. one would typically look up personal interest more often than housing alterations).

Figure 14. Areas in which use of internet has increased, following Tech Savvy Seniors (N=140)

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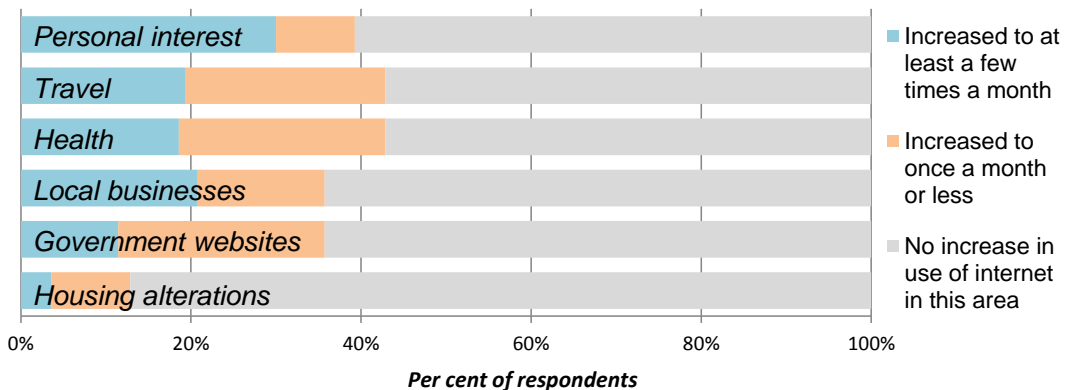
[3] χ^2 (1, N=140) = 8.63, p = .003; χ^2 (2, N=147) = 6.29, p = .043; χ^2 (2, N=146) = 6.02, p = .049 (respectively)

[4] χ^2 (2, N=138) = 7.91, p = .019; χ^2 (2, N=138) = 9.49, p = .009 (respectively)

Impact of Tech Savvy Seniors on participants' use of ICTs for:

ACCESSING SERVICES ONLINE

Participants of Tech Savvy Seniors were more willing to access information online than to utilise online services such as banking, shopping and government services. Trainees' reason for not utilising online services was often a lack of trust in the security of online systems.

Although access to ICTs and skills to use ICTs are important components of digital inclusion, trainee's lack of trust in the security of online systems stresses the importance of digital literacy training to assist seniors to understand or trust the integrity of different online security systems. Although some trainees attended tutorials about cyber safety, the narrative of distrust in online services (particularly banking) was common among interviewees.

Accessing online services is increasingly important, as Digital Economy policies reflect and encourage moves to increase economic transactions online.

"I'm not confident in doing internet banking. You just see it all the time, people are not sure who's hacking in. You see it all the time on the news"
- Male, beginner, regional

"I'm on a part pension with Centrelink and I know I'm supposed to get a password to access my details or to let them know about changes... that's something I haven't done yet."
- Female, beginner, metro

Tech Savvy Seniors has helped me use the internet to: ACCESS SERVICES ONLINE

Figure 15. Impact of Tech Savvy Seniors on the use of ICTs to access services online *(N=151)*
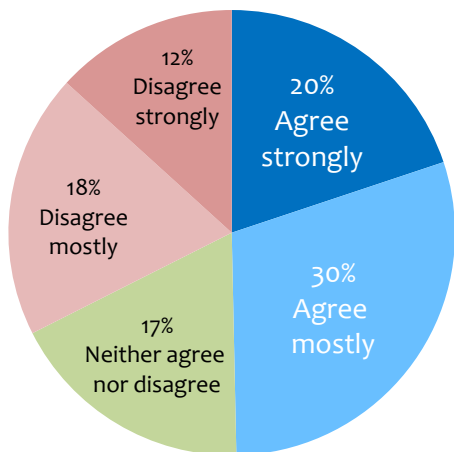
1 in 2 participants (50%) found Tech Savvy Seniors helpful in supporting their use of the internet to access online services.

While almost 6 in 10 trainees (60%) who had used a computer, tablet or smartphone prior to Tech Savvy Seniors found their tutorial helpful for accessing services online, only 1 in 10 trainees (10%) who had not used ICTs prior training found their tutorial helpful for accessing services online. This difference is statistically significant.[5] As with accessing information online, this highlights the importance of time and practice in developing the skills, motivation and/or trust to utilise the internet to access online services.

What online services are trainees utilising?

Figure 16 indicates that about 1 in 3 trainees have increased their use of ICTs since attending Tech Savvy Seniors. Data presented by ACMA (2014) illustrates that seniors are behind in their utilisation of online banking, with 60% cent of people aged 65 or over conducting online banking, while over 90% of people aged 25-44 and over 70% of people aged 45-65 conduct online banking.

Figure 16. Breakdown of online services which program participants have increased accessing (N=140)

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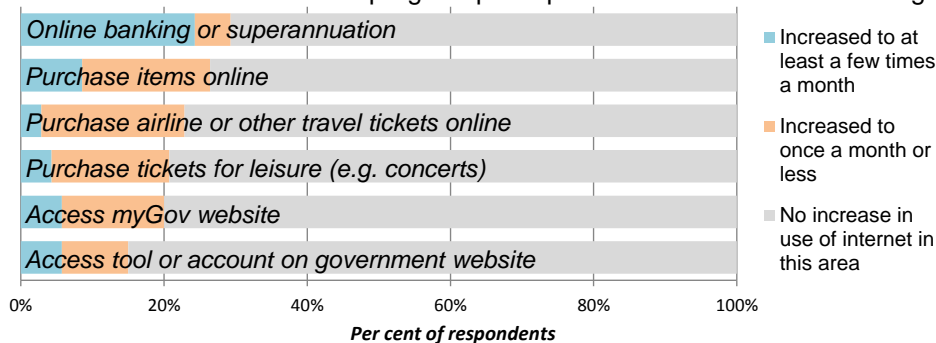
[5] χ^2 (4, N=140) = 19.61, p = .001

CONCLUSION

Summary

The mix of narrative, qualitative and financial analysis, which has informed this evaluation, shows that Tech Savvy Seniors has been of great benefit to an overwhelming majority of seniors who participated in the program, and their immediate and broader community.

The outcomes and impact of Tech Savvy Seniors present a compelling case for the continuation of Tech Savvy Seniors, which ideally takes into account this evaluation's 'considerations for policy and practice'.

Considerations for policy and practice

The following suggestions may improve digital literacy programs for seniors:

- Ensuring that trainers have sufficient support to meet the needs of all trainees in their tutorial is essential for the success of Tech Savvy Seniors, however adjustments are likely to require increased resourcing.

- Tutorials have been presented in terms of the ICT device or function being learnt (e.g. tablets or emailing) rather than the 'meaningful activity' that is being mediated (e.g. connecting with family or staying informed about your health). Emphasising, from the onset, the 'meaningful activity' alongside the ICT device and function may help motivate seniors to integrate ICTs into their lifestyles following tutorials.

- While many trainees were able to integrate ICTs into their family lives, adoption of ICTs into community involvement was less common. Although the ICT in community life is likely to be relevant to a small proportion of (more advanced) trainees, it is of large social value—trainers could highlight administrative uses of ICTs when relevant.

- The program is likely to have a more positive influence on the take up of online services if it increases awareness and trust of secure methods of online banking and shopping, compared with less secure methods which increase the risk of fraud.

Key findings

This evaluation has revealed the following notable insights into outcomes of the Tech Savvy Seniors program:

- Tech Savvy Seniors has provided a genuine opportunity for seniors to improve their digital skills and literacy—**almost 9 in 10 trainees (88%) found their trainer to be helpful, the training resources to be clear and their tutorial to be at the right pace.** Trainees emphasised the importance of accessing teaching which was geared towards seniors, learning with peers and learning ICT fundamentals.

- **3 in 4 trainees (73%) found Tech Savvy Seniors helpful in increasing their use of the internet to stay connected with family and friends,** particularly in cases where family had moved away. By helping trainees stay connected with social networks, Tech Savvy Seniors has helped mitigate risks of social isolation which can lead to a deterioration of physical and mental health (COTA 2014).

- After attending Tech Savvy Seniors, **3 in 4 trainees (77%) increased their use of ICTs to access information for personal interest or to help in decision making involved in 'active ageing'**. By comparison, only **1 in 2 trainees (50%) increased their use of online services.** Trainees were significantly more likely to have found Tech Savvy Seniors helpful for accessing online information or services if they had used ICTs before Tech Savvy Seniors or had attended numerous tutorials. This finding emphasises the importance of time, practice and experience of using ICTs for building the skills, motivation and trust to access online information and services.

- **Almost 9 in 10 participants (88%) found Tech Savvy Seniors to be helpful in increasing their knowledge or confidence in operating an ICT device.** In cases where the pace of tutorials was too fast or too slow, trainees generally reported Tech Savvy Seniors to have been not helpful in developing their digital skills and literacy.

About the authors

Roksolana Suchowerska
PhD candidate
School of Social & Political Sciences
University of Melbourne
rsuc@student.unimelb.edu.au

Roksolana is researching the role that Australian companies play in facilitating the social inclusion of their existing or potential customers through sustainability programs. Roksolana has also worked as a Senior Policy Officer in the Australian Public Service.

Dr Jens O Zinn
Associate Professor
School of Social & Political Sciences
University of Melbourne
jzinn@unimelb.edu.au

Dr Jens Zinn is a Professor in Sociology at the University of Melbourne. He is the Discipline Chair for Sociology, Social Theory and Social Policy and Director of the Social Science Research Hub. His research activities include studies on people's management of risk and uncertainty in the course of their life, social inequality, social policy and social change.

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Appendix 1.
List of tables & figures

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Design of evaluation

The evaluation has been designed in line with the steps and principles of identifying, investigating and measuring social return on investment, as laid out by The SROI Network (based in United Kingdom).

The SROI Network's steps and principles create a framework for understanding the social, economic and environmental outcomes of a program or organisation. Importantly, the steps taken to understand the ratio of investment to return, is embedded in a mix of narrative, qualitative and financial measures (Nicholls *et al.* 2009) which illustrate a 'theory of change'.

Although there are controversies regarding the usefulness of a cost-benefit approach to assessing intangible values, proponents suggest that it is important to quantify such intangible values (despite limitations) as an economic value is able to have more influence over policy and commercial interests (Arvidson *et al.* 2010: 12).

Six stages of calculating social return on investment

This evaluation of Tech Savvy Seniors (NSW) followed the SROI Network's six steps (outlined below) to identify, investigate and measure the impact of Tech Savvy Seniors in terms of social return on investment.

Figure 17. Six steps for calculating social return on investment *(Source: SROI Network)*
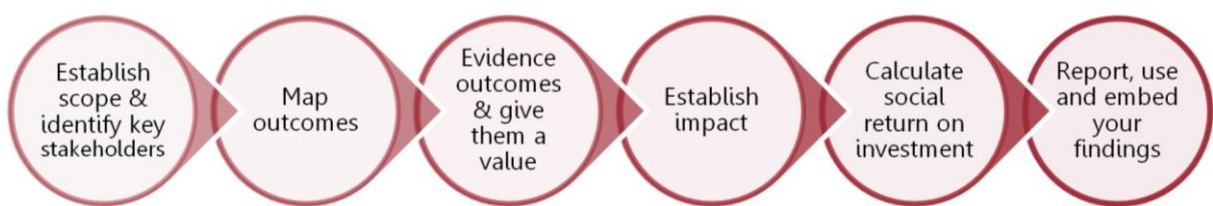
Seven principles to address the limitations of social return on investment

This evaluation of Tech Savvy Seniors (NSW) was guided by the following seven principles to mitigate the limitations of social return on investment methods of evaluation.

Figure 18. Seven principles to address the limitations of social return on investment *(Source: SROI Network)*

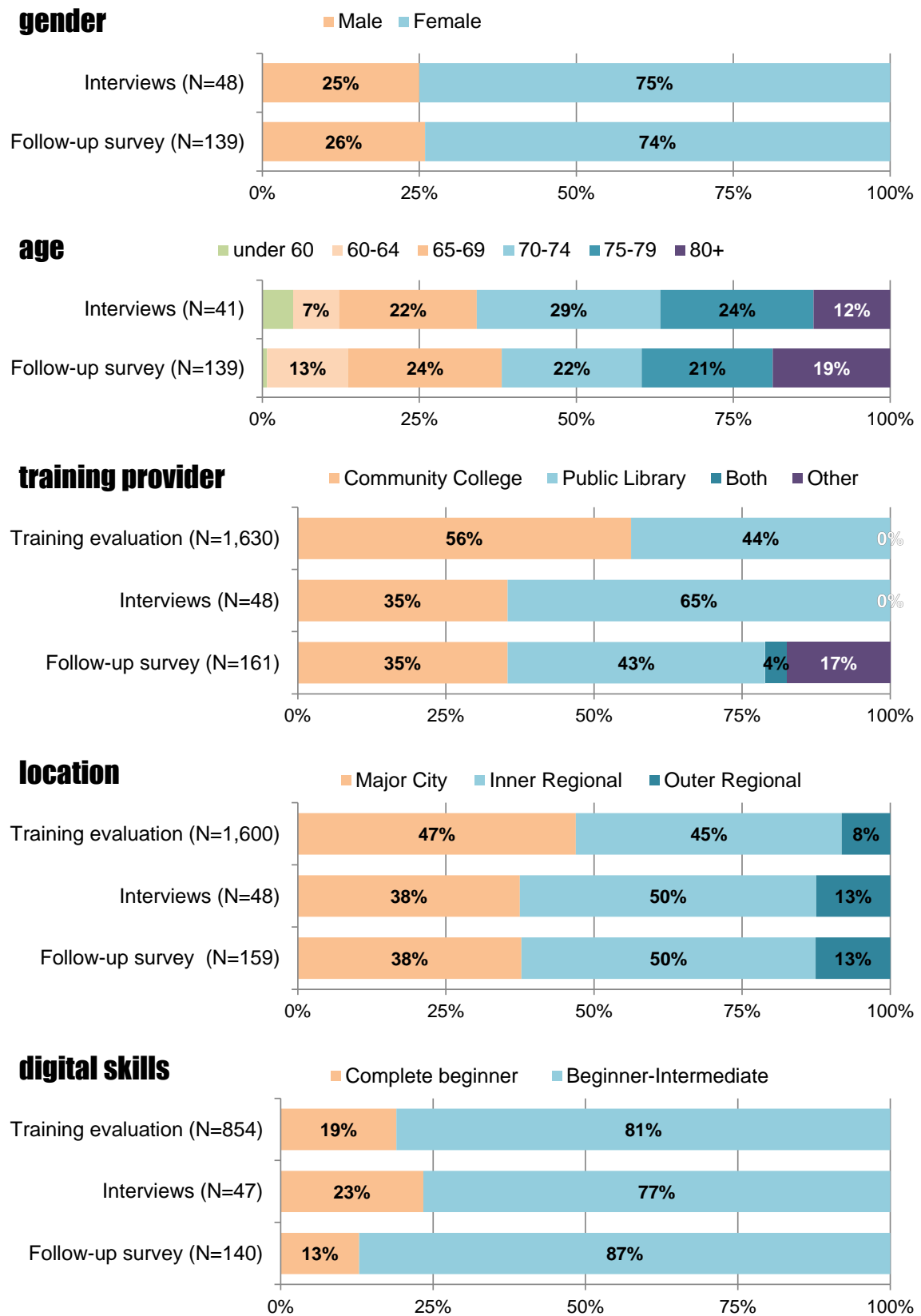**Figure 19.** Profile of interviewees and survey respondents by gender, age, training provider, location and digital skills *(Source: authors)*

gender

Legend: ■ Male ■ Female

	Male	Female
Interviews (N=48)	25%	75%
Follow-up survey (N=139)	26%	74%

(scale: 0% – 25% – 50% – 75% – 100%)

age

Legend: ■ under 60 ■ 60-64 ■ 65-69 ■ 70-74 ■ 75-79 ■ 80+

	60-64	65-69	70-74	75-79	80+
Interviews (N=41)	7%	22%	29%	24%	12%
Follow-up survey (N=139)	13%	24%	22%	21%	19%

(scale: 0% – 25% – 50% – 75% – 100%)

training provider

Legend: ■ Community College ■ Public Library ■ Both ■ Other

	Community College	Public Library	Both	Other
Training evaluation (N=1,630)	56%	44%		0%
Interviews (N=48)	35%	65%		0%
Follow-up survey (N=161)	35%	43%	4%	17%

(scale: 0% – 25% – 50% – 75% – 100%)

location

Legend: ■ Major City ■ Inner Regional ■ Outer Regional

	Major City	Inner Regional	Outer Regional
Training evaluation (N=1,600)	47%	45%	8%
Interviews (N=48)	38%	50%	13%
Follow-up survey (N=159)	38%	50%	13%

(scale: 0% – 25% – 50% – 75% – 100%)

digital skills

Legend: ■ Complete beginner ■ Beginner-Intermediate

	Complete beginner	Beginner-Intermediate
Training evaluation (N=854)	19%	81%
Interviews (N=47)	23%	77%
Follow-up survey (N=140)	13%	87%

(scale: 0% – 25% – 50% – 75% – 100%)

The sensitivity analysis provides an assessment of the extent to which the results of the evaluation would change if the estimates that inform the calculation of social return on investment were to change. The sensitivity analysis indicates which estimates have the greatest effect on the model.

Table 11. Sensitivity analysis of social return on investment ratio *(Source: authors)*

	Current estimate	Adjusted metric	Adjusted SRoI ratio	Size of adjustment
Rate of program participation				
The SROI Network recommends estimates are tested to determine what change would be required to achieve a return on investment ratio of 1:1. This approach is adopted to assess estimates of rate of program participation.				
Reducing the number of trainees	11,000	1,600	$0.99	*-85% (metric)*
Varying the proportion of beginners to intermediate trainees does not deliver a negative return on investment. The two limits are presented in the rows below.				
If all trainees were complete beginners	20%	100%	$4.37	*-36% (ratio)*
If all trainees were beginner-intermediate	80%	100%	$7.39	*+9% (ratio)*
Incidence of outcome & financial proxies				
Varying the value of each financial proxy individually does not deliver a negative return on investment. The rows below indicate the effect of reducing the valuation to $0—the equivalent of removing an outcome.				
Knowledge	$32	$0	$6.62	*-2% (ratio)*
Confidence	$70	$0	$6.53	*-4% (ratio)*
Family	$374	$0	$5.82	*-14% (ratio)*
Community involvement — Attendance	$13	$0	$4.54	*-33% (ratio)*
Community involvement — Volunteering	$4,770	$0		
Access to information	$378	$0	$5.72	*-16% (ratio)*
Access to services	$1,200	$0	$4.69	*-31% (ratio)*
If all metrics are halved	$32 - $1,200	$0	$3.64	*-46% (ratio)*
Accounting for change that would have occurred anyway, contribution of others and longevity of outcomes				
The following rows indicate the effect of reducing/increasing estimates (regarding external influences and dynamics) to 50% on the return on investment ratio.				
If all deadweight (change that would have occurred anyway) was increased to 50%	0 – 5%	50%	$3.55	*-48% (ratio)*
If all attribution was (change that would have occurred anyway) was increased to 50%	5-30%	50%	$4.77	*-30% (ratio)*
If all outcomes dropped off by only 50% in each year	50% - 90%	50%	$8.52	*+26% (ratio)*