

Information and Communication Technology in New Zealand



*Use and supply of information and
communication technology in New Zealand*

2006

A dark grey horizontal bar with a white circular icon containing a smaller circle, resembling a target or a lens.

Information and Communication Technology in New Zealand: 2006



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Preface

This report provides a statistical overview of the supply and use of information and communication technology (ICT) in New Zealand in 2006.

It is the first report of its kind, and attempts to bring the collected data together in one volume, publish additional data not yet released from each survey, and provide additional analysis and international comparison not previously available.

The ICT industry has been identified as being an important industry in its own right, where high value can be added to the production and sales of goods and services. ICT infrastructure allows New Zealand businesses, people and government access to ICT services and information. The patterns of computer, Internet and other technology usage by New Zealanders inform industry, policy makers and individuals.

The data published here has been sourced from the programme of ICT surveys developed and collected by Statistics New Zealand between 2004 and 2006. Statistics NZ's ICT programme aims to measure the impact and use of ICT in New Zealand's economy and society.

The initial results from each of the surveys were released up until April 2007 and this report completes the scheduled publications for the 2006 data. The report is intended to be repeated two-yearly to publish the detailed analysis from the six-monthly, annual and two-yearly ICT surveys.

Statistics NZ is grateful for the cooperation of the organisations and individuals who participated in the ICT surveys.



Geoff Bascand
Government Statistician

Standards and further information

Percentage changes

Percentage movements are, in a number of cases, calculated using data of greater precision than published. This could result in slight variations.

Rounding procedures

On occasion, figures are rounded to the nearest thousand or some other convenient unit. This may result in a total disagreeing slightly with the total of the individual items as shown in tables. Where figures are rounded the unit is in general expressed in words below the table headings, but where space does not allow this the unit may be shown as (000) for thousands, etc.

All business counts in this report have been randomly rounded to base 3 to protect the confidentiality of respondents. For this reason not all totals will add to that stated.

Changes of base

Where consecutive figures have been compiled on different bases and are not strictly comparable, a footnote is added indicating the nature of the difference.

Source

All data is compiled by Statistics New Zealand, except where otherwise stated. Both administrative and survey data had been used in this report.

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1 Guide to interpreting data

This chapter covers the main points to consider when interpreting the data presented in this report. These are:

- report background
- Statistics New Zealand's information and communication technology (ICT) programme
- presentation of numerical totals.

For a detailed description of the data used in this report, see chapter 10 'Technical notes'.

Report background

Statistics New Zealand collects and publishes information about the supply and use of information and communication technology (ICT) in New Zealand. The information presented here was sourced from ICT-specific surveys conducted by Statistics NZ between 2004 and 2006 and was supplemented with data from other Statistics NZ data sources. Data used in chapter 9, 'International comparisons', was sourced from the Community Survey on ICT Usage in Enterprises: April 2007, and the Community Survey on ICT Usage in Households and by Individuals: April 2007 published in the Organisation for Economic Co-operation and Development's *OECD Science, Technology and Industry Scoreboard 2007*.

The measurement of ICT in New Zealand can be divided into:

- the supply of ICT goods, services and infrastructure
- the demand or use of ICT goods, services and infrastructure by business, government and individuals.

Statistics New Zealand's ICT programme

Statistics NZ developed five surveys in response to the data needs identified by the ICT taskforce and the growth and innovation framework (GIF) completed in 2003.

- Information and Communication Technology (ICT) Supply Survey. Annual census of NZ ICT industries to measure sales and exports of ICT commodities and industry structure.
- Internet Service Provider (ISP) Survey. Biannual census of main providers of subscription connections to the Internet that measures numbers, technologies, speeds and other information of Internet connection.
- Business Use of ICT Survey. Biennial sample survey of businesses to measure the use, implementation and benefits of ICT in business. Collected as a module of the Business Operations Survey (BOS).
- Government Use of ICT Survey. Biennial census of government organisations to measure the use, implementation and expenditure on ICT in government.
- Household Use of Information and Communication Technology (ICT) Survey. Biennial sample survey of household and individuals to measure the use, implementation and expenditure on ICT in households. Collected as a supplement to the quarterly Household Labour Force Survey (HLFS).

Other Statistics NZ data sources about ICT are discussed briefly but not investigated in depth in this report.

Presentation of numerical totals

To preserve the confidentiality of respondents, counts used for this report were randomly rounded to base 3. When data in a table has been randomly rounded to base 3, every value in the table is a multiple of 3. The probabilities of rounding up or down are set so that in the long run the expected value, after rounding, equals the original count (counts for the household survey have been rounded to the nearest 100). The randomness of this kind of rounding may result in a total that differs slightly from the sum of the individual cells contributing to this total.

2 Highlights – Information and communication technology (ICT) in New Zealand

This chapter summarises the supply and use of information and communication technology (ICT) in New Zealand during the 2006 financial year.

ICT in households

In 2006, 64.6 percent of households had access to the Internet. Thirty-three percent of New Zealand households had a broadband connection, while 30.9 percent had a dial-up connection.

In the 2006 financial year, 35.4 percent of households did not have Internet access. Of these households, 56.2 percent indicated that they were not interested, 26.5 percent indicated that the costs were too high, and 9.7 percent indicated that lack of knowledge, confidence and skills, and 'other' were reasons for not having the Internet.

In December 2006, the most common Internet activity conducted by individuals who had recently used the Internet was sending and receiving emails (90.3 percent), followed by obtaining information or general web browsing (84.4 percent), and obtaining information on goods and services (64.8 percent).

In 2006, 4.7 percent of individuals received harassing or threatening text, pictures or messages through a cellular phone. Of this proportion, 45.9 percent had reported it to a telecommunications provider, friend or family member, the police or others.

ICT in business

In the 2006 financial year, 93 percent of businesses used computers, 91 percent used the Internet and 46 percent of staff had access to the Internet. Business use of ICT was previously examined in Statistics New Zealand's analytical report, *Information Technology Use in New Zealand: 2001*. Comparison of results from this report and from the Business Operations Survey: 2006 indicates the number of businesses using the Internet increased by 12 percentage points.

For businesses, the top three outcomes of ICT implementation were improved responsiveness to customers (53 percent), improved efficiency of work flow processes (52 percent), and better coordination of staff and business activities (48 percent).

Eighteen percent of all businesses experienced at least one ICT security attack in the 2006 financial year. For businesses that employed basic ICT security measures (virus, spyware and firewall), this percentage dropped to 12 percent. Of those using all specific ICT security measures (also referred to as 'comprehensive'), only 1 percent experienced at least one attack.

ICT in government

In the 2006 financial year, 37 percent of all government organisations used dial-up technology, while 97 percent had broadband connections. Digital subscriber line (DSL) was the most common Internet connection type for all government organisations (69 percent), followed by cable (55 percent), cellular (52 percent), wireless (36 percent), and satellite (4 percent).

Ninety-seven percent of all government organisations had a website. Fifty-six percent of all government organisations' websites contained interactive information (for example, online forms), 28 percent had dynamic information (for example, webcams) and

26 percent offered online transaction services. Tertiary education websites were the most likely to offer these features: 91 percent had interactive information, 55 percent had dynamic information and 63 percent offered online transaction services.

Comparison of ICT usage in business and government

In 2006, 93 percent of businesses used computers, 91 percent used the Internet, but only 46 percent of their staff had access to the Internet. This compared with government organisations where 99 percent used computers, 99 percent used the Internet and 93 percent of staff had access to the Internet.

ICT industries and commodities

For businesses that exported in 2006, the largest barriers to growth were strength of competition (32.4 percent), access to international markets (31.1 percent) and access to financing (28.4 percent). The largest barriers to domestic sales were strength of competition (32.7 percent), ability to attract and/or retain experienced staff (27.4 percent) and the ability to attract and/or retain qualified staff (24.6 percent).

Internet service providers (ISPs)

For the six months ended 31 March 2007, there were 57 ISPs operating in New Zealand, with 1,464,300 active subscribers. The number of subscribers increased by 5.9 percent from 30 September 2006.

Residential (household) subscribers totalled 1.2 million at the end of March 2007. They accounted for 84.9 percent of all active subscribers and provided 73.1 percent of all ISP revenue. While the number of residential subscribers increased 8.1 percent, business and government subscribers decreased 5.1 percent (to 220,800). Business and government subscribers accounted for 15.1 percent of the total number of active subscribers and provided 26.8 percent of all ISP revenue.

Comparison of ICT usage in OECD countries

On Internet usage in businesses in 2006, New Zealand ranked fourteenth out of 28 Organisation for Economic Co-operation and Development (OECD) countries.

In 2006, New Zealand ranked ninth out of 25 countries whose households had access to a home computer.

The OECD Community Survey on ICT Usage in Households and by Individuals: April 2007, indicated households in New Zealand with access to a home computer increased by 25 percentage points to 71.6 percent from 2001 to 2006.

3 ICT in households

This chapter summarises:

- computer and Internet usage by households and individuals
- Internet use by individuals
- activities conducted on the Internet by individuals
- network, cellular phone and other ICT usage by households and individuals
- ICT security for households and individuals.

The information in this chapter was sourced from Statistics New Zealand's Household Use of Information and Communication Technology Survey: 2006. This survey was the first of its kind conducted by Statistics NZ and was collected in the quarter to December 2006.

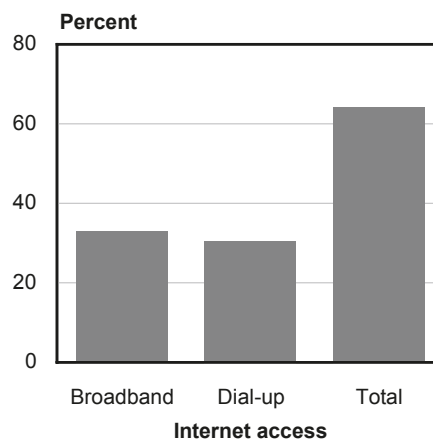
For more tables related to this chapter, see tables 1 to 25 in the appendix.

Household access to the Internet

In 2006, 64.6 percent of households had access to the Internet. Thirty-three percent of New Zealand households had a broadband connection, while 30.9 percent had a dial-up connection.

Figure 3.01

Household Access to the Internet
December 2006 quarter



Digital subscriber line (DSL) was the most common type of connection, used by 69.2 percent of households using broadband. Cable and wireless were the next most prevalent technology with 18.3 percent and 17 percent, respectively, followed by other broadband connections (0.8 percent).

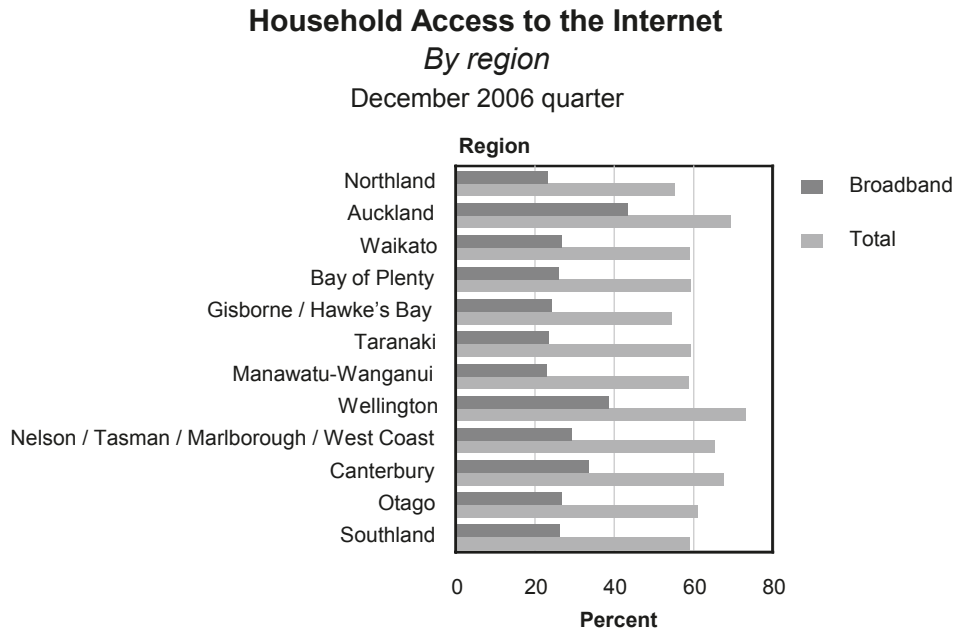
Of households that had dependants, 79.1 percent indicated they had Internet access, compared with only 63 percent of households with no dependants.

The most common method households used to access the Internet was through a computer (94.7 percent), followed by a laptop or hand-held computer (11 percent), and an Internet-enabled cellular phone (6 percent).

Regional and rural/urban Internet access

The Wellington region had the highest proportion of households with access to the Internet (72.7 percent). The Auckland and Canterbury regions followed with 68.9 percent and 67.2 percent, respectively. The Gisborne/Hawke's Bay regions shared the lowest proportion of households with Internet access, at 54.2 percent each.

Figure 3.02



The proportion of households with Internet access was the same for the 'all rural' (64.2 percent) and 'all urban' (64.6 percent) areas. When the 'all urban' areas group was separated into main urban, secondary urban and minor urban groups, there were significant differences between the three areas. Of households in main urban areas, 66.8 percent had Internet access, secondary urban areas had 56.2 percent, while only 48.1 percent of households in minor urban areas had access to the Internet.

A significant difference was seen between households in rural centres and smaller rural areas, where 56 percent and 65.9 percent, respectively, reported having access to the Internet.

Table 3.01

Household Access to the Internet
By area
December 2006 quarter

Area	Total Households	Internet access ⁽¹⁾		Broadband access ⁽²⁾	
		Number	Percent	Number	Percent
All rural areas	211,000	135,500	64.2	46,800	22.2
Rural centre	36,400	20,400	56.0	8,100	22.3
Rural	174,600	115,100	65.9	38,600	22.1
All urban areas	1,355,100	875,400	64.6	473,800	35.0
Main urban	1,158,300	773,600	66.8	428,600	37.0
Secondary urban	89,000	50,000	56.2	21,300	23.9
Minor urban	107,800	51,900	48.1	24,000	22.3
All⁽³⁾	1,566,000	1,010,900	64.6	520,500	33.2

(1) Households may have both broadband and dial-up access.

(2) Broadband includes DSL, cable, wireless and other broadband connection types.

(3) Total number of households is 1,566,000.

Note: All numbers in this table have been rounded to nearest 100. Due to rounding, figures may not add to 100 percent.

Regional and rural/urban broadband access

The Auckland region had the highest penetration of broadband access, with 43 percent of all households. The Wellington and Canterbury regions followed with 38.3 percent and 33.2 percent, respectively.

While proportions of households with Internet access were similar for urban and rural, broadband access differed markedly. All rural was 22.2 percent and the all urban was 35 percent. When the all urban areas group was separated into main urban, secondary urban and minor urban groups, there were also significant differences. Thirty-seven percent of households in main urban areas had broadband access, in secondary urban areas it was 23.9 percent, and 22.3 percent of households had access in minor urban areas.

The most common broadband technology that was used in all areas and all regions was DSL. The next most common was cable, followed by wireless.

Reasons households do not have the Internet

In the 2006 financial year, 35.4 percent of households did not have Internet access. Of these households, 56.2 percent indicated that they were not interested, 26.5 percent indicated that the costs were too high, and 9.7 percent indicated that lack of knowledge, confidence and skills, and 'other' were reasons for not having the Internet. See table 4 in the appendix for more details.

For households with dependants, the main reason for not having Internet access was that costs were too high (45.3 percent), compared with only 25.4 percent of households with no dependants.

Reasons households do not have broadband

Of all households with only dial-up access to the Internet, 50.8 percent reported that cost was a reason for not having broadband access, and 15.6 percent indicated concern about service and suppliers as the reason they had not switched to broadband.

Of all households with dial-up, 97.1 percent indicated they could browse web pages.

Household networks

Overall, only 9 percent of households indicated that they had networks. The highest proportion of households with networks was recorded in the Wellington region (12.3 percent of all households).

The most common type of network in all households was a wired network (59.4 percent), followed by a radio (wireless) (30.5 percent), and both (10.1 percent).

Loss or damage caused by a virus

The total number of households that experienced a loss or damage caused by a virus or similar was 16.8 percent.

Households with dependants experienced more loss or damage compared with households with no dependants (22.5 percent and 16 percent, respectively).

The Bay of Plenty region had the highest proportion of households that experienced loss or damage caused by a virus or similar (19.7 percent), followed by the Northland and Waikato regions (18.4 percent each).

Internet use by individuals

In the December 2006 quarter, the proportion of individuals aged 15 years and over who used the Internet in the previous 12 months from any location was 69 percent.

The proportion of males and females who had recently accessed the Internet was similar (68.8 percent and 69.1 percent, respectively).

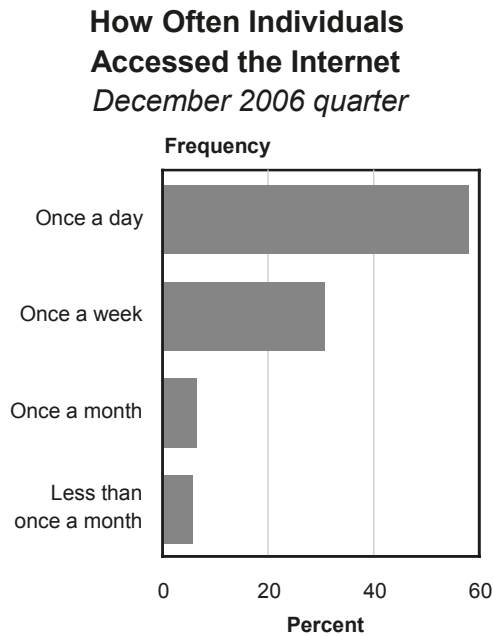
In the 15- to 19-year age group, 87.2 percent had used the Internet in the previous 12 months, while only 19.6 percent of people in the 75- to 79-year age group had done so.

Of individuals without a tertiary qualification, 58.4 percent accessed the Internet recently, compared with 79.8 percent of individuals with a tertiary qualification.

Of individuals who were employed, 78.2 percent indicated they had recently accessed the Internet, compared with only 51.4 percent of those who were not employed.

The most common frequency by which individuals accessed the Internet was once a day (57.7 percent), followed by once a week (30.5 percent).

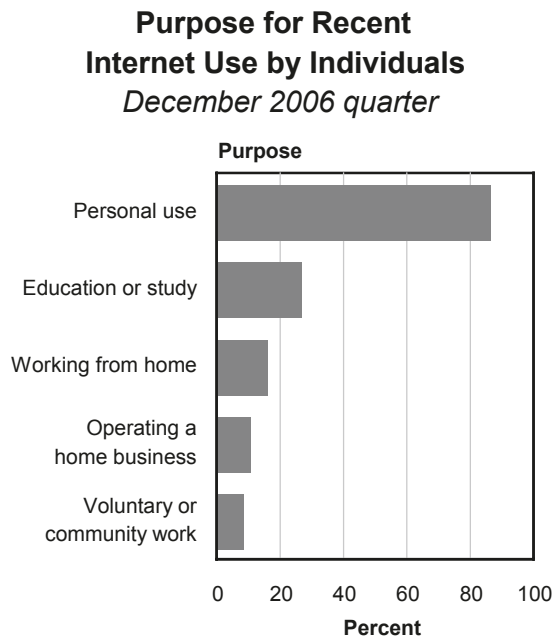
Figure 3.03



Purpose for recent Internet use by individuals

Personal use was the main purpose for recent Internet use by individuals (86.1 percent). This was followed by education or study (26.3 percent), working from home (15.6 percent), operating a home business (10.3 percent) and voluntary or community work (8.0 percent).

Figure 3.04



Those aged 60 years and over were the group most likely to use the Internet from home for voluntary or community work (12.7 percent), compared with 2.2 percent of those in the 15- to 19-year age group.

There was a large difference in proportion between those with a tertiary qualification and those without one, within the different purposes categories. For example, 16.9 percent of individuals without a tertiary qualification used the Internet to operate a home business compared with 5.4 percent of those with a tertiary qualification. See table 11 in the appendix for more details.

Mobile access to the Internet for personal use

In the last 12 months to December 2006, the proportion of individuals who connected to the Internet for purposes other than work (using a cellular phone or mobile data card) was 7.6 percent, and those that connected through another wireless connection such as a 'hotspot' or 'WiFi' was only 4.0 percent.

More males (8.8 percent) connected to the Internet through a cellular phone, compared with females (6.3 percent). This was similar for another wireless connection (4.8 percent and 3.2 percent respectively).

The 15- to 19-year age group and the 25- to 29-year age group had the highest proportion of those who used their cellular phone to connect to the Internet (both with 14.2 percent). The 20- to 24-year age group had the highest proportion that had used another wireless connection type to connect to the Internet (7.4 percent), followed by the 35- to 39-year age group (5.7 percent).

A higher proportion of individuals with a tertiary qualification accessed the Internet using a cellular phone or another wireless connection (9.0 percent and 5.3 percent, respectively), compared with those who did not have a tertiary qualification (6.2 percent and 2.7 percent, respectively).

Of employed individuals, 9.3 percent said they accessed the Internet using a cellular phone and 4.9 percent through another wireless connection. Of people not in employment, 4.2 percent indicated they accessed the Internet through a cellular phone, compared with 2.7 percent through another wireless connection.

It was more common for the Māori, European and 'other' ethnic groups to access the Internet through a cellular phone (7.8 percent), followed by Pacific (7.0 percent). On using another wireless connection, the 'other' ethnic groups had the highest proportion (5.1 percent), followed by European (4 percent), Pacific (2.2 percent) and Māori (1.8 percent).

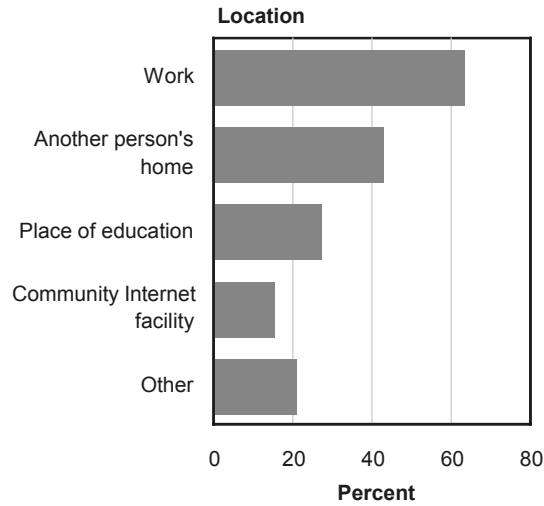
Those who earned more than \$100,000 annually were more likely to access the Internet through a cellular phone (21.0 percent) or through another wireless technology (15.5 percent).

Where individuals accessed the Internet

The most common place for people to access the Internet (other than from home) was at work (63.1 percent), followed by another person's home (42.5 percent) and at their place of education (26.9 percent).

Figure 3.05

Where Individuals Accessed the Internet⁽¹⁾ December 2006 quarter



(1) Excluding own home.

The 50- to 54-year age group had the highest proportion that accessed the Internet from work (83.4 percent), followed by the 45- to 49-year age group (81.8 percent).

The Pacific ethnic group had the highest proportion who indicated they accessed the Internet in the community (35.4 percent), followed by Māori (27.2 percent).

Of individuals who earned between \$70,000 and \$100,000 annually, 91.9 percent accessed the Internet from work, which was the highest proportion. The highest proportion of individuals who accessed the Internet from their place of education earned between \$1 and \$5,000 (77.4 percent).

Internet activities by individuals

In December 2006, the most common Internet activity conducted by individuals who had recently used the Internet was sending and receiving emails (90.3 percent), followed by obtaining information or general web browsing (84.4 percent) and obtaining information on goods and services (64.8 percent).

Table 3.02

Individual Internet Use by Activities
December 2006 quarter

Activity ⁽¹⁾	Total	
	Number ⁽²⁾	Percent ⁽³⁾
Internet communication		
Send or receive emails	1,993,400	90.3
Other communication e.g. chat rooms, message boards, instant messaging or blogging	544,700	24.7
Telephone over the Internet	266,900	12.1
Obtaining information on the following		
Other information or general web browsing	1,862,800	84.4
Goods and services	1,430,900	64.8
Government organisations or public authorities	961,200	43.5
Health or health services	626,400	28.4
Job opportunities	624,200	28.3
Leisure activities		
Download or listen to online music	709,900	32.2
Read or download electronic books, newspapers or magazines	575,300	26.1
Download or watch movies, short films or images	415,200	18.8
Play or download computer or video games	384,700	17.4
Listen to web radio or watch web television	349,700	15.8
Share files via peer to peer exchange	284,500	12.9
Personal purposes		
Internet banking	1,190,800	53.9
Download software, patches or upgrades	856,300	38.8
Sell goods and services	663,600	30.1
Formal education or training activities	416,900	18.9
Apply for jobs	325,900	14.8
Interaction with government organisations		
Download or complete a form online	594,900	26.9
Make online payments	318,600	14.4

(1) Number of people who accessed the Internet in the last 12 months is 2,207,600.

(2) Personal use of the Internet only; does not include use of the Internet for work purposes.

(3) Percentages are of all individuals for each activity.

Note: All numbers in this table have been rounded to nearest 100. Due to rounding, figures may not add to 100 percent.

Joining chat rooms and message boards, instant messaging, blogging and playing or downloading computer or video games were the most common Internet activities that the 15- to 19-year age group conducted.

The most common activity on the Internet for the 25- to 29-year age group was sharing files via peer to peer exchange (16.2 percent).

Internet purchases by individuals

Males were more likely to make an online purchase, with 30.3 percent doing so, compared with 27.0 percent of females.

The 30- to 34-year age group were the most likely to make an online purchase (43.3 percent), followed closely by the 25- to 29-year age group (41 percent).

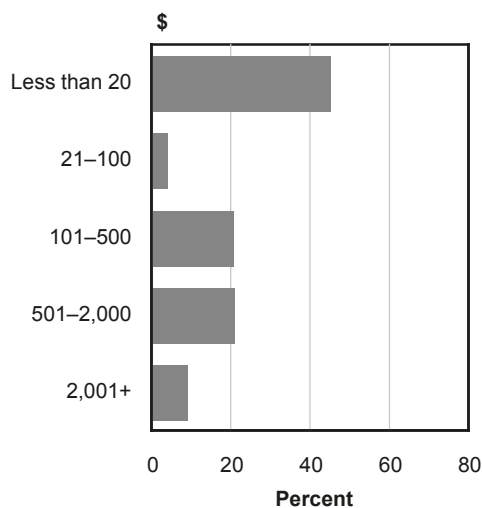
A total of 38.8 percent of those with a tertiary qualification had made at least one online purchase, compared with 18.6 percent of those without a tertiary qualification.

The proportion of employed individuals who made at least one online purchase was 35.6 percent, compared with 15.5 percent of those not employed.

A total purchase of less than \$20 was the most common value of goods and services bought for personal use over the Internet (44.9 percent).

Figure 3.06

Value of Online Purchases by Individuals *December 2006 quarter*



Individuals who had a personal annual income of over \$100,000 had the highest proportion of those who made online purchases valued from \$2,001 to \$20,000 and from \$20,001 and over (13.2 percent and 4.4 percent, respectively).

Use of online government services by individuals

Thirty-three percent of individuals indicated they had used a local or central government website in the last 12 months to December 2006.

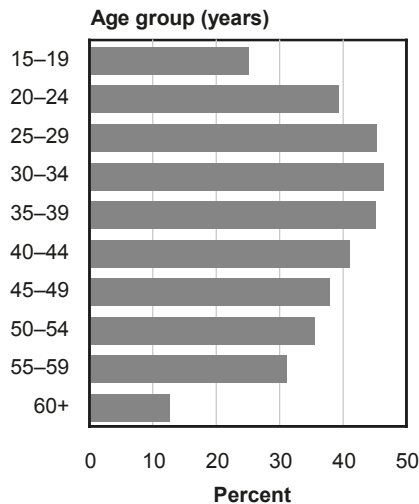
The 30- to 34-year age group had the highest proportion of individuals who indicated they had recently used a government website (46.2 percent), followed closely by the 25- to 29-year age group (45.1 percent).

Figure 3.07

Use of Online Government Services by Individuals

By age group

December 2006 quarter



Those with a tertiary qualification had almost double the proportion of people who used a government website compared with those who have no tertiary qualification (44.7 percent and 21.4 percent, respectively). This is also the case for those that were employed and those that were not employed (40.3 percent and 19.1 percent, respectively).

Of those individuals who had accessed a government website recently, 94.6 percent obtained information from government organisations. Of this proportion, 53.4 percent obtained information from central government websites while 19.7 percent obtained information from local government websites.

In the last 12 months to December 2006, 60.6 percent of those who had used a government website used it to download and/or complete government forms. Of this proportion, 76.7 percent downloaded or completed forms from central government websites and 11.9 percent downloaded or completed them from local government websites.

A higher proportion of individuals with a tertiary qualification made an online payment to government, compared with those with no tertiary qualification (10.8 percent and 4.2 percent, respectively). The 35- to 39-year age group had the highest proportion of those who made online payments to government through its website (11.5 percent).

The most common reason for not using a local or central government website was that there had been no need to (84.7 percent); followed by not interested (12.7 percent); preference to phone or talk to someone in person (4.5 percent); and 'other', which includes concerns about safety, security and privacy (3.1 percent).

Use of cellular phone by individuals

Eighty percent of individuals had personal use of a cellular phone in the last 12 months to the December 2006 quarter.

The 20- to 24-year age group had the highest share of individuals who had use of a cellular phone (92.8 percent), followed by the 25- to 29-year age group (92.5 percent) and the 30- to 34-year age group (90.1 percent).

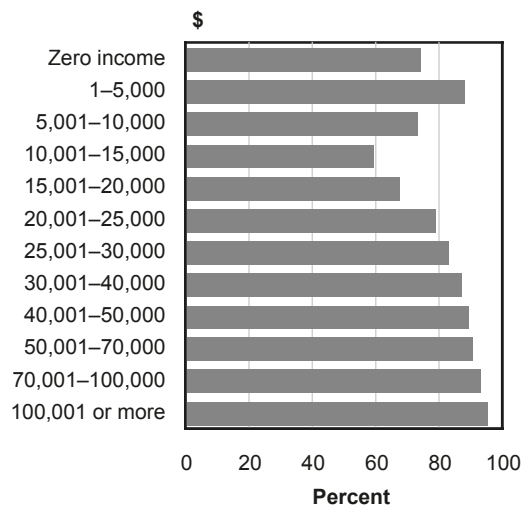
The income group with the highest proportion of individuals who had personal use of a cellular phone were those who had a personal annual income of more than \$100,000 (95 percent). The next were individuals who had an annual income of \$70,001–\$100,000 (92.7 percent), and \$50,001–\$70,000 (90.3 percent). The income group with the lowest proportion responded that their personal annual income was at a loss (67.3 percent).

Figure 3.08

Use of Cellular Phone by Individuals

By annual income

December 2006 quarter



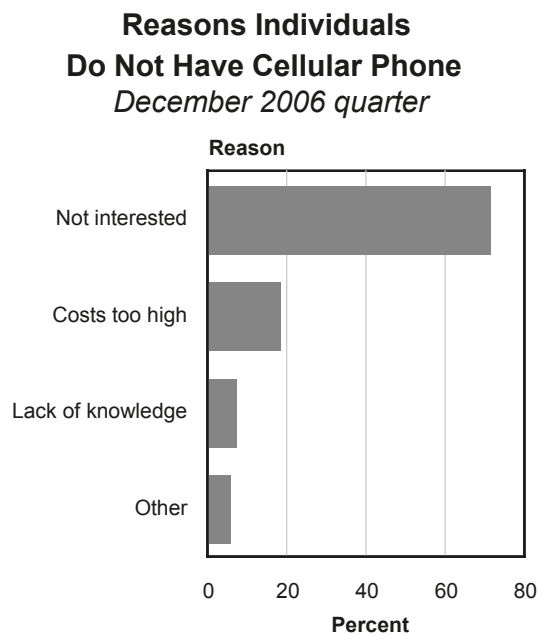
A higher proportion of individuals with a tertiary qualification had used a cellular phone in the last 12 months to December 2006 (86.2 percent) compared with those who have no tertiary qualification (73.8 percent).

The top three income bands had the highest proportion of individuals who indicated they had recently used a cellular phone for personal use (95.0 percent, 92.7 percent and 90.3 percent, respectively).

Reasons individuals do not have personal use of cellular phone

In 2006, 71.2 percent of those who did not have a cellular phone responded 'not interested' as their reason for not having personal use of a cellular phone. The next most common reason was that the costs were too high (18.3 percent), and lack of confidence, knowledge or skills (7.1 percent).

Figure 3.09



For the 15- to 19-year age group, the most common reason for not having personal use of a cellular phone was that the costs were too high (46.8 percent). Individuals aged 80 years and over had the largest percentage of those who responded they were not interested in having personal use of a cellular phone (85.4 percent).

The European ethnic group had the highest proportion of individuals who were not interested in a cellular phone (76.4 percent), while the Pacific peoples ethnic group had the lowest (50.2 percent).

Personal loss caused by fraudulent ICT activity

The proportion of individuals who had been a victim of fraudulent ICT activity that resulted in some loss was 1.6 percent.

The 35- to 39-year age group had the highest proportion of those who experienced personal loss (2.3 percent), followed by the 50- to 54-year age group (2.2 percent), and the 55- to 59-year age group (2.2 percent).

Reasons for not using the Internet from a public location

Twenty percent of individuals indicated they were happy to use the Internet from a public location.

The age group that had the highest number of people who indicated they were happy to use the Internet from a public location was the 15- to 19-year age group (32.7 percent). The lowest proportion came from the 75- to 79-year age group (7 percent).

The most common response individuals gave for not using the Internet from a public location was there was no need (41.7 percent), followed by security concerns (35.2 percent), privacy (14.4 percent) and 1.4 percent indicated 'other' reasons.

Cellular phone harassment

In 2006, 4.7 percent of individuals received harassing or threatening text, pictures or messages through a cellular phone.

Of this proportion, 45.9 percent had reported it to a telecommunications provider, friend or family member, the police or others.

Females received more cellular phone harassment than males (5.6 percent and 3.7 percent, respectively).

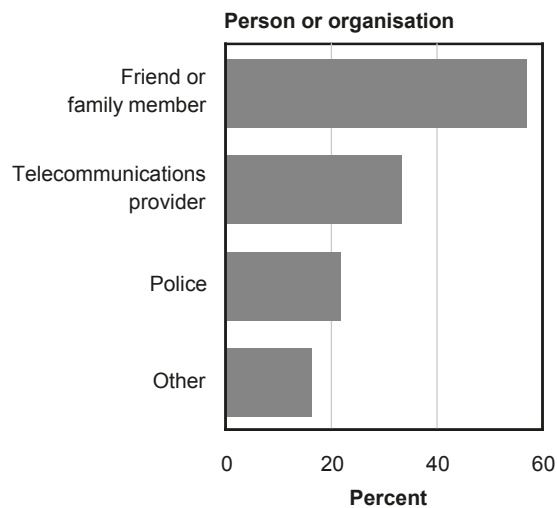
The 15- to 19-year age group had the highest proportion of harassment with 48.9 percent reporting it.

The ethnic group that received the highest proportion of harassment was Māori (6.6 percent), followed by Pacific peoples (5.6 percent), and other (5.4 percent). Of those who received harassment, the Māori ethnic group had the highest proportion of those who reported harassment (50.5 percent).

It was more common for individuals to report their harassment to a friend or family member (56.8 percent), followed by a telecommunications provider (33.1 percent), the police (21.6 percent) and 'other' (16.1 percent), which includes a work colleague or staff of an educational institution.

Figure 3.10

Cellular Phone Harassment Reports
By person or organisation reported to
 December 2006 quarter



4 ICT in business

This chapter summarises:

- computer and Internet usage by business
- ICT security and support services in business
- business Internet services
- business Internet activities, including online interaction with government
- network, cellular phone and other ICT usage by business.

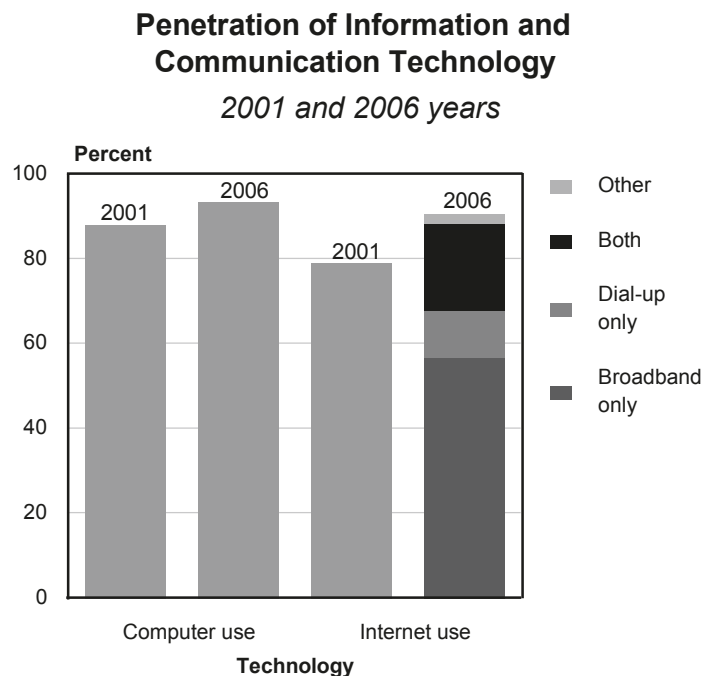
The information in this chapter was sourced from Statistics New Zealand's Business Operations Survey: 2006. See chapter 10, 'Technical notes' for more details.

For more tables related to this chapter, see tables 26 to 41 in the appendix .

Business use of computers and the Internet

In the 2006 financial year, 93 percent of businesses used computers, 91 percent used the Internet and 46 percent of staff had access to the Internet. Business use of ICT was previously examined in Statistics New Zealand's analytical report, *Information Technology Use in New Zealand: 2001*. Comparison of results from this report and from the Business Operations Survey: 2006 indicates the number of businesses using the Internet increased by 12 percentage points.

Figure 4.01



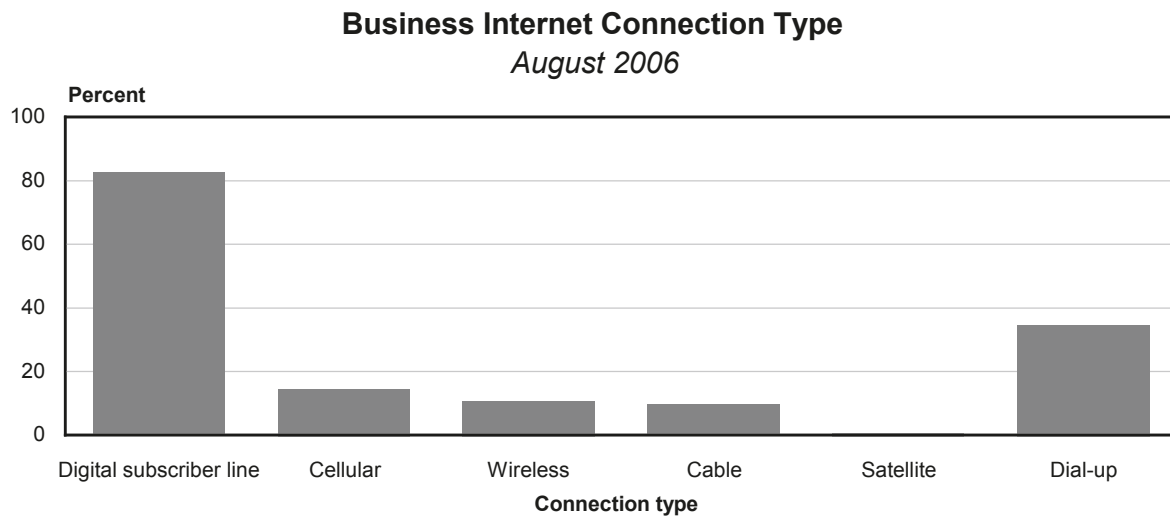
Note: 2001 data sourced from *Information Technology Use in New Zealand 2001*. Internet connection types for 2001 are not available.

Large companies saw a slight increase in Internet usage, with businesses of 100 or more employees reporting that 99 percent used the Internet. This compared with only 89 percent for businesses with 6–19 employees.

The top industry users of the Internet were the electricity, finance and wholesale trade industries with 100 percent, 99 percent and 97 percent of businesses, respectively. The lowest Internet use was in the mining and quarrying industry, and the agriculture, forestry and fishing industry, with 77 percent each. See table 26 in the appendix for more details.

Most businesses used a broadband Internet connection rather than dial-up, with digital subscriber line (DSL) the most prevalent broadband connection type (83 percent).

Figure 4.02



Business ICT security

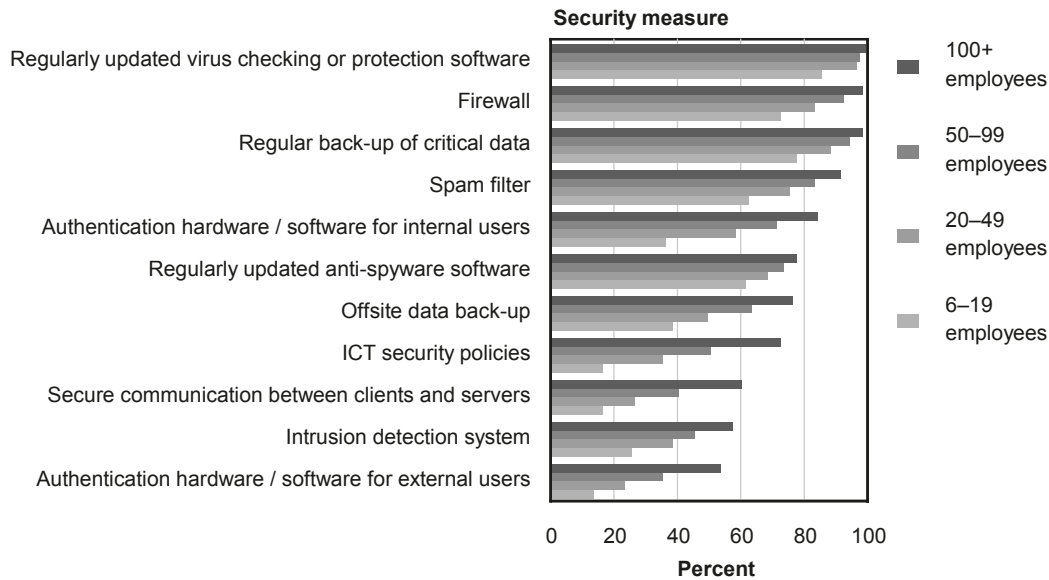
The most common ICT security measure used by businesses was regularly updated virus checking or protection software (88 percent of businesses). The least common security measure was hardware/software authentication for external users, with only 17 percent of businesses using this measure in the 2006 financial year.

The larger businesses saw increased use of security measures. Ninety-nine percent of businesses with 100 or more employees reported using regularly updated virus checking or protection software, compared with only 85 percent of businesses with 6–19 employees.

Figure 4.03

Business ICT Security Measures*By business size*

August 2006



With the exception of the mining and quarrying industry, all industries indicated regularly updating virus checking or protection software as their most common form of security measure.

Eighteen percent of all businesses experienced at least one ICT security attack in the 2006 financial year. For businesses that employed basic ICT security measures (virus, spyware and firewall), this percentage dropped to 12 percent. Of those using all specific ICT security measures (also referred to as 'comprehensive'), only 1 percent experienced at least one attack.

The highest proportion of businesses that experienced at least one attack was in the accommodation, cafes and restaurants industry (23 percent), closely followed by the transport and storage industry (22 percent) and construction industry (21 percent).

Larger businesses experienced proportionately fewer attacks than smaller businesses. For example, 15 percent of businesses with 100 or more employees experienced at least one security attack in 2006, compared with 18 percent of businesses with 6-19 employees.

Table 4.01

Security Measures and Attacks
By business size and industry
 August 2006

	Total number of businesses ⁽¹⁾	Businesses that experienced an attack		Business that experienced an attack AND had security measures ⁽²⁾				
				Virus	Spyware	Firewall	Basic security measures	Comprehensive security measures
		Number	Percent ⁽³⁾	Percent ⁽⁴⁾				
Business size⁽⁵⁾								
6–19 employees	25,974	4,752	18	18	14	15	12	0
20–49 employees	6,288	1,062	17	17	13	15	12	1
50–99 employees	1,731	288	17	16	13	15	13	2
100+ employees	1,440	213	15	15	11	14	10	3
Industry								
Agriculture, forestry and fishing	3,123	498	16	15	11	10	8	0
Mining and quarrying	90	15	17	14	14	14	14	0
Manufacturing	5,523	942	17	17	13	15	13	0
Electricity, gas and water supply ⁽⁶⁾	18	0	0	0	0	0	0	0
Construction	3,549	738	21	21	17	16	14	0
Wholesale trade	3,198	507	16	16	13	14	11	1
Retail trade	5,886	1,077	18	18	16	15	14	0
Accommodation, cafes and restaurants	3,465	810	23	21	14	19	11	0
Transport and storage	1,524	336	22	22	16	16	14	1
Communication services	141	30	21	19	18	18	18	5
Finance and insurance	582	81	14	13	12	13	12	4
Property and business services	5,055	723	14	14	11	12	10	1
Education	585	87	15	15	14	14	12	0
Health and community services	2,085	357	17	17	11	17	11	2
Cultural and recreational services	615	132	21	21	17	18	16	2
Overall	35,436	6,312	18	17	14	15	12	1

(1) For more information on the businesses included, refer to the technical notes of this report.

(2) There were 0 businesses that had no security measures in place.

(3) Percentages are of all New Zealand businesses in each business size or industry category.

(4) Percentages are of all New Zealand businesses in each business size or industry category that experienced an attack.

(5) Defined by rolling mean employment (RME) count. For more information on the RME count, refer to the technical notes of this report.

(6) Results for the electricity, gas and water supply industry should be treated with caution due to the small number of businesses in this category.

Note: All counts in this survey were randomly rounded to base 3 to protect confidentiality, so actual figures may differ from those stated.

ICT support services

Respondents in the Business Operations Survey: 2006 were asked to indicate the methods they used to maintain their ICT. Most businesses used a combination of other services with contractors. Fifty-six percent of businesses received ICT support through contractors, and 9 percent of businesses reported they received no ICT support.

The next most common support type was warranty (32 percent), followed by in-house support by other staff (19 percent), and in-house support by ICT staff (12 percent).

Contractor support of ICT was more common for businesses in the industries of health and community services, and agriculture. For the forestry and fishing industries, warranty was the most commonly used support. In-house support by ICT staff was the most common for the electricity, gas and water supply industry.

Table 4.02

ICT Support Services Used by Business
By business size and industry
August 2006

	Total number of businesses ⁽¹⁾	Warranty	Contracted	In-house by ICT staff	In-house by other staff	None
		Percent ⁽²⁾				
Business size⁽³⁾						
6–19 employees	25,974	31	54	7	18	11
20–49 employees	6,288	36	63	16	22	5
50–99 employees	1,731	35	67	34	24	2
100+ employees	1,440	39	63	63	21	1
Industry						
Agriculture, forestry and fishing	3,123	34	30	3	11	20
Mining and quarrying	90	27	60	30	10	10
Manufacturing	5,523	32	62	13	21	7
Electricity, gas and water supply ⁽⁴⁾	18	17	50	67	33	0
Construction	3,549	32	54	8	13	16
Wholesale trade	3,198	30	67	22	24	3
Retail trade	5,886	32	58	5	20	8
Accommodation, cafes and restaurants	3,465	23	44	5	12	14
Transport and storage	1,524	34	56	19	17	8
Communication services	141	23	49	38	23	9
Finance and insurance	582	35	71	40	23	0
Property and business services	5,055	32	64	22	23	5
Education	585	33	51	18	26	10
Health and community services	2,085	45	70	10	24	9
Cultural and recreational services	615	38	49	18	16	12
Overall	35,436	32	56	12	19	9

(1) For more information on the businesses included, refer to the technical notes of this report.

(2) Percentages are of all New Zealand businesses in each business size or industry category. Businesses could select more than one ICT support service.

(3) Defined by rolling mean employment (RME) count. For more information on the RME count, refer to the technical notes of this report.

(4) Results for the electricity, gas and water supply industry should be treated with caution due to the small number of businesses in this category.

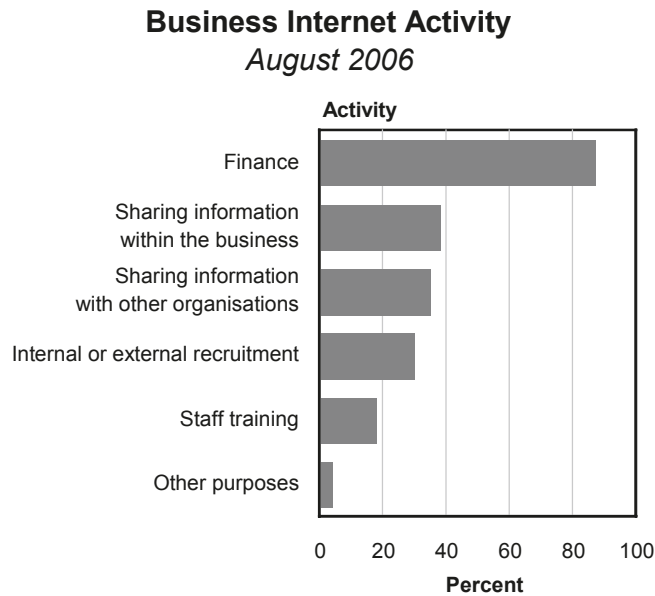
Note: All counts in this survey were randomly rounded to base 3 to protect confidentiality, so actual figures may differ from those stated.

Business Internet activities

Finance activities were the dominant Internet activities undertaken by businesses, with 87 percent of all businesses using the Internet for this purpose. There was a large gap between finance activities and the next most common activity, which was sharing information within the business (38 percent).

Larger businesses were more likely to conduct Internet activities. Thirty-two percent of businesses with 6–19 employees used the Internet to share information within the organisation compared with 73 percent of businesses with 100 or more employees.

Figure 4.04

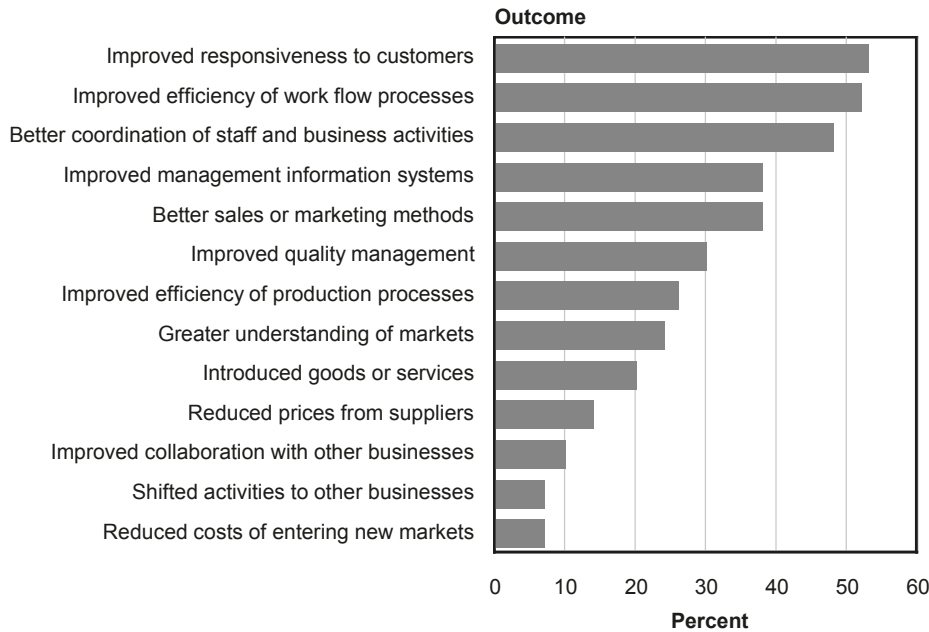


Outcomes of ICT implementation

For businesses, the top three outcomes of ICT implementation were improved responsiveness to customers (53 percent), improved efficiency of work flow processes (52 percent), and better coordination of staff and business activities (48 percent).

Figure 4.05

Outcomes of Information and Communication Technology August 2006



The larger businesses were more likely to report that ICT usage had been important in achieving positive outcomes.

Table 4.03

Outcomes of Information and Communication Technology August 2006

Outcome	Business size (number of employees) ⁽¹⁾			
	6–19	20–49	50–99	100+
	Rank ⁽²⁾			
Improved responsiveness to customers	1	1	2	1
Improved efficiency of work flow processes ⁽³⁾	2	2	1	2
Better coordination of staff and business activities	3	3	3	3
Improved management information systems	5	4	4	4
Better sales or marketing methods	4	5	6	6
Improved quality management	6	6	5	5
Improved efficiency of production processes	7	7	7	7
Greater understanding of markets	7	9	8	9
Introduced goods or services	10	10	10	10
Reduced prices from suppliers	11	11	11	11
Other ⁽⁴⁾	9	8	8	7

(1) Defined by rolling mean employment (RME) count. For more information on the RME count, refer to the technical notes of this report.

(2) Rankings are assigned in descending order of percentage of businesses in each business size category.

(3) Includes inventory management and ordering systems (eg just-in-time processes).

(4) Other outcomes include: improved collaboration with other businesses, shifted activities to other businesses and reduced costs of entering new markets.

Business activities conducted to gain benefit from ICT

Over the last two years to 2006, 42 percent of businesses cited they had trained employees to derive more benefits from their ICT. The next most common activities were introducing new work practices (22 percent), followed by new work strategies (22 percent).

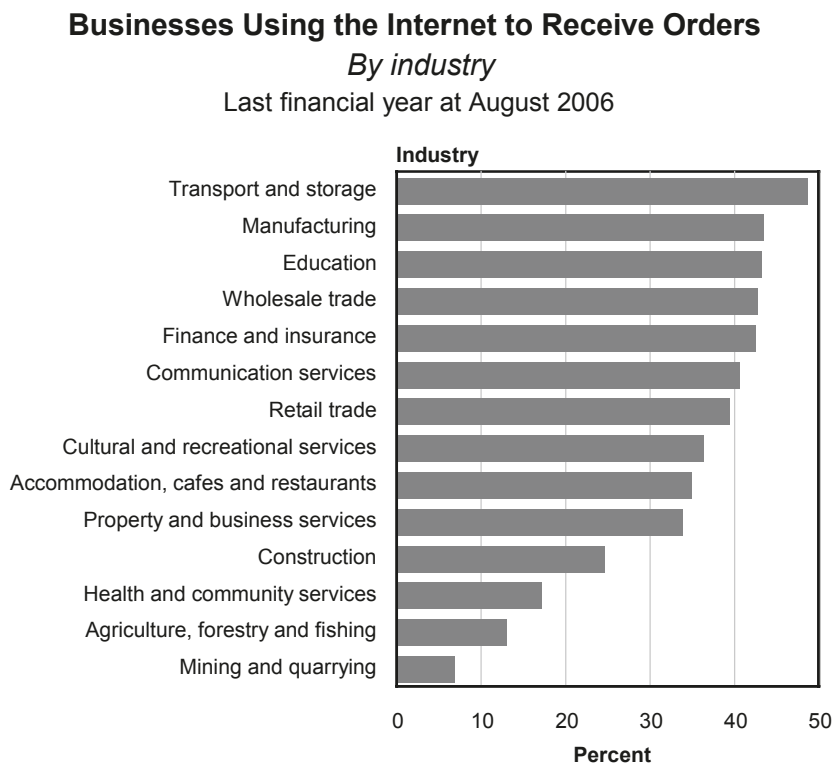
Sixty-eight percent of the finance and insurance industry trained employees to benefit from ICT. Forty percent of this industry changed staff levels or skills mix, new work practices and used new strategies to derive benefits.

Larger businesses were more likely to conduct activities to receive more benefit from their ICT. Seventy-six percent of businesses that employed over 100 people trained employees to get more benefit from their ICT, compared with 36 percent of those businesses that employed between 6 and 19 employees.

Internet sales

Overall, 34 percent of businesses reported they used the Internet to receive orders for goods or services. The highest proportion was recorded in the transport and storage industry (48 percent), followed closely by the manufacturing and education industries (43 percent each).

Figure 4.06



Of those businesses that used the Internet to receive orders, an online facility was the most popular medium (24 percent), followed by a third party website (21 percent), other (12 percent) and email (0.7 percent).

The larger businesses were more likely to use an online facility to receive orders. For example, 21 percent of businesses with 6–19 employees indicated they used an online facility, compared with 43 percent of businesses with 100 or more employees.

Nineteen percent of all businesses reported that up to 10 percent of their total sales were acquired online, and only 2 percent of businesses had online sales of more than 50 percent of their total income.

Table 4.04

Business Internet Sales
By business size and industry
August 2006

	Total number of businesses ⁽¹⁾	Percentage using the Internet to receive orders for goods or services	Internet sales as a percentage of total sales				
			0	1–10	11–25	26–50	50+
			Percentage of all businesses ⁽²⁾				
Business size⁽³⁾							
6–19 employees	25,974	34	3	18	5	2	2
20–49 employees	6,288	34	4	21	3	2	2
50–99 employees	1,731	36	4	21	4	1	2
100+ employees	1,440	44	5	24	6	2	1
Industry							
Agriculture, forestry and fishing	3,123	13	2	7	1	0	0
Mining and quarrying	90	7	0	3	3	0	0
Manufacturing	5,523	43	4	27	4	3	1
Electricity, gas and water supply ⁽⁴⁾	18	.. S	.. S	.. S	.. S	.. S	.. S
Construction	3,549	25	2	15	3	0	0
Wholesale trade	3,198	42	2	27	7	1	1
Retail trade	5,886	39	6	23	2	2	2
Accommodation, cafes and restaurants	3,465	35	0	11	14	6	4
Transport and storage	1,524	48	4	24	10	2	5
Communication services	141	40	4	17	9	0	4
Finance and insurance	582	42	4	25	4	2	3
Property and business services	5,055	34	4	16	4	1	2
Education	585	43	4	29	4	1	0
Health and community services	2,085	17	4	8	4	0	0
Cultural and recreational services	615	36	0	22	4	0	3
Overall	35,436	34	3	19	5	2	2

(1) For more information on the businesses included, refer to the technical notes of this report.

(2) Percentages are of all New Zealand businesses in each business size or industry category. Excludes businesses that indicated don't know.

(3) Defined by rolling mean employment (RME) count. For more information on the RME count, refer to the technical notes of this report.

(4) Results for the electricity, gas and water supply industry have been suppressed due to the small number of businesses in this category.

Note: All counts in this survey were randomly rounded to base 3 to protect confidentiality, so actual figures may differ from those stated. Due to rounding, some figures may not sum to stated total.

Symbols:

S suppressed

.. figures not available

Overall Internet sales to customers outside New Zealand were low, with 22 percent of businesses indicating they had no Internet sales outside New Zealand.

Fourteen percent of the transport and storage industry indicated that 1 percent to 10 percent of their Internet sales were to overseas customers. This was the highest percentage among all industries.

Internet purchases

Fifty-four percent of businesses indicated they used the Internet for purchases, and 34 percent indicated they do not use the Internet for making purchases.

The larger businesses were more likely to use the Internet for making purchases. Fifty-percent of businesses with 6–19 employees reported that they used the Internet to make purchases, compared with 72 percent of businesses with 100 or more employees.

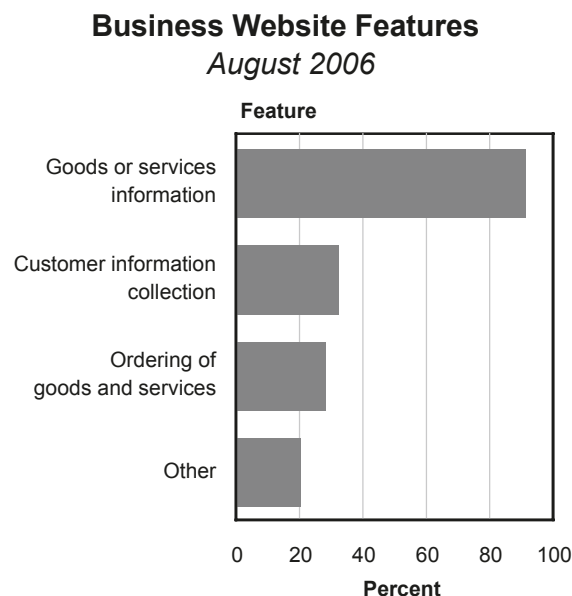
Business website features

Fifty-one percent of businesses indicated they had a website. The highest proportion was recorded in the electricity, gas and water supply industry (83 percent), followed closely by the finance and insurance industry (82 percent).

Only 45 percent of businesses with 6–19 employees have a website, compared with 86 percent of businesses with 100 or more employees.

The most common website feature was goods and services information (91 percent). Customer information collection was next (32 percent), followed by ordering of goods and services (28 percent).

Figure 4.07



Internet connection choice

Businesses were asked to indicate what factors were considered when making their Internet connection choice. Fifty-percent of businesses said connection speed was the most important factor, followed closely by availability in business location, and ongoing connection and usage costs (46 percent and 44 percent, respectively).

Businesses with over 100 employees rated compatibility with their existing technology as more important (47 percent), compared with businesses with 6–19 employees who indicated this factor as less important (22 percent). The larger the business, the more likely that it considers each of the factors mentioned above before making their Internet connection choice.

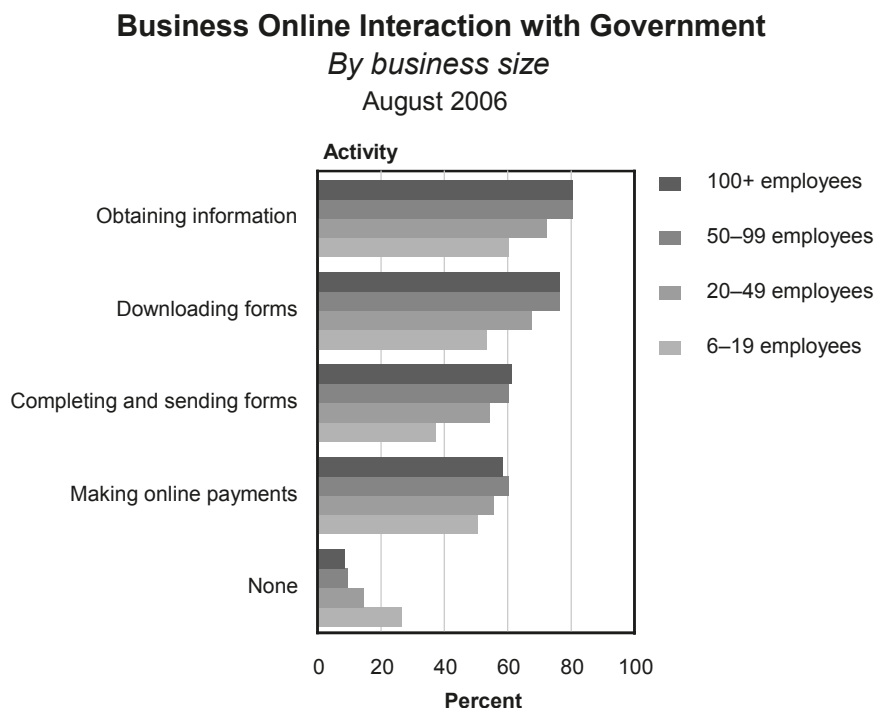
The education industry indicated ongoing connection and usage costs as their highest priority (51 percent). Availability in business location was the highest priority for the mining and quarrying industry (50 percent) and the agriculture, forestry and fishing industry (48 percent).

Business online interaction with government

When businesses used the Internet to transact with government, the most common activity in the 2006 financial year was obtaining information (64 percent), followed by downloading forms (58 percent), making online payments (52 percent) and completing and sending forms (43 percent).

The larger businesses were more likely to use online services to transact with government. For example, 80 percent of businesses with 100 or more employees obtained information from the government through the Internet, compared with 60 percent of businesses with 6–19 employees.

Figure 4.08



The education industry had the highest proportion of businesses that used the Internet to obtain information from government (86 percent).

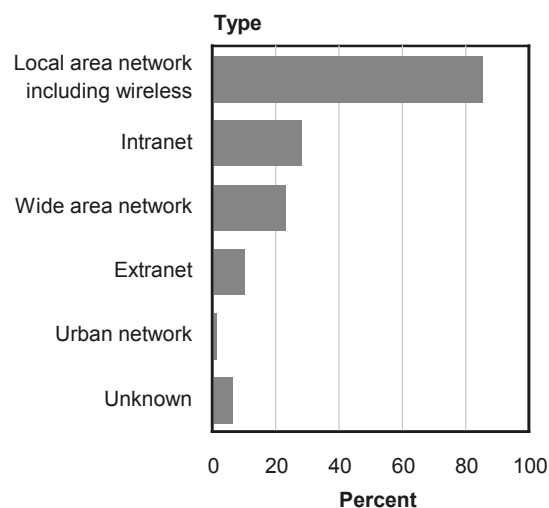
Network technologies used by business

Overall, 68 percent of businesses indicated that they use networks. The highest proportion was recorded in the electricity, gas and water supply industry (100 percent).

The most popular network used amongst businesses was LAN (local area network, which includes wireless), with 85 percent of businesses indicating use of this type. Of all the networks available to businesses, LAN was by far the most preferred. The next highest was an intranet within the business (28 percent), followed by WAN (wide area network) with 23 percent.

Figure 4.09

Business Use of Network Technology August 2006



Only 61 percent of small businesses used a network, compared with 97 percent of large businesses. This trend is seen throughout the network types. For example, only 21 percent of businesses with 6–19 employees had an intranet, while 64 percent of businesses with 100 or more employees indicated use of an intranet.

Business provision of cellular phones

During the 2006 financial year, 83 percent of businesses indicated that their staff had provision of cellular phones. Only 33 percent of businesses reported that 10 percent or less of their staff were provided with cellular phones and 9 percent of businesses provided 76 percent to 100 percent of their staff with cellular phones.

It was not common for businesses in the health and community services industry to provide staff with cellular phones. None of the businesses in this industry indicated that they provided 75 percent or less of their staff with cellular phones and only 2 percent of businesses indicated that 76 percent to 100 percent of their staff have cellular phones.

5 ICT in government

This chapter summarises:

- ICT usage in government
- data exchanges with other organisations
- ICT security and support services in government
- government online services and web presence
- ICT training for staff
- ICT expenditure in government
- online purchases and payments by government
- government ICT investment plans
- barriers to implementation of new ICT.

The information in this chapter was sourced from Statistics New Zealand's Government Use of ICT Survey: 2006. This is the first survey of its kind at Statistics NZ. See chapter 10, 'Technical notes' for more details.

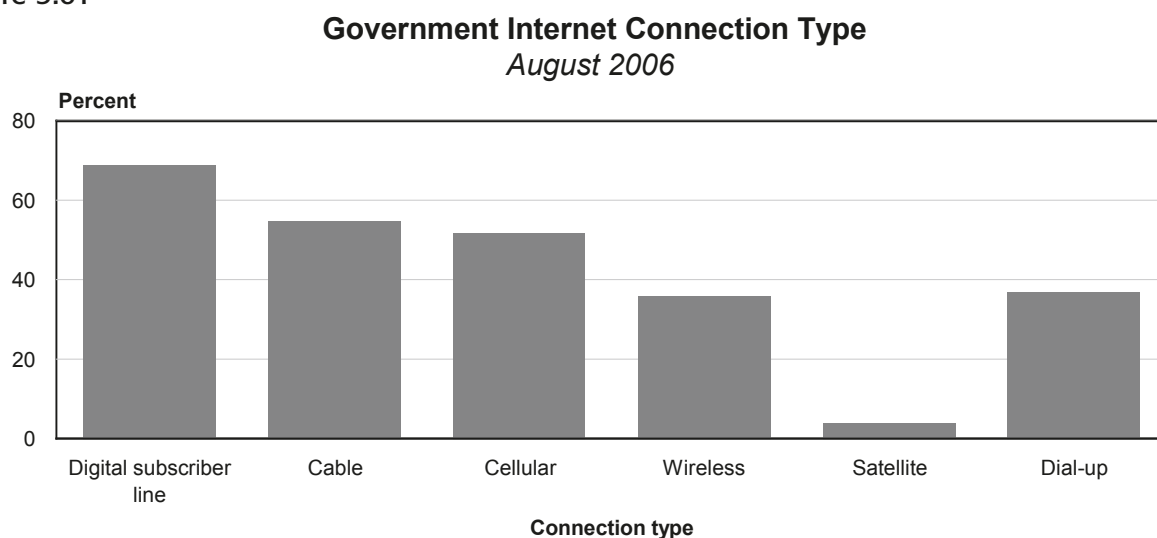
For more tables related to this chapter, see tables 42 to 60 in the appendix.

Government use of computers and the Internet

Results from Statistics NZ's Government Use of ICT Survey: 2006 showed that 99 percent of government organisations used computers and the Internet. On average, 93 percent of staff had access to the Internet at work.

Thirty-seven percent of all government organisations used dial-up technology, while 97 percent used broadband. Digital subscriber line (DSL) was the most common Internet connection type for all government organisations (69 percent), followed by cable (55 percent), cellular (52 percent), wireless (36 percent), and satellite (4 percent).

Figure 5.01

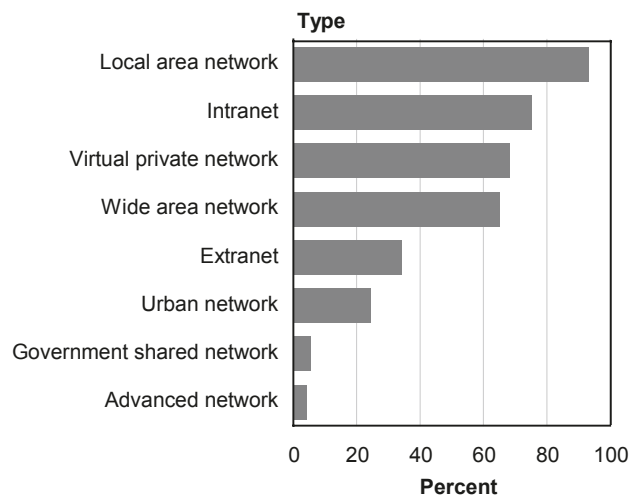


Government use of network technology

Local area network (LAN) was the most widely used network technology across all government organisations, with 93 percent of agencies using it. The next most common was intranet (75 percent of users) and virtual private network (VPN), with 68 percent. Only 4 percent of government organisations used the advanced network (also known as Kiwi Advanced Research and Education Network or KAREN).

Figure 5.02

Government Use of Network Technology August 2006



Larger government organisations were more likely to use network technology. For example, only 18 percent of government organisations with 0–5 employees indicated that they used WAN (wide area network), compared with 100 percent of government organisations with 1,000 or more employees.

Government use of other ICT

Ninety-six percent of government organisations used cellular phones in the 2006 financial year. Thirty-one percent of all organisations had voice over Internet protocol (VoIP) and only 6 percent used radio frequency identification (RFID). RFID is an automatic identification method, relying on storing and remotely retrieving data using devices called RFID tags or transponders.

All government organisations with 1,000 or more employees indicated that they used cellular phones, 94 percent used wireless laptops and 88 percent used wireless PDAs (personal digital assistants). However, government organisations with 0–5 employees indicated 82 percent used cellular phones, 45 percent used wireless laptops and only 27 percent used wireless PDAs.

One hundred percent of Crown research institutes (CRIs) and tertiary education organisations indicated that they used cellular phones and wireless laptops.

Government data exchange with other organisations

Seventy-seven percent of government organisations engaged in regular data exchanges with other organisations (including other government organisations). Only 45 percent of government organisations with 0–5 employees engaged in regular data exchange with other organisations, compared with 100 percent of organisations with 1,000 or more employees.

Most data exchanges were made with central government (52 percent), followed by businesses (45 percent) and wider state services (33 percent). Tertiary education institutes carried out the most data exchange with central government (82 percent).

The proportion of data exchanges that took place in real time was 37 percent. CRIs had the highest proportion, with 67 percent of their exchanges taking place in real time.

Most government organisations preferred to use the Internet for regular data exchange (64 percent of organisations). Attachment to an email was next (61 percent), followed by CD or DVD, (50 percent). Only 5 percent of government organisations used magnetic tapes for data exchange.

ICT security in government

Ninety-nine percent of organisations used filtering and network protection, 92 percent operated with authentication technology, and 50 percent applied cryptography security measures. Forty-nine percent of government organisations used all specified internal ICT security measures.

Ninety-five percent of government organisations indicated that they used business continuity measures to secure their ICT, 83 percent indicated they used physical security of ICT equipment and 82 percent used IT reviews/audits.

Table 5.01

Government Use of Information and Communication Technology Security
By organisation type
 August 2006

	Overall	Organisation type				
		Central government	Local government	Crown research institute	Tertiary education	Other government organisation
Percent ⁽¹⁾						
Internal ICT security						
Filtering	99	100	96	100	100	100
Network protection	99	100	96	100	100	95
Authentication	92	95	93	100	100	80
Cryptography	50	60	43	67	73	25
All of the above internal ICT security measures used ⁽²⁾	49	58	43	67	73	25
ICT security procedures						
ICT security education of employee	56	56	61	100	73	30
Formal ICT security policy	64	74	61	100	82	40
Appointed person responsible for ICT security	54	63	43	67	55	50
IT reviews/audits	82	86	86	100	91	65
Business continuity measures	95	100	96	100	100	85
Emergency plan updated past two years	50	56	54	67	45	25
Physical security of ICT equipment	83	86	86	100	100	60
Emergency back-up power	76	77	93	100	82	50
None of the above ICT security procedures used	2	0	0	0	0	10
Total number of organisations⁽³⁾	315	129	84	9	33	60

(1) Percentages are of all organisations in each organisation type.

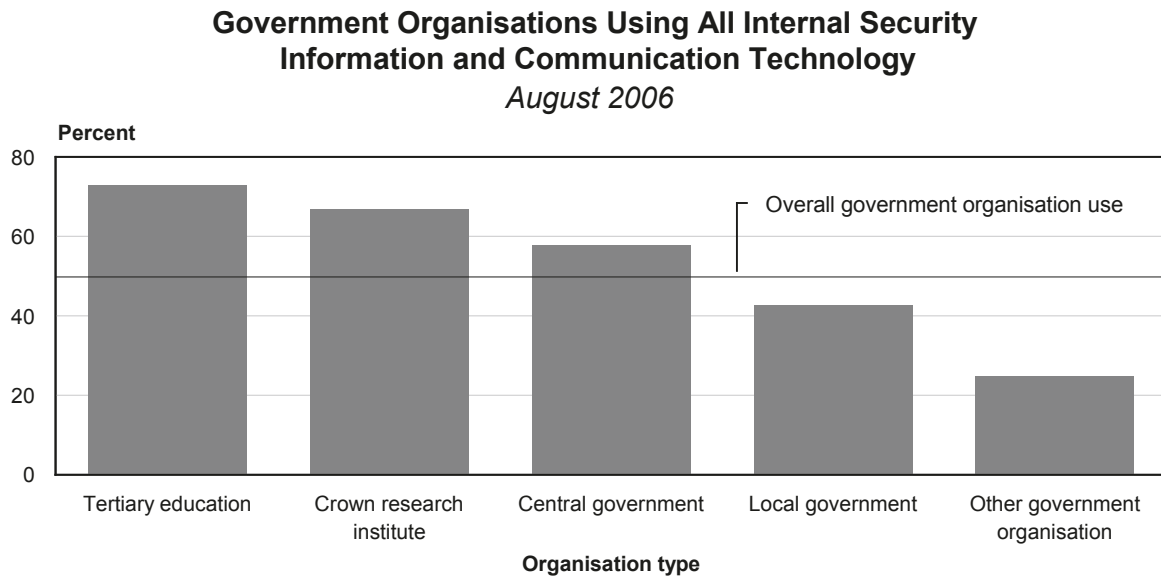
(2) A small number of other government organisations had no internal ICT security measures in place. This data has been suppressed.

(3) For more information on the government organisations included, refer to the technical notes of this report.

Note: All counts in this survey were randomly rounded to base 3 to protect confidentiality, so actual figures may differ from those stated. Due to rounding, some figures may not sum to stated total.

Seventy-three percent of tertiary education organisations used all specified internal ICT security measures, compared with only 25 percent of other government organisations.

Figure 5.03



Note: Internal security includes filtering, network protection, authentication, and cryptography.

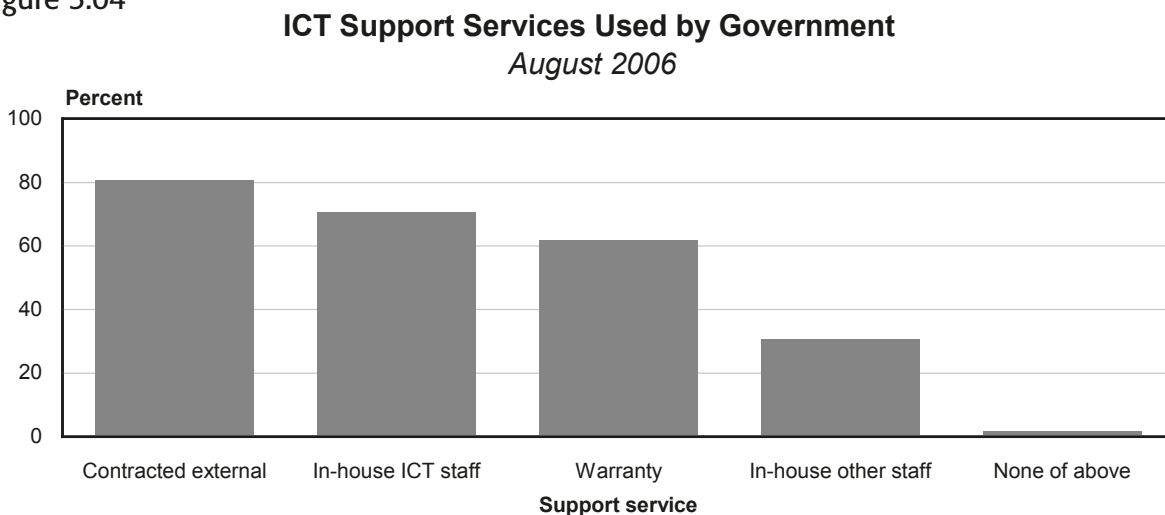
Seventy-nine percent of government organisations reported that updates to their anti-virus software were automatic, 26 percent said their software was updated daily, and 3 percent indicated that it was updated weekly.

ICT support services used by government

Respondents in the Government Use of ICT Survey: 2006 were asked to indicate how their ICT was supported. Most government organisations used a combination of other services with contractors. Eighty-one percent of organisations received ICT support through contractors, and 2 percent of organisations reported having no ICT support.

The next most common support type was in-house support by ICT staff (71 percent), followed by warranty (62 percent), and in-house support provided by other staff (31 percent).

Figure 5.04



Warranty, contractors and in-house ICT staff were the most common support services for CRIs (100 percent). The most common ICT support for local government was from in-house ICT staff (89 percent).

Eighty-eight percent of government organisations indicated that contractors provided most ICT development services, followed by in-house ICT staff (57 percent), in-house by other staff (18 percent) and 5 percent indicated none of the above.

Government website features

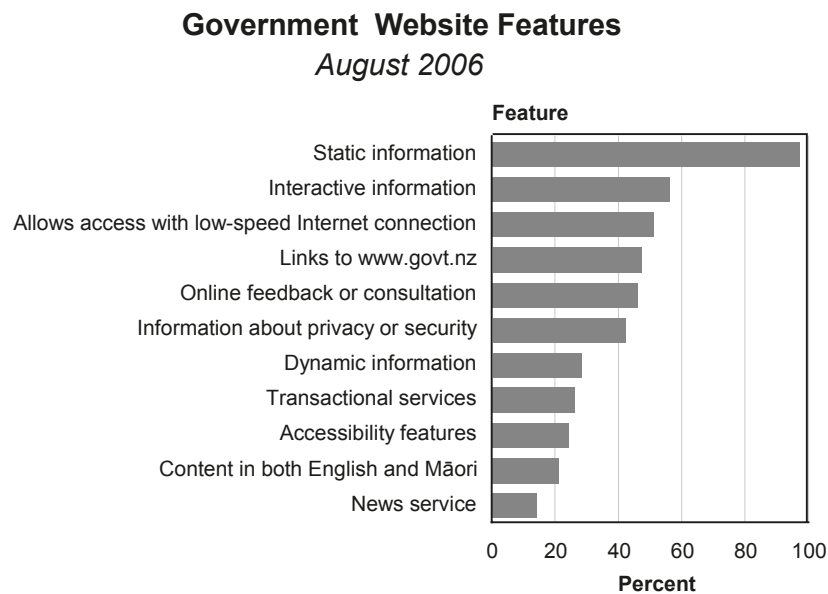
In the 2006 financial year, 97 percent of all government organisations had a website.

Fifty-six percent of all government organisation websites contained interactive information (for example, online forms), 28 percent had dynamic information (for example, webcams) and 26 percent offered online transaction services. Tertiary education websites were the most likely to offer these features: 91 percent had interactive information, 55 percent had dynamic information and 64 percent offered online transaction services.

Of all government organisations, the tertiary education sector also had the highest proportion of websites with low-speed accessibility (73 percent). It also had the highest percentage of websites with content in both English and Māori (45 percent).

For all government organisations, static information was the most common website feature. Organisations with 1,000 or more employees had the highest proportion of websites with content in both English and Māori (41 percent).

Figure 5.05



ICT training in government

In the 2006 financial year, 80 percent of all government organisations indicated they offered ICT training for new staff. Seventy-five percent of all government organisations gave training on new technologies or applications, 67 percent provided ICT training to upskill general staff, and 62 percent provided technical training to ICT staff.

While 15 percent of other government organisations did not offer any ICT training, only 8 percent of all government organisations indicated the same.

ICT expenditure in government

Total operating expenditure on ICT across all government organisations was \$1.1 billion in the 2006 financial year. Central government accounted for 70 percent (\$775 million) of all ICT operating expenditure. The tertiary education sector accounted for 15.7 percent (\$174 million), and local government spent 11.7 percent (\$129 million) of total operating expenditure.

Total capital expenditure on ICT by all government organisations was \$630 million. Of this total, 79.9 percent (\$503 million) was attributed to central government, 9.5 percent (\$60 million) to the tertiary education sector, 8.9 percent (\$56 million) to local government, and the remaining 1.8 percent to CRIs and other government organisations.

Table 5.02

Government Expenditure on Information and Communication Technology By organisation type August 2006

Organisation type	Total number of organisations ⁽¹⁾	Operating expenditure		Capital expenditure	
		\$(000)	Percent ⁽²⁾	\$(000)	Percent ⁽²⁾
Central government	129	775,190	70.3	503,287	79.9
Local government	84	128,951	11.7	56,031	8.9
Crown research institute	9	21,028	1.9	8,725	1.4
Tertiary education	33	173,539	15.7	59,579	9.5
Other government organisation	60	4,317	0.4	2,473	0.4
Overall	315	1,103,025	100.0	630,096	100.0

(1) For more information on the government organisations included, refer to the technical notes of this report.

(2) Percentages are of all operating or capital expenditure in each organisation size or type.

(3) Defined by rolling mean employment (RME) count. For more information on the RME count, refer to the technical notes of this report.

Note: Due to rounding, some figures may not sum to stated total.

Online purchases and payments by government

In the 2006 financial year, 82 percent of government organisations used suppliers' websites to order goods or services. This was the most common form of electronic purchase and procurement within the government sector. The next most common was use of other electronic systems (37 percent), orders placed electronically (16 percent) and invoices electronically received (10 percent).

One hundred percent of CRIs and tertiary education organisations used suppliers' websites to make purchases, compared with only 91 percent of other government organisations.

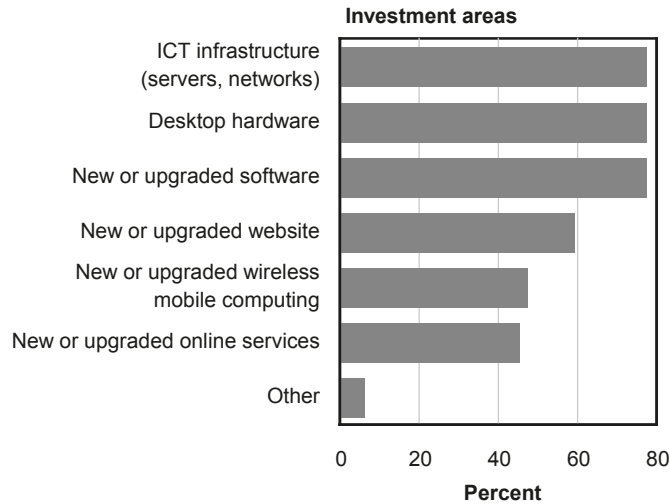
Eighty-three percent of government organisations received their payments through other methods (these included EFTPOS and Internet banking). The next most common medium through which payments were received was email (25 percent of organisations).

Government ICT investment plans

In 2006, 90 percent of all government organisations planned to make capital investments in ICT in the next 12 months. The top three areas for investment were new or upgraded software, desktop hardware, and ICT infrastructure, with 77 percent each.

Figure 5.06

Government ICT Investment Plans
By investment area
August 2006

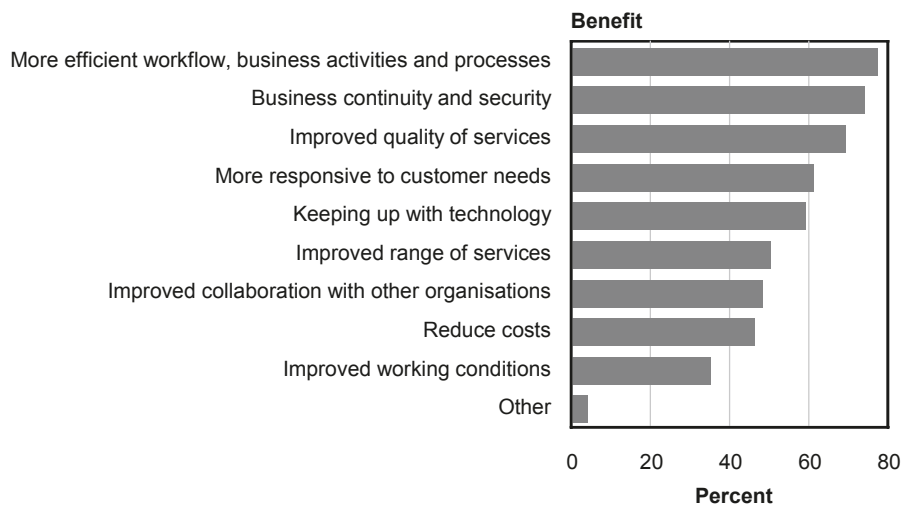


One hundred percent of organisations with 1,000 or more employees responded that they planned to invest in new or upgraded software, desktop hardware, and ICT infrastructure (servers and networks) in the next 12 months, compared with organisations with 0–5 employees, where 27 percent, 27 percent and 18 percent were indicated, respectively.

Intended benefits from ICT investment in the next 12 months were to improve the efficiency of workflow, business activities and processes (77 percent), business continuity and security (74 percent) and quality of services (69 percent).

Figure 5.07

Government ICT Investment Plans
By intended benefits
August 2006



One hundred percent of CRIs and tertiary education providers indicated that their intended benefits from ICT investment were business continuity and security, and more efficient workflow, business activities and processes. One hundred percent of CRIs indicated improved collaboration with other organisations as another intended benefit.

Barriers to implementation of new ICT

Seventy-six percent of all government organisations reported that competing priorities restricted the implementation of new ICT. The next most common factors were budget constraints (67 percent), the availability of qualified ICT personnel (45 percent), and internal resistance to change (37 percent).

Competing priorities and availability of qualified ICT personnel were factors that rated the highest amongst central government, local government, CRIs, and tertiary education organisations. For other government organisations, budget constraints rated as the highest factor restricting government implementation of ICT.

6 Comparison of ICT usage in business and government

This chapter compares:

- computer and Internet usage in business and government
- ICT support services used by business and government.

The information published here was sourced from Statistics New Zealand's Business Operations Survey: 2006 and Government Use of ICT Survey: 2006.

The denominators used in this chapter are the same as those used in the business (chapter 4) and government (chapter 5) chapters.

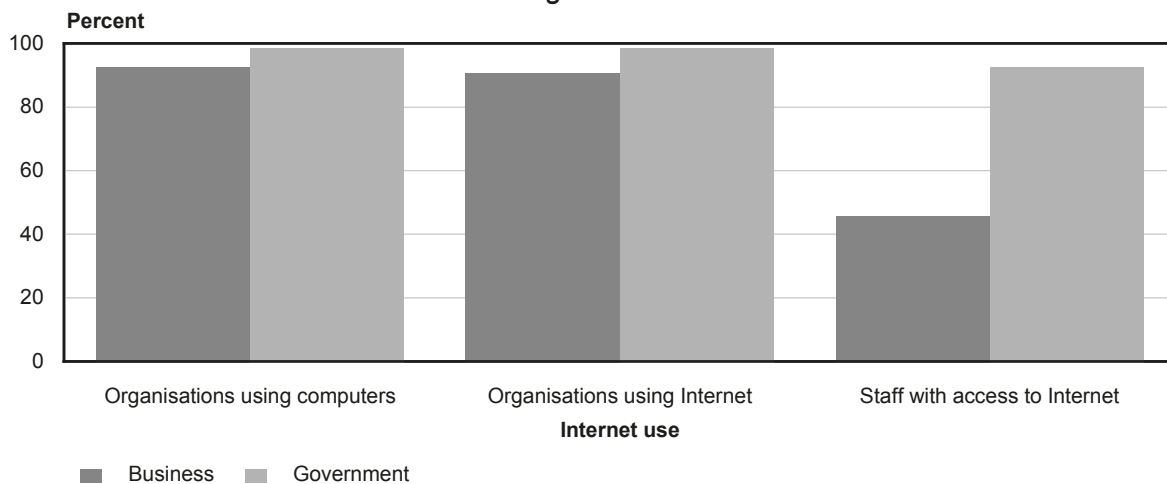
For more detailed information see tables 61 to 63 in the appendix.

Business and government use of computers and the Internet

Ninety-three percent of businesses used computers, 91 percent used the Internet, but only 46 percent of their staff had access to the Internet. This compared with government organisations where 99 percent used computers, 99 percent used the Internet and 93 percent of staff had access to the Internet.

Figure 6.01

Business and Government Use of Computers and Internet August 2006



Dial-up was the least preferred Internet connection type for both businesses and government (35 percent and 37 percent, respectively). Broadband was by far the most common Internet connection type, with businesses indicating 85 percent usage and government 97 percent. The most common broadband type used by both businesses and government was DSL (83 percent and 69 percent, respectively), followed by cellular (15 percent of businesses, 52 percent of government organisations).

Table 6.01

Business⁽¹⁾ and Government⁽²⁾ Internet Connection Types
By organisation size
 August 2006

Internet connection type ⁽³⁾	Organisation size (employees) ⁽⁴⁾				Overall
	6–19	20–49	50–99	100+	
Percent ⁽⁵⁾					
Dial-up					
Business	36	31	34	42	35
Government	18	33	36	41	37
Broadband					
DSL					
Business	83	82	82	81	83
Government	82	75	79	67	69
Cable					
Business	8	11	14	25	10
Government	9	42	36	72	55
Satellite					
Business	1	1	2	3	1
Government	0	0	0	5	4
Wireless					
Business	10	14	13	15	11
Government	27	33	29	43	36
Cellular ⁽⁶⁾					
Business	11	19	27	45	15
Government	18	42	36	67	52
Total broadband⁽⁷⁾					
Business	83	83	93	95	85
Government	100	100	100	97	97

(1) For more information on the businesses included, refer to the technical notes of this report.

(2) For more information on the government organisations included, refer to the technical notes of this report.

(3) Organisations may use more than one connection type so percentages may not add to total and may add to over 100 percent.

(4) Defined by rolling mean employment (RME) count. For more information on the RME count, refer to the technical notes of this report.

(5) Business percentages are a proportion of all New Zealand businesses with the Internet. Government percentages are a proportion of all government organisations. Businesses and government organisations could select more than one ICT support service.

(6) Cellular includes WAP, GPRS and 3G services.

(7) Total broadband includes DSL, cable, satellite, wireless and cellular broadband technologies.

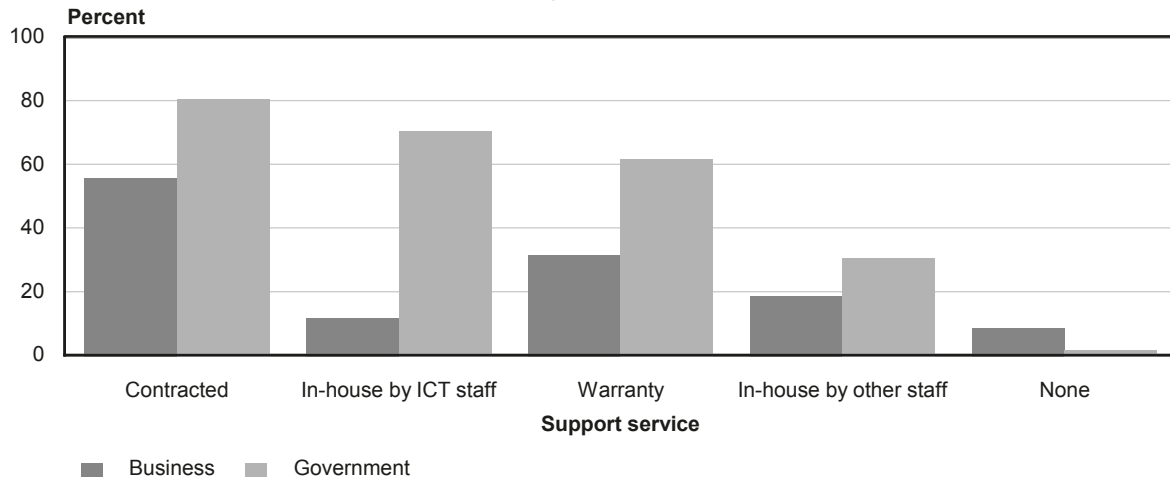
Note: All counts in this survey were randomly rounded to base 3 to protect confidentiality, so actual figures may differ from those stated. Due to rounding, some figures may not sum to stated total.

ICT support services used by business and government

The most common ICT support service type for businesses and government was contractors (56 percent and 81 percent, respectively). This was followed by warranty, for businesses (32 percent), and in-house support by ICT staff, for government (71 percent).

Figure 6.02

ICT Support Services Used by Business and Government August 2006



7 ICT industries and commodities

This chapter summarises:

- total sales of ICT goods and services
- businesses with ICT sales, by industry and size
- barriers to growth.

The information published here was sourced from Statistics New Zealand's ICT Supply Surveys of 2004/2005 and 2005/2006.

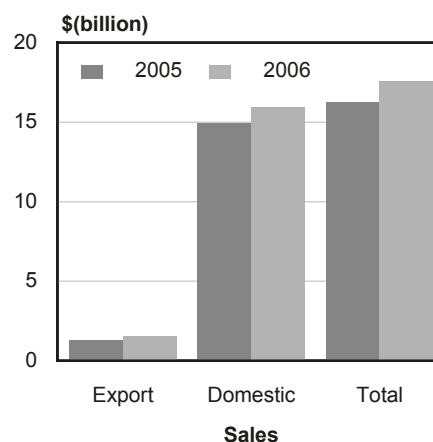
For more tables related to this chapter, see tables 64 to 72 in the appendix.

Total ICT sales

Results from the ICT Supply Survey for the 2006 financial year show that total sales of ICT goods and services were valued at \$17,643 million, with 90.9 percent (\$16,033 million) of this value sold domestically, and 9.1 percent (\$1,610 million) sold to export markets. This is a 7.9 percent increase in total sales, with domestic sales rising 6.9 percent and export sales up 19.9 percent from the 2005 financial year.

Figure 7.01

Sales of ICT Goods and Services
2005 and 2006 financial years



Sales of ICT commodities

For the 2006 financial year, sales of ICT services increased 7 percent to reach \$9,518 million, while sales of ICT goods (including published software) increased 9.1 percent to \$8,125 million. This difference between sales of ICT goods and services remained relatively constant, with a difference of 0.4 percent between the two years.

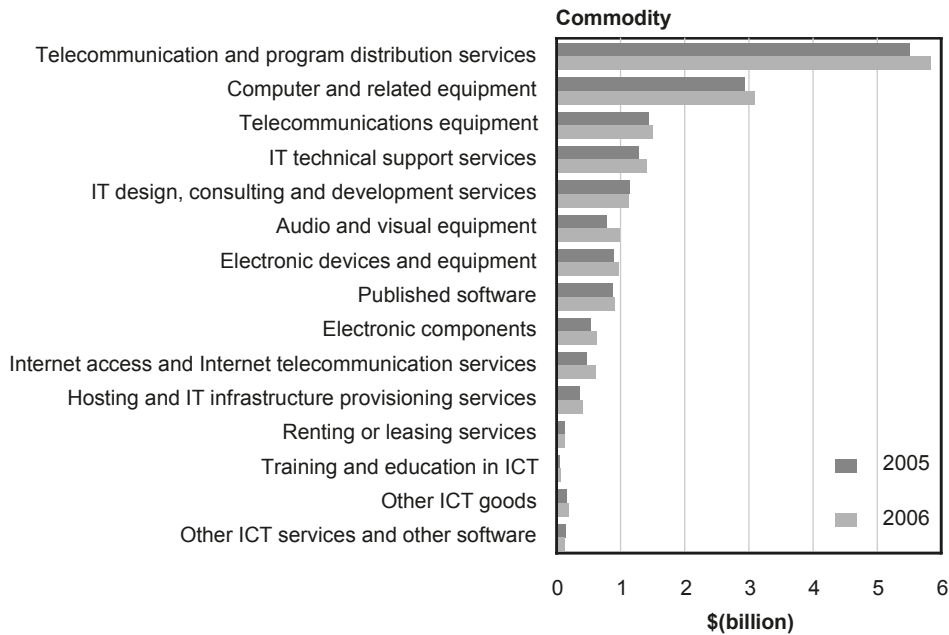
Sales of Internet access and Internet telecommunication services increased 32.5 percent, to reach \$595 million in 2006.

Sales of telecommunication and program distribution services increased 5.8 percent, to reach \$5,803 million. This remains the most significant sales commodity.

The audio and visual equipment commodity group, which increased 27.1 percent (to \$970 million) in 2006, had the largest percentage change in sales.

Figure 7.02

Sales of ICT by Commodity 2005 and 2006 financial years



Export sales of ICT commodities

For the 2006 financial year, sales of ICT goods were 78.3 percent (\$1,260 million) of the total export value (\$1,610 million), while ICT services were 21.7 percent (\$350 million) of the total.

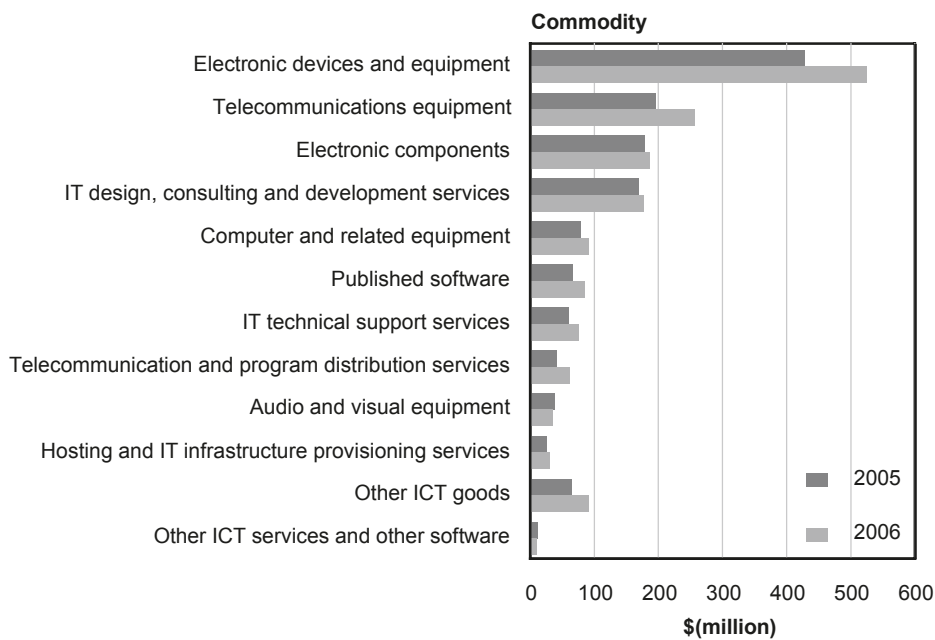
Export sales of electronic devices and equipment increased \$97 million to \$523 million in 2006. This remains the highest-value exported category, with 32.5 percent of the total export value.

Export sales of telecommunications equipment increased 31.2 percent to \$254 million. Export sales accounted for almost all the overall increase in total telecommunications equipment sales.

Export sales of published software increased 30.8 percent, to reach \$84 million in 2006.

Figure 7.03

Export Sales of ICT by Commodity 2005 and 2006 financial years



Domestic sales of ICT commodities

For the 2006 financial year, sales of ICT goods were 42.8 percent (\$6,865 million) of the total domestic value (\$16,033 million), while ICT services were 57.2 percent (\$9,169 million) of the total.

Domestic sales of telecommunication and program distribution services increased \$298 million to \$5,742 million in 2006. This remains the highest-value commodity category, with 35.8 percent of the total domestic value.

Audio and visual equipment increased 28.8 percent to reach \$936 million in 2006. The next highest increase was electronic components, with 26.8 percent to reach \$415 million.

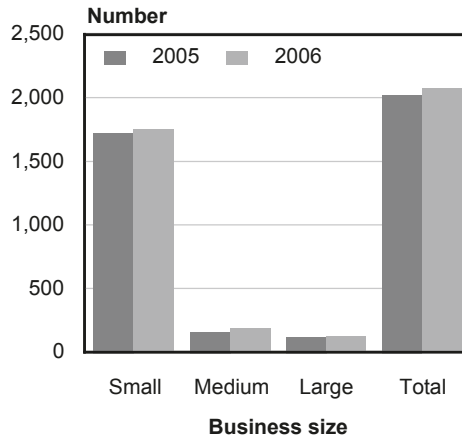
ICT businesses, by industry and size

Of the 2,618 enterprises in the 2005/06 ICT supply survey population, 2,088 (80 percent) sold ICT goods and services, an increase of 60 enterprises from the 2004/05 ICT supply survey population.

Of these 2,088 enterprises, 1,761 (84 percent) were classified as small, an increase of 27 enterprises from the previous survey. There were also 195 medium-sized ICT businesses (9 percent of total), an increase of 27 enterprises; and 131 large businesses (6 percent of total) an increase of 6 enterprises.

Figure 7.04

Businesses with ICT Sales
By business size
 2005 and 2006 financial years

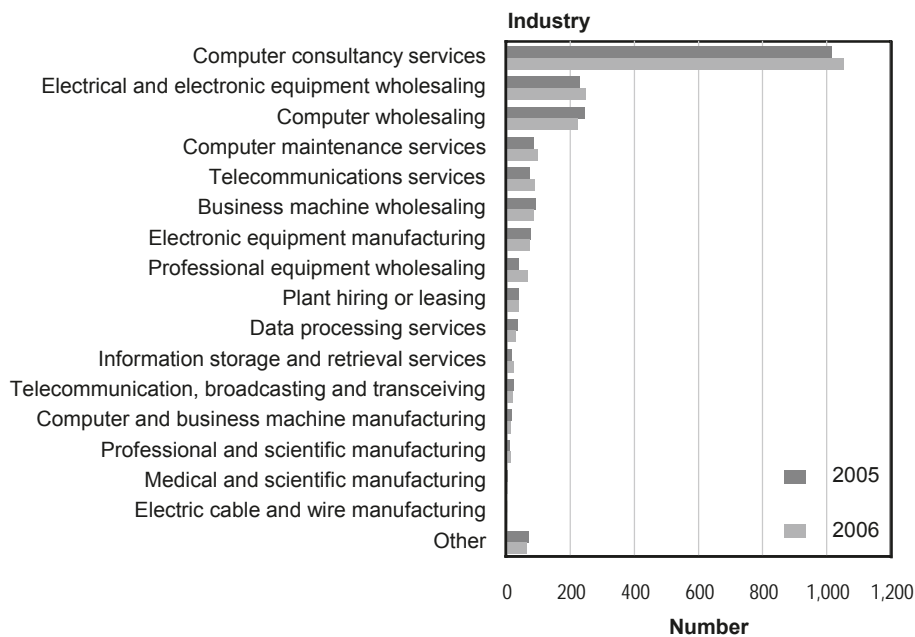


For the 2006 financial year, the number of enterprises with ICT sales in the computer consultancy services industry increased by 39, to 1,050 enterprises. This accounted for 50 percent of the total population of enterprises with ICT sales (2,088).

The number of computer wholesaling industry enterprises with ICT sales decreased by 24, to 219 enterprises in 2006. The number of professional equipment wholesaling industry enterprises with ICT sales increased by 75 percent, from 36 to 63 enterprises.

Figure 7.05

Businesses with ICT Sales
By industry
 2005 and 2006 financial years



ICT sales, by business size

In the 2006 financial year, the larger enterprises accounted for \$13,230 million (75 percent) of total ICT sales. Medium-sized businesses contributed \$1,724 million (10 percent) and small businesses \$2,688 million (15 percent). Large businesses were more influential in the sale of services than in the sale of goods.

ICT goods sold by small businesses had decreased by \$55 million (to reach \$1,733 million), while sales for medium and large businesses increased by \$147 million and \$584 million, respectively.

ICT services sold by medium-sized businesses decreased \$38 million to reach \$654 million in 2006, while small and large businesses experienced increased sales of \$204 million and \$455 million, respectively.

Barriers to business growth

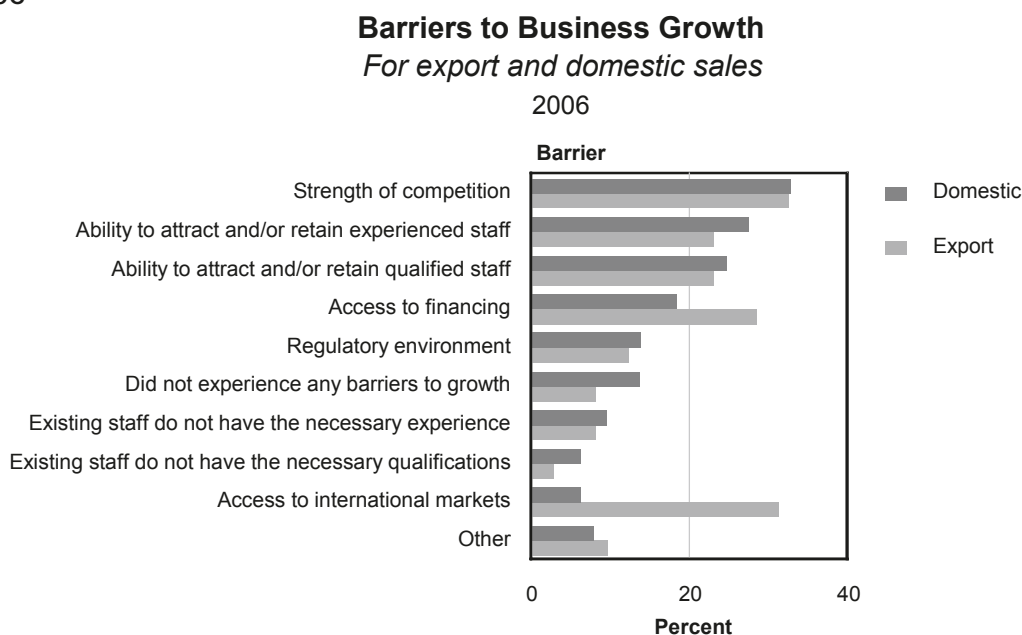
For the 2006 financial year, 32.5 percent of respondents reported strength of competition as the greatest barrier to business growth. Other barriers identified were the ability to attract and/or retain experienced staff (26.7 percent), and the ability to attract and/or retain qualified staff (24.3 percent).

Compared with 2005, there was a 4.5 percent increase in 2006 in the number of enterprises reporting that the ability to attract and/or retain experienced staff had been a barrier to growth.

There was also a 3.6 percent increase (from 15.7 percent in 2005 to 19.3 percent in 2006) in the number of enterprises reporting that access to financing had been a barrier to growth.

For businesses that exported in 2006, the largest barriers to growth were strength of competition (32.4 percent), access to international markets (31.1 percent) and access to financing (28.4 percent). The largest barriers to domestic sales were strength of competition (32.7 percent), ability to attract and/or retain experienced staff (27.4 percent) and the ability to attract and/or retain qualified staff (24.6 percent).

Figure 7.06



For small businesses, the largest barrier to growth was existing staff not having necessary qualifications (90.9 percent). This was also their largest barrier to growth in 2005.

The largest barriers to growth for medium-sized business were access to international markets (13.5 percent), followed by the ability to attract and/or retain experienced staff (12.5 percent). In 2005, their largest barrier to growth was the ability to attract and/or retain experienced staff (9.8 percent).

The most common barrier to growth for large businesses in 2006 was strength of competition (8.5 percent). This was followed by regulatory environment (8.3 percent) and access to international markets (7.9 percent). In 2005, their largest barrier to growth was access to international markets (10.3 percent), followed by regulatory environment (9.4 percent) and the ability to attract and/or retain qualified staff (8.1 percent).

8 Internet service providers (ISPs)

This chapter summarises:

- Internet service provision in New Zealand
- size of Internet service providers
- Internet service provider (ISP) revenue
- Internet subscriber speeds
- filtering services
- ISP barriers to growth.

The information published here was sourced from Statistics New Zealand's Internet Service Provider Survey from March 2005 to March 2007.

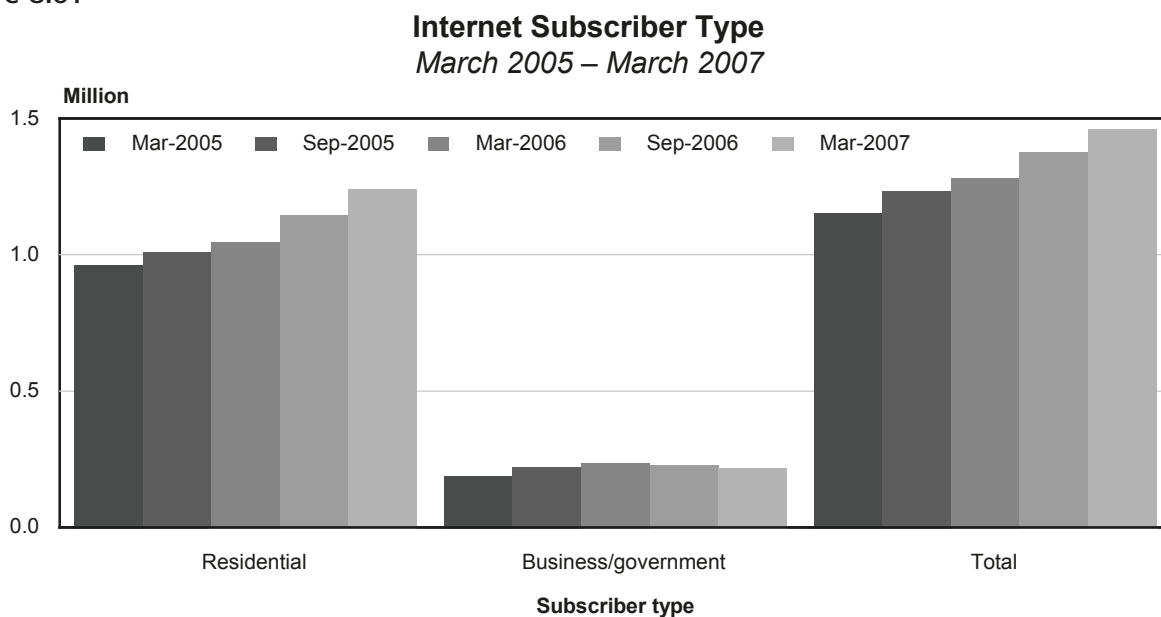
For more tables related to this chapter, see tables 73 to 87 in the appendix.

Internet service provision in New Zealand

For the six months ended 31 March 2007, there were 57 ISPs operating in New Zealand, with 1,464,300 active subscribers. The number of subscribers increased by 5.9 percentage points from 30 September 2006.

Residential (household) subscribers totalled 1,243,500 at the end of March 2007. They accounted for 84.9 percent of all active subscribers and provided 73.1 percent of revenue. While the number of residential subscribers increased 8.1 percent, business and government subscribers decreased 5.1 percent, to 220,800. Business and government subscribers were 15.1 percent of the total number of active subscribers and provided 26.8 percent of revenue.

Figure 8.01



Size of Internet service providers

Percentiles are a useful method for comparing ISP size over time. Percentiles are determined by sorting ISPs (by number of subscribers) from smallest to largest. The average number of subscribers within a percentile range is then calculated. At 31 March 2007, the smallest ISPs (0th–20th percentile) had 45 subscribers on average, while the largest ISPs (81st–100th) had 118,260 subscribers. The number of subscribers in ISPs above the 80th percentile has increased 41 percent since March 2005.

Table 8.01

Size of Internet Service Providers

By percentile range

March 2005–March 2007

Percentile range ⁽¹⁾	March 2005	September 2005	March 2006	September 2006	March 2007
	Average number of subscribers				
0-20th (small ISPs)	30	40	45	45	45
21th-40th	220	190	190	120	140
41th-60th	880	840	700	530	570
61th-80th	3,670	3,630	4,150	3,380	3,340
81th-100th (large ISPs)	84,160	90,890	102,650	111,460	118,260

(1) Percentile is calculated by sorting ISPs (by number of subscribers) from smallest to largest, then the average number of subscribers within a percentile range is calculated.

Note: All cells in this table have been randomly graduated rounded.

ISP revenue from business and government subscribers

The proportion of revenue ISPs received from business and government subscribers at 31 March 2007 was similar to that at 30 September 2006. Twenty-six percent of ISPs received up to 20 percent of their revenue from business and government subscribers, while 32 percent received between 81 percent and 100 percent.

Internet subscriber connection type

At 31 March 2007, the number of subscribers using analog (dial-up) connection technology was 739,700, down 4.1 percent since September 2006. However, analog is still the predominant connection technology with 50.5 percent of total subscribers, down from 55.8 percent six months earlier.

The number of non-analog (broadband) subscribers has increased by 18.5 percent from 30 September 2006, to reach 724,600 subscribers. Of the non-analog connections, digital subscriber line (DSL) continued to be the most common connection technology, with 573,900 subscribers. The next most common non-analog connection technologies (in descending order) were: cellular, cable, wireless, satellite, and other. The strong growth of cable connection in the year to 31 March 2007 saw it overtake wireless and become the third highest subscription option in New Zealand.

There were 35.1 Internet subscribers per 100 inhabitants in New Zealand at the end of March 2007, compared with 33.3 subscribers per 100 inhabitants at 30 September 2006. The number of non-analog subscribers increased from 14.7 to 17.3 per 100 inhabitants over the same period.

Of the 17.3 non-analog subscribers per 100 inhabitants, 13.7 were using a DSL connection type and 3.6 were using other connection technologies.

Internet subscription data allowances

Of the 724,600 non-analog subscribers at 31 March 2007, 10.2 percent (up from 2.4 percent in September 2006) had no data allowance cap (or data cap) on their subscription plan. Of subscribers who had a data cap, 59.2 percent (429,000) used plans with a data cap of less than 5GB, 24.0 percent (173,800) had a data cap between 5GB and less than 20GB, and 6.6 percent (48,000) had a data cap of 20GB or more.

In the six months to March 2007, the number of subscribers with a data cap of more than 20GB increased 157 percent, from 18,700 to 48,000. There were 73,900 subscribers with no data cap, an increase of more than 400 percent from the 14,600 subscribers at 30 September 2006.

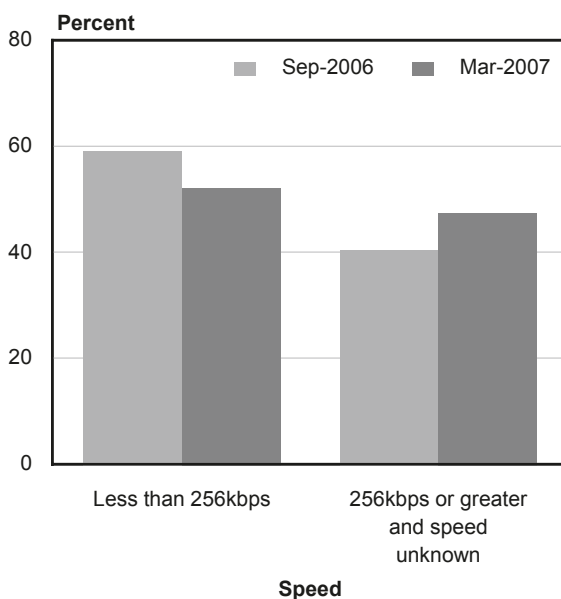
Internet subscriber speeds

At 31 March 2007, 52.3 percent of all subscribers (766,500) had subscription-plan download speeds of less than 256kbps, and 47.7 percent (697,800) had download speeds of more than 256kbps.

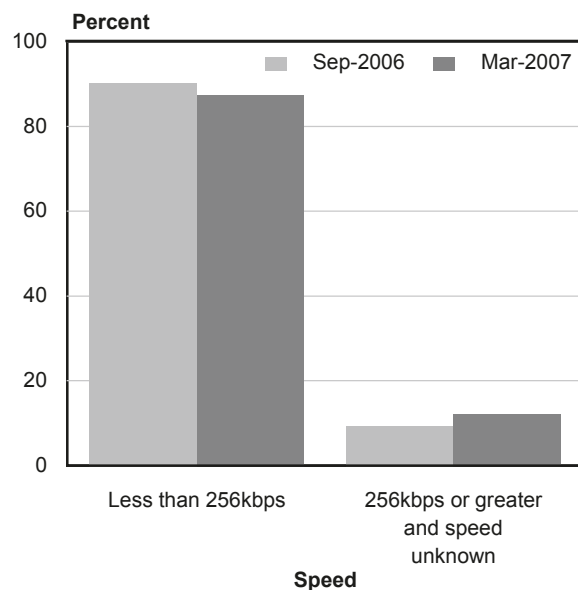
There were 87.5 percent of subscribers with upload speeds of less than 256kbps, and 12.5 percent had upload speeds greater than 256kbps.

Figure 8.02 and Figure 8.03

Internet Subscriber Download Speed
September 2006 – March 2007



Internet Subscriber Upload Speed
September 2006 – March 2007



Download speeds increased in the six months to March 2007. The number of subscribers with download speeds between 2Mbps and 10Mbps increased between 150 percent and 200 percent. The next most common download speed categories for non-analog subscribers (in descending order) were: 512kbps to 2Mbps, 256kbps to 512kbps, 128kbps to 256kbps, unknown download speed, 10 Mbps or greater, and 64kbps to 128kbps.

During the same period, upload speeds between 128kbps and 256kbps remained the most common. The next most common upload speeds (in descending order) were: 256kbps to 512kbps, 512kbps to 2Mbps, 2Mbps to 10Mbps, unknown upload speed, 64kbps to 128kbps, and 10Mbps or greater. The lowest speed range of 64kbps to 128kbps continued to decrease.

Filtering services supplied by ISPs

The Internet Service Provider Survey: March 2007 measures only the uptake of filtering services that are supplied by the ISPs. Many other alternatives are available to subscribers, including purchasing and downloading software, which are outside the scope of this survey.

At 31 March 2007, 98.4 percent of Internet subscribers (1,440,200) had adopted an email filtering product offered by their ISPs. Ninety-five percent of ISPs offered their subscribers email filtering as either a free or charged service. Sixty-eight percent of ISPs provided a free service, 11 percent provided a charged service and 16 percent of ISPs provided both a free and charged service.

At 31 March 2007, 21 percent of ISPs offered their subscribers web filtering as either a free or charged service. Only 5 percent provided a free service; 11 percent provided a charged service and 5 percent provided both a free and charged service. Seventy-nine percent of ISPs did not offer web filtering services.

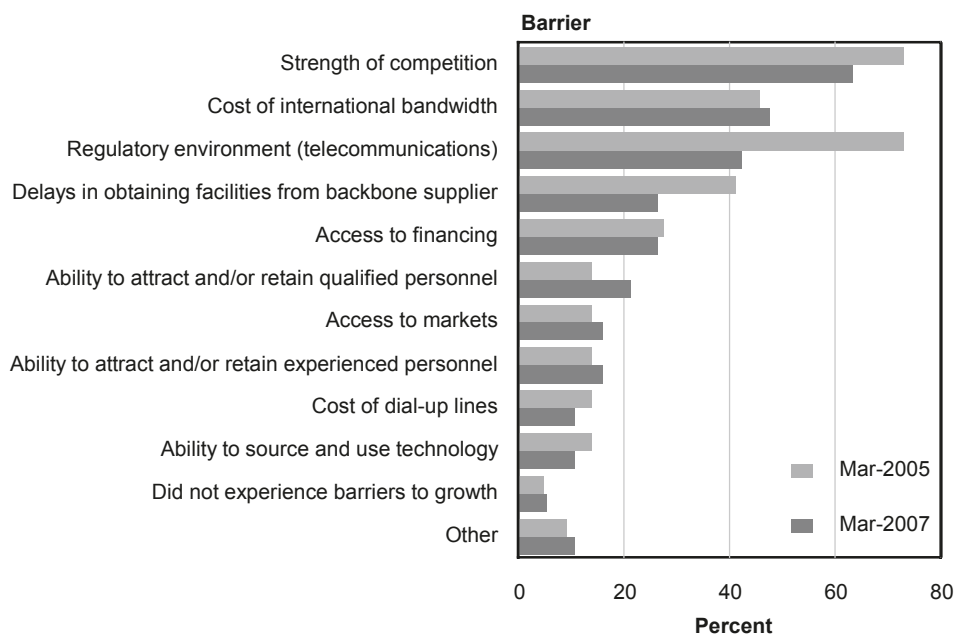
Barriers to ISP growth

For the six months ended 31 March 2007, 63 percent of ISPs identified strength of competition as the greatest barrier to the growth of their operations. Other common barriers recognised were the cost of international bandwidth (47 percent), the regulatory environment relating to telecommunications (42 percent), and access to financing (26 percent). Five percent of ISPs reported that there were no barriers to growth.

There was a 42 percent decrease in the number of ISPs reporting that the regulatory environment relating to telecommunications had been a barrier to growth in the past two years.

Figure 8.04

Barriers to Internet Service Provider Growth
March 2005 and March 2007



9 International comparisons

This chapter compares ICT usage between Organisation for Economic Co-operation and Development (OECD) countries. It summarises:

- ICT usage by business
- business online services and web presence
- computer and Internet usage by households and individuals.

The international data published here was sourced from the Community Survey on ICT Usage in Enterprises April: 2007, and the Community Survey on ICT Usage in Households and by Individuals April: 2007 published in the *OECD Science, Technology and Industry Scoreboard 2007*.

New Zealand data in this chapter may slightly differ from previous chapters due to differences in definitions used by Statistics New Zealand and the OECD.

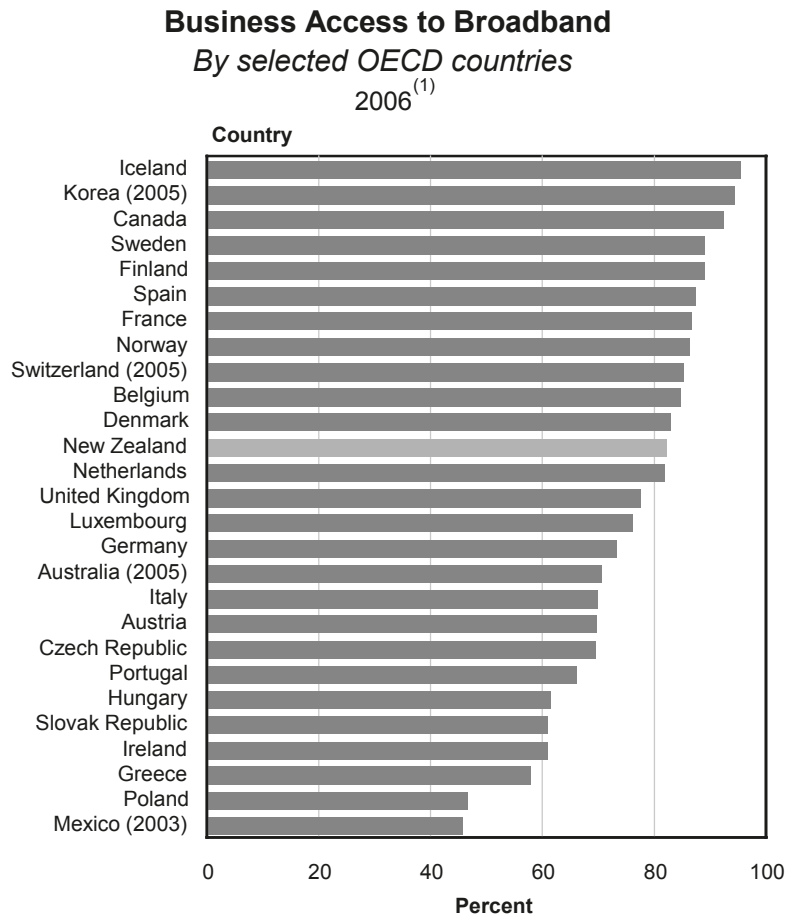
For more tables related to this chapter, see tables 88 to 94 in the appendix.

Business use of the Internet

In 2006, New Zealand ranked fourteenth out of 28 OECD countries in the use of the Internet in businesses. The country with the highest percentage of businesses with Internet access was Iceland (99.2 percent), and the lowest was Hungary (79.9 percent).

Eighty-two percent of New Zealand businesses indicated they use broadband, which ranked New Zealand twelfth out of 28 OECD countries that use this type of Internet connection. The country that had the highest broadband use was Iceland (95.2 percent), and the lowest was Mexico (45.6 percent).

Figure 9.01



(1) Unless otherwise stated.

The proportion of New Zealand businesses that had their own website was 59.3 percent. This ranked us twentieth out of 28 OECD countries. Sweden recorded the highest proportion of businesses with their own websites at 86.3 percent, while Portugal ranked lowest with 35 percent.

Businesses encountering IT security problems

Results from the OECD Community Survey on ICT Usage in Enterprises: April 2007, show that 17.5 percent of New Zealand businesses with 10 or more employees using the Internet experienced IT security problems in general. Due to differences in question wording, comparison with other countries must be treated with caution.

Japan experienced the highest number of computer virus attacks (65.5 percent of businesses). Two percent of Japanese businesses received blackmail or threats and 2.8 percent encountered unauthorised access of some form.

Businesses in Australia indicated 50.2 percent had experienced a computer virus attack and 3.7 percent encountered some form of unauthorised access.

Businesses receiving Internet sales

New Zealand was ranked as the country with the highest proportion of businesses by all industries that used the Internet to trade goods and services (36.7 percent), followed by Denmark (33.9 percent) and United Kingdom (UK) (30.4 percent).

Businesses making Internet purchases

New Zealand was ranked second behind Canada for the proportion of businesses who indicated that they had made purchases online for all industries (58.8 percent and 61.6 percent, respectively), followed by Switzerland (57 percent).

Mexico had the lowest business Internet purchases with 2.2 percent.

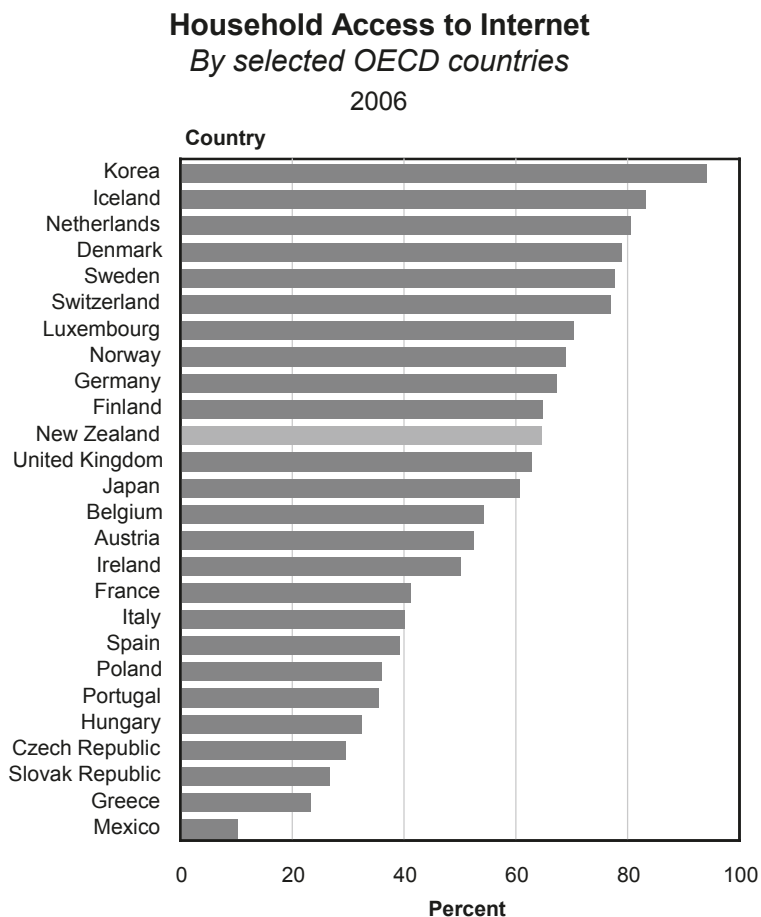
Household access to the computer and Internet

The OECD Community Survey on ICT Usage in Households and by Individuals: April 2007, indicated households in New Zealand with access to a home computer increased by 25 percentage points to 71.6 percent from 2001 to 2006.

In 2006, New Zealand ranked ninth out of 25 countries whose households had access to a home computer.

In 2001, 37.4 percent of households in New Zealand had access to the Internet. By 2006, this percentage had increased to 64.5 percent. This ranked New Zealand as the eleventh highest country (from tenth in 2001) in the OECD.

Figure 9.02



In 2006, Korea had the highest proportion of households who had access to the Internet (94 percent). The country with the lowest proportion was Mexico (10.1 percent).

The proportion of households in New Zealand with broadband access in 2006 was 33.2 percent, ranking New Zealand twelfth out of the 25 responding countries.

Internet use from any location by individuals

In 2006, the percentage of individuals in New Zealand who accessed the Internet from any location 72.3 percent. This placed New Zealand tenth in the OECD out of 25 countries.

The country with the highest proportion of individual Internet use from any location was Iceland (89.5 percent), and the country with the lowest was Mexico (20.4 percent).

Internet use by individuals

Emailing was the most common Internet activity by New Zealanders (65.4 percent), as is for Denmark (74.2 percent) and UK (52.8 percent).

At 17.4 percent, New Zealand ranked low in other communication uses (sixteenth out of the 25 OECD countries that responded).

On using the Internet for job-searching, New Zealand was ranked fourth highest (21 percent), out of the 25 OECD countries that responded.

Table 9.01

Internet Activities by Individuals
By country
2006

Country	Type of activity ^(1,2)								
	E-mailing	Telephoning over the Internet	Other communication uses	Seeking health information	Purchasing/ordering goods or services	Banking services	Playing / downloading games or music	Job search	Interaction with public authorities
	Percent ⁽³⁾								
Australia (2004)	..	..	..	..	33.5	..	..	..	..
Austria	52.6	7.4	12.7	24.3	23.3	27.2	15.4	8.6	33.0
Belgium	54.4	7.9	18.6	22.5	13.9	28.4	20.0	9.0	30.2
Canada (2005) ^(5,9)	58.6	..	24.6	37.2	29.6	37.4	24.7	19.6	33.6
Czech Republic	37.2	8.8	12.7	10.0	6.9	9.7	12.5	4.3	17.4
Denmark	74.2	13.1	16.6	27.6	30.6	57.2	26.3	20.3	43.2
Finland	67.3	14.2	22.0	43.6	28.9	62.8	33.3	26.5	47.0
France	34.2	4.9	17.5	13.0	18.5	18.1	9.3	6.3	..
Germany	60.2	10.4	26.2	34.2	38.0	31.7	18.3	16.8	32.3
Greece	16.9	1.8	2.9	5.6	3.1	2.5	11.2	4.2	8.6
Hungary	36.9	7.8	21.2	16.6	5.0	8.0	22.4	11.9	16.8
Iceland	77.0	18.2	43.6	40.0	31.4	66.8	34.0	17.4	60.6
Ireland	44.7	5.8	6.4	7.8	21.3	20.6	11.2	6.0	25.7
Italy	29.1	3.3	8.9	12.3	5.4	8.9	10.5	6.2	16.1
Japan (2005) ⁽¹⁰⁾	54.4	..	..	..	39.7	8.8	16.3	7.1	21.7
Korea ⁽⁸⁾	57.8	2.7	29.4	15.1	39.9	26.2	39.7	..	15.5
Luxembourg	64.8	16.3	35.0	26.5	35.4	40.8	26.4	10.9	45.8
Mexico ^(7,12)	8.6	0.5	3.9	2.1	0.9	0.6	1.2	..	1.3
Netherlands	75.9	10.1	29.6	45.0	36.3	58.7	41.6	18.5	51.8
New Zealand⁽⁸⁾	65.4	8.9	17.4	21.0	30.8	40.2	22.9	21.0	32.4
Norway	72.3	13.3	34.1	34.3	46.9	66.5	36.6	21.9	57.5
Poland	27.2	8.0	17.7	10.9	8.8	9.1	16.2	7.2	5.8
Portugal	28.8	5.5	14.9	13.8	4.7	9.8	16.2	5.1	16.5
Slovak Republic	41.6	7.0	20.0	13.6	6.8	12.6	18.5	10.4	32.2
Spain	36.7	6.3	20.1	19.1	10.1	15.1	23.0	..	24.7
Sweden	73.6	8.6	24.8	28.4	39.4	56.9	33.8	24.4	..
Switzerland (2005) ^(4,11)	63.6	..	..	..	31.8	30.5	14.7	20.6	..
United Kingdom	52.8	6.7	13.4	17.9	38.1	27.8	24.5	16.1	..
United States (2003) ⁽⁶⁾	56.1	..	..	..	34.0	18.3	..	12.3	23.3

Source: OECD Science, Technology and Industry Scoreboard 2007

(1) Generally, data from the EU Community Survey on Household Use of ICT, which covers EU countries plus Iceland, Norway and Turkey, relate to the first quarter of the reference year. For the Czech Republic, data relate to the fourth quarter of the reference year.

(2) Individuals aged 16–74 years, except for Australia (18+), Canada (18–74), the Czech Republic (15+), Japan (6+), Korea (7+ until 2001, 6+ afterwards), Mexico (6+), Switzerland (14–74). Data generally refer to Internet use in the last 12 months for non-Eurostat countries and last 3 months for Eurostat countries.

(3) Percentage of all adults.

(4) Private data from *Arbeitsgruppe für Werbemedienforschung* (WEMF AG). Data refers to Internet users aged 14–74 who used the Internet at least once within the last six months.

(5) Data for 2000 to 2003 refer to the percentage of all households with at least one member regularly using the Internet from home. Individual data are available for 2005, data include individuals aged 18–74.

(6) E-mailing includes instant messaging.

(7) Telephoning over the Internet includes videoconferencing; data are for 2004.

(8) Playing/downloading music only.

(9) Playing/downloading games only. Job search data is for 2003. Obtaining information from public authorities' websites.

(10) Playing/downloading music only. Obtaining information from public authorities' websites.

(11) Playing/downloading games only.

(12) Playing/downloading games only. Obtaining information from public authorities' websites.

10 Technical notes

The *Information and Communication Technology in New Zealand: 2006* report uses data from a number of Statistics New Zealand surveys:

- Household Use of Information and Communication Technology (ICT) Survey
- Business Operations Survey
- Government Use of Information and Communication (ICT) Survey
- Information and Communication Technology (ICT) Supply Survey
- Internet Service Provider Survey

This chapter contains summary technical notes for the surveys referenced in this report and also contains sourced data from the Organisation for Economic Co-operation and Development (OECD).

Comprehensive technical notes can be found in the source publications at www.stats.govt.nz/ict.

Statistics New Zealand would like to acknowledge the cooperation of other agencies.

General technical notes that apply to all of the surveys are listed here first followed by technical notes for specific surveys.

All surveys technical notes

Non-response and imputation

Unit (or complete) non-response occurs when units do not complete a questionnaire. The initial selection weight of the remaining units was adjusted to account for the unit non-response. Item (or partial) non-response is when units complete the questionnaire but some questions are not complete (for example, refused). Nearest neighbour imputation was used to impute answers for unanswered categorical questions.

Non-sampling errors

Non-sampling errors are all errors that are not sampling errors. It is present in both sample surveys and censuses. It cannot be directly numerically measured. There are many potential sources of non-sampling errors.

Statistics NZ adopts procedures to minimise these types of errors, but they may still occur and are not quantifiable. Non-sampling errors include unintentional mistakes by respondents when completing questionnaires, variation in the respondents' and interviewers' interpretation of the questions asked, and errors made during the processing of the data. In addition, the survey applied imputation methodologies to cope with non-respondents.

Given the nature of the data collected, there are limitations on the level of accuracy that can be expected from the survey. Even though detailed descriptions of technical terms was given, there may still be differences in respondent and interviewer interpretation.

Rounding

Due to rounding procedures, table totals may differ from the sum of individual cells. All counts have been rounded to base 3, or nearest hundred.

Confidentiality

Data published from the ICT surveys must conform to the provisions of the Statistics Act 1975, which requires that all statistical information published by Statistics NZ shall be arranged in such a manner as to prevent any particulars belonging to any respondent from being identifiable. Cell suppression has been used to prevent the disclosure of sensitive information when required.

Specific survey technical notes

Household Use of Information and Communication Technology (ICT) Survey: 2006

Survey background

The Household Use of Information and Communication Technology (ICT) Survey measures New Zealand households and individuals that have access to, and use of, computers, the Internet and mobile phones.

The survey produces official statistics on New Zealand household access and use of ICT and is used to gain a better understanding of how these technologies are influencing New Zealand's economy and society.

Data collection

The Household Use of ICT Survey: 2006 was a supplement to the Household Labour Force Survey (HLFS) during the December 2006 quarter. The supplement was asked of all households and people eligible to take part in the HLFS. Two questionnaires were used. A household ICT questionnaire asked about that household's access to computers and to the Internet. An individual ICT questionnaire was then asked of all eligible individuals within the HLFS sample. Proxy responses were not accepted for the ICT questionnaires.

The survey was carried out from 8 October 2006 to 6 January 2007 (the December 2006 quarter) through personal and telephone interviews.

Target population

The target population for the Household Use of ICT Survey is the same as the HLFS target population. This is the civilian, usually resident, non-institutionalised population aged 15 years and over. This means that the statistics in this release do not cover long-term residents of homes for older people, hospitals and psychiatric institutions; inmates of penal institutions; members of the permanent armed forces; members of the non-New Zealand armed forces; overseas diplomats; overseas visitors who expect to be resident in New Zealand for less than 12 months; and those aged under 15 years.

The target population for the household portion of the survey is all households from the scope outlined above with at least one eligible individual.

The HLFS sample contains about 15,000 private households and about 30,000 individuals each quarter. Households are sampled on a statistically representative basis from rural and urban areas throughout New Zealand, and information is obtained for each member of the household.

Response rate

The target response rate for the Household Use of ICT Survey: 2006 was 75 percent. The achieved response rate for households was 94 percent of those households which completed the HLFS (13,757 households). The achieved rate for individuals was 89 percent, or 24,855 of those individuals who completed the HLFS personal questionnaire.

Measurement errors

Statistics New Zealand endeavours to minimise the impact of measurement errors through the application of best survey practices and monitoring of known indicators (for example, non-response). However, the Household Use of ICT Survey results are subject to measurement errors, including both non-sample and sample errors. These errors should be considered when analysing the results from the survey.

Sample errors

Sampling error can be measured, and quantifies the variability that occurs by chance because a sample rather than an entire population is surveyed.

Sampling errors are calculated for each cell in the published tables. For example, the estimated total number of households with access to the Internet in the December 2006 quarter was 1,011,000. This estimate is subject to a sampling error of plus or minus 15,000 or 1 percent (measured at the 95 percent confidence level). This means that we can be 95 percent confident that the true number of households with access to the Internet lies between 996,000 and 1,026,000.

Smaller estimates, such as the total number of rural centre households with access to the Internet in the December 2006 quarter (20,000), are subject to larger relative sampling errors than larger estimates. This estimate is subject to a sampling error of plus or minus 7,000 or 8 percent (measured at the 95 percent confidence level). This means that we are 95 percent confident that the true value of rural centre households with access to the Internet lies between 13,000 and 27,000.

In general, the sampling errors associated with subnational estimates (for example, breakdowns by regional council area) are larger than those associated with national estimates.

Comparisons with 2006 Census data

Due to a number of factors, some data outputs (such as household Internet access) that were produced from New Zealand's 2006 Census of Population and Dwellings differ from comparative outputs that were produced by the Household Use of ICT Survey: 2006. Further information is available on request.

Business Operations Survey: 2006

Survey background

The New Zealand Government has a range of initiatives aimed at increasing New Zealand's economic growth rate above the OECD average and sustaining this higher growth performance over a number of years. In order for New Zealand's economic performance to be measured against these aims, a large range of data on a variety of measures needs to be collected.

Because of this increase, Statistics New Zealand has developed an integrated, modular survey – the Business Operations Survey – as a way of collecting the required information while minimising the reporting load for New Zealand businesses. The survey has been designed to include up to three 'modules' and has been run annually since 2005.

The survey has been developed by Statistics NZ in conjunction with the Ministry of Economic Development (MED) and the Department of Labour and is carried out annually by Statistics NZ.

The main objective of the survey is to collect information on the operations of New Zealand businesses in order to quantify business behaviour, capacity and performance. In addition, each module in the survey has its own specific objectives. The modules included in the Business Operations Survey: 2006 and their objectives are listed below.

Module A: Business Operations Module

The objective of this module is to provide a longitudinal series of information relating to business performance. The information required can be grouped into two main categories:

- financial performance measures
- business environment measures.

The purpose of collecting financial measures of business performance is to measure and monitor business performance, and to relate the impact of potential enablers on this performance. An important element of these financial measures is their longitudinal dimension, which will enable changes over time to be analysed. This will assist in the development of models aimed at investigating causal relationships. As well as traditional measures of performance such as turnover and profitability, there is also a desire to collect information on such areas as export intensity. The purpose of collecting environmental information is to analyse any relationships between the environment in which a business operates and the results it achieves.

Module B: Information and Communication Technology (ICT) Module

The objective of this module is to provide a core set of comprehensive, official statistics on the present state of business ICT utilisation, constraints that businesses face when implementing ICT and areas where improvements and efficiency gains can be made.

Module C: Employment Practices Module

The objective of this module is to provide information on the characteristics of business and management practice in New Zealand, including:

- the extent to which employment practices enable better firm performance
- the factors that lead to the adoption of employment practices.

Data collection

The Business Operations Survey: 2006 was a postal survey. Initial contact was made to key and/or complex businesses in the survey by telephone, before the mail-out, to determine the appropriate person(s) within the business to whom the survey questions could be directed. For all other businesses, the survey form was addressed to the managing director. The survey was posted out in August 2006 and collected information for the last financial year for which the business had data available at that point.

Target population

The target population for the Business Operations Survey: 2006 was live enterprise units on Statistics NZ's Business Frame that at the population selection date:

- were economically significant enterprises (those that have an annual GST turnover figure of greater than \$30,000)
- had six or more employees
- had been operating for one year or more
- were classified to Australian and New Zealand Standard Industrial Classification – New Zealand Version 1996 (ANZSIC96) codes listed as 'in scope' in list 1 below
- were private enterprises as defined by New Zealand Institutional Sector 1996 Classification (NZISC96) listed in list 2 below.

An enterprise is defined as a business or service entity operating in New Zealand, such as a company, partnership, trust, government department or agency, state-owned enterprise, university or self-employed individual.

The final estimated population size for the survey was 35,436 enterprises.

List 1 – ANZSIC96 Codes in Scope**In scope*****ANZSIC96 code – description***

- A – Agriculture, Forestry and Fishing
- B – Mining and Quarrying
- C – Manufacturing
- D – Electricity, Gas and Water Supply
- E – Construction
- F – Wholesale Trade
- G – Retail Trade
- H – Accommodation, Cafes and Restaurants
- I – Transport and Storage
- J – Communication Services
- K – Finance and Insurance
- L – Property and Business Services
- N – Education
- O – Health and Community Services
- P91 – Motion Picture, Radio and Television Services
- P93 – Sport and Recreation

Out of scope

- M – Government Administration and Defence
- P92 – Libraries, Museums and the Arts
- Q – Personal and Other Services.

List 2 – NZISC96 Codes in Scope**In scope*****NZISC96 code – description***

- 1111 – Private Corporate Producer Enterprises
- 1121 – Private Non-Corporate Producer Enterprises
- 1211 – Producer Boards
- 1311 – Central Government Enterprises
- 2211 – Private Registered Banks
- 2221 – Private Other Broad Money (M3) Depository Organisations
- 2291 – Private Other Depository Organisations nec
- 2311 – Private Other Financial Organisations Excluding Insurance and Pension Funds
- 2411 – Private Insurance and Pension Funds.

Out of scope

1321 – Local Government Enterprises

21 – Central Bank

2212, 2213, 2222, 2223, 2292, 2293, 2312, 2313, 2412, 2413 – Central and Local Government Financial Intermediaries

3 – General Government

4 – Private Non-Profit Organisations Serving Households

5 – Households

6 – Rest of World

Sample design

The sample design was a two-level stratification according to ANZSIC industry and employment size groups. This information was obtained using enterprise ANZSIC industry and employment information from Statistics NZ's Business Frame.

The first level of stratification was 33 ANZSIC industry groupings. Within each of the ANZSIC groups there is a further stratification by employment size group. The four employment size groups used in the sample design are:

- 6–19 employees (small)
- 20–29 employees (medium 1)
- 30–49 employees (medium 2)
- 50 or more employees (large).

The two medium groups have been amalgamated, and the large size group further broken down for this publication, as these businesses were of particular interest for some of the results.

Response rate

The Business Operations Survey 2006 targeted an 80 percent response rate. The survey achieved an actual response rate of 81.7 percent, which represented 6,066 businesses.

Government Use of ICT Survey: 2006**Survey background**

The Government Use of Information and Communication Technology (ICT) Survey provides reliable information about the present state of government ICT use, emerging technology uptake, and factors that hamper ICT use by government organisations. It also provides a picture of how new ICT is changing the way that government organisations carry out their roles.

Together with results from the Business Use of ICT module in the Business Operations Survey: 2006 and the Household Use of ICT Survey: 2006, this information will help build a picture of ICT use in New Zealand.

Population

The Government Use of ICT Survey is a census of all government sector enterprise units in New Zealand. The population was constructed using Statistics New Zealand's Business Frame and each unit meets one of the following criteria:

Institutional sector code

All 3111 (central government), all 3121 (funded social security schemes), and ANZSIC M81130 (local government administration) with institutional sector code of 3291 (other local authorities).

Business type code

All 08 (central government) and 10 (local government).

The population has been classified into the following divisions:

Central government: includes public service departments, non-public service departments, crown entities, organisations subject to the Public Finance Act (4th Schedule), district health boards, office of parliament, ACC and the Reserve Bank.

Local government: includes regional, district and city councils.

Crown research institute: crown entity companies.

Tertiary education: includes universities, colleges of education, and polytechnics/institutes of technology.

Other government organisation: All other government organisations in the population frame, such as trusts, councils and reserve boards.

The above criteria result in 315 enterprises in the population.

Out-of-scope population

State-owned enterprises and local authority trading enterprises are not in the target population. These enterprises are covered by the Business Use of ICT module in the Business Operations Survey: 2006.

Education (other than tertiary education) is also not included in the survey population.

Data collection

The Government Use of ICT Survey: 2006 was a postal survey to all organisations meeting the population criteria.

Response rate

A target overall response rate of 80 percent was specified in terms of the number of enterprise units from the survey population. Key organisations were also identified and targeted with a response rate of 95 percent.

An overall response rate of 94 percent was achieved, including 100 percent of key units.

Information and Communication Technology (ICT)**Supply Survey: 2006****Background**

The Information and Communication Technology (ICT) Supply Survey: 2005/06 is the second of a new time series based on recently developed OECD definitions to measure the ICT industry. The need for a new survey is recognition that these two technology categories are converging at a fast rate and are also becoming widespread.

Statistics in this release are drawn from the ICT Supply Survey: 2005/06. The objectives of this survey are to provide information on the total income, export income and domestic income from sales of ICT in New Zealand.

Reference period

The reference period for the survey was the 2006 financial year. For enterprises with balance dates falling between 1 January and 30 September, this is financial data for the year ending 2006. For enterprises with balance dates falling between 1 October and 31 December, this is financial data for the year ending 2005.

Population

The ICT Supply Survey is a census of all enterprise units with 2.0 or more rolling mean employees (RME) engaged in ICT activity in New Zealand. RME is the average size of the enterprise employment count over the past 12 months. The population for the ICT Supply Survey: 2005/06 was 2,618 enterprises.

All units with greater than 2.0 RME, and classified on the Statistics NZ Business Frame to the following ANZSIC codes, are included in the survey:

C283900 Professional and scientific equipment manufacturing nec

Units mainly engaged in manufacturing draughting, meteorological, surveying or other professional or scientific instruments or equipment nec, or watches, clocks or other timing instruments.

C284100 Computer and business machine manufacturing

Units mainly engaged in manufacturing computers or business machines.

C284200 Telecommunication, broadcasting and transceiving equipment manufacturing

Units mainly engaged in manufacturing telecommunications, broadcasting or transceiving equipment.

C284900 Electronic equipment manufacturing nec

Units mainly engaged in manufacturing radio receiving sets (except radio transceivers or radio telegraphic receivers), television receiving sets, sound reproducing and/or recording equipment, headphones, hearing aids or electronic equipment or components nec.

C285200 Electric cable and wire manufacturing

Units mainly engaged in manufacturing electric or telephone cable, wire or strip, including stranded, braided or insulated non-ferrous wire, cable or strip.

F461200 Professional equipment wholesaling

Units mainly engaged in wholesaling scientific, medical or other professional equipment.

F461300 Computer wholesaling

Units mainly engaged in the wholesaling of computers or computer peripheral equipment.

F461400 Business machine wholesaling nec

Units mainly engaged in the wholesaling of office or business machines or equipment nec.

F461500 Electrical and electronic equipment wholesaling nec

Units mainly engaged in the wholesaling electrical or electronic equipment nec.

J712000 Telecommunication services

Units mainly engaged in providing telecommunication services to the public by wire, cable or radio.

L783100 Data processing services

Units mainly engaged in providing data processing services. Also included are units mainly engaged in providing time-sharing services.

L783200 Information storage and retrieval services

Units mainly engaged in providing information storage and retrieval services (other than library and bibliographic services).

L783300 Computer maintenance services

Units mainly engaged in providing computer maintenance or repair services.

L783400 Computer consultancy services

Units mainly engaged in providing computer consultancy services, computer systems analysis or computer programming services.

A keyword search was used on the Statistics NZ Business Frame to find ICT units from the following two ANZSIC codes. These units also had to have greater than 2.0 RME to be included in the survey:

C283200 Medical and surgical manufacturing

Units mainly engaged in manufacturing medical, surgical or dental equipment, including dentures.

L774300 Plant hiring or leasing

Units mainly engaged in the leasing, renting or hiring of industrial machinery, plant or equipment (except transport equipment) without operators, from stock physically held for that purpose.

In addition, enterprises are also added if they have greater than 2.0 RME and are a member of one of the following lists:

- New Zealand Software Association
- Information Technology Association of New Zealand
- Companies identified by New Zealand Trade and Enterprise as the ICT industry.

Also included are any other enterprises that have more than 2.0 RMEs and are known to be significant participants in the ICT industry outside the above sources and which are not classified on the Statistics NZ Business Frame to any of the above ANZSIC codes. Known information communication and technology retailers were also added to the population.

Data collection

The ICT Supply Survey: 2005/06 is a postal survey to all organisations meeting the population criteria.

Response rate

A target overall response rate of 75 percent was specified in terms of the number of enterprise units from the survey population. Key businesses were also identified and targeted with a response rate of 95 percent. These key businesses were identified as those having the highest total GST sales in the 2006 financial year, or which were significant contributors to commodity or export totals in the ICT Supply Survey: 2004/05.

An overall response rate of 83 percent was achieved, including 96 percent of key businesses.

Internet Service Provider Survey**Background**

The Internet Service Provider Survey provides information on the total number and nature of subscribers who use New Zealand-based Internet service providers (ISPs) to connect either permanently or regularly to the Internet. This information allows a measurement of the global connectivity of New Zealanders, which is regarded as an important determinant in accelerating economic growth. A core set of official statistics on Internet service provision results from this survey and this will help individuals, communities, businesses and government to understand how information and communication technology is changing the economy and society.

Data collection

The Internet Service Provider Survey: March 2007 was a postal survey of all organisations meeting the population selection criteria. The population was constructed by combining ISP industry lists with names of ISP organisations from the Statistics New Zealand Business Frame, according to the Australian and New Zealand Standard Industrial Classification (ANZSIC) 2006 category J591000.

- J591000 Internet Service Providers and Web Search Portals. This class consists of units mainly engaged in providing Internet access services. Also included are units which provide web-search portals used to search the Internet. Primary activities are Internet access provision, Internet access service (online), and Internet service provision.

The questionnaire used a six-monthly reference period ending 31 March 2007. No financial information was requested from respondents. The survey was posted out in April 2007.

Target population

The target population was defined as: 'All resident New Zealand Internet service providers', where Internet service providers were defined as economically significant businesses that supply permanent or regular Internet connectivity services to individuals, households, businesses and other organisations in New Zealand.

A business is considered economically significant if it is found on the Statistics NZ Business Frame and meets one or more of the following criteria:

- has greater than \$30,000 annual GST expenses or sales
- had more than two employees over the last year
- is in a GST-exempt industry (except for residential property leasing and rental)
- is part of a group of enterprises.

For the purposes of this survey, the population included all resident ISPs, regardless of their RME (rolling mean employee) measurement, found on the Statistics NZ Business Frame or other employment measures.

Exclusions

Enterprises that provided other Internet services such as web and domain hosting, but who did not provide ISP services, were excluded from the population. This was because the above enterprises were not strictly classified as ISPs. Web-hosting units did not interact directly with the public. Since the public access their website through an ISP, their activity was already covered by the survey. Including them would have resulted in double counting.

Businesses that provided occasional or unmetered access (including Internet cafes, kiosks, libraries, universities) were also excluded. The activity of this group was covered by the ISP each subscribed to, so they did not need to be surveyed separately.

Connections to the Internet via mobile phone were also excluded as this is neither a permanent nor regular Internet connection and thus is beyond the scope of this survey. However mobile (cellular) data-card-only subscriptions to the Internet are included.

The selection unit for inclusion in the population was set at the enterprise level.

Response rate

The target response rate for the Internet Service Provider Survey: March 2007 was 85 percent for units in the population list, with 100 percent collection required of identified key respondents. The actual overall response rate achieved was 89 percent overall and 100 percent for key respondents.

The population for the survey was 74 enterprises.

Glossary

Active subscriber

This is a customer who within the last 90 days has accessed the Internet or paid for access to the Internet through an ISP. This definition includes all subscribers who obtain access to the Internet through an ISP and both dial-up and non-dial-up connection subscribers. This definition excludes web-hosting-only subscribers, email-only subscribers and/or connections to the Internet via mobile phone.

Advanced network

Advanced network (also known as Kiwi Advanced Research and Education Network or KAREN) provides an ultra-high speed Internet connection for New Zealand educationalists and researchers that links them with their colleagues nationally and internationally. It is an optical network providing many gigabit capacities to high-bandwidth users such as universities and Crown research institutes.

Authentication

The process of attempting to verify the digital identity of the sender of a communication, such as a request to log in. The sender being authenticated may be a person using a computer, a computer itself or a computer program.

ANZSIC

The Australian and New Zealand Standard Industrial Classification (ANZSIC).

Broadband

Broadband is a high-speed connection to the Internet and is also referred to as non-analog. For the purposes of the Household Use of ICT questionnaires, broadband was self-identified by the respondent, and then the specific connection technology type was requested, for example, DSL, cable.

Business Frame

A register of all economically significant businesses operating in New Zealand, maintained by Statistics NZ from which the survey population is drawn.

Business size

Small business: between 2 and less than 20 RME

Medium business: RME between 20 and less than 50

Large business: 50 or more RME.

Business type

New Zealand standard classification of business type 1996.

Cable

A broadband transmission technology using coaxial cable or fibre-optic lines that were first used for TV and are now being used for Internet access. Includes fibre optic, ethernet, coaxial, and hybrid fibre coaxial.

Capital expenditure on ICT

Capital expenditure, commonly referred to as CAPEX, is expenditure used by a company to acquire or upgrade physical assets such as equipment. Capital expenditure on ICT refers to all investment in new ICT, including new or improved ICT hardware or software, new infrastructure, and capitalised salaries.

Cellular Internet access

Cellular Internet access uses the cellphone network to connect.

Cryptography

The use of encryption technology to protect information.

Data exchange

Includes any data exchange that occurs as a result of a formal agreement between the respondent and any other entity. This does not include information that is transferred on an ad hoc basis such as emails between individuals or information downloaded from a website.

Dial-up

Dial-up access is a way of connecting a computer to the Internet using a modem and the telephone line.

DSL

Digital subscriber line (DSL) is a type of high-speed broadband Internet connection that transmits data over regular copper wires (phone line). DSL allows for simultaneous voice and data transmission.

Dynamic information

Information that is asynchronously changed as further updates to the information become available. Anything that is updated automatically, for example, webcams or webcasts.

Email filtering

Email filtering is a service offered by ISPs that monitors email messages. It will either pass the message through unchanged for delivery to the user's mailbox, redirect the message for delivery elsewhere, or delete or edit the message. Common uses for email filters include removal of spam and computer viruses.

Ethnicity

Ethnicity is collected by the HLFS and each respondent can provide up to three ethnic groups. Respondents can select among the following 10 ethnic groups: European, New Zealand Māori, Samoan, Cook Island Māori, Niuean, Tongan, Other Pacific, Chinese, Indian, Other. In this release, estimates for the European, Māori, Pacific and Other ethnic groups are based on total responses. An estimate for the Māori ethnic group is based on total responses to the New Zealand Māori ethnic group; an estimate for the Pacific ethnic group is based on total responses to Samoan, Cook Island Māori, Niuean, Tongan and Other Pacific ethnic groups; and an estimate for the Other ethnic group is based on total responses to Chinese, Indian and Other ethnic groups. In this survey, it was not possible to derive information specifically on the Asian ethnic group.

Enterprise

A single business entity operating in New Zealand either as a legally constituted body, such as a company, trust, local or central government trading organisation, incorporated society, or self-employed individual.

Exports

Excludes goods sold to other New Zealand businesses who will export the goods at a later stage.

Extranet

An extranet is a private network that uses Internet protocols and the public telecommunication system to securely share part of a business's information or operations with suppliers, vendors, partners, customers, or other organisations. An extranet can be viewed as part of a company's intranet that is extended to users outside the company.

Filtering

Security measures aimed at filtering incoming material. Includes SPAM, virus, or content filtering.

Geographical information system

Geographical information system (GIS) is a computer system capable of assembling, storing, manipulating, and displaying geographically referenced information (that is, spatial data). The GIS contains information on attributes such as elevation, land ownership and use, crop yield and soil nutrient levels.

Global positioning system

Global positioning system is a system of satellites and receiving devices used to compute positions on Earth. It is used in navigation, and to determine geographical coordinates and local time.

Goods and services pricing

The data reported in the ICT Supply Survey: 2005/06 is collected and reported in nominal dollar values at time of sale. These nominal sales figures combine price and volume movements. Price movements of these goods and services may disguise the volume or quantity change in goods and services sold.

Government shared network

Government shared network (GSN) is a network that enables government agencies to share information at higher speeds and more cost effectively. The GSN is made up of a fibre-optic network connecting government agencies in Wellington, and a wide area network connecting government sites anywhere in New Zealand on a secure voice and data capable network.

Information and communication technology (ICT)

This refers to electronic technologies for collecting, processing or transmitting information which can be in the form of voice, images, or data. Examples include computers, software, the Internet, telecommunications, networks, and new developments such as video conferencing and global positioning system.

ICT commodity definition

The following is a list of ICT commodity categories used in the ICT Supply Survey questionnaire, and examples relating to each category. ICT goods commodities are defined by the internationally recognised Harmonized System (HS).

Institutional sector

New Zealand standard institutional sector classification 1996.

Interactive information

Content which accepts and responds to content from users, for example, online forms.

Internet service providers (ISPs)

Businesses that supply Internet connectivity services to individuals, households, businesses and other organisations.

Internet subscription data allowance

An Internet subscription data allowance is a method employed by ISPs to limit the volume of data downloaded and/or uploaded by subscribers during a fixed period, normally a month. Once a fixed data cap has been reached, lower speed or extra access charges may apply.

Intranet

An intranet is a private computer network that uses Internet protocols for communication and shared access to an organisation's information or operations.

Local area network

Local area network (LAN) is a computer network limited to the immediate area, such as a building, department or site. Computers connected to the LAN can access resources on other computers and shared peripheral devices.

Mbps and kbps

Mbps and kbps are measures of download and upload speed. Mbps stands for megabits per second (1,000,000 bits per second) and kbps stands for kilobits per second (1,000 bits per second).

Network protection

Security measures aimed at preventing unauthorised access to a network. Includes firewalls, intrusion detection systems, or architectural defences.

Operating expenditure on ICT

Operating expenditure, commonly referred to as OPEX, is the ongoing cost for running a product, business, or system. Operating expenditure on ICT refers to all ongoing ICT costs, and includes maintenance and servicing of ICT, upgrades and repairs of software or hardware, and salaries of ICT staff.

OECD definition of ICT goods and services

ICT goods and services fulfil or enable the function of information processing and communication by electronic means. Alternatively, ICT goods may also use electronic processing to detect, measure and/or record physical phenomena or control a physical process.

Online purchase

Those purchases which are paid for online, for example, by credit card or web-based Internet transaction systems. This does not include online banking, or when the payment for the purchase is made by cash or cheque.

Personal use of a cellular phone

The phone need not be owned or paid for by the person but should be reasonably available through work or family. Excludes occasional use, for instance, borrowing a cellular phone to make a call.

Radio frequency identification

Radio frequency identification (RFID) is a method of remotely storing and retrieving data by using devices called RFID tags/transponders. The tag can be attached to a product. RFID tags contain antennas to enable them to receive and respond to radio-frequency queries from an RFID transceiver.

Real time

A transmission that occurs right away, without any perceptible delay.

Regional council areas

Regional council areas are defined at meshblock and area unit level. Regional councils cover every territorial authority in New Zealand with the exception of the Chatham Islands Territory. The seaward boundary of the regions is the 12-mile (19.3km) New Zealand territorial limit. Generally regional council areas contain complete territorial authorities. Where territorial authorities straddle regional council boundaries, the affected area has been statistically defined in complete area units. There are 16 regional council areas in New Zealand. To allow publication of smaller areas, these categories have been combined into 12 regions for this release.

Rolling mean employment (RME)

The average size of the enterprise employment count over the past 12 months. This number is sourced from the Statistics NZ Business Frame which is updated on a monthly basis by employers.

Sales

Sales in New Zealand dollars for each ICT category.

Sales to New Zealand end-users

Sales to those purchasers who buy goods for their own use, rather than for selling.

Sales to other New Zealand customers

Sales not classed as exports or sales to New Zealand end-users. This category includes sales to businesses that sell the ICT goods or services.

Satellite communications

Communication satellites permit two or more points on the ground (Earth stations) to send messages to one another over large distances by using radio waves.

Satellite Internet access

Satellite Internet access is a one-way or two-way method to access the Internet by using satellite technology as the means of data transfer.

Sharing files via peer to peer exchanges

Directly accessing other computers' files through Internet networks and software programs.

Static information

Website one-way content, such as plain text, photos, or printable forms.

Urban network

An open-access network that delivers gigabit capacity to large bandwidth users, such as local government, businesses, hospitals, universities and schools.

Urban and rural areas

All urban areas

Statistically defined areas with no administrative or legal basis. There is a three-part hierarchical subdivision of urban areas. The urban population is defined internationally as towns with 1,000 people or more.

Main urban area

Very large urban area centred on a city or major urban centre. Main urban areas have a minimum population of 30,000.

Secondary urban area

Urban area with a population between 10,000 and 29,999 and centred on the larger regional centres.

Minor urban area

These are urbanised settlements (outside main and secondary urban areas), centred around smaller towns with a population between 1,000 and 9,999.

All rural areas

Statistically defined areas with no administrative or legal basis. Two-part hierarchical subdivision of rural areas. They have a population of less than 1,000.

Rural centre

Centres with a population between 300 and 999.

Rural

Rural dwellers living in a true rural area. Rural areas have a population of under 300.

Virtual private network

Virtual private network (VPN) is a private communications network used to communicate confidentially over a publicly accessible network. VPN-message traffic can be carried over a public networking infrastructure (for example, the Internet) on top of standard protocols, or over a service provider's private network. Data sent across a VPN is encrypted, so the entire network is 'virtually' private.

Voice over Internet protocol

Voice over Internet protocol is the routing of voice conversations over the Internet or through any other IP-based network.

Voice recognition technology

A computerised system that allows a person, typically a telephone caller, to select an option from a voice menu and otherwise interface with a computer system. The systems use speech recognition to interpret the questions that the person wants answered.

Wide area network

Wide area network (WAN) is a computer network covering a wide geographical area, such as a city, region or country. Typically, a WAN consists of two or more local area networks (LANs). Computers connected to a WAN are often connected through public networks, such as the telephone system.

Web filtering

Web filtering is a service offered by ISPs that filters by keyword or blocks by URL what a web browser will display, usually for the benefit of children.

Web radio and web television

Radio and television stations which can be accessed through the Internet, also called 'webcasting'.

Wireless

Access to the Internet via wireless networks (other than cellular technology).

Wireless Internet connection

Access to the Internet via wireless networks (other than cellular technology).

Wireless personal digital assistant

A handheld device that combines computing, telephone, fax, and networking features, and connects to a network through wireless technology. Personal digital assistants are also called PDAs, palmtops, hand-held computers, and pocket computers.

Appendix Full set of tables

Table 1 (3.01)

Household Access to the Internet By household type and area December 2006 quarter

	Total households	Internet access ⁽¹⁾		Broadband access ⁽²⁾		Dial-up access	
		Number	Percent	Number	Percent	Number	Percent
Household type							
No dependants	1,413,600	890,200	63.0	449,800	31.8	433,900	30.7
Dependants	152,500	120,700	79.1	70,700	46.4	49,600	32.5
All rural areas	211,000	135,500	64.2	46,800	22.2	87,000	41.3
Rural centre	36,400	20,400	56.0	8,100	22.3	11,900	32.7
Rural	174,600	115,100	65.9	38,600	22.1	75,100	43.0
All urban areas	1,355,100	875,400	64.6	473,800	35.0	396,400	29.3
Main urban	1,158,300	773,600	66.8	428,600	37.0	339,800	29.3
Secondary urban	89,000	50,000	56.2	21,300	23.9	28,800	32.3
Minor urban	107,800	51,900	48.1	24,000	22.3	27,900	25.9
Regional area							
Northland	57,700	31,600	54.8	13,200	22.9	17,900	31.0
Auckland	482,300	332,400	68.9	207,600	43.0	123,300	25.6
Waikato	149,600	87,600	58.6	39,300	26.3	47,500	31.7
Bay of Plenty	103,700	61,000	58.8	26,400	25.5	34,400	33.1
Gisborne / Hawke's Bay	74,600	40,400	54.2	17,800	23.9	22,200	29.7
Taranaki	39,800	23,500	59.0	9,200	23.1	14,200	35.7
Manawatu-Wanganui	86,600	50,600	58.4	19,600	22.6	30,600	35.3
Wellington	176,300	128,200	72.7	67,500	38.3	60,600	34.3
Nelson / Tasman / Marlborough / West Coast	66,800	43,400	65.0	19,400	29.0	23,800	35.6
Canterbury	208,000	139,800	67.2	69,000	33.2	69,100	33.2
Otago	83,200	50,500	60.7	21,900	26.3	28,000	33.7
Southland	37,400	21,900	58.6	9,700	25.9	12,100	32.3
All⁽³⁾	1,566,000	1,010,900	64.6	520,500	33.2	483,500	30.9

(1) Households may have both broadband and dial-up access.

(2) Broadband includes DSL, cable, wireless and other broadband connection types.

(3) Total number of households in New Zealand is 1,566,000.

Note: All numbers in this table have been rounded to the nearest 100. Due to rounding, figures may not sum to 100 percent.

Table 2

Broadband Technology
By area
December 2006 quarter

Area	Total households with broadband ⁽¹⁾		Households with broadband ⁽²⁾			
			Wireless	Cable	DSL	Other
	Number	Percent	Percent	Percent	Percent	Percent
All rural areas						
Rural centre	8,100	22.3	8.6	11.1	80.2	1.2
Rural	38,600	22.1	18.9	13.7	67.4	1.3
All urban areas						
Main urban	428,600	37.0	17.3	19.2	68.6	0.8
Secondary urban	21,300	23.9	14.6	13.6	74.6	1.4
Minor urban	24,000	22.3	12.5	13.3	74.2	0.0
Regional area						
Northland	13,200	22.9	7.6	15.2	79.5	0.8
Auckland	207,600	43.0	17.0	15.4	71.3	0.8
Waikato	39,300	26.3	18.3	12.5	70.2	0.8
Bay of Plenty	26,400	25.5	12.1	22.0	72.3	0.4
Gisborne / Hawke's Bay	17,800	23.9	14.6	21.9	72.5	2.2
Taranaki	9,200	23.1	18.5	16.3	67.4	1.1
Manawatu-Wanganui	19,600	22.6	17.3	22.4	68.9	1.0
Wellington	67,500	38.3	18.5	30.4	57.8	0.3
Nelson / Tasman / Marlborough / West Coast	19,400	29.0	13.4	12.4	76.8	0.5
Canterbury	69,000	33.2	18.6	21.2	65.5	1.2
Otago	21,900	26.3	11.9	10.0	78.5	0.5
Southland	9,700	25.9	34.0	8.2	62.9	1.0
All⁽³⁾	520,500	33.2	17.0	18.3	69.2	0.8

(1) Households may have both broadband and dial-up access.

(2) Households may have more than one broadband connection.

(3) Total number of households in New Zealand is 1,566,000.

Note: All numbers in this table have been rounded to the nearest 100. Due to rounding, figures may not sum to 100 percent.

Table 3

How Households Access the Internet*By area*

December 2006 quarter

Area	Total households with Internet access ⁽¹⁾		Households with Internet access			
			Computer	Internet-enabled cellular phone	Laptop or hand-held computer	Games machine or other
	Number	Percent	Percent ⁽²⁾			
All rural areas						
Rural centre	20,400	56.0	98.0	5.9	8.8	8.8
Rural	115,100	65.9	95.3	5.1	8.1	8.9
All urban areas						
Main urban	773,600	66.8	94.6	6.3	11.7	12.8
Secondary urban	51,900	58.3	90.6	6.4	9.6	10.4
Minor urban	50,000	46.4	98.6	4.4	9.8	10.4
Regional area						
Northland	31,600	54.8	96.2	4.7	7.3	7.3
Auckland	332,400	68.9	95.8	6.1	11.0	11.8
Waikato	87,600	58.6	93.9	5.8	9.2	9.6
Bay of Plenty	61,000	58.8	94.9	5.6	9.0	10.0
Gisborne / Hawke's Bay	40,400	54.2	96.0	5.7	8.9	9.2
Taranaki	23,500	59.0	97.9	6.8	7.7	8.5
Manawatu-Wanganui	50,600	58.4	93.5	5.1	11.9	13.0
Wellington	128,200	72.7	92.7	7.3	13.8	15.8
Nelson / Tasman / Marlborough / West Coast	43,400	65.0	93.5	5.1	12.2	13.4
Canterbury	139,800	67.2	93.7	7.4	13.2	14.9
Otago	50,500	60.7	96.0	3.2	7.7	7.9
Southland	21,900	58.6	93.6	5.9	11.0	11.9
All⁽³⁾	1,010,900	64.6	94.7	6.1	11.0	12.1

(1) Households may have both broadband and dial-up access.

(2) Percentage of households with Internet access.

(3) Total number of households in New Zealand is 1,566,000.

Note: All numbers in this table have been rounded to the nearest 100. Due to rounding, figures may not sum to 100 percent.

Table 4

Reasons for Not Having Internet
By household type and area
December 2006 quarter

Area	Total households without Internet		Reasons for not having Internet						
			Not interested	Costs are too high	Lack of knowledge, confidence and skills	Access elsewhere	Concerns about safety	Not available	Other
	Number	Percent	Percent ⁽²⁾						
Household type									
No dependants	522,200	36.9	57.7	25.4	10.0	6.7	1.1	2.6	8.8
Dependants	31,600	20.7	32.0	45.3	5.1	3.8	4.7	6.0	13.6
All rural areas									
Rural centre	16,000	44.0	61.9	28.8	6.9	3.8	0.6	5.6	5.6
Rural	59,500	34.1	55.8	19.8	10.9	6.1	2.0	6.9	11.9
All urban areas									
Main urban	383,600	33.1	54.5	28.2	9.5	7.4	1.3	2.1	9.0
Secondary urban	38,900	43.7	60.9	27.2	10.8	4.6	0.5	1.8	6.9
Minor urban	55,800	51.8	63.6	21.1	9.7	3.2	1.3	3.9	9.1
Regional area									
Northland	26,000	45.1	58.5	23.5	9.6	4.2	1.9	5.4	6.5
Auckland	149,200	30.9	52.2	31.0	11.8	6.5	1.7	2.4	9.1
Waikato	62,000	41.4	49.7	29.7	9.8	7.3	1.3	2.7	11.3
Bay of Plenty	42,500	41.0	58.4	22.4	8.5	4.9	0.9	3.3	7.5
Gisborne / Hawke's Bay	34,200	45.8	57.6	22.8	7.9	3.5	2.3	4.4	13.2
Taranaki	16,300	41.0	66.3	19.0	6.7	4.9	1.2	3.7	8.6
Manawatu-Wanganui	35,800	41.3	57.5	24.3	7.8	8.1	0.8	2.8	9.8
Wellington	48,100	27.3	58.6	29.9	6.9	9.4	0.6	2.1	8.9
Nelson / Tasman / Marlborough / West Coast	23,400	35.0	62.4	21.8	12.0	3.4	1.3	4.7	6.8
Canterbury	68,000	32.7	56.6	25.7	10.1	7.5	0.9	1.6	9.3
Otago	32,700	39.3	63.3	19.9	8.6	5.8	0.6	3.7	6.4
Southland	15,500	41.4	61.9	21.9	8.4	9.7	1.3	1.9	6.5
All⁽³⁾	553,800	35.4	56.2	26.5	9.7	6.5	1.3	2.9	9.1

(1) Households could select more than one reason.

(2) Percentages are of households that do not have the Internet.

(3) Total number of households in New Zealand is 1,566,000.

Note: All numbers in this table have been rounded to the nearest 100. Due to rounding, figures may not sum to 100 percent.

Table 5

Reasons Households Do Not Have Broadband Access⁽¹⁾*Household with dial-up access only, by area*

Last 12 months, December 2006 quarter

Area	Households with dial-up Internet access only ⁽²⁾		Users that can browse webpages	Reason ⁽³⁾				
				Not available in local area	Costs too high ⁽⁴⁾	Dial-up is sufficient	Concern about suppliers and service	Other
	Number	Percent	Percent ⁽⁵⁾					
All rural areas								
Rural centre	11,900	32.7	96.6	19.3	49.6	23.5	11.8	0.8
Rural	75,100	43.0	95.7	37.6	36.5	21.6	16.6	0.8
All urban areas								
Main urban	339,800	29.3	97.4	3.7	53.9	34.4	15.6	2.1
Secondary urban	28,800	32.4	97.2	2.8	51.1	40.8	14.8	0.7
Minor urban	27,900	25.9	97.5	4.4	51.6	34.1	15.8	1.8
Regional area								
Northland	17,900	31.0	95.5	9.6	48.9	33.7	16.3	1.1
Auckland	123,300	25.6	96.8	5.2	57.5	29.8	15.8	1.2
Waikato	47,500	31.8	96.8	17.4	46.0	32.1	13.8	1.3
Bay of Plenty	34,400	33.2	97.4	12.6	47.4	32.6	15.6	2.9
Gisborne / Hawke's Bay	22,200	29.8	95.9	12.3	49.3	28.8	18.3	1.8
Taranaki	14,200	35.7	97.2	16.3	45.4	34.0	14.2	1.4
Manawatu-Wanganui	30,600	35.3	96.4	13.5	44.1	30.9	15.1	2.3
Wellington	60,600	34.4	97.5	3.2	50.8	34.2	17.2	3.4
Nelson / Tasman / Marlborough / West Coast	23,800	35.6	99.2	14.0	51.9	27.2	14.9	2.1
Canterbury	69,100	33.2	97.4	7.4	50.3	37.0	16.7	1.6
Otago	28,000	33.7	97.9	10.8	49.8	36.9	12.9	0.7
Southland	12,100	32.4	96.7	17.6	42.9	32.8	12.6	0.8
All⁽⁶⁾	483,500	30.9	97.1	9.4	50.8	32.5	15.6	1.8

(1) Broadband includes DSL, cable, wireless and other broadband connection types.

(2) Households may have both broadband and dial-up access.

(3) Households could select more than one reason.

(4) Costs too high includes those who had concerns about the extra cost of exceeding plan limits.

(5) Percentages are of households that have dial-up access.

(6) Total number of households in New Zealand is 1,566,000.

Note: All numbers in this table have been rounded to the nearest 100. Due to rounding, figures may not sum to 100 percent.

Table 6

Household Computer Networks⁽¹⁾
By household type and area
 December 2006 quarter

	Total households with networks		Network type		
			Network cable	Radio (wireless)	Both
	Number	Percent	Percent ⁽²⁾		
Household type					
No dependents	118,000	8.3	58.5	30.9	10.5
Dependents	23,600	15.5	63.6	28.2	8.2
All rural areas					
Rural centre	1,500	4.1	83.1	5.5	11.4
Rural	9,500	5.4	58.3	25.8	15.9
All urban areas					
Main urban	121,700	10.5	58.5	32.0	9.5
Secondary urban	4,600	5.2	69.0	15.7	15.3
Minor urban	4,400	4.1	66.7	23.7	9.6
Regional area					
Northland	2,600	4.5	77.8	2.8	19.3
Auckland	58,100	12.0	58.1	33.3	8.6
Waikato	10,700	7.2	51.3	37.4	11.4
Bay of Plenty	4,600	4.4	74.6	16.3	9.1
Gisborne / Hawke's Bay	3,900	5.2	71.6	12.9	15.5
Taranaki	3,200	8.0	67.2	25.2	7.6
Manawatu-Wanganui	6,100	7.0	71.5	24.8	3.8
Wellington	21,600	12.3	55.4	33.3	11.3
Nelson / Tasman / Marlborough / West Coast	4,000	6.0	57.5	24.1	18.4
Canterbury	19,300	9.3	61.3	28.6	10.0
Otago	5,400	6.5	53.7	31.6	14.7
Southland	2,000	5.3	50.3	38.9	10.8
All⁽³⁾	141,600	9.0	59.4	30.5	10.1

(1) Households can have both wired and wireless network.

(2) Percentages are of households that have a computer network.

(3) Total number of households in New Zealand is 1,566,000.

Note: All numbers in this table have been rounded to the nearest 100. Due to rounding, figures may not sum to 100 percent.

Table 7

Household Loss or Damage Caused by Virus or Similar
Households with access to the Internet, last 12 months
 December 2006 quarter

	Total households with Internet ⁽¹⁾	Loss or damage caused by a virus or similar ⁽²⁾	
		Number	Percent
Household type			
No dependents	890,200	142,300	16.0
Dependents	120,700	27,200	22.5
All rural areas			
Rural centre	19,200	4,100	21.4
Rural	107,800	22,200	20.6
All urban areas			
Main urban	722,200	129,100	17.9
Secondary urban	47,000	7,300	15.5
Minor urban	47,800	6,800	14.2
Regional area			
Northland	31,600	5,800	18.4
Auckland	332,400	54,000	16.2
Waikato	87,600	16,100	18.4
Bay of Plenty	61,000	12,000	19.7
Gisborne / Hawke's Bay	40,400	6,900	17.1
Taranaki	23,500	4,100	17.4
Manawatu-Wanganui	50,600	8,000	15.8
Wellington	128,200	19,200	15.0
Nelson / Tasman / Marlborough / West Coast	43,400	7,700	17.7
Canterbury	139,800	25,200	18.0
Otago	50,500	6,800	13.5
Southland	21,900	3,800	17.4
Household with Internet security installed⁽²⁾			
No security	48,200	6,500	13.5
Anti-virus software	897,500	155,600	17.3
Firewall software	741,200	130,800	17.6
Anti-spyware software	657,600	116,200	17.7
Software patches	575,600	96,300	16.7
All above security	439,700	76,400	17.4
All⁽³⁾	1,010,900	169,500	16.8

(1) Households may have both broadband and dial-up access.

(2) Loss or damage includes loss of data, time and/or damage to a household computer.

(3) Total number of households in New Zealand is 1,566,000.

Note: All numbers in this table have been rounded to the nearest 100. Due to rounding, figures may not sum to 100 percent.

Table 8

Most Recent Internet Access
December 2006 quarter

	Number	Percent
Never	827,600	25.8
Within the last month	2,092,200	65.3
Within the last 3 months	58,600	1.8
Between three months to a year ago	56,800	1.8
More than a year ago	153,800	4.8
Don't know	9,100	0.3
Total	3,201,600	100.0

Note: All numbers in this table have been rounded to the nearest 100. Due to rounding, figures may not sum to 100 percent.

Table 9

Individual Internet Use			
<i>By sex, age, qualification, employment, ethnicity and income</i>			
December 2006 quarter			
	Total number of individuals	Recent Internet Users ⁽¹⁾	
		Number	Percent
Sex			
Male	1,555,100	1,070,000	68.8
Female	1,646,500	1,137,500	69.1
Age group			
15–19	303,200	264,400	87.2
20–24	283,800	237,700	83.8
25–29	257,200	212,000	82.4
30–34	272,800	225,700	82.7
35–39	302,400	232,800	77.0
40–44	312,100	242,800	77.8
45–49	300,400	220,100	73.3
50–54	260,100	179,300	68.9
55–59	238,300	152,000	63.8
60–64	185,900	98,300	52.9
65–69	154,000	64,400	41.8
70–74	118,900	41,200	34.7
75–79	101,600	19,900	19.6
80+	111,100	16,800	15.1
Highest qualification			
Not tertiary level	1,620,600	945,900	58.4
Tertiary level	1,581,000	1,261,700	79.8
Employment			
Not employed	1,112,700	571,500	51.4
Employed	2,089,000	1,636,100	78.3
Ethnic group			
European	2,400,600	1,717,300	71.5
Māori	416,300	244,200	58.7
Pacific	181,900	92,100	50.6
Other	367,600	275,500	74.9
Personal income (\$)			
Loss	10,100	6,000	59.5
Zero income	343,000	231,400	67.5
1–5,000	163,700	136,100	83.1
5,001–10,000	186,300	121,200	65.1
10,001–15,000	357,000	150,800	42.2
15,001–20,000	285,500	142,200	49.8
20,001–25,000	220,600	136,000	61.7
25,001–30,000	254,200	168,500	66.3
30,001–40,000	428,100	312,100	72.9
40,001–50,000	347,100	276,000	79.5
50,001–70,000	337,600	288,400	85.4
70,001–100,000	160,000	142,300	88.9
100,001 or more	105,300	95,000	90.2
All⁽²⁾	3,201,600	2,207,600	69.0

(1) Individuals who have used the Internet in the last 12 months to December 2006.

(2) Total number of individuals aged 15 years and over is 3,201,600.

Note: All numbers in this table have been rounded to the nearest 100. Due to rounding, figures may not sum to 100 percent.

Table 10

Frequent Internet Users
By sex, age, qualification, employment, ethnicity and income
 December 2006 quarter

	Recent Internet users ⁽¹⁾		Once a day	Once a week	Once a month	Less than once a month
	Number	Percent					Percent^{(2)}
Sex						
Male	1,070,000	68.8	59.9	28.7	6.0	5.3
Female	1,137,500	69.1	55.6	32.2	6.3	5.7
Age group						
15–19	264,400	87.2	53.6	34.4	6.9	5.0
20–24	237,700	83.8	61.7	25.9	5.9	6.2
25–29	212,000	82.4	61.9	25.8	5.1	6.9
30–34	225,700	82.7	61.5	28.7	5.5	4.2
35–39	232,800	77.0	58.3	30.9	5.9	4.5
40–44	242,800	77.8	58.7	29.6	4.8	6.5
45–49	220,100	73.3	59.4	29.9	5.9	4.7
50–54	179,300	68.9	58.6	30.6	6.1	4.6
55–59	152,000	63.8	57.0	31.6	6.3	4.9
60–64	98,300	52.9	52.5	33.6	8.2	5.7
65–69	64,400	41.8	48.0	36.8	7.6	7.5
70–74	41,200	34.7	44.2	40.3	8.5	7.3
75–79	19,900	19.6	36.2	56.8	8.5	11.1
80+	16,800	15.1	35.7	36.3	18.4	9.5
Highest qualification						
Not tertiary level	945,900	58.4	82.8	37.6	6.8	6.0
Tertiary level	1,261,700	79.8	38.9	25.2	5.7	5.1
Employment						
Not employed	571,500	51.4	51.0	34.1	7.4	7.4
Employed	1,636,100	78.3	60.0	29.2	5.7	4.9
Ethnic group						
European	1,717,300	71.5	57.0	31.5	1.9	5.3
Māori	244,200	58.7	47.6	32.4	16.9	11.4
Pacific	92,100	50.6	47.0	36.0	32.8	6.8
Other	275,500	74.9	72.1	21.5	11.7	3.1
Personal income (\$)						
Loss	6,000	59.4	44.9	36.6	8.3	10.0
Zero income	231,400	67.5	57.2	32.4	6.0	4.5
1–5,000	136,100	83.1	55.8	33.1	5.4	5.7
5,001–10,000	121,200	65.1	55.5	31.4	4.9	8.2
10,001–15,000	150,800	42.2	48.7	33.0	9.9	8.2
15,001–20,000	142,200	49.8	47.8	34.7	9.0	8.3
20,001–25,000	136,000	61.7	45.1	37.9	7.5	8.9
25,001–30,000	168,500	66.3	51.4	33.0	8.1	7.2
3,0001–40,000	312,100	72.9	55.4	30.2	7.3	7.0
40,001–50,000	276,000	79.5	58.9	31.1	5.7	4.3
50,001–70,000	288,400	85.4	65.9	26.9	4.5	2.6
70,001–100,000	142,300	88.9	72.7	22.1	3.3	1.8
100,001 or more	95,000	90.2	80.6	17.8	0.5	1.1
All⁽³⁾	2,207,600	69.0	57.7	30.5	6.2	5.5

(1) Individuals who have used the Internet in the last 12 months to December 2006.

(2) Percentages are of individuals who have recently used the Internet for each category.

(3) Total number of individuals aged 15 years and over is 3,201,600.

Note: All numbers in this table have been rounded to the nearest 100. Due to rounding, figures may not sum to 100 percent.

Table 11

Purpose For Recent Internet Use by Individuals
By sex, age, qualification, employment, ethnicity and income
 Last 12 months, December 2006 quarter

	Recent Internet users ⁽¹⁾		Operating a home business	Working from home ⁽²⁾	Education or study	Voluntary or community work	Personal use
	Number	Percent						Percent^{(3)}
Sex							
Male	1,070,009	68.8	12.5	18.6	25.1	7.6	86.8
Female	1,137,541	69.1	8.2	12.8	27.4	8.4	85.5
Age group							
15–19	264,400	87.2	1.0	1.7	55.1	2.2	82.0
20–24	237,700	83.8	2.9	4.8	39.4	4.3	80.3
25–29	212,000	82.4	7.1	15.8	23.3	5.6	82.1
30–34	225,700	82.8	10.1	20.7	20.8	6.8	86.0
35–39	232,800	77.0	13.4	22.1	22.1	9.0	88.0
40–44	242,800	77.8	13.3	20.4	21.3	8.2	88.5
45–49	220,100	73.3	16.1	22.1	21.9	11.5	89.5
50–54	179,300	68.9	15.8	21.8	19.4	11.0	88.2
55–59	152,000	63.8	18.6	22.8	15.9	11.4	88.0
60+	240,600	35.8	10.2	10.4	14.0	12.4	90.2
Highest qualification							
Not tertiary level	945,900	58.4	16.9	56.8	34.2	4.6	83.9
Tertiary level	1,261,700	79.8	5.4	6.0	20.3	10.6	87.8
Employment							
Not employed	571,500	51.4	2.9	3.6	33.4	7.7	85.5
Employed	1,636,100	78.3	12.9	19.8	23.8	8.1	86.4
Ethnic group							
European	1,717,300	71.5	11.4	17.1	24.4	7.9	82.2
Māori	244,200	58.7	6.3	10.4	26.1	4.7	49.6
Pacific	92,100	50.6	3.2	7.8	25.4	4.0	44.5
Other	275,500	74.9	8.2	11.0	39.9	5.7	84.5
Personal income (\$)							
Loss	6,000	59.6	28.3	11.6	24.9	8.9	89.6
Zero income	231,400	67.5	3.4	3.5	42.0	5.7	84.9
1–5,000	136,100	83.1	5.0	3.6	56.0	5.5	86.5
5,001–10,000	121,200	65.0	7.2	6.4	41.2	7.0	86.6
10,001–15,000	150,800	42.2	7.4	9.0	24.3	8.8	86.0
15,001–20,000	142,200	49.8	9.8	9.1	23.5	10.0	85.9
20,001–25,000	136,000	61.7	8.1	8.8	20.6	6.9	81.0
25,001–30,000	168,500	66.3	8.9	8.9	18.2	6.0	82.5
30,001–40,000	312,100	72.9	10.1	12.8	16.3	7.0	84.2
40,001–50,000	276,000	79.5	11.7	18.2	20.8	6.9	85.9
50,001–70,000	288,400	85.4	14.1	27.9	21.1	10.6	89.3
70,001–100,000	142,300	88.9	16.7	34.8	22.4	12.1	91.5
100,001 or more	95,000	90.2	24.5	52.1	26.5	11.6	92.7
All⁽⁴⁾	2,207,600	69.0	10.3	15.6	26.3	8.0	86.1

(1) Individuals who have used the Internet in the last 12 months to December 2006.

(2) Working from home is those whose business is not based at home.

(3) Percentages are of individuals who have recently used the Internet for each category.

(4) Total number of individuals 15 years and over is 3,201,600.

Note: All numbers in this table have been rounded to the nearest 100. Due to rounding, figures may not sum to 100 percent.

Table 12

Mobile Access⁽¹⁾ to the Internet for Personal Use
By sex, age, qualification, employment, ethnicity and income
 December 2006 quarter

	Using cellphones		Using wireless ⁽²⁾	
	Number	Percent	Number	Percent
Sex				
Male	137,400	8.8	74,200	4.8
Female	104,200	6.3	53,500	3.2
Age group				
15–19	43,200	14.2	14,400	4.7
20–24	31,700	11.2	20,900	7.4
25–29	36,600	14.2	14,400	5.6
30–34	29,700	10.9	13,700	5.0
35–39	30,200	10.0	17,300	5.7
40–44	24,900	8.0	12,300	3.9
45–49	17,900	6.0	13,700	4.6
50–54	10,200	3.9	6,800	2.6
55–59	9,100	3.8	7,900	3.3
60+	8,100	1.2	6,300	0.9
Highest qualification				
Not tertiary level	100,000	6.2	44,400	56.8
Tertiary level	141,600	9.0	83,300	5.3
Employment				
Not employed	46,800	4.2	25,200	2.3
Employed	194,800	9.3	102,500	4.9
Ethnic group				
European	187,000	7.8	97,200	4.0
Māori	32,600	7.8	7,700	1.8
Pacific	12,700	7.0	4,000	2.2
Other	28,800	7.8	18,800	5.1
Personal income (\$)				
Loss	400	4.0	200	2.0
Zero income	19,500	5.7	12,400	3.6
1–5,000	19,300	11.8	7,100	4.3
5,001–10,000	13,400	7.2	5,600	3.0
10,001–15,000	12,800	3.6	6,700	1.9
15,001–20,000	10,200	3.6	4,100	1.4
20,001–25,000	11,200	5.1	4,400	2.0
25,001–30,000	18,000	7.1	6,500	2.6
3,0001–40,000	29,100	6.8	11,500	2.7
40,001–50,000	29,700	8.6	14,200	4.1
50,001–70,000	33,400	9.9	23,100	6.8
70,001–100,000	22,600	14.1	15,600	9.8
100,001 or more	22,100	21.0	16,300	15.5
All⁽³⁾	241,600	7.6	127,700	4.0

(1) Mobile access includes using cellphones or a mobile data card.

(2) Wireless includes any wireless connection such as a 'hotspot' or 'WiFi' away from home.

(3) Total number of participants is 3,201,600.

Note: All numbers in this table have been rounded to the nearest 100. Due to rounding, figures may not sum to 100 percent.

Table 13

Where Individuals Accessed the Internet
By sex, age, qualification, employment, ethnicity, income
 December 2006 quarter

	Recent Internet users ⁽¹⁾		Place of access				
			Work	Place of education	Another person's home	Community Internet facilities	Other ⁽²⁾
	Number	Percent	Percent ⁽³⁾				
Sex							
Male	613,300	39.4	65.2	24.0	42.1	13.3	24.7
Female	658,500	40.0	61.1	29.7	42.9	16.9	17.1
Age group							
15–19	185,200	61.1	13.8	76.2	58.7	21.3	19.9
20–24	170,200	60.0	46.4	46.2	63.7	23.2	23.9
25–29	143,200	55.7	68.4	19.5	51.3	16.3	22.1
30–34	140,600	51.5	79.1	15.0	42.8	11.9	21.5
35–39	134,300	44.4	77.8	11.4	39.0	14.8	19.8
40–44	130,500	41.8	80.0	10.7	29.8	11.8	16.6
45–49	122,800	40.9	81.8	15.3	24.8	9.7	19.2
50–54	92,600	35.6	83.4	9.9	24.2	9.0	19.9
55–59	74,700	31.3	79.7	11.5	26.8	10.0	22.4
60–64	44,100	23.7	67.1	12.9	25.9	11.1	21.3
65–69	19,700	12.8	49.7	5.6	37.6	11.2	27.4
70–74	7,800	6.6	21.8	56.8	48.7	29.5	26.9
75–79	3,300	3.2	18.2	12.1	39.4	27.3	9.1
80+	3,000	2.7	30.0	10.0	53.3	16.7	20.0
Highest qualification							
Not tertiary level	508,300	31.4	43.7	39.6	47.2	17.0	18.8
Tertiary level	763,600	48.3	76.0	18.5	39.3	13.9	22.1
Employment							
Not employed	262,200	23.6	15.5	55.5	55.3	26.5	24.8
Employed	1,009,700	48.3	75.4	19.5	39.2	12.2	19.7
Ethnic group							
European	978,700	40.8	67.6	23.3	43.4	13.1	21.0
Māori	100,700	24.2	74.2	51.5	76.3	27.2	27.4
Pacific	45,800	25.2	61.6	58.7	52.6	35.4	38.0
Other	146,700	39.9	54.5	45.5	39.3	24.0	20.9
Personal income (\$)							
Loss	2,000	19.8	35.0	65.0	35.0	15.0	20.0
Zero income	122,000	35.6	8.7	68.9	53.3	27.6	22.6
1–5,000	85,400	52.2	12.6	77.4	55.9	23.2	18.4
5,001–10,000	66,600	35.7	23.4	66.8	58.4	28.8	21.3
10,001–15,000	67,200	18.8	36.2	37.1	57.6	18.9	24.9
15,001–20,000	62,800	22.0	43.2	30.3	56.2	21.2	21.8
20,001–25,000	66,300	30.1	62.0	19.9	45.9	18.4	20.7
25,001–30,000	89,900	35.4	60.7	15.2	45.6	11.1	18.5
3,0001–40,000	176,400	41.2	78.7	12.3	40.2	11.5	15.9
40,001–50,000	167,300	48.2	87.5	8.8	34.7	9.4	15.0
50,001–70,000	188,400	55.8	90.8	13.3	33.0	10.6	21.0
70,001–100,000	100,900	63.1	91.9	10.4	28.2	9.0	23.8
100,001 or more	76,600	72.7	89.4	5.2	30.0	8.5	37.7
All⁽⁴⁾	1,271,900	39.8	63.1	26.9	42.5	15.2	20.8

(1) Individuals who have accessed the Internet in the last 12 months to December 2006, at places other than home.

(2) Other includes commercial access facilities.

(3) Percentages are of individuals who have recently used the Internet for each category.

(4) Total number of individuals 15 years and over is 3,201,600.

Note: Individuals may have selected more than one location. All numbers in this table have been rounded to the nearest 100. Due to rounding, figures may not sum to 100 percent.

Table 14

Individual Internet Use by Activities
Last 12 months, aged 15 years and over⁽¹⁾
 December 2006 quarter

Activity ⁽²⁾	Total		Age group					
			15–19	25–29	35–39	45–49	55–59	70+
	Number	Percent	Percent ⁽³⁾					
Internet communication								
Send or receive emails	1,993,400	90.3	11.2	9.7	10.7	10.1	6.9	3.7
Other communication e.g. chat rooms, message boards, instant messaging or blogging	544,700	24.7	28.0	13.5	7.9	5.4	3.2	0.8
Telephone over the Internet	266,900	12.1	8.8	15.0	12.7	8.7	5.5	1.6
Obtaining information on the following								
Other information or general web browsing	1,862,800	84.4	11.9	10.1	10.9	10.0	6.7	3.0
Goods and services	1,430,900	64.8	8.6	10.4	12.2	10.3	7.1	2.3
Government organisations or public authorities	961,200	43.5	7.3	11.1	13.3	10.9	6.7	1.9
Health or health services	626,400	28.4	5.0	10.8	13.0	10.6	7.8	3.4
Job opportunities	624,200	28.3	12.5	13.3	11.3	8.7	4.6	0.2
Leisure activities								
Download or listen to online music	709,900	32.2	24.4	14.5	8.8	6.1	3.1	0.7
Read or download electronic books, newspapers or magazines	575,300	26.1	9.1	56.8	12.0	10.3	5.8	2.4
Download or watch movies, short films or images	415,200	18.8	23.2	15.1	8.9	5.5	2.5	0.6
Play or download computer or video games	384,700	17.4	26.9	14.1	8.2	5.1	2.2	1.6
Listen to web radio or watch web television	349,700	15.8	15.5	15.3	12.2	7.5	3.3	1.0
Share files via peer to peer exchange	284,500	12.9	21.0	16.2	8.5	5.5	3.8	0.8
Personal purposes								
Internet banking	1,190,800	53.9	6.6	12.0	12.7	10.1	6.4	1.6
Download software, patches or upgrades	856,300	38.8	9.9	11.0	11.4	9.9	6.3	2.5
Sell goods and services	663,600	30.1	9.3	11.8	12.7	9.5	5.8	1.7
Formal education or training activities	416,900	18.9	24.5	11.4	9.0	7.2	2.9	0.9
Apply for jobs	325,900	14.8	11.4	14.8	11.4	8.0	3.4	0.2
Interaction with government organisations								
Download or complete a form online	594,900	26.9	5.8	11.6	13.8	10.7	6.7	1.7
Make online payments	318,600	14.4	3.0	12.4	13.9	11.7	6.2	1.5

(1) Number of individuals who accessed the Internet in the last 12 months to December 2006, is 2,207,600.

(2) Personal use of the Internet only; does not include use of the Internet for work purposes.

(3) Percentages are of all individuals for each activity.

Note: All numbers in this table have been rounded to the nearest 100. Due to rounding, figures may not sum to 100 percent.

Table 15

Value of Online Purchases by Individuals
By sex, age, qualification, employment, ethnicity and income
 December 2006 quarter

	Individuals making payments online		Value of Internet purchases (\$)				
	Number	Percent ⁽¹⁾	Less than 20	21–100	101–500	501–2,000	Over 2,001
			Percent ⁽²⁾				
Sex							
Male	470,900	30.3	44.7	3.3	19.0	20.9	10.4
Female	444,400	27.0	45.1	4.2	22.0	20.2	7.0
Age group							
15–19	56,200	18.5	46.3	5.5	29.0	14.6	2.1
20–24	101,800	35.9	42.9	2.9	27.3	20.0	5.4
25–29	105,500	41.0	37.5	4.0	21.8	27.4	7.8
30–34	118,100	43.3	41.6	4.2	22.9	22.9	6.4
35–39	115,600	38.2	45.5	3.7	20.8	19.7	9.4
40–44	106,400	34.1	47.5	3.2	17.2	18.9	11.7
45–49	101,500	33.8	44.0	2.9	18.4	22.0	11.2
50–54	70,200	27.0	47.2	3.4	15.5	21.7	11.4
55–59	67,500	28.3	51.9	2.7	15.0	17.0	11.7
60–64	36,800	19.8	49.2	6.0	16.3	16.8	10.3
65–69	17,900	11.6	46.9	2.8	16.2	18.4	12.3
70–74	10,100	8.5	64.4	56.8	10.9	12.9	6.9
75–79	4,800	4.7	60.4	10.4	12.5	6.3	10.4
80+	2,900	2.6	37.9	24.1	24.1	13.8	3.4
Highest qualification							
Not tertiary level	302,000	18.6	43.6	4.7	23.1	19.3	7.6
Tertiary level	613,400	38.8	45.6	3.3	19.2	21.2	9.3
Employment							
Not employed	172,200	15.5	46.7	5.5	23.9	16.1	5.8
Employed	743,200	35.6	44.5	3.3	19.7	21.6	9.5
Ethnic group							
European	770,900	32.1	45.6	3.8	19.2	21.0	8.9
Māori	71,200	17.1	39.2	3.2	25.3	21.1	9.6
Pacific	17,500	9.6	36.0	4.0	23.4	26.3	9.1
Other	97,400	26.5	44.7	3.4	26.5	17.0	6.6
Personal income (\$)							
Loss	1,700	16.8	64.7	11.8	11.8	11.8	0.0
Zero income	69,400	20.2	44.1	3.3	30.0	15.9	4.9
1–5,000	36,900	22.5	43.9	8.4	27.4	14.4	3.0
5,001–10,000	42,500	22.8	47.8	3.8	23.3	19.8	3.5
10,001–15,000	45,700	12.8	51.9	4.2	22.1	16.6	4.8
15,001–20,000	49,200	17.2	47.6	4.9	25.6	16.5	3.9
20,001–25,000	48,300	21.9	46.0	5.6	23.4	15.1	8.1
25,001–30,000	56,900	22.4	40.2	4.7	22.1	24.4	7.7
3,0001–40,000	127,500	29.8	43.6	3.8	21.0	23.3	6.7
40,001–50,000	125,600	36.2	48.4	3.0	17.4	19.0	10.9
50,001–70,000	154,700	45.8	44.3	2.5	18.2	24.2	9.8
70,001–100,000	89,300	55.8	40.4	3.4	17.1	22.1	14.1
100,001 or more	67,700	64.3	44.3	2.7	11.2	23.0	17.6
All⁽³⁾	915,300	28.6	44.9	3.7	20.5	20.6	8.8

(1) Percentages are of all individuals for each category.

(2) Percentages are of individuals who have made Internet payments.

(3) Total number of individuals 15 years and over is 3,201,600.

Note: All numbers in this table have been rounded to the nearest 100. Due to rounding, figures may not sum to 100 percent.

Table 16

Use of Government Websites to Obtain Information by Individuals
By sex, age, qualification, employment, ethnicity and income
 December 2006 quarter

	Recent users of government website ⁽¹⁾		For obtaining information from government organisations		Type of government website		
	Number	Percent	Number	Percent ⁽²⁾	Local	Central	Both
					Percent ⁽³⁾		
Sex							
Male	515,100	33.1	487,300	94.6	20.0	49.8	29.8
Female	539,300	32.8	509,800	94.5	19.4	56.7	23.2
Age group							
15–19	75,300	24.8	69,100	91.8	16.8	66.3	16.6
20–24	111,200	39.2	106,600	95.9	23.6	52.2	23.4
25–29	115,900	45.1	108,500	93.6	20.9	52.0	26.8
30–34	125,900	46.2	121,500	96.5	18.6	52.3	28.5
35–39	136,000	45.0	128,400	94.4	19.9	46.0	33.0
40–44	127,400	40.8	122,300	96.0	20.3	53.8	25.8
45–49	113,300	37.7	108,100	95.4	18.0	55.7	25.8
50–54	91,900	35.3	87,100	94.8	18.0	55.2	26.6
55–59	73,800	31.0	69,100	93.6	16.2	55.0	27.9
60+	83,600	12.4	76,400	91.4	23.2	51.6	24.7
Highest qualification							
Not tertiary level	346,900	21.4	320,900	92.5	21.5	56.7	21.4
Tertiary level	707,400	44.7	676,200	95.6	18.9	51.8	28.8
Employment							
Not employed	212,600	19.1	200,700	94.4	24.3	53.2	21.9
Employed	841,700	40.3	796,400	94.6	18.5	53.4	27.6
Ethnic group							
European	845,400	35.2	797,800	94.3	18.8	54.1	26.7
Māori	101,600	24.4	95,900	94.3	20.5	56.6	22.0
Pacific	20,500	11.3	24,100	92.2	24.5	44.0	30.7
Other	204,400	55.6	126,800	96.7	24.7	48.4	26.2
Personal income (\$)							
Loss	2,700	26.7	2,700	100.0	18.5	44.4	37.0
Zero income	78,500	22.9	73,900	94.1	24.0	51.4	24.2
1–5,000	54,900	33.5	51,000	92.9	14.9	63.1	21.2
5,001–10,000	55,500	29.8	52,800	95.1	18.0	55.9	25.9
10,001–15,000	59,200	16.6	55,900	94.4	26.5	49.0	23.4
15,001–20,000	54,800	19.2	52,200	95.3	22.0	52.5	25.5
20,001–25,000	53,800	24.4	50,200	93.3	18.5	58.6	22.9
25,001–30,000	66,800	26.3	62,900	94.2	18.0	62.2	18.6
3,0001–40,000	141,100	33.0	132,600	94.0	22.5	54.9	22.5
40,001–50,000	140,900	40.6	133,200	94.5	19.8	51.7	27.7
50,001–70,000	181,200	53.7	171,700	94.8	18.2	50.9	30.3
70,001–100,000	98,300	61.4	94,000	95.6	16.5	49.1	33.9
100,001 or more	66,600	63.2	64,000	96.1	17.8	51.1	30.8
All⁽⁴⁾	1,054,400	33.0	997,100	94.6	19.7	53.4	26.4

(1) Individuals who have visited a government website in the last 12 months to December 2006.

(2) Percentages are of all who have used a government website.

(3) Percentages are of all who obtained information from government websites.

(4) Total number of individuals 15 years and over is 3,201,600.

Note: All numbers in this table have been rounded to the nearest 100. Due to rounding, figures may not sum to 100 percent.

Table 17

Use of Government Websites to Download Forms by Individuals
By sex, age, qualification, employment, ethnicity and income
 December 2006 quarter

	Recent government website users ⁽¹⁾		Downloading forms		Type of government website		
	Number	Percent	Number	Percent ⁽²⁾	Local	Central	Both
					Percent ⁽³⁾		
Sex							
Male	515,100	33.1	310,930	60.4	11.7	74.7	12.7
Female	539,300	32.8	327,780	60.8	9.3	78.6	11.1
Age group							
15–19	75,300	24.8	35,900	47.7	13.5	79.2	5.1
20–24	111,200	39.2	63,387	57.0	15.3	71.1	11.9
25–29	115,900	45.1	70,880	61.2	12.1	72.3	13.7
30–34	125,900	46.2	82,077	65.2	7.4	78.7	13.7
35–39	136,000	45.0	88,454	65.0	9.9	76.3	13.2
40–44	127,400	40.8	79,528	62.4	9.1	80.4	10.3
45–49	113,300	37.7	69,345	61.2	10.0	78.9	10.7
50–54	91,900	35.3	58,911	64.1	10.4	75.6	13.4
55–59	73,800	31.0	43,660	59.2	10.1	78.0	10.2
60+	83,616	12.4	46,569	55.7	9.5	76.9	12.9
Highest qualification							
Not tertiary level	346,900	21.4	188,532	54.3	11.6	79.2	8.1
Tertiary level	707,400	44.7	450,178	63.6	10.0	75.6	13.4
Employment							
Not employed	212,600	19.1	112,680	53.0	15.7	73.8	8.8
Employed	841,700	40.3	526,030	62.5	9.4	77.3	12.5
Ethnic group							
European	845,400	35.2	515,320	61.0	8.7	78.6	11.8
Māori	101,600	24.4	61,423	60.5	15.2	73.6	10.2
Pacific	20,500	11.3	13,993	68.3	17.0	58.6	24.3
Other	204,400	55.6	78,812	38.6	18.1	68.9	12.0
Personal income (\$)							
Loss	2,700	26.7	1,904	70.5	32.0	38.6	29.4
Zero income	78,500	22.9	40,748	51.9	18.5	70.9	10.3
1–5,000	54,900	33.5	23,209	42.3	4.0	85.7	7.4
5,001–10,000	55,500	29.8	35,337	63.7	10.9	80.4	7.1
10,001–15,000	59,200	16.6	34,002	57.4	10.6	74.3	13.1
15,001–20,000	54,800	19.2	33,345	60.8	10.1	78.7	10.7
20,001–25,000	53,800	24.4	29,168	54.2	14.2	76.5	9.0
25,001–30,000	66,800	26.3	40,583	60.8	7.0	80.2	11.3
30,001–40,000	141,100	33.0	83,830	59.4	12.9	75.8	10.6
40,001–50,000	140,900	40.6	86,867	61.7	10.3	74.5	14.8
50,001–70,000	181,200	53.7	119,787	66.1	8.6	77.2	12.8
70,001–100,000	98,300	61.4	63,402	64.5	11.1	75.3	13.2
100,001 or more	66,600	63.2	46,527	69.9	6.6	79.8	13.3
All⁽⁴⁾	1,054,400	33.0	638,710	60.6	10.5	76.7	11.9

(1) Individuals who have visited a government website in the last 12 months to December 2006.

(2) Percentages are of all who have used a government website.

(3) Percentages are of all who downloaded or filled in forms from government websites.

(4) Total number of individuals 15 years and over is 3,201,600.

Note: All numbers in this table have been rounded to the nearest 100. Due to rounding, figures may not sum to 100 percent.

Table 18

Use of Government Websites for Online Payments by Individuals
By sex, age, qualification, employment, ethnicity and income
 December 2006 quarter

	Individuals making online payments from a government website recently ⁽¹⁾		Type of government website		
			Local	Central	Both
	Number	Percent	Percent ⁽²⁾		
Sex					
Male	129,900	8.4	21.2	66.9	11.0
Female	108,800	6.6	23.6	65.6	10.0
Age group					
15–19	5,000	1.6	26.0	44.0	28.0
20–24	20,900	7.4	32.1	59.8	8.1
25–29	28,900	11.2	24.2	65.1	10.0
30–34	31,000	11.4	25.5	63.5	11.0
35–39	34,900	11.5	24.4	65.9	9.5
40–44	30,900	9.9	17.2	71.5	9.1
45–49	28,900	9.6	23.9	65.1	11.1
50–54	25,100	9.7	19.5	69.3	11.2
55–59	17,200	7.2	12.8	70.3	14.0
60+	15,900	2.4	15.7	74.2	8.8
Highest qualification					
Not tertiary level	68,300	4.2	20.8	68.1	10.1
Tertiary level	170,500	10.8	22.9	65.6	10.7
Employment					
Not employed	32,300	2.9	26.3	59.1	13.9
Employed	206,500	9.9	21.6	67.4	10.0
Ethnic group					
European	197,900	8.2	20.4	69.5	9.3
Māori	19,100	4.6	21.5	66.0	10.5
Pacific	5,100	2.8	35.3	47.1	15.7
Other	28,400	7.7	36.6	45.8	17.3
Personal income (\$)					
Loss	500	5.0	60.0	20.0	20.0
Zero income	11,600	3.4	33.6	56.9	9.5
1–5,000	5,900	3.6	30.5	61.0	10.2
5,001–10,000	7,800	4.2	17.9	55.1	21.8
10,001–15,000	10,300	2.9	23.3	71.8	4.9
15,001–20,000	12,100	4.2	28.1	62.8	8.3
20,001–25,000	8,000	3.6	15.0	70.0	12.5
25,001–30,000	14,300	5.6	16.8	74.1	8.4
30,001–40,000	30,400	7.1	22.7	67.4	9.9
40,001–50,000	35,400	10.2	20.3	65.0	14.4
50,001–70,000	50,600	15.0	19.4	69.6	10.1
70,001–100,000	27,600	17.3	30.8	59.1	10.1
100,001 or more	24,300	23.1	17.3	72.4	8.2
All⁽³⁾	238,800	7.5	22.3	66.3	10.6

(1) Online payments or purchases from a government organisation website made in the last 12 months to December 2006.

(2) Percentages are of all individuals who made online payments from government websites recently for each category.

(3) Total number of individuals 15 years and over is 3,201,600.

Note: All numbers in this table have been rounded to the nearest 100. Due to rounding, figures may not sum to 100 percent.

Table 19

Reasons for Not Using Government Websites
By sex, age, qualification, employment, ethnicity and income
 December 2006 quarter

	Individuals not using government websites		Reason for not using government websites			
			No need to	Not interested	Prefer phone or in person	Other ⁽¹⁾
	Number	Percent	Percent ⁽²⁾			
Sex						
Male	550,400	35.4	85.2	13.2	4.1	2.8
Female	593,100	36.0	84.1	12.2	5.0	3.3
Age group						
15–19	187,700	61.9	84.0	15.1	0.8	2.7
20–24	125,900	44.4	85.1	15.2	2.9	1.9
25–29	95,700	37.2	84.1	12.3	4.2	4.3
30–34	99,000	36.3	83.9	13.0	4.8	2.9
35–39	95,700	31.6	84.6	9.9	6.7	1.8
40–44	114,300	36.6	83.9	11.0	6.2	3.4
45–49	105,800	35.2	85.6	10.2	5.8	2.9
50–54	86,600	33.3	86.0	10.9	6.6	3.7
55–59	77,400	32.5	86.8	11.0	3.1	2.8
60–64	55,000	29.6	82.9	13.1	7.8	5.6
65–69	43,600	28.3	85.8	15.6	3.9	2.5
70–74	28,600	24.1	84.3	56.8	7.7	5.2
75–79	15,200	15.0	80.9	17.8	12.5	3.3
80+	13,000	11.7	85.4	13.1	1.5	3.8
Highest qualification						
Not tertiary level	594,800	36.7	84.1	14.2	3.2	3.0
Tertiary level	548,800	34.7	85.2	11.1	5.9	3.1
Employment						
Not employed	356,200	32.0	82.8	13.5	4.5	3.7
Employed	787,300	37.7	85.5	12.3	4.5	2.8
Ethnic group						
European	864,100	36.0	86.1	12.2	4.4	2.9
Māori	141,300	33.9	79.3	17.2	5.2	5.5
Pacific	65,800	36.2	73.7	19.1	4.7	1.7
Other	143,800	39.1	82.9	11.4	4.5	2.6
Personal income (\$)						
Loss	3,300	32.7	87.9	9.1	6.1	3.0
Zero income	151,900	44.3	84.8	12.5	1.8	2.8
1–5,000	80,200	49.0	84.5	15.1	2.0	2.5
5,001–10,000	65,600	35.2	82.3	14.8	3.8	3.2
10,001–15,000	91,000	25.5	83.0	14.0	5.8	3.8
15,001–20,000	86,600	30.3	80.7	14.4	6.2	4.6
20,001–25,000	81,900	37.1	81.3	15.8	4.9	5.6
25,001–30,000	101,300	39.9	84.2	13.5	4.2	3.7
3,0001–40,000	169,500	39.6	86.4	11.6	4.2	1.8
40,001–50,000	134,800	38.8	86.7	11.4	6.1	3.3
50,001–70,000	106,000	31.4	86.6	9.9	5.3	1.9
70,001–100,000	43,300	27.1	82.0	9.0	9.5	1.6
100,001 or more	28,200	26.8	93.3	9.9	2.5	2.8
All⁽³⁾	1,143,500	35.8	84.7	12.7	4.5	3.1

(1) Other includes concerns about safety, security and privacy.

(2) Percentages are of all individuals who have not used a government website.

(3) Total number of individuals 15 years and over is 3,201,600.

Note: All numbers in this table have been rounded to the nearest 100. Due to rounding, figures may not sum to 100 percent.

Table 20

Personal Loss Caused by Virus or Similar
By sex, age, qualification, employment, ethnicity, income
 Last 12 months, December 2006 quarter

	Recent Internet users ⁽¹⁾		Loss from fraudulent activities
	Number	Percent	Percent ⁽²⁾
Sex			
Male	1,070,000	68.8	1.8
Female	1,137,500	69.1	1.4
Age group			
15–19	264,400	87.2	0.7
20–24	237,700	83.8	1.2
25–29	212,000	82.4	1.6
30–34	225,700	82.7	2.1
35–39	232,800	77.0	2.3
40–44	242,800	77.8	1.6
45–49	220,100	73.3	1.2
50–54	179,300	68.9	2.2
55–59	152,000	63.8	2.2
60+	240,600	35.8	1.0
Highest qualification			
Not tertiary level	945,900	58.4	1.3
Tertiary level	1,261,700	79.8	1.7
Employment			
Not employed	571,500	51.4	1.2
Employed	1,636,100	78.3	1.7
Ethnic group			
European	1,717,300	71.5	1.6
Māori	244,200	58.7	1.2
Pacific	92,100	50.6	0.9
Other	275,500	74.9	1.7
Personal income (\$)			
Loss	6,000	59.4	5.0
Zero income	231,400	67.5	1.0
1–5,000	136,100	83.1	1.7
5,001–10,000	121,200	65.1	1.2
10,001–15,000	150,800	42.2	1.2
15,001–20,000	142,200	49.8	1.5
20,001–25,000	136,000	61.7	1.5
25,001–30,000	168,500	66.3	1.6
30,001–40,000	312,100	72.9	1.8
40,001–50,000	276,000	79.5	1.1
50,001–70,000	288,400	85.4	2.4
70,001–100,000	142,300	88.9	1.1
100,001 or more	95,000	90.2	2.5
All⁽³⁾	2,207,600	69.0	1.6

(1) Individuals who have used the Internet in the last 12 months to December 2006.

(2) Percentages are of individuals who have recently used the Internet for each category.

(3) Total number of individuals 15 years and over is 3,201,600.

Note: All numbers in this table have been rounded to the nearest 100. Due to rounding, figures may not sum to 100 percent.

Table 21

Reasons for Not Using the Internet From a Public Location
By sex, age, qualification
 December 2006 quarter

	Recent Internet users ⁽¹⁾		Happy to use in public	Reason			
				Security concerns	Privacy	No need	Other
	Number	Percent	Percent ⁽²⁾				
Sex							
Male	1,070,000	68.8	21.2	36.9	13.5	39.1	2.2
Female	1,137,500	69.1	18.9	33.6	15.3	44.2	2.3
Age group							
15–19	264,400	87.2	32.7	27.7	13.7	33.1	2.0
20–24	237,700	83.8	25.8	33.8	17.1	34.7	1.9
25–29	212,000	82.4	24.8	33.8	14.4	37.9	2.8
30–34	225,700	82.7	21.7	36.8	14.2	39.3	1.5
35–39	232,800	77.0	16.8	39.0	15.5	42.8	2.1
40–44	242,800	77.8	15.9	37.9	13.4	46.0	2.1
45–49	220,100	73.3	14.6	38.5	13.6	45.0	1.9
50–54	179,300	68.9	15.1	38.3	15.2	44.3	2.1
55–59	152,000	63.8	16.3	36.3	14.4	43.6	2.6
60–64	98,300	52.9	14.3	32.6	11.8	49.4	3.4
65–69	64,400	41.8	12.6	36.5	16.5	50.2	4.3
70–74	41,200	34.7	11.7	30.6	56.8	54.4	4.6
75–79	19,900	19.6	7.0	31.7	11.1	60.8	1.0
80+	16,800	15.1	14.9	16.7	12.5	63.1	4.2
Highest qualification							
Not tertiary level	945,900	58.4	20.8	32.6	13.7	42.1	0.3
Tertiary level	1,261,700	79.8	19.4	37.2	14.9	41.5	2.2
All⁽³⁾	2,207,600	69.0	20.0	35.2	14.4	41.7	1.4

(1) Individuals who have used the Internet in the last 12 months to December 2006.

(2) Percentages are of all individuals who used the Internet in the last 12 months.

(3) Total number of individuals 15 years and over is 3,201,600.

Note: All numbers in this table have been rounded to the nearest 100. Due to rounding, figures may not sum to 100 percent.

Table 22

Use of Cellular Phone by Individuals
By sex, age, qualification, employment, ethnicity and income
 December 2006 quarter

	Total	Personal use of a cellular phone recently ⁽¹⁾	
		Number	Percent
Sex			
Male	1,555,100	1,246,300	80.1
Female	1,646,500	1,313,700	79.8
Age group			
15–19	303,200	268,400	88.5
20–24	283,800	263,300	92.8
25–29	257,200	237,800	92.5
30–34	272,800	245,900	90.1
35–39	302,400	264,100	87.3
40–44	312,100	268,600	86.1
45–49	300,400	253,700	84.5
50–54	260,100	210,700	81.0
55–59	238,300	184,800	77.5
60–64	185,900	131,800	70.9
65–69	154,000	95,800	62.2
70–74	118,900	63,200	53.2
75–79	101,600	41,400	40.7
80+	111,100	30,800	27.7
Highest qualification			
Not tertiary level	1,620,600	1,196,600	73.8
Tertiary level	1,581,000	1,363,400	86.2
Employment			
Not employed	1,112,700	716,400	64.4
Employed	2,089,000	1,843,600	88.3
Ethnic group			
European	2,400,600	1,656,100	69.0
Māori	416,300	248,400	59.7
Pacific	181,900	85,700	47.1
Other	367,600	260,500	70.9
Personal income (\$)			
Loss	10,100	6,800	67.3
Zero income	343,000	253,000	73.8
1–5,000	163,700	143,700	87.8
5,001–10,000	186,300	135,800	72.9
10,001–15,000	357,000	211,000	59.1
15,001–20,000	285,500	192,400	67.4
20,001–25,000	220,600	173,100	78.5
25,001–30,000	254,200	210,500	82.8
30,001–40,000	428,100	371,700	86.8
40,001–50,000	347,100	308,900	89.0
50,001–70,000	337,600	304,900	90.3
70,001–100,000	160,000	148,300	92.7
100,001 or more	105,300	100,000	95.0
All⁽²⁾	3,198,300	2,560,000	80.0

(1) Recent use in the last 12 months to December 2006.

(2) Total number of individuals 15 years and over is 3,201,600.

Note: All numbers in this table have been rounded to the nearest 100. Due to rounding, figures may not sum to 100 percent.

Table 23

Reasons Individuals Do Not Have Cellular Phone
By sex, age, qualification, employment, ethnicity and income
 December 2006 quarter

	People not using cellphones		Reasons for not having personal use of cellular phone			
			Not interested	Costs too high	Lack of knowledge	Other ⁽¹⁾
	Number	Percent	Percent ⁽²⁾			
Sex						
Male	306,800	19.7	71.2	18.3	5.3	6.7
Female	331,600	20.1	71.2	18.4	8.8	4.7
Age group						
15–19	34,600	11.4	37.0	46.8	2.9	6.6
20–24	20,500	7.2	45.9	35.6	3.9	7.8
25–29	19,300	7.5	52.8	34.7	2.6	8.3
30–34	26,800	9.8	61.6	23.9	3.0	9.7
35–39	37,700	12.5	61.5	33.2	3.2	6.6
40–44	42,500	13.6	65.2	23.1	7.3	5.6
45–49	46,600	15.5	71.9	17.0	4.9	6.7
50–54	48,900	18.8	69.5	12.9	7.8	6.3
55–59	53,400	22.4	73.2	14.8	9.4	5.1
60–64	53,900	29.0	76.4	16.7	9.6	4.8
65–69	57,900	37.6	77.2	13.1	8.3	5.0
70–74	55,600	46.8	82.7	56.8	7.0	4.9
75–79	60,200	59.3	79.2	12.5	9.5	3.8
80+	80,300	72.3	85.4	8.0	9.0	4.5
Highest qualification						
Not tertiary level	422,900	26.1	69.9	20.4	8.2	5.1
Tertiary level	215,500	13.6	73.8	14.3	5.1	6.7
Employment						
Not employed	395,500	35.5	70.7	19.1	8.6	5.5
Employed	242,800	11.6	72.0	17.1	4.7	5.8
Ethnic group						
European	438,200	18.3	76.4	13.4	5.6	6.3
Māori	90,100	21.6	58.0	28.4	5.5	6.3
Pacific	66,400	36.5	50.2	42.2	13.1	2.9
Other	67,500	18.4	68.3	15.4	11.7	3.1
Personal income (\$)						
Loss	3,300	32.7	84.8	6.1	3.0	9.1
Zero income	90,100	26.3	60.3	25.3	5.9	5.5
1–5,000	20,000	12.2	54.5	30.0	4.0	7.5
5,001–10,000	50,500	27.1	69.5	25.5	7.7	4.4
10,001–15,000	145,900	40.9	73.7	16.6	9.5	6.6
15,001–20,000	93,200	32.6	74.1	17.8	9.9	4.2
20,001–25,000	47,500	21.5	71.6	18.3	6.1	6.3
25,001–30,000	43,700	17.2	69.1	20.4	8.9	4.6
30,001–40,000	56,400	13.2	73.8	13.3	6.0	5.5
40,001–50,000	38,200	11.0	77.7	11.8	3.7	5.8
50,001–70,000	32,700	9.7	79.2	11.3	2.1	4.9
70,001–100,000	11,700	7.3	78.6	10.3	0.0	10.3
100,001 or more	5,300	5.0	81.1	0.0	1.9	7.5
All⁽³⁾	638,400	20.0	71.2	18.3	7.1	5.6

(1) Other includes health concerns, and services not available.

(2) Percentages are of individuals who have not used a cellular phone.

(3) Total number of individuals 15 years and over is 3,201,600.

Note: All numbers in this table have been rounded to the nearest 100. Due to rounding, figures may not sum to 100 percent.

Table 24

Personal Cellular Phone Harassment
By sex, age, qualification, employment, ethnicity and income
 December 2006 quarter

	Mobile phone users		Individuals who received harassing or threatening messages ⁽¹⁾	Reported
	Number	Percent	Percent ⁽²⁾	Percent ⁽³⁾
Sex				
Male	1,246,300	80.1	3.7	36.2
Female	1,313,700	79.8	5.6	51.8
Age group				
15–19	268,400	88.5	10.4	48.9
20–24	263,300	92.8	8.6	35.0
25–29	237,800	92.5	6.5	49.4
30–34	245,900	90.1	4.8	37.0
35–39	264,100	87.3	3.8	43.6
40–44	268,600	86.1	3.8	51.5
45–49	253,700	84.5	3.0	57.9
50–54	210,700	81.0	2.7	64.3
55–59	184,800	77.5	1.8	36.4
60+	363,000	54.1	1.4	48.0
Highest qualification				
Not tertiary level	1,196,600	73.8	5.0	56.8
Tertiary level	1,363,400	86.2	4.4	43.6
Employment				
Not employed	716,400	64.4	5.7	49.0
Employed	1,843,600	88.3	4.3	44.1
Ethnic group				
European	1,958,000	81.6	4.4	48.2
Māori	325,800	78.3	6.6	50.5
Pacific	118,900	65.4	5.6	41.8
Other	300,000	81.6	5.4	31.1
Personal income (\$)				
Loss	6,800	67.3	2.9	100.0
Zero income	253,000	73.8	6.8	42.7
1–5,000	143,700	87.8	7.7	45.5
5,001–10,000	135,800	72.9	6.9	39.4
10,001–15,000	211,000	59.1	5.4	58.8
15,001–20,000	192,400	67.4	5.1	55.6
20,001–25,000	173,100	78.5	6.2	47.7
25,001–30,000	210,500	82.8	4.2	39.8
30,001–40,000	371,700	86.8	3.1	37.9
40,001–50,000	308,900	89.0	3.9	47.9
50,001–70,000	304,900	90.3	3.1	49.5
70,001–100,000	148,300	92.7	2.9	32.6
100,001 or more	100,000	95.0	3.1	48.4
All⁽⁴⁾	2,560,000	80.0	4.7	45.9

(1) Cellular phone harassment is defined as receiving texts, pictures or other messages via a cellular phone that were harassing or threatening.

(2) Percentages are of all individuals who use mobile phones.

(3) Percentages are of all individuals who have experienced harassment via mobile phones.

(4) Total number of individuals 15 years and over is 3,201,600.

Note: All numbers in this table have been rounded to the nearest 100. Due to rounding, figures may not add to 100 percent.

Table 25

Reported Personal Cellular Phone Harrassment*By sex, age*

December 2006 quarter

	Reported harrassment		Person or organisation reported to ⁽¹⁾			
			Telecommunications provider	Friend or family member	Police	Other ⁽¹⁾
	Number	Percent	Percent ⁽²⁾			
Sex						
Male	16,700	36.2	34.7	53.3	18.0	13.2
Female	38,100	51.8	32.5	58.3	23.1	17.3
Age group						
15–19	13,600	48.9	17.0	78.7	13.2	14.0
20–24	7,900	35.0	44.8	55.7	17.7	20.3
25–29	7,600	49.4	27.1	72.4	10.5	13.2
30–34	4,400	37.0	36.5	56.8	29.5	11.4
35–39	4,400	43.6	35.9	27.3	43.2	15.9
40–44	5,200	51.5	30.5	40.4	32.7	26.9
45–49	4,400	57.9	49.9	31.8	34.1	20.5
50–54	3,600	64.3	38.1	52.8	27.8	13.9
55–59	1,200	36.4	54.6	33.3	16.7	16.7
60+	2400	48.0	51.2	45.8	12.5	4.2
All⁽³⁾	54,700	45.9	33.1	56.8	21.6	16.1

(1) Includes work colleague, staff of school or education institution.

(2) Percentages are of individuals that reported harrassment via cellular phones.

(3) Total number of individuals 15 years and over is 3,201,600.

Note: All numbers in this table have been rounded to the nearest 100. Due to rounding, figures may not sum to 100 percent.

Table 26

Business Use of Internet
August 2006

	Businesses ⁽¹⁾			Staff with access to the Internet	Internet connection type ⁽²⁾						
	Total	Using computers	Using the Internet		Dial-up	Broadband					Total broadband
						DSL	Cable	Satellite	Wireless	Cellular ⁽³⁾	
	Percent ⁽⁴⁾		Percent	Percent ⁽⁵⁾	Percent ⁽⁶⁾					Percent ⁽⁵⁾	
Business size⁽⁷⁾											
6–19 employees	25,974	92	89	47	36	83	8	1	10	11	83
20–49 employees	6,288	97	95	41	31	82	11	1	14	19	91
50–99 employees	1,731	99	98	43	34	82	14	2	13	27	93
100+ employees	1,440	100	99	48	42	81	25	3	15	45	95
Industry											
Agriculture, forestry and fishing	3,123	82	77	22	61	74	2	5	21	11	62
Mining and quarrying	90	83	77	35	43	67	14	10	14	29	96
Manufacturing	5,523	97	93	32	34	81	9	1	9	15	87
Electricity, gas and water supply ⁽⁸⁾	18	100	100	91	50	80	60	40	20	80	100
Construction	3,549	98	92	24	36	89	7	0	7	10	89
Wholesale trade	3,198	99	97	65	30	82	12	1	12	23	91
Retail trade	5,886	93	89	37	38	84	4	0	14	12	83
Accommodation, cafes and restaurants	3,465	78	82	35	33	83	15	0	9	2	79
Transport and storage	1,524	98	94	47	37	80	14	1	11	22	86
Communication services	141	96	94	60	34	78	22	5	29	22	95
Finance and insurance	582	99	99	92	31	76	26	2	10	32	96
Property and business services	5,055	98	96	81	25	84	14	1	12	22	95
Education	585	98	94	57	32	82	17	1	12	12	78
Health and community services	2,085	99	93	53	32	84	6	1	6	8	84
Cultural and recreational services	615	95	95	45	40	82	7	3	21	13	78
Overall	35,436	93	91	46	35	83	10	1	11	15	85

(1) For more information on the businesses included, refer to the technical notes of this report.

(2) Businesses may use more than one connection type so percentages may not add to total and may add to over 100 percent.

(3) Cellular includes WAP, GPRS and 3G services.

(4) Percentages are of all New Zealand businesses in each business size or industry category.

(5) Percentages are of New Zealand businesses in each business size or industry category who use the Internet.

(6) Percentages are of New Zealand businesses in each business size or industry category who use broadband Internet.

(7) Defined by rolling mean employment (RME) count. For more information on the RME count, refer to the technical notes of this report.

(8) Results for the electricity, gas and water supply industry should be treated with caution due to the small number of businesses in this category.

Note: All counts in this survey were randomly rounded to base 3 to protect confidentiality, so actual figures may differ from those stated. Due to rounding, some figures may not sum to stated total.

Table 27

Security of Information and Communication Technology
August 2006

	Security measure										
	Regularly updated virus checking or protection software	Regular back-up of critical data	Firewall	Spam filter	Regularly updated anti-spyware software	Authentication hardware / software for internal users	Offsite data back-up	Intrusion detection system	ICT security policies	Secure communication between clients and servers	Authentication hardware / software for external users
	Percent ⁽²⁾										
Business size⁽³⁾											
6–19 employees	85	77	72	62	61	36	38	25	16	16	13
20–49 employees	96	88	83	75	68	58	49	38	35	26	23
50–99 employees	97	94	92	83	73	71	63	45	50	40	35
100+ employees	99	98	98	91	77	84	76	57	72	60	53
Industry											
Agriculture, forestry and fishing	76	58	55	52	50	18	23	17	8	6	6
Mining and quarrying	77	80	73	67	57	60	63	50	37	17	23
Manufacturing	91	84	78	71	64	45	44	28	20	18	15
Electricity, gas and water supply ⁽⁴⁾	100	100	83	83	67	83	50	67	83	67	67
Construction	96	80	78	65	71	38	39	26	11	11	11
Wholesale trade	96	92	87	76	70	63	53	42	40	28	26
Retail trade	86	84	75	67	60	37	40	30	20	20	12
Accommodation, cafes and restaurants	67	53	53	44	49	22	21	15	6	13	9
Transport and storage	92	86	77	71	66	49	42	29	29	29	22
Communication services	94	79	87	83	85	64	45	45	40	40	49
Finance and insurance	98	98	95	85	77	82	79	58	68	50	47
Property and business services	95	91	87	81	71	65	59	39	39	31	31
Education	90	85	76	63	63	45	58	25	29	24	20
Health and community services	92	86	83	63	61	52	47	34	37	27	18
Cultural and recreational services	89	81	67	57	65	35	30	23	26	32	15
Overall	88	80	76	67	63	44	42	30	24	21	17

(1) For more information on the businesses included, refer to the technical notes of this report.

(2) Percentages are of all New Zealand businesses in each business size or industry category.

(3) Defined by rolling mean employment (RME) count. For more information on the RME count, refer to the technical notes of this report.

(4) Results for the electricity, gas and water supply industry should be treated with caution due to the small number of businesses in this category.

Note: All counts in this survey were randomly rounded to base 3 to protect confidentiality, so actual figures may differ from those stated. Due to rounding, some figures may not sum to stated total.

Table 28

Security Measures and Attacks
By business size and industry
August 2006

	Total number of businesses ⁽¹⁾	Businesses that experienced an attack		Business that experienced an attack AND had security measures ⁽²⁾				
				Virus	Spyware	Firewall	Basic security measures	Comprehensive security measures
		Number	Percent ⁽³⁾	Percent ⁽⁴⁾				
Business size⁽⁵⁾								
6–19 employees	25,974	4,752	18	18	14	15	12	0
20–49 employees	6,288	1,062	17	17	13	15	12	1
50–99 employees	1,731	288	17	16	13	15	13	2
100+ employees	1,440	213	15	15	11	14	10	3
Industry								
Agriculture, forestry and fishing	3,123	498	16	15	11	10	8	0
Mining and quarrying	90	15	17	14	14	14	14	0
Manufacturing	5,523	942	17	17	13	15	13	0
Electricity, gas and water supply ⁽⁶⁾	18	0	0	0	0	0	0	0
Construction	3,549	738	21	21	17	16	14	0
Wholesale trade	3,198	507	16	16	13	14	11	1
Retail trade	5,886	1,077	18	18	16	15	14	0
Accommodation, cafes and restaurants	3,465	810	23	21	14	19	11	0
Transport and storage	1,524	336	22	22	16	16	14	1
Communication services	141	30	21	19	18	18	18	5
Finance and insurance	582	81	14	13	12	13	12	4
Property and business services	5,055	723	14	14	11	12	10	1
Education	585	87	15	15	14	14	12	0
Health and community services	2,085	357	17	17	11	17	11	2
Cultural and recreational services	615	132	21	21	17	18	16	2
Overall	35,436	6,312	18	17	14	15	12	1

(1) For more information on the businesses included, refer to the technical notes of this report.

(2) There were 0 businesses that had no security measures in place.

(3) Percentages are of all New Zealand businesses in each business size or industry category.

(4) Percentages are of all New Zealand businesses in each business size or industry category that experienced an attack.

(5) Defined by rolling mean employment (RME) count. For more information on the RME count, refer to the technical notes of this report.

(6) Results for the electricity, gas and water supply industry should be treated with caution due to the small number of businesses in this category.

Note: All counts in this survey were randomly rounded to base 3 to protect confidentiality, so actual figures may differ from those stated.

Table 29 (4.02)

ICT Support Services Used by Business*By business size and industry*

August 2006

	Total number of businesses ⁽¹⁾	Warranty	Contracted	In-house by ICT staff	In-house by other staff	None
Business size⁽³⁾						
6–19 employees	25,974	31	54	7	18	11
20–49 employees	6,288	36	63	16	22	5
50–99 employees	1,731	35	67	34	24	2
100+ employees	1,440	39	63	63	21	1
Industry						
Agriculture, forestry and fishing	3,123	34	30	3	11	20
Mining and quarrying	90	27	60	30	10	10
Manufacturing	5,523	32	62	13	21	7
Electricity, gas and water supply ⁽⁴⁾	18	17	50	67	33	0
Construction	3,549	32	54	8	13	16
Wholesale trade	3,198	30	67	22	24	3
Retail trade	5,886	32	58	5	20	8
Accommodation, cafes and restaurants	3,465	23	44	5	12	14
Transport and storage	1,524	34	56	19	17	8
Communication services	141	23	49	38	23	9
Finance and insurance	582	35	71	40	23	0
Property and business services	5,055	32	64	22	23	5
Education	585	33	51	18	26	10
Health and community services	2,085	45	70	10	24	9
Cultural and recreational services	615	38	49	18	16	12
Overall	35,436	32	56	12	19	9

(1) For more information on the businesses included, refer to the technical notes of this report.

(2) Percentages are of all New Zealand businesses in each business size or industry category. Businesses could select more than one ICT support service.

(3) Defined by rolling mean employment (RME) count. For more information on the RME count, refer to the technical notes of this report.

(4) Results for the electricity, gas and water supply industry should be treated with caution due to the small number of businesses in this category.

Note: All counts in this survey were randomly rounded to base 3 to protect confidentiality, so actual figures may differ from those stated.

Table 30

Business Internet Activities
By business size and industry
 August 2006

	Total number of businesses using the Internet ⁽¹⁾	Finance	Internal or external recruitment	Staff training	Sharing information within the business	Sharing information with other organisations	Internet used for other purposes
		Percent ⁽²⁾					
Business size⁽³⁾							
6–19 employees	23,055	86	24	14	32	33	5
20–49 employees	5,970	88	38	23	49	38	4
50–99 employees	1,698	90	53	28	60	43	2
100+ employees	1,422	90	66	40	73	49	2
Industry							
Agriculture, forestry and fishing	2,403	83	24	7	26	35	9
Mining and quarrying	69	86	32	27	63	50	9
Manufacturing	5,157	89	27	12	36	32	3
Electricity, gas and water supply ⁽⁴⁾	18	100	50	50	67	67	17
Construction	3,267	89	24	8	26	26	7
Wholesale trade	3,099	87	29	21	48	44	5
Retail trade	5,259	87	19	16	34	26	3
Accommodation, cafes and restaurants	2,835	85	34	9	16	30	3
Transport and storage	1,428	90	27	20	46	40	3
Communication services	132	89	43	32	76	55	5
Finance and insurance	579	89	40	34	65	52	4
Property and business services	4,845	88	47	33	56	43	4
Education	549	88	50	24	52	38	5
Health and community services	1,935	80	32	30	40	46	5
Cultural and recreational services	582	77	37	21	42	33	9
Overall	32,139	87	30	18	38	35	4

(1) For more information on the businesses included, refer to the technical notes of this report.

(2) Percentages are of all New Zealand businesses in each business size or industry category.

(3) Defined by rolling mean employment (RME) count. For more information on the RME count, refer to the technical notes of this report.

(4) Results for the electricity, gas and water supply industry should be treated with caution due to the small number of businesses in this category.

Note: All counts in this survey were randomly rounded to base 3 to protect confidentiality, so actual figures may differ from those stated. Due to rounding, some figures may not sum to stated total.

Table 31

Outcomes of Information and Communication Technology
By business size and industry
 August 2006

	Outcome ⁽¹⁾										
	Improved responsiveness to customers	Improved efficiency of work flow processes ⁽²⁾	Better coordination of staff and business activities	Improved management information systems	Better sales or marketing methods	Improved quality management	Improved efficiency of production processes	Greater understanding of markets	Introduced goods or services	Reduced prices from suppliers	Other ⁽³⁾
	Percent ⁽⁴⁾										
Business size⁽⁵⁾											
6–19 employees	49	48	42	32	35	25	21	21	18	12	20
20–49 employees	60	61	58	48	44	41	35	29	23	17	31
50–99 employees	67	71	66	59	46	47	41	38	28	20	38
100+ employees	76	75	73	68	52	54	51	48	34	26	51
Industry											
Agriculture, forestry and fishing	24	29	26	22	16	20	18	15	10	7	14
Mining and quarrying	33	50	50	50	23	33	37	20	13	7	17
Manufacturing	53	54	44	35	40	29	33	26	17	15	25
Electricity, gas and water supply ⁽⁶⁾	67	50	67	67	50	67	67	33	50	33	100
Construction	47	48	50	32	28	26	18	16	12	18	19
Wholesale trade	70	69	57	48	54	31	27	35	22	17	28
Retail trade	45	53	37	35	39	23	17	27	18	14	15
Accommodation, cafes and restaurants	44	50	37	25	44	19	21	20	16	9	24
Transport and storage	59	50	55	44	35	41	25	26	23	11	26
Communication services	74	57	57	55	36	47	38	34	34	19	55
Finance and insurance	82	65	71	62	53	57	52	36	44	16	54
Property and business services	68	57	66	52	39	42	41	23	33	17	31
Education	57	52	62	39	38	44	23	23	23	13	32
Health and community services	59	52	58	45	38	48	21	26	21	14	28
Cultural and recreational services	64	46	45	34	46	27	18	25	21	12	29
Overall⁽⁷⁾	53	52	48	38	38	30	26	24	20	14	24

(1) Businesses may have selected more than one outcome.

(2) Includes inventory management and ordering systems (eg just-in-time processes).

(3) Other outcomes include: improved collaboration with other businesses (10 percent), shifted activities to other businesses (7 percent), and reduced costs of entering new markets (7 percent).

(4) Percentages are of all New Zealand businesses in each business size or industry category.

(5) Defined by rolling mean employment (RME) count. For more information on the RME count, refer to the technical notes of this report.

(6) Results for the electricity, gas and water supply industry should be treated with caution due to the small number of businesses in this category.

(7) For more information on the businesses included, refer to the technical notes of this report.

Note: All counts in this survey were randomly rounded to base 3 to protect confidentiality, so actual figures may differ from those stated. Due to rounding, some figures may not sum to stated total.

Table 32 (4.03)

Outcomes of Information and Communication Technology
August 2006

Outcome	Business size (number of employees) ⁽¹⁾			
	6–19	20–49	50–99	100+
	Rank ⁽²⁾			
Improved responsiveness to customers	1	1	2	1
Improved efficiency of work flow processes ⁽³⁾	2	2	1	2
Better coordination of staff and business activities	3	3	3	3
Improved management information systems	5	4	4	4
Better sales or marketing methods	4	5	6	6
Improved quality management	6	6	5	5
Improved efficiency of production processes	7	7	7	7
Greater understanding of markets	7	9	8	9
Introduced goods or services	10	10	10	10
Reduced prices from suppliers	11	11	11	11
Other ⁽⁴⁾	9	8	8	7

(1) Defined by rolling mean employment (RME) count. For more information on the RME count, refer to the technical notes of this report.

(2) Rankings are assigned in descending order of percentage of businesses in each business size category.

(3) Includes inventory management and ordering systems (eg just-in-time processes).

(4) Other outcomes include: improved collaboration with other businesses, shifted activities to other businesses and reduced costs of entering new markets.

Table 33

Business Activities Benefiting ICT
By business size and industry
 August 2006

	Business activities benefiting ICT									
	Change of staff levels or skill mix	Trained employees	New work practices	Restructuring	New strategies ⁽¹⁾	Process redesign	Research and development	Invested in other capital	Other ⁽²⁾	None
	Percent ⁽³⁾									
Business size⁽⁴⁾										
6–19 employees	16	36	18	10	20	6	7	9	11	40
20–49 employees	25	53	29	19	26	9	14	9	17	30
50–99 employees	32	66	33	23	30	12	20	12	23	19
100+ employees	45	76	36	29	36	18	28	17	32	12
Industry										
Agriculture, forestry and fishing	9	22	12	6	15	2	9	4	5	45
Mining and quarrying	23	53	20	17	17	10	17	10	7	27
Manufacturing	24	40	19	14	22	6	14	10	18	37
Electricity, gas and water supply ⁽⁵⁾	50	67	67	33	50	17	50	17	33	33
Construction	19	34	22	17	21	8	9	6	10	44
Wholesale trade	27	53	24	19	26	13	11	9	22	27
Retail trade	13	36	19	8	17	5	5	8	7	47
Accommodation, cafes and restaurants	7	31	13	4	17	5	12	12	8	34
Transport and storage	26	48	27	19	21	15	12	10	14	35
Communication services	38	60	28	30	38	21	19	13	32	23
Finance and insurance	40	68	40	29	40	18	13	16	31	15
Property and business services	28	58	30	19	28	9	9	13	18	24
Education	30	57	36	22	30	12	10	11	21	29
Health and community services	25	56	32	11	29	5	10	5	13	30
Cultural and recreational services	18	38	20	11	22	7	10	10	10	45
Overall⁽⁶⁾	20	42	22	13	22	7	10	9	13	36

(1) Includes management techniques.

(2) Shift in production towards goods or services that use ICT more intensively is included in the other category.

(3) Percentages are of all New Zealand businesses in each business size or industry category.

(4) Defined by rolling mean employment (RME) count. For more information on the RME count, refer to the technical notes of this report.

(5) Results for the electricity, gas and water supply industry should be treated with caution due to the small number of businesses in this category.

(6) For more information on the businesses included, refer to the technical notes of this report.

Note: All counts in this survey were randomly rounded to base 3 to protect confidentiality, so actual figures may differ from those stated. Due to rounding, some figures may not sum to stated total.

Table 34

Internet Orders and Purchases
By business size and industry
 August 2006

	Total number of businesses using the Internet ⁽¹⁾	Use the Internet to place orders for goods or services	Use the Internet to receive orders for goods or services	Internet orders facilities used ⁽²⁾			
				Email	Online ordering facility	Third party website	Other
				Percent ⁽³⁾			
Business size							
6–19 employees	23,055	57	34	1	21	22	13
20–49 employees	5,970	64	34	1	28	18	12
50–99 employees	1,698	68	36	1	30	20	11
100+ employees	1,422	73	44	1	43	26	7
Industry							
Agriculture, forestry and fishing	2,403	44	13	1	18	16	25
Mining and quarrying	69	57	7	1	35	15	15
Manufacturing	5,157	57	43	1	18	14	14
Electricity, gas and water supply ⁽⁴⁾	18	82	..S	0	40	60	20
Construction	3,267	58	25	1	14	4	22
Wholesale trade	3,099	61	42	1	23	23	17
Retail trade	5,259	59	39	1	25	18	4
Accommodation, cafes and restaurants	2,835	52	35	1	32	57	8
Transport and storage	1,428	52	48	1	37	33	12
Communication services	132	56	40	0	55	15	20
Finance and insurance	579	74	42	1	33	16	6
Property and business services	4,845	76	34	1	22	18	14
Education	549	74	43	1	35	22	5
Health and community services	1,935	53	17	1	14	10	28
Cultural and recreational services	582	52	36	1	38	24	12
Overall	32,139	59	34	1	24	21	13

(1) For more information on the businesses included, refer to the technical notes of this report.

(2) Businesses could select more than one Internet ordering facility.

(3) Percentages are of all New Zealand businesses in each business size or industry category.

(4) Results for the electricity, gas and water supply industry should be treated with caution due to the small number of businesses in this category.

Note: All counts in this survey were randomly rounded to base 3 to protect confidentiality, so actual figures may differ from those stated. Due to rounding, some figures may not sum to stated total.

Symbols:

S suppressed

.. figures not available

Table 35 (4.04)

Business Internet Sales
By business size and industry
 August 2006

	Total number of businesses ⁽¹⁾	Percentage using the Internet to receive orders for goods or services	Internet sales as a percentage of total sales				
			0	1–10	11–25	26–50	50+
			Percentage of all businesses ⁽²⁾				
Business size⁽³⁾							
6–19 employees	25,974	34	3	18	5	2	2
20–49 employees	6,288	34	4	21	3	2	2
50–99 employees	1,731	36	4	21	4	1	2
100+ employees	1,440	44	5	24	6	2	1
Industry							
Agriculture, forestry and fishing	3,123	13	2	7	1	0	0
Mining and quarrying	90	7	0	3	3	0	0
Manufacturing	5,523	43	4	27	4	3	1
Electricity, gas and water supply ⁽⁴⁾	18	.. S	.. S	.. S	.. S	.. S	.. S
Construction	3,549	25	2	15	3	0	0
Wholesale trade	3,198	42	2	27	7	1	1
Retail trade	5,886	39	6	23	2	2	2
Accommodation, cafes and restaurants	3,465	35	0	11	14	6	4
Transport and storage	1,524	48	4	24	10	2	5
Communication services	141	40	4	17	9	0	4
Finance and insurance	582	42	4	25	4	2	3
Property and business services	5,055	34	4	16	4	1	2
Education	585	43	4	29	4	1	0
Health and community services	2,085	17	4	8	4	0	0
Cultural and recreational services	615	36	0	22	4	0	3
Overall	35,436	34	3	19	5	2	2

(1) For more information on the businesses included, refer to the technical notes of this report.

(2) Percentages are of all New Zealand businesses in each business size or industry category. Excludes businesses that indicated don't know.

(3) Defined by rolling mean employment (RME) count. For more information on the RME count, refer to the technical notes of this report.

(4) Results for the electricity, gas and water supply industry have been suppressed due to the small number of businesses in this category.

Note: All counts in this survey were randomly rounded to base 3 to protect confidentiality, so actual figures may differ from those stated. Due to rounding, some figures may not sum to stated total.

Symbols:

S suppressed

.. figures not available

Table 36

Internet Sales Outside of New Zealand
By business size and industry
 August 2006

	Total number of businesses ⁽¹⁾	Percentage using the Internet to receive orders for goods or services	Percentage of Internet sales to customers outside New Zealand				
			0	1–10	11–25	26–50	50+
			Percentage of all businesses ⁽²⁾				
Business size⁽³⁾							
6–19 employees	25,974	34	22	5	1	1	2
20–49 employees	6,288	34	21	8	1	1	2
50–99 employees	1,731	36	20	8	1	1	2
100+ employees	1,440	44	25	10	1	1	2
Industry							
Agriculture, forestry and fishing	3,123	13	9	3	0	0	0
Mining and quarrying	90	7	3	0	0	0	0
Manufacturing	5,523	43	28	9	0	1	3
Electricity, gas and water supply ⁽⁴⁾	18	.. S	.. S	.. S	.. S	.. S	.. S
Construction	3,549	25	21	1	0	0	0
Wholesale trade	3,198	42	32	8	0	0	1
Retail trade	5,886	39	27	4	0	1	1
Accommodation, cafes and restaurants	3,465	35	10	9	3	4	8
Transport and storage	1,524	48	21	14	2	1	5
Communication services	141	40	28	6	0	0	0
Finance and insurance	582	42	30	6	1	1	1
Property and business services	5,055	34	20	7	0	1	2
Education	585	43	24	9	1	0	6
Health and community services	2,085	17	15	1	0	0	0
Cultural and recreational services	615	36	12	13	0	0	5
Overall	35,436	34	22	6	1	1	2

(1) For more information on the businesses included, refer to the technical notes of this report.

(2) Percentages are of all New Zealand businesses in each business size or industry category. Excludes businesses that indicated don't know.

(3) Defined by rolling mean employment (RME) count. For more information on the RME count, refer to the technical notes of this report.

(4) Results for the electricity, gas and water supply industry have been suppressed due to the small number of businesses in this category.

Note: All counts in this survey were randomly rounded to base 3 to protect confidentiality, so actual figures may differ from those stated. Due to rounding, some figures may not sum to stated total.

Symbols:

S suppressed

.. figures not available

Table 37

Website Features
By business size and industry
August 2006

	Total number of businesses using the Internet ⁽¹⁾	Businesses that have websites	Website features			
			Goods or services information	Customer information collection	Ordering of goods and services	Other ⁽²⁾
			Percent ⁽³⁾		Percent ⁽⁴⁾	
Business size⁽⁵⁾						
6–19 employees	23,055	45	91	31	28	20
20–49 employees	5,970	65	92	35	28	21
50–99 employees	1,698	75	91	35	25	20
100+ employees	1,422	86	89	36	28	27
Industry						
Agriculture, forestry and fishing	2,403	16	80	31	26	17
Mining and quarrying	69	47	86	7	0	14
Manufacturing	5,157	60	92	30	21	17
Electricity, gas and water supply ⁽⁶⁾	18	83	100	60	20	50
Construction	3,267	34	92	24	13	11
Wholesale trade	3,099	70	92	33	22	20
Retail trade	5,259	42	90	33	47	30
Accommodation, cafes and restaurants	2,835	54	89	37	41	20
Transport and storage	1,428	50	90	46	45	29
Communication services	132	68	91	53	53	36
Finance and insurance	579	82	89	43	35	32
Property and business services	4,845	68	90	30	19	18
Education	549	70	99	47	43	19
Health and community services	1,935	44	93	21	14	14
Cultural and recreational services	582	74	93	34	36	21
Overall	32,139	51	91	32	28	20

(1) For more information on the businesses included, refer to the technical notes of this report.

(2) Other category includes online payments, information about security, customised webpages or information for repeat customers, and online sales support.

(3) Percentages are of all New Zealand businesses in each business size or industry category that use the Internet.

(4) Percentages are of all New Zealand businesses in each business size or industry category that have websites.

(5) Defined by rolling mean employment (RME) count. For more information on the RME count, refer to the technical notes of this report.

(6) Results for the electricity, gas and water supply industry should be treated with caution due to the small number of businesses in this category.

Note: All counts in this survey were randomly rounded to base 3 to protect confidentiality, so actual figures may differ from those stated. Due to rounding, some figures may not sum to stated total.

Table 38

Internet Connection Choice Considerations*By business size and industry*

August 2006

	Total number of businesses ⁽²⁾	Internet connection choice considerations ⁽¹⁾							Other ⁽³⁾
		Availability in business location	Start up costs	Ongoing connection and usage costs	Connection speed	Compatibility with existing technology	Availability of technical support		
		Percent ⁽⁴⁾							
Business size⁽⁵⁾									
6–19 employees	25,974	44	23	41	46	22	16	18	
20–49 employees	6,288	50	24	50	58	34	22	24	
50–99 employees	1,731	55	24	56	65	38	27	29	
100+ employees	1,440	56	27	61	69	47	30	41	
Industry									
Agriculture, forestry and fishing	3,123	48	14	24	29	12	8	14	
Mining and quarrying	90	50	13	27	40	30	20	27	
Manufacturing	5,523	46	23	48	53	26	17	23	
Electricity, gas and water supply ⁽⁶⁾	18	67	33	67	83	67	50	67	
Construction	3,549	48	26	40	50	22	17	18	
Wholesale trade	3,198	48	21	52	59	30	21	27	
Retail trade	5,886	40	21	42	43	26	21	20	
Accommodation, cafes and restaurants	3,465	42	30	29	44	14	13	17	
Transport and storage	1,524	56	25	46	55	35	23	27	
Communication services	141	43	30	55	64	49	23	34	
Finance and insurance	582	51	22	61	70	45	27	35	
Property and business services	5,055	50	23	59	67	34	23	24	
Education	585	47	30	51	46	28	18	19	
Health and community services	2,085	46	32	44	46	32	17	16	
Cultural and recreational services	615	46	27	51	40	11	23	20	
Overall	35,436	46	24	44	50	26	18	21	

(1) Businesses could select more than one consideration.

(2) For more information on the businesses included, refer to the technical notes of this report.

(3) Other category includes mobile access.

(4) Percentages are of all New Zealand businesses in each business size or industry category.

(5) Defined by rolling mean employment (RME) count. For more information on the RME count, refer to the technical notes of this report.

(6) Results for the electricity, gas and water supply industry should be treated with caution due to the small number of businesses in this category.

Note: All counts in this survey were randomly rounded to base 3 to protect confidentiality, so actual figures may differ from those stated. Due to rounding, some figures may not sum to stated total.

Table 39

Business Online Interaction with the Government
By business size and industry
 August 2006

	Total number of businesses who use the Internet ⁽¹⁾	Business Internet activity type with government ⁽²⁾				
		Obtaining information	Downloading forms	Completing and sending forms	Making online payments	None
		Percent ⁽³⁾				
Business size⁽⁴⁾						
6–19 employees	23,055	60	53	37	50	26
20–49 employees	5,970	72	67	54	55	14
50–99 employees	1,698	80	76	60	60	9
100+ employees	1,422	80	76	61	58	8
Industry						
Agriculture, forestry and fishing	2,403	56	53	35	52	28
Mining and quarrying	69	72	68	59	50	27
Manufacturing	5,157	61	58	43	50	20
Electricity, gas and water supply ⁽⁵⁾	18	83	100	67	33	0
Construction	3,267	60	55	43	60	18
Wholesale trade	3,099	71	62	45	49	18
Retail trade	5,259	54	41	26	43	36
Accommodation, cafes and restaurants	2,835	53	42	35	56	29
Transport and storage	1,428	61	62	48	52	26
Communication services	132	55	55	41	55	23
Finance and insurance	579	80	73	55	51	13
Property and business services	4,845	81	78	61	62	10
Education	549	86	81	53	58	7
Health and community services	1,935	71	62	47	39	16
Cultural and recreational services	582	60	60	45	42	25
Overall	32,139	64	58	43	52	22

(1) For more information on the businesses included, refer to the technical notes of this report.

(2) Business could select more than one activity type.

(3) Percentages are of all New Zealand businesses in each business size or industry category.

(4) Defined by rolling mean employment (RME) count. For more information on the RME count, refer to the technical notes of this report.

(5) Results for the electricity, gas and water supply industry should be treated with caution due to the small number of businesses in this category.

Note: All counts in this survey were randomly rounded to base 3 to protect confidentiality so actual figures may differ from stated. Due to rounding, some figures may not sum to stated total.

Table 40

Business Use of Network Technology*By business size and industry*

August 2006

	Total number of businesses using the Internet ⁽¹⁾	Businesses using networks	LAN including wireless	WAN	Intranet within business	Extranet between others	Urban network	Unknown
		Percent ⁽²⁾		Percent ⁽³⁾				
Business size⁽⁴⁾								
6–19 employees	23,055	61	84	15	21	8	0	6
20–49 employees	5,970	80	85	25	32	12	2	6
50–99 employees	1,698	93	86	44	43	15	2	3
100+ employees	1,422	97	87	70	64	24	4	1
Industry								
Agriculture, forestry and fishing	2,403	27	82	14	14	6	0	5
Mining and quarrying	69	68	94	53	47	12	6	0
Manufacturing	5,157	72	88	18	24	7	1	6
Electricity, gas and water supply ⁽⁵⁾	18	100	83	67	67	33	33	17
Construction	3,267	62	84	16	14	2	0	7
Wholesale trade	3,099	88	88	25	32	14	0	3
Retail trade	5,259	64	84	22	22	11	0	9
Accommodation, cafes and restaurants	2,835	50	74	22	13	2	0	10
Transport and storage	1,428	64	82	33	32	10	0	6
Communication services	132	76	82	41	65	24	12	3
Finance and insurance	579	99	84	42	45	22	6	5
Property and business services	4,845	89	87	28	42	14	3	4
Education	549	61	89	19	33	7	2	3
Health and community services	1,935	67	80	16	26	16	2	4
Cultural and recreational services	582	62	80	30	20	9	2	6
Overall	32,139	68	85	23	28	10	1	6

(1) For more information on the businesses included, refer to the technical notes of this report.

(2) Percentages are of all New Zealand businesses in each business size or industry category.

(3) Percentages are of all New Zealand businesses in each business size or industry category that use networks.

(4) Defined by rolling mean employment (RME) count. For more information on the RME count, refer to the technical notes of this report.

(5) Results for the electricity, gas and water supply industry should be treated with caution due to the small number of businesses in this category.

Note: All counts in this survey were randomly rounded to base 3 to protect confidentiality, so actual figures may differ from those stated. Due to rounding, some figures may not sum to stated total.

Table 41

Business Provision of Cellular Phones
By business size and industry
 August 2006

	Total number of businesses ⁽¹⁾	Businesses that provide cellular phones	Percentage of staff provided with a cellular phone					
			Zero	10 or less	25 or less	50 or less	75 or less	76-100
			Percent ⁽²⁾					
Business size⁽³⁾								
6–19 employees	25,974	80	20	29	20	14	7	10
20–49 employees	6,288	89	10	43	21	15	5	6
50–99 employees	1,731	95	5	46	28	12	5	4
100+ employees	1,440	97	3	47	26	15	5	5
Industry								
Agriculture, forestry and fishing	3,123	77	22	33	21	11	3	8
Mining and quarrying	90	90	13	27	33	20	7	7
Manufacturing	5,523	91	9	43	30	12	3	3
Electricity, gas and water supply ⁽⁴⁾	18	100	0	17	17	33	50	17
Construction	3,549	95	5	15	19	24	14	23
Wholesale trade	3,198	95	5	16	20	26	17	16
Retail trade	5,886	78	22	41	17	9	6	5
Accommodation, cafes and restaurants	3,465	61	37	41	12	6	0	3
Transport and storage	1,524	93	6	31	26	13	5	18
Communication services	141	91	11	36	32	11	2	15
Finance and insurance	582	93	7	21	31	28	7	7
Property and business services	5,055	87	13	26	23	18	8	12
Education	585	67	33	44	17	6	1	1
Health and community services	2,085	69	29	39	20	8	0	2
Cultural and recreational services	615	72	27	45	12	7	0	8
Overall	35,436	83	17	33	21	14	6	9

(1) For more information on the businesses included, refer to the technical notes of this report.

(2) Percentages are of all New Zealand businesses in each business size or industry category.

(3) Defined by rolling mean employment (RME) count. For more information on the RME count, refer to the technical notes of this report.

(4) Results for the electricity, gas and water supply industry should be treated with caution due to the small number of businesses in this category.

Note: All counts in this survey were randomly rounded to base 3 to protect confidentiality, so actual figures may differ from those stated. Due to rounding, some figures may not sum to stated total.

Table 42

Government Use of Internet
By organisation size and type
 August 2006

	Organisation			Percentage of staff using the Internet	Internet connection type ⁽²⁾						Total broadband
	Total number of organisations ⁽¹⁾	Using computers	Using the Internet		Dial-up	Broadband					
						DSL	Cable	Satellite	Wireless	Cellular ⁽³⁾	
	Percent ⁽⁴⁾		Average	Percent ⁽⁴⁾							
Organisation size⁽⁵⁾											
0–5 employees	33	91	91	86	27	45	36	0	27	27	82
6–19 employees	33	100	100	100	18	82	9	0	27	18	100
20–49 employees	36	100	100	100	33	75	42	0	33	42	100
50–99 employees	42	100	100	91	36	79	36	0	29	36	100
100–1,000 employees	123	100	100	92	41	68	71	2	44	66	98
1,000 or more employees	51	100	100	89	41	65	76	12	41	71	94
Organisation type											
Central government	129	100	100	95	37	63	65	2	33	56	98
Local government	84	100	100	89	36	75	43	4	36	54	96
Crown research institute	9	100	100	99	67	67	100	0	33	67	100
Tertiary education	33	100	100	99	64	73	100	18	64	64	100
Other government	60	95	95	92	25	65	30	0	30	30	95
Overall	315	99	99	93	37	69	55	4	36	52	97

(1) For more information on the government organisations included, refer to the technical notes of this report.

(2) Government organisations may use more than one connection type so percentages may not add to total.

(3) Cellular includes WAP, GPRS and 3G services.

(4) Percentages are of all organisations in each organisation size or type.

(5) Defined by rolling mean employment (RME) count. For more information on the RME count, refer to the technical notes of this report.

Note: All counts were randomly rounded to base 3 to protect confidentiality, so actual figures may differ from those stated.

Due to rounding, some figures may not sum to stated total.

Table 43

Government Use of Network Technology
By organisation size and type
 August 2006

	Total number of organisations ⁽¹⁾	Technology type							
		Intranet	Extranet	Local area network	Wide area network	Virtual private network	Urban network	Government shared network	Advanced network
		Percent ⁽²⁾							
Organisation size⁽³⁾									
0–5 employees	33	18	9	73	18	9	18	0	0
6–19 employees	33	36	9	82	18	55	18	0	0
20–49 employees	36	67	17	100	42	50	17	8	0
50–99 employees	42	71	29	93	57	64	14	7	0
100–1,000 employees	123	93	41	100	90	80	24	5	5
1,000 or more employees	51	94	71	100	100	94	41	6	12
Organisation type									
Central government	129	77	33	95	65	72	37	12	0
Local government	84	93	43	96	79	82	14	0	0
Crown research institute	9	100	67	100	100	100	0	0	33
Tertiary education	33	82	45	100	91	82	18	0	18
Other government	60	30	15	75	25	30	15	0	0
Overall	315	75	34	93	65	68	24	5	4

(1) For more information on the government organisations included, refer to the technical notes of this report.

(2) Percentages are of all organisations in each organisation size or type.

(3) Defined by rolling mean employment (RME) count. For more information on the RME count, refer to the technical notes of this report.

Note: All counts in this survey were randomly rounded to base 3 to protect confidentiality, so actual figures may differ from those stated. Due to rounding, some figures may not sum to stated total.

Table 44

Government Use of Other Information and Communication Technology
By organisation size and type
 August 2006

	Total number of organisations ⁽¹⁾	Other ICT type								
		Cellular phone	Wireless personal digital assistant	Wireless laptop	Voice over Internet protocol (VoIP)	Satellite communication	Voice recognition technology	GPS or GIS ⁽²⁾	RFID ⁽³⁾	None listed
		Percent ⁽⁴⁾								
Organisation size⁽⁵⁾										
0–5 employees	33	82	27	45	0	0	0	9	0	27
6–19 employees	33	91	36	64	9	9	9	9	0	9
20–49 employees	36	92	58	83	17	8	17	17	0	0
50–99 employees	42	93	64	64	21	7	7	57	7	7
100–1,000 employees	123	98	88	90	46	15	7	56	10	0
1,000 or more employees	51	100	88	94	59	24	35	59	18	0
Organisation type										
Central government	129	98	63	79	33	12	14	21	2	2
Local government	84	96	82	82	36	11	11	93	11	0
Crown research institute	9	100	67	100	67	33	0	67	33	0
Tertiary education	33	109	91	100	64	27	18	36	27	0
Other government	60	85	40	65	10	0	5	10	0	15
Overall	315	96	67	77	31	10	10	39	6	3

(1) For more information on the government organisations included, refer to the technical notes of this report.

(2) Global positioning system (GPS) or geographical information system (GIS).

(3) Radio frequency identification (RFID).

(4) Percentages are of all organisations in each organisation size or type.

(5) Defined by rolling mean employment (RME) count. For more information on the RME count, refer to the technical notes of this report.

Note: Due to rounding, some figures may not sum to stated total.

Table 45

Government Use of Data Exchange Technology
By organisation type
 August 2006

	Overall	Organisation type				
		Central government	Local government	Crown research institute	Tertiary education	Other government organisation
		Percent ⁽¹⁾				
Any data exchange with other organisations	77	70	89	100	100	60
Data exchange technology⁽²⁾						
Internet	64	51	82	67	100	50
Private leased line or other dedicated link	26	37	18	33	36	5
Extranet	16	16	14	67	18	0
Emailed as an attachment	61	53	75	100	73	50
CD or DVD	50	42	64	100	55	35
Magnetic tape	5	5	4	33	9	0
On-site data access facility	9	7	7	0	18	10
Other	3	2	4	0	0	0
Total number of organisations⁽³⁾	315	129	84	9	33	60

(1) Percentages are of all organisations in each organisation type.

(2) Government organisations may use more than one data exchange technology, so percentages may not add to total and may add to over 100 percent.

(3) For more information on the government organisations included, refer to the technical notes of this report.

Note: All counts in this survey were randomly rounded to base 3 to protect confidentiality, so actual figures may differ from those stated. Due to rounding, some figures may not sum to stated total.

Table 46

Government Use of Data Exchange Technology
By organisation size
 August 2006

	Overall	Organisation size (employees) ⁽¹⁾					
		0–5	6–19	20–49	50–99	100–1,000	1,000 or more
	Percent ⁽²⁾						
Any data exchange with other organisations	77	45	64	75	71	88	100
Data exchange technology⁽³⁾							
Internet	64	36	55	58	57	76	88
Private leased line or other dedicated link	26	9	9	8	14	32	65
Extranet	16	0	9	8	14	20	41
Emailed as an attachment	61	27	55	58	57	71	76
CD or DVD	50	27	27	50	50	56	82
Magnetic tape	5	0	0	0	0	5	24
On-site data access facility	9	18	9	0	0	7	29
Other	3	0	0	8	0	5	6
Total number of organisations⁽⁴⁾	315	33	33	36	42	123	51

(1) Defined by rolling mean employment (RME) count. For more information on the RME count, refer to the technical notes of this report.

(2) Percentages are of all organisations in each organisation size.

(3) Government organisations may use more than one data exchange technology, so percentages may not add to total and may add to over 100 percent.

(4) For more information on the government organisations included, refer to the technical notes of this report.

Note: All counts in this survey were randomly rounded to base 3 to protect confidentiality, so actual figures may differ from those stated. Due to rounding, some figures may not sum to stated total.

Table 47

Government Data Exchange Partners
By organisation type
 August 2006

	Overall	Organisation type				
		Central government	Local government	Crown research institute	Tertiary education	Other government organisation
		Percent ⁽¹⁾				
Real time data exchanges	37	40	32	67	55	35
Data exchange with⁽²⁾						
Central government	52	51	54	67	82	40
Wider state services	33	37	29	100	45	25
Local government	25	9	64	33	18	15
Tertiary education institutions	20	14	7	67	73	25
Non-government organisations	18	19	25	33	18	15
Business	45	33	61	100	64	35
Overseas entities	14	12	7	100	27	15
Other	5	5	7	0	9	10
Total number of organisations⁽³⁾	315	129	84	9	33	60

(1) Percentages are of all organisations in each organisation type.

(2) Government organisations may exchange data with more than one partner, so percentages may not add to total and may add to over 100 percent.

(3) For more information on the government organisations included, refer to the technical notes of this report.

Note: All counts in this survey were randomly rounded to base 3 to protect confidentiality, so actual figures may differ from those stated. Due to rounding, some figures may not sum to stated total.

Table 48

Government Data Exchange Partners
By organisation size
August 2006

	Overall	Organisation size (employees) ⁽¹⁾					
		0-5	6-19	20-49	50-99	100-1,000	1,000 or more
		Percent ⁽²⁾					
Real time data exchanges	37	36	36	25	21	37	76
Data exchange with⁽³⁾							
Central government	52	27	36	50	43	59	82
Wider state services	33	9	36	25	14	39	71
Local government	25	9	18	17	36	34	24
Tertiary education institutions	20	18	18	17	14	24	35
Non-government organisations	18	9	27	8	21	20	35
Business	45	36	27	25	36	59	59
Overseas entities	14	18	18	8	7	17	24
Other	5	0	9	17	7	5	6
Total number of organisations⁽⁴⁾	315	33	33	36	42	123	51

(1) Defined by rolling mean employment (RME) count. For more information on the RME count, refer to the technical notes of this report.

(2) Percentages are of all organisations in each organisation size.

(3) Government organisations may use more than one data exchange technology, so percentages may not sum to total and may sum to over 100 percent.

(4) For more information on the government organisations included, refer to the technical notes of this report.

Note: All counts in this survey were randomly rounded to base 3 to protect confidentiality, so actual figures may differ from those stated. Due to rounding, some figures may not sum to stated total.

Table 49 (5.01)

Government Use of Information and Communication Technology Security
By organisation type
 August 2006

	Organisation type					
	Overall	Central government	Local government	Crown research institute	Tertiary education	Other government organisation
		Percent ⁽¹⁾				
Internal ICT security						
Filtering	99	100	96	100	100	100
Network protection	99	100	96	100	100	95
Authentication	92	95	93	100	100	80
Cryptography	50	60	43	67	73	25
All of the above internal ICT security measures used ⁽²⁾	49	58	43	67	73	25
ICT security procedures						
ICT security education of employee	56	56	61	100	73	30
Formal ICT security policy	64	74	61	100	82	40
Appointed person responsible for ICT security	54	63	43	67	55	50
IT reviews/audits	82	86	86	100	91	65
Business continuity measures	95	100	96	100	100	85
Emergency plan updated past two years	50	56	54	67	45	25
Physical security of ICT equipment	83	86	86	100	100	60
Emergency back-up power	76	77	93	100	82	50
None of the above ICT security procedures used	2	0	0	0	0	10
Total number of organisations⁽³⁾	315	129	84	9	33	60

(1) Percentages are of all organisations in each organisation type.

(2) A small number of other government organisations had no internal ICT security measures in place. This data has been suppressed.

(3) For more information on the government organisations included, refer to the technical notes of this report.

Note: All counts in this survey were randomly rounded to base 3 to protect confidentiality, so actual figures may differ from those stated. Due to rounding, some figures may not sum to stated total.

Table 50

Government Frequency of Updates to Anti-virus Software
By organisation type and size
 August 2006

	Organisations ⁽¹⁾		Frequency of updates					
	Total	Using computers	Automatic-ally updated	Daily	Weekly	Monthly	Less than monthly	Never
	Percent ⁽²⁾							
Organisation size⁽³⁾								
0–5 employees	33	91	82	9	9	0	0	9
6–19 employees	33	100	91	18	0	0	0	0
20–49 employees	36	100	75	33	8	8	0	0
50–99 employees	42	100	71	36	14	0	0	0
100–1,000 employees	123	100	80	29	2	2	0	0
1,000 or more employees	51	100	76	29	0	0	0	0
Organisation type								
Central government	129	100	79	28	0	2	0	0
Local government	84	100	75	32	7	0	0	0
Crown research institute	9	100	100	33	0	0	0	0
Tertiary education	33	100	91	27	0	0	0	0
Other government	60	95	80	20	5	5	0	5
Overall	315	99	79	26	3	1	0	1

(1) For more information on the government organisations included, refer to the technical notes of this report.

(2) Percentages are of all organisations in each organisation type.

(3) Defined by rolling mean employment (RME) count. For more information on the RME count, refer to the technical notes of this report.

Note: All counts in this survey were randomly rounded to base 3 to protect confidentiality, so actual figures may differ from those stated. Due to rounding, some figures may not sum to stated total.

Table 51

Government ICT Support and Development
By organisation size and type
 August 2006

	Total number of organisations ⁽¹⁾	ICT support					ICT development			
		Warranty	External contracted	In-house ICT staff	In-house other staff	None	External contracted	In-house ICT staff	In-house other staff	None
		Percent ⁽²⁾								
Organisation size⁽³⁾										
0–5 employees	33	18	73	9	27	18	55	18	9	27
6–19 employees	33	36	100	18	36	0	91	27	18	0
20–49 employees	36	67	75	75	42	0	92	50	17	8
50–99 employees	42	64	86	71	29	0	86	43	14	7
100–1,000 employees	123	76	76	93	27	0	90	76	17	2
1,000 or more employees	51	88	94	100	59	0	94	94	41	0
Organisation type										
Central government	129	63	91	70	35	2	93	58	14	5
Local government	84	71	75	89	29	0	89	64	18	4
Crown research institute	9	100	100	100	67	0	67	100	67	0
Tertiary education	33	82	73	109	45	0	91	91	36	0
Other government	60	40	75	30	30	5	75	30	15	15
Overall	315	62	81	71	31	2	88	57	18	5

(1) For more information on the government organisations included, refer to the technical notes of this report.

(2) Percentages are of all organisations in each organisation size or type.

(3) Defined by rolling mean employment (RME) count. For more information on the RME count, refer to the technical notes of this report.

Note: All counts in this survey were randomly rounded to base 3 to protect confidentiality, so actual figures may differ from those stated. Due to rounding, some figures may not sum to stated total.

Table 52

Government Website Features
By organisation type
August 2006

	Overall	Organisation type				
		Central government	Local government	Crown research institute	Tertiary education	Other government organisation
		Percent ⁽¹⁾				
Organisations with website	97	100	100	100	100	90
Website feature						
Static information	97	100	96	100	100	90
Dynamic information	28	21	39	33	55	10
Interactive information	56	60	50	67	91	35
Transactional services	26	26	11	67	64	20
Online feedback or consultation	46	47	54	67	55	25
News service	14	16	14	33	27	5
Links to www.govt.nz	47	63	50	0	27	20
Content in both English and Māori	21	26	11	33	45	10
Information about privacy or security	42	56	29	33	55	25
Accessibility features	24	35	11	33	27	10
Accessible with low-speed Internet connection	51	56	57	33	73	35
Total number of organisations⁽²⁾	315	129	84	9	33	60

(1) Percentages are of all organisations in each organisation type.

(2) For more information on the government organisations included, refer to the technical notes of this report.

Note: All counts in this survey were randomly rounded to base 3 to protect confidentiality, so actual figures may differ from those stated. Due to rounding, some figures may not sum to stated total.

Table 53

Government Website Features
By organisation size
August 2006

	Overall	Organisation size (employees) ⁽¹⁾					
		0-5	6-19	20-49	50-99	100-1,000	1,000 or more
Percent ⁽²⁾							
Organisations with website	97	82	91	108	93	98	94
Website feature							
Static information	97	82	91	108	93	98	94
Dynamic information	28	18	0	17	29	41	41
Interactive information	56	27	45	58	50	63	82
Transactional services	26	18	18	17	21	27	53
Online feedback or consultation	46	18	36	58	43	54	53
News service	14	18	18	17	14	15	29
Links to www.govt.nz	47	27	45	50	57	54	53
Content in both English and Māori	21	9	18	17	14	27	41
Information about privacy or security	42	36	27	33	36	46	71
Accessibility features	24	18	18	17	21	27	47
Allows access with low-speed Internet connection	51	27	45	58	57	59	65
Total number of organisations⁽³⁾	315	33	33	36	42	123	51

(1) Defined by rolling mean employment (RME) count. For more information on the RME count, refer to the technical notes of this report.

(2) Percentages are of all organisations in each organisation size.

(3) For more information on the government organisations included, refer to the technical notes of this report.

Note: All counts in this survey were randomly rounded to base 3 to protect confidentiality, so actual figures may differ from those stated. Due to rounding, some figures may not sum to stated total.

Table 54

Government Information and Communication Technology Training
By organisation size and type
 August 2006

	Total number of organisations ⁽¹⁾	Type of ICT training				
		Induction (for new staff)	Up-skill (for general staff)	Use of new technologies or applications	Technical (for ICT staff)	Do not offer
		Percent ⁽²⁾				
Organisation size⁽³⁾						
0–5 employees	33	45	36	36	18	45
6–19 employees	33	82	55	82	18	9
20–49 employees	36	83	83	75	50	8
50–99 employees	42	79	57	79	50	7
100–1,000 employees	123	85	71	80	83	5
1,000 or more employees	51	94	88	94	94	6
Organisation type						
Central government	129	84	67	79	63	7
Local government	84	79	61	75	71	4
Crown research institute	9	100	100	67	100	0
Tertiary education	33	100	91	91	91	0
Other government	60	65	55	55	25	15
Overall	315	80	67	75	62	8

(1) For more information on the government organisations included, refer to the technical notes of this report.

(2) Percentages are of all organisations in each organisation type.

(3) Defined by rolling mean employment (RME) count. For more information on the RME count, refer to the technical notes of this report.

Note: All counts in this survey were randomly rounded to base 3 to protect confidentiality, so actual figures may differ from those stated. Due to rounding, some figures may not sum to stated total.

Table 55 (5.02)

Government Expenditure on Information and Communication Technology
By organisation size and type
 August 2006

	Total number of organisations ⁽¹⁾	Operating expenditure		Capital expenditure	
		\$(000)	Percent ⁽²⁾	\$(000)	Percent ⁽²⁾
Organisation size⁽³⁾					
0–5 employees	33	1,292	0.1	875	0.1
6–19 employees	33	2,086	0.2	2,081	0.3
20–49 employees	36	7,784	0.7	3,337	0.5
50–99 employees	42	12,768	1.2	7,729	1.2
100–1,000 employees	123	289,848	26.3	168,877	26.8
1,000 or more employees	51	789,247	71.6	447,196	71.0
Organisation type					
Central government	129	775,190	70.3	503,287	79.9
Local government	84	128,951	11.7	56,031	8.9
Crown research institute	9	21,028	1.9	8,725	1.4
Tertiary education	33	173,539	15.7	59,579	9.5
Other government organisation	60	4,317	0.4	2,473	0.4
Overall	315	1,103,025	100.0	630,096	100.0

(1) For more information on the government organisations included, refer to the technical notes of this report.

(2) Percentages are of all operating or capital expenditure in each organisation size or type.

(3) Defined by rolling mean employment (RME) count. For more information on the RME count, refer to the technical notes of this report.

Note: Due to rounding, some figures may not sum to stated total.

Table 56

Government Purchase and Payment via Information and Communication Technology
By organisation size and type
 August 2006

	Total number of organisations ⁽¹⁾	Purchases and procurement				Payments received				
		Suppliers' website	Other electronic system	Orders electronically placed	Invoices electronically received	On the Internet	Other computer networks	Email	Other methods ⁽²⁾	No payment
		Percent ⁽³⁾								
Organisation size⁽⁴⁾										
0–5 employees	33	36	27	0	18	9	0	27	73	18
6–19 employees	33	82	18	18	9	18	0	27	82	27
20–49 employees	36	92	33	8	0	17	8	25	92	25
50–99 employees	42	86	43	14	7	14	14	36	79	21
100–1,000 employees	123	90	37	17	5	20	15	24	85	10
1,000 or more employees	51	94	65	47	41	35	12	29	88	12
Organisation type										
Central government	129	79	37	21	14	12	5	21	72	23
Local government	84	93	43	18	7	18	14	21	96	4
Crown research institute	9	100	67	33	0	67	33	67	100	0
Tertiary education	33	91	55	36	27	45	27	36	100	0
Other government	60	65	25	5	5	15	5	30	75	20
Overall	315	82	37	16	10	18	9	25	83	13

(1) For more information on the government organisations included, refer to the technical notes of this report.

(2) Other methods includes EFTPOS, Internet banking and other methods.

(3) Percentages are of all operating or capital expenditure in each organisation size or type.

(4) Defined by rolling mean employment (RME) count. For more information on the RME count, refer to the technical notes of this report.

Note: Due to rounding, some figures may not sum to stated total.

Table 57

Government Information and Communication Technology Investment Plan
By organisation type
 August 2006

	Overall	Organisation type				
		Central government	Local government	Crown research institute	Tertiary education	Other government organisations
Percent ⁽¹⁾						
Organisations with ICT investment plan for next 12 months	90	95	96	100	100	65
Areas plan to invest in						
New or upgraded website	59	60	64	67	73	35
New or upgraded online services	45	37	54	33	82	25
New or upgraded software	77	79	86	100	91	45
Desktop hardware	77	84	82	100	100	45
ICT infrastructure (servers, networks)	77	81	86	100	100	40
New or upgraded wireless mobile computing	47	47	50	67	73	30
Other	6	9	0	33	0	0
Intended benefits						
Keeping up with technology	59	63	61	67	64	45
Business continuity and security	74	77	82	100	100	45
Reduce costs	46	44	43	67	82	25
More efficient workflow, business activities and processes	77	86	75	100	100	50
Improved working conditions	35	35	36	33	36	40
Improved range of services	50	49	57	33	73	35
Improved quality of services	69	72	71	67	91	45
More responsive to customer needs	61	53	75	67	91	40
Improved collaboration with other organisations	48	51	43	100	64	35
Other	4	5	4	0	0	0
Total number of organisations⁽²⁾	315	129	84	9	33	60

(1) Percentages are of all government organisations in each organisation type.

(2) For more information on the government organisations included, refer to the technical notes of this report.

Note: All counts in this survey were randomly rounded to base 3 to protect confidentiality, so actual figures may differ from those stated. Due to rounding, some figures may not sum to stated total.

Table 58

Government Information and Communication Technology Investment Plan
By organisation size
 August 2006

	Overall	Organisation size (employees) ⁽¹⁾					
		0–5	6–19	20–49	50–99	100–1,000	1,000 or more
Percent ⁽²⁾							
Organisations with ICT investment plan for next 12 months	90	55	73	100	93	98	100
Areas plan to invest in							
New or upgraded website	59	45	45	58	43	73	71
New or upgraded online services	45	27	27	33	36	61	65
New or upgraded software	77	27	55	83	79	95	100
Desktop hardware	77	27	64	92	79	88	100
ICT infrastructure (servers, networks)	77	18	36	75	79	100	100
New or upgraded wireless mobile computing	47	27	27	33	36	61	82
Other	6	0	9	17	7	7	12
Intended benefits							
Keeping up with technology	59	27	55	67	57	63	76
Business continuity and security	74	27	45	75	79	90	88
Reduce costs	46	27	36	17	36	54	88
More efficient workflow, business activities and processes	77	45	55	92	64	90	100
Improved working conditions	35	18	45	50	29	37	47
Improved range of services	50	27	36	67	50	56	65
Improved quality of services	69	27	45	83	64	78	94
More responsive to customer needs	61	27	36	58	64	71	88
Improved collaboration with other organisations	48	27	36	42	29	61	71
Other	4	9	0	0	7	7	12
Total number of organisations⁽³⁾	315	33	33	36	42	123	51

(1) Defined by rolling mean employment (RME) count. For more information on the RME count, refer to the technical notes of this report.

(2) Percentages are of all government organisations in each organisation type.

(3) For more information on the government organisations included, refer to the technical notes of this report.

Note: All counts in this survey were randomly rounded to base 3 to protect confidentiality, so actual figures may differ from those stated. Due to rounding, some figures may not sum to stated total.

Table 59

**Factors Restricting Government Implementation
of New Information and Communication Technology**
August 2006

Factor	Degree of restriction ⁽¹⁾			
	High	Moderate	Low	Not at all
Percent ⁽²⁾				
Budget constraints	26	40	19	14
Rate at which new versions of software introduced	4	26	43	28
Commercially available ICT products not meeting needs	3	20	45	33
Availability of qualified ICT personnel	13	32	29	27
Internal resistance to change	7	30	38	24
Lack of perceived benefits	7	23	42	29
Security or privacy concerns	5	21	43	31
Competing priorities	40	36	15	10

(1) Degree of restriction rated by organisations.

(2) Percentages are of all government organisations.

Note: All counts in this survey were randomly rounded to base 3 to protect confidentiality, so actual figures may differ from those stated. Due to rounding, some figures may not sum to stated total.

Table 60

Factors Restricting Government Implementation
By organisation type
 August 2006

Factor	Organisation type					
	Overall	Central government	Local government	Crown research institute	Tertiary education	Other government organisations
	Percent ⁽¹⁾					
Budget constraints	67	70	61	67	82	70
Rate at which new versions of software introduced	30	30	25	33	55	30
Commercially available ICT products not meeting needs	24	21	32	67	27	20
Availability of qualified ICT personnel	46	51	50	100	55	30
Internal resistance to change	38	35	54	67	55	25
Lack of perceived benefits	30	28	32	33	45	25
Security or privacy concerns	26	28	25	33	36	25
Competing priorities	76	79	79	100	100	60
Total number of organisations⁽²⁾	315	129	84	9	33	60

(1) Percentages are of all government organisations.

(2) For more information on the government organisations included, refer to the technical notes of this report.

Note: All counts in this survey were randomly rounded to base 3 to protect confidentiality, so actual figures may differ from those stated. Due to rounding, some figures may not sum to stated total. Degree of restriction includes high and moderate.

Table 61

Business⁽¹⁾ and Government⁽²⁾ Use of Computers and Internet
By organisation size
 August 2006

	Organisations using computers		Organisations using the Internet		Staff with access to the Internet	
	Business	Government	Business	Government	Business	Government
	Percent ⁽³⁾					
Organisation size⁽⁴⁾						
6–19 employees	92	100	89	100	47	100
24–49 employees	97	100	95	100	41	100
50–99 employees	99	100	98	100	43	91
100+ employees	100	100	99	100	48	91
Overall	93	99	91	99	46	93

(1) For more information on the businesses included, refer to the technical notes of this report.

(2) For more information on the government organisations included, refer to the technical notes of this report.

(3) Business percentages are a proportion of all New Zealand businesses with the Internet. Government percentages are a proportion of all government organisations.

(4) Defined by rolling mean employment (RME) count. For more information on the RME count, refer to the technical notes of this report.

Note: All counts in this survey were randomly rounded to base 3 to protect confidentiality, so actual figures may differ from those stated. Due to rounding, some figures may not sum to stated total.

Table 62 (6.01)

Business⁽¹⁾ and Government⁽²⁾ Internet Connection Types
By organisation size
 August 2006

Internet connection type ⁽³⁾	Organisation size (employees) ⁽⁴⁾				Overall
	6–19	20–49	50–99	100+	
	Percent ⁽⁵⁾				
Dial-up					
Business	36	31	34	42	35
Government	18	33	36	41	37
Broadband					
DSL					
Business	83	82	82	81	83
Government	82	75	79	67	69
Cable					
Business	8	11	14	25	10
Government	9	42	36	72	55
Satellite					
Business	1	1	2	3	1
Government	0	0	0	5	4
Wireless					
Business	10	14	13	15	11
Government	27	33	29	43	36
Cellular ⁽⁶⁾					
Business	11	19	27	45	15
Government	18	42	36	67	52
Total broadband⁽⁷⁾					
Business	83	83	93	95	85
Government	100	100	100	97	97

(1) For more information on the businesses included, refer to the technical notes of this report.

(2) For more information on the government organisations included, refer to the technical notes of this report.

(3) Organisations may use more than one connection type so percentages may not add to total and may add to over 100 percent.

(4) Defined by rolling mean employment (RME) count. For more information on the RME count, refer to the technical notes of this report.

(5) Business percentages are a proportion of all New Zealand businesses with the Internet. Government percentages are a proportion of all government organisations. Businesses and government organisations could select more than one ICT support service.

(6) Cellular includes WAP, GPRS and 3G services.

(7) Total broadband includes DSL, cable, satellite, wireless and cellular broadband technologies.

Note: All counts in this survey were randomly rounded to base 3 to protect confidentiality, so actual figures may differ from those stated. Due to rounding, some figures may not sum to stated total.

Table 63

ICT Support Services used by Business⁽¹⁾ and Government⁽²⁾
By organisation size
 August 2006

ICT support type	Organisation size (employees) ⁽³⁾				Overall
	6–19	20–49	50–99	100+	
Percent ⁽⁴⁾					
Warranty					
Business	31	36	35	39	32
Government	36	67	64	79	62
Contracted					
Business	54	63	67	63	56
Government	100	75	86	81	81
In-house by ICT staff					
Business	7	16	34	63	12
Government	18	75	71	95	71
In-house by other staff					
Business	18	22	24	21	19
Government	36	42	29	36	31
None					
Business	11	5	2	1	9
Government	0	0	0	0	2

(1) For more information on the businesses included, refer to the technical notes of this report.

(2) For more information on the government organisations included, refer to the technical notes of this report.

(3) Defined by rolling mean employment (RME) count. For more information on the RME count, refer to the technical notes of this report.

(4) Business percentages are a proportion of all New Zealand businesses with the Internet. Government percentages are a proportion of all government organisations. Businesses and government organisations could select more than one ICT support service.

Note: All counts in this survey were randomly rounded to base 3 to protect confidentiality, so actual figures may differ from those stated.

Table 64

Information and Communication Technology Sales of Goods and Services*By sales*
2005 and 2006

	2005	2006	Percent change
	\$(million)		
Export sales	1,342 R	1,610	19.9
Domestic sales	15,002 R	16,033	6.9
Total	16,344 R	17,643	7.9

Symbol:

R revised

Table 65

Information and Communication Technology Sales of Goods and Services*By percentage of sales*
2005 and 2006

	2005	2006
	Percent of sales	
Export sales	8.2 R	9.1
Domestic sales	91.8 R	90.9
Total	100.0	100.0

Note: Figures may not sum to totals due to rounding.**Symbol:**

R revised

Table 66

Sales of Information and Communication Technology
By commodity and sales type
 2005 and 2006

Commodity	2005		2006		Percent change
	\$(million)				
Total sales					
ICT goods (excluding software)					
Telecommunications equipment	1,422	R	1,477		3.8
Computer and related equipment	2,912	R	3,073		5.5
Audio and visual equipment	763	R	970		27.1
Electronic components	504	R	600		19.1
Electronic devices and equipment	862	R	955		10.8
Other ICT goods	134	R	168		24.9
Published software					
Published software	850	R	882		3.8
Total sales of ICT goods	7,448	R	8,125		9.1
Communication services					
Telecommunication and program distribution services	5,484	R	5,803		5.8
Internet access and Internet telecommunication services	449	R	595		32.5
Information technology services					
IT technical support services	1,251	R	1,379		10.2
IT design, consulting and development services	1,124	R	1,098		-2.4
Hosting and IT infrastructure provisioning services	342	R	390		14.0
Other ICT services					
Renting or leasing services	98		102		4.8
Training and education in ICT	25	R	44		78.6
Other ICT services and other software	124	R	108		-12.7
Total sales of ICT services	8,897	R	9,518		7.0
Total sales of ICT goods and services	16,344	R	17,643		7.9
Export sales					
ICT goods (excluding software)					
Telecommunications equipment	194		254		31.2
Computer and related equipment	77	R	89		16.0
Audio and visual equipment	37		34		-7.9
Electronic components	176	R	185		4.9
Electronic devices and equipment	426	R	523		22.8
Other ICT goods	63		90		43.9
Published software					
Published software	64	R	84		30.8
Total sales of ICT goods	1,037	R	1,260		21.5
Communication services					
Telecommunication and program distribution services	40		61		50.5
Internet access and Internet telecommunication services	..	C	1		.. C
Information technology services					
IT technical support services	58	R	74		25.8
IT design, consulting and development services	167	R	176		5.1
Hosting and IT infrastructure provisioning services	24	R	29		20.2
Other ICT services					
Renting or leasing services	..	C	..	C	.. C
Training and education in ICT	1		..	C	.. C
Other ICT services and other software	10		9		-17.3
Total sales of ICT services	305	R	350		14.6
Total sales of ICT goods and services	1,342	R	1,610		19.9

For footnotes, see end of table.

Table 66 continued

Sales of Information and Communication Technology
By commodity and sales type
 By financial year

Commodity	2005		2006		Percent change
	\$(million)				
Domestic sales					
ICT goods (excluding software)					
Telecommunications equipment	1,228	R	1,222		-0.5
Computer and related equipment	2,835	R	2,984		5.3
Audio and visual equipment	726	R	936		28.8
Electronic components	327	R	415		26.8
Electronic devices and equipment	436	R	432		-0.9
Other ICT goods	72	R	77		8.2
Published software					
Published software	786	R	798		1.5
Total sales of ICT goods	6,411	R	6,865		7.1
Communication services					
Telecommunication and program distribution services	5,444	R	5,742		5.5
Internet access and Internet telecommunication services	..	C	594		.. C
Information technology services					
IT technical support services	1,193	R	1,305		9.5
IT design, consulting and development services	957	R	922		-3.7
Hosting and IT infrastructure provisioning services	318	R	361		13.5
Other ICT services					
Renting or leasing services	..	C	..	C	.. C
Training and education in ICT	24	R	..	C	.. C
Other ICT services and other software	114	R	100		-12.3
Total sales of ICT services	8,591	R	9,169		6.7
Total sales of ICT goods and services	15,002	R	16,033		6.9

Note: Figures may not sum to totals due to rounding.

Symbols:

R revised

C confidential

.. figures not available

Table 67

Population Breakdown
By industry
2005 and 2006

Industry	Total number of surveyed businesses		Businesses with reported ICT sales	
	2005	2006	2005	2006
Business machine wholesaling	93	90	87	81
Computer and business machine manufacturing	15	12	15	12
Computer consultancy services	1,080	1,149	1,011	1,050
Computer maintenance services	93	99	81	93
Computer wholesaling	252	228	243	219
Data processing services	45	45	33	27
Electric cable and wire manufacturing	3	3	0	0
Electrical and electronic equipment wholesaling	390	405	225	246
Electronic equipment manufacturing	93	99	72	69
Information storage and retrieval services	21	30	15	21
Medical and scientific manufacturing	87	6	3	3
Plant hiring or leasing	303	45	36	36
Professional and scientific manufacturing	24	33	9	12
Professional equipment wholesaling	129	138	36	63
Telecommunication, broadcasting and transceiving equipment manufacturing	21	18	21	18
Telecommunications services	84	87	69	84
Other ⁽¹⁾	69 R	129	66 R	60
Total	2,807 R	2,618	2,028 R	2,088
Percentage				
Business machine wholesaling	3.3 R	3.4	4.3 R	3.9
Computer and business machine manufacturing	0.5 R	0.5	0.7 R	0.6
Computer consultancy services	38.5 R	43.9	49.9 R	50.3
Computer maintenance services	3.3 R	3.8	4.0 R	4.5
Computer wholesaling	9.0 R	8.7	12.0 R	10.5
Data processing services	1.6 R	1.7	1.6 R	1.3
Electric cable and wire manufacturing	0.1 R	0.1	0.0 R	0.0
Electrical and electronic equipment wholesaling	13.9 R	15.5	11.1 R	11.8
Electronic equipment manufacturing	3.3 R	3.8	3.6 R	3.3
Information storage and retrieval services	0.7 R	1.1	0.7 R	1.0
Medical and scientific manufacturing	3.1 R	0.2	0.1 R	0.1
Plant hiring or leasing	10.8 R	1.7	1.8 R	1.7
Professional and scientific manufacturing	0.9 R	1.3	0.4 R	0.6
Professional equipment wholesaling	4.6 R	5.3	1.8 R	3.0
Telecommunication, broadcasting and transceiving equipment manufacturing	0.7 R	0.7	1.0 R	0.9
Telecommunications services	3.0 R	3.3	3.4 R	4.0
Other ⁽¹⁾	2.5 R	4.9	3.3 R	2.9
Total	100.0 R	100.0	100.0 R	100.0

(1) The other industry group includes businesses that were selected through lists from NZSA, ITANZ and NZTE. For more information, refer to the technical notes of this report.

Note: All cells have been randomly rounded to base 3 to protect confidentiality, so actual figures may differ from those stated.

Symbol:

R revised

Table 68

Population Breakdown
By industry and business size⁽¹⁾
 2005 and 2006

Industry	Businesses with reported ICT sales					
	Small		Medium		Large	
	2005	2006	2005	2006	2005	2006
Business machine wholesaling	66	63	18	9	9	9
Computer and business machine manufacturing	12	9	0	0	0	0
Computer consultancy services	909	927	57	78	42	45
Computer maintenance services	78	87	3	3	3	3
Computer wholesaling	210	183	24	27	6	9
Data processing services	24	18	6	3	3	3
Electric cable and wire manufacturing	0	0	0	0	0	0
Electrical and electronic equipment wholesaling	186	201	21	27	18	15
Electronic equipment manufacturing	54	51	9	9	6	6
Information storage and retrieval services	12	18	0	3	3	3
Medical and scientific manufacturing	0	3	0	0	0	3
Plant hiring or leasing	33	30	3	6	0	0
Professional and scientific manufacturing	6	9	3	3	3	0
Professional equipment wholesaling	30	48	3	9	3	3
Telecommunication, broadcasting and transceiving equipment manufacturing	18	12	0	0	9	3
Telecommunications services	48	60	12	15	9	12
Other ⁽²⁾	42 R	39	9 R	12	12 R	12
Total	1,734 R	1,761	168 R	195	126 R	132
Percentage						
Business machine wholesaling	75.9	77.8	20.7	11.1	10.3	11.1
Computer and business machine manufacturing	80.0	75.0	0.0	0.0	0.0	0.0
Computer consultancy services	89.9	88.3	5.6	7.4	4.2	4.3
Computer maintenance services	96.3	93.5	3.7	3.2	3.7	3.2
Computer wholesaling	86.4	83.6	9.9	12.3	2.5	4.1
Data processing services	72.7	66.7	18.2	11.1	9.1	11.1
Electric cable and wire manufacturing	0.0	0.0	0.0	0.0	0.0	0.0
Electrical and electronic equipment wholesaling	82.7	81.7	9.3	11.0	8.0	6.1
Electronic equipment manufacturing	75.0	73.9	12.5	13.0	8.3	8.7
Information storage and retrieval services	80.0	85.7	0.0	14.3	20.0	14.3
Medical and scientific manufacturing	0.0	100.0	0.0	0.0	0.0	100.0
Plant hiring or leasing	91.7	83.3	8.3	16.7	0.0	0.0
Professional and scientific manufacturing	66.7	75.0	33.3	25.0	33.3	0.0
Professional equipment wholesaling	83.3	76.2	8.3	14.3	8.3	4.8
Telecommunication, broadcasting and transceiving equipment manufacturing	85.7	66.7	0.0	0.0	42.9	16.7
Telecommunications services	69.6	71.4	17.4	17.9	13.0	14.3
Other ⁽²⁾	63.6 R	65.0	13.6 R	20.0	18.2 R	20.0
Total	85.5	84.3	8.3	9.3	6.2	6.3

(1) A small business is defined as having an RME equal to 2 and less than 20, medium as having an RME equal to 20 and less than 50, and large as having an RME of more than 50.

(2) The other industry group includes businesses that were selected through lists from NZSA, ITANZ and NZTE. For more information, refer to the technical notes of this report.

Note: All cells have been randomly rounded to base 3 to protect confidentiality, so actual figures may differ from those stated.

Symbol:

R revised

Table 69

Sales of Information and Communication Technology

By business size⁽¹⁾
2005 and 2006

Commodity	2005		2006		Percent change
	\$(million)	Percent	\$(million)	Percent	
Small-sized businesses					
ICT goods (excluding software)					
Telecommunications equipment	260	R 18.3	R 194	13.1	-25.6
Computer and related equipment	880	R 30.2	R 770	25.1	-12.5
Audio and visual equipment	96	12.6	R 161	16.6	66.9
Electronic components	109	21.7	R 138	23.0	26.2
Electronic devices and equipment	141	R 16.3	R 125	13.4	-11.1
Other ICT goods	34	25.4	R 35	19.5	1.6
Published software					
Published software	267	R 31.4	R 310	35.2	16.4
Total sales of ICT goods	1,788	R 24.0	R 1,733	21.4	-3.1
Communication services					
Telecommunication and Internet services ⁽²⁾	116	R 1.9	R 212	3.3	83.3
Information technology services					
IT technical support services	233	R 18.6	R 256	18.6	10.0
IT design, consulting and development services	270	R 24.0	306	27.9	13.3
Hosting and IT infrastructure provisioning services	48	14.2	R 80	21.0	65.0
Other ICT services					
Renting or leasing services	32	33.0	28	27.7	-12.1
Training and education in ICT	10	39.4	R 25	56.5	156.4
Other ICT services and other software	43	R 34.6	R 49	35.9	12.9
Total sales of ICT services	752	R 8.4	R 956	10.0	27.1
Total sales of ICT goods and services	2,539	R 15.5	R 2,688	15.2	5.9
Medium-sized businesses					
ICT goods (excluding software)					
Telecommunications equipment	272	19.1	R 257	17.4	-5.2
Computer and related equipment	365	R 12.5	R 437	14.3	19.6
Audio and visual equipment	75	9.8	R 79	8.2	5.6
Electronic components	14	2.8	R 51	8.5	266.5
Electronic devices and equipment	99	R 11.5	R 116	12.4	17.2
Other ICT goods	20	R 14.6	R 42	23.8	116.9
Published software					
Published software	78	9.2	R 87	9.9	11.8
Total sales of ICT goods	923	R 12.4	R 1,070	13.2	16.0
Communication services					
Telecommunication and Internet services ⁽²⁾	258	4.3	R 231	3.6	-10.3
Information technology services					
IT technical support services	142	11.3	R 132	9.6	-6.6
IT design, consulting and development	177	R 15.7	R 199	18.2	12.6
Hosting and IT infrastructure provisioning services	69	R 20.2	R 35	9.1	-49.5
Other ICT services					
Renting or leasing services	15	15.1	13	13.2	-8.7
Training and education in ICT	9	R 35.7	R 12	27.3	36.7
Other ICT services and other software	23	R 18.4	R 31	23.1	36.7
Total sales of ICT services	692	R 7.8	R 654	6.9	-5.4
Total sales of ICT goods and services	1,614	R 9.9	R 1,724	9.8	6.8

For footnotes, see end of table.

Table 69 continued

Sales of Information and Communication Technology*By business size⁽¹⁾*

2005 and 2006

Commodity	2005		2006		Percent change
	\$(million)	Percent	\$(million)	Percent	
Large-sized businesses					
ICT goods (excluding software)					
Telecommunications equipment	890 R	62.6 R	1,026	69.5	15.2
Computer and related equipment	1,667 R	57.2 R	1,856	60.6	11.4
Audio and visual equipment	592 R	77.5 R	730	75.2	23.3
Electronic components	381 R	75.5 R	411	68.5	8.0
Electronic devices and equipment	622 R	72.2 R	714	74.8	14.8
Other ICT goods	81	60.0 R	101	56.7	25.5
Published software					
Published software	506 R	59.5	485	54.9	-4.1
Total sales of ICT goods	4,737 R	63.6 R	5,321	65.5	12.3
Communication services					
Telecommunication and Internet services ⁽²⁾	5,560 R	93.7 R	5,955	93.1	7.1
Information technology services					
IT technical support services	877 R	70.1 R	990	71.8	13.0
IT design, consulting and development services	678 R	60.3 R	592	54.0	-12.6
Hosting and IT infrastructure provisioning services	224 R	65.6 R	275	70.5	22.5
Other ICT services					
Renting or leasing services	51	51.9	60	59.1	19.5
Training and education in ICT	6	25.0 R	7	16.2	15.6
Other ICT services and other software	58 R	47.0 R	29	26.4	-51.0
Total sales of ICT services	7,454 R	83.8	7,909	83.1	6.1
Total sales of ICT goods and services	12,191 R	74.6 R	13,230	75.0	8.5

(1) A small business is defined as having an RME equal to 2 and less than 20, medium-sized as having an RME equal to 20 and less than 50, and large as having an RME of more than 50.

(2) The telecommunication and program distribution services commodity and the Internet access and Internet telecommunication services were combined to protect confidentiality.

Symbol:

R revised

Table 70

Barriers to Business Growth
Total ICT businesses
2005 and 2006

Barrier	Number of businesses ⁽¹⁾	
	2005	2006
Total businesses		
Access to financing	318 R	402
Strength of competition	603 R	678
Regulatory environment	213 R	276
Ability to attract and/or retain qualified staff	432 R	507
Ability to attract and/or retain experienced staff	450 R	558
Existing staff do not have the necessary qualifications	102 R	120
Existing staff do not have the necessary experience	174 R	192
Access to international markets	135 R	180
Did not experience any barriers to growth	264 R	267
Other	144 R	165
Percentage of total ICT businesses		
Access to financing	15.7 R	19.3
Strength of competition	29.7 R	32.5
Regulatory environment	10.5 R	13.2
Ability to attract and/or retain qualified staff	21.3 R	24.3
Ability to attract and/or retain experienced staff	22.2 R	26.7
Existing staff do not have the necessary qualifications	5.0 R	5.7
Existing staff do not have the necessary experience	8.6 R	9.2
Access to international markets	6.7 R	8.6
Did not experience any barriers to growth	13.0 R	12.8
Other	7.1 R	7.9

(1) ICT businesses that responded to the barriers to growth question. Note that businesses can have multiple answers to this question.

Note: All cells have been randomly rounded to base 3 to protect confidentiality, so actual figures may differ from those stated. Figures may not sum to totals due to rounding.

Symbol:

R revised

Table 71

Barriers to Business Growth*By ICT business sales type⁽¹⁾*

2005 and 2006

Barrier	Number of businesses ⁽²⁾	
	2005	2006
Export sales		
Access to financing	24.2	28.4
Strength of competition	29.0	32.4
Regulatory environment	11.3	12.2
Ability to attract and/or retain qualified staff	24.2	23.0
Ability to attract and/or retain experienced staff	22.6	23.0
Existing staff do not have the necessary qualifications	4.8	2.7
Existing staff do not have the necessary experience	9.7	8.1
Access to international markets	22.6	31.1
Did not experience any barriers to growth	16.1	8.1
Other	8.1	9.5
Domestic sales		
Access to financing	15.0	18.3
Strength of competition	30.0	32.7
Regulatory environment	10.6	13.7
Ability to attract and/or retain qualified staff	21.0	24.6
Ability to attract and/or retain experienced staff	22.1	27.4
Existing staff do not have the necessary qualifications	5.2	6.2
Existing staff do not have the necessary experience	8.5	9.4
Access to international markets	5.2	6.1
Did not experience any barriers to growth	12.9	13.6
Other	7.2	7.8

(1) ICT sales type.

(2) ICT businesses that responded to the barriers to growth question. Note that businesses can have multiple answers to this question.

Note: All cells have been randomly rounded to base 3 to protect confidentiality, so actual figures may differ from those stated. Figures may not sum to totals due to rounding.

Table 72

Barriers to Business Growth*By ICT business size⁽¹⁾*

2005 and 2006

Barrier	Number of businesses ⁽²⁾		
	2005		2006
Small-sized businesses			
Access to financing	89.0	R	89.8
Strength of competition	82.5	R	79.5
Regulatory environment	82.2	R	79.9
Ability to attract and/or retain qualified staff	83.5	R	81.5
Ability to attract and/or retain experienced staff	82.2	R	79.8
Existing staff do not have the necessary qualifications	90.2	R	90.9
Existing staff do not have the necessary experience	89.5	R	86.5
Access to international markets	80.1	R	78.7
Did not experience any barriers to growth	85.7	R	88.4
Other	88.3	R	88.4
Medium-sized businesses			
Access to financing	7.5	R	7.5
Strength of competition	9.6	R	11.9
Regulatory environment	8.5	R	11.9
Ability to attract and/or retain qualified staff	8.4	R	11.6
Ability to attract and/or retain experienced staff	9.8	R	12.5
Existing staff do not have the necessary qualifications	6.9	R	6.6
Existing staff do not have the necessary experience	6.4	R	8.3
Access to international markets	9.6	R	13.5
Did not experience any barriers to growth	7.5	R	6.0
Other	7.6	R	7.3
Large-sized businesses			
Access to financing	3.4	R	2.7
Strength of competition	7.9	R	8.5
Regulatory environment	9.4	R	8.3
Ability to attract and/or retain qualified staff	8.1	R	6.9
Ability to attract and/or retain experienced staff	8.0	R	7.7
Existing staff do not have the necessary qualifications	2.9	R	2.5
Existing staff do not have the necessary experience	4.1	R	5.2
Access to international markets	10.3	R	7.9
Did not experience any barriers to growth	6.8	R	5.6
Other	4.1	R	4.3

(1) A small business is defined as having an RME equal to 2 and less than 20, medium-sized as having an RME equal to 20 and less than 50, and large as having an RME of more than 50.

(2) ICT businesses that responded to the barriers to growth question. Note that businesses can have multiple answers to this question.

Note: All cells have been randomly rounded to base 3 to protect confidentiality, so actual figures may differ from those stated. Figures may not sum to totals due to rounding.

Symbol:

R revised

Table 73

Internet Service Providers and Subscribers in New Zealand
March 2005–March 2007

	Mar 2005	Sep 2005	Mar 2006	Sep 2006	Mar 2007
Total number of Internet service providers ⁽¹⁾	66	66	57	57	57
Number of subscribers					
Residential	965,000	1,014,500	1,049,700	1,150,000	1,243,500
Business/government	191,200	224,400	238,200	232,600	220,800
Total	1,156,200	1,238,900	1,287,900	1,382,600	1,464,300
Percent change from previous period					
Residential	...	5.1	3.5	9.6	8.1
Business/government	...	17.4	6.1	-2.4	-5.1
Total	...	7.2	4.0	7.4	5.9

(1) All cells in this row have been randomly rounded to base 3.

Symbol:

... not applicable

Table 74

Internet Subscriber Type and Revenue
March 2005–March 2007

Subscriber type	Mar 2005	Sep 2005	Mar 2006	Sep 2006	Mar 2007
Percent of subscribers					
Residential	83.5	81.9	81.5	83.2	84.9
Business/government	16.5	18.1	18.5	16.8	15.1
Percent of revenue⁽¹⁾					
Residential	64.3	60.3	63.1	71.5	73.1
Business/government	35.7	39.7	36.9	28.5	26.8

(1) Each ISP reported the aggregate percent which was weighted by subscriber numbers to calculate the weighted total.

Table 75 (8.01)

Size of Internet Service Providers⁽¹⁾
By percentile range
March 2005–March 2007

Percentile range ⁽²⁾	Mar 2005	Sep 2005	Mar 2006	Sep 2006	Mar 2007
	Average number of subscribers				
0–20th (small ISPs)	30	40	45	45	45
21th–40th	220	190	190	120	140
41th–60th	880	840	700	530	570
61th–80th	3,670	3,630	4,150	3,380	3,340
81th–100th (large ISPs)	84,160	90,890	102,650	111,460	118,260

(1) Percentile range table has replaced percentile table released in Internet Service Provider Survey September 2006.

(2) Percentile is calculated by sorting ISPs (by number of subscribers) from smallest to largest, then the average number of subscribers within a percentile range is calculated.

Note: All cells in this table have been randomly graduated rounded.

Table 76

Internet Service Provider Revenue
From business and government subscribers
 March 2005–March 2007

Percent of revenue from business and government subscribers	Mar 2005	Sep 2005	Mar 2006	Sep 2006	Mar 2007
	Percent of ISPs				
zero to 20	27	27	21	28	26
21 to 40	18	18	26	26	21
41 to 60	9	9	11	7	5
61 to 80	14	14	11	12	16
81 to 100	27	27	32	28	32

Note: All cells in this table have been randomly rounded to base 3. Due to rounding, figures may not sum to 100 percent.

Table 77

Other Business Activities of Internet Service Providers
March 2005–March 2007

Business activity	Mar 2005	Sep 2005	Mar 2006	Sep 2006	Mar 2007
	Percent of ISPs				
Wholesale of bandwidth to other ISPs	27	27	26	30	26
Sale of packages to other ISPs for resale	23	32	32	33	26

Note: All cells in this table have been randomly rounded to base 3.

Table 78

Internet Connection Type
March 2005–March 2007

Connection type	Mar 2005	Sep 2005	Mar 2006	Sep 2006	Mar 2007
Number of subscribers					
Analog ⁽¹⁾	835,200	869,300	812,300	771,100	739,700
Non-analog	321,000	369,600	475,700	611,600	724,600
Digital subscriber line	C	C	C	493,300	573,900
Other ⁽²⁾	C	C	C	118,300	150,700
Total	1,156,200	1,238,900	1,287,900	1,382,600	1,464,300
Percent of subscribers					
Analog ⁽¹⁾	72.2	70.2	63.1	55.8	50.5
Non-analog	27.8	29.8	36.9	44.2	49.5
Digital subscriber line	C	C	C	35.7	39.2
Other ⁽²⁾	C	C	C	8.6	10.3
Percent change from previous period					
Analog ⁽¹⁾	...	4.1	-6.6	-5.1	-4.1
Non-analog	...	15.1	28.7	28.6	18.5
Digital subscriber line	...	C	C	C	16.3
Other ⁽²⁾	...	C	C	C	27.4

(1) Includes analog and integrated services digital network connection types.

(2) Includes cellular, wireless, cable, satellite and other connection types.

Note: Due to rounding, figures may not sum to stated totals.

Symbols:

C confidential

... not applicable

Table 79

Internet Subscribers
Per 100 inhabitants
March 2005–March 2007

Connection type	Mar 2005	Sep 2005	Mar 2006	Sep 2006	Mar 2007
Subscribers per 100 inhabitants					
Analog ⁽¹⁾	20.4	21.2	19.6	18.6	17.7
Non-analog	7.8	9.0	11.5	14.7	17.3
Digital subscriber line	C	C	C	11.9	13.7
Other ⁽²⁾	C	C	C	2.8	3.6
Total	28.2	30.2	31.2	33.3	35.1

(1) Includes analog and integrated services digital network connection types.

(2) Includes cellular, wireless, cable, satellite and other connection types.

Note: Population data sourced from National Population Estimates, Statistics New Zealand.

Symbol:

C confidential

Table 80

Non-analog Internet Subscribers
Ranked by connection type
 March 2005–March 2007

Connection type	Mar 2005	Sep 2005	Mar 2006	Sep 2006	Mar 2007
Ranking⁽¹⁾					
Digital subscriber line	1	1	1	1	1
Cellular	2	2	2	2	2
Cable	4	4	4	4	3
Wireless	3	3	3	3	4
Satellite	5	5	5	5	5
Other	6	6	6	6	6
Percent change from previous period⁽²⁾					
Digital subscriber line	...	11 to 20	21 to 30	C	16 ⁽³⁾
Cellular	...	11 to 20	21 to 30	31 to 40	21 to 30
Cable	...	0 to 10	21 to 30	31 to 40	41 to 50
Wireless	...	31 to 40	21 to 30	11 to 20	11 to 20
Satellite	...	-71 to -80	11 to 20	300 to 350	0 to 10
Other	...	-21 to -30	S	S	S

(1) 1 is the highest rank; 6 is the lowest.

(2) Percent ranges are used to protect confidentiality.

(3) Released for the first time as the number of DSL subscribers is no longer confidential.

Symbols:

C confidential

S suppressed

... not applicable

Table 81

Non-analog Internet Subscribers
Per 100 inhabitants of selected OECD countries
 2005–2007

Country	2005			2006				2007
	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Mar
	Per 100 inhabitants							
Denmark	21.8	..	25.0	..	29.3	..	31.9	..
Netherlands	22.5	..	25.3	..	28.8	..	31.8	..
Iceland	21.7	..	26.7	..	27.3	..	29.7	..
Korea	25.5	..	25.4	..	26.4	..	29.1	..
Switzerland	20.3	..	23.1	..	26.2	..	28.5	..
Norway	18.2	..	21.9	..	24.6	..	27.7	..
Finland	18.7	..	22.5	..	25.0	..	27.2	..
Sweden	16.5	..	20.3	..	22.7	..	26.0	..
Canada	19.2	..	21.9	..	22.4	..	23.8	..
Belgium	18.2	..	18.3	..	19.3	..	22.5	..
United Kingdom	13.5	..	15.9	..	19.4	..	21.6	..
Luxembourg	11.8	..	14.9	..	17.9	..	20.4	..
France	12.8	..	15.2	..	17.7	..	20.3	..
Japan	16.4	..	17.6	..	19.0	..	20.2	..
United States	14.5	..	16.8	..	19.2	..	19.6	..
Australia	10.9	..	13.8	..	17.4	..	19.2	..
Austria	12.5	..	14.1	..	17.7	..	17.3	..
Germany	10.2	..	13.0	..	15.1	..	17.1	..
OECD average	11.8	..	13.6	..	15.5	..	16.9	..
Spain	9.3	..	11.7	..	13.6	..	15.3	..
Italy	10.0	..	11.9	..	13.2	..	14.8	..
New Zealand⁽¹⁾	6.9	9.0	8.1	11.5	11.7	14.7	14.0	17.3
Portugal	9.9	..	11.5	..	12.9	..	13.8	..
Ireland	4.3	..	6.7	..	9.2	..	12.5	..
Hungary	4.6	..	6.3	..	7.8	..	11.9	..
Czech Republic	2.8	..	6.4	..	9.4	..	10.6	..
Poland	3.3	..	2.4	..	5.3	..	6.9	..
Slovak Republic	1.6	..	2.5	..	2.9	..	5.1	..
Greece	0.8	..	1.4	..	2.7	..	4.6	..
Turkey	1.2	..	2.1	..	3.0	..	3.8	..
Mexico	1.0	..	2.2	..	2.8	..	3.5	..

Source: OECD Broadband Statistics

(1) New Zealand June and December data sourced from OECD. September and March data sourced from Statistics New Zealand subscribers Internet Service Provider Surveys and includes cellular data subscribers.

Note: OECD data excludes cellular data card subscribers.

Symbol:

.. not available

Table 82

Internet Subscription Data Allowance*Non-analog subscribers⁽¹⁾*

At September 2006 and March 2007

Data allowance ⁽²⁾	Sep 2006	Mar 2007
Number of subscribers		
Data cap	597,000	650,800
Less than 5GB	419,600	429,000
5GB to less than 20GB	158,700	173,800
20GB or more	18,700	48,000
No cap	14,600	73,900
Total non-analog subscribers	611,600	724,600
Percent of subscribers		
Data cap	97.6	89.8
Less than 5GB	68.6	59.2
5GB to less than 20GB	25.9	24.0
20GB or more	3.1	6.6
No cap	2.4	10.2
Percent change from previous period		
Data cap	...	9.0
Less than 5GB	...	2.2
5GB to less than 20GB	...	9.5
20GB or more	...	156.7
No cap	...	406.2

(1) Includes digital subscriber line, cellular, wireless, cable, satellite and other connection types.

(2) Data allowance (or data cap) is the volume of data allowed before restrictions apply.

Note: Due to rounding, figures may not sum to stated totals.**Symbol:**

... not applicable

Table 83

Internet Subscriber Download and Upload Speeds
At September 2006 and March 2007

Speed	Sep 2006	Mar 2007
Number of subscribers		
Download speed		
Less than 256kbps	821,200	766,500
256kbps or greater and speed unknown	561,400	697,800
Total	1,382,600	1,464,300
Upload speed		
Less than 256kbps	1,249,800	1,280,600
256kbps or greater and speed unknown	132,800	183,700
Total	1,382,600	1,464,300
Percent of subscribers		
Download speed		
Less than 256kbps	59.4	52.3
256kbps or greater and speed unknown	40.6	47.7
Upload speed		
Less than 256kbps	90.4	87.5
256kbps or greater and speed unknown	9.6	12.5
Percent change from previous period		
Download speed		
Less than 256kbps	...	-6.7
256kbps or greater and speed unknown	...	24.3
Total	...	5.9
Upload speed		
Less than 256kbps	...	2.5
256kbps or greater and speed unknown	...	38.3
Total	...	5.9

Note: Due to rounding, some figures may not add to stated totals.

Symbol:

... not applicable

Table 84

Internet Subscriber Non-analog Speed
At six-monthly intervals
 March 2005–March 2007

Speed	Mar 2005	Sep 2005	Mar 2006	Sep 2006	Mar 2007
Ranking⁽¹⁾					
Download speed					
64kbps to less than 128kbps	3	6	6	6	7
128kbps to less than 256kbps	4	1	1	3	4
256kbps to less than 512kbps	1	5	4	4	3
512kbps to less than 2Mbps	5	2	3	1	2
2Mbps to less than 10Mbps	2	3	2	2	1
10Mbps or greater	7	4	5	7	6
Speed unknown	6	7	7	5	5
Upload speed					
64kbps to less than 128kbps	2	4	4	5	6
128kbps to less than 256kbps	1	1	1	1	1
256kbps to less than 512kbps	4	3	2	2	2
512kbps to less than 2Mbps	3	2	3	3	3
2Mbps to less than 10Mbps	5	5	5	4	4
10Mbps or greater	7	7	6	7	7
Speed unknown	6	6	7	6	5
Percent change from previous period⁽²⁾					
Download speed					
64kbps to less than 128kbps	...	-81 to -90	21 to 30	-81 to -90	51 to 60
128kbps to less than 256kbps	...	451 to 500	0 to 10	-71 to -80	-11 to -20
256kbps to less than 512kbps	...	-71 to -80	51 to 60	0 to 10	0 to -10
512kbps to less than 2Mbps	...	151 to 160	0 to 10	250 to 300	-61 to -70
2Mbps to less than 10Mbps	...	-41 to -50	81 to 90	130 to 140	150 to 200
10Mbps or greater	...	more than 500	31 to 40	-90 to -100	101 to 110
Speed unknown	...	-61 to -70	S	S	-11 to -20
Upload speed					
64kbps to less than 128kbps	...	-61 to -70	11 to 20	-81 to -90	-81 to -90
128kbps to less than 256kbps	...	41 to 50	21 to 30	31 to 40	11 to 20
256kbps to less than 512kbps	...	111 to 120	51 to 60	31 to 40	21 to 30
512kbps to less than 2Mbps	...	-11 to -20	-21 to -30	11 to 20	41 to 50
2Mbps to less than 10Mbps	...	-61 to -70	201 to 250	150 to 200	51 to 60
10Mbps or greater	...	81 to 90	31 to 40	200 to 250	-31 to -40
Speed unknown	...	-71 to -80	S	S	90 to 100

(1) 1 is the highest rank with 7 being the lowest.

(2) Percent ranges are used to protect confidentiality.

Symbols:

S suppressed

... not applicable

Table 85

Use of Internet Service Provider Filtering Services
At September 2006 and March 2007

Type of filtering service	Sep 2006	Mar 2007
Number of subscribers using service		
Email content filtering	1,341,700 R	1,440,200
Web content filtering	C	C
Percent of subscribers		
Email content filtering	97.0 R	98.4
Web content filtering	C	C
Percent change from previous period		
Email content filtering	...	7.3
Web content filtering	...	C

Symbols:

R revised

C confidential

... not applicable

Table 86

Filtering Service Offered by Internet Service Providers
At September 2006 and March 2007

Filtering service offered	Sep 2006	Mar 2007
	Percent of ISPs	
Email content filtering		
None	9	5
Free service	63	68
Charged service	12	11
Both free and charged service	15	16
Web content filtering		
None	72	79
Free service	3	5
Charged service	18	11
Both free and charged service	6	5

Note: All cells in this table have been randomly rounded to base 3.

Table 87

Barriers to Internet Service Provider Growth*At six-monthly intervals*

March 2005–March 2007

Barrier	Mar 2005	Sep 2005	Mar 2006	Sep 2006	Mar 2007
	Percent of ISPs				
Strength of competition	73	77	79	72	63
Cost of international bandwidth	45	36	42	42	47
Regulatory environment (telecommunications)	73	59	53	48	42
Access to financing	27	32	37	30	26
Delays in obtaining facilities from backbone supplier	41	23	21	15	26
Ability to attract and/or retain qualified personnel	14	14	16	12	21
Access to markets	14	14	16	15	16
Ability to attract and/or retain experienced personnel	14	14	11	24	16
Cost of dial-up lines	14	18	16	15	11
Other	9	5	11	9	11
Ability to source and use technology	14	5	11	9	11
Did not experience barriers to growth	5	9	0	3	5

Note: All cells in this table have been randomly rounded to base 3.

Table 88

Business Use of the Internet*By country*
2006⁽¹⁾

Country	Have Internet access	Broadband ⁽²⁾	Have own website
	Percent ⁽³⁾		
Iceland	99.2	95.2	75.3
Finland	99.0	88.9	80.0
Switzerland (2005)	98.0	85.0	82.0
Denmark	97.9	82.7	83.4
Japan (2005)	97.6	..	85.6
Austria	97.5	69.5	77.7
Netherlands	96.8	81.7	78.9
Sweden	96.2	88.9	86.3
Korea (2005)	95.9	94.2	56.5
Czech Republic	95.1	69.3	70.0
Canada	94.9	92.2	67.5
Germany	94.7	73.1	73.3
Belgium	94.7	84.5	68.6
New Zealand	94.5	82.0	59.3
France	94.5	86.5	61.3
Ireland ⁽⁴⁾	94.4	60.7	63.7
Norway	94.3	86.1	72.1
Greece	93.7	57.7	60.4
Luxembourg	93.5	76.0	60.4
Slovak Republic	93.5	60.8	61.1
United Kingdom ⁽⁵⁾	93.4	77.4	75.3
Italy	92.9	69.6	56.7
Spain	92.6	87.1	46.5
Australia (2005) ⁽⁶⁾	91.9	70.4	52.5
Mexico (2003)	90.0	45.6	52.5
Poland	88.8	46.4	53.3
Portugal	82.9	65.9	35.0
Hungary	79.9	61.3	42.1

Source: OECD Science, Technology and Industry Scoreboard 2007

(1) 2006 unless otherwise stated.

(2) Most countries define broadband in terms of technology (e.g. ADSL, cable, etc) rather than speed.

(3) As a percentage of businesses with 10 or more employees.

(4) Includes all of NACE 92.

(5) Includes all of NACE 55.

(6) Website includes a presence on another entity's website.

Symbol:

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Table 89

Business ICT Security Problems*By country*2005⁽¹⁾

Country	Computer virus attack	Unauthorised access	Blackmail or threat
	Percent ⁽²⁾		
Australia (2003) ⁽³⁾	50.2	3.7	..
Austria	35.4	2.2	0.1
Belgium	23.4	2.7	0.3
Czech Republic	24.6	2.9	..
Denmark	24.3	4.8	..
Finland	55.4	4.1	..
Germany	21.0	0.7	0.3
Greece	27.0	2.6	0.3
Ireland	38.9	3.5	2.0
Italy	50.4	3.7	0.9
Japan ⁽⁴⁾	65.5	2.8	2.0
Korea	24.9	..	..
Luxembourg	21.8	2.9	0.6
Mexico (2003)	31.2	..	..
Netherlands	21.3	1.5	0.3
New Zealand⁽⁵⁾	17.5	..	..
Norway	22.2	4.0	0.9
Poland	24.6	1.0	0.0
Portugal	12.7	..	..
Slovak Republic	20.4	0.7	0.1
Spain	26.6	2.7	0.3
Sweden	24.8	1.9	0.1
United Kingdom	22.2	2.8	0.1

Source: OECD Science, Technology and Industry Scoreboard 2007

(1) 2005 unless otherwise stated.

(2) As a percentage of businesses with 10 or more employees.

(3) Computer virus attack consists of just viruses.

(4) Defamation, libel, etc. on the web instead of blackmail or threat; data for 2004 instead of 2005.

(5) IT security problems in general.

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Table 90

Business Internet Selling and Purchasing
By country
 2006⁽¹⁾

Country	Selling	Purchasing
	Percent ⁽²⁾	
Australia (2005)	17.2	45.2
Austria	15.4	36.5
Belgium	14.8	15.9
Canada	12.5	61.6
Czech Republic	8.2	16.9
Denmark	33.9	33.9
Finland	13.6	23.1
France	18.4	20.7
Germany	18.1	47.6
Greece	7.3	11.2
Hungary	8.6	10.8
Iceland	22.0	37.6
Ireland	22.7	52.8
Italy	2.8	9.7
Japan (2005)	15.2	20.1
Korea (2005)	7.5	32.5
Luxembourg	11.5	30.3
Mexico (2003)	2.2	2.2
Netherlands	23.3	31.8
New Zealand	36.7	58.8
Norway	27.5	48.8
Poland	9.3	15.6
Portugal	7.1	14.4
Spain	8.4	14.7
Sweden	23.9	44.4
Switzerland (2005)	25.0	57.0
United Kingdom	30.4	50.6

Source: OECD Science, Technology and Industry Scoreboard 2007

(1) 2006 unless otherwise stated.

(2) As a percentage of businesses with 10 or more employees.

Table 91

Household Access to the Internet
By country
2001–2006

Country	Access to the Internet					
	2001	2002	2003	2004	2005	2006
	Percent ⁽¹⁾					
Australia	42.0	46.0	53.0	56.0	60.0	..
Austria	..	33.5	37.4	44.6	46.7	52.3
Belgium	..	..	..	..	50.2	54.0
Canada	49.9	54.5	56.9	59.8	64.3	..
Czech Republic	..	..	14.8	19.4	19.1	29.3
Denmark	59.0	55.6	64.2	69.4	74.9	78.7
Finland	39.5	44.3	47.4	50.9	54.1	64.7
France	18.1	23.0	31.0	33.6	..	40.9
Germany	36.0	46.1	54.1	60.0	61.6	67.1
Greece	..	12.2	16.3	16.5	21.7	23.1
Hungary	..	..	..	14.2	22.1	32.3
Iceland	..	..	..	80.6	84.4	83.0
Ireland	..	..	35.6	39.7	47.2	50.0
Italy	..	33.7	32.1	34.1	38.6	40.0
Japan	..	48.8	53.6	55.8	57.0	60.5
Korea	63.2	70.2	68.8	86.0	92.7	94.0
Luxembourg	..	39.9	45.4	58.6	64.6	70.2
Mexico	6.1	7.4	..	8.7	9.0	10.1
Netherlands	..	58.0	60.5	..	78.3	80.3
New Zealand	37.4	..	..	..	..	64.5
Norway	..	..	60.5	60.1	64.0	68.8
Poland	..	..	..	26.0	30.4	35.9
Portugal	18.0	15.1	21.7	26.2	31.5	35.2
Slovak Republic	..	..	..	23.3	23.0	26.6
Spain	..	..	27.5	33.6	35.5	39.1
Sweden	53.3	..	..	..	72.5	77.4
Switzerland	54.7	61.9	66.4	69.8	73.5	76.8
Turkey	..	..	..	7.0	7.7	..
United Kingdom	40.0	49.7	55.1	55.9	60.2	62.6
United States	50.3	..	54.6	..	..	..

Source: OECD Science, Technology and Industry Scoreboard 2007

(1) Percentage of all households.

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Table 92

Household Use of Computers*By country*
2001–2006

Country	Access to home computers					
	2001	2002	2003	2004	2005	2006
	Percent ⁽¹⁾					
Australia	58.0	61.0	66.0	67.0	70.0	..
Austria	..	49.2	50.8	58.6	63.1	66.8
Belgium	..	..	..	..	..	57.5
Canada	59.8	64.1	66.6	68.7	72.0	..
Czech Republic	..	..	23.8	29.5	30.0	39.0
Denmark	69.6	72.2	78.5	79.3	83.8	84.8
Finland	52.9	54.5	57.4	57.0	64.0	71.1
France	32.4	36.6	45.7	49.8	..	56.4
Germany	53.0	61.0	65.2	68.7	69.9	76.8
Greece	..	25.3	28.7	29.0	32.6	36.7
Hungary	..	..	..	31.9	42.3	49.5
Iceland	..	..	..	85.7	89.3	84.4
Ireland	..	..	42.2	46.3	54.9	58.5
Italy	..	39.9	47.7	47.4	45.7	47.6
Japan	58.0	71.7	78.2	77.5	80.5	..
Korea	76.9	78.6	77.9	77.8	78.9	79.6
Luxembourg	..	52.6	58.0	67.3	74.5	77.1
Mexico	11.6	15.2	..	18.0	18.4	20.5
Netherlands	..	69.0	70.8	0.0	77.9	80.0
New Zealand	46.6	..	62.0	..	..	71.6
Norway	..	..	71.2	71.5	74.2	75.3
Poland	..	..	..	36.1	40.1	45.3
Portugal	39.0	26.8	38.3	41.3	42.5	45.4
Slovak Republic	..	..	..	38.5	46.7	50.1
Spain	..	..	47.1	52.1	54.6	56.9
Sweden	69.2	..	..	..	79.7	82.5
Switzerland	62.2	65.4	68.9	70.6	..	..
Turkey	..	..	..	10.2	12.2	..
United Kingdom	49.0	57.9	63.2	65.3	70.0	71.4
United States	56.2	..	61.8	..	..	..

Source: OECD Science, Technology and Industry Scoreboard 2007

(1) Percentage of all households.

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Table 93 (9.01)

Internet Activities by Individuals
By country
2006

Country	Type of activity ^(1,2)								
	E-mailing	Telephoning over the Internet	Other communication uses	Seeking health information	Purchasing/ordering goods or services	Banking services	Playing / downloading games or music	Job search	Interaction with public authorities
	Percent ⁽³⁾								
Australia (2004)	..	..	..	..	33.5	..	..	..	..
Austria	52.6	7.4	12.7	24.3	23.3	27.2	15.4	8.6	33.0
Belgium	54.4	7.9	18.6	22.5	13.9	28.4	20.0	9.0	30.2
Canada (2005) ^(5,9)	58.6	..	24.6	37.2	29.6	37.4	24.7	19.6	33.6
Czech Republic	37.2	8.8	12.7	10.0	6.9	9.7	12.5	4.3	17.4
Denmark	74.2	13.1	16.6	27.6	30.6	57.2	26.3	20.3	43.2
Finland	67.3	14.2	22.0	43.6	28.9	62.8	33.3	26.5	47.0
France	34.2	4.9	17.5	13.0	18.5	18.1	9.3	6.3	..
Germany	60.2	10.4	26.2	34.2	38.0	31.7	18.3	16.8	32.3
Greece	16.9	1.8	2.9	5.6	3.1	2.5	11.2	4.2	8.6
Hungary	36.9	7.8	21.2	16.6	5.0	8.0	22.4	11.9	16.8
Iceland	77.0	18.2	43.6	40.0	31.4	66.8	34.0	17.4	60.6
Ireland	44.7	5.8	6.4	7.8	21.3	20.6	11.2	6.0	25.7
Italy	29.1	3.3	8.9	12.3	5.4	8.9	10.5	6.2	16.1
Japan (2005) ⁽¹⁰⁾	54.4	..	..	..	39.7	8.8	16.3	7.1	21.7
Korea ⁽⁸⁾	57.8	2.7	29.4	15.1	39.9	26.2	39.7	..	15.5
Luxembourg	64.8	16.3	35.0	26.5	35.4	40.8	26.4	10.9	45.8
Mexico ^(7,12)	8.6	0.5	3.9	2.1	0.9	0.6	1.2	..	1.3
Netherlands	75.9	10.1	29.6	45.0	36.3	58.7	41.6	18.5	51.8
New Zealand⁽⁸⁾	65.4	8.9	17.4	21.0	30.8	40.2	22.9	21.0	32.4
Norway	72.3	13.3	34.1	34.3	46.9	66.5	36.6	21.9	57.5
Poland	27.2	8.0	17.7	10.9	8.8	9.1	16.2	7.2	5.8
Portugal	28.8	5.5	14.9	13.8	4.7	9.8	16.2	5.1	16.5
Slovak Republic	41.6	7.0	20.0	13.6	6.8	12.6	18.5	10.4	32.2
Spain	36.7	6.3	20.1	19.1	10.1	15.1	23.0	..	24.7
Sweden	73.6	8.6	24.8	28.4	39.4	56.9	33.8	24.4	..
Switzerland (2005) ^(4,11)	63.6	..	..	..	31.8	30.5	14.7	20.6	..
United Kingdom	52.8	6.7	13.4	17.9	38.1	27.8	24.5	16.1	..
United States (2003) ⁽⁶⁾	56.1	..	..	..	34.0	18.3	..	12.3	23.3

Source: OECD Science, Technology and Industry Scoreboard 2007

(1) Generally, data from the EU Community Survey on Household Use of ICT, which covers EU countries plus Iceland, Norway and Turkey, relate to the first quarter of the reference year. For the Czech Republic, data relate to the fourth quarter of the reference year.

(2) Individuals aged 16–74 years, except for Australia (18+), Canada (18–74), the Czech Republic (15+), Japan (6+), Korea (7+ until 2001, 6+ afterwards), Mexico (6+), Switzerland (14–74). Data generally refer to Internet use in the last 12 months for non-Eurostat countries and last 3 months for Eurostat countries.

(3) Percentage of all adults.

(4) Private data from *Arbeitsgruppe für Werbemedienforschung* (WEMF AG). Data refers to Internet users aged 14–74 who used the Internet at least once within the last six months.

(5) Data for 2000 to 2003 refer to the percentage of all households with at least one member regularly using the Internet from home. Individual data are available for 2005, data include individuals aged 18–74.

(6) E-mailing includes instant messaging.

(7) Telephoning over the Internet includes videoconferencing; data are for 2004.

(8) Playing/downloading music only.

(9) Playing/downloading games only. Job search data is for 2003. Obtaining information from public authorities' websites.

(10) Playing/downloading music only. Obtaining information from public authorities' websites.

(11) Playing/downloading games only.

(12) Playing/downloading games only. Obtaining information from public authorities' websites.

Table 94

Use of Internet from any Location by Individuals
By country
 2005 and 2006

Country	Access to Internet from any location	
	2005	2006
	Percent ⁽¹⁾	
Australia	70.0	..
Austria	58.0	63.6
Belgium	59.8	64.2
Canada	71.7	..
Czech Republic	35.3	47.9
Denmark	82.7	86.6
Finland	74.5	79.7
France	..	46.9
Germany	68.7	72.2
Greece	24.5	32.3
Hungary	39.0	47.1
Iceland	87.3	89.5
Ireland	41.6	54.8
Italy	35.4	38.0
Japan	74.9	..
Korea	71.3	78.3
Luxembourg	70.4	72.5
Mexico	19.0	20.4
Netherlands	80.8	82.6
New Zealand	..	72.3
Norway	82.0	82.5
Poland	38.8	44.6
Portugal	35.0	38.0
Slovak Republic	55.2	56.1
Spain	47.9	50.4
Sweden	84.8	87.8
Switzerland	76.7	75.7
Turkey	15.5	..
United Kingdom	69.6	68.8
United States (2003) ⁽²⁾	..	63.8

Source: OECD Science, Technology and Industry Scoreboard 2007

(1) Percentage based on individuals aged 16–74 years, except for the Czech Republic (15+), Japan (6+), Korea (6+), Mexico (6+), Switzerland (14–74).

(2) Data is only available for 2003.

Symbol:

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