World Internet Project
New Zealand
Internet in New Zealand in
2017





World Internet Project New Zealand.

Report 6: The Internet in New Zealand 2017.

Associate Professor Angsana Techatassanasoontorn, Project Co-director

New Zealand Work Research Institute, Auckland University of Technology

Associate Professor Antonio Díaz Andrade, Project Co-director

New Zealand Work Research Institute, Auckland University of Technology

Dr Mary Hedges, Report writer

New Zealand Work Research Institute, Auckland University of Technology

Dr Hadi Karimikia, Data analyst

New Zealand Work Research Institute, Auckland University of Technology

24 May 2018

| Suggested citation: |
|---|
| Díaz Andrade, A., Hedges, M.R., Karimikia, H. & Techatassanasoontorn, A. (2018). <i>World Internet Project: The Internet in New Zealand 2017</i> . New Zealand Work Research Institute, Auckland. |
| |
| |
| |
| |
| |
| |
| |
| |
| © New Zealand Work Research Institute |
| |
| |
| |
| |
| |
| |
| Contact details: Associate Professor Antonio Díaz Andrade Co-director |
| World Internet Project New Zealand PO Box 92019 |
| Auckland 1743 Phone +64 9 921 9999 |
| Further information on the World Internet Project New Zealand is available at https://workresearch.aut.ac.nz/current-research/surveys/world-internet-project-nz |

Acknowledgements

The team at New Zealand Work Research Institute are grateful for the support received from the team at Institute for Culture, Discourse and Communication. This was a major new project for NZWRI and their encouragement and tips on how to complete this project were important to the success of this project.

We also thank InternetNZ, Ministry of Business, Innovation and Employment and Auckland Council for their financial assistance to run this survey. Without this assistance, the 2017 edition of this study could not have been undertaken. We also thank them for the input into the NZ parts of the questionnaire to ensure we captured material on the digital divide, disabilities and attitudes toward both local and central government. These questions did enrich the information gained through the survey and aid the policy relevancy of the results.

Foreword

This is the sixth edition of the World Internet Project – New Zealand. Our colleagues from the Institute of Culture, Discourse and Communication at Auckland University of Technology (AUT) have done an impeccable job since they ran the first survey in 2007 until the fifth one in 2015. They built the solid foundations for us, at AUT's New Zealand Work Research Institute, to continue with the national version of this global initiative that analyses trends on internet access in New Zealand, how New Zealanders use the internet and their attitudes toward it.

Why is it important to understand the presence, activities and perceptions of New Zealanders in the online space? It is an inescapable reality that many human actions take place via digital networks. Transacting goods and services, participating in learning endeavours, consuming information, interacting with family, friends and a wide network of contacts, playing games and expressing political views are just a few examples of what the internet affords. It is interesting to observe that the default option for completing the *2018 Census* was online; the paper-based form was available on request.

Moreover, the internet supports the power of digital networks that shape our understanding of the world. The speed of the internet made possible the almost immediate distribution of more than 11 million leaked documents known as the *Panama Papers*, while social media provided the platform where the 2016 election in the United States was fiercely contested. On a less consequential yet equally revealing instance of the power of the internet for defining cultural trends at a global scale, the video of the Latin song *Despacito* surpassed five billion views on YouTube in just a few months – it is a paradox that the word 'despacito' can be loosely translated as 'slowly'.

Since New Zealand society praises individual freedom, celebrates creativity, honours its cultural traditions and projects these values to the world through different commercial, political and cultural fora, it needs to know what the internet affords and understand its implications. We hope this biennial report contributes to this understanding.

Antonio Díaz Andrade Angsana Techatassanasoontorn World Internet Project – New Zealand, Co-directors

Table of Contents

| Ack | nowled | gements | ٠i٧ |
|------|----------|--|-----|
| Fore | eword | | V |
| List | of Tabl | es | vii |
| List | of Figu | res | vii |
| 1. | World | Internet Project New Zealand | . 1 |
| | 1.1. | World Internet Project | . 1 |
| | 1.2. | World Internet Project New Zealand 2017 survey | . 1 |
| | 1.3. | The sample | . 2 |
| | | 1.3.1. Sampling framework | . 2 |
| | 1.4. | Focus questions of 2017 report | . 3 |
| | 1.5. | Summary of key findings | . 3 |
| 2. | Usage | behaviours | . 5 |
| | 2.1. | User type | . 5 |
| | | 2.1.1. Non-users | . 6 |
| | | 2.1.2. All users | . 8 |
| | | 2.1.3. Location | . 8 |
| | 2.2. | Connectivity and devices | |
| | | 2.2.1. Device choice | |
| | | 2.2.2. Connectivity | 10 |
| | 2.2. | Internet literacy | 13 |
| | 2.3. | Activity range and frequency | 15 |
| | | 2.3.1. Communication | 15 |
| | | 2.3.2. Source of information | 16 |
| | | 2.3.3. Entertainment | 18 |
| | | 2.3.4. Transactions | 19 |
| | | 2.3.5. Learning | 21 |
| | | 2.3.6. Overall activity assistance | 21 |
| 3. | Privacy | and security | |
| | 3.1. | Opinions on internet privacy | 24 |
| | | 3.2.1. Negative experiences | 25 |
| 4. | Civic e | ngagement | 29 |
| | 4.1. | Political interactions | 29 |
| | 4.2. | Reliability of information on the internet | 30 |
| | | 4.2.1. Ability to discern reliability | 31 |
| | 4.3. | Freedom of speech | |
| 5. | Living | with disabilities | 34 |
| | 5.1. | Help and assistance | 34 |
| | 5.2. | The internet and lifestyle | |
| 6. | Future | directions | 37 |
| | | | |
| App | endix: 2 | 2017 WIPNZ questionnaire | 39 |

List of Tables

| Table 1: Disability types and frequency | 34 |
|--|----|
| Table 2: Type of assistance required | |
| | |
| List of Figures | |
| Figure 1: User types | 5 |
| Figure 2: Reasons why the internet is not used | 7 |
| Figure 3: What would enable me to use the internet | 7 |
| Figure 4: Connection density by region | 9 |
| Figure 5: Device usage | |
| Figure 6: Multiple access methods | |
| Figure 7: Urban-Rural difference in access methods | 11 |
| Figure 8: Urban-Rural difference in home connection types | |
| Figure 9: Internet literacy | |
| Figure 10: Internet literacy of those who only access via computer | |
| Figure 11: Internet literacy of those who only access via smartphone | |
| Figure 12: Frequency of use for communication | |
| Figure 13: Frequency of use for information | |
| Figure 14: Frequency of use for government interaction | |
| Figure 15: Frequency of use for entertainment types | |
| Figure 16: Frequency of use for specific types of site | |
| Figure 17: Frequency of use for transactions | |
| Figure 18: Frequency of use for learning | |
| Figure 19: Preferred changes in usage frequency | |
| Figure 20: Assistance required to use the internet more | |
| Figure 21: Attitudes to online privacy | |
| Figure 22: Concerns about online privacy | |
| Figure 23: Negative experiences online | |
| Figure 24: Impact of privacy violations | |
| Figure 25: Consequences of privacy violations | |
| Figure 26: Impact of minor privacy breaches | |
| Figure 27: Political interactions | |
| Figure 28: Central versus local government | |
| Figure 29: Internet information reliability | 31 |
| Figure 30: Ability to discern the reliability of information | |
| Figure 31: Freedom of speech on the internet | |
| Figure 32: Access to help needed to use the internet | |
| Figure 33: Internet impact on lifestyle | |
| | |

1. World Internet Project New Zealand

1.1. World Internet Project

Since 2000, working with partner countries worldwide, the Center for the Digital Future (at University of Southern California, Annenberg School for Communication and Journalism) has conducted the world's largest and longest-running longitudinal study on internet use and digital adoption.

This has created a growing body of data and insights about the impact of the internet on users and non-users – behaviour that supports the needs of corporate and public agency leaders to understand the impact of the internet and stay ahead of the changes that online technology is bringing worldwide.

The World Internet Project operates through the Center for the Digital Future in collaboration with partners in 39 countries. Studies explore the evolution of communication technology through findings on more than 80 subject areas in broad categories that include:

- Internet users and non-users
- Information-seeking online
- Access to online services
- Politics and the internet
- Online media use
- Media reliability and importance
- · User-generated content and social media
- Online entertainment
- Online purchasing
- Personal privacy
- Online communication
- Credit card security
- Offline media use
- Blogs
- The internet and education

The study focuses on the social impact of the internet on users rather than technical uptake rates. In this way, it explores ideas of attitudes towards the use of the internet, privacy and security issues, freedom of speech and social interactions. Each survey includes common questions agreed to by all of the international partners. Individual countries then often include some specific questions of interest to them. This combination has allowed for international comparisons in attitude, usage and perceived control to be made. New Zealand is one of the partner countries.

1.2. World Internet Project New Zealand 2017 survey

The sixth World Internet Project New Zealand (WIPNZ) survey continues the biennial analysis of New Zealanders' usage of, and attitudes towards the internet. It follows on from the surveys undertaken in 2007, 2009, 2011, 2013 and 2015. In 2017, WIPNZ moved from the Institute of Culture, Discourse and Communication (ICDC) at Auckland University of Technology (AUT) to the New Zealand Work Research Institute (NZWRI), also at AUT.

In this report, we present top-level analysis of data from the survey carried out between September and December 2017. Surveying was completed using a combination of landline and mobile telephone interviews and online interviews to ensure the widest possible coverage of the sample. Details of the sample are provided in Section 1.3. Comparative findings with our earlier surveys will be presented in a later report.

This report is divided into six sections:

- Section 1: Describes the background to the study, sample information and specific areas of interest included in the 2017 survey and key results.
- Section 2: Provides a description of the user categories (consistent with previous reports) and summaries of the usage behaviour of respondents. This is broken down into the different types of usage.
- Section 3: Describes the respondents' attitudes toward privacy and security on the internet.
- Section 4: Provides an overview of how the internet in New Zealand impacts on civic engagement and respondent's attitudes toward political engagement and freedom of speech.
- Section 5: Provides an overview of the impact of the internet on those living with disabilities.
- Section 6: Presents suggestions for future directions.

1.3. The sample

The data used in this report is based on computer-assisted telephone interviews (CATI) and online surveys carried out on our behalf by Infield International Limited.

1.3.1. Sampling framework

In contrast to previous surveys in WIPNZ, this does not include re-contacts from previous rounds of WIPNZ, as that group had become too small (<200) to enable meaningful data analysis. Instead, the sample size was increased to a total of 2,012 respondents, which allows further analysis to be undertaken for sub-groups of interest.

These respondents were drawn from two sampling frames. CATI interviews (n=1,004) were drawn from: 60% landline random digit dialling (RDD) supplied by Infield International; 20% published (white pages) landline listings. In both cases, the required respondent would be the person in household 16 years and over who has the next birthday.

The final 20% of the sample was drawn from a mobile phone RDD supplied by Infield international. This includes 25% of these mobile numbers (5% of those approached) being for people nationwide known to be under the age of 40 years. For this recruitment group, the required respondent was the person who answered the phone who was 16 years of age or older.

Consistent with both the 2013 and 2015 WIPNZ surveys, the current survey includes participants from an online panel. The online participants (n=1,008) were drawn from an online panel database that has 143,000 active members. They are a well-established and major online sample provider in the New Zealand market with a slight skew in the panel towards younger people.

1.4. Focus questions of 2017 report

The 2017 survey included the commonly agreed to questions from the international partners. Within those questions, there was a focus on political interactions and freedom of speech on the internet. In collaboration with our funding partners, WIPNZ elected to split out some of the government interaction questions into local government and central government. This split still allows the results to be aggregated for our international reporting but provides a deeper level of information for domestic use.

Within the questions added specifically for New Zealand, the focus was on the potential for the identification of a digital divide, in either access or usage. Of special interest was the role the internet plays in mediating social and business interactions for those with disabilities and the impact this has on their quality of life.

In order to keep the survey to a length that would ensure a high level of participation and completion, there were some specialised screening questions so only those for whom the next questions applied needed to answer them. This means that not all results reported will apply to the entire sample. The restrictions on responses and numbers relevant to each question will be specified.

1.5. Summary of key findings

Some of the key findings from the 2017 survey are listed below.

New Zealand has an extremely high level of connectivity

Consistent with previous WIPNZ surveys, a connectivity rate of well over 90 percent was found. There was a slight increase in the number of those connected but the change was more evident in the 25 percent decrease of those not connected from 8 percent down to 6 percent.

Frequency and range of online activity is high

There was a very high level of online activity participation and that was reflected in the fall in low-level users since the 2015 survey. The frequency, range of activities and the number of devices people used to access the internet have all increased.

People are comfortable with their own control of privacy

The majority of respondents were comfortable with their own privacy settings and their ability to control them. This survey was completed prior to the Facebook-Cambridge Analytica scandal and must be read in that context. However, even in their responses there were clear concerns about other individuals, corporates or governments attempting to breach their privacy. Their government concerns were more focused around foreign governments rather than the New Zealand government, either local or central.

People are comfortable with the level of freedom of speech and political expression

Consistent with the lower level of concern around the New Zealand government impinging on their privacy, there was also very little concern about government interference or the need for any greater control on the internet by the government. There was a clear pattern that most people valued the freedom of speech aspects of the internet and felt it was important.

Internet improves quality of life for those living with disabilities

For those that identified having any degree of disability or impairment according the Washington Group short questions, the impact of the internet was overwhelmingly positive and unrelated to the degree of difficulty faced.

2. Usage behaviours

A key focus of the 2017 survey was to identify the respondents' internet literacy and the types of online activity they participated in. This data enabled the categorisation of respondents into five user groups consistent with previous years. For non-users some description was provided of why they are non-users and/or what it would require for them to become users. For users, the focus was on their connectivity in terms of device and access.

For users, the survey then went on to identify their usage behaviour through the types and frequency of activities they participated in through the internet. The types of activity were grouped into the five categories of: communication; information seeking; entertainment; transactions and learning. A key influence on people's willingness to participate in these activities is their attitude toward privacy and security on the internet and their ability to manage these to their own satisfaction. These issues are reported on in the rest of this section.

2.1. User type

An important longitudinal aspect of this project is quantifying connectivity changes over time. The 2017 survey shows a slight increase in user rate to almost 94 percent (93.8%)¹. While this appears to be only a slight increase, it does represent an almost 25 percent drop in the non-users from 8 percent in 2015 to 6 percent in 2017 (never user and ex-user).

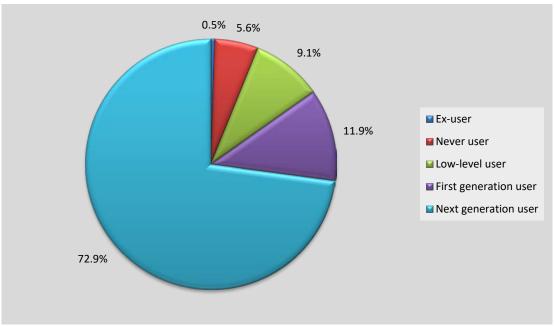


Figure 1: User types

¹ Given the composition of the sample, this percentage deserves an explanation. As expected, all participants from the online panel, which represents 50 percent of the sample (see Section 1.3.1), reported to be internet users. For the remaining participants who were contacted over the phone, 11 percent reported not to be internet users. However, a closer examination of their open-ended comments reveals that a few of them are in fact internet users. For instance, one participant who declares to be a non-internet user explained "I only [do] Facebook", which makes this person an internet user. In addition, some other participants self-reported as non-internet users do indirectly use the internet through other household members.

For all users, a usage index was calculated as an average of their usage frequencies across 29 online activities. A scale ranging from 0 to 5 was created; 0 equals 'never' in all usage questions, and 5 equals 'several times a day' on all questions. This resulted in the following internet user categories:

Low Level Users (LLUs) includes all current internet users with usage indices of less than 1. For those with a usage index of equal to or greater than 1, further criteria were applied to determine whether they were a next generation user.

Next Generation Users (NGUs) are those who accessed the internet (either currently or in the past), through phones and/or tablets or e-readers (i.e. rated 2 to 6 under phone and/or tablet or e-reader) who also:

- Have broadband or mobile connection at home;
- Rated their ability a 3, 4 or 5 out of 5 in the range of tasks covered in the internet literacy question

First Generation Users (FGUs) were then determined as current internet users who are neither next generation users nor low level users.

The percentage of low-level users is 9 percent, which is slightly lower than the 11 percent reported in the 2015 survey. In the 2017 survey, the percentage of first generation users is close to 12 percent while the percentage of next generation users is close to 73 percent compared with 9 percent and 71 percent in the 2015 survey, respectively.

2.1.1. **Non-users**

For those who identified as non-users, there was a strong age-based gradient. For all age groups younger than 65, usage levels were greater than 97 percent meaning very low levels of non-users. However, in the 65-74 age group the percentage of non-users increased markedly to 10 percent, 75-84 age group to 25 percent and for those over 85 years of age the rate was 50 percent. This strong age gradient then influenced the responses to the next question about why they were non-users. The predominant answers to this were that the internet was not viewed as being useful or being confused by technology. These two answers accounted for over 50 percent of the responses. This was an unprompted question and the summary of the responses is given below.

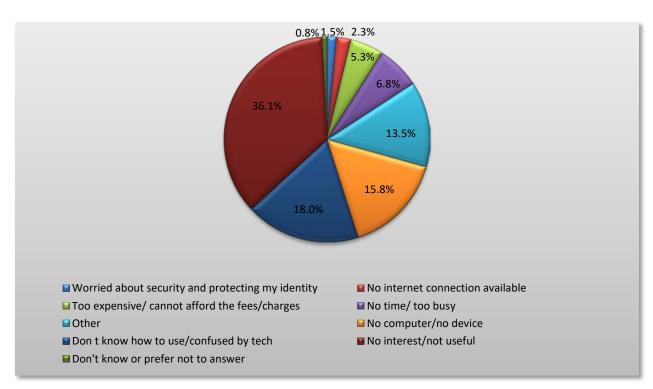


Figure 2: Reasons why the internet is not used

They were then asked what would be most helpful in order for them to become internet users. Over half did not think anything would inspire them, which again is explained by the age gradient observed. Training, security, cost and time were the next most important. Interestingly, better access to devices or connectivity were rated as only minor impediments with about 2.5 percent (the margin of error and the same percentage who didn't know or preferred not to answer) identifying these as problems.

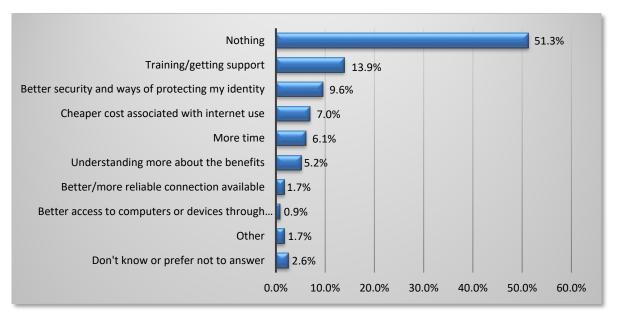


Figure 3: What would enable me to use the internet

The combination of these answers suggest that any digital divide that may exist is more a function of age and understanding of the technology than any real impediments to use.

These respondents were also asked for their perceptions toward the internet about freedom of speech and political aspects that will be covered in Section 4.

2.1.2. All users

Those who identified as current users or ex-users were then asked about connectivity, device usage, the range and frequency of activities that they undertake (or undertook) online. These responses are the focus of the rest of this section. It is worth noting that only 1 percent of users had been online for less than one year.

2.1.3. Location

Of interest was whether there were geographical differences in connectivity. Our sample was geographically diverse and response rates form each region matched the 2013 Census population shares (most recent data available). Four regions had connection densities greater than 95 percent. These were Auckland, Wellington, Hawkes Bay and Taranaki. Only two regions had densities less than 90 percent and these were Manawatu-Wanganui and Marlborough. Densities are illustrated in the map below with the darker the shading the higher the connection density.

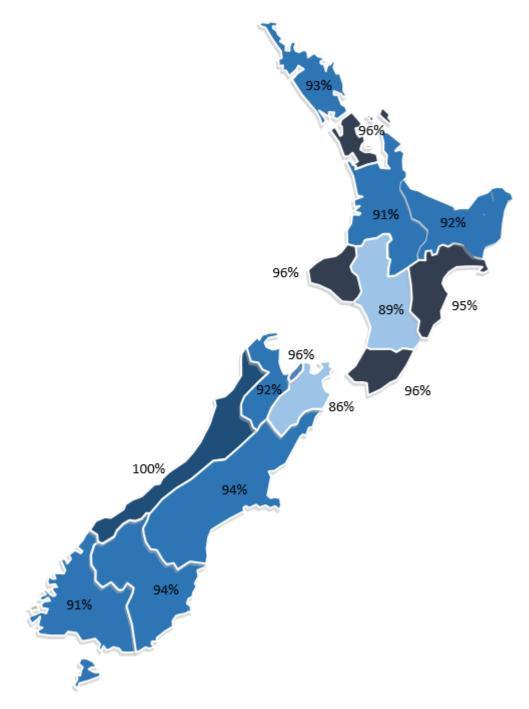


Figure 4: Connection density by region

2.2. Connectivity and devices

In the 2017 survey, there were two aspects to connectivity investigated. The first was the frequency of access by device type, and the second was method(s) of connection.

2.2.1. Device choice

The most common device type to be used at least daily is still the computer (almost 90 percent) with smartphones in second place at almost 80 percent. Tablets or e-readers are the least frequently used with only one quarter of respondents using them at least daily and half never using them. It is important to note that in the 2017 survey computer use was not separated into desktop versus laptop usage as in previous surveys.

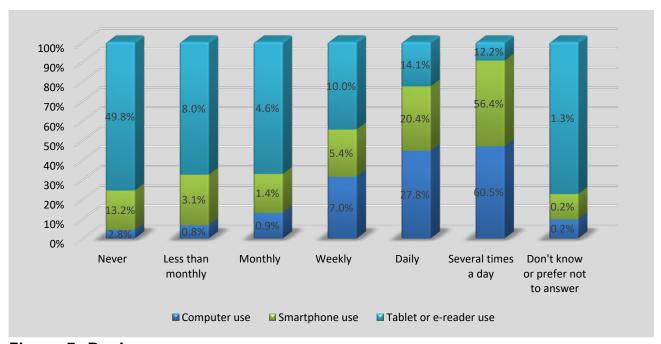


Figure 5: Device usage

2.2.2. Connectivity

With the increasing use of multiple devices, it would be reasonable to expect this to be reflected in connection type as well. Respondents were asked how they had accessed the internet in the last month and were able to identify all of the methods used.

Given the range of devices used, it was not surprising that most people also connected through several different methods. Close to 70 percent of participants accessed the internet in two to four different devices. Just over 20 percent accessed it only through one device and the remainder utilised more than four devices.

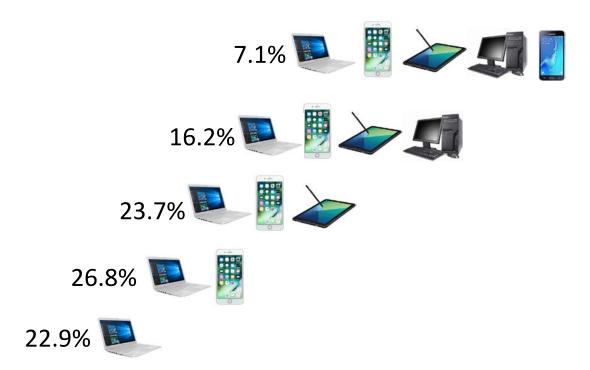


Figure 6: Multiple access methods

The vast majority of users accesses the internet through a personal connection at home or via their mobile devices. Ninety-six percent of urban participants use an internet connection at home; the proportion of rural participants who use an internet connection at home is similar: 94 percent. Urban participants report a higher percentage of connection through mobile phone providers at 69 percent compared to 56 percent for rural participants.

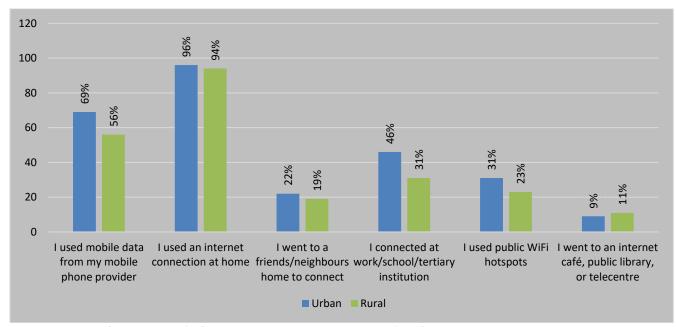


Figure 7: Urban-Rural difference in access methods

In addition to using an internet connection at home or via their mobile devices, 46 percent of urban participants connect from schools/work/tertiary institutions, 31 percent from public hotspots, and 22 percent from their friends/neighbours houses. A further 9 percent use internet cafés, public libraries or telecentres to access to the internet.

In the case of rural participants, 31 percent connect to the internet from schools/work/tertiary institutions, 23 percent from public hotspots, 19 percent from their friends/neighbours houses, and 11 percent using internet cafés, public library or telecentres. Further analysis may enable these differences to be better understood when modelling is undertaken that relates income and other personal characteristics with connection types.

For those that had internet connections at home the majority had broadband connections of some type (almost 75-80 percent) but again there was a significant urban–rural divide. Urban participants had much higher connection rates through ultra-fast broadband with a corresponding lower rate of ADSL/VDSL connectivity than when compared to rural participants.

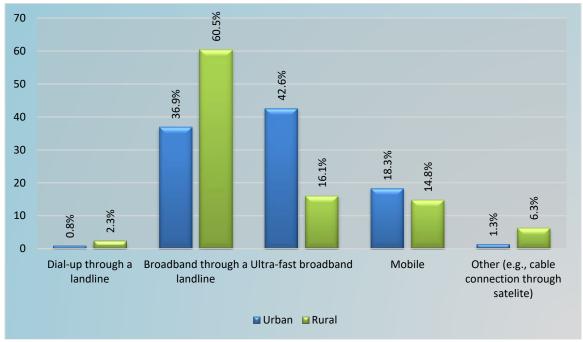


Figure 8: Urban-Rural difference in home connection types

2.2. Internet literacy

Internet literacy was measured by asking how strongly respondents agreed or disagreed with statements (5-point scale) regarding their ability to complete basic actions on the internet. Most users (>90%) 'agreed' or 'strongly agreed' that they knew how to open and download files. Knowing how to download apps to a mobile device was interesting in that it was not as gradated as the other skills. Respondents either knew or did not know how to do this. This is most likely reflective of the number and types of devices that people used.

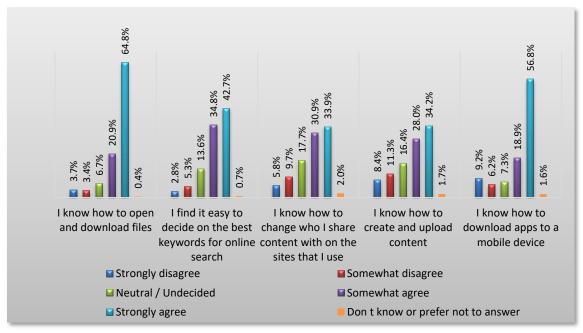


Figure 9: Internet literacy

If we look at users who only access the internet through a computer, we see a very low level of knowing how to download apps to a mobile device. Clearly, this is based on the absence of need rather literacy per se.

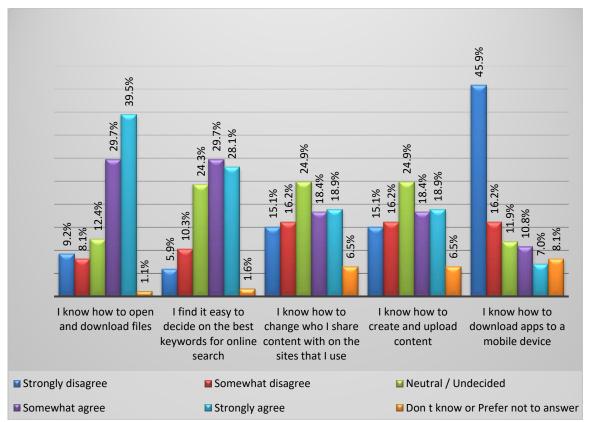


Figure 10: Internet literacy of those who only access via computer

Conversely, those that access only through a smartphone are very comfortable with downloading apps.

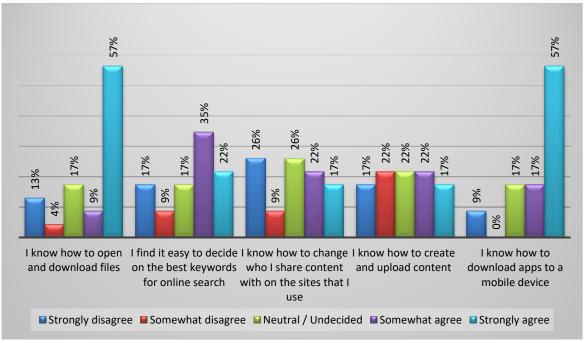


Figure 11: Internet literacy of those who only access via smartphone

The final three literacy questions all showed a clear gradation with many finding it easy to decide on the best keywords for online searchers, less knowing how to change their sharing setting and still less knowing how to create and upload content. This type of gradation is what would be expected as internet literacy develops.

2.3. Activity range and frequency

In order to calculate the type of internet user each respondent was, there were a series of questions as to how frequently the internet was used for different types of activity. The first two of these activities, communication and information, were expected to be the most widely and frequently used. The other three activities, entertainment, transactions and learning, are more likely to be determined by lifestyle and preferences rather than ability. For this reason, these different types of activity cannot be used as a proxy measure of literacy. Within each of these categories, there are also specific activities that will also be determined by preferences and opportunity rather than internet capability.

2.3.1. Communication

Communication looked at different ways people can communicate over the internet from basic email, to messages/chat, voice over internet calls (e.g. Skype, FaceTime, WhatsApp) and by posting created content or re-posting / sharing content created by others. Virtually all respondents checked their email at least daily. A very high percentage also sent messages or chats at least weekly. The other three categories all had 20-30 percent never using that form of communications and the weighting was heavily toward weekly or less than weekly. Only 15-20 percent of users made voice calls over the internet or posted/re-posted content daily. Another 20-25 percent did these things weekly. The lower frequency of these three activities is probably is reflective of time and need rather than capability.

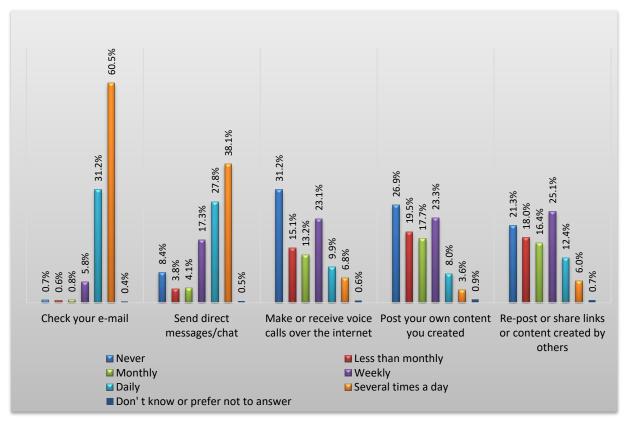


Figure 12: Frequency of use for communication

2.3.2. Source of information

The internet is an important source of information in the twenty-first century and users did report a high level of usage for this purpose. The most frequently sought type of information was news with almost 90 percent of users doing this at least weekly.

Seeking travel or health information were both widely undertaken but at lower frequency than looking for news. While the internet was widely used for these activities, three-quarters of respondents said this was 'weekly', 'monthly' or 'less than monthly'. This range of responses is no doubt reflective of the frequency of need. Similarly, the least frequently sought type of information was looking for jobs/work, which would be expected as changing jobs is an infrequent occurrence for most people.

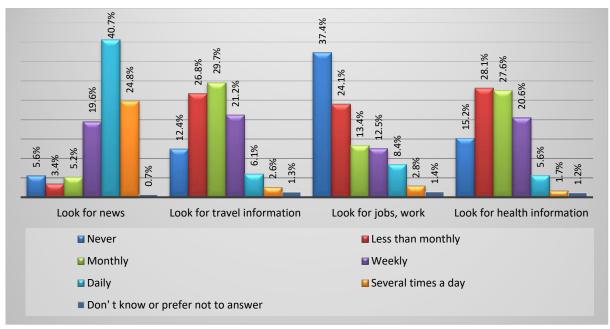


Figure 13: Frequency of use for information

The least frequently information sought was interacting with government, either local or central government, with approximately 70 percent saying they never did this or did it less than monthly.

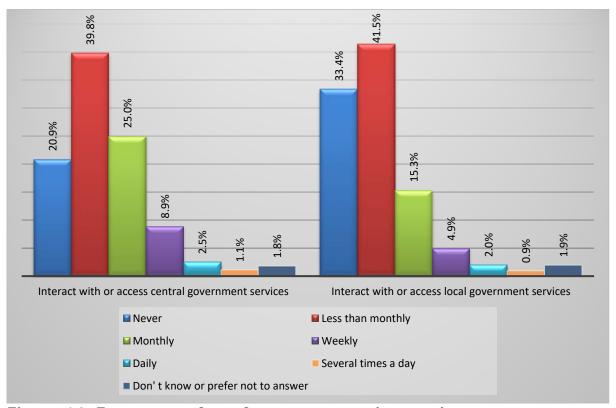


Figure 14: Frequency of use for government interaction

2.3.3. Entertainment

The most frequent types of entertainment enjoyed through the internet were downloading or listening/watching music and videos. These were both reasonably evenly spread across all the frequencies with 'never' being similar to 'daily' and 'weekly' responses. Gaming online was quite even in frequency among the users but had 44 percent of users never doing this.

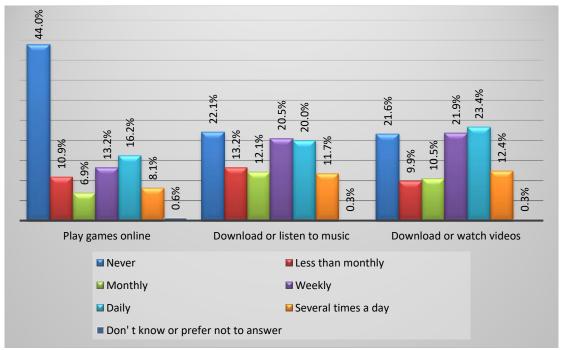


Figure 15: Frequency of use for entertainment types

The four categories that asked about specific categories of content were all dominated by the 'never' users. The content asked about included: religious or spiritual content; betting or gambling; sites with sexual content and online dating sites. Of those that use the internet for this type of content, frequency was most likely to be 'less than monthly' (infrequent) and falling through to 'daily' and 'several times a day'. Religious or spiritual content was viewed slightly more frequently than the other categories but this could also reflect a willingness to respond.

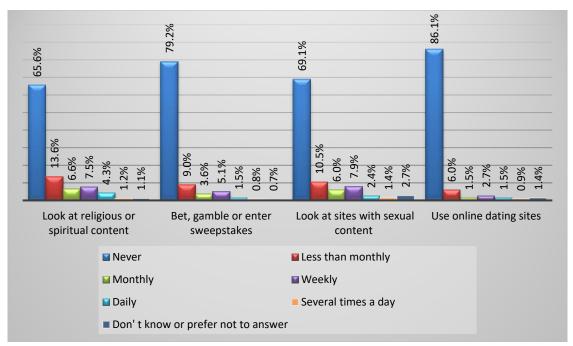


Figure 16: Frequency of use for specific types of site

2.3.4. Transactions

Respondents used the internet for a wide range of transactions or activities that support transactions. Getting information about products or services and paying bills/e-banking were the most frequent transaction types with 60-64 percent of participants completing these, at least on a weekly basis. The least frequent transaction type was investing in shares/stocks/bonds/funds online with almost 80 percent of respondents never doing this.

People buy things online more frequently than they sell things online with 35 percent never having sold something online. Approximately 80 and 85 percent have made travel reservations/booking online and compared process of products/services online but these transactions are undertaken at a much lower frequency. This lower frequency would be expected given the lower frequency of need for most people.

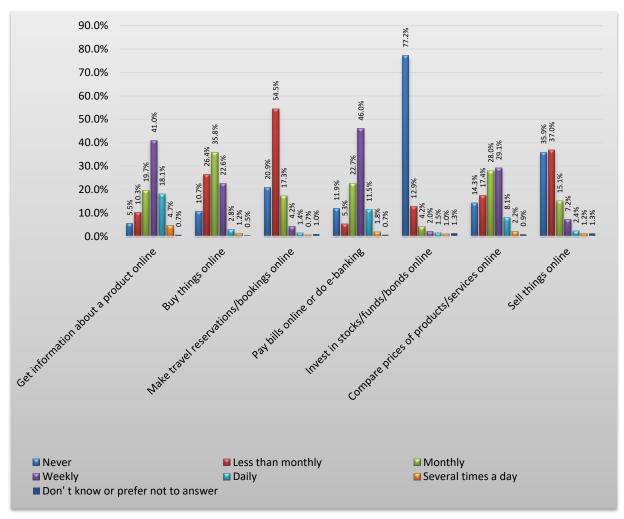


Figure 17: Frequency of use for transactions

2.3.5. Learning

The use of the internet for looking up information is different from using it explicitly to learn though there is some overlap. The most frequent type of learning undertaken was finding or checking facts with over 60 percent doing this at least weekly. Over 50 percent looked up word definitions at least weekly. Utilising the internet to support formal learning such as school-related work or formal online learning was much less common with 52 and 58 percent of respondents respectively never doing this.

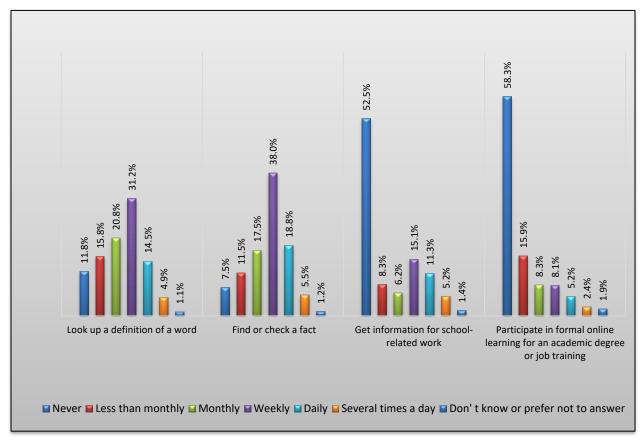


Figure 18: Frequency of use for learning

2.3.6. Overall activity assistance

Users were also asked about which of these activities they would like to do more or less of. An additional question was added as to whether they would like to learn how to use new digital tools, such as the cloud, and the responses to this were quite different from the others. Only 40 percent felt they were currently doing about the right amount and a further 40 percent would like to do more of this. The percentage who would prefer to do less of this was similar to those wanting to do less of all the other activities too at 12 percent.

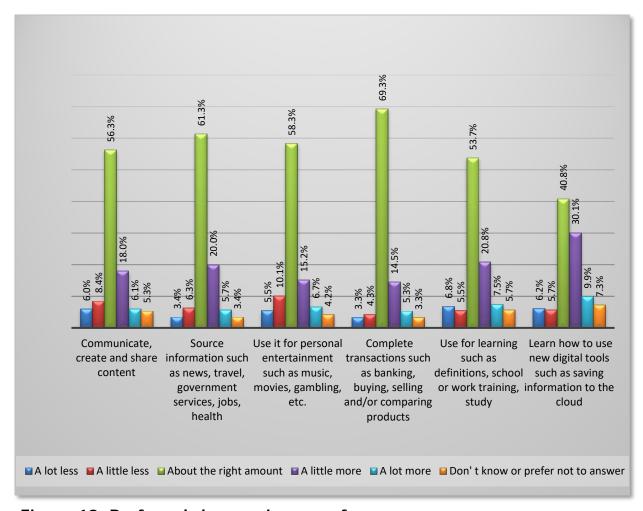


Figure 19: Preferred changes in usage frequency

While most people were reasonably happy with their own usage of the internet, we did ask what additional help they would require in order to do more.

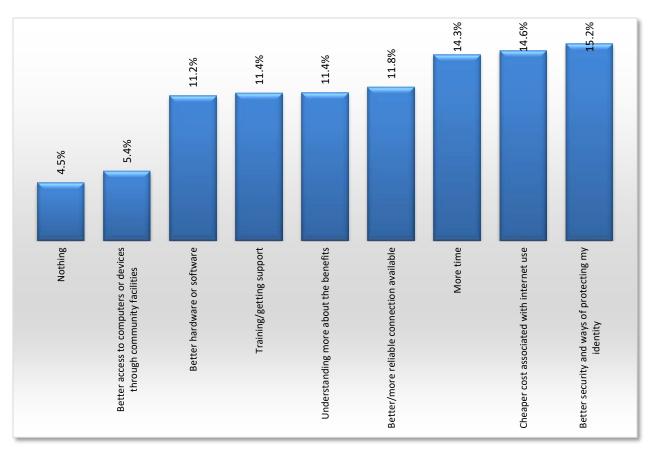


Figure 20: Assistance required to use the internet more

3. Privacy and security

A key area of focus in the 2017 WIP survey was attitudes toward privacy and security. It is important to note, however, that the New Zealand 2017 survey was completed prior to the Facebook and Cambridge Analytica data scandal becoming public in early 2018. The widespread media attention given to that scandal may have changed people's attitudes since this survey was completed.

These aspects of privacy and security need to be considered together as there are ways that individuals can enable security measures that will then influence the ease with which privacy can be breached. Whether people implement security features is dependent on their initial attitude toward internet privacy and their ability to manage their settings. These are some of the potential areas where a digital divide may appear with low-level users being less able to secure their online presence.

3.1. Opinions on internet privacy

Participants were asked how strongly they 'agreed' or 'disagreed' with a series of statements about online privacy. Interestingly, a majority of respondents (50-65 percent) 'agreed' or 'strongly agreed' to the four statements related to their personal attitude and behaviour: that there is no privacy online, accept it; that they actively protect and control their privacy online and that they have nothing to hide.

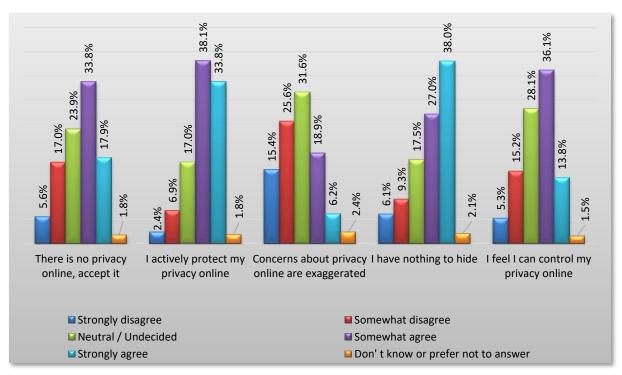


Figure 21: Attitudes to online privacy

Respondents were much more concerned about others behaviour toward the violation of their own privacy online. This concern was focussed around private corporations (40 percent) and individuals 30 percent) rather than governments (both about 20 percent agreement). About one in four believe that concerns about online privacy are exaggerated.

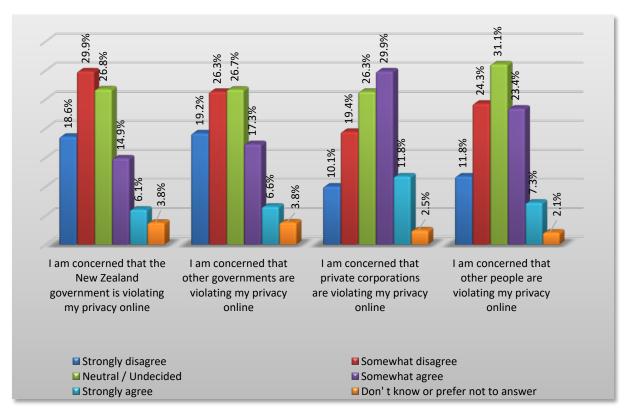


Figure 22: Concerns about online privacy

3.2.1. Negative experiences

There are two levels of negative experience that respondents were asked about. The first was specific negative experiences that may not have been aimed at the individual concerned. This included things like receiving a virus, buying something that was misrepresented or accidentally arriving at a pornographic site. Relatively high numbers had experienced some of these things as illustrated in the graph below.

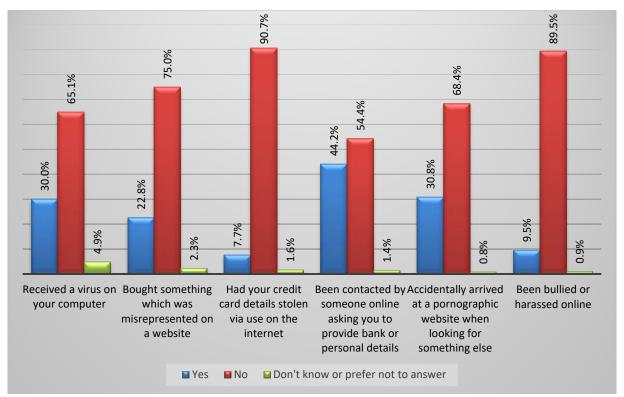


Figure 23: Negative experiences online

Participants were then asked if they believed their privacy had been violated in the previous year via the internet. In spite of the relatively high numbers above, only one in five believed their privacy had actually been violated.

Of the 393 people who believed their privacy had been violated online, two-thirds of them felt it had not really been a problem or had been only a minor problem.

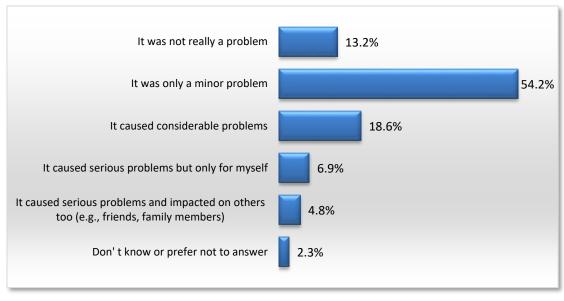


Figure 24: Impact of privacy violations

The primary consequence of a privacy violation was that it changed user online behaviour after the breach. This may have been in behaviour and/or by changing their security settings. Over one-third of those who had suffered breaches responded in this way.

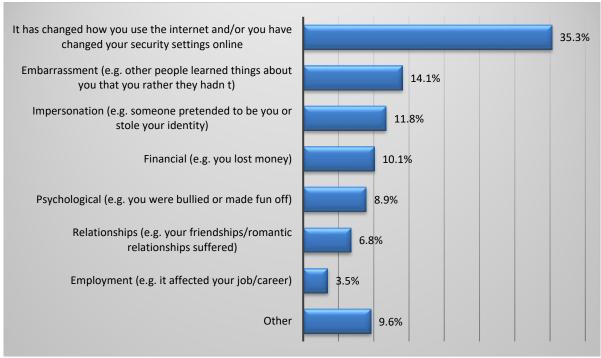


Figure 25: Consequences of privacy violations

For those who considered the breach to be not really a problem or only a minor problem, the major consequence was embarrassment. A smaller percentage of this group changed the way they used the internet and/or their security settings.

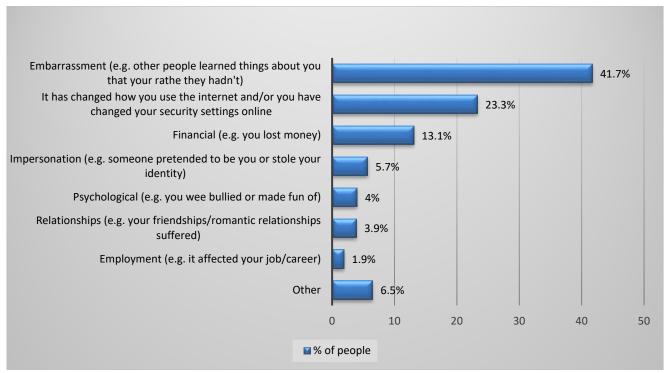


Figure 26: Impact of minor privacy breaches

4. Civic engagement

An area of interest to the wider World Internet Project was the role the internet plays in what we have termed civic engagement. Included in this are questions about whether using the internet improves political understanding and participation, the reliability of information and freedom of speech. Both users and non-users answered all of these questions, so differences in attitude could also be considered.

4.1. Political interactions

Among users, over 60 percent 'agreed' or 'strongly agreed' that it helped them to understand politics better. Three questions that asked for attitudes toward whether using the internet gave them greater influence were all similar with 75 percent choosing 'slightly agree', 'neutral' or 'slightly disagree'. There was not any great differentiation in these answers and the data offers little in the way of insights. It is possible that if these responses are broken down further by demographic variables such as income or education level, the results may off greater diversity but that is beyond the scope of this report.

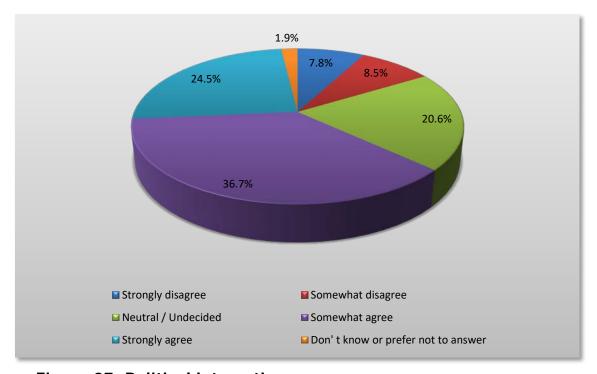


Figure 27: Political interactions

Of more interest within the WIPNZ questions was how people viewed the questions about government. The questions asked as to what they mainly thought of when they saw 'government' – local or central. The responses were overwhelmingly that central government was the immediate interpretation. Over 60 percent agreed or strongly agreed that it was central government and 55 percent disagreed or strongly disagreed that it was local government.

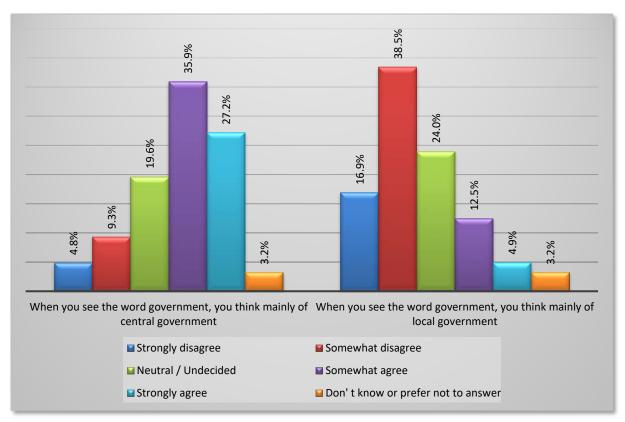


Figure 28: Central versus local government

4.2. Reliability of information on the internet

Given the very high usage of the internet to find information, confirm facts and compare products there must be a level of trust regarding the information found. The question came down to how much do people trust the information itself versus their ability to evaluate its reliability.

Regardless of the tool used to access it, there is a range of information available of varying reliability. This was evident when people were asked how much of the information on the internet they felt was reliable.

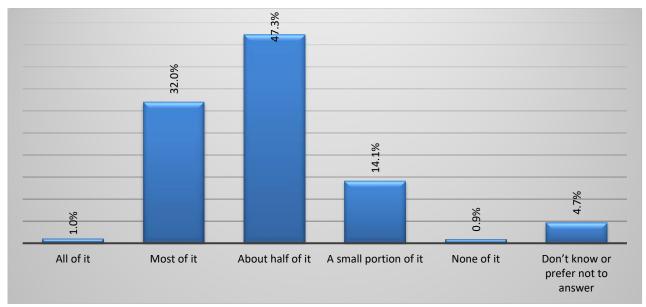


Figure 29: Internet information reliability

That 80 percent of participants felt that at least half of the information they found on the internet was reliable appears extremely high. At either end, only 1 percent felt that either all of it or none of it was reliable. Given this spread, the more important question became how well the individual felt that they could discern the reliability of the information.

4.2.1. Ability to discern reliability

WIPNZ asked the additional questions as to how respondents viewed their ability to discern the reliability of information. Close to 7 percent of users said that they do not even attempt to assess reliability of the information found and around 8 percent felt extremely confident in their ability to do this.

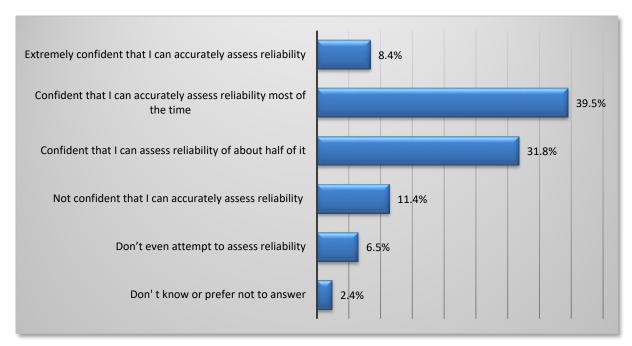


Figure 30: Ability to discern the reliability of information

4.3. Freedom of speech

New Zealand does pride itself on being a politically open society that encourages freedom of speech as an integral part of the political landscape. This was reflected in the responses to the freedom of speech questions. Participants were asked how strongly they agreed or disagreed with statement about freedom of speech with special reference to government and politics.

Respondents most strongly agreed with the statement that people should be free to criticise their government on the internet and about the same number felt comfortable doing so. People were much less certain about it being safe to say what you like about politics and about the freedom to express views even if they are extreme. For these two statements, only 20 percent felt strongly one way or the other; the remaining 80 percent were neutral/unsure or weakly agreed/disagreed. Only 20 percent agreed that the government should regulate the internet more and this no doubt reflects New Zealanders' attitudes toward freedom of speech. It will be interesting to compare this last result with the same question from the international WIP partners.

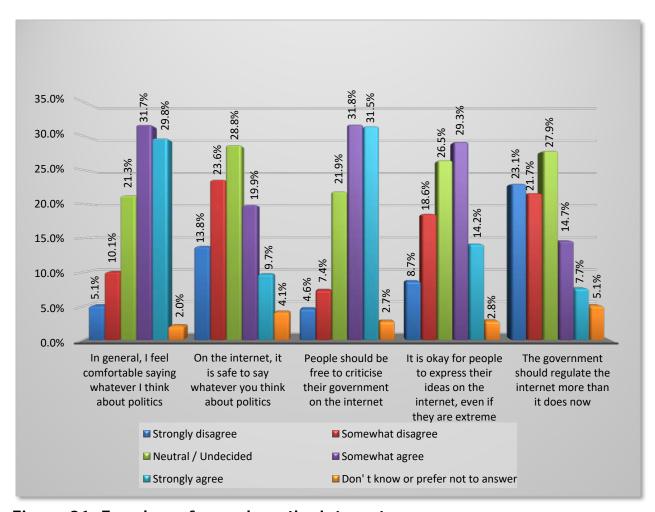


Figure 31: Freedom of speech on the internet

5. Living with disabilities

One of the areas of interest in New Zealand is the concept of the digital divide and across what dimension it may be reinforced or mitigated by the internet. Historically, this survey has looked at this from the type of internet connection available to people but with more than 90 percent now having some form of broadband access this is less of an issue. In this survey we focussed more on the impediments to internet usage and what would encourage people to use it more and also how the internet affected the lives of those living with disabilities.

Using the Washington Group short set of questions to identify those living with disability, the following numbers of respondents identified as having 'a lot of difficulty' (severe, including blind or deaf) with each of the senses.

Table 1: Disability types and frequency

| Impairment type | Number who reported a lot of difficulty or that they cannot do at all |
|---------------------------------------|---|
| Vision impairment | 30 |
| Hearing impairment | 18 |
| Walking or climbing stairs difficulty | 54 |
| Remembering or concentrating | 33 |
| Self-care difficulties | 8 |
| Communication problems | 8 |

While 125 individuals of the total sample reported 151 instances of disabilities (meaning that some of them had more than one disability), 108 of these had one disability only. The rest experience significant problems in two to four areas. We excluded from the analysis those who reported a minor secondary disability.

5.1. Help and assistance

Of the 125 individuals who experience significant disabilities, a majority of 105 individuals are internet users. Of these, over half have never experienced any difficulty accessing the internet and a further 20 percent have rarely experienced difficulty accessing the internet. Of those who have experienced difficulties, the following table shows the types of assistance needed.

Table 2: Type of assistance required

| Help needed | Count |
|--|-------|
| Better hardware | 10 |
| More training (with others experiencing same difficulty rather than general class or personalised) | 17 |
| Talking computer | 6 |
| Visual support – font, displays etc. | 14 |
| Better connection | 9 |
| Concentration, fatigue or ergonomic setup | 4 |
| Other | 4 |
| Total | 64 |

Of those users who thought they needed some help or assistance about half had access to the assistance they required and half did not.

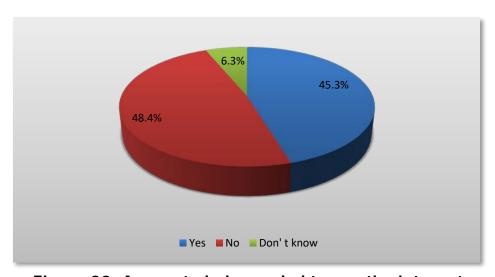


Figure 32: Access to help needed to use the internet

Of the 38 who had received access to the assistance required, the majority (> 60 percent) had paid for it themselves/family or their employer had provided it. For the others, eight said 'Other' and the final group of seven included Ministry of Health, District Health Boards and support organisation (either specific to the disability or more general).

5.2. The internet and lifestyle

There was some concern that access to the internet could act as a further barrier to participation in society by those with disabilities. Quite the contrary was found in that one-quarter of those who identified as having a disability found that their lifestyle had been improved a lot by the internet, a further one-quarter found it had no impact, and one in three found some improvement. Very few (numbers too small to report) identified a negative impact.

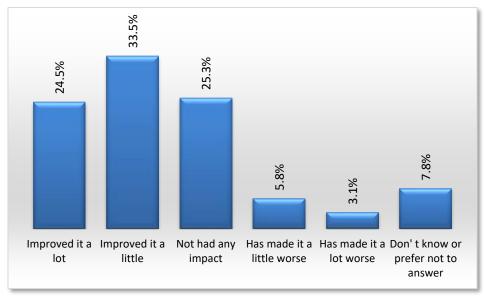


Figure 33: Internet impact on lifestyle

We then investigated whether the distribution was related to the degree of disability (minor, moderate, could not do at all) and found no relationship. Even those most severely affected by their disability had generally found the internet improved their quality of life. At this stage, we have not further broken this down by the type of difficulty but can do further analysis on this with the data.

6. Future directions

This report has provided only high-level descriptions of patterns found in the 2017 survey. It does not include any in depth analysis or investigation into many of the relationships between usage and demographic profiles such as education levels, income and household type. While at times reference has been made to changes in percentages since the 2015 survey, this longitudinal analysis has also not been completed or included in this initial report. There will be subsequent reports that focus on specific areas of interest.

Glossary

FGU First Generation User

LLU Low Level User

NGU Next Generation User

SNS Social Networking Site

UFB Ultra-Fast Broadband

CAPI Computer Assisted Personal Interview

CATI Computer Assisted Telephone Interview

Appendix: 2017 WIPNZ questionnaire

SECTION 1 - DEMOGRAPHICS (PART 1)

- 1. What is your gender?
 - a. Male
 - b. Female
- 2. First, to make sure we speak to a cross-section of people, can you please tell me your postcode?

3. In what year were you born?

SECTION 2 - SCREENING - INTERNET PART 1 -

BASE - ALL RESPONDENTS

- 4. Are you a current user of the internet?
 - a. YES → SECTION 4
 - b. NO
- 5. Have you used the internet in the last three months?
 - YES → SECTION 4 (these become a user for previous question and are classified as an ex-user)
 - b. NO \rightarrow SECTION 3

SECTION 3 – BASE NON-INTERNET USERS

- 6. What are the reasons you <u>DO NOT</u> use the internet? Multiple unprompted responses
- 7. What would be the most helpful for you to become an internet user? Text responses then categorised

All non-users → SECTION 5 - PUBLIC IMPACT ATTITUDE

SECTION 4 - BASE INTERNET USERS

- 8. Tell us how often you connect to the internet (e.g., for search, e-mail, social networks, etc.) with each of the following devices. The frequency measures are: Several times a day, daily, weekly, monthly, less than monthly, never.
 - a. Computer (desktop, laptop)
 - b. Phone
 - c. Tablet or e-reader
- 9. In the last month, how did you connect to the internet? Please select all that apply.
 - a. I used mobile data from my mobile phone provider
 - b. I used an internet connection at home → Also answer next question
 - c. I went to a friend's/neighbour's home to connect
 - d. I connected at work/school/tertiary institution
 - e. I used public WiFi hotspots
 - f. I went to an internet cafe, public library, or telecentre
- 10. What type of internet connection do you have at home?
 - a. Dial-up
 - b. Broadband
 - c. Mobile
 - d. Ultra fast broadband
 - e. Other (please specify)

| 11. | How many years have you used the internet? |
|-----|--|
| | YEARS |
| | [If less than one year] MONTHS |

- 12. In the past year have you ever ...? (Yes/No responses)
 - a. Received a virus on your computer
 - b. Bought something which was misrepresented on a website
 - c. Had your credit card details stolen via use on the internet
 - d. Been contacted by someone online asking you to provide bank or personal details
 - e. Accidentally arrived at a pornographic website when looking for something else
 - f. Been bullied or harassed online

<u>SECTION 5 – PUBLIC IMPACT ATTITUDE</u>

- 13. I'm going to read you a list of statements. Please tell me how much you agree or disagree with each of these statements. Use a scale of 1 to 5 where "1" means strongly disagree and "5" means strongly agree. Remember that you can choose any number between 1 and 5. Do you think by using the internet...?
 - a. People like you can have more political power
 - b. People like you will have more say about what the government does
 - c. People like you can better understand politics
 - d. Public officials will care more what people like you think
 - e. When I see the word government I think mainly of central government.
 - f. When I see the word government I think mainly of local government
- 14. How much of the information on the internet overall is generally reliable? Use a scale of 1 to 5 where "1" means none of it is reliable and "5" means that all of it is reliable.
- 15. Information on the internet comes from multiple sources of differing reliability. How confident do you feel that you are able to accurately assess the reliability of information on the internet? Use a scale of 1 to 5 where "1" extremely confident you can assess reliability and "5" means that you don't even attempt to assess reliability.

All non-users → SECTION 7 – POLITICS
All users → SECTION 6 – PRIVACY & USAGE

SECTION 6 – INTERNET USERS PRIVACY & USAGE

- 16. In the PAST YEAR, do you believe that your privacy has been violated online? (Choose one answer)
 - a. No, I haven't experienced this → Q19
 - b. Yes, I have experienced this
- 17. How much of a problem was this privacy breach? Use a scale of 1 to 5 where "1" means it was not really a problem and "5" means that it caused serious problems.
- 18. What were the consequences of this privacy violation? (select all that apply)
 - a. Financial (e.g., you lost money)
 - b. Embarrassment (e.g., other people learned things about you that you rather they hadn't)
 - c. Impersonation (e.g., someone pretended to be you or stole your identity)
 - d. Relationships (e.g., my friendships/romantic relationships suffered)
 - e. Employment (e.g., it affected your job/career)
 - f. Psychological (e.g., you were bullied or made fun off)
 - g. It has changed how I use the internet and/or I have changed my security settings online

- h. Other (please write them down)
- 19. How much do you agree or disagree with the following statements? Use a scale of 1 to 5 where "1" means strongly disagree and "5" means strongly agree. Remember that you can choose any number between 1 and 5.
 - a. There is no privacy online, accept it
 - b. I am concerned the New Zealand government is violating my privacy online
 - c. I am concerned that other governments are violating my privacy online
 - d. I am concerned private corporations are violating my privacy online
 - e. I am concerned other people are violating my privacy online
 - f. I actively protect my privacy online
 - g. Concerns about privacy online are exaggerated
 - h. I have nothing to hide
 - i. I feel I can control my privacy online
- 20. I'm going to read you a list of statements. Please tell me how much you agree or disagree with each of these statements. Use a scale of 1 to 5 where "1" means strongly disagree and "5" means strongly agree. Remember that you can choose any number between 1 and 5.
 - a. I know how to open and download files.
 - b. I find it easy to decide on the best keywords for online search.
 - c. I know how to change who I share content with on the sites that I use.
 - d. I know how to create and upload content
 - e. I know how to download apps to a mobile device.

For the next set of questions the frequency measures are: Several times a day, daily, weekly, monthly, less than monthly, never.

- 21. Now I'd like you to think about the different ways you use the internet to **communicate**, create and share content. On average how often do you use the internet for the following purposes?
 - a. Check your e-mail
 - b. Send direct messages/chat
 - c. Make or receive voice calls over the internet
 - d. Post your own content (videos, photos, writing, etc.) you created
 - e. Re-post or share links or content (videos, photos, writing, etc.) created by others
- 22. Some people often look up **information** on the internet as they go about their daily lives things like news, sports scores and movie times others don't. On average how frequently do you use the internet for the following purposes?
 - a. Look for news-local, national, international
 - b. Look for travel information
 - c. Look for jobs, work
 - d. Look for health information
 - e. Interacting/accessing central government services (e.g. IRD, DIA, WINZ)

- f. Interacting/accessing local government services (e.g. your local or regional council, water provider)
- 23. Now I'd like you to think about the routine things you do for personal **entertainment** like playing games or listening to music. On average how frequently do you use the for the following purposes?
 - a. Play games online
 - b. Play games online
 - c. Download or watch video
 - d. Look at religious or spiritual content
 - e. Bet, gamble, or enter sweepstakes
 - f. Look at sites with sexual content
 - g. Use online dating sites
- 24. Now I'd like you to think about different **transactions** people do in their everyday lives like banking or shopping. On average how frequently do you use the Internet for the following purposes?
 - a. Get information about a product online
 - b. Buy things online
 - c. Make travel reservations/bookings online
 - d. Pay bills online or do e-banking
 - e. Invest in stocks/funds/bonds online
 - f. Compare prices of products/services online
 - g. Sell things online
- 25. Some people use the Internet for classes or to support their **learning**, but many others do not. On average how frequently, if ever, do you use the Internet for the following purposes
 - a. Look up a definition of a word
 - b. Find or check a fact
 - c. Get information for school, work or study-related work
 - d. Participate in formal online learning for an academic degree or job training
- 26. Of the types of activities just asked about, which ones would you like to do more or less of? The scale used is: a lot more, a little more, about the right amount, a little less, a lot less.
 - a. Communicate, create and share content
 - b. Source information such as news, travel, Government services, jobs, travel, health.
 - c. Use it for personal entertainment such as music, movies, gambling etc.
 - d. Complete transaction such as buy, sell, compare products, bank.\
 - e. Use for learning such as definitions, school or work training, study.
 - f. Learn to use new digital tools such as saving information to the Cloud

- 27. What would you need to help you do more of these online activities?
 - a. Nothing
 - b. Understanding more about the benefits
 - c. Better access to computers or devices through community facilities (e.g. library, school, marae, wananga/polytechnic)
 - d. Cheaper cost
 - e. More time
 - f. Training/getting support
 - g. Better/more reliable connection available
 - h. Better security and ways of protecting my identity.
 - i. Better hardware or software
 - j. Other [Please specify:]

SECTION 7 – FREEDOM OF SPEECH

- 28. I'm going to read you a list of statements. Please tell me how much you agree or disagree with each of these statements. Use a scale of 1 to 5 where "1" means strongly disagree and "5" means strongly agree. Remember that you can choose any number between 1 and 5.
 - a. In general, I feel comfortable saying whatever I think about politics online.
 - b. On the internet, it is safe to say whatever you think about politics
 - c. People should be free to criticise their government on the internet.
 - d. It is okay for people to express their ideas on the internet, even if they are extreme.
 - e. The government should regulate the internet more than it does now.

SECTION 8 – DEMOGRPHICS PART 2

- 29. Which ethnic group or groups do you identify with?

 Chosen from provided list with 'Other (please specify)' options also provided.
- 30. Which ethnic group do you most strongly identify with?

 Must be one of those listed above
- 31. What is your highest completed secondary school qualification?
 - a. No secondary school qualifications
 - b. NZ School Certificate or National Certificate/NCEA level 1
 - c. NZ Sixth Form Certificate or National Certificate/NCEA level 2 or NZ UE before 1986
 - d. NZ Higher School Certificate *or* NZ University Entrance from NZ Bursary *or* National certificate/NCEA level 3
 - e. NCEA level 4
 - f. Other NZ secondary school qualification (please tell us)
 - g. Overseas secondary school qualification

- 32. Apart from secondary school qualifications, do you have any other completed qualifications, the equivalent of 3 months or more full-time study to complete?
 - a. Yes
 - b. No \rightarrow Q34
- 33. What is your highest completed qualification?
 - a. Trade Certificate or National Certificate levels 1-4
 - b. Diploma below bachelors level (e.g., teaching or nursing diploma) or National certificate levels 5 or 6
 - c. Bachelor's degree
 - d. Bachelor's degree with honours, or postgraduate diploma
 - e. Master's degree
 - f. PhD
- 34. What is the current total annual income for your household? Please include your personal income in this total.
 - a. \$1 \$5,000
 - b. \$5,001 -\$10,000
 - c. \$10,001 \$20,000
 - d. \$20,001 \$25,000
 - e. \$25,001 \$30,000
 - f. \$30,001 \$35,000
 - g. \$35,001 \$40,000
 - h. \$40,001 \$50,000
 - i. \$50,001 \$60,000
 - j. \$60,001 \$70,000
 - k. \$70,001 \$100,000
 - I. \$100,001 \$150,000
 - m. > \$150,001
- 35. Are you:
 - a. Single
 - b. Married/Civil Union
 - c. Living with a partner
 - d. Divorced/Separated
 - e. Widowed
- 36. Are you employed?
 - a. YES Fulltime (30 hours or more per week)
 - b. YES Part-time (less than 30 hours per week)
 - c. NO \rightarrow Q38

- 37. What industry are you employed in?
 - a. Agriculture, forestry and fishing
 - b. Mining
 - c. Manufacturing
 - d. Electricity, gas, water and waste services
 - e. Construction
 - f. Wholesale trade
 - g. Retail trade
 - h. Accommodation and food services
 - i. Transport, postal and warehousing
 - i. Information media and telecommunications
 - k. Financial and insurance services
 - I. Rental, hiring and real estate services
 - m. Professional, scientific and technical services
 - n. Administration and support services
 - o. Public administration and safety
 - p. Education and training
 - q. Healthcare and social assistance
 - r. Arts and recreation services
 - s. Other services (please specify)
- 38. Are you currently studying?
 - a. YES Full-time
 - b. YES Part-time
 - c. NO

39. If NEITHER EMPLOYED NOR STUDYING THEN:

Are you ...

- a. At home looking after children
- b. At home looking after other adults
- c. Unemployed
- d. Retired
- e. Unable to work due to disability or illness
- f. Other (please specify)

SECTION 9 – DISABILITIES

- 40. Do you have difficulty seeing, even if wearing glasses?
 - a. No no difficulty
 - b. Yes some difficulty
 - c. Yes a lot of difficulty
 - d. Cannot do at all

- 41. Do you have difficulty hearing, even if using a hearing aid?
 - a. No- no difficulty
 - b. Yes some difficulty
 - c. Yes a lot of difficulty
 - d. Cannot do at all
- 42. Do you have difficulty walking or climbing steps?
 - a. No- no difficulty
 - b. Yes some difficulty
 - c. Yes a lot of difficulty
 - d. Cannot do at all
- 43. Do you have difficulty remembering or concentrating?
 - a. No no difficulty
 - b. Yes some difficulty
 - c. Yes a lot of difficulty
 - d. Cannot do at all
- 44. Do you have difficulty (with self-care such as) washing all over or dressing?
 - a. No no difficulty
 - b. Yes some difficulty
 - c. Yes a lot of difficulty
 - d. Cannot do at all
- 45. Using your usual (customary) language, do you have difficulty communicating, for example understanding or being understood?
 - a. No no difficulty
 - b. Yes some difficulty
 - c. Yes a lot of difficulty
 - d. Cannot do at all

If No answered to ALL of questions 40 - 45→ SECTION 10

If No not answered for **ALL** of questions 40 – 45 carry on.

- 46. How often does this/do these difficulty(ies) limit you accessing and using the internet?
 - a. Never
 - b. Rarely
 - c. Sometimes
 - d. Often
 - e. Always

If Q46 = Never → SECTION 10

If Q46 ≠ Never carry on.

47. What additional help/equipment enables you or would enable you to access and use the internet more easily?

Free answer

- 48. Do you currently have access to this help/equipment?
 - a. Yes
 - b. No \rightarrow **Q50**
- 49. How did you get access to that help/equipment that you currently use?
 - a. Paid for myself
 - b. Paid for by my family and/or friends
 - c. Through my District Health Board or Ministry of Health
 - d. Through a specialist support organisation related to my disability (e.g. Blind Foundation, Deaf Aotearoa)
 - e. Through a local community support organisation unrelated to my disability my difficult but that I have personal contact with.
 - f. Through your employer/workplace
 - g. Through another support organisation not covered by 4 or 5 (please specify).
 - h. Other (please specify)
- 50. Using a scale of 1 to 5 where "1" means it has improved it and "5" means it has made it a lot worse, has using the internet (with or without the aid of additional equipment) changed your quality of life and/or social interaction? Remember that you can choose any number between 1 and 5.

SECTION 10 – THANK YOU AND CLOSE