



THE INSTITUTE OF CULTURE, DISCOURSE & COMMUNICATION



UNIVERSITY

World Internet Project New Zealand

The Internet in New Zealand 2011

Philippa Smith
Andy Gibson
Charles Crothers
Jennie Billot
Allan Bell

Institute of Culture, Discourse & Communication
AUT University
Auckland
New Zealand

wipnz.aut.ac.nz

World Internet Project New Zealand Team

Professor Allan Bell, *Project Director*

Institute of Culture, Discourse & Communication, AUT University

Andy Gibson, *Research Manager and Lead Analyst (from August 2011)*

Institute of Culture, Discourse & Communication, AUT University

Professor Charles Crothers, *Methodological Advisor*

Department of Social Sciences, AUT University

Dr. Jennie Billot, *Research Director (until July 2011)*

University Postgraduate Centre, AUT University

Philippa Smith, *Research Associate*

Institute of Culture, Discourse & Communication, AUT University

Acknowledgements

We extend our thanks for assistance on this project to Alwin Aguirre and Trish Brothers from ICDC, to David Fougere and his team at Phoenix Research for conducting the surveys, and to Jeff Cole, International Director of the WIP. We have appreciated the support and guidance of Winston Roberts of the National Library and Vikram Kumar of InternetNZ. We would also like to acknowledge the input of the following people involved in past World Internet Project NZ surveys: Ian Goodwin, Nigel Smith, Kevin Sherman and Karishma Kripalani.

This report is available online: wipnz.aut.ac.nz | icdc.aut.ac.nz

© 2011. Institute of Culture, Discourse & Communication, AUT University.

This work is licensed under a Creative Commons Attribution-NonCommercial 3.0 New Zealand Licence. In essence, you are free to copy, distribute and adapt the work, as long as you attribute the work, the new works are non-commercial, and abide by the other licence terms.

Please cite as:

Smith, P., Gibson, A., Crothers, C., Billot, J., Bell, A. (2011). *The Internet in New Zealand 2011*. Auckland, New Zealand: Institute of Culture, Discourse & Communication, AUT University.

ISBN: 978-1-927184-04-2

Funded by the Government through the National Library, and by InternetNZ.

Additional support provided by the Faculty of Applied Humanities, AUT University.



Executive Summary

The third World Internet Project New Zealand survey was conducted in July–August 2011. The sample of 1255 New Zealanders were asked about their usage of and attitudes to the Internet. The latest findings are compared with the 2007 and 2009 surveys and the significant trends presented.

Use of the Internet in New Zealand has continued to rise, reaching 86% in 2011, up from 79% in 2007 and 83% in 2009. The remnant of the digital divide persists, with most of those still not online aged over 60 or in a low-income household, or both.

Broadband has also continued to spread. With 91% of users on broadband in 2011, the trajectory from 67% in 2007 to 84% in 2009 has continued but eased as it approaches saturation, bringing New Zealand close to other comparable countries on an important measure where it once lagged. The divide as focused in broadband access has reduced in the past four years. Older New Zealanders are now catching up with younger, and rural residents with urban.

Usage of smartphones and other handheld wireless devices has grown apace, from 7% of Internet users in the 2007 sample, to 18% in 2009 and 27% in 2011. This is clearly a strong trend that will continue into the future.

A majority of Internet usage has now shifted out of the back rooms of the home and into the open, communal spaces. 54% of Internet users now go online mostly from a communal space in their home, up by half on the 36% of 2007. Using the Internet in communal spaces is a sign of growing Internet mobility through wireless access, and of the increasing embeddedness of the Internet in everyday home life. More and more New Zealanders (58%) also affirm the overall importance of the Internet to their daily lives, with younger, more wealthy and urban dwellers leading.

The same demographic pattern holds for the Internet as a source of information. An increasing majority of New Zealanders rate the Internet as important for information (69% in 2011, up from 62% in 2007), while newspapers are losing influence. Over 40% of Internet users in New Zealand now look online for news every day, up from 33% in 2007. Over 20% check facts online daily, and over 10% look for word definitions every day. Nearly 60% of Internet users surf the web every day, and about half access or download music or videos at least occasionally. People are becoming less sceptical about the reliability of information on the Internet. For New Zealanders aged 30-59, the drop in scepticism is significant, down from 18% in 2007 to 6% in 2011.

Social network site membership is up by a third since 2009 to 64% of Internet users, almost all on Facebook. SNS membership is highly stratified by age, attracting 87% of under-30s but only 34% of over-60s, although over-30s are providing continued growth. Higher household income and urban residence also promote SNS use. Over a quarter of Internet users have made new friends online, and half of those have gone on to meet them in person.

Online phone calling (through Skype, for example) has nearly doubled since 2007, with 42% of users now making or receiving calls online. Texting remains the preferred medium of communication for younger people (79% at least weekly), somewhat at the expense of phone calls (65% doing this weekly). More and more older people are coming on to email (46% emailing at least weekly) as younger people move away from it (54% in 2007, now 40% emailing weekly).

The use of the Internet for business transactions has grown markedly, especially for paying bills (65% of users) and banking (73%). Paying public charges such as taxes and licences has nearly doubled to 38% since 2007.

Concern about Internet security for children continues to increase, with rises in the proportion of households that set rules for their under-18s, for example about not chatting with strangers.

Contents

Executive Summary	i
Contents.....	ii
Introduction	iii
Section 1 2011 Results	1
Usage Patterns	2
Information Seeking	6
Entertainment and Leisure.....	8
Relationships and Communication.....	11
Commerce	14
Education	15
Public Sector and Politics	15
Security.....	17
Section 2 2007–2011 Trends.....	19
Usage Patterns	20
Information Seeking	23
Entertainment and Leisure.....	25
Relationships and Communication.....	26
Commerce	27
Education	28
Public Sector and Politics	28
Security.....	29
Section 3 Profiling Social Diversity and the Internet	31
Usage Patterns	32
Information Seeking	38
Entertainment and Leisure.....	41
Relationships and Communication.....	42
Commerce	45
Appendix Methodology	47

Introduction

This report focuses on the third World Internet Project New Zealand (WIPNZ) survey, following on from the surveys undertaken in 2007 and 2009. The report provides an overview of New Zealanders' usage of, and attitudes towards, the Internet. It contains analysis of top-level data from the survey conducted in July–August 2011. Interviews were conducted with a national probability sample of 1255 New Zealanders. The first section of this report presents graphs and commentary on the key survey findings for 2011. The second section focuses on trends over the last four years, and the third section looks more deeply at these trends with respect to key demographics such as age and household income.

Methodology

The data used in this report are based on a telephone survey, carried out on our behalf by Phoenix Research Ltd. The survey includes a random sample of New Zealand adults, together with three targeted random samples of the Māori, Pasifika and Asian populations, and a sample of 12–15 year olds. The data set was weighted to reflect both the sampling design and the characteristics of the New Zealand population at the 2006 census. The analysed sample comprises 1255 respondents aged 12 years and above. Note that this differs from the 2007 WIPNZ sample composition, where respondents were aged 16 years and above. Most graphs present information about all respondents or about users only. The number in the sample for a particular graph varies depending on whom the question was directed to and the question-specific response. The full survey and analysis methodology is presented in an appendix at the end of this report, detailing the shape and treatment of the database from which these results are drawn.

New Zealand in an international context

This New Zealand survey contributes to the World Internet Project, an international collaborative project looking at the social, political and economic impact of the Internet and other new technologies. By gathering longitudinal and cross-national information on the way people use the Internet and the effect it has on their lives, the World Internet Project enables monitoring of developments and trends in Internet usage both locally and internationally. The 30 project partners conduct questionnaire surveys every one or two years in their country. The WIPNZ survey contains questions common to all WIP partners, to allow international comparisons, as well as a set of questions designed specifically for New Zealand. An international report, including a selection of the New Zealand findings presented below, will be prepared comparing WIP member countries who conducted surveys during 2011.

WIPNZ: The future

The WIPNZ survey is intended to be carried out every two years. A longitudinal panel of respondents from the 2007 benchmark survey formed a portion of the sample represented in this survey, allowing for research on the way individuals' use of the Internet develops over time. The next survey is scheduled for August 2013. It is intended that the WIPNZ findings provide the country with information that assists in decision making and raising the standard of planning and debate in government policy and industry in New Zealand.

Section 1

2011 Results

This section presents graphs of the main findings from the WIPNZ 2011 survey. Each result is briefly discussed alongside a graph showing the proportions of respondents in each response category. Presentation of results includes the following details:

- Survey question wording: The full wording of the relevant survey question is given at the top of the right-hand column. The number of the question as listed in the WIPNZ 2011 questionnaire is also given.
- Base: A description of the set of respondents of whom the question was asked. Most commonly, this is either all respondents or all Internet users. Some questions were asked of different or more restricted groups, depending on the relevance of the question to the group.
- Number of respondents: The first presentation of a result for a particular base includes the number of respondents for that sample or sub-sample. This information is also shown below for the bases that occur more than once. Cases where a respondent declined to answer a question, or gave a 'don't know' response, are treated as missing values. As a result, the actual sample sizes of the data as shown in the graphs are often slightly below the n shown in the base.
 - All respondents: n=1255
 - Internet users: n=1082
 - Internet users with an Internet connection at home: n=1033
 - Non-users (never-users and ex-users combined): n=173
 - Students: n=228
 - Internet users in a household that includes somebody under the age of 18: n=347
- Confidence intervals are shown as error bars on some of the simpler graphs in order to give a sense of the margin of error for each population. See the Appendix for a description of indicative confidence intervals.

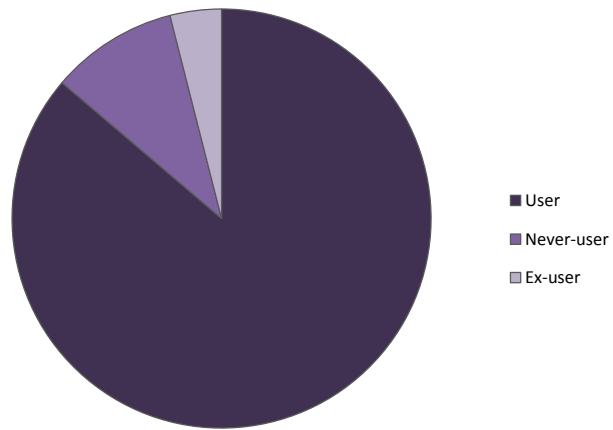
Usage Patterns

Q1: Do you currently use the Internet?

Q1B: Has there ever been a period of time in the past when you have used the Internet?

86% of New Zealanders use the Internet. Of the 14% who do not, just under one third have used the Internet in the past, while over two thirds have never used it.

User status



Base: All respondents (n=1255)

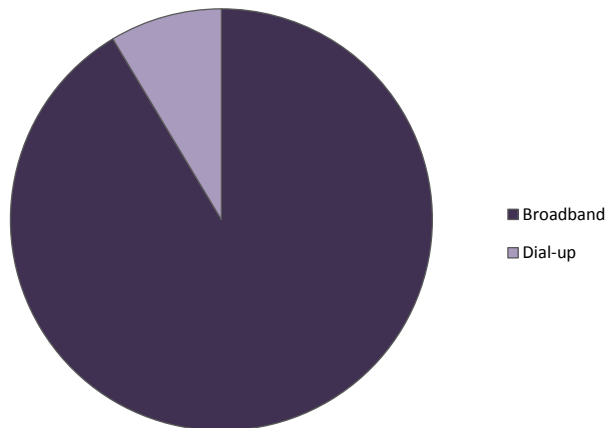
Q5A: What type of Internet connection do you have at home?

91% of the Internet users who have a connection at home have broadband, compared to 9% with dial-up.

Included under broadband are people who have multiple connection types in the home (2%), and those who access the Internet at home solely through a mobile phone, a cable or satellite connection, or a USB device (1% total).

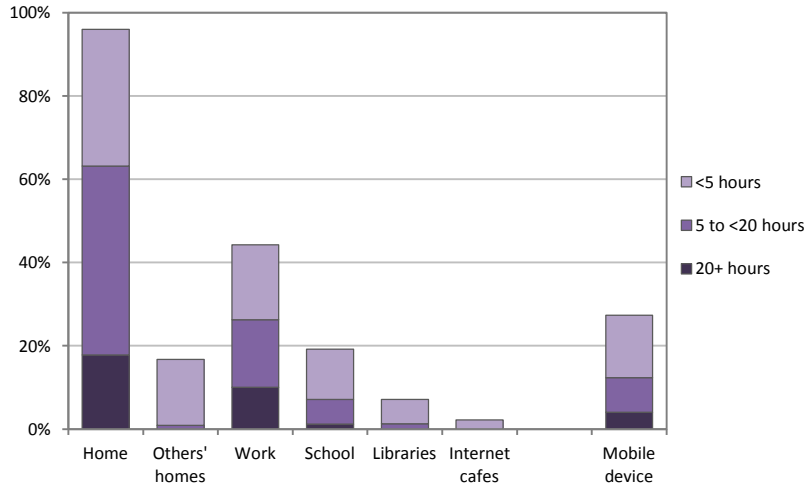
The rise in broadband usage marks probably the most salient change in the New Zealand Internet landscape between the 2007 and 2011 WIPNZ surveys. Trends over time, like this one, will be discussed in Section 2.

Home Internet connection



Base: Internet users who have an Internet connection at home (n=1033) | Note: Where multiple connection types were given, the first one mentioned by the respondent is reported. Broadband is defined here as all connection types other than dial-up. Respondents connecting through 3G, cable, satellite, or a USB device are reported here as having a broadband connection.

Hours spent online per week



Base: Internet users (n=1082)

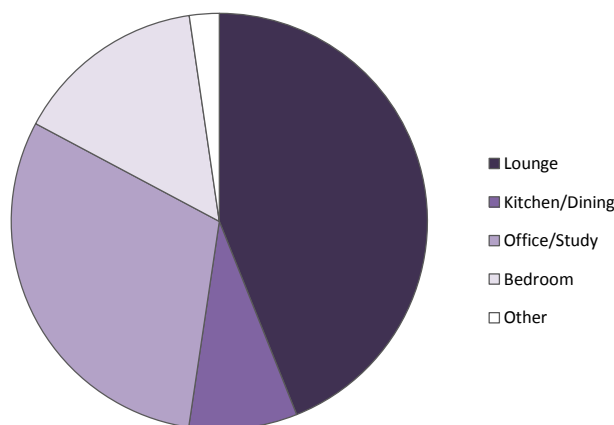
Q3: On average, about how many hours per week do you use the Internet ... ?
 1. at home for any reason
 2. at work, not in the home
 3. at school or university, outside your home
 4. from Internet cafes
 5. from other people's homes
 6. from libraries

Q2A: How many hours a week do you use the Internet through wireless hand-held devices?

96% of Internet users access the Internet from home. People also access the Internet at work (44%), at school/university (19%), at other people's homes (17%), at libraries (7%), and at Internet cafes (2%). 18% of users are online from home for at least 20 hours a week, and almost two thirds (63%) spend at least 5 hours on the Internet at home per week.

More than a quarter (27%) of users access the Internet from a hand-held mobile device such as a smartphone or an iPad. 12% of Internet users, over 10% of the NZ population as a whole, spend 5 hours or more a week online from a wireless hand-held device.

Main location in house for using Internet



Base: Internet users who have an Internet connection at home

Q6: Where in your home do you mostly use the Internet?

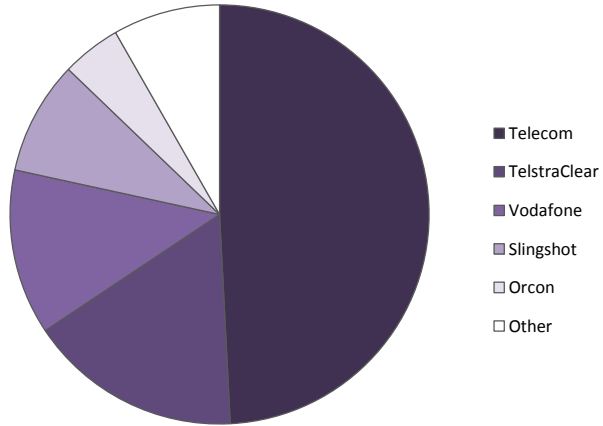
The two main rooms in the home for using the Internet are the lounge (44%) and a study/office (30%). A further 15% use the Internet in a bedroom.

Several people also responded that they use the Internet from multiple locations around the house as a result of having wireless connectivity.

Q7: Which Internet provider are you currently using?

Almost half of those with an Internet connection at home use Telecom (49%) as their Internet service provider. TelstraClear (16%), Vodafone (13%), Slingshot (9%), and Orcon (5%) account for most of the remainder, with a further 8% spread across a range of smaller companies, including Kiwi Online, Actrix, Woosh and X-net.

Internet service provider



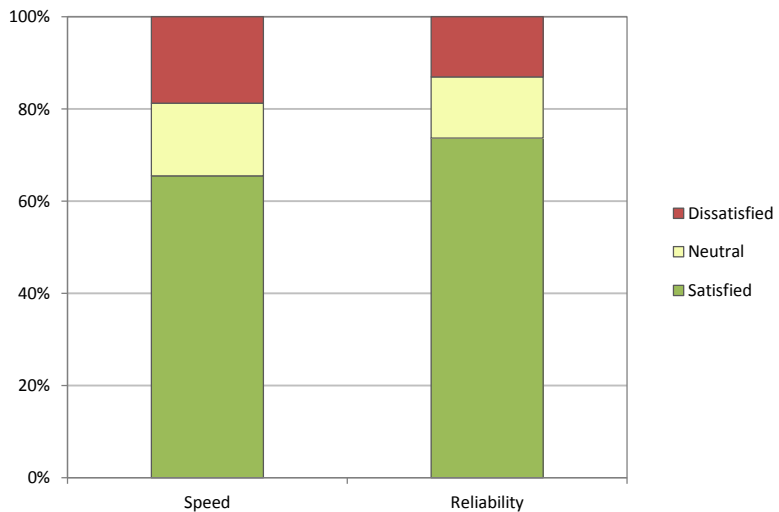
Base: Internet users who have an Internet connection at home

Q5B/Q5C: How satisfied are you with the speed/reliability of your Internet connection at home?

Overall, there are high levels of satisfaction with the speed and reliability of home Internet connections. Only one in five users (19%) is dissatisfied with the speed of their Internet connection at home, and even fewer (13%) are dissatisfied with the reliability of their connection.

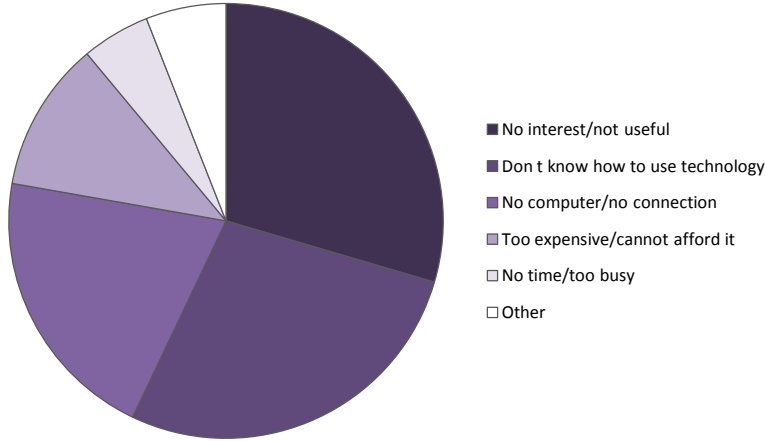
There are no significant differences between ISPs on customer satisfaction levels.

Satisfaction with Internet connection



Base: Internet users who have an Internet connection at home

Non-users: Main reason for not using Internet



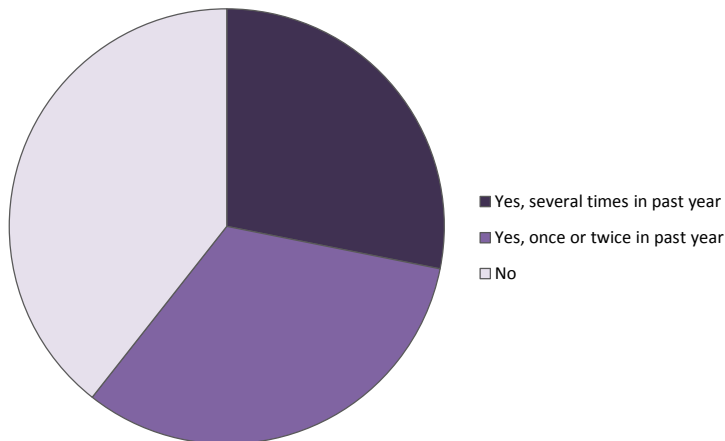
Base: Never-users and ex-users (n=173)

Q1A: What is the main reason you do not use the Internet?

Respondents who do not use the Internet say the main reason for their non-use is that they do not find the Internet interesting or useful (30%) or because they do not have a computer or Internet connection (28%).

A fifth of non-users (21%) say their main reason is that they do not have the requisite skills. A surprisingly small number of respondents (5%) give financial constraints as their main reason for not using the Internet.

Non-users: Asked someone to do something online



Base: Never-users and ex-users

Q16: In the past year have you asked someone to do something on the Internet for you, such as send an email, get information or make a purchase?

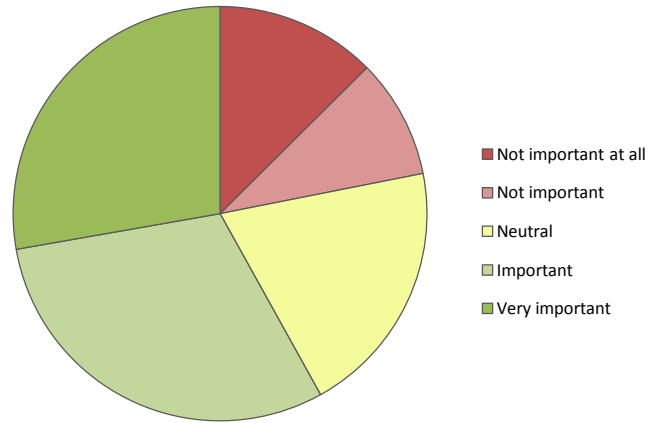
Of those who do not use the Internet, 61% have asked another person to do something online on their behalf in the past year.

The fact that the majority of those who do not use the Internet still gain access by proxy is a sign of the pervasive importance of the Internet. It is also a sign that those who choose not to connect, or are unable to connect, may be disadvantaged.

Q50: Overall, how important is the Internet to your everyday life?

58% of New Zealanders feel that the Internet is important or very important in their everyday life. 22%, including most of the non-users in the sample, feel that it is not important or not important at all.

Importance of Internet in everyday life



Base: All respondents

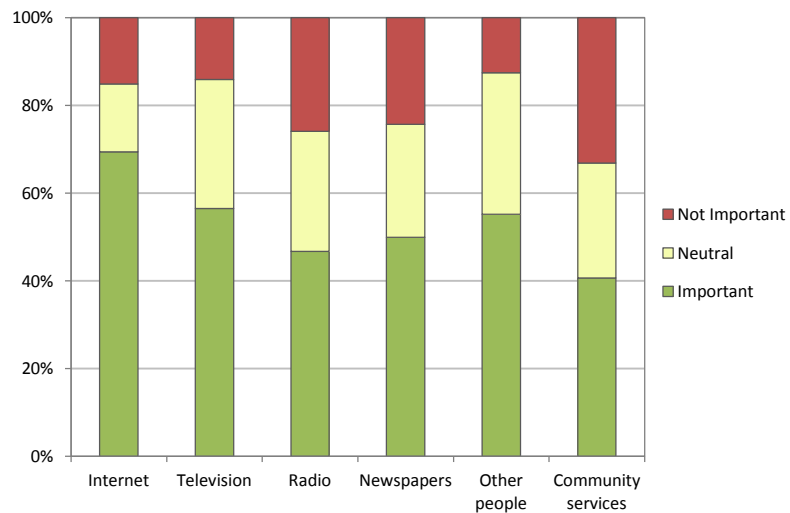
Information Seeking

Q18: How important is each of the following to you as a source of information in general?

1. The Internet
2. Television
3. Newspapers
4. Radio
5. Other people such as family and friends
6. Community services such as libraries

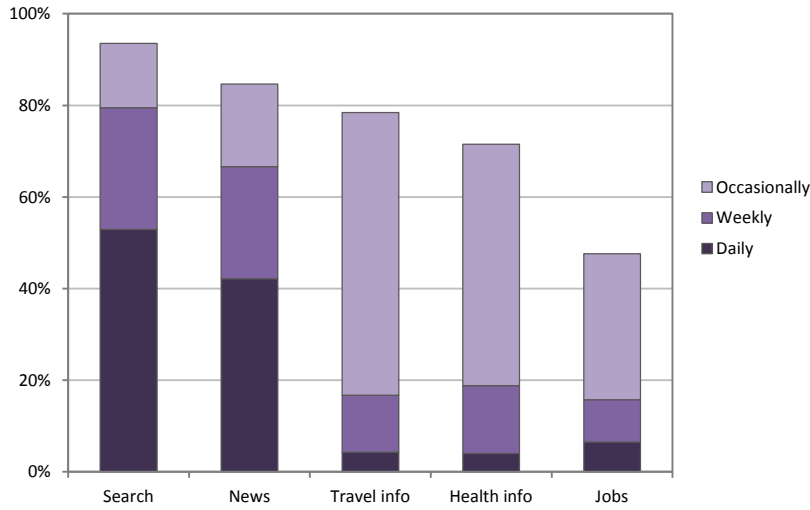
The Internet is rated highly as a source of information, above all the other sources surveyed. 69% rate the Internet as important compared with 15% as not important (the figures include non-users). This places the Internet as a more important source of information than television (56%), newspapers (50%), and radio (47%). Strikingly, the Internet rates rather higher as an information source than interpersonal sources such as family and friends (55%). Community services such as libraries are rated important as sources of information by a smaller proportion of respondents (41%).

Rating information sources



Base: All respondents

Online information seeking (1)



Base: Internet users | Note: The data in its original form included the following six categories: 'several times a day', 'daily', 'weekly', 'monthly', 'less than monthly', and 'never'. The first two of these categories are grouped on these figures as 'daily', while 'monthly' and 'less than monthly' are grouped together and represented as 'occasionally'. The blank space above each bar represents the 'never' responses

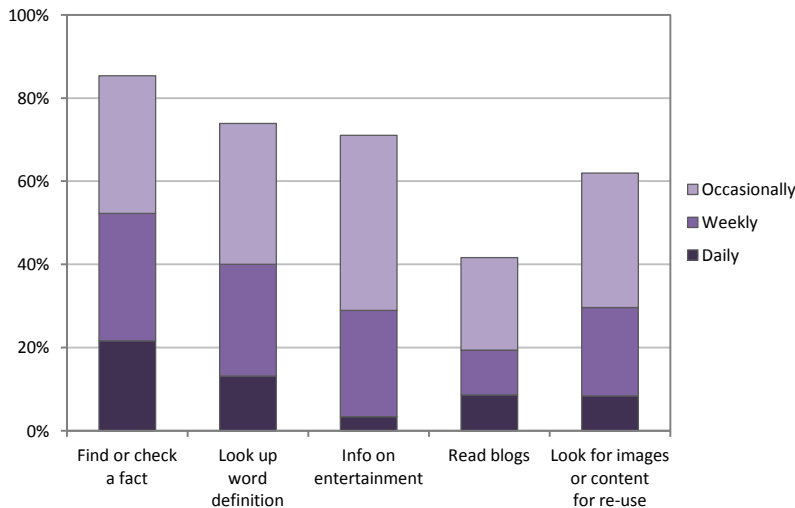
Q21: Some people look up information on the Internet as they go about their daily lives – things like news, sports scores, events and movie times – others don't. How often do you use the Internet for the following purposes?

1. Use a search engine or browser to locate information
2. Look for news – local, national, international
3. Look for travel information
4. Look for health information
5. Look for jobs/work

53% of Internet users use a search engine or browser on a daily basis to look up information, with 93% doing so at least occasionally.

The only other information seeking activity that occurs daily for a large proportion of users is searching for news (42%). A majority of users also look for travel and health information online, though this is a less frequent activity for most.

Online information seeking (2)



Base: Internet users

Q38: Some people use the Internet for classes or to support their learning, many others do not. How often, if ever, do you use the Internet or Web for the following purposes?

1. Find or check a fact
2. Look up a definition of a word

Q21 (cont.):

3. Look for information on entertainment activities such as movies or shows
4. Read blogs
5. Look for images and content for re-use

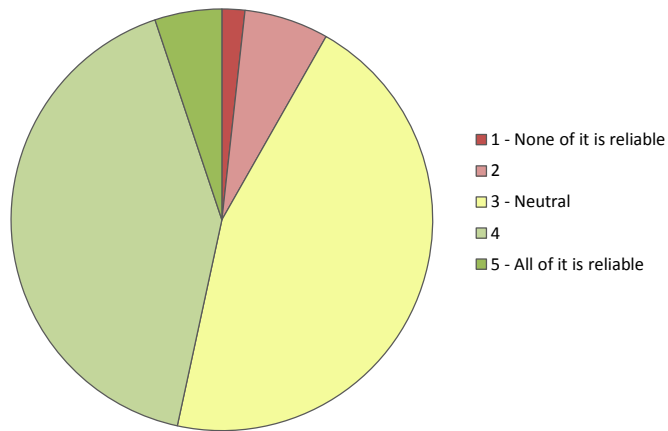
Just over half of the Internet users surveyed (52%) go online to find or check a fact at least once a week. 40% of users look up a definition of a word every week.

71% of users look online for information about entertainment, such as schedules for movies or shows. 42% read blogs, and 62% look for images and content for re-use.

Q51: In your opinion, how much of the information on the Internet overall is generally reliable?

Almost half of New Zealanders feel that information on the Internet is generally reliable. Only 8%, including many non-users, believe it is unreliable. Many respondents are neutral.

Reliability of information on Internet



Base: All respondents

Entertainment and Leisure

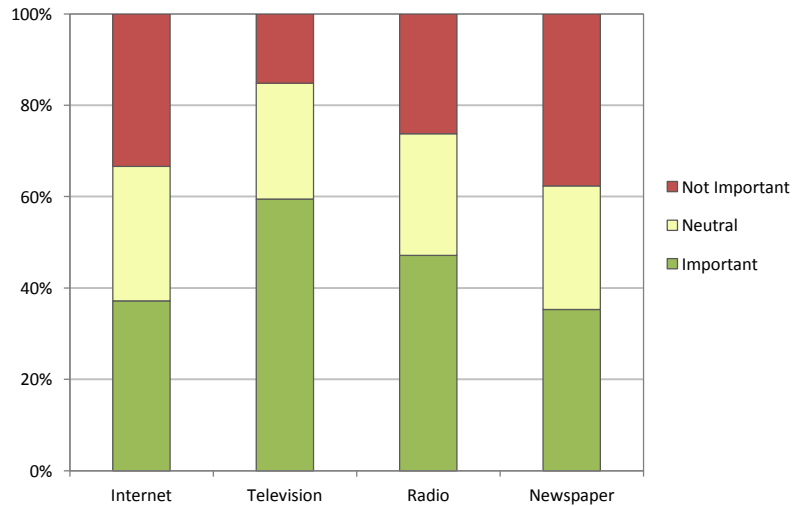
Q17: How important is each of the following media to you as a form of entertainment?

1. The Internet
2. Television
3. Radio
4. Newspapers

Television remains the dominant entertainment medium in New Zealand, with 59% of the full sample rating it as an important or very important source of entertainment. Radio is also an important medium of entertainment for 47%.

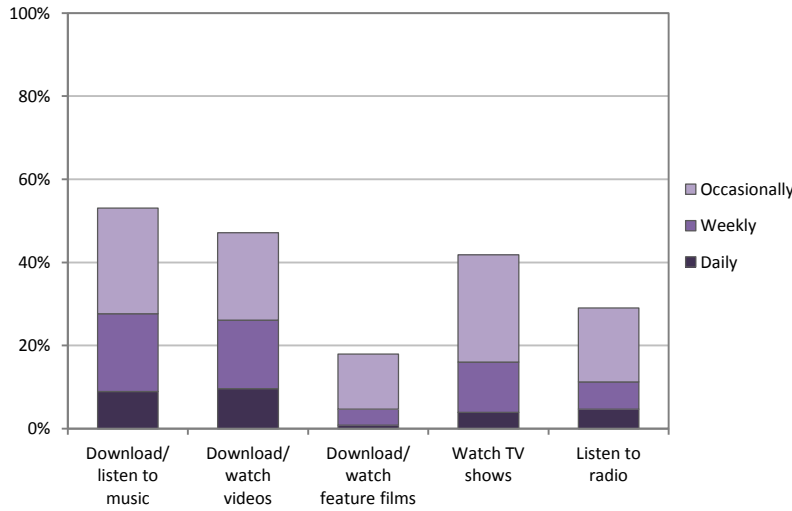
New Zealanders value the Internet much less for entertainment than they do for information. Only 37% rate the Internet as an important source of entertainment (compared to 69% rating it important for information). One in three respondents (including non-users) say the Internet is not important as a source of entertainment. The pattern of responses for newspapers is similar.

Rating entertainment sources



Base: All respondents

Online entertainment: Music and video



Base: Internet users

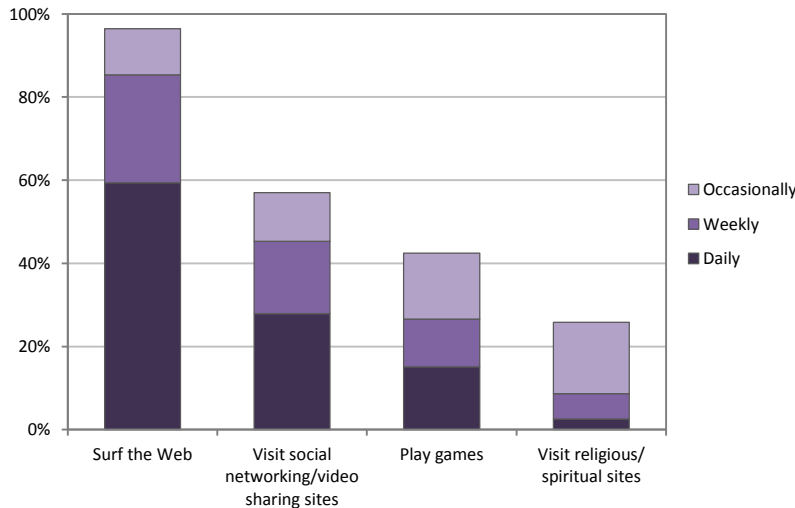
Q19: Now I'd like you to think about the routine things you do for personal entertainment, like playing games or listening to music. How often do you use the Internet for the following purposes?

1. Download or listen to music online
2. Download or watch videos online
3. Download or watch feature films from the Internet
4. Watch TV shows online
5. Listen to a radio station online

More than half of the Internet users surveyed download or listen to music online; and 28% do this weekly or more often. A similar proportion of users (26%) download or watch videos online for entertainment purposes on at least a weekly basis.

Other online entertainment activities include: watching TV shows online (16% of users do so weekly); listening to radio stations online (11% weekly); and downloading or watching feature films online (5% weekly).

Online entertainment: Other activities



Base: Internet users

Q19 (continued):

1. Surf or browse the Web
2. Visit social networking or video-sharing websites
3. Play games online
4. Look at religious or spiritual sites

Almost all Internet users spend some time browsing the Web for entertainment purposes, 85% of them on at least a weekly basis. For 59% of users, surfing the Web is a daily activity. The majority of users visit social networking or video sharing sites, with 45% doing so weekly, and more than a quarter (28%) daily.

15% of users play games online every day, and 9% visit religious or spiritual websites every week.

Q52: During a typical week, how many hours do you spend on the following activities not online?

1. Watching television
2. Listening to the radio
3. Reading a newspaper
4. Reading books
5. Reading e-books
6. Participating in a physical activity, e.g. walking, playing a sport or going to a gym

If necessary: You can be doing other things at the same time, including using the Internet. But the device/medium must be offline.

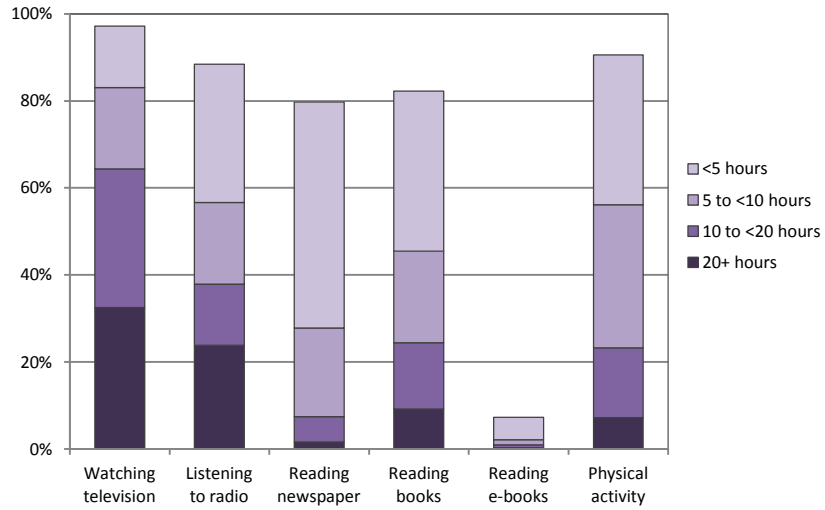
Alongside the entertainment and leisure activities that people do online, respondents were asked about how much time they spend on other activities, not online.

Almost everyone (97%) watches television, with a third of all respondents watching at least 20 hours of television per week.

Four out of five respondents read newspapers, in most cases for less than five hours a week.

The majority of respondents (56%) spend 5 hours or more exercising in an average week.

Hours spent doing offline activities



Base: All respondents

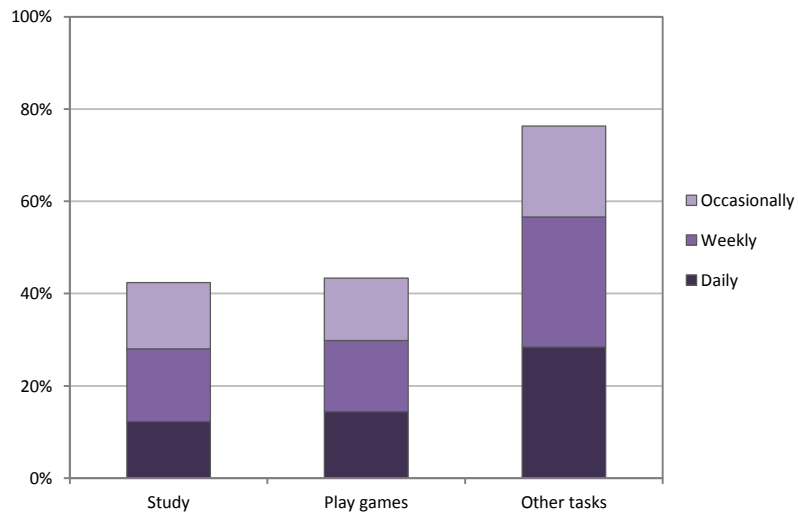
Q54: How frequently do you do the following things on your computer, but not on the Internet?

On average, how often do you use your computer, not on the Internet, to ... ?

1. study
2. play computer games
3. do other tasks, e.g. word processing, photo editing, etc.

As the Internet becomes more and more a part of New Zealander's lives, it is of interest to see whether people still use their computers offline. A large majority (76%) use their home computer offline to do tasks like word processing or photo editing, while many also study (42%) and play games (43%) on their computers without using the Internet.

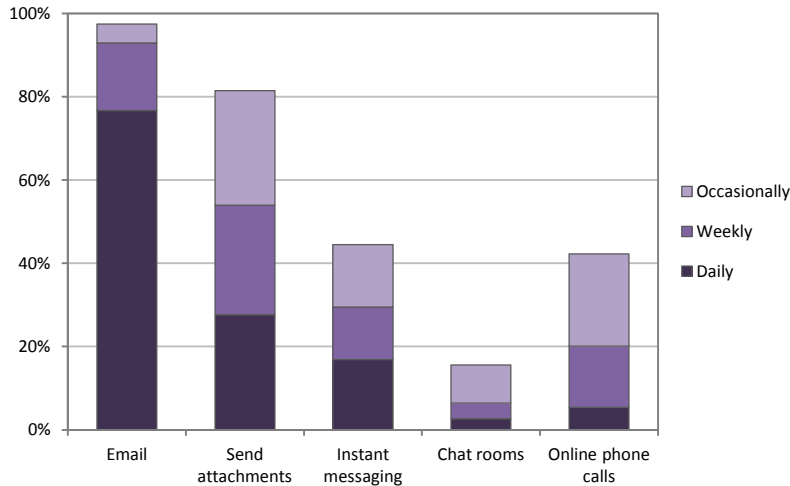
Offline computer activities



Base: Internet users plus those non and ex-users who have a computer at home (n=1120)

Relationships and Communication

Online communication activities



Base: Internet users

Q25: Now I'd like you to think about the different ways people keep in touch with each other in their everyday lives. How often do you use the Internet for the following purposes?

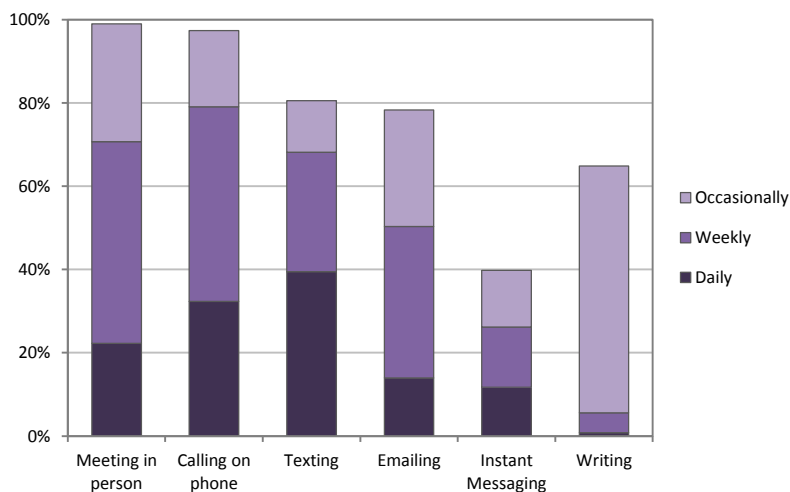
1. Check your email
2. Send attachments with your email
3. Do instant messaging – e.g. MSN
4. Participate in chat rooms
5. Make or receive phone calls over the Internet

Checking email is the most universal and frequent online activity for Internet users in New Zealand. 98% of Internet users check their email, with 77% checking it daily. 82% of users send attachments with email, with over half (54%) doing so at least weekly.

42% of users make or receive phone calls online, through an application like Skype. 44% contact people using instant messaging, with 17% of Internet users doing this daily.

Participating in chat rooms is less popular (16%). Most of those who use chat rooms do so monthly or less.

Contacting people



Base: All respondents

Q30: Thinking of people who do not live in the same household as you, how often do you contact family or friends by ... ?

1. meeting them in person
2. calling them on the phone
3. texting them
4. emailing them
5. using instant messaging
6. writing a card or a letter to them

As would be expected, almost all respondents contact their friends and family by meeting them in person, and 97% call them on the phone. Four out of five (79%) say they make phone calls to friends or family at least weekly.

As a means of daily contact, however, texting is the most popular form of communication, with 39% of all respondents saying they text family or friends every day. 78% email their friends and family, though this is not a daily activity for many (14%).

While 65% of respondents write cards or letters, most (59%) do this only occasionally.

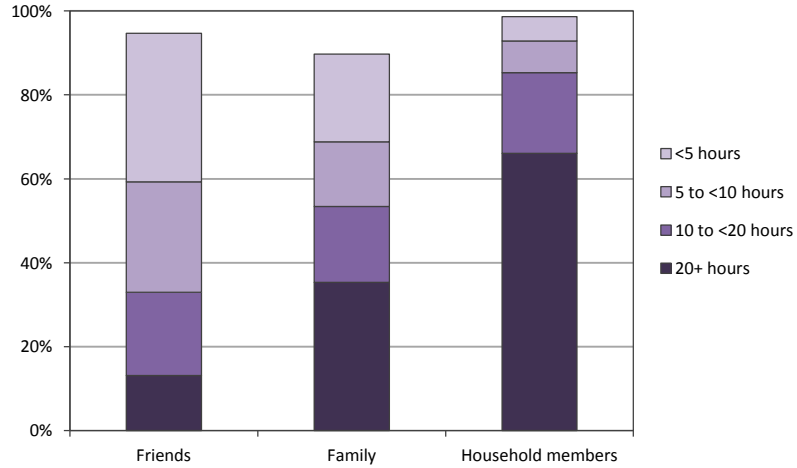
Q52: During a typical week, how much time do you spend ... ?

1. socialising face-to-face with your friends – outside school/university, or outside office hours
2. socialising face-to-face with your family who either live with you, or live in a different household
3. socialising face-to-face with those in your household

Two thirds of those surveyed spend 20 hours or more per week face-to-face with other members of their household (this question was not asked of those that live alone).

Over half of the respondents (53%) say they spend 10 hours or more per week with their family, while only a third spend that much time face-to-face with their friends every week.

Hours face-to-face with people



'Friends' and 'Family' base: All respondents | 'Household members' base: Those who don't live alone (n=946)

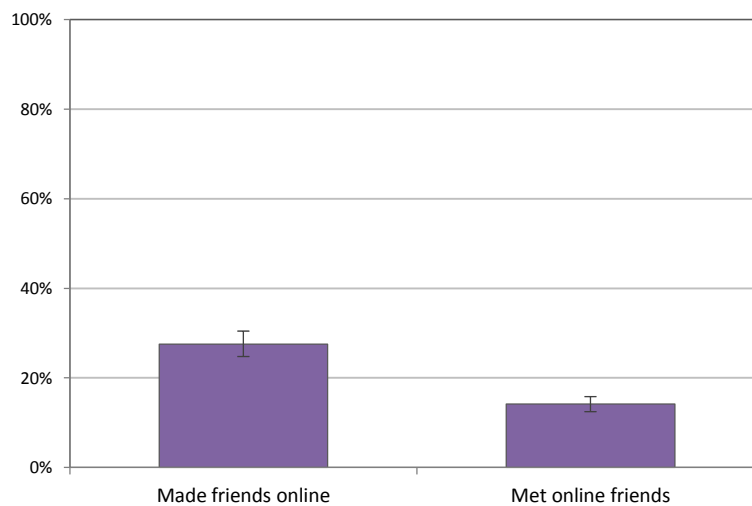
Q27: Have you ever made new friends online?

Q28: Have you ever gone on to meet any of these new friends in person?

Over a quarter of Internet users (28%) say they have made new friends online. Just over half of these people (52%) have gone on to meet those friends in person.

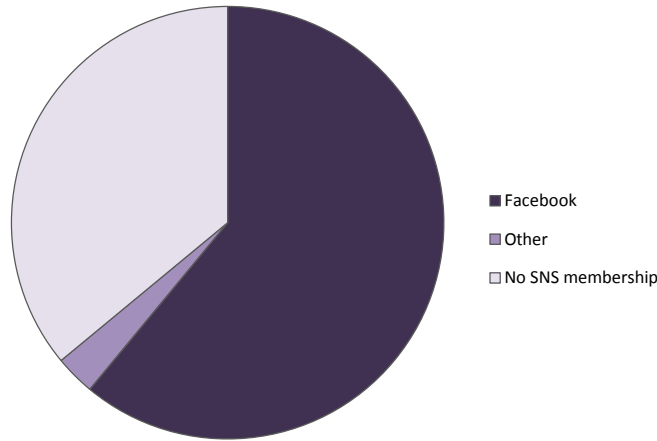
Despite the potential of the Internet to create new links between people, it appears to be used predominantly to keep in touch with already established contacts. This does not appear to be changing, with no significant shift in the proportion of people making friends online in the four years from 2007 to 2011.

Making new friends online



Base: Internet users

Social networking site membership and preference



Base: Internet users

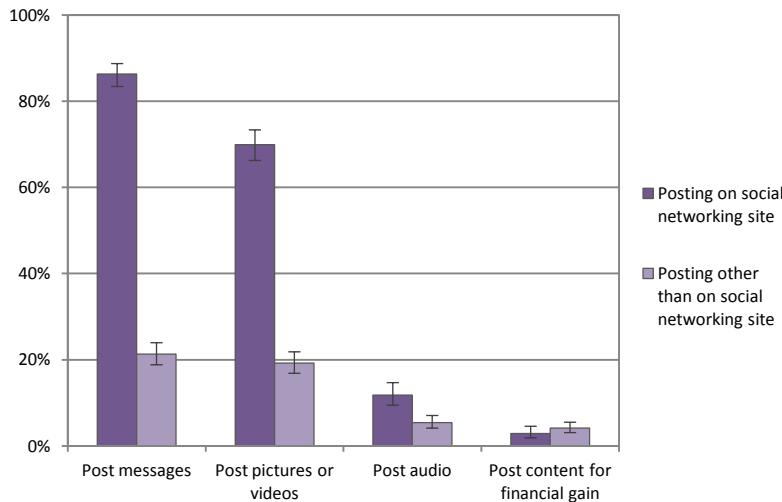
Q23: Are you a member of a social networking site or sites, e.g. Facebook, Bebo, Myspace?

Q24: Which social networking site do you use most often?

64% of Internet users say they belong to a social networking site (SNS). Of those with an SNS membership, 96% say that Facebook is the site they use the most.

Other sites mentioned are LinkedIn (1.5%), Twitter (0.6%), YouTube (0.5%), Bebo (0.3%), and others (total 1.1%). In this 2011 sample, not even a single respondent said that MySpace is their most used social networking site.

Posting content



Base for activities on SNS: Users that are a member of an SNS (n=687) | Base for activities outside SNS: All Internet users

Q24A: Thinking about the social networking site or sites you use, do you ... ?

1. post messages
2. post pictures, photos or videos
3. post audio material
4. post content for financial gain

Q24B: Apart from your social networking sites, do you do any of the following?

1. Post messages on discussion or message boards
2. Post pictures, photos or videos on the Internet
3. Post audio material on the Internet
4. Post messages or content for financial gain

Social networking sites are a prime site for content sharing. 86% of those who belong to a social networking site post messages while using that SNS, while only 21% of Internet users do this outside of an SNS. Similarly, pictures and videos are shared by a majority of SNS users on their SNS (70%), while only 19% of users do this on other websites.

Q25: Now I'd like you to think about the different ways people keep in touch with each other in their everyday lives. How often do you use the Internet for the following purposes?

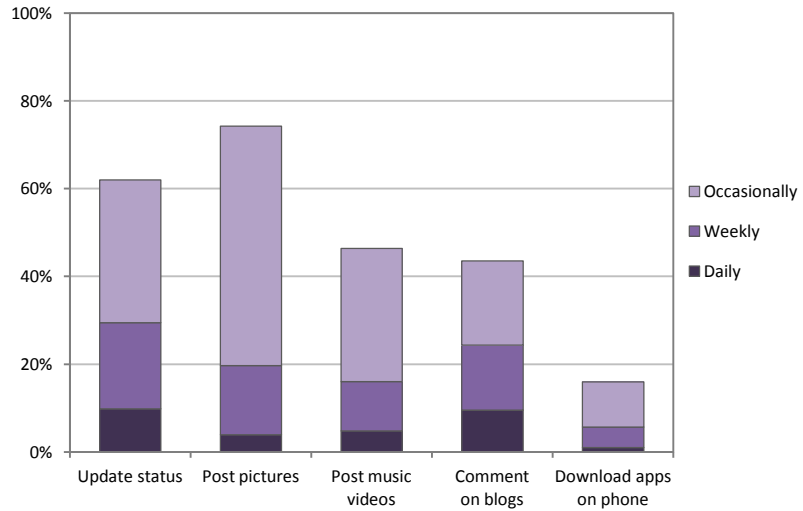
1. Update your status, such as what are you doing now
2. Post photos or pictures on the Internet
3. Upload music videos
4. Comment on other people's blogs, message boards, etc.
5. Download applications (such as Twitter) on a smartphone

Of those with an SNS membership, 63% update their status at least occasionally, and one in ten does so daily.

The figures for frequency of posting pictures and music videos focus just on those Internet users who said they post audio and visual material. Considering just those that said they post pictures or videos online, one in five posts photos or pictures at least weekly. Of the 113 respondents who said they post audio material on the Web, almost half say they sometimes post music videos, with 16% doing so at least weekly.

44% of all Internet users say they comment on other people's blogs or on message boards, and 16% say they download applications on a smartphone.

Content creation and sharing



'Update status' base: Those who are members of an SNS (n=687) | 'Post pictures' base: Those that said they post pictures in Q24 (n=556) | 'Post music vids' base: Those that said they post audio material on the Internet (n=113) | 'Comment on blogs' base: All Internet users | 'Download apps on phone' base: All Internet users

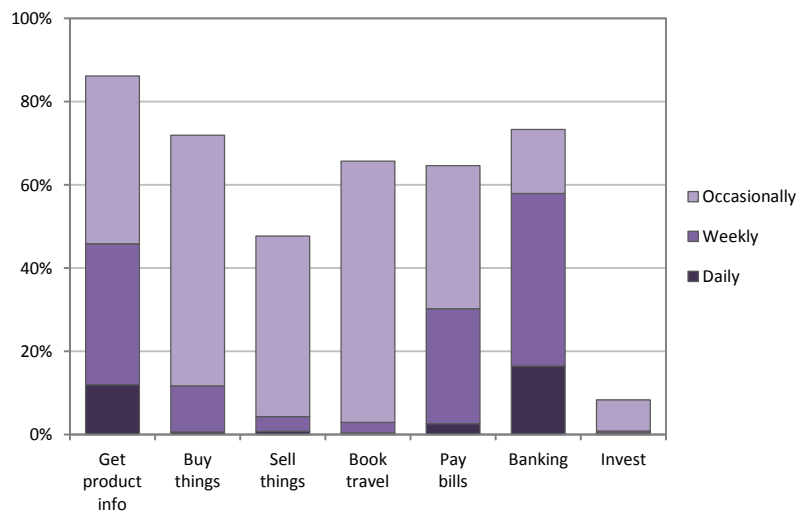
Commerce

Q31: Now I'd like you to think about different transactions people do in their everyday lives like banking or shopping. How frequently do you use the Internet for the following purposes?

1. Get information about a product online
2. Buy things online
3. Sell things online
4. Make travel reservations/bookings online
5. Pay bills online
6. Use your bank's online services
7. Invest in stocks/funds/bonds online

Internet users are generally quite engaged with e-commerce. Almost three quarters (72%) of Internet users buy things online, though this is a weekly activity for only 12%. Almost half of the Internet users surveyed (48%) say they also use the Internet to sell things. Online banking is a frequent activity for those that do it – 58% of users log on to their bank's website at least weekly.

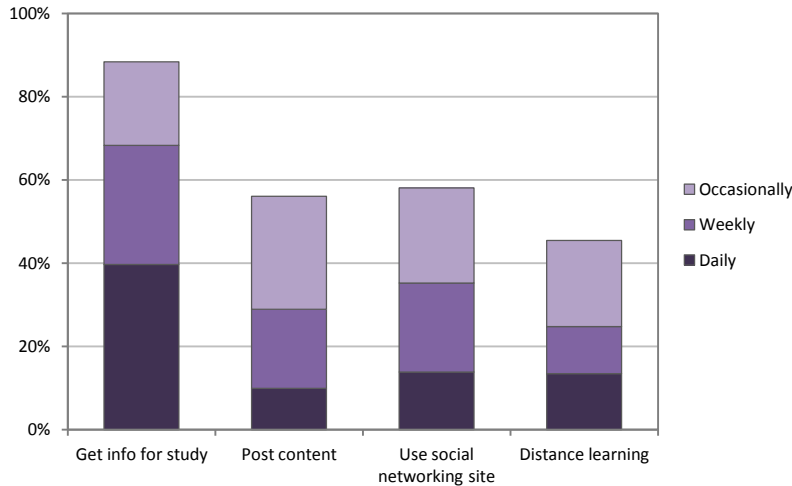
Online consumer transactions



Base: Internet users

Education

Online education activities



Base: Students (n=228)

Q38: Some people use the Internet for classes or to support their learning, many others do not. How often, if ever, do you use the Internet or Web for the following purposes?

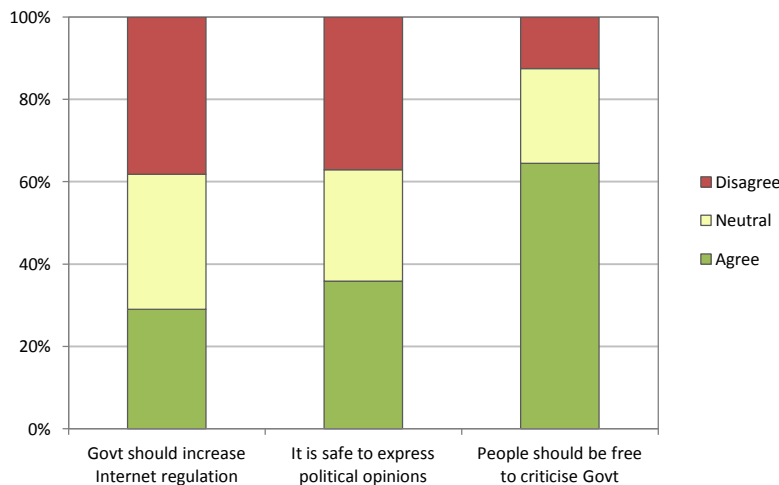
1. Get information for school or university related work
2. Put content on the Internet as part of educational activities
3. Use a social networking site as part of educational activities
4. Participate in distance learning for an academic degree or job training

Most students (88%) use the Internet to get information for their school or university work, with four out of ten doing this daily. More than half of the students in the sample put content on the Internet (56%) and use a social networking site (58%) as part of their educational activities.

45% of the students surveyed say they participate in distance learning for an academic degree or job training. This is particularly the case for those in full-time employment. 72% of the 39 respondents that work full-time and also study are involved in distance learning.

Public Sector and Politics

Opinions about political issues on the Internet



Base: All respondents

Q37: I'm going to read you a list of statements. Please tell me how much you disagree or agree with each of these statements.

1. The government should regulate the Internet more than it does now
2. On the Internet, it is safe to say whatever you think about politics
3. People should be free to criticise their government on the Internet

38% of respondents did not agree that the Government should regulate the Internet more than it does now, compared to 29% who agree.

Respondents are divided on whether or not it is safe to say whatever you think about politics online, with 36% agreeing and 37% disagreeing.

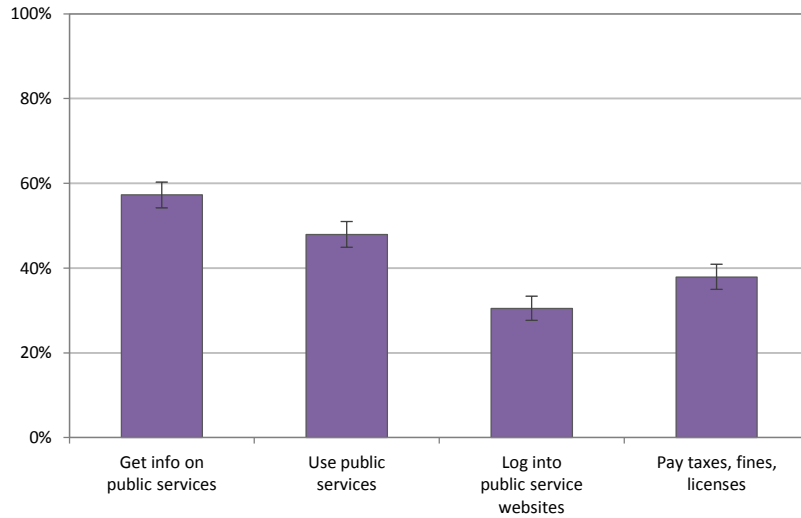
There is much more consensus that people should be free to criticise their Government on the Internet, with 64% of respondents agreeing.

Q34: Talking now about government information and services, have you used the Internet in the past year for the following purposes?

1. To get information about Government or Council services
2. To use Government or Council services that are delivered online, such as ordering a tax form or a StudyLink form
3. To log in to secure areas on Government or Council websites
4. To pay for taxes, a fine, or licence online

Over half of Internet users (57%) say they have used the Internet in the past year to get information about Government or Council services, and almost half (48%) have used Government or Council services that are delivered online, such as ordering a tax form or a StudyLink form. Three out of ten users have logged in to secure areas on Government or Council websites and 38% have gone online to pay for taxes, a fine, or a licence in the past year.

Use Internet for public information/services (1)



Base: Internet users

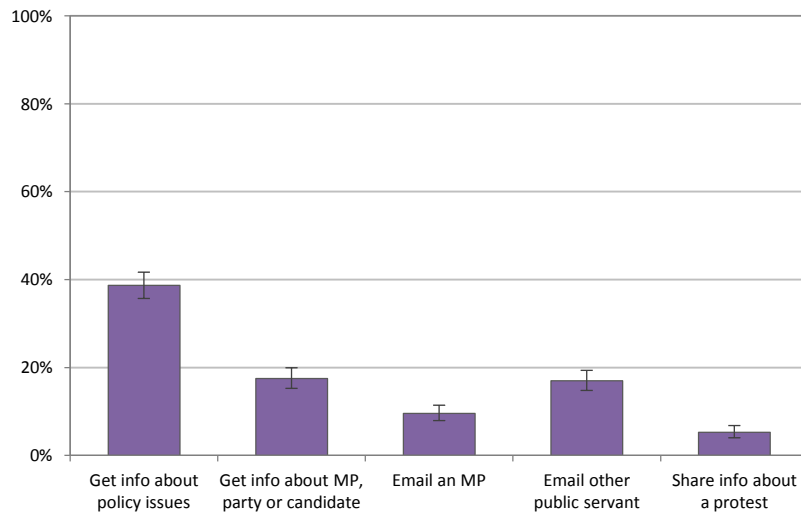
Q34 (cont.):

1. To get information about Government or Council policy issues
2. To look for information about an MP, political party or candidate
3. To email an MP
4. To email any other Government or Council official
5. To communicate information regarding a protest or rally

Almost four out of ten Internet users (39%) have gone online in the last year to get information about Government or Council policy issues, while 18% have looked for information about an MP, political party or candidate.

10% of users have emailed an MP, and 17% have emailed other Government or Council officials. 5% of users say they have communicated information regarding a protest or rally.

Use Internet for public information/services (2)

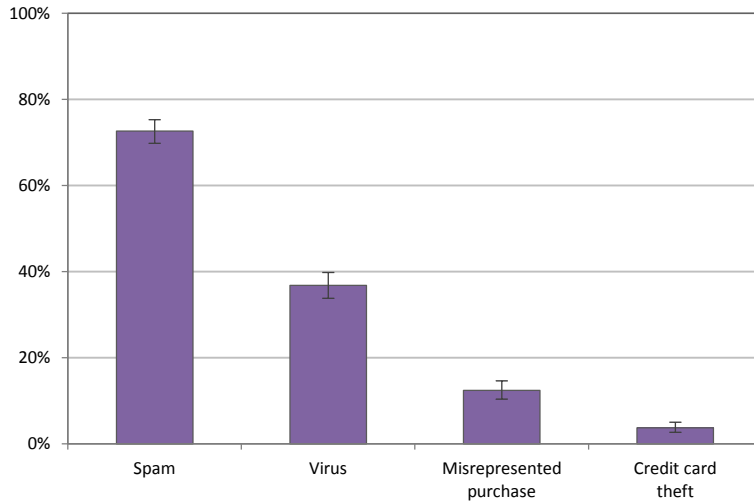


Base: Internet users

Overall, these figures suggest a relatively high degree of engagement with the public sector through Internet use.

Security

Adverse events on Internet



Base: Internet users

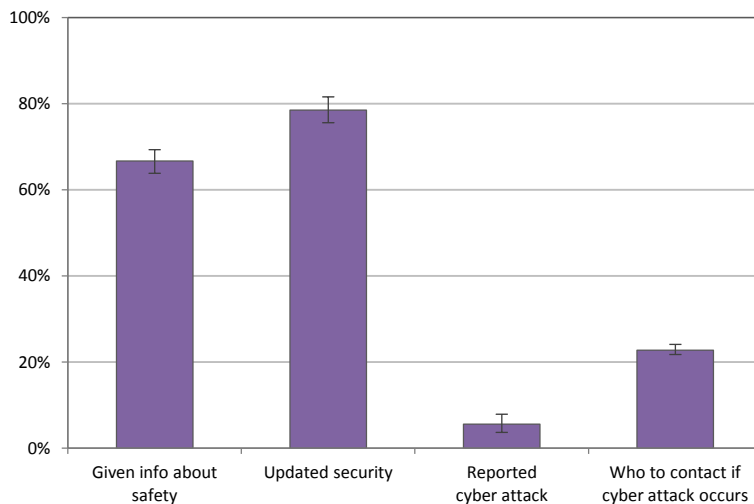
Q48: The next section of the survey is about Internet security and safety issues. In the past year have you ... ?

1. received nuisance emails or SPAM
2. received a virus onto your computer
3. bought something which has been misrepresented on a website
4. had credit card details stolen via use on the Internet

A very large proportion of Internet users (73%) report having received spam or nuisance email in the last year, and well over a third (37%) say they have received a virus on to their computer.

12% of Internet users have bought something which was misrepresented on a website, and 4% have had credit card details stolen via use on the Internet.

Awareness of Internet security issues



Base: Internet users

Q48 (cont.):

1. Been given information about Internet safety (e.g. about malicious online behaviour or other potential harms)
2. Updated your Internet security to protect your computer
3. Ever reported a cyber attack

Q48 (cont.): In the event of a cyber attack, do you know who to contact to report one?

Two thirds of users have been given information about Internet safety in the past year, and 78% say they have updated their Internet security to protect their computer. Almost a quarter of respondents (23%) said they knew who to contact in the event of a cyber attack.

Asked to elaborate on this, the most frequent responses from these people were that they would contact their ISP, the police, an IT person, or their friends, family or colleagues. Many said they would look for help online, while a smaller number of people said they would contact NetSafe, their anti-virus company, or a Government department.

Q46: What rules does your household have regarding use of the Internet? Are children guided or told ... ?

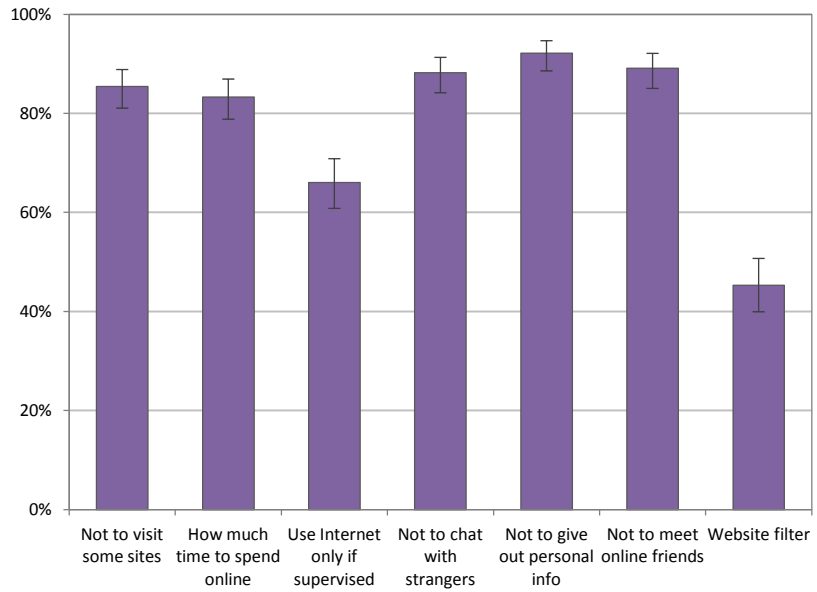
1. not to visit some sites
2. how much time to spend online
3. to use the computer only under parent's control
4. not to chat with strangers online
5. not to give out personal information
6. not to meet up with someone they've only met online

Q47: Does your household use a filter that controls or restricts access to certain websites?

Overall, young people are given a lot of guidance about Internet safety. Over 80% of applicable respondents say children are guided not to interact with strangers online or give out personal information, and told how much time to spend online and to avoid visiting some sites.

Two thirds tell children to use the computer only under a parent's control, and 45% use a website filter.

Household rules for Internet use



Base: Internet users in a household that includes somebody under the age of 18 (n=341)

Section 2

2007–2011 Trends

This section presents graphs of the key changes which have been observed across the three WIPNZ surveys conducted thus far: in 2007; 2009; and 2011. The focus is on responses which have shown a significant change across the three survey years. In some cases, however, a lack of change over time is of interest in its own right, and is therefore included in the report. Each finding is briefly discussed alongside a graph showing the proportions of respondents in each response category. Throughout the section, orange is used to represent 2007 data, green represents data from 2009 and purple is used for the latest results, from the 2011 survey. Presentation of results includes the following details:

- **Survey question wording:** The full wording of the relevant survey question is given at the top of the right-hand column. The number of the question as listed in the WIPNZ 2011 questionnaire is also given.
- **Base:** A description of the set of respondents of whom the question was asked. Most commonly, this is either all respondents or all Internet users. Some questions were asked of different or more restricted groups, depending on the relevance of the question to the group.
- **Statistical tests:** Many of the results include details of statistical tests. Somer's d is used to test relationships between two ordinal variables (variables which have a logical order but are not based on continuous data). The value of the Somer's d statistic gives a sense of the degree and direction of change over time, while the p value gives a sense of the strength and validity of the result. Small p values indicate a relationship which is unlikely to be caused by sampling error.
- **Information on differences between the display and the original format of the data:** Many questions are presented in simplified ways. For example, 5-point scales regarding agreement and disagreement are reduced to three categories: agree; neutral; and disagree. Note that statistical tests are always conducted on the data in its original form.
- **Number of respondents:** The first presentation of a result for a particular base includes the number of respondents for that sample or sub-sample. This information is also repeated below for the more common bases. Cases where a respondent declined to answer a question, or gave a 'Don't know' response, are treated as missing values. As a result, the actual number of respondents represented in each graph varies slightly.

Base	Survey year		
	2007	2009	2011
All respondents	1529	1250	1255
Internet users	1213	1034	1082
Internet users with a connection at home	1136	991	1014

- **Confidence intervals** are shown as error bars on some of the simpler graphs in order to give a sense of the margin of error for each population. See the Appendix for a description of indicative confidence intervals.

Usage Patterns

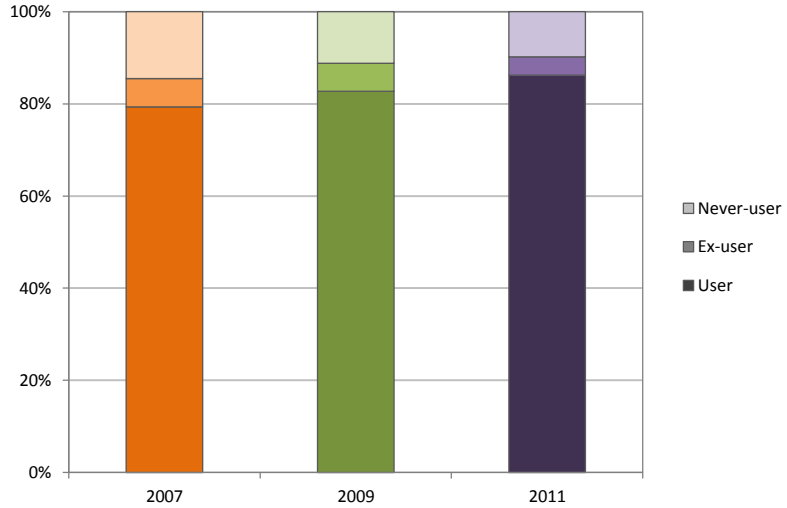
Q1: Do you currently use the Internet?

Q1B: Has there ever been a period of time in the past when you have used the Internet?

In the past four years there has been a significant increase in the proportion of New Zealanders who use the Internet – from 79% in 2007 to 83% in 2009, and to 86% in 2011.

This increase is matched by a decrease in the proportion of those that have never used the Internet, from 15% in 2007 to 10% in 2011. In 2007 and 2009, 6% of respondents had used the Internet in the past but did not anymore. The proportion of these ‘ex-users’ dropped to just 4% in 2011.

User status



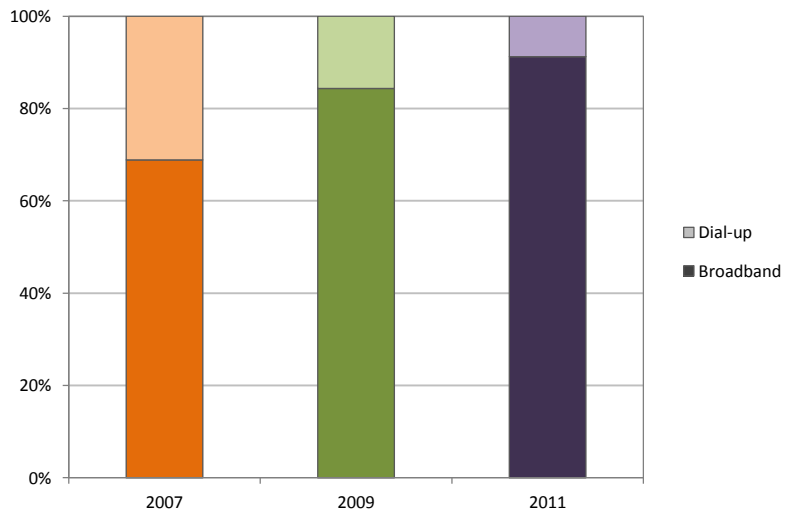
Base: All respondents (2007 n=1529; 2009 n=1250; 2011 n=1255) | Somer's d=.014, p<.001

Q5A: What type of Internet connection do you have at home?

One of the most striking differences between 2007 and 2011 is the increasing number of households with broadband Internet connections. In 2007 69% of respondents had a broadband connection at home. This rose to 84% in 2009, and again to 91% in 2011.

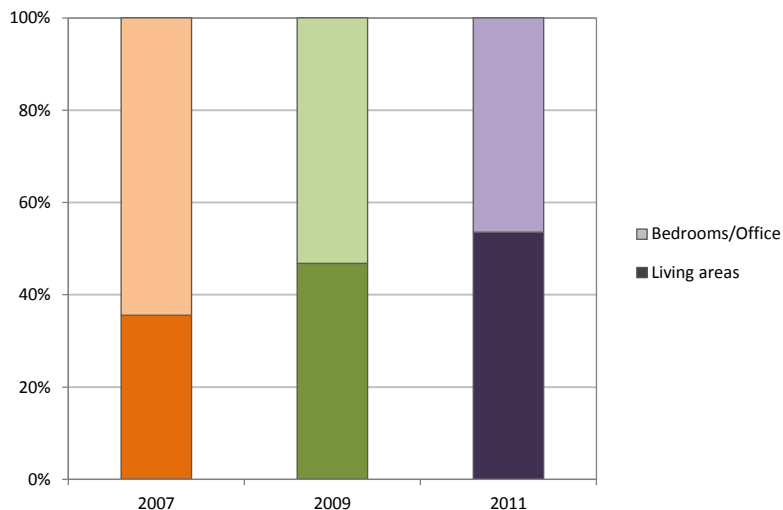
The pervasiveness of broadband generates likely knock-on effects in the ways that people use the Internet.

Home Internet connection



Base: Internet users who have an Internet connection at home (2007 n=1136; 2009 n=991; 2011 n=1014) | Somer's d=.15, p<.001

Main location in house for using Internet



Base: Internet users who have an Internet connection at home | Somer's d=.122, p<.001 | Note: this analysis of the data excludes 'other' responses, which means the 2007 and 2009 percentages differ slightly to those shown in previous reports.

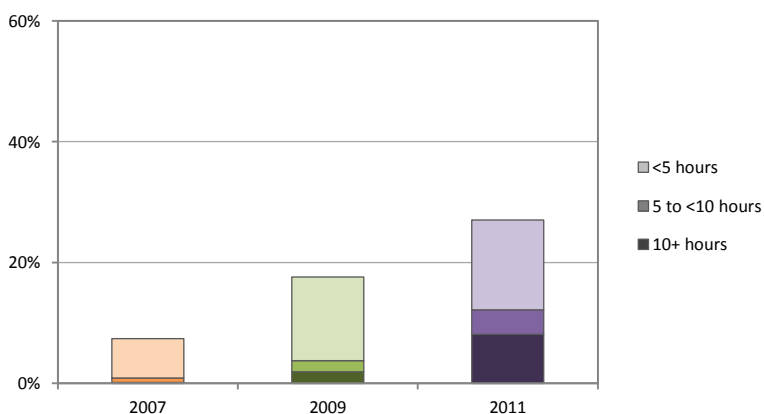
Q6: Where in your home do you mostly use the Internet?

The Internet is increasingly moving into the open, communal spaces in the house.

The percentage of people who use the Internet mainly in living areas (including lounge, dining room and kitchen) rose significantly from 36% in 2007 to 54% in 2011. Correspondingly fewer people use the Internet mainly in a private space (including bedroom, office/study, and computer room).

Using the Internet in communal spaces is a sign of increasing Internet mobility (through wireless access), and of the increasing embeddedness of the Internet in the everyday life of the household.

Internet access from wireless handheld devices



Base: Internet users (2007 n=1213; 2009 n=1063; 2011 n=1082) | Note: This question may under-represent the true population figures since the survey excludes people without a landline. New Zealanders who don't have a landline are likely to be highly engaged with mobile technology, including wireless handheld devices with an Internet connection.

2011

Q2: Do you use the Internet through wireless hand-held devices, such as a mobile phone or iPad?

If 'yes', ask 2B: How many hours a week do you use the Internet through wireless hand-held devices?

2007 & 2009

Q2: Do you use the Internet through wireless devices such as a wireless computer or a mobile phone from any location?

If 'yes', ask Q2B: How many hours a week do you use the Internet through a mobile phone or other mobile device?

While a minority of users access the Internet via a smartphone or other handheld wireless device, the proportion doing so has risen steeply – from 7% in 2007 to 18% in 2009, and in 2011 to more than a quarter of users (27%). This upward trend is likely to continue.

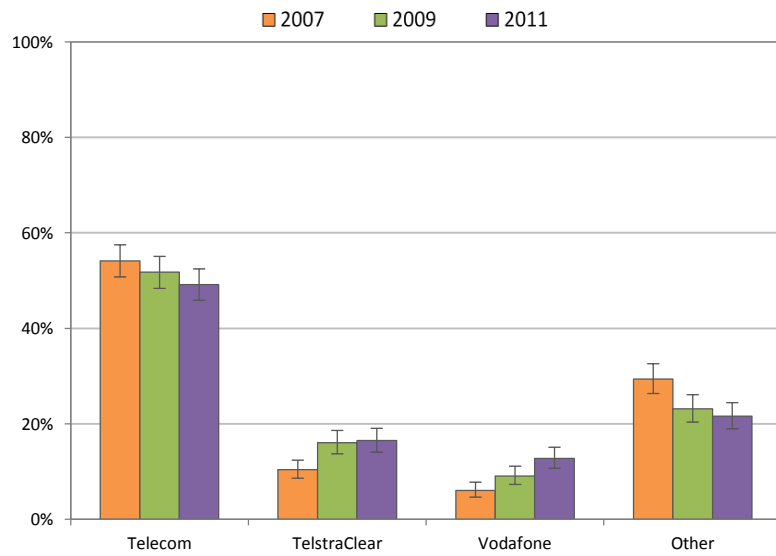
Correspondingly, the proportion of users accessing the Internet from a handheld mobile device for 10 hours a week or more has increased from almost none in 2007, to 8% of users in 2011.

Q7: Which Internet provider are you currently using?

In the four years between 2007 and 2011, the proportion of users with a home Internet connection through Telecom decreased slightly from 54% to 49%.

There has been an increase in the proportion of people using TelstraClear (from 10% to 16%) and Vodafone (from 6% to 13%).

Internet service provider

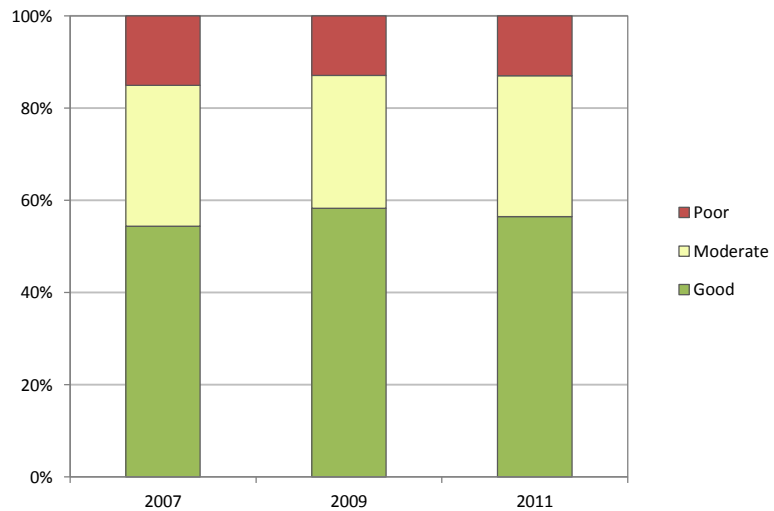


Base: Internet users who have an Internet connection at home

Q11: How would you rate your ability to use the Internet?

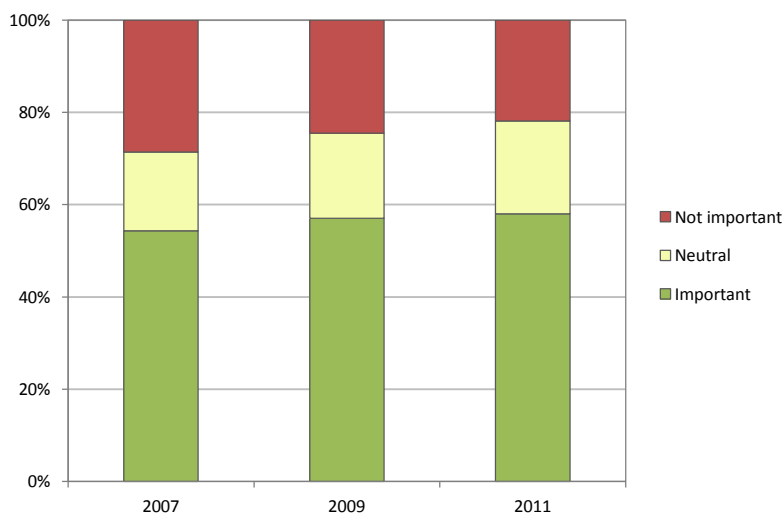
There has been no significant change in Internet users' rating of their ability to use the Internet since 2007, though the raw figures of ability have increased slightly. In 2011 56% of users rated their ability as good.

Rating of own ability to use Internet



Base: Internet users | Note: These results are from a 5-point Likert scale. Categories 1 and 2, and categories 4 and 5 have been grouped in this display.

Importance of Internet in everyday life



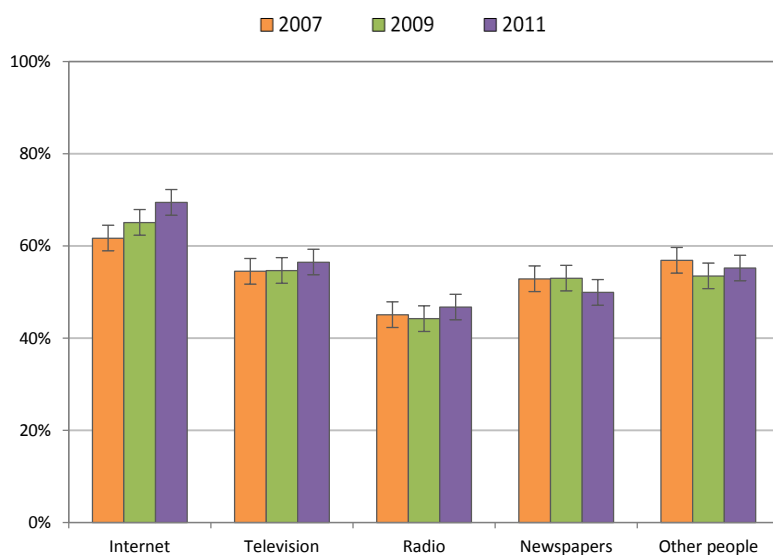
Base: All respondents | Somer's d=.04, p=.006 | These results are from a 5-point Likert scale. The Somer's d test is based on the data in its original form.

Q50: Overall, how important is the Internet to your everyday life?

There has been an increase in New Zealanders' ratings of the overall importance of the Internet in their everyday lives since 2007. This change reflects the increasing proportion of New Zealanders that use the Internet.

Information Seeking

Rating information sources



Base: All respondents | Internet: Somer's d=.072, p<.001; Television: ns; Radio: ns; Newspapers: Somer's d=-.031, p=.032; Other people: ns. | Note: The Somer's d tests are conducted on the 5-point Likert scale data which runs from 1= 'Not important at all' to 5= 'Very important'. This graph shows the percentage of respondents who gave a rating of either 4 or 5 on this scale.

Q18: How important is each of the following to you as a source of information in general?

1. The Internet
2. Television
3. Newspapers
4. Radio
5. Other people such as family and friends

An increasing majority of New Zealanders perceive the Internet to be an important or very important source of general information (from 62% in 2007 to 69% in 2011).

There has been a decrease in ratings of newspapers as a source of information, from 53% of respondents seeing newspapers as important in 2007, to 50% in 2011. However, the increasing importance of the Internet alongside the decrease for print newspapers may mask online accessing of newspaper content.

Q21: Some people look up information on the Internet as they go about their daily lives – things like news, sports scores, events and movie times – others don't. How often do you use the Internet for the following purposes?

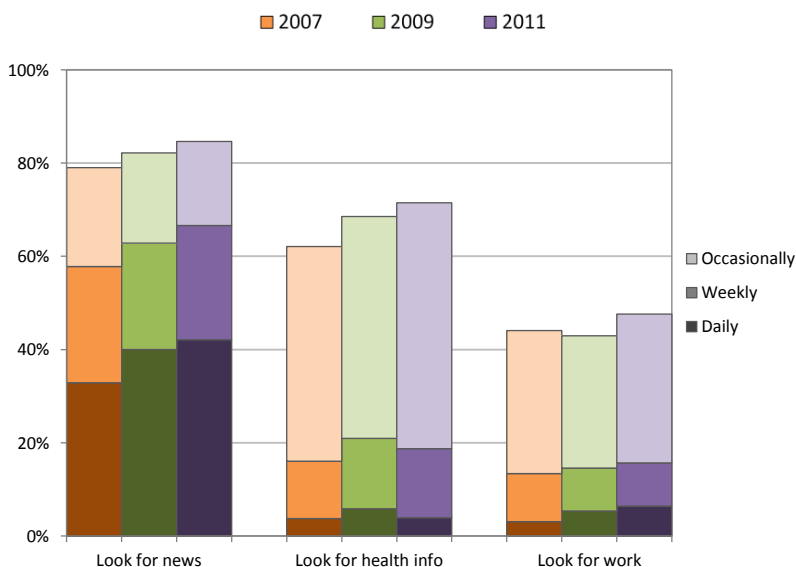
1. Look for news – local, national, international
2. Look for health information
3. Look for jobs/work

Among the various questions on frequency of online information searching activities, significant increases occurred in the frequency with which Internet users search for news, health information, and jobs.

42% of users now search daily online for news, compared to 33% in 2007. The percentage of people saying they search for health information online at least occasionally has risen from 62% in 2007 to 72% in 2011.

In 2011, 6% of users say they look for jobs or work online on a daily basis, up from 3% in 2007.

Online information seeking



Base: Internet users | News: Somer's d=.08, p<.001; Health: Somer's d=.059, p<.001; Work: Somer's d=.029, p=.054 | Note: The Somer's d tests are conducted on the basis of the data in its original form which includes the following six categories: 'several times a day', 'daily', 'weekly', 'monthly', 'less than monthly', and 'never'. The first two of these categories are grouped on these figures as 'daily', while 'monthly' and 'less than monthly' are grouped together and represented as 'occasionally'. The blank space above each bar represents the 'never' responses.

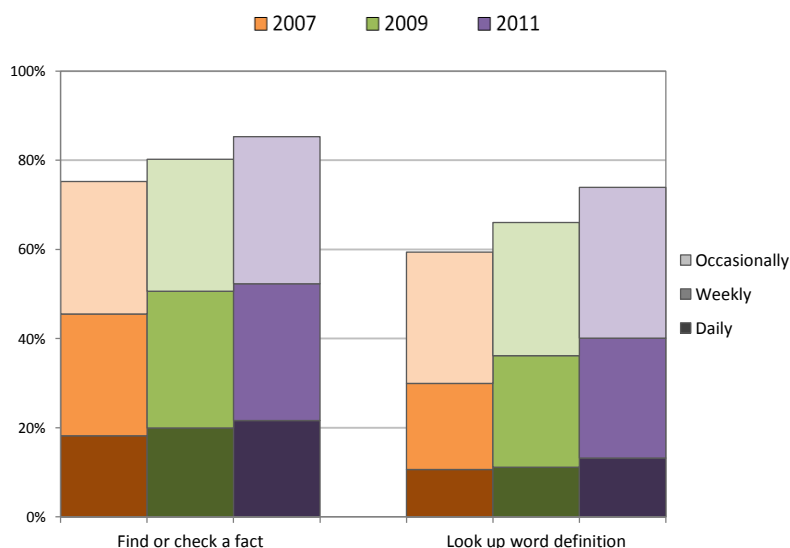
Q38: Some people use the Internet for classes or to support their learning, many others do not. How often, if ever, do you use the Internet or Web for the following purposes?

1. Find or check a fact
2. Look up a definition of a word

Internet users check facts and look up words online significantly more frequently in 2011 than in previous years.

53% of users check facts online every week, up from 45% in 2007. 85% check facts at least occasionally. Almost three quarters (74%) of users look up words online, a large increase from the 59% reported in 2007.

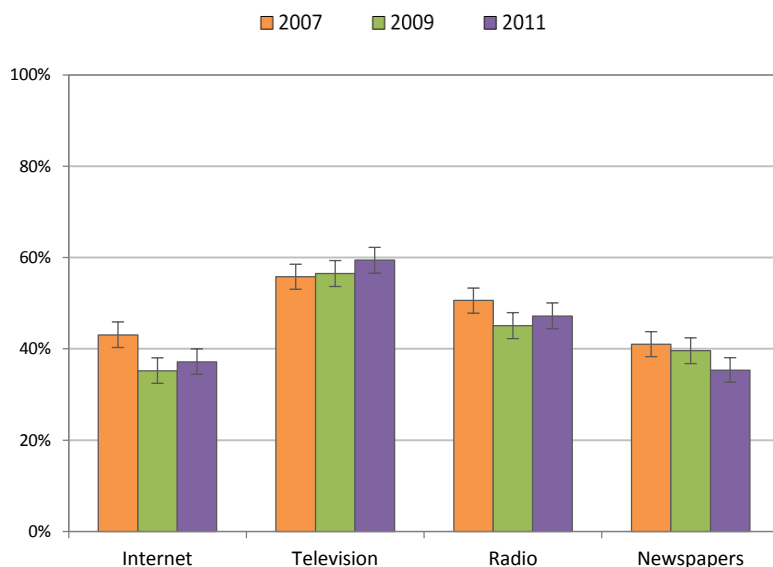
Looking up words and facts online



Base: Internet users | Look up word: Somer's d=.106, p<.001; Check fact: Somer's d=.071, p<.001

Entertainment and Leisure

Rating entertainment sources



Base: All respondents | Internet: ns; Television: ns; Radio: ns; Newspapers: Somer's $d = -.053$, $p < .001$. | Note: The increase for television occurred strongly for those aged 30–49, while television has slightly decreased in importance for those under 30

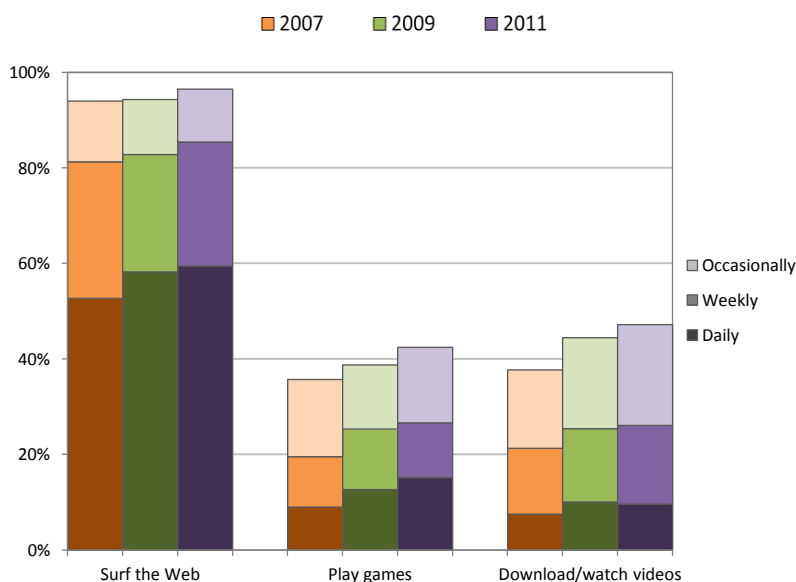
Q17: How important is each of the following media to you as a form of entertainment?

1. The Internet
2. Television
3. Radio
4. Newspapers

37% of respondents see the Internet as an important or very important source of entertainment in 2011, down from 43% in 2007 (although the decrease over the three surveys is not statistically significant). This means that only about half as many New Zealanders see the Internet as important for entertainment as those who see it as important for information (69%, reported above).

The perceived value of newspapers as a source of entertainment has decreased significantly since 2007 (from 41% to 35%).

Online entertainment activities



Base: Internet users | Browse the Web: Somer's $d = .066$, $p < .001$; Games: Somer's $d = .056$, $p < .001$; Videos: Somer's $d = .062$, $p < .001$

Q19: Now I'd like you to think about the routine things you do for personal entertainment, like playing games or listening to music. How often do you use the Internet for the following purposes?

1. Surf or browse the Web
2. Play games online
3. Download or watch videos online

96% of users now browse the web at least occasionally, with almost 6 out of 10 doing so daily. In 2011, 42% of users say they play games online, up from 36% in 2007, while the percentage of users downloading or watching videos online has increased from 38% in 2007 to 47% in 2011.

Note that the figures presented in this section focus on the frequency of online activities which have changed significantly between 2007 and 2011. Other online activities, such as downloading audio material, did not change significantly over time.

Relationships and Communication

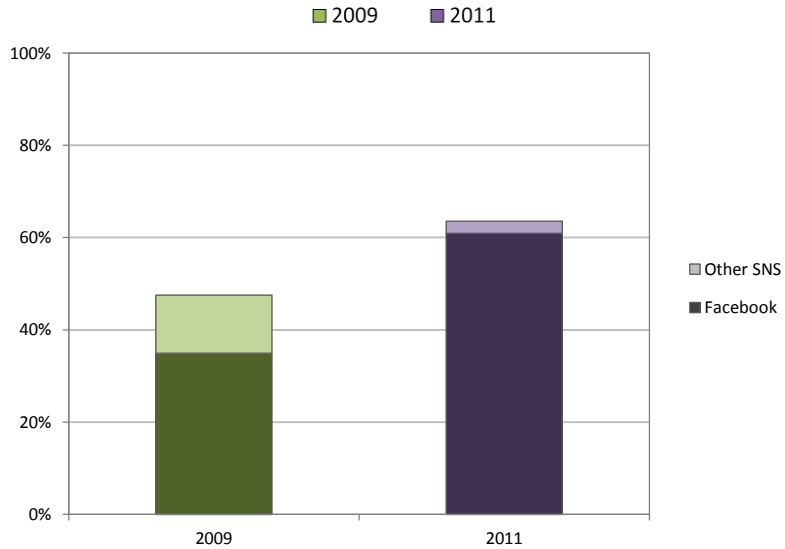
Q23: Are you a member of a social networking site or sites, for example Facebook, Bebo or Myspace?

If yes, ask Q24: Which social networking site do you use most often?

The proportion of Internet users who belong to a social networking site (SNS) has increased significantly between 2009 and 2011, from 48% to 64% (note that this question was not asked in 2007).

There has been a striking increase in the numbers who state that Facebook is the social networking site they use most often, from 74% of those with an SNS membership in 2009, to 96% in 2011. The difference is largely caused by the complete disappearance of respondents saying that MySpace is their most-used SNS.

Social networking site membership and preference



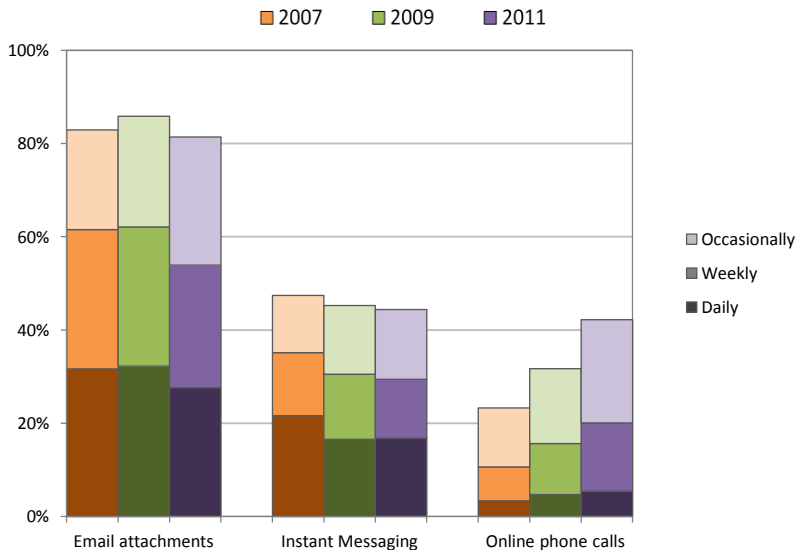
Base: Internet users | Overall difference in membership levels, chi-square $p < .001$. Note: This question was not asked in 2007

Q25: Now I'd like you to think about the different ways people keep in touch with each other in their everyday lives. How often do you use the internet for the following purposes?

1. Check your email
2. Do instant messaging - e.g. MSN
3. Make or receive phone calls over the internet

Sending attachments and doing instant messaging are two of the few online activities where a significant decrease has occurred since 2007. Internet users who send attachments at least weekly decreased from 62% in 2007 to 54% in 2011, and the proportion of users who do instant messaging at least weekly dropped from 35% to 29%. Online phone calling through applications like Skype, on the other hand, has increased dramatically. In 2007, 23% of users said they at least occasionally made or received phone calls online. This increased to 42% in 2011.

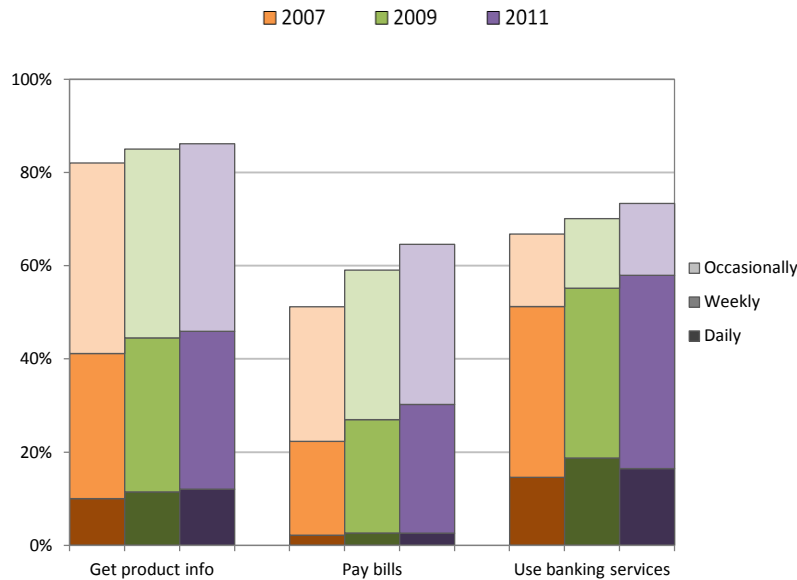
Online communication activities



Base: Internet users | Attachments: Somer's $d = -.049$, $p < .002$; IM: Somer's $d = -.037$, $p < .016$; Phone: Somer's $d = .127$, $p < .001$

Commerce

Online consumer transactions (1)



Base: Internet users | Product info: Somer's d=.041, p=.009; Bills: Somer's d=.095, p<.001; Banking: Somer's d=.052, p=.001

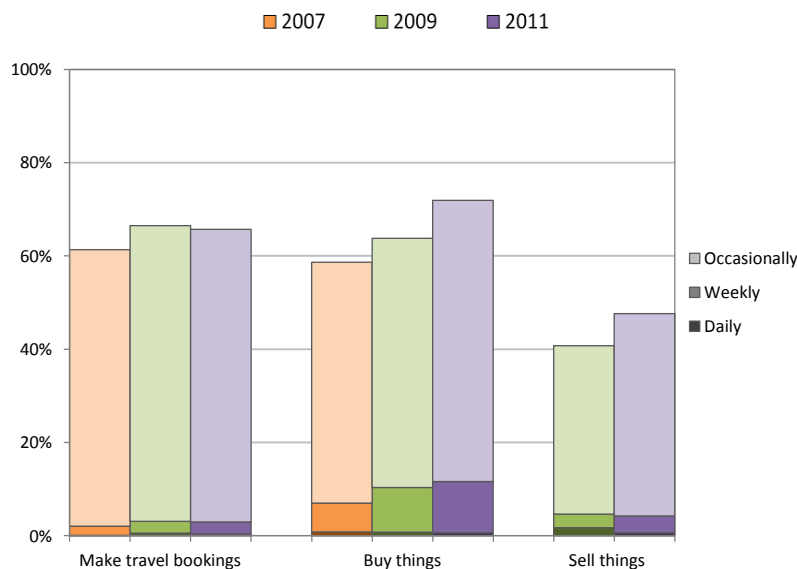
Q31: Now I'd like you to think about different transactions people do in their everyday lives like banking or shopping. How frequently do you use the Internet for the following purposes?

1. Get information about a product online
2. Pay bills online
3. Use your bank's online services

Of all the areas covered in the WIP survey, none showed such consistently significant increases as those questions on e-commerce activities. The two figures on this page show a range of online transactions, all of which have shown significant increases over the four years from 2007 to 2011.

For example, while only 51% of Internet users paid bills online in 2007, 65% say they do so in 2011. The percentage of users that at least occasionally use their bank's online services has risen from 67% to 73%.

Online consumer transactions (2)



Base: Internet users | Travel bookings: Somer's d=.041, p=.009; Buy things: Somer's d=.091, p<.001; Sell things: Somer's d=.06, p=.008

Q31 (cont.):

4. Make travel reservations/bookings online
5. Buy things online
6. Sell things online

Buying things online is another fast-growing e-commerce activity. 59% of users in 2007 said they bought things online, rising to 72% in 2011.

In 2009, a question about frequency of selling things through the Internet was added. In the two years between 2009 and 2011, the percentage of Internet users who sell things online grew from 41% to 48%.

There was an increase in frequency of making travel reservations between 2007 and 2009, and while this has levelled off in the two years to 2011, the overall trend is significant.

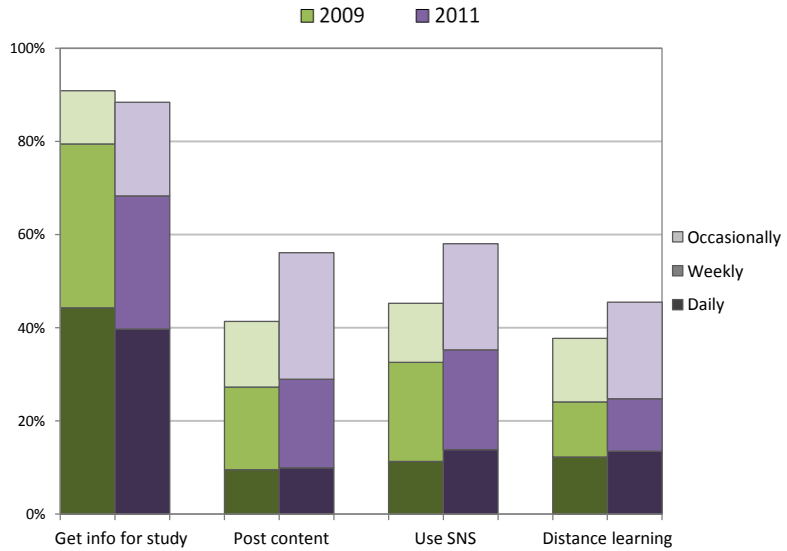
Education

Q38: Some people use the Internet for classes or to support their learning, many others do not. How often, if ever, do you use the Internet or Web for the following purposes?

1. Get information for school or university related work
2. Put content on the Internet as part of educational activities
3. Use a social networking site as part of educational activities
4. Participate in distance learning for an academic degree or job training

From 2009 to 2011 there have been some significant increases in the frequency with which students use the Internet for educational purposes (the 2007 sample was not comparable). Posting content online rose from 41% to 56% of students and use of social networking sites from 45% to 58%. There are also more students engaged in distance learning in 2011 than 2009, increasing from 38% to 45% of students. There have been no significant trends in the proportion of students using the Internet to get information for study, though the raw figures show a small decrease.

Online education activities



Base: Students | 2009: n=219; 2011: n=224 | Get info: ns; Post content: Somer's d=.112, p=.028; Use SNS: Somer's d=.102, p=.047; Distance learning: Somer's d=.072, p=.019 | Note: In 2007, respondents that were employed full time were not asked whether or not they were also students. The 2007 results for these questions are therefore not directly comparable to those in 2009 and 2011.

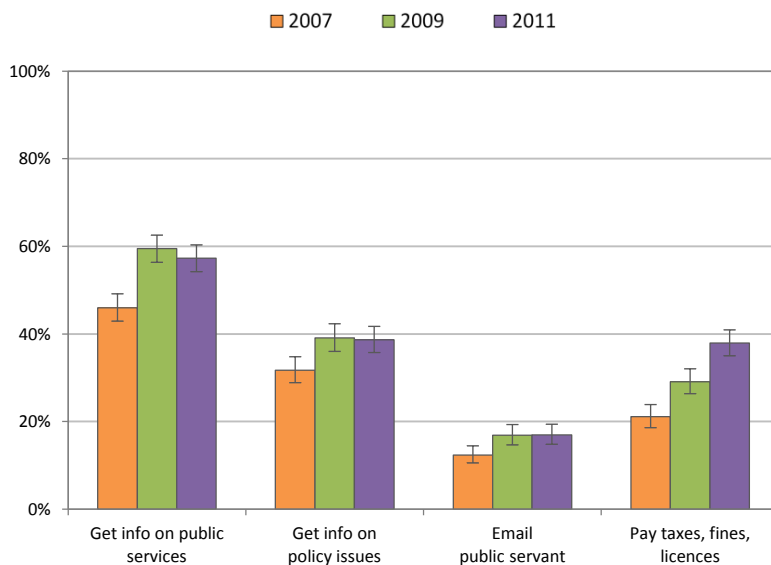
Public Sector and Politics

Q34: Talking now about government information and services, have you used the Internet in the past year for the following purposes?

1. To get information about Government or Council services
2. To get information about Government or Council policy issues
3. To email any other Government or Council official [other than an MP]
4. To pay for taxes, a fine, or licence online

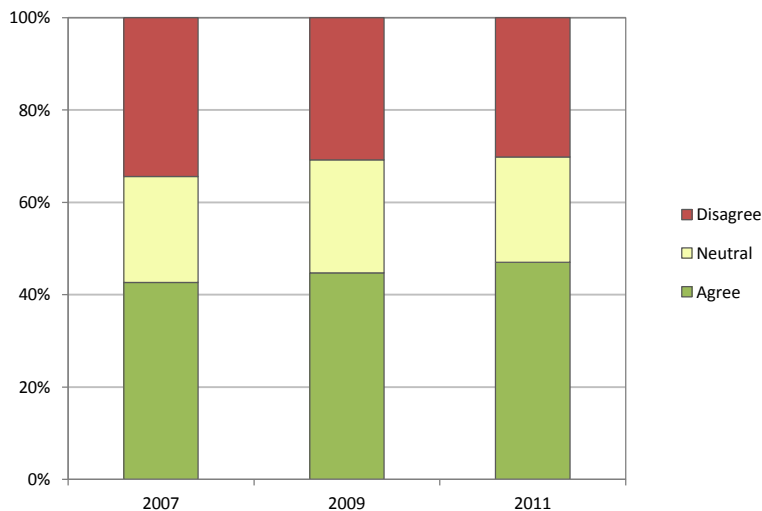
Significant increases occurred for some government-related online activities. The most striking is the increase in people saying they have paid for taxes, fines, or licences online in the past year, up from 21% in 2007 to 38% in 2011. The other three results shown here indicate increases between 2007 and 2009, but not between 2009 and 2011.

Use Internet for public information/services



Base: Internet users | Info on services: Somer's d=.079, p<.001; Info on policy: Somer's d=.049, p<.001; Email an official: Somer's d=.032, p=.001; Pay taxes: Somer's d=.114, p<.001.

Government funding for Internet access



Base: All respondents | Somer's d=.044, p=.003

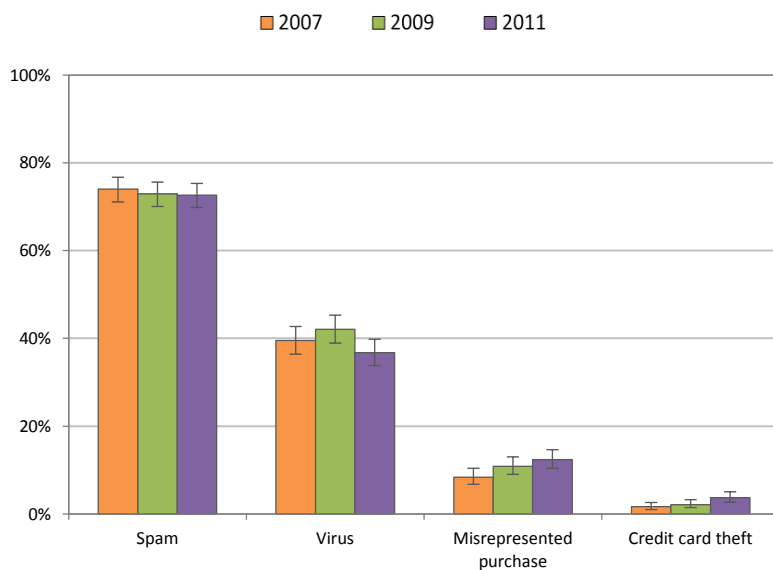
Q36: Please tell me how much you disagree or agree with the following statement:

The New Zealand Government should allocate funds to enable all New Zealanders to have access to Internet services.

There has been a slight but statistically significant increase in agreement with the idea that the New Zealand Government should allocate funds to enable all New Zealanders to have access to Internet services, with 47% agreeing with this statement in 2011, compared to 43% in 2007.

Security

Adverse events on Internet



Base: Internet users | Spam: ns; Virus: ns; Misrepresented purchase: Somer's d=.027, p=.002; Credit card theft: Somer's d=.014, p=.003

Q48: The next section of the survey is about Internet security and safety issues. In the past year have you ... ?

1. received nuisance emails or spam
2. received a virus onto your computer
3. bought something which has been misrepresented on a website
4. had credit card details stolen via use on the Internet

The proportion of people who have bought something they feel was misrepresented on a website has increased from 8% in 2007 to 12% in 2011. Credit card theft, while rare, has doubled, from 1.6% in 2007 to 3.7% in 2011.

Almost three quarters of Internet users receive spam, and there has been no significant change in this figure. There is no significant trend in the proportion of users receiving a virus on their computer, though the 2011 figure is lower than in previous years (37%, compared to 40% in 2007 and 42% in 2009).

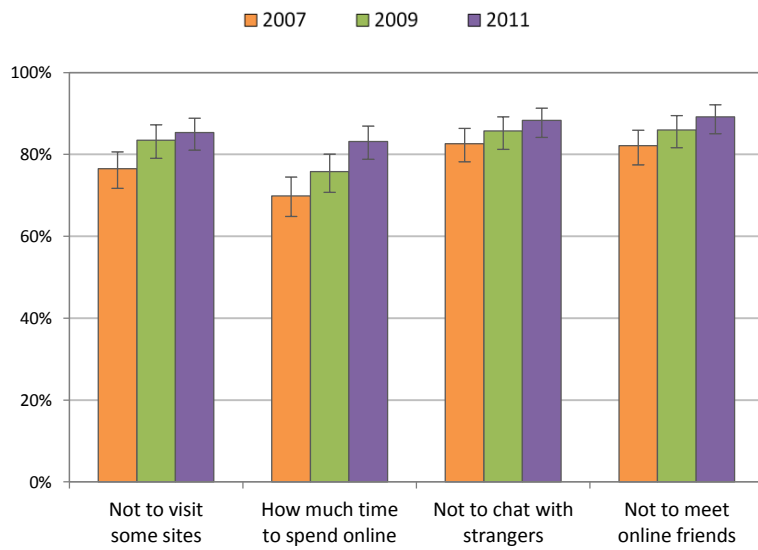
Q46: What rules does your household have regarding use of the Internet? Are children guided or told ... ?

1. not to visit some sites
2. how much time to spend online
3. not to chat with strangers online
4. not to meet up with someone they've only met online

Of the six questions regarding rules for children, four have shown significant change since 2007, with an increasing proportion of households setting rules around Internet use.

Under-18s are increasingly guided or told not to visit certain sites, how much time to spend online, not to chat online with strangers and not to meet up with someone met only online. The largest increase was in rules for how much time to spend online, with 83% of households ruling on this in 2011, compared to 70% in 2007.

Household rules for Internet use

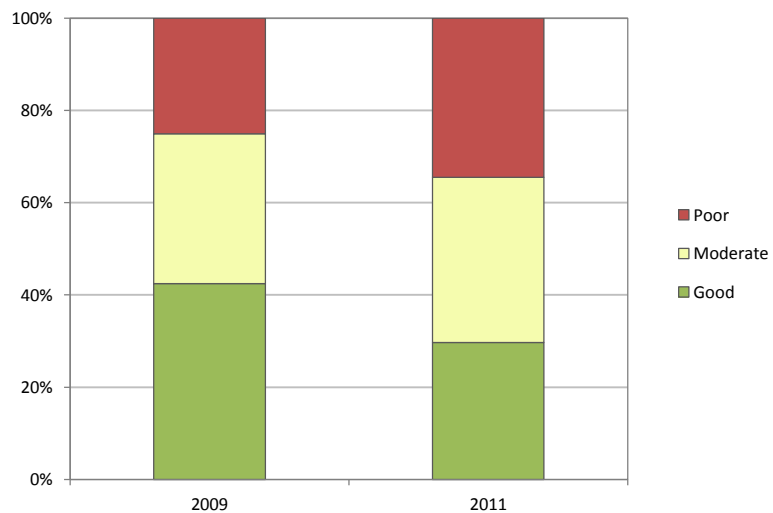


Base: Internet users in a household that includes somebody under the age of 18 (2007 n=376; 2009 n=333; 2011 n=341) | Not to visit: Somer's d=.061, p=.003; How much time: Somer's d=.091, p<.001; Not to meet: Somer's d=.048, p=.009; Not to chat: Somer's d=.039, p=.032

Q49: How would you rate your confidence to deal with Internet security issues?

Respondents' confidence in their ability to deal with Internet security issues has decreased significantly between 2009 and 2011. The percentage of users rating their confidence at 4 or 5 on a 5-point scale dropped from 42% in 2009 to 30% in 2011.

Confidence with Internet security issues



Base: Internet users | Somer's d=-.156, p<.001 | Note: These results are from a 5-point Likert scale. Categories 1 and 2, and categories 4 and 5, have been grouped in this display. | Note: This question was not asked in 2007

Section 3

Profiling Social Diversity and the Internet

This section profiles the main demographics measured in the WIPNZ 2011 survey: age; gender; area; income; ethnicity; and also user status. A brief discussion of interactions between each demographic and aspects of Internet use is illustrated by a selection of graphs. As in Section 2, orange is used to represent 2007 data, green represents data from 2009 and purple is used for the 2011 results. The survey question wording is not repeated in this section. Note that for the purposes of these demographic comparisons, certain groupings need to be made: Māori and Pasifika respondents have been grouped due to the small sample size for Pasifika respondents (68 individuals in the 2011 weighted sample). This grouping was motivated by general similarity of responses for these two ethnicities, and similarity between the two groups in terms of other demographics. 'Other' ethnicities are not reported in this section since this is a very diverse group.

- **Base:** A description of the relevant set of respondents is given alongside the first graph for each question. Most commonly, this is either all respondents or all Internet users. Some questions were asked of different or more restricted groups, depending on the relevance of the question to the group.
- **Statistical tests:** Many of the results include details of statistical tests. Somer's d is used to test relationships between two ordinal variables (variables which have a logical order but are not based on continuous data). The value of the Somer's d statistic gives a sense of the degree and direction of change over time, while the p value gives a sense of the strength and validity of the result. Small p values indicate a relationship which is unlikely to be caused by sampling error. Pearson chi-square tests are used in some cases to test for the significance of a difference across the categories of a certain demographic in a single year. In this section, details regarding statistical tests are presented in the right-hand column, underneath the description of the results.
- **Number of respondents:** When cross-tabulating results by year and demographics, the number of people in a given cell becomes much smaller. This means that some trends that appear in the displays do not reach statistical significance. See the Appendix for a guide to the number of respondents in each category for each demographic.

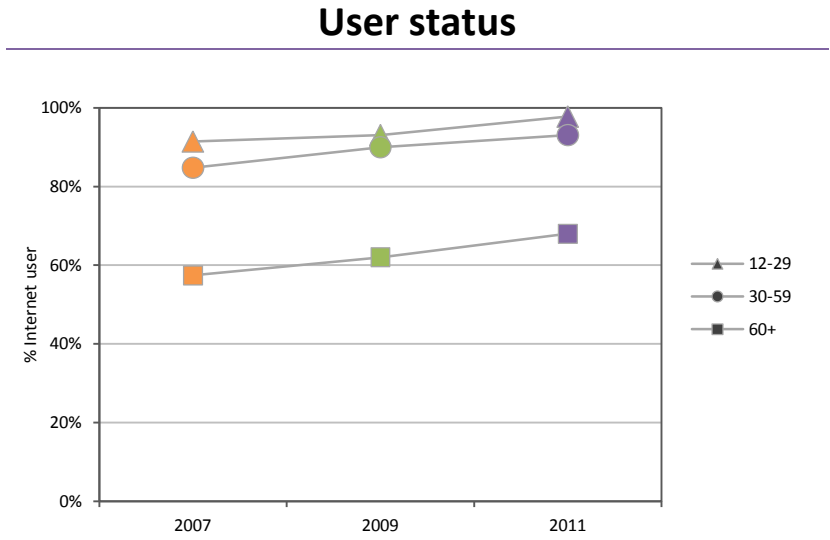
Usage Patterns

User status: Age

98% of younger New Zealanders surveyed in 2011 are Internet users, as are 93% of those aged between 30 and 59. The figure for 60-plus remains much lower.

Increases have occurred across all age groups, with the largest growth for those who had lowest usage in 2007. 68% of the 60-plus age group are users in 2011, up from 57% in 2007. Some of this change will reflect the ageing of former under-60 users.

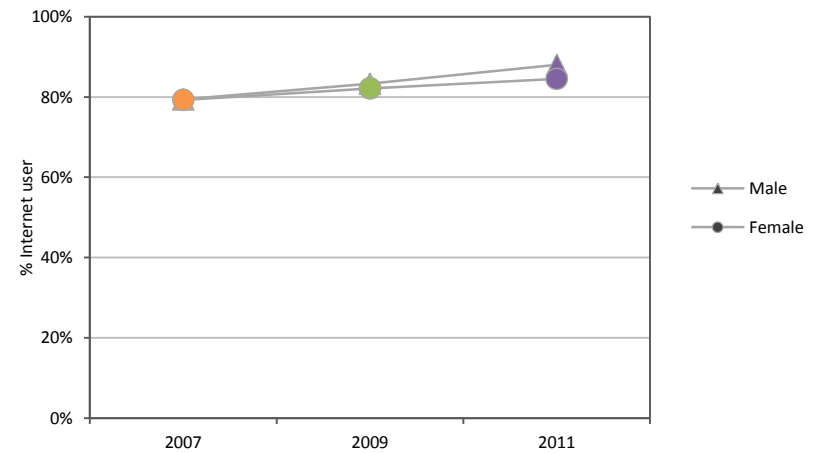
Base: All respondents | Increase over time significant for all age groups.



User status: Gender

There remains very little gender difference in user status in New Zealand. There has been a slight increase in the gap between the genders since 2007, however the difference in 2011 is still non-significant.

Increase over time significant for both males and females.

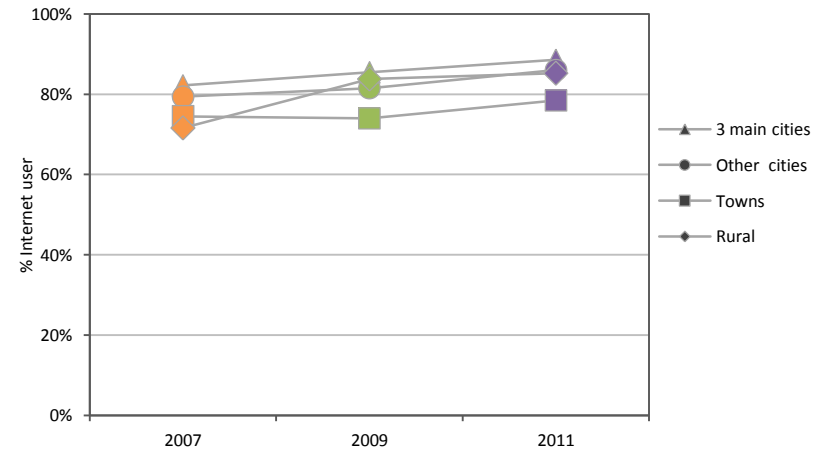


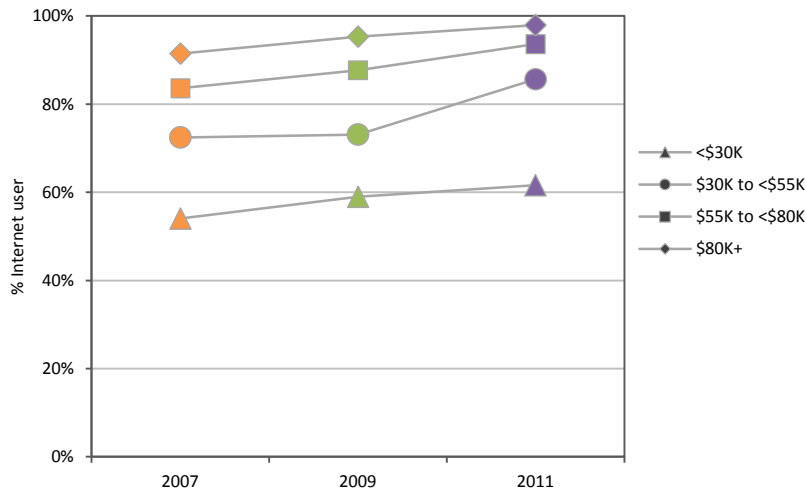
User status: Area

People in rural areas are now almost as likely to use the Internet as those in cities and main centres. While 72% of respondents in rural areas used the Internet in 2007, 85% are users in 2011.

Those in secondary and minor urban areas (towns) have lower rates of Internet usage than rural dwellers – at 78% in 2011 – and have not experienced significant growth since 2007.

Increase over time significant for all except for Towns.





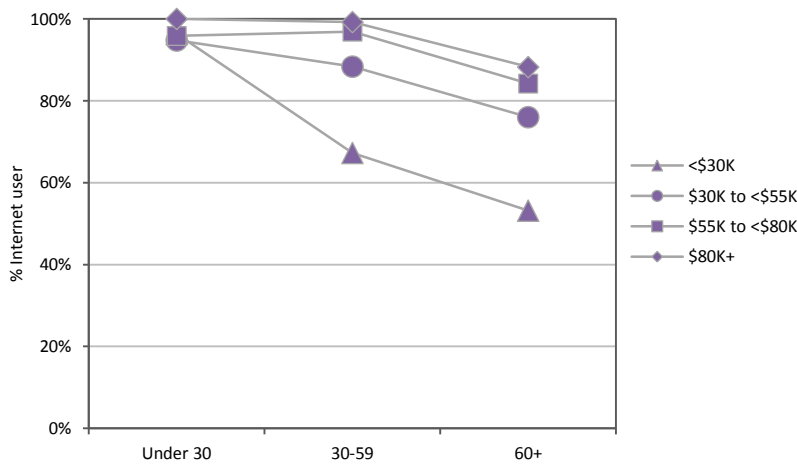
Note: The categories for household income were adjusted in the 2011 survey (see the appendix for details). As a result, changes over time in relation to household income may be inflated. The stratification patterns within each year, however, are not affected by the change in categories.

User status: Income

Internet usage is strongly related to household income levels. People with higher household incomes are more likely to be Internet users. Households with a combined income of \$80,000 per year or more show 98% usage of the Internet in 2011. The largest growth has been for those in the second lowest income bracket, \$30-55,000. 86% of respondents in this category are now users, compared to 72% in 2007.

There is a marked and increasing difference between the lowest income earners and the other three groups. However, there is a relationship between income and age. Two thirds of people in the under \$30,000 group are aged 60 or over, thus belonging to the lowest-usage age group (see next graph).

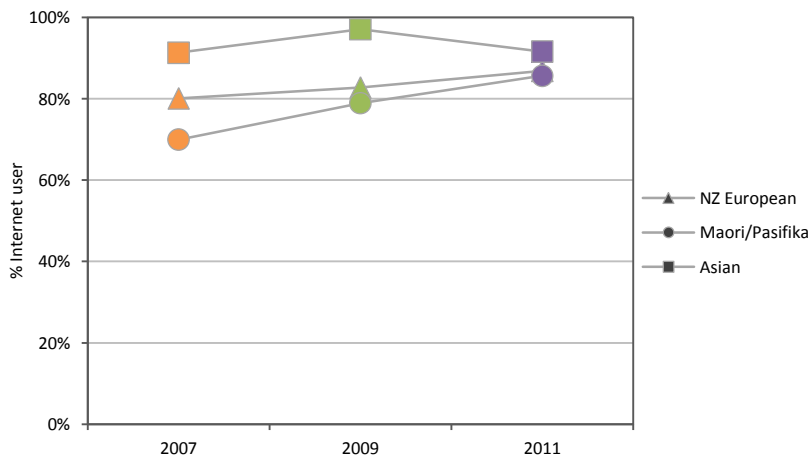
Significant increase for all income brackets except <30K.



User status: Income by age

All respondents under 30 in 2011 use the Internet at similar levels, regardless of income. But income is highly significant for those over 30, and particularly strong for those over 60. In the 60-plus group, only 53% of those in the lowest household income bracket are Internet users, compared to 88% in the highest bracket.

Base: All respondents



User status: Ethnicity

The divide between ethnicities in terms of user status has decreased greatly since 2007. This decrease in ethnic difference is largely due to a very increase in the proportion of Māori and Pasifika people that use the Internet, rising steadily from 70% in 2007 to 86% in 2011.

There is almost no difference according to ethnicity for those under 30. For those aged 30–59, NZ Europeans have the highest proportion of users, at 95%, compared to 87% for Asians and 85% for Māori and Pasifika people.

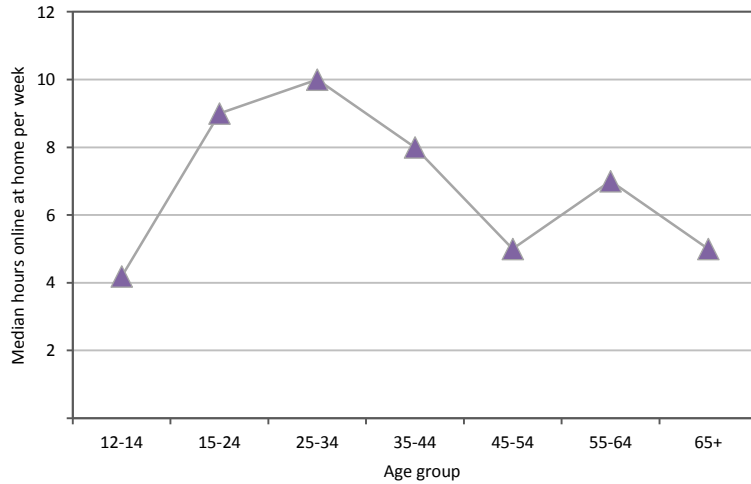
Increase significant for NZ European and Māori/Pasifika. Note: Asian people have the highest average rate of Internet use in part because they have a younger average age than the other ethnicities in the sample.

Hours online

Hours online: Age

This figure shows the median number of hours spent online at home per week according to age. Internet users aged 15–34 spend the most time online at home, averaging 9 hours (15–24 age group) and 10 hours (25–34 age group) per week. Somewhat surprisingly, users aged 12–14 spend the least time online at home, at a median of 4 hours per week.

Base: Internet users

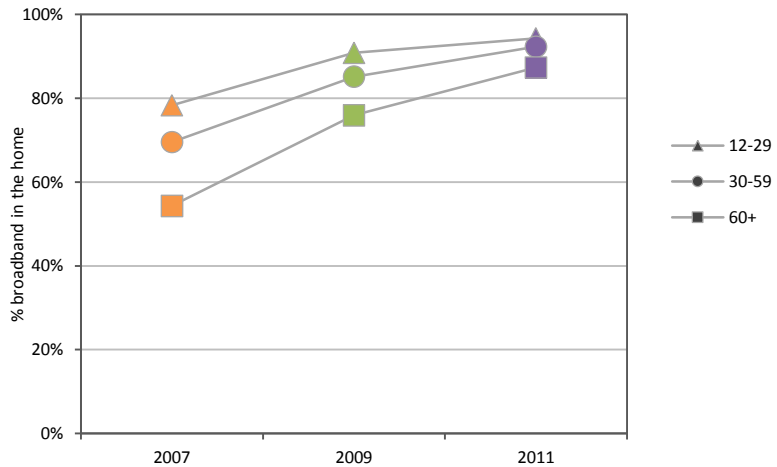


Broadband

Broadband: Age

Since 2007 the age gap for broadband connectivity has diminished substantially and is no longer significant. Younger people still maintain their lead in broadband access with 94% in 2011, up from 78% in 2007. But now 87% of the over-60s have broadband compared to 54% in 2007.

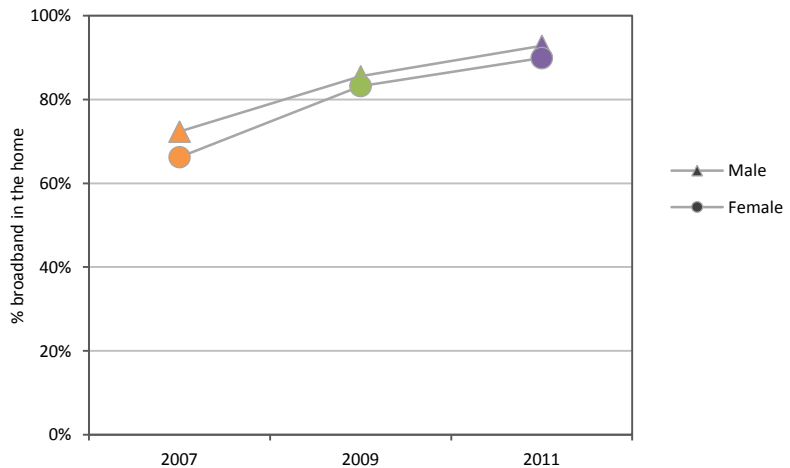
Base: Internet users with a connection at home

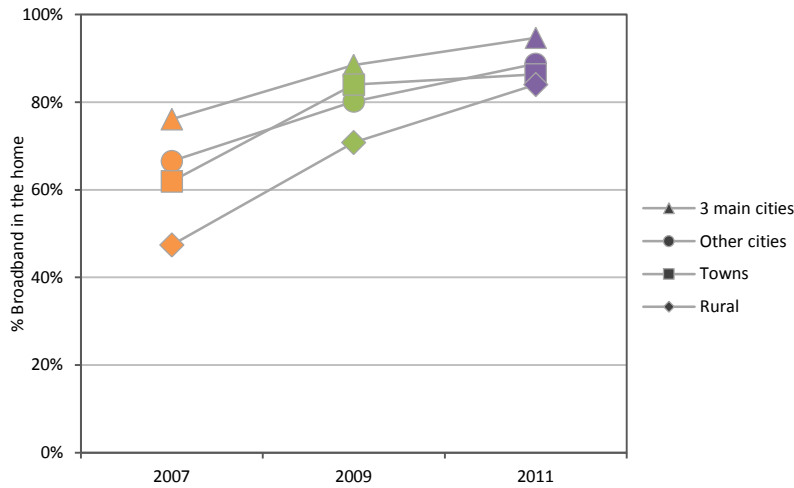


Broadband: Gender

Men have been slightly more likely to have broadband than women in all three surveys, though this difference was only significant in 2007.

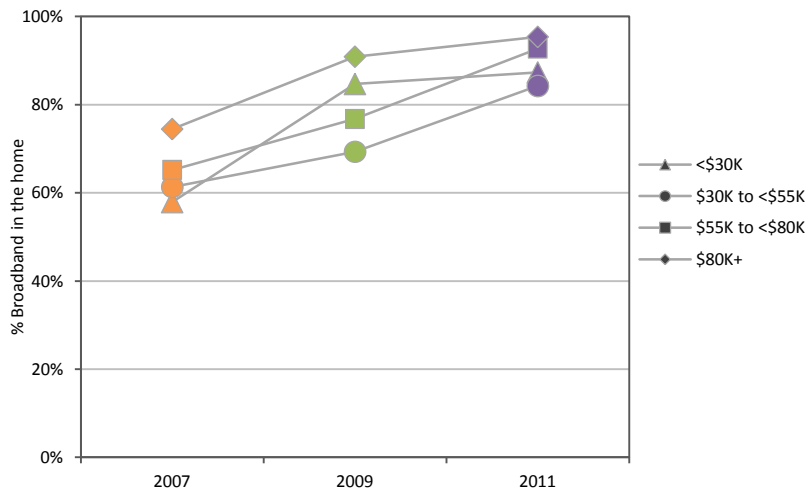
Base: Internet users with a connection at home





Broadband: Area

Broadband penetration has always been higher in the cities than in smaller centres, and consistently been lowest in rural areas. However, the urban/rural divide has closed considerably since 2007. 47% of rural Internet users had a broadband connection at home in 2007, rising to 84% in 2011. Only one in twenty users in Auckland, Wellington and Christchurch remain on dial-up, with broadband rates increasing to 95% from 76% in 2007.

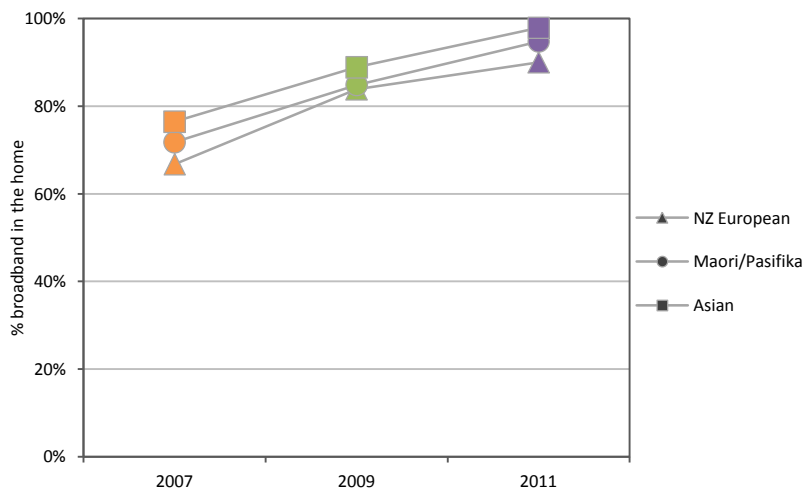


Broadband: Income

There still remains a significant difference for broadband penetration according to household income, though this difference has decreased since 2007/09. In 2007, broadband ranged from 58% to 74%. In 2011, the lowest group was 84%, and the highest 95%.

In both 2009 and 2011 the lowest income bracket has higher broadband rates than the second lowest bracket. This pattern holds when different age groups are separated out, so is not an effect of any relationship between income and age.

The Somer's d test with percent broadband as the dependent variable, and income bracket as the independent variable was highly significant ($p < .001$) in all three years, but the strength of the relationship has decreased (Somers' d: 2007=.113; 2009=.093; 2011=.061).



Broadband: Ethnicity

Asian Internet users have led the way in broadband uptake, though ethnicity is less important for broadband than the differences according to location and age.

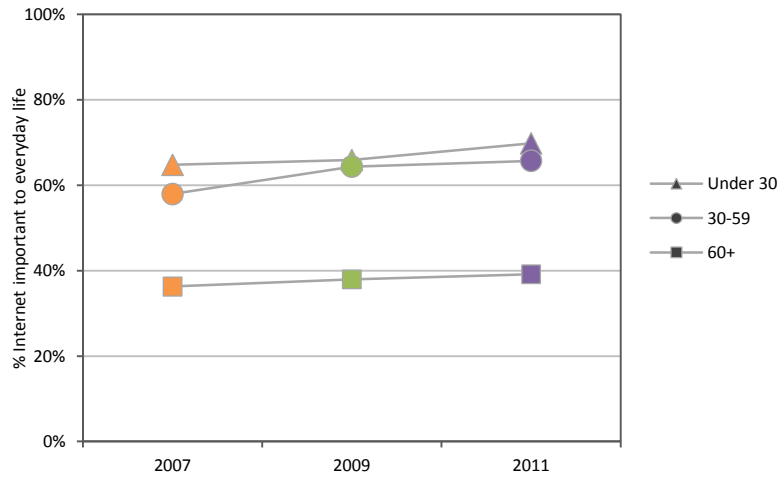
NZ European Internet users are less likely to have broadband than Māori/Pasifika and Asian users. This holds for all age groups.

Overall importance of Internet

Importance: Age

The importance of the Internet in everyday life has risen in 2011 for all age groups, but not significantly for any age group in its own right. The Internet is important for at least two thirds of New Zealanders under 60 in 2011, but for only 39% of the oldest age group.

Base: All respondents

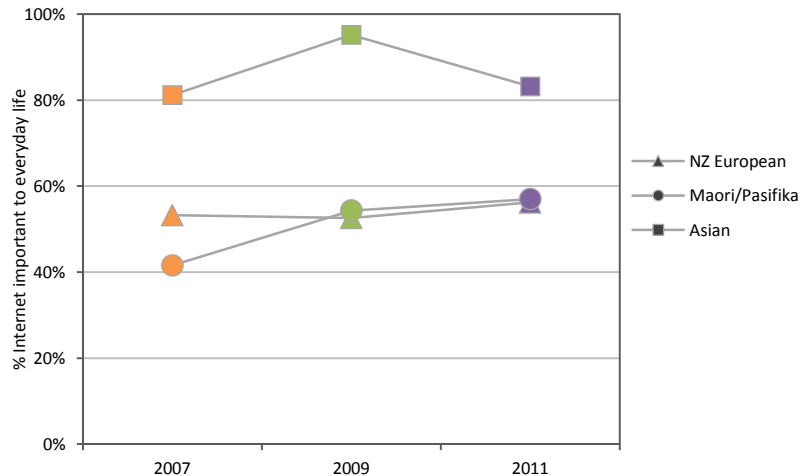


Importance: Ethnicity

Many more Asian New Zealanders rate the Internet as an important or very important part of everyday life, although this has dropped back since 2009.

The only significant increase across time is among Māori and Pasifika, increasing from 42% in 2007 to 57% in 2011.

Māori/Pasifika: Somer's $d = .134$, $p < .001$

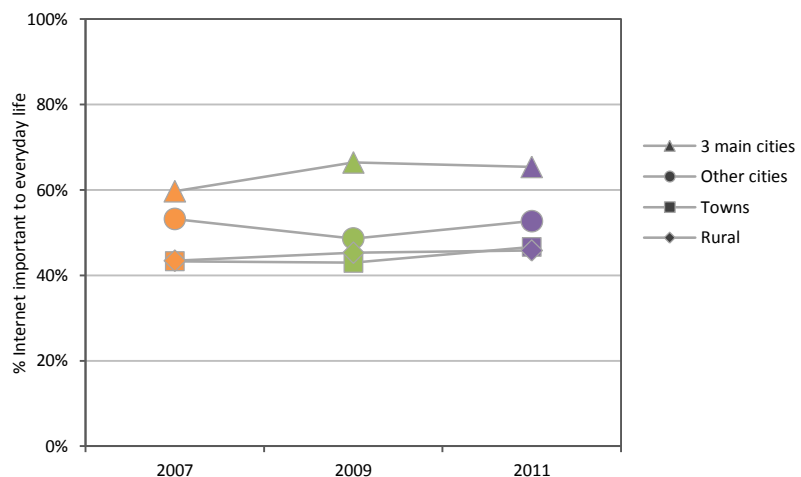


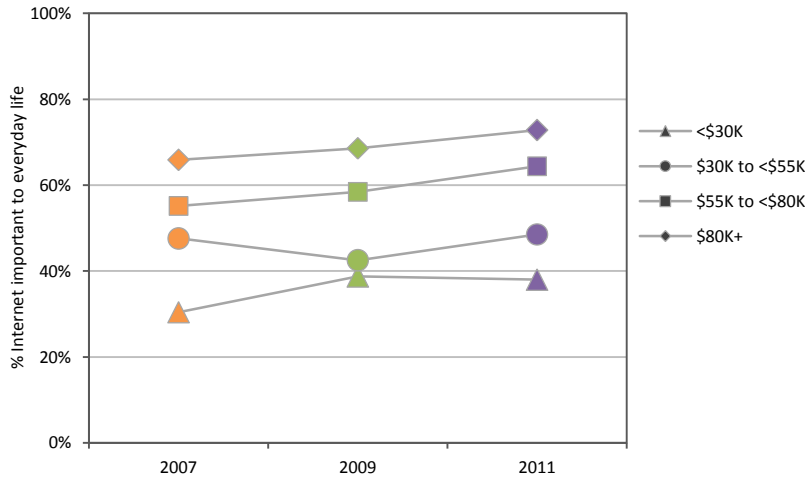
Importance: Area

More citizens of the three largest cities rate the Internet as important than do residents elsewhere in New Zealand. In 2011 two thirds of the big-city dwellers rated the Internet as important, compared to less than half (46%) of those in rural areas.

The importance ratings in the three main cities have increased significantly (on the original 5-point scale) across the three surveys, but the changes elsewhere are not significant.

3 main cities: Somer's $d = .05$, $p = .012$



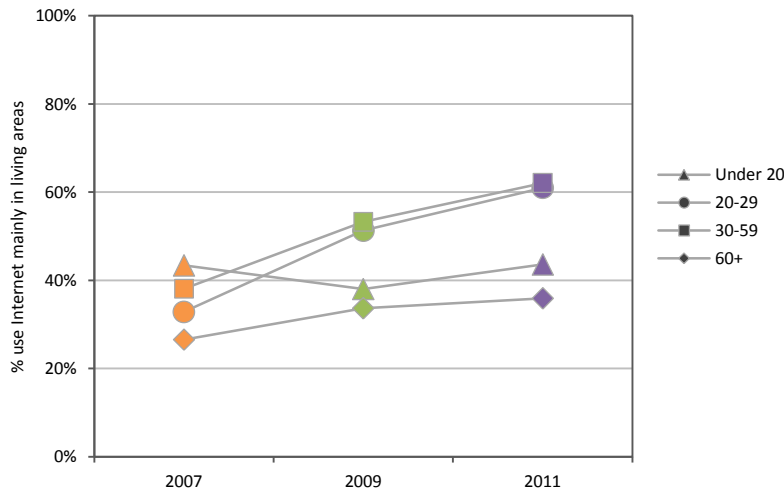


Importance: Income

The higher the combined income in a person’s household, the more likely they are to rate the Internet as an important or very important part of their everyday life. 73% of those in the highest income bracket rated it as important in 2011, compared to 38% in the lowest bracket (although people over 60 are over-represented in the under-\$30,000 bracket). The rise from 2007 is significant for the two highest income brackets.

\$55K to < \$80K: Somer’s d=.077, p=.017; \$80K+: Somer’s d=.06, p=.011

Use Internet in living areas of house

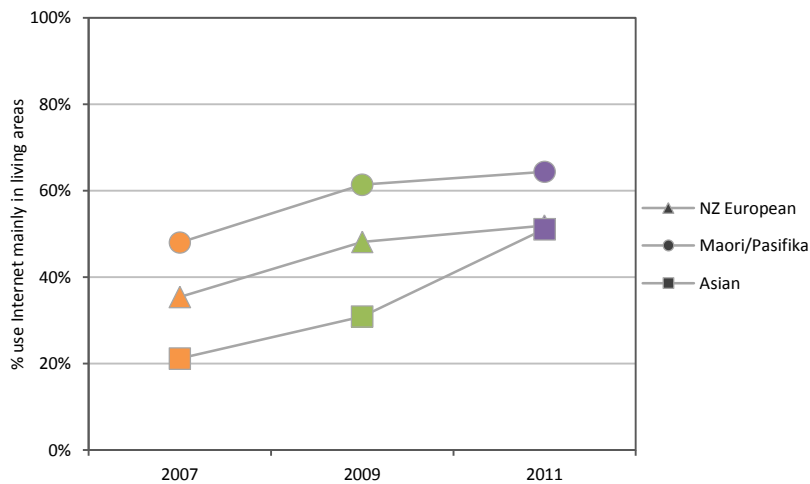


Location in house: Age

The increasing tendency to use the Internet in communal areas of the home is being led by those aged between 20 and 59. The trend also holds for those over 60, though it is less pronounced. Teenagers, on the other hand, show no signs of moving their Internet use into communal living areas.

Over 60% of those aged 20-59 use the Internet in living areas in 2011. People of these age groups were less inclined to use the Internet in communal parts of the house than teenagers in 2007, but now they have overtaken teenagers by over 17%.

Base: Internet users with a connection at home | 20-29: Somer’s d=.202, p<.001; 30-59: Somer’s d=.159, p<.001; 60+: Somer’s d=.062, p=.035



Location in house: Ethnicity

More Māori and Pasifika use the Internet in communal spaces than do other groups, although the increase for Asians is most dramatic.

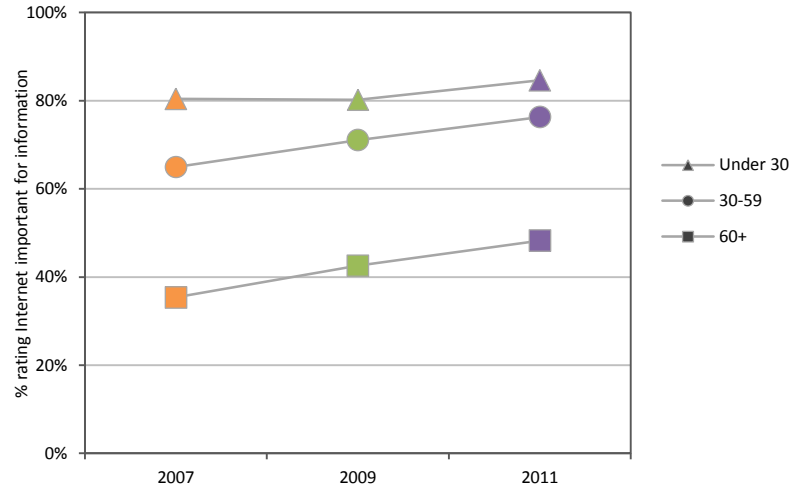
Information Seeking

Importance of information sources

Internet: Age

The younger someone is, the more likely they are to rate the Internet as an important source of information. But the main difference is between those under and those over 60, with far fewer in the oldest group rating the Internet important.

Base: All respondents

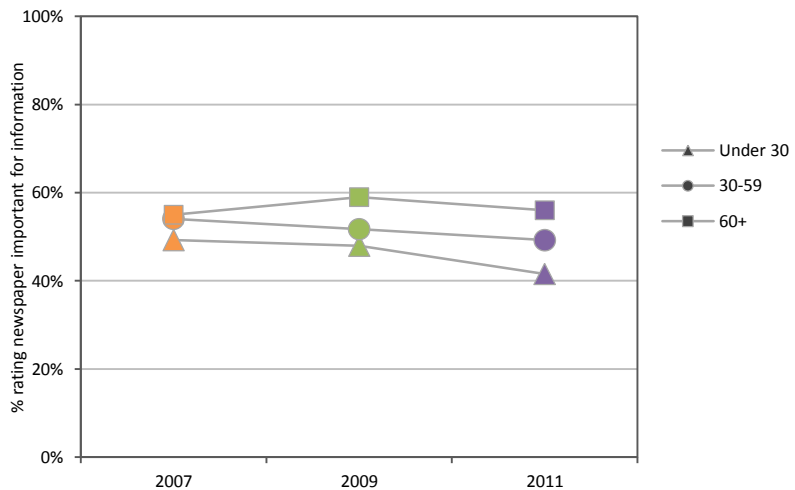


Newspapers: Age

Newspapers are an important source of general information for a larger proportion of those in older age groups than younger age groups. In 2011, newspapers are important to 56% of those aged 60 and over, but to only 42% of those under 30.

Considering changes over time, the importance of print news is in decline for those under 60, but not for the older age group.

Base: All respondents | 30-59: Somer's d=-.063, p=.003 | Note: The decrease for those under 30 does not reach significance due to its smaller sample size

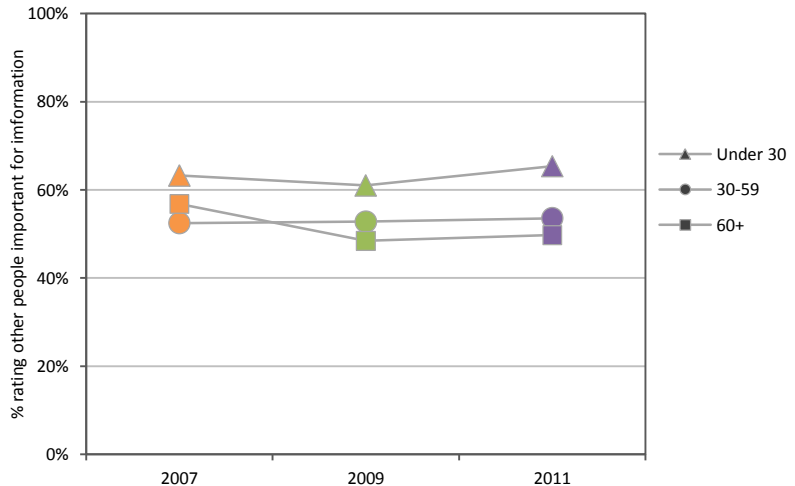


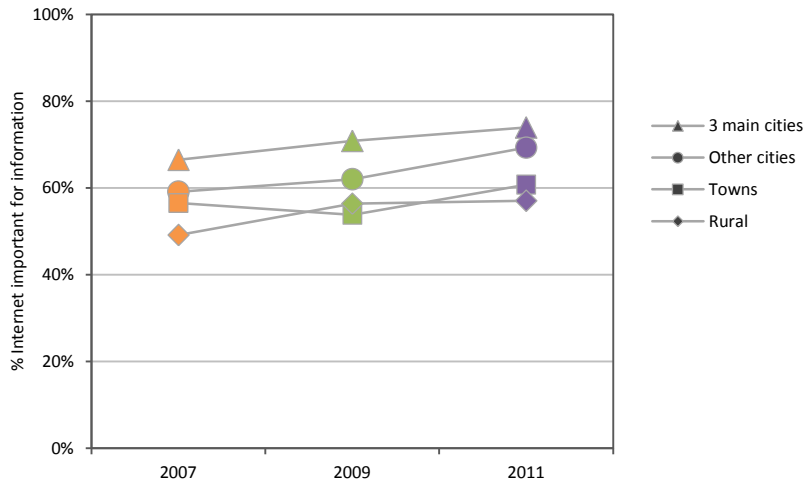
Other people: Age

When it comes to other people, such as family and friends, as a source of information, younger groups give the highest importance ratings. 65% of those under 30 rely on other people for information, compared to 50% of those over 60.

There are no significant trends over time for any of the age groups, though the decrease in importance for those 60 and over approaches significance.

Base: All respondents

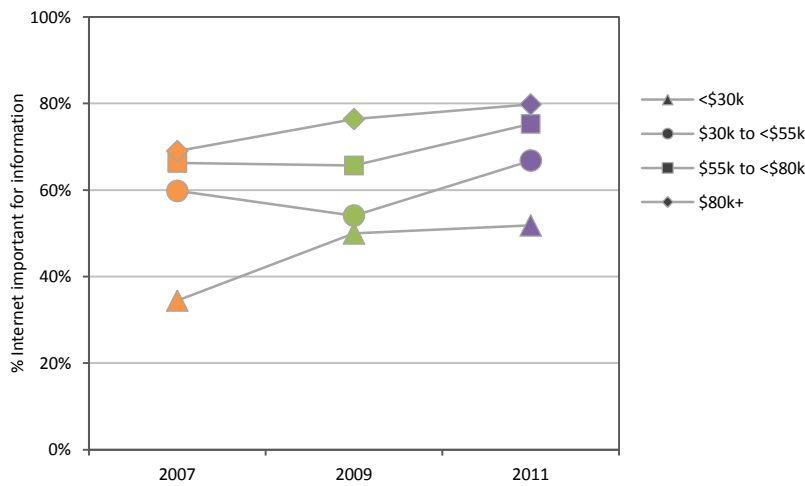




Internet for information: Area

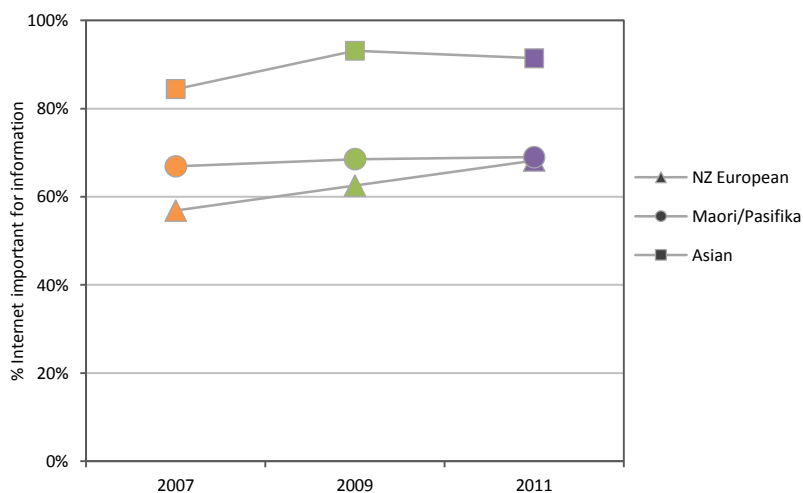
The more urban the area, the more residents rate the Internet as an important source of information.

Base: All respondents



Internet for information: Income

The greater someone’s household income, the more likely they are to rate the Internet as an important source of information. The most notable increase since 2007 is among the lowest income bracket.



Internet for information: Ethnicity

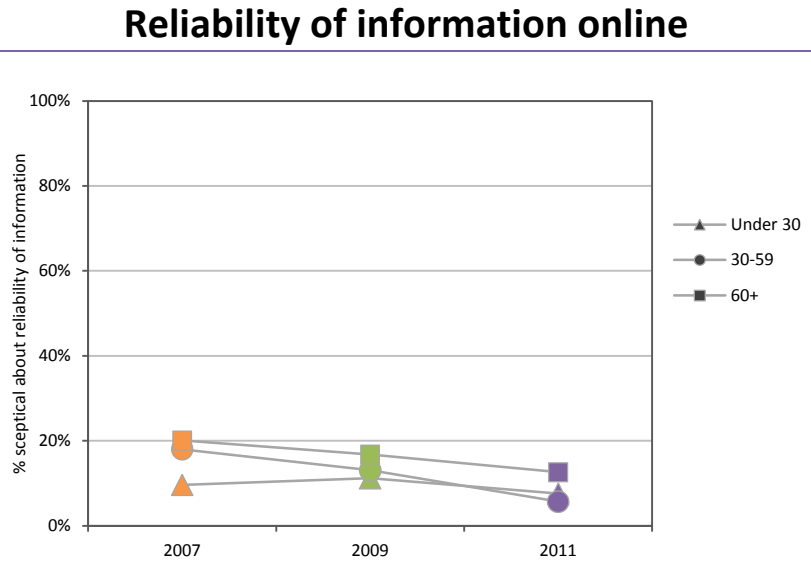
Asian respondents are most likely to rate the Internet as important for information. In 2011, 91% of the Asian respondents said it was important. Much fewer NZ European and Māori/Pasifika respondents rated the Internet as important for information (69% and 68% respectively).

When looking at the under 30, and the 30–59 age groups in their own right for the 2011 data, NZ European respondents rate the Internet more highly than Māori/Pasifika respondents. This distinction is lost in the figure shown here since the NZ European respondents are older on average.

**Reliability of information:
Age**

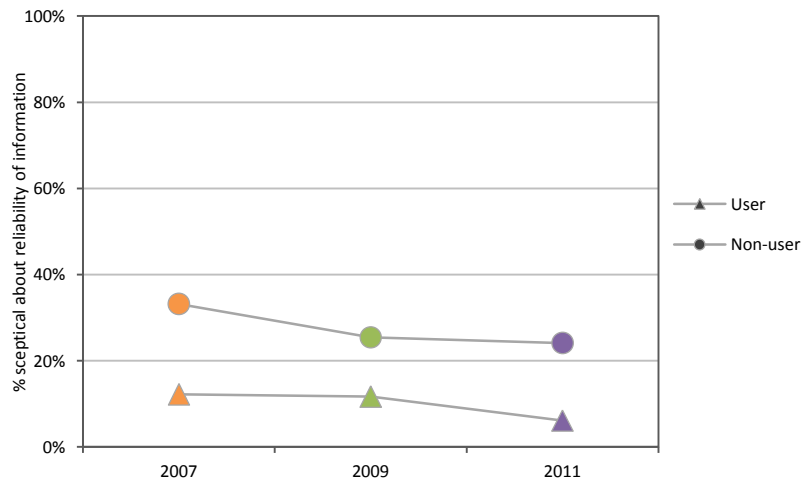
Over time people are becoming less sceptical about the reliability of information on the Internet. While there is a reduction in scepticism, there is less sign of an increase in active confidence in Internet information. For the middle, 30–59 age group, the fall in scepticism is significant, from 18% in 2007 to 6% in 2011.

Base: All respondents | 30–59: Somer's $d=.063$, $p=.003$ | Note: The display shows the percentage of respondents who feel that information found online is unreliable (responses of 1 and 2 on a 5-point scale from 'none of the information online is reliable', to 'all of it is reliable')



**Reliability of information:
User**

Unsurprisingly, users of the Internet are more trusting of the reliability of online information than are those that do not use the Internet. However, scepticism has decreased over time for both groups. In 2007 a third of non-users felt that information on the Web was generally unreliable (rated 1 or 2 on a 5-point scale), dropping to less than a quarter in 2011. As the Internet establishes itself as part of the social fabric, scepticism appears to be less and less of a factor in non-use.

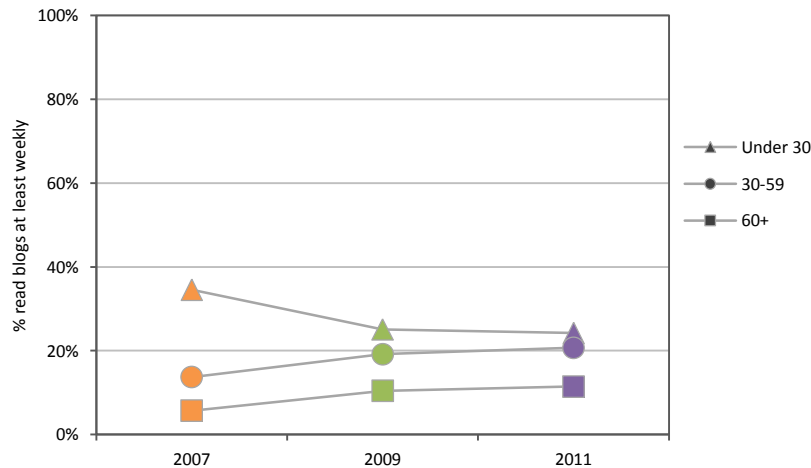


Reading blogs

Read blogs: Age

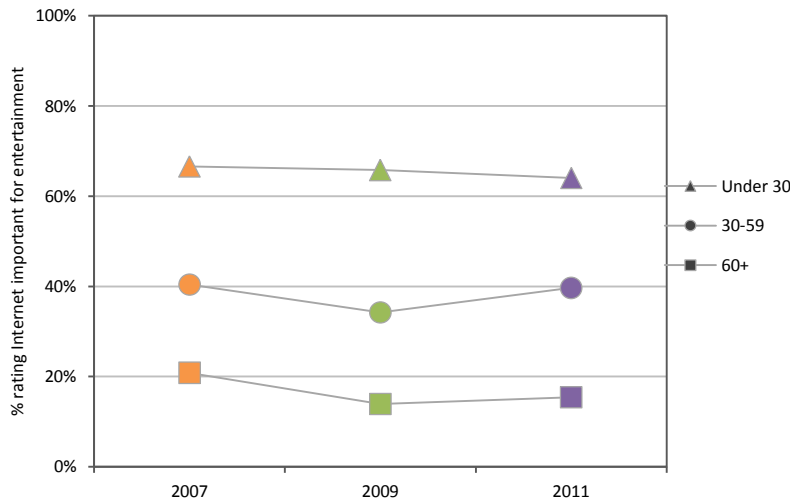
Blogs are becoming popular with more older people but fewer young people.

Base: Internet users



Entertainment and Leisure

Importance of Internet for entertainment

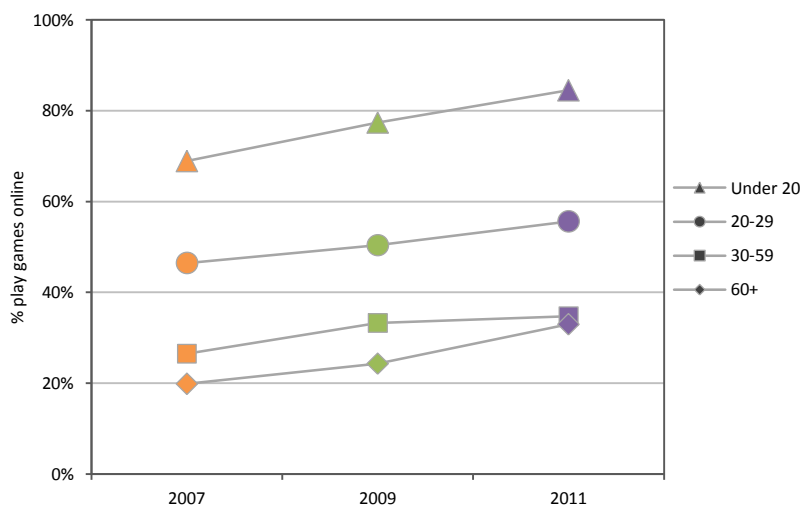


Internet for entertainment: Age

The Internet is much more important as a source of entertainment to those under 30 than it is to older New Zealanders. This has not changed significantly over time.

Base: All respondents

Play games online



Play games online: Age

Playing games online is highly age graded. It is very much more popular with people under 20 than with any other age group. In 2011, 84% of Internet users between 12 and 19 years of age play games online. This compares with 56% for people in their 20s, and about a third of those over 30. Increases in online game playing have occurred across time for all age groups, with under 20s increasing the most, from 69% in 2007 to 84% in 2011.

Base: Internet users | Under 20: Somer's d=.159, p<.001; 20–29: ns; 30–59: Somer's d=.065, p=.001; 60+: Somer's d=.092, p=.001

Relationships and Communication

Social networking: Age

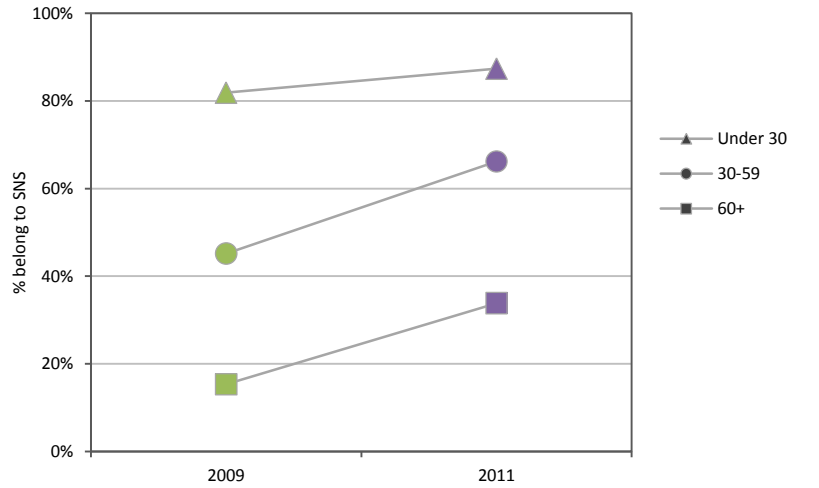
There has been striking growth in the use of social networking sites for the over-30s. Usage in these age groups has risen by about 20% in the two years since 2009.

Social networking sites like Facebook were already very popular in 2009 for Internet users under 30, so the growth to 2011 for this age cohort has been small.

Now 87% of New Zealanders under the age of 30 belong to a social networking site, mainly Facebook.

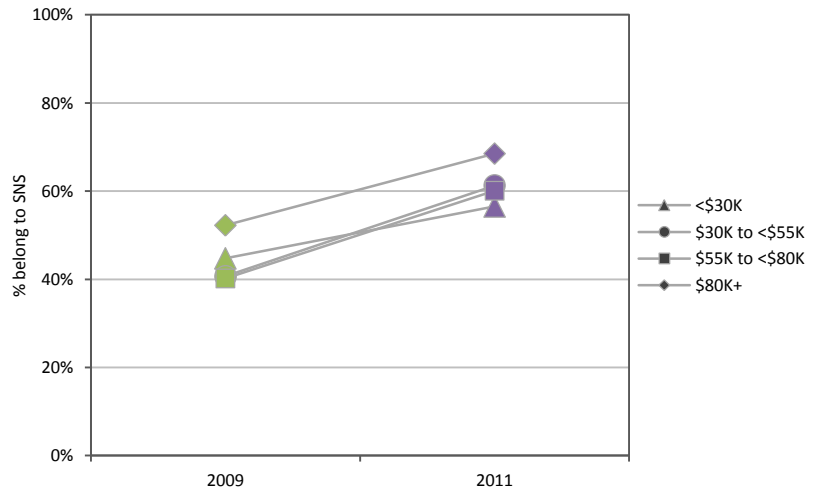
Base: Internet users | Note: This question was not asked in 2007

Social networking



Social networking: Income

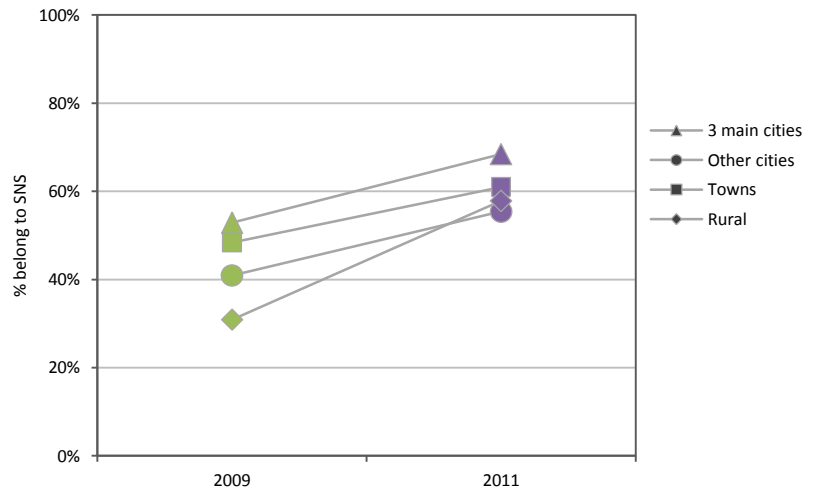
Growth has occurred for all income brackets, with those in households with a combined income of \$80K+ per year having higher rates of SNS membership in both survey years.



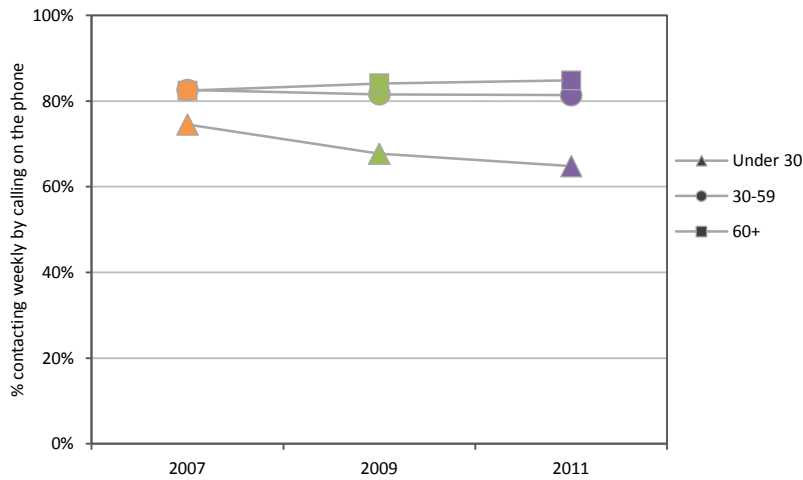
Social networking: Area

As with other Internet behaviours, the three main cities are the most engaged with social networking sites. However, the difference between users in the three main cities and those in rural areas has decreased greatly between 2009 and 2011, from 22% to 10%.

In terms of gender, females are more likely overall to belong to a social networking site.



Methods of contacting family and friends

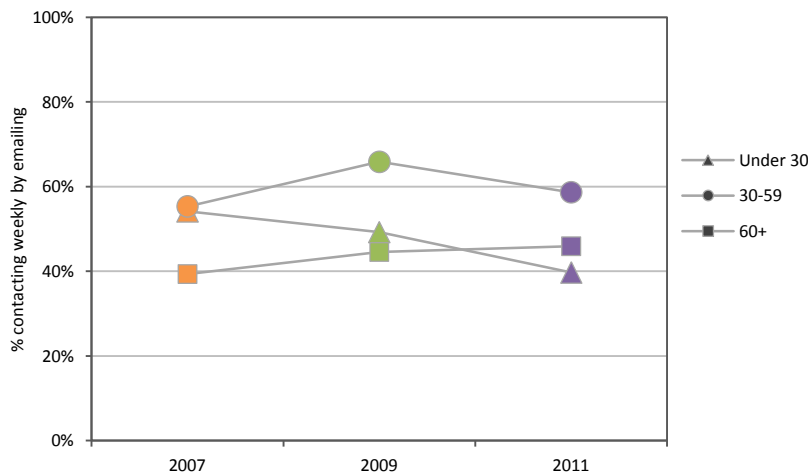


Calling on the phone: Age

There are constant shifts in communication technology usages. People over 30 are much more likely to make contact with friends and family by phone than are people under 30.

The proportion of under-30s making weekly phone calls to contact friends and family has decreased markedly from 2007 to 2011.

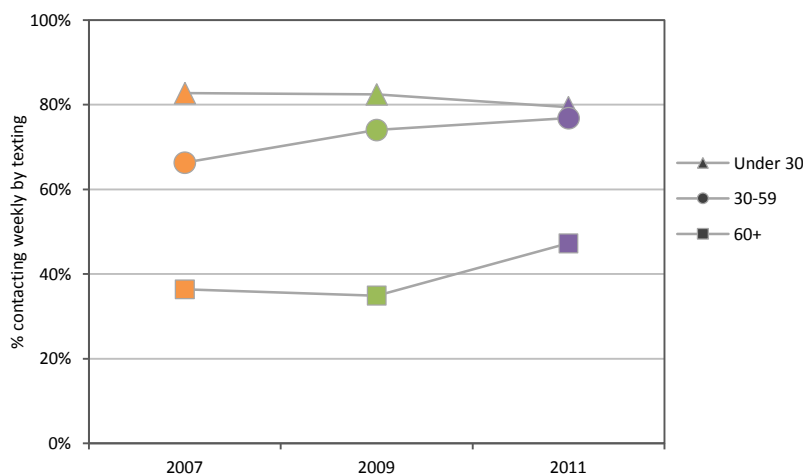
Base: All respondents | Under 30: Somer's $d=-.097$, $p=.001$



Emailing: Age

People under 30 are now the least likely group to contact friends or family weekly by email. The popularity of email for under 30s has decreased significantly over time, from 54% doing this weekly in 2007 to 40% in 2011. Meanwhile emailing continues to increase in popularity for people over 60, who now use it more than the under-30s.

Base: All respondents | Under 30: Somer's $d=-.113$, $p<.001$; 60+: Somer's $d=.065$, $p=.013$



Texting: Age

Out of the methods of communication surveyed, texting remains by far the most common way for under-30s to contact friends and family. This figure shows the percentage of people in each age group that text at least weekly.

While there has been no rise in the frequency with which under-30s text their friends and family, there have been significant increases for the over-30s, although over-60s still text much less often.

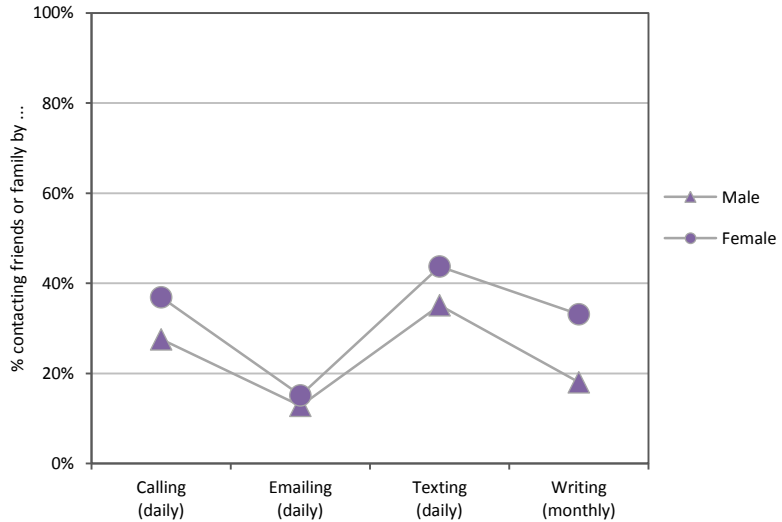
Base: All respondents | 30-59: Somer's $d=.088$, $p<.001$; 60+: Somer's $d=.076$, $p=.004$

Contacting people: Gender

Frequency of contacting friends and family is one of the relatively few variables where a significant gender distinction emerges.

Women engage in contacting friends and family more frequently overall than men. This applies to all methods of mediated communication (including writing a card or letter) except for emailing, which shows no significant gender difference.

Base: All respondents | Somer's d tests based on the data in its original form (6-point frequency scale) are significant for calling, texting and writing, but not for emailing, with females doing these activities more often than males in all cases.



Made friends online

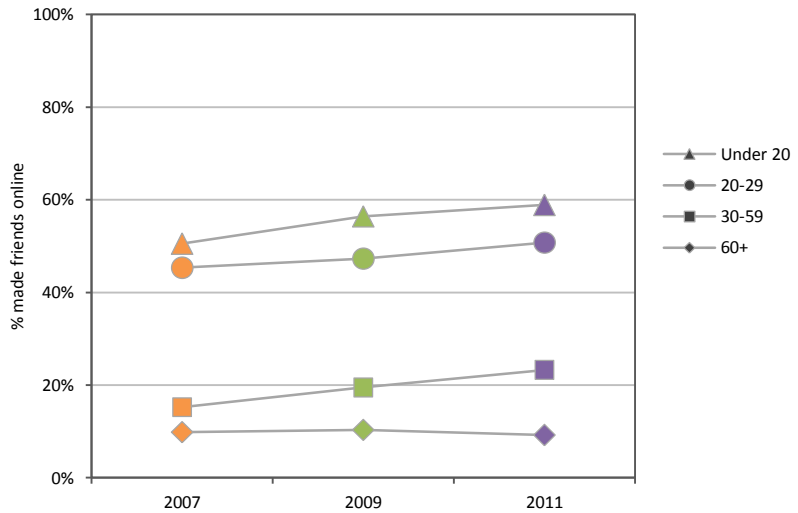
Online friends: Age

The frequency of making friends online is age graded. It is much more common for those under 30.

Almost six out of ten teenage Internet users have made friends online, and a majority of those in their 20s (51%) have done so.

In 2011, among those aged 60 and over, less than one in ten reports having made friends online.

Base: Internet users | 30-59: Somer's d=.54, p=.001

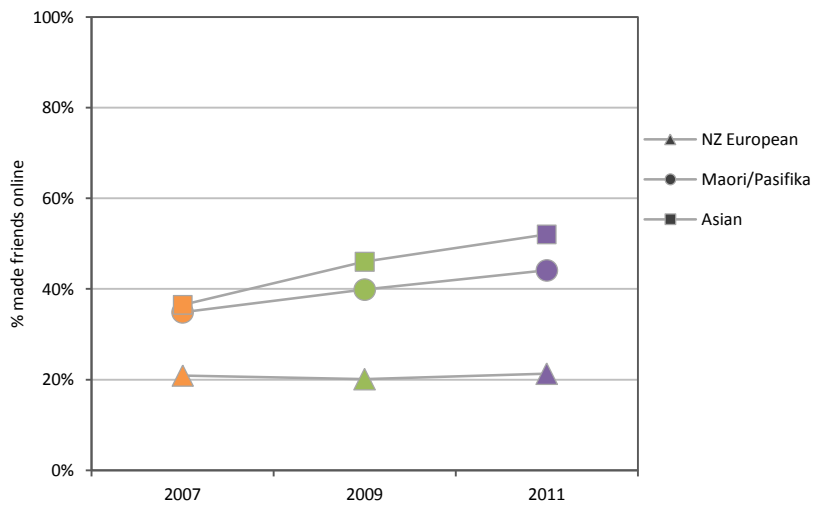


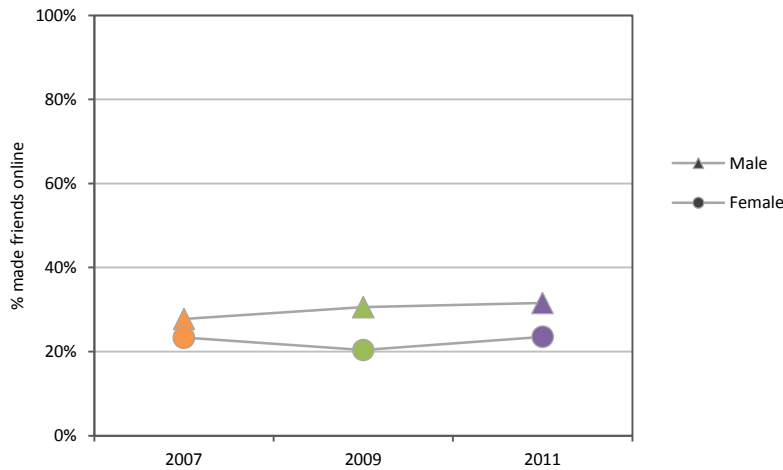
Online friends: Ethnicity

A majority of Asian Internet users have made friends online, 52% in 2011 compared to 37% in 2007. NZ European Internet users, on the other hand, are much less likely to have made friends online (21% in 2011), and have shown no increase over time.

NZ European Internet users are also more likely to go on and meet online friends in person. In 2011, 59% of NZ European respondents that made online friends have then met those friends in person, compared to 45% for the other two ethnicities.

Asian: Somer's d=.107, p<.017





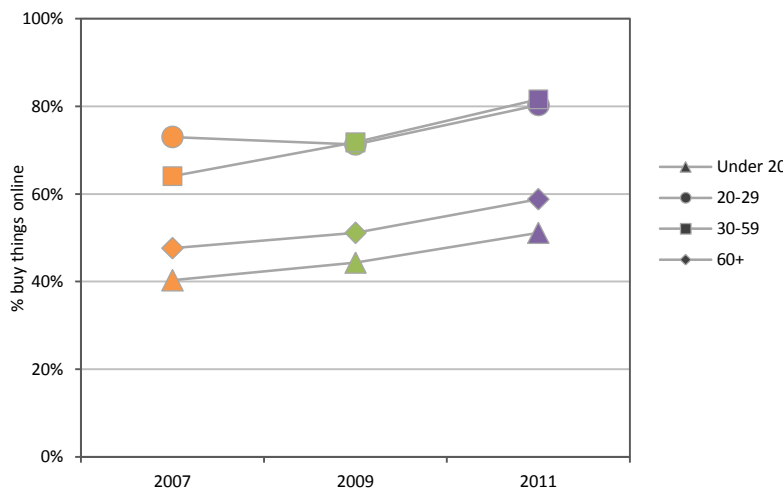
Online friends: Gender

In 2011 significantly more men than women say they have made friends online. Almost a third of all male Internet users have made online friends (32%) compared to 24% for females. The pattern is the same for all age groups.

2011: Pearson chi-square p=.003

Commerce

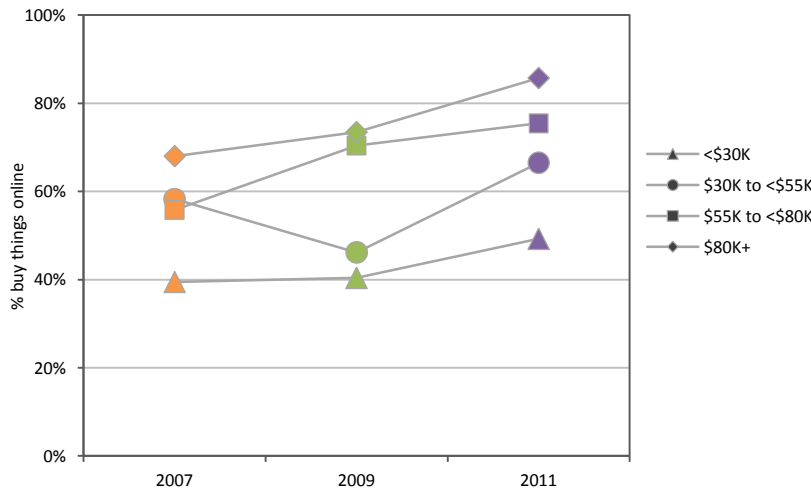
Online consumer transactions



Buy things online: Age

People aged between 20 and 59 do the most online buying. Under-20s are shown separately from those 20–29, because they are much less active in online consumer transactions. People in this age group are less likely to have a credit card. The recent marketing of debit cards that can be used to purchase online may change this, though the growth line for buying things online for those under 20 is similar to that for other age groups.

Base: Internet users | Significant increase over time for all groups. | Note: These figures show the percentage of people doing each activity at least sometimes



Buy things online: Income

The higher a household's income, the more likely someone is to buy something online. 86% of people in households with an income over \$80,000 now buy things online at least occasionally.

The top two income brackets have increased online purchasing significantly over time, leading to a larger gap between the highest and lowest income households in 2011 than 2007.

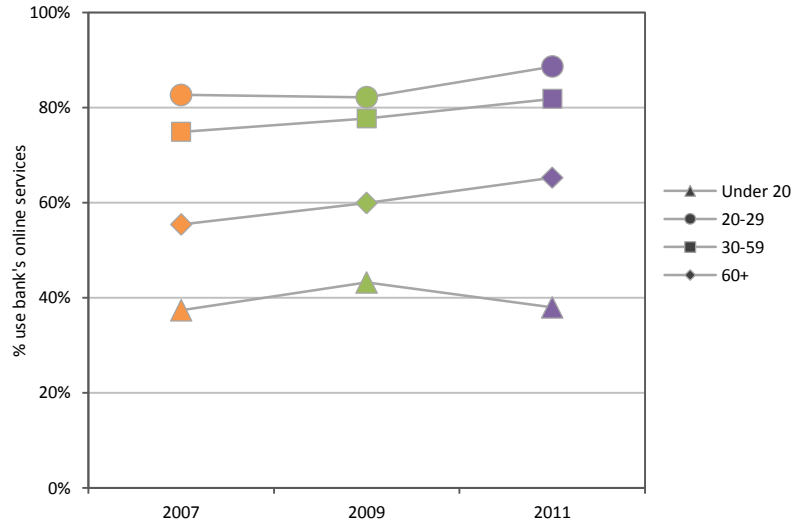
\$55K to < \$80K: Somer's d=.133, p<.001; \$80K+: Somer's d=.127, p<.001 | Note: Somer's d tests are based on the frequency scale as a whole

Online banking: Age

Those aged between 20 and 59 are much more likely to do online banking than those over 60 (65% in 2011) and under 20 (38%).

In 2011, almost nine out of ten (89%) Internet users in their 20s say they do online banking.

Base: Internet users | Significant increase for 30-59, near significant increase for 60+

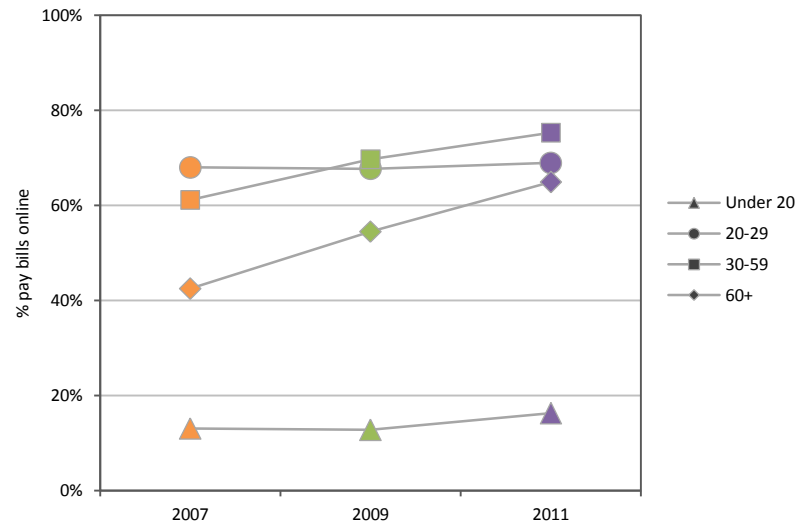


Pay bills online: Age

Those under 20 are less likely to have bills to pay bills, and few do so online (16% in 2011). But this is common for all other age groups.

There has been a massive increase in the proportion of people aged 60 and over that pay their bills online, from 42% in 2007 to 65% in 2011.

Base: Internet users | Pay bills: significant increase over time for 30-59 and 60+

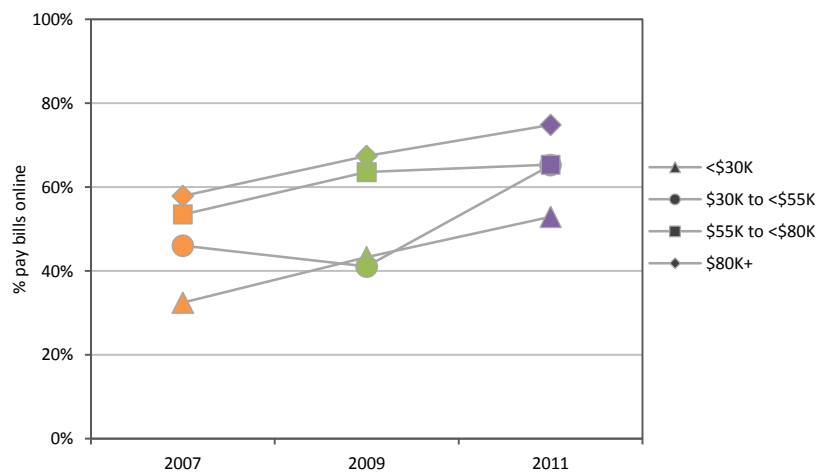


Pay bills online: Income

People in households with more income are more likely to pay their bills online at least occasionally.

Significant increases in online bill paying over time have occurred for all income brackets. The highest income group increased from 58% paying bills online in 2007, to three quarters in 2011. The lowest income group increased even more, from 32% to 53%.

<\$30K: Somer's d=.158, p<.001;
 \$30K to <\$55K: Somer's d=.136, p=.001;
 \$55K to <\$80K: Somer's d=.076, p=.024;
 \$80K+: Somer's d=.127, p<.001
 | Note: Somer's d tests are based on the frequency scale as a whole



Appendix

Methodology

Sample design

The design aimed at achieving a representative sample of around 1250 people, aged 12 and up, across New Zealand. The sample design involved the following strata:

1. Recontact of those in the 2009 sample who had answered that they were prepared to consider answering a further wave of the WIP study.
2. A fresh sample drawn to provide adequate coverage of the remainder of the population;
 - a. Fresh simple random sample.
 - b. Three further simple random targeted booster samples within meshblocks known to have:
 - i. >30% Maori people;
 - ii. >30% Pasifika people;
 - iii. >30% Asian people.

The sampling frames for both the fresh simple random sample and the three targeted booster samples were calculated by using 2006 census data on the number of households with access to a telephone (using a database of phone numbers purchased from Yellow Ltd.). This sampling strategy incorporates over-sampling of Maori, Pasifika and Asian people (often under-represented populations) to ensure adequate numbers of respondents in these cells.

Representative coverage of geographic areas and gender was ensured by the setting of quota based on census data.

Exclusions: those without landlines; non-English speakers; those refusing.

Achieved sample and weighting

The achieved sample for the 2011 survey was 1255.

The database was weighted to correct for departures from 2006 Statistics New Zealand census proportions on several important parameters: household size; age (group); gender; and ethnicity. The sum of all the weights was scaled to match the sample size of 1255. For weighting purposes, ethnicity was coded in such a way as to match census data, which allows for multiple ethnicities to be reported by an individual.

The sample is slightly older than the New Zealand population as reported by Statistics New Zealand in the 2006 census. This was mitigated through sample weighting, but the weighted sample is still not representative in terms of age (see Table 1). Since younger people tend to be more strongly engaged in Internet activities, the figures reported for Internet usage and related activities may be slightly lower than the true population mean. It should be noted that the 2009 WIPNZ sample had a similar bias, with a slightly older average age than the NZ population as a whole. The 2007 sample, however, was more representative in terms of age. This means that the true population differences between 2007 and subsequent years may be greater than those reported here. The weighted sample in 2011 is well aligned with census proportions in terms of the other three weighting demographics (gender, ethnicity and household size). The only departure of note is that one and two person households are slightly under-represented, and three to five person households are slightly over-represented.

Table 1. Comparison of age distribution of weighted WIPNZ 2011 sample and 2006 NZ census

Age group	WIPNZ 2011 % (weighted)	2006 census %
12–19	10.6	14.5
20–29	10.9	15.4
30–39	14.7	17.3
40–49	15.7	18.2
50–59	17.1	14.5
60–69	16.0	9.8
70–79	10.0	6.5
80+	4.8	3.9

Response rates

The overall sample comprises about half recontact, one quarter fresh and then under 10% each for the three target samples. The response-rate for recontacts was 71%, and 17–21% for the other samples. The samples targeting Pasifika and Asian respondents had the highest proportion of calls where a language barrier meant the interview could not be conducted, at around 5% each. The response data presented below excludes those calls still in process ('not resolved') at the time the sample was completed.

Table 2. Strata details

Strata	Total completed (n)	Share of sample (%)	Resolved (n)	Valid (n)	Valid (%)	Response-rate (%)	Refused (%)	Soft callback (%)	No contact (%)	Language barrier (%)
Fresh	348	27.7	1937	1684	86.9	20.7	28.7	9.6	39.8	1.3
Recontact	596	47.5	1006	843	83.8	70.7	8.3	6.8	14.1	0.1
Target 1: Māori	104	8.3	949	542	57.1	19.2	26.8	3.3	48.5	2.2
Target 2: Pasifika	105	8.4	964	548	56.9	19.2	15.9	6.6	53.3	5.1
Target 3: Asian	102	8.1	1089	600	55.1	17.0	34.2	12.3	31.5	5.0
Total	1255	100	5945	4217	70.9	29.8	23.5	8.2	36.6	2.2

Statistical procedures

The primary means of determining the significance of differences over time, or between demographic categories, was through the use of Somer's d tests for ordinal data and Pearson chi-square tests for nominal data. The Pearson chi-square test is a non-parametric test for tables of counts, where a significant result means that the distribution of counts is different across the three years, or across the categories of a certain demographic in a single year. All of the tests are two-sided, meaning that no pre-judgment is made about the directionality of differences. Somer's d is used to test relationships between two ordinal variables. The value of the Somer's d statistic gives a sense of the degree and direction of change over time, while the p value gives a sense of the strength and validity of the result. Smaller p values mean that the relationship is unlikely to be caused by sampling error. For ordinal data where Somer's d tests were applied, the Somer's d coefficient represents the overall change using the original Likert scale response data, while the graphs display the data in a more simplified form.

As the 2011 sample includes both returning respondents and a fresh sample, there are certain difficulties in comparing the data from the 2007, 2009 and 2011 surveys. In this report, the statistical tests have been conducted based on the assumption that the three waves are independent. The ideal approach would be to calculate the statistics separately for the panel sample and for the 'top-up' sample. In future years, changes in the panel of returning respondents will be examined in more detail.

Confidence intervals

The precision of estimated weighted proportions can be assessed using indicative confidence intervals. For all respondents (n=1255), 95% confidence intervals varied from approximately $\pm 1.8\%$ on small percentages (under 30%) to around 2.0% on larger percentages (in the 30–70% range). For the users subset (n=1082), 95% confidence intervals varied from approximately $\pm 3.2\%$ on small percentages (under 30%) to around 3.7% on larger percentages (in the 30–70% range). In Section 3, where cross-tabulation of results by demographics leads to small numbers of respondents in each reported cell, the confidence intervals increase substantially. When reporting 2011 results in terms of three age categories, for example, the confidence intervals are around $\pm 6\%$ for under-30s (n=267) and $\pm 4\%$ for the 30–59 (n=591) and 60+ (n=384) groups. The sub-sample sizes for various demographics are given below.

The SPSS 'Complex Samples' add-on module was used to calculate the confidence intervals, taking adult-child pairs as clusters and accounting for the inclusion probabilities of the three booster samples. This increases the reported confidence intervals in order to make up for any extra sampling error caused by the complexity of the sample. Note that this process affects confidence intervals, but does not change the estimates of the results themselves. The probabilities of selection used for the three booster samples were the same as those used in 2009. See the 2009 report (at <http://wip.aut.ac.nz>) for details of how these were calculated.

Weighted sample sizes according to survey year and demographics

Table 3. Weighted sample size according to survey year and user status

User status	Survey year			Total
	2007	2009	2011	
User	1213	1034	1082	3329
Never-user	222	140	123	485
Ex-user	94	76	50	220
Total	1529	1250	1255	4034

Table 4. Weighted sample size according to survey year and age

Age	Survey year			Total
	2007	2009	2011	
12–19	207	130	132	469
20–29	250	142	135	527
30–39	131	185	183	499
40–49	265	201	195	661
50–59	253	222	213	688
60–69	201	185	199	585
70+	205	174	185	564
Total	1512	1239	1242	3993

Table 5. Weighted sample size according to survey year and ethnicity

Ethnicity	Survey year			Total
	2007	2009	2011	
NZ European/Pākehā	888	788	790	2466
Māori	194	138	120	452
Pacific Islander	89	60	68	217
Asian	138	103	107	348
Other	204	135	141	480
Total	1513	1224	1226	3963

Table 6. Weighted sample size according to survey year and area

Area	Survey year			Total
	2007	2009	2011	
3 main cities	826	668	674	2168
Other cities	330	292	279	901
Towns (secondary/ minor urban areas)	196	173	181	550
Rural centres and rural areas	176	117	122	415
Total	1528	1250	1256	4034

Table 7. Weighted sample size according to survey year and combined household income

Income	Survey year			Total
	2007	2009	2011	
<\$30k	211	178	223	612
\$30k to <\$55k	208	160	238	606
\$55k to <\$80k	330	244	235	809
\$80k to <\$115k	330	250	193	773
\$115k+	265	241	193	699
Total	1344	1073	1082	3499

Note: The categories for household income were adjusted in the 2011 survey. The categories listed on figures in Section 3 of the report are those used in 2011. In 2007 and 2009, the categories were: <\$25K, \$25K to <\$40K, \$40K to <\$65K, \$65K+. The figures therefore compare, for example, those with a household income of \$65,000 or more per year in 2007 and 2009 with those that had a household income of \$80,000 per year or more in 2011. Where income has a positive relationship with a variable, the difference between previous years and 2011 may therefore be artificially inflated.