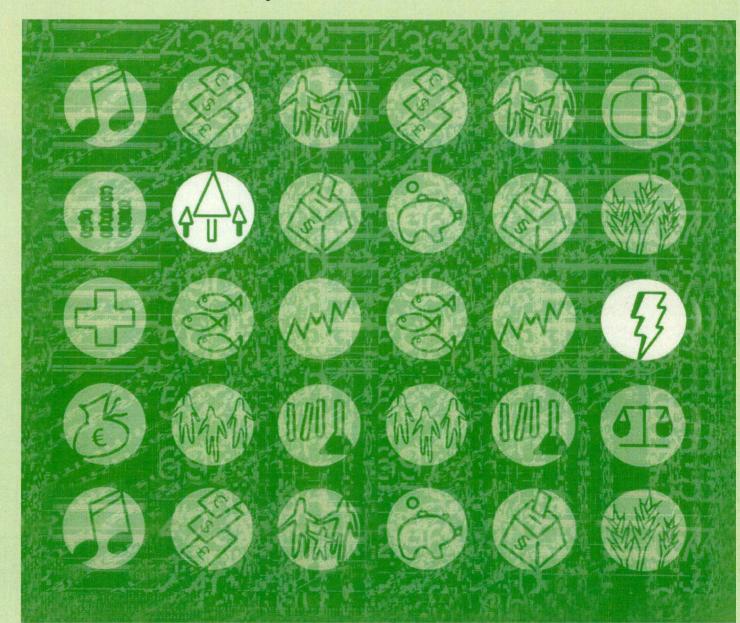


Changes in Internet usage

Results from the survey on ICT usage in households and by individuals 2008





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Tiedustelut – Förfrågningar – Inquiries:

tietoyhteiskunta.info@tilastokeskus.fi

Kansikuva – Pärmbild – Cover photograph: Rurik Mahlberg

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ISSN 1239-3800 = Reviews ISBN 978-952-244-028-0

Multiprint Oy, Helsinki 2009

Foreword

Statistics Finland has been monitoring the use of information and communication technology by the population and households for a long time. Face-to-face interviews for the research project entitled 'The Finns and the Future Information Society' were carried out in 1996, 1999 and 2002. Since 2003, the information has been collected annually by telephone interviews.

The Survey of ICT use is an example of a successful collaboration project. Several different parties were involved in the survey providing financing and as participants in the planning and reporting of the survey through the project steering group. The Ministries of Education, Finance, Justice, Employment and the Economy, Social Affairs and Health, and Transport and Communications, and TeliaSonera Finland, Elisa Corporation, Finnet Focus and Itella Corporation helped finance the 2008 survey.

The study on the use of information and communication technology by the population and households has become established as part of the Finnish statistical system. As of 2009, the national funding will come entirely from Statistics Finland's budget. In the future, partners will participate in the development of the study in an expert group established in 2008.

The Survey of ICT use has also become established as a part of the European Union's statistical system. Between 2004 and 2009, the survey had to be carried out due to a fixed-term regulation. This regulation is being replaced by a new ten year regulation. In Finland, the EU survey accounts for approximately two-thirds of the information content of the Survey of ICT use. The EU participated in the financing of the survey also in 2008.

The report on changes in Internet use describes changes in the use of ICT from various points of view with the help of the results of the 2008 study. The main focus is on investigating how common Internet use is and how Intenet is used.

The report on changes in Internet use is the product of several persons' efforts. The report was edited by Timo Sirkiä, Researcher, and Rauli Kohvakka, Senior Researcher at Statistics Finland. In addition to them, Juha Nurmela, Director of Research and Riitta Hanifi, Researcher, both from Statistics Finland, have also contributed writing to the publication. Chapter seven was written by Marja-Liisa Viherä, Chairman of the Finnish Society for Futures Studies.

Helsinki, August 2009 Riitta Harala Director Social Statistics

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Introduction 1

Statistics Finland has conducted interviews to monitor changes in the use of information and communication technologies in Finland since autumn 1996, initially at three-year intervals and annually since 2002. This report presents key results from the 2008 Survey on ICT use. The results of other studies are also used to some extent in the report.

The report is structured as follows: To begin with, we will discuss the increase in the number of computers and Internet connections in Finnish households during the last three years and the frequency of Internet use, the sites of Internet use and ways of using the Internet in 2008. The following Chapter briefly describes the frequency and purposes of Internet use in EU coun-

tries. After this, survey results on consumers' use of e-banking will be presented. Chapter 5 compares the reading of newspapers with the reading of online newspapers and examines the way in which Internet use has changed reading habits. Chapter 6 concerns Finnish residents' e-participation, particularly from the perspective of web democracy and citizen participation. The following Chapter considers the way in which communication methods change as web communications develop new forms and become more diverse. Finally, the availability of postal and library services in an information society in which services are increasingly available on the Internet will be examined.

1.1 Background, aims and research practice

In 1996 and 1999, the data for a project entitled 'The Finns and the Future Information Society' were collected in extensive home face-to-face interviews on the basis of random samples drawn from the central population register. In 2002, the data were collected in connection with Statistics Finland's Leisure Survey. Since 2003, the data have been collected by telephone interviews. These most recent surveys have been largely based on EU-harmonised items, designed with a view to compiling pan-European information society indicators. The survey also contains national questions compiled jointly with parties interested in the development of the information society. Comparative EU data are available from Eurostat's database; the relevant website is mentioned in the list of sources.

The aim of this research is to produce EU-harmonised data on ICT use in Finnish households and in the Finnish population. The sample survey data are collected each spring in telephone interviews, which have always concerned the population aged 16 to 74, although sometimes younger and older age groups are included as well. Recurring research themes include ownership of ICT appliances by households, the prevalence of computer and Internet use, purposes and sites of Internet use, e-commerce and mobile phone communications. Other prevalent themes include data security and online learning as well as opinions on the information society. Classifications used to describe the results include age group, gender, household size, population group and degree of urbanisation of municipality of residence.

The population for the Survey on ICT use in spring 2008 consisted of people aged 16 and above, with no upper age limit. The interviewees lived at home and represented both the Finnishand Swedish-speaking population in Finland. There were two samples, one of which consisted of persons aged 16 to 74, and the other persons aged over 74. The total sample size was around 4,500 persons. The interviews were carried out at Statistics Finland's telephone interview centre beginning in April 2008. A total of 3,043 acceptable responses were obtained. The non-response rate was 32.8 per cent, including over-coverage. The data collected were weighted to correspond to the whole population in Finland, after taking account of non-response.

2 Changes in Internet use in Finland

2.1 Computers and Internet connections at home

Computers continue to become more common in Finnish homes. In spring 2008, 76 per cent of Finns aged 16 to 74 had access to a computer at home. The proportion rose by two percentage points on the previous year and five percentage points on 2006. Computers are becoming more common to the extent that more and more homes have more than one computer. In 2008, 28 per cent of all households had at least two computers, while in 2006 the proportion was 23 per cent. However, the majority of households, i.e. 48 per cent, still had just one computer.

It is a well-known fact that there are great differences between different age groups in the possibility to use a computer at home. Computers are far more common in the homes of people in younger age groups than in the homes of people in older age groups. Nearly all youths and young adults (persons aged 16 to 24 and 25 to 34, respectively) had a computer at home, but only 64 percent of persons aged 55 to 64 and 36 per cent of persons aged 65 to 74 had a computer at home.

However, the most abrupt change in house-hold ownership of computers is in laptop owner-

ship. In 2008, 43 per cent of homes had a laptop. while in 2007 only 36 per cent of homes had one (only 24 per cent in 2006). The change reflects a transition from desktop computers to laptops: while laptops are increasing in popularity, desktop computers are becoming less common in homes - from 58 per cent to 53 per cent of households from 2006 to 2008. Laptops are purchased for the home to be used in the same way as desktop computers, which is possible as the technical properties of laptops have caught up with those of desktop computers. The prices of laptops have also fallen sufficiently. In most cases, consumers no longer have reason to buy a desktop computer when a smaller device is available to suits their needs as well or at least sufficiently. Laptops undoubtedly add flexibility to computer use with respect to the place of use – a laptop can be used outside the home. A laptop allows users to move from one room to another and to move either nearer to other family members or further away from them. (Table 2.1) Some laptop owners take their laptops wherever they go, and the transition to using a laptop may

Table 2.1
Computer and Internet connection at home 2006–2008

· · · · · ·	Computer	r	· • • • • • • • • • • • • • • • • • • •	Internet o	•	
	% of all h	ouseholds		% of all h		
	2006	2007	2008	2006	2007	2008
Age of respondent						
16–24	86	95	94	79	91	90
25–34	87	90	94	81	86	93
35–44	86	85	90	79	83	86
45–54	78	80	80	71	74	75
55-64	56	63	64	51	56	60
55–74	33	38	36	26	32	33
74-			8			6
I-person household	53	59	58	45	51	53
2-person household	68	73	78	62	68	75
3-person household	91	92	95	86	87	93
4+-person household	97	96	98	92	95	97
Helsinki metropolitan area	75	81	82	70	78	81
Cities with more than 100,000 inhabitants	77	80	78	71	73	75
Semi-urban areas	69	73	75	64	67	70
Rural areas	68	69	72	60	64	68
All 16-74	71	74	76	65	69	72

Households according to possession of desktop and laptop computers in 2006 and 2008

· · · · · · · · · · · · · · · · · · ·						
2006	% of all ho	ouseholds				
	Number of	laptop computers	in household			:
Number of desktop computers in household	0	1	2	3+	yht.	
0	29	11	2	0	42	
1	37	10	2	0	49	
2	4	3	1	0	8	
- 3+	1	1	0	0	2	
Total	71	25	5	0	100	
2000	% of all h		•			. :
2008	% OI all III	nazemoras				
	Number o	f laptop computers	in household			
Number of desktop computers in household	0	1	2	3+	yht.	
0	24	19	3	1	47	
1	29	13	2	1	45	
2	3	2	1	0	6	
3+	1	1	0	0	2	
Total	57	35	6	2	100	

have a significant effect on their computer use. However, the majority of laptops probably mostly sit on the same desk that would have previously been occupied by a desktop computer.

Nevertheless, in 2008 desktop computers were still somewhat more popular than laptops, but this may soon change. A laptop is not acquired just as a secondary computer to complement a desktop computer - in many homes, it is the only computer. 19 per cent of households only had a laptop computer, while 29 per cent only had a desktop computer.

Internet connections are also more and more common in Finnish homes. In spring 2008, 72 per cent of households had an Internet connection. The proportion rose by three percentage points on the previous year and seven percentage

points on 2006. Internet connections are multiplying at approximately the same rate as computers. Nearly all homes with computers are also connected to the Internet. Only two per cent of homes that had a computer did not have an Internet connection in spring 2008.

As is the case with the ability to use a computer, there is a strong link between having an Internet connection at home and a person's age. It is much more common for young people to have an Internet connection at home than it is for older people. In 2008, 90 per cent of persons aged 16 to 24 and 93 per cent of persons aged 25 to 34 had an Internet connection at home, while this was the case for only 33 per cent of persons aged 65 to 74.

Prevalence, frequency and purposes of Internet use 2.2

Internet use is already very prevalent in Finland. In spring 2008, 83 per cent of persons aged 16 to 74 said they had used the Internet during the previous three months. The proportion was up by four percentage points on 2007 (six percentage points on 2006). The younger the age group in question, the higher the proportion of people that have used the Internet. All youths (persons aged 16 to 24) and young adults (persons aged 25 to 34) had used the Internet during the previous three months in spring 2008. In the older age groups, only the group of persons aged 55 to 64

and people older than that used the Internet significantly less frequently. 67 per cent of persons aged 55 to 64 had used the Internet. Internet use has become more prevalent slightly more quickly in the oldest age groups. The proportion of persons aged 55 to 64 who used the Internet during the previous three months rose by eight percentage points between 2006 and 2008. In the youngest age groups, the change was only a couple of percentage points. However, in the youngest age groups, Internet use is already so prevalent that there is hardly any room for increase.

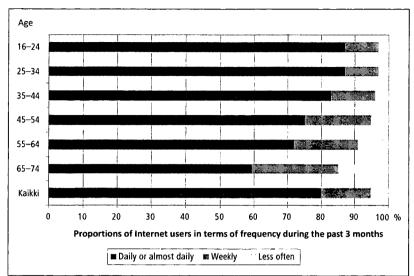


Figure 2.1
Frequency of Internet use by age 2008

Internet use is equally prevalent among women and men. Only among persons aged 65 to 74 was there a slightly greater difference in Internet use between the sexes. (Figure 2.1) 38 per cent of men aged 65 to 74 had used the Internet during the past three months, as compared with 30 per cent of women in the same age group.

In Finland, Internet use has become an everyday thing. People who have an Internet connection go online regularly and often. In spring 2008, no less than 80 per cent of Internet users reported using the Internet daily or almost daily. Also, 15 per cent of Internet users go online every week. Very few Internet users use it rarely. Only five per cent of respondents went on the Internet once a month or less often. Daily use has increased, as in 2006 the proportion of people who use the Internet daily or almost daily was 73 per cent. Daily Internet use is also common at the level of the entire population. The proportion of people that use the Internet daily or almost daily out of all people aged 16 to 74 was 66 per cent in 2008.

The daily nature of Internet use also largely applies to elderly people, among whom Internet use is rarer than among young people. As much as 60 per cent of persons aged 65 to 74 who used the Internet during the previous three months said that they used it on a daily basis, and 26 per cent on a weekly basis. Daily or almost-daily Internet use has clearly become more common in all age groups.

The fact that the Internet is used on a daily basis is actually quite understandable considering the nature of the things the Internet is generally used for. Many of these things are also daily matters that recur at short intervals. In spring 2008,

the most common use for the Internet was e-mail. E-mail was used for private purposes by 90 per cent of those who had used the Internet during the previous three months. E-mail use can easily take on a daily or an almost-daily nature if it is used for both managing social relationships and practical matters. Indeed, as much as 68 per cent of persons who have used the Internet during the previous three months said that they used e-mail on a daily or almost-daily basis. The proportion of people who used e-mail on a weekly basis was 19 per cent, while the proportion of people using e-mail monthly or less often was 13 per cent.

Some of the most common uses for the Internet include taking care of day-to-day tasks, which may have to be taken care of at very short intervals. These tasks include taking care of one's financial affairs, purchases, travel, health care, taking care of affairs with authorities, etc. For example, in spring 2008, 87 per cent of Internet users took care of banking matters over the Internet. 88 per cent sought information on goods and services. The things that many of the mass communication media on the Internet, such as online newspapers and radios offer changes every day, which is why keeping up with them also naturally becomes regular. Reading online newspapers is common in Finland. 69 per cent of persons who had used the Internet during the previous three months read online newspapers during those three months. The most popular online newspapers are online versions of daily newspapers.

By and large, women and men use the Internet equally often for those purposes which were asked about in the Survey on ICT use. There were some differences between the sexes,

Internet uses in 2008, per cent of Internet users by age group

Internet use	% of Int	ernet user	'S				., 1	
	Age							
	16-24	25-34	35-44	45-54	55-64	65-74	Kaikki	
Sending or receiving e-mail	94	96	91	86	82	83	90	
Searching for information about goods and services	89	95	92	86	79	76	88	
E-banking E-banking	89	95	92	86	79	76	87	
Browsing travel and accommodation websites	60	73	73	73	68	68	70	
Reading online newspapers	64	74	73	69	68	58	69	
Searching for information related to illnesses, nutrition or health	58	69	65	60	56	54	62	
Viewing content uploaded by users (e.g. Youtube, Flickr)	91	78	61	45	25	20	58	
Searching for information on websites run by public authorities	46	69	64	54	47	43	56	
Downloading official documents	34	46	42	37	34	26	38	
Searching for information on education and training courses	59	50	46	42	26	16	44	
Listening to Internet radio or watching Internet TV	53	52	40	28	26	25	40	
Listening to or downloading music onto a computer or other device	70	52	35	24	14	18	39	
Reading blogs	51	49	32	30	27	32	38	
Searching for information for study purposes	69	39	37	26	18	12	37	
Instant messaging	78	49	25	17	12	10	35	
Downloading software onto a computer	45	43	32	23	19	13	32	
Looking for work or filing in job applications	61	40	33	21	8	2	32	
Chatting or writing on discussion boards	59	42	23	16	11	11	30	
Registering as user into social web services (e.g. Facebook, MySpace, IRCs)	61	40	13	5	2	1	25	
Buying second hand goods at online auctions	29	33	24	18	12	9	23	
Using browser-based news services (e.g. RSS)	31	28	22	20	14	11	23	
Internet phone calls	18	24	16	15	17	18	18	
Selling goods, products and services at online auctions	22	24	20	12	10	8	17	
Online learning	34	20	14	11 .	8	3	17	
Downloading films and video clips onto a computer	34	26	13	6	2	3	16	
Subscribing regularly to an online publication or news service	9	18	16	15	10	8	14	
Internet gaming	40	12	10	4	5	4	14	
Uploading own content for sharing	20	17	9	7	5	3	11	
Video conferencing	13	12	9	8	6	12	10	
Downloading games onto a computer	21	8	7	5	3	3	9	
Using P2P networks for exchanging films, music etc.	20	13	5	0	0	0	7	
Using podcasting services	9	9	5	2	2	1	5	
Creating or maintaining a personal blog	8	10	3	2	1	2	5	

though. Firstly, men download computer programmes from the Internet more often than women. (Table 2.3) In spring 2008, 42 per cent of men had downloaded computer programmes from the Internet, compared with just 22 per cent of women. Men also download films and videos onto their computers more often than women. Moreover, men watch videos and photographs posted by others more often than women. One difference between the sexes was to do with the information being sought on the Internet. Women seek information on illnesses, nutrition and health care more often than men. 72 per cent of women who had used the Internet during the previous three months had searched for such information during these three months, while the corresponding figure for men was 51

per cent. There would have probably been other differences in the content of searches between the sexes if the content of the information being sought had been itemised in more detail in the survey's questions.

There are major differences in the ways in which people in different age groups use the Internet. Not only do people in the younger age groups use the Internet more often than those in older age groups - they also use it in many more ways. Youths and young adults use the Internet in more ways much more often than people in older age groups. These things and ways of using the Internet include instant messaging, online communities (Facebook etc), writing messages in discussion boards and newsgroups, listening to music on the web or downloading it, viewing

videos and photos of other users, downloading films and videos and playing games on the web. Youths and young adults have, therefore, broadly embraced the Internet's new means of communication. They also use the Internet widely to download videos and music. For some uses, the differences compared with the older age groups

are substantial. 78 per cent of Internet users aged 16 to 24 had used instant messaging during the previous three months, while only 24 per cent of users aged 35 to 44 had used instant messaging, for example.

2.3 Sites of Internet use

At the level of the entire population, the home is the most common site of Internet use. 75 per cent of the population aged 16 to 74 had used the Internet at home in spring 2008, i.e. in practice all those who have access to the Internet at home. The proportion of people who use the Internet at home has grown at the same rate as the proportion of people who have an Internet connection at home. Nearly one third of the population had used the Internet at someone else's home. Using the Internet at someone else's home is most common among youths and young adults. The place where the Internet is used most frequently after the home depends on the person's main activity: school pupils and students use the Internet at their educational establishments, while employed people use it at the workplace. The information concerning site of use includes work and study-related use in addition to private use. In spring 2008, 86 per cent of students and pupils had used the Internet at their educational establishment. Perhaps surprisingly, not all school pupils and students had used the Internet at their educational institution. This is probably mainly due to the fact that some students were working rather than studying at the time of the survey. 17 per cent of students had used the Internet at the workplace. 68 per cent of employed people, i.e. slightly more people than previously, had used the Internet at the workplace.

Internet use in places other than those mentioned above is not very common. In spring 2008, only 19 per cent of Finnish residents had used the Internet somewhere other than at home, at a friend's home, at school or at the workplace. The most common other site of Internet use was the library, where eight per cent

of respondents had used the Internet. Computers with Internet connections are readily available for customers' use at libraries. Many libraries also increasingly offer the possibility of using the Internet with one's own laptop computer through a wireless network connection point. Both these ways of using the Internet are also possible in other public places such as Internet cafés. Four per cent of respondents had used the Internet at an Internet café. Just five per cent of Finnish residents had accessed the Internet with their own computer and a wireless Internet connection point. Thus, mobile Internet use with one's own computer is not very common at the level of the entire population.

As stated at the beginning of this Chapter regarding equipment needed to use the Internet while on the move, laptop computers are already very common. In spring 2008, 43 per cent of households had a laptop computer. In this respect, the stage is set for mainstream use of mobile Internet. However, "ultra-portable" devices, i.e. palmtop computers and mobile phones with full keyboards, which fit into a pocket or handbag, are not yet very common. In spring 2008, only 14 per cent of households possessed one or the other of the above-mentioned devices. A fairly large proportion of people that have a device with mobile Internet capability use the device for browsing the web. Around one in four people that had a laptop computer and an Internet connection at home said that they use their laptop to connect to the Internet through a wireless connection elsewhere than home, a friend's house, the workplace or educational establishment. Correspondingly, 37 per cent of persons that had a palmtop computer used it to browse the Internet

3 Internet use in the EU

Computers and Internet connections are becoming increasingly common in European homes. In certain European countries, such as the Netherlands and the Nordic countries, nearly 90 per cent of homes had a computer and an Internet connection in spring 2008. In these countries, the increase has slowed down, as there is hardly any scope for it. However, in some European countries, the increase is rapid - even over 10 percentage points per year.

The current trend largely evens out the vast differences that exist between European countries in the prevalence of computers and the Internet. As stated above, in European countries, at best nearly 90 per cent of households had a computer and an Internet connection, but in certain countries, the coverage of households remained below 50 percent in spring 2008. Put simply this means that computers and the Internet are more common in Western Europe and the Nordic countries than in Eastern and Southern Europe. The differences between European countries are not disappearing altogether - at least not very quickly - as the increase is slow in some countries in which the Internet and computers are not very common.

Table 3.1 Households with Internet access in 2006-2008

Table 3.2
Persons having used the Internet
during the past three months in
2006-2008

Persons having used the Internet daily or almost daily in 2006-2008

	2006	2007	2008	,	2006	2007	2008		2006	2007	2008
% of households				% of population	aged 16	-74		% of Internet use	rs		
Netherlands	80	83	86	Iceland	88	90		Denmark	79	81	85
Norway	69	78	84	Norway	81	85	89	italy	81	82	84
Sweden	77	79	84	Sweden	86	80	88	Iceland	80	82	
Iceland	83	84		Netherlands	81	84	87	Luxembourg	66	72	81
Denmark	79	78	82	Denmark	83	81	84	Norway	72	77	81
Luxembourg	70	75	80	Finland	77	79	83	Finland	73	78	80
Germany	67	71	75	Luxembourg	71	78	81	Sweden	71	73	78
Finland	65	69	72	United Kingdom	66	72	76	Netherlands	75	79	77
United Kingdom	63	67	71	Germany	69	72	75	Malta	68	75	75
Austria	52	60	69	Austria	61	67	71	Belgium	72	73	74
EU15	54	59	64	Belgium	62	67	69	Hungary	64	72	73
Belgium	54	60	64	France	47	64	68	Lithuania	56	61	72
Ireland	50	57	63	EU15	56	62	66	Slovenia	72	72	72
EU25	51	56	62	Estonia	61	64	66	EU15	62	67	71
France	41	49	62	Slovakia	50	56	66	EU27	61	66	70
EU27	49	54	60	EU25	54	59	64	EU25	61	67	70
Malta	53	54	59	Ireland	51	57	63	France	56	65	70
Slovenia	54	58	59	EU27	52	57	62	Latvia	62	67	70
Slovakia	27	46	58	Latvia	50	55	61	Portugal	62	67	70
Estonia	46	53	58	Hungary	45	52	59	United Kingdom	59	67	70
Latvia	42	51	53	Czech Republic	44	49	58	Germany	57	63	68
Lithuania	35	44	51	Spain	48	52	57	Estonia	66	67	68
Spain	39	45	51	Slovenia	51	53	56	Austria	64	67	68
Hungary	32	38	48	Lithuania	42	49	53	Slovakia	53	58	67
Poland	36	41	48	Malta	38	45	49	Bulgaria	58	64	66
Italy	40	43	47	Poland	40	44	49	Poland	55	61	65
Czech Republic	29	35	46	Italy	36	38	42	Ireland	50	56	62
Portugal	35	40	46	Portugal	36	40	42	Cyprus	56	61	62
Cyprus	37	39	43	Cyprus	34	38	39	Spain	51	57	61
Greece	23	25	31	Greece	29	33	38	Greece	44	56	60
Romania	14	22	30	Bulgaria	24	31	35	Romania	42	49	54
Bulgaria	17	19	25	Romania	21	24	29	Czech Republic	41	50	52

Source: Eurostat, New Cronos 22 February 2009

Due to their frequency, more and more Europeans use computers and Internet connections. In 2008, the proportion of the entire population in the EU that used the Internet during the last three months rose by five percentage points on the previous year to 62 per cent. The change in Internet use is also very rapid in some countries. (Table 3.1, Table 3.2, Table 3.3) In Slovakia, the proportion of Internet users rose by ten percentage points in 2008. On the other hand, in many countries, Internet use is increasing rather slowly. The Internet is most commonly used in Iceland where 90 per cent of the population aged 16 to 74 had used the Internet during the last three months of 2007. The corresponding figure in Finland was 83 per cent.

In Chapter two of this publication, which deals with Internet use in Finland, Internet use was said to already be very much an "everyday

thing". This means that the Internet is used often and regularly. In spring 2008, no less than 80 per cent of Finnish Internet users reported using the Internet daily or almost daily. Of the European countries, Internet use has taken on a daily nature to the greatest extent in Denmark, where 85 per cent of Internet users said that they used it every day. There are also great differences between European countries with respect to the daily nature of Internet use. The lowest proportion of people who use the Internet daily or almost daily is in Serbia and the Czech Republic. In recent years, Internet use has become an everyday thing in most European countries, but not in all of them. The proportion of users who use the Internet daily or almost daily has also increased in certain countries in which Internet connections in households are not very common.

Use of e-banking

The use of e-banking for paving invoices and taking care of other banking-related matters has become more widespread in recent years. In 2008, 87 per cent of Internet users and 72 per cent of all persons aged 18 to 74, i.e. around 2.8 million people, used e-banking. A year earlier, the proportions were 84 and 66 per cent, and in 2004, 50 per cent of the entire population used e-banking. In 1998, less than half a million Finns had used e-banking. E-banking is not very closely tied to age among Internet users since 80 per cent of Internet users aged 60 to 74 said they used e-banking services. However, only four in ten use the Internet in this age group, so the proportion of e-banking customers in the entire age group is around one-third.

Direct debit is a system in which the money to pay an invoice is withdrawn from the customer's account by the bank on the invoice's due date. In 2008, 53 per cent of Finnish residents used direct debit. It was a payment method favoured by the elderly. In 2008, 80 per cent of persons aged 60 to 74 and 43 per cent of persons aged 18 to 40 used direct debit. 81 per cent of persons aged over 74 also used direct debit.

In direct invoicing for consumers, bills are sent directly to the recipient's online bank account for approval and payment. E-invoicing is still a new phenomenon for consumer use, but it has rapidly gained popularity within the space of a few years, as in 2008, 13 per cent of persons aged 18 to 74 used it, whereas in 2004 the proportion was 3 per cent. 16 per cent of users of e-banking used direct invoicing. In 2008, around one in six persons aged 25 to 40 and around one in ten persons aged 55 to 74 used direct invoicing

One factor affecting the rapid increase in use of e-banking is that e-banking is generally considered to be safe. 93 per cent of persons who sometimes use the Internet was of this opinion according to an interview-based survey carried out in 2005. 76 per cent of respondents fully agreed with the statement "Use of e-banking services is safe", and 17 per cent more or less agreed. A slightly lower proportion, 84 per cent, of those aged 60 to 74 agreed with the statement. (Memorandum to the information society programme on ICT use and attitudes towards ICT use in Finland in November 2005.)

Taking care of banking matters over the Internet on behalf of another person was studied in autumn 2005 with the question: "Has someone else taken care of banking matters on your behalf using the Internet since the beginning of August?" The question was asked separately for persons whose households did not have an Internet connection and for persons with access to the Internet at home. Thus, the significance of being able to use the Internet at home with respect to taking care of banking matters on behalf of someone else could be investigated. One in two persons had taken care of banking matters on the behalf of one in four persons who had the

Use of e-banking, methods of paying bills and preferred invoice receipt forms in 2004, 2006, 2007 and 2008, % of persons aged 18-74

			2 400 00 500 00 500		
	2004	2006	2007	2008	
Has used e-banking	50	63	66	72	
Paid bills with direct debit ²⁾	48	52	52	53	
Paid bills via direct invoicing ¹⁾	3	9	9	13	
Received bills or notification of bill on mobile phone			6		
Received bills or notification of bill by letter		93	- 93		
Received bills or notification of bill by e-mail		12	11		
Does not want to receive bills by letter ³⁾		11	12		

¹⁾ bill received electronically in online bank for approval and payment

Data are missing from some years, because the question was not asked.

²⁾ contract for direct debit, bills paid shown in bank statement

³⁾ agrees to some extent or fully with the statement

Internet at home. (Table 4.1) There were no differences in the proportions between the age groups. One in two persons had taken care of banking matters on the behalf of one in six persons who did not have the Internet at home. (Memorandum to the information society programme on ICT use and attitudes towards ICT use in Finland in November 2005.)

Electronic invoicing in banking services does not yet have the approval of customers, as more than four in five respondents would prefer to receive their bills via ordinary mail rather than e-mail. Nearly all those who did not use the Internet or e-banking were sceptical about of e-mail invoicing. (Survey of ICT use 2007.)

5 Reading newspapers and online newspapers

5.1 Introduction

Finns have traditionally been considered to be a population of readers. Finland is, in many respects, a country with strong newspapers and magazines. There are many titles, with high circulation (see Finnish Mass Media 2006, 271). However, reading is something that changes and moves with the times, just like any other cultural behaviour. The changes that take place in reading habits do not take place in a vacuum, instead

they are associated with changes in society and culture (see Eskola 1990, 25). In Finland, the world of media has become increasingly diverse in a short space of time, and the use of computers and the Internet, in particular, has increased significantly in the 2000s. The purpose of this article is to survey the way in which the Internet has become a part of the reading culture of newspapers.

Internet use also increasing among older people 5.2

The number of Internet content services increased rapidly towards the end of the 1990s. Traditional mass media companies also actively developed their products and services to suit the Internet. The most popular Internet sites in Finland, when search engines, etc., are not included, are those maintained by traditional mass media. In 2006 there were approximately 400 publications available on the Internet that could be classified as newspapers. The majority of these were online versions of printed newspapers. Online newspapers often cover only some of the material that is contained in the printed version, but they do offer supplementary material which is not available in the printed version. Some newspapers publish an exact digital replica of their paper version. (Finnish Mass Media 2006. 319-320.)

Even though people in Finland still read papers and magazines a lot, the number of youths who regularly read printed publications, in particular newspapers, has decreased during the 2000s. Instead, almost all youths and young adults currently use ICT. So does the use of ICT, in particular the Internet, affect the reading of printed publications? The use of ICT is also continuing to increase among older people; approximately one third of those aged 50 to 74 do not use the Internet at all whereas in 2002 only one fifth of those aged 55 or over used the Internet. (Nurmela et al. 2006).

5.3 Reading online newspapers is one of the most common reasons for using the Internet

Reading online newspapers is one of the most common reasons for using the Internet. Over half of the entire population aged 16 to 74 read online newspapers. This number has increased significantly, as in 2002 approximately one in ten people aged 15 and over read online newspapers quite regularly. More men than women read on-

line newspapers, though the difference is small. Examined by age group, young adults aged 25 to 34 read online newspapers the most (73 per cent). 64 per cent of those aged 16 to 24 read online newspapers. Persons aged 55 and over read online newspapers less frequently than those in other age groups. (Table 5.1)

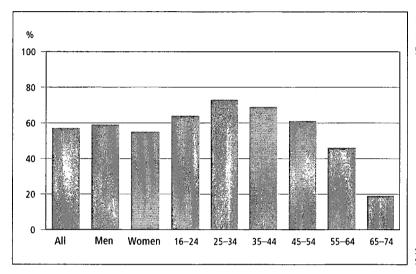


Figure 5.1
Reading of online newspapers by gender and age, persons aged 16–74, %

Source: Survey of ICT use 2008. Statistics Finland.

5.4 The oldest and youngest Internet users read online newspapers the least

Approximately 70 per cent of all Internet users read online newspapers. People living in towns read online newspapers slightly more often than people living in rural areas. When Internet users are considered it is possible to see that the youngest and the oldest people read online newspapers the least. Young adults aged 25 to 44 read online newspapers the most. Almost 70 per cent of middle-aged people, i.e. those aged 45 to 64, who use the Internet read online newspapers. This proportion is larger than the proportion of those aged 16 to 24 who read online newspapers (64 per cent). Over half of Internet users aged 65 to 74 say they read online newspapers.

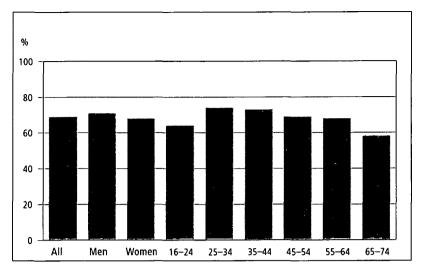
Girls aged 16 to 24 read online newspapers slightly more often than boys of the same age (67 per cent vs. 62 per cent). Men and women in the 65-74 age group who use the Internet read online newspapers equally often. In all other age

groups, men who use the Internet read online newspapers slightly more often than women who use the Internet.

Almost everyone aged 45 and over reads printed newspapers regularly (see e.g. Sauri 2005, 40). However, youths read printed papers less than other age groups, and they also read online newspapers less than other Internet users, not including the oldest age group.

The Survey on ICT use asked respondents whether they read online news instead of reading printed news, newspapers or magazines. Over half of respondents under the age of 45 replied that they at least sometimes read online news instead of reading printed publications. Approximately 70 per cent of those aged 16 to 25 reported doing this. Approximately one third of Internet users aged 65 to 74 replied that they read online publications instead of printed publi-

Figure 5.2 Reading of online newspapers by gender and age, Internet users aged



cations. However, according to the research results, almost all persons aged 65 to 74 regularly read printed newspapers almost every day. However, youths read printed newspapers less than the other age groups, and they also read online newspapers less than other Internet users, not including the oldest age group that participated in the study. (Table 5.2) Therefore, on the basis of this study, there is no clear indication that youths have replaced printed newspapers with online newspapers.

Respondents of the 2002 Leisure Survey were read out a list of hobbies and other activities and

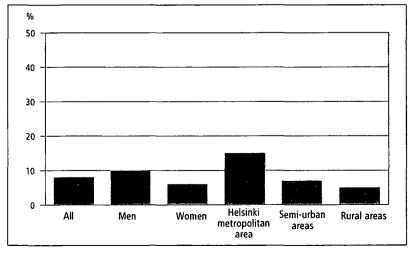
asked to assess which issues they considered to be significant and which they considered to be insignificant. Finnish residents generally had a very positive attitude to written communications. However, this was not exactly the case when it came to youths. While in 1991, 82 per cent of youths aged 15 to 19 considered reading newspapers to be very or rather important, only 68 per cent of youths were of this opinion in 2002. This may be a sign that there is some kind of a decrease in the importance of reading newspapers among youths, and this also seems to include online newspapers.

5.5 Subscribing to online newspapers is most common in the Helsinki metropolitan area

Subscribing to an online newspaper is not very common. Only about one in ten people in the entire population subscribe to an online newspaper. More men than women subscribe to online

newspapers. When examined by age group, those aged 25 to 44 subscribe to online newspapers more often than people in the other age groups: slightly more than one in ten people aged

Figure 5.3 Subscribing to online newspapers by gender and age, persons aged 16-74, %



25 to 44 subscribe to an online newspaper. Those living in the Helsinki metropolitan area subscribe to online newspapers the most, with 15 per cent of all the people who live there subscribing. In contrast, the lowest number of people subscribing to a printed newspaper live in the

Helsinki metropolitan area: over one third of people living in the Helsinki metropolitan area do not subscribe to a printed newspaper. (Figure 5.3

5.6 Online newspapers complement printed newspapers

Reading newspapers and magazines is one of the most popular pastimes of Finnish people. Reading newspapers is considered to be particularly important and almost nine out of ten regularly read a newspaper. In Finland reading newspapers has traditionally been considered a national trait. Newspapers have traditionally been considered to be a media for all that promotes democracy and freedom of speech (see Hujanen 2002, 45). In Finland, the world of media has become increasingly diverse in a short space of time, and the use of computers and the Internet, in particular, has increased significantly. The more traditional mass media companies have also actively developed their products and services to suit the Internet.

Reading online newspapers is one of the most common reasons for using the Internet. Over half of the entire population of those aged 16 to 74 read online newspapers and about 70 per cent of all Internet users. Young adults aged 25 to 44 read online newspapers the most. However, subscribing to online newspapers is not very common. Online newspapers are subscribed to the most in the Helsinki area.

Almost everyone aged 45 and over regularly reads newspapers. However, youths read printed newspapers less than other age groups, and they also read online newspapers less than other

Internet users, not including the oldest age group. Therefore, you could say that regularly reading the newspaper is no longer a lifestyle shared by everyone as was the case 20 years ago (see Hanifi 2007, 11). Erkki Hujanen, who has studied those who do not subscribe to a newspaper, explains that the main factors governing whether someone subscribes to a newspaper or not are age and stage of life. According to him, factors contributing to not subscribing to a newspaper are poor financial resources (unemployed), an unsettled or busy lifestyle (youths, students) and a low level of social integration (unemployed, immigrants). (Hujanen 2002, 56) These groups also contain the highest number of people who do not read papers or magazines. This may mean that the traditional nature and authority of newspapers and magazines as influencers of society has started to crumble a little for some population groups.

It is a rather sweeping statement to say that new media, particularly IT, reduces the use of more conventional printed media. The Survey on ICT use shows no evidence of this. Right now it seems that different forms of media, such as printed and online newspapers have their own place and function in everyday life and that they complement, not replace, one another.

E-participation in Finland 6

Background 6.1

The background to this article is the general worry of decreasing citizen participation. The state authorities actively try to raise citizens' political interest. A new Democracy Unit started its work at the Ministry of Justice in April 2007. The task of the unit is to promote citizen participation. It organises cooperation between ministries in the area of citizen participation, develops research into democracy, is responsible for the preparation of democracy policies and administers the work of the Advisory Board on Civil Society Policy. The Democracy Unit continues the work of the citizen participation policy. It is also in charge of the maintenance of the discussion board Otakantaa.fi and the Kansanvalta.fi portal.

The Advisory Board on Civil Society Policy, whose first term is 1 November 2007 to 31 October 2011, was set up to support the operations of the Democracy Unit. Its duties include: 1) promotion of co-operation and interaction between civic society and the authorities, 2) making motions and presentations and giving statements in order to develop areas that are important for civic society and 3) assessing ministries' NGO strategies and citizen consultation practices.

The Democracy Unit has defined democracy indicators with which the state and development of Finnish democracy are monitored in the following subject areas:

- electoral and party democracy
- participative democracy and social capital
- participation by organisation
- concepts of nationality and of one's participation possibilities
- attitudes towards political institutions and actors
- criteria for informed citizenship.

For the purposes of the Democracy Unit's indicator work, a number of questions were added to the annual Survey on ICT use in Finland. These questions will be analysed in this article. Due to a decrease in voting turnout, concerns over the state of (representative) democracy have spread far and wide and, as a background to empirical analysis, a number of views on democracy and e-participation will be presented.

Perspectives on e-democracy and new forms of participation

In October 2008 at the Verkkodemokratia seminar on web democracy in Tampere, Mika Mannermaa claimed that a regional nationality identity - which has been tied to a country - will change in the future. In the future, people's group identity may form like a chain, for example: resident of Turku - citizen of Finland - European - citizen of the world; or, it may be formed through a culture, profession or hobby. The Internet allows these identities to be born and strengthened virtually without being tied to physical location or region.

According to Mannermaa, the age structure of a population has a substantial effect on forms of democracy. People at later stages of their lives are supporters of representative democracy. For younger generations, other ways of participating are more important than voting. Representative democracy is losing clout as it is a slow way of influencing rapid technological and economic processes and societal changes. Direct societal participation is increasing especially among younger age groups, as they are adept at using new communications technologies.

In the virtual democracy of the future, society is influenced through blogs, Facebook and similar Internet communities, virtual discussion boards, wikis and vote match tests. Participation may become continuous, and even voting, too. Political dialogue will turn into virtual "open electronic town meetings" and non-territorial virtual conferences and elections. Participants can be from all walks of life: youths, women, men, pedestrians, homosexuals, motorists, etc.

Easy organisation and ease of contacting also increase "swarm activism", examples of which include protests in conjunction with major international summits (WTO, G8, etc), boycotts of companies, products and nations, environmental activism, a petition for the Lordi band's anonymity, etc. According to Mannermaa, the increase in virtual participation could lead to society becoming less hierarchical and more citizen-oriented.

At the same seminar on web democracy, Professor Hannu Nieminen analysed e-democracy and e-participation. He started by asking a number of introductory questions:

Does the concept of e-democracy refer primarily to a group of participation projects compiled on a top-down basis that exist first and foremost to serve the administrative needs of the politico-governmental elite or is it an idea that stems from the needs and expectations of citizens that aims for genuine dialogue? Why has the development of interaction between the administration and citizens remained insignificant? Why do citizens not participate, even though several means of participating, enabled by communications technology, have been created?

According to Nieminen, some have claimed that the Internet could automatically offer an opportunity to fix the problems and maladies of Finnish democracy. However, the situation among citizens should be examined realistically, without being weighed down by ideals and principles.

Three kinds of expectations have been imposed on web democracy: a) Increasing interaction and developing consultation procedures; the point of departure is that the Internet would facilitate citizens' participation and provide new possibilities for it; b) Increasing the efficiency of administration, which also has many dimensions, but the central one concerns efficiency and productivity. The belief is that when services are transferred to the Internet, services will be provided more efficiently - i.e. the web will save resources as citizens serve themselves. Nieminen believes that the Internet does not actually save resources at all, but rather constantly adds to the demand for resources, and therefore, the expected improvement in efficiency is not achieved. c) The Internet can be used to develop services for various groups that require special services and for other minority groups, thus promoting the well-being and social aptitude of these groups.

Nieminen states, in line with the ideas of Habermas, that the objectives of web democracy cannot diverge from the objectives of democracy. Democracy can be described as follows:

- a) freedom to express one's opinion: citizens are guaranteed a genuine chance of participating in public debate, i.e. in the formation of opinions and intent, and citizens have access to the best available information for these purposes.
- b) transparency of procedures: preparation of decisions, decision-making and the execution of decisions are based on open, predictable procedures - in other words, public opinion matters when making decisions.

If citizens cannot trust these procedures, they will not participate in the formation of opinions and intent, either. According to Nieminen, the fact that an enormous amount of data and documents are placed on the Internet does not mean that they form a coherent whole or that citizens are able to make use of them. Virtual information poses a major problem. However, the Internet can promote citizens' ability to be active, as it has a number of democratic functions:

- a) information and communication in principle, this is in good shape in Finland, but the problem is loss of information,
- b) services partly in the right direction, but it seems as though resources are needlessly being spent on technical matters,
- c) consultation, consultation of citizens is still sporadic; this would be important especially at the municipal or local level,
- d) promoting dialogue Finland is not the only country that is lacking an administrative culture that would promote this.

According to Nieminen, Finnish residents' belief in their own ability to influence matters has weakened - especially in the late 1990s. "We can talk about a loss of confidence: during the past eight years, from 1996 to 2004, something has clearly happened to radically change the relationship between the citizens of municipalities and decision-makers. Confidence in the efficiency and effectiveness of participation has been lost. An interesting fact is that the people that have lost their faith in the effectiveness of influencing matters are precisely those who have tried to participate and influence matters. However, at the same time, the activeness of participation in local matters has increased during the same period according to the "Kuntalainen - kansalainen" study on residents of municipalities carried out by the Association of Finnish Local and Regional Authorities (Pekkola – Sjöblom 2006).

According to Nieminen, Finnish democracy suffers from a kind of structural malaise that is visible to all but for which there seems to be no remedy in sight. If the main problem is that citizens feel left out, and if the primary threat for national security is the threat of marginalisation, then the Internet is not the solution. Citizens do not participate despite an abundance of possibilities because they do not believe in their political influence, and because the problems are increasingly ones that public authority either cannot or will not solve.

Results of the participation survey for 2004 6.2

Under the auspices of the Association of Finnish Local and Regional Authorities, Pekola-Sjöblom, Helander and Sjöblom studied the attitudes and participation of municipal residents in a total of 46 municipalities in postal surveys carried out in 1996, 2000 and 2004. According to the survey, interest in questions related to municipal policy varies significantly according to individual characteristics and life situation. Respondents rated their competence as members of a municipality as substantially better in 2004 than it was four years earlier. Political interest was tied to having political views in general, and was one of the preconditions for activeness and willingness to participate. The effect of competence as a member of a municipality was less direct. However, both are clearly tied to an individual's political resources, which is expressed in particular as a strong connection to occupational status and education. Both are still affected by the degree to which the municipal resident identifies himself or herself with his or her municipality of residence and other local territories. Identification that strengthens competence as a member of a municipality, in particular, occurs more in small municipalities than larger ones.

The proportion of those who identify with their municipality of residence either fairly much or very much was 48 per cent in 2004, which was a significantly lower than in Norway and Denmark. After Finland and the North, municipality of residence was the next-most important object of identification. Of the territories that were evaluated, the objects of identification that were clearly the weakest were economic regions and the European Union, which just one fifth of respondents regarded as important objects of identification.

The respondents' characteristics affected identification with a municipality: Swedish speakers, original inhabitants living in the centre of the municipality, persons with a high level of training in leadership positions, women and senior citizens identified with their municipality of residence more than others. Of the characteristics of municipalities, the size of the municipality in terms of both number of citizens and area turned out to be factors indicating identification with the municipality. However, a high degree of urbanisation increased identification with a municipality even more strongly than population.

Age had a bearing on participation in the activities of a party. Older age groups participated in municipal party activities. A high level of education and a leading position in society were connected with participation in party activity. This was strongest in small and medium-sized municipalities and weakest in large ones.

Confidence in being able to influence matters by voting increased somewhat between 1996 and 2004. Senior citizens have believed in the significance of voting all along, but attitudes towards voting were becoming more positive than before also among the younger age groups. Highly educated people voted more actively than those with only primary level education.

The connection between using various forms of participation and voting activity was very strong. The forms of participation accumulated increasingly. Those who were active within the framework of representative democracy also took part in more functions than others. The most active group was persons aged 50 to 59.

In 2004, a positive attitude towards efficiency of participation, in particular, was even more strongly tied to an individual's personal resources than it was 10 years earlier. One fact that applies to education and training and occupational status alike is that the differences between the extremes of the scale have grown significantly during the past decade.

One of the most significant results of the Kuntalaistutkimus survey of municipal residents in 2000 regarding participation was that confidence in the effectiveness of channels of participation had decreased significantly, despite the fact that the general activeness of residents of municipalities had increased. According to the 2004 survey, confidence in the effectiveness of participation has continued to decline. Therefore, an increasing number of municipal residents participate without believing in the effectiveness of participating.

Membership of associations, and also organisational activeness to some extent, was largely explained by the respondent's age, with senior members of the working-age population and older age groups participating most actively in organisations. The group that diverged most from these in terms of both number of memberships and active participation in organisations was the youngest age group in the analysis: persons aged 18 to 29. Another central factor explaining participation in associations is training, the increase of which is connected to the number of memberships of associations, and therefore the accumulation of activity in associations. The higher degree of participation by Swedish speakers in association activity compared with speakers of the language spoken by the majority of the population is also noticeable. Participation in associations was lowest in the rural municipalities of Northern Finland that have become depopulated. Urban municipalities fall between these two with respect to association activity.

Joining associations and especially the number of memberships of associations have a very strong connection to citizens' social activeness and impact. The social capital measured by the number of

association memberships correlates very strongly and directly with civic competence, political activeness and participation in volunteer work. Therefore, strong social capital is one of the most important indicators of a vital nationality.

Heli Pessala recently drew up a report entitled "Electronic encounters: social participation by Finns on the Internet," which presents concepts and studies regarding e-democracy in greater depth.

6.3 E-participation in Finland in 2008

Based on the observations on a renewing democracy summarised above, we can conclude that Internet use is a substantial divider when examining the participation and preconditions for participation by municipal citizens or residents. The results of previous studies have shown that age, training, main activity and degree of urbanisation

of place of residence affect the prevalence of computer and Internet use.

A total of around 700,000 Finnish residents aged 16 to 74 do not use the Internet, and there are also 380,000 persons aged over 75 that do not use it. In other words, around one in four persons of voting age are beyond the Internet's reach. This should be reason enough to conclude that partici-

Table 6.1 Frequency of Internet use by different background variables in 2008, %

Background variable	Used during the past 3 months,	Used sometimes,	Never used,	
	%	%	%	
Age group				
16-29	100	0	0	
30-39	97	2	1	
40-49	92	4	4	
50-59	82	4	14	
60-74	43	9	48	
75+	2	2	96 (incl.)	
Age group and education				
16-39 and comprehensive school	99	1	0	
16-39 and secondary-level education	98	2	0	
16-39 and higher education	99	1	0	
40-74 and comprehensive school	48	6	46	
40-74 and secondary-level education	73	6	21	
40-74 and higher education	91	4	5	
Main activity				
Student	100	0	0	
Employed	93	2	5	
Retired	50	9	41	
Unemployed	79	5	16	
Degree of urbanisation				
Helsinki metropolitan area	90	3	7	
Other major cities	83	6	11	
Other cities and towns	82	4	14	
Semi-urban area	84	3	13	
Rural heartland areas	78	4	18	
Sparsely populated rural areas	73	4	23	
All persons aged 16–74	83	3	13	

pation and participatory processes cannot be arranged solely through the Internet. If Internet use at home were set as the criterion, the proportion of people outside the scope of the Internet would rise further. The excluded people would be primarily one-person households with low income and elderly people, but would also include people in two-person households. (Table 6.1)

Table 6.1 shows that Internet use is very common among persons under 50, after which the proportion of Internet users falls drastically. Level

of education has a significant effect on Internet use. Less than half of middle-aged people and pensioners who have only completed primary school use the Internet. Internet use among people living in rural areas is somewhat lower than among people living in cities. If the opinions of pensioners, people with a low level of education and people living in secluded rural areas are required for the preparation of matters, the Internet is not a fair channel for informing these people of these matters or for collecting feedback.

6.4 Political e-participation

How many people use the Internet to follow politics? This is a relevant question when evaluating the Internet's potential to increase citizens' activeness.

The proportion of people who follow politics on the Internet is highest among highly educated Internet users aged under 40. A corresponding

proportion of Internet users living in the Helsinki metropolitan area and aged 30 to 39 follow politics through the Internet. Table 6.2 indicates that low level of education, being older and living in rural areas are factors that reduce the rate of following of politics through the Internet, even if the Internet is used otherwise. (Table 6.2)

Following politics via the Internet during the past 12 months by different background variables, of Internet users in 2008, %)

Background variable	Following politics,	Participating in political discussion,	
	%	%	
Age group			
16-29	38	4	
30-39.	47	4	
40-49	31	3	
50-59	28	2	
60-74	25	4	
75+			
Age group and education			
16-39 and comprehensive school	27	3	
16-39 and secondary-level education	43	4	
16-39 and higher education	54	3	
40-74 and comprehensive school	20	1	
40-74 and secondary-level education	25	3	
40-74 and higher education	36	4	
Main activity			
Student	39	4	
Employed	34	3	
Retired	28	2	
Unemployed	25	0	
Degree of urbanisation			
Helsinki metropolitan area	47	6	
Other major cities	42	4	
Other cities and towns	29	2	
Semi-urban areas	28	3	
Rural heartland areas	29	3	
Sparsely populated rural areas	25	2	
All persons aged 16–74	35	4	
Source: Survey of ICT use 2009 Statistics E	inland		

Over the period of a year, young, highly educated adults living in the Helsinki metropolitan area or in large cities followed politics through the Internet, although it was only around one in two of these people. All in all, around 1.1 million people aged 16 to 74 followed politics through the Internet, i.e. 29 per cent of the population in that age bracket.

When participation is narrowed down further based on one's own activeness, i.e. participating in political discussion, only 110,000 people aged 16 to 74, or four per cent of the population of that age, participated in political discussion through the

Internet during 12 months. Around one in 10 people who follow political discussion on the Internet also participate in the actual discussion. It is possible that the wording of the question caused many respondents to interpret participating in political discussion to mean specifically participating in parties' political discussions.

Regardless of level of education, young adults (persons aged 16 to 39) do not seem to be very interested in participating in politics. There is slightly more interest in the Helsinki metropolitan area than elsewhere.

6.5 Sources of information of people who follow politics on the Internet

The sources of political information are as expected. Young people seek information on politics in online newspapers. Pensioners are interested in matters related to their own municipalities. Large cities have more readers of online newspapers than rural municipalities, where the municipality's web site is the primary source of

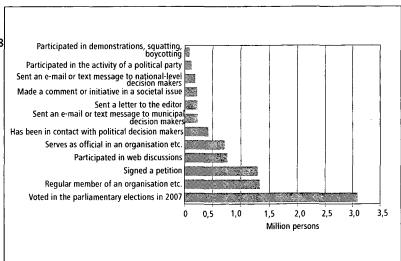
political information. The websites of parties and politicians are visited much less often. As the websites of the ministries contain more information than the Parliament's website, a higher proportion of people naturally visit these websites.

People under the age of 30 said that they follow political preparations and decision-making to

Table 6.3 Use of certain online communication channels by Internet users for following political information in spring 2008, %

.	Online newspapers	Websites of political parties or politicians	Website of Finnish parliament	Websites of Finnish ministries	Website of the municipality of residence
Age group					
16–29	70	36	20	29	38
30–39	58	27	21	30	53
40-49	53	31	27	26	64
50-59	58	29	28	33	71
60-74	46	47	33	24	68
75+					
Age group and education					
16-39 and comprehensive school	66	30	25	23	39
16-39 and secondary-level educati	on 65	33	20	33	42
16–39 and higher education	62	33	20	29	51
40-74 and comprehensive school	63	31	18	17	78
40-74 and secondary-level educati		26	24	23	59
40-74 and higher education	56	38	34	34	70
Main activity					
Student	68	36	28	35	40
Employed	59	31	24	29	57
Retired	52	43	27	21	58
Unemployed	67	24	9	14	45
Degree of urbanisation					
Helsinki metropolitan area	67	36	25	35	44
Other major cities	66	34	28	30	55
Other cities and towns	59	31	21	28	55
Semi-urban areas	57	27	17	23	63
Rural heartland areas	53	31	27	23	60
Sparsely populated rural areas	42	39	30	36	75
All persons aged 16–74	60	33	24	29	54

Figure 6.1 Forms of participation of Finns aged 16-74 during the past 12 months in 2008



the same extent at both local and national level, although the number of followers is clearly lower than in the older age groups (Table 6.4). As age and level of education increase, people become more interested in matters relating to their own municipality than in national politics. Following national politics is more common in the Helsinki metropolitan area than in other areas. Perhaps the fact that national politics is carried out in Helsinki makes most residents of the Helsinki metropolitan area interested in national politics. (Table 6.4) Higher education and being middle

Table 6.4 Use of the Internet for following political preparation and decision-making by Internet users in spring 2008, %

variables	Matters handled by municipal	Matters handled and decided	Matters handled and decided by	and decided by the go-	
新聞 。	hat by the	by councils	the parliament	vernment	ministries
Age group					
16-29	19	18	21	17	18
30-39	40	33	13	11	17
40-49	37	34	10	9	12
50–59	35	33	9	8	10
60–74	32	29	9	8	7
75+					
Age group and education					
16-39 and comprehensive scho	ool 14	12	18	13	13
16-39 and secondary-level educa	ation 29	26	19	16	20
16–39 and higher education	39	33	17	15	18
40-74 and comprehensive scho		26	6	5	6
40-74 and secondary-level educa	ation 30	28	6	5	5
40–74 and higher education	44	40	13	14	17
Main activity					
Student	17	16	23	19	17
Employed	35	32	13	12	16
Retired	29	26	8	6	6
Unemployed	22	20	5	4	5
Degree of urbanisation					
Helsinki metropolitan area	27	24	22	20	21
Other major cities	33	29	18	15	17
Other cities and towns	31	28	11	10	11
Semi-urban areas	36	33	7	7	10
Rural heartland areas	31	28	9	7	11
Sparsely populated rural areas	37	33	8	6	10
All persons aged 16–74	32	29	13	11	14

aged increase interest in municipal preparations and decision-making. We can interpret that interest is slightly greater in the preparation stage of matters than in the decision stage. So far, there are no clear signs of a weakening of local identity as proposed by Mannermaa.

The telephone interviews included questions on the forms of political participation – from voting to protests. According to these questions, Finns were divided as indicated in Figure 6.1. The forms of participation are not mutually exclusive, and respondents may have even engaged in all the forms of participation.

Voting in the 2007 Parliamentary elections is in a category of its own. There are around 1.3 million members of associations or organisations and petition signers. Slightly more than 700,000 association officials and people have participated in Internet discussions. Some 400,000 Finns were in touch with political decision-makers during the one-year period. The numbers of people using other forms of participation remain low. Somewhat more people have taken part in party activity than in protests.

One can get a clearer idea of the general picture by comparing the forms of participation of

Table 6.5a
Forms of participation of Finnish residents by different background variables in spring 2008, %

	Voted in 2006*,a	Member of an association, b	Official of an association, c	Participation in pol tical party activity, d	i-Wrote a letter to the editor, e	In contact with a political decision-
						maker, f
Age group						
16–29	73*					
		25	11	1	5	5
30–39	80	35	19	2	5	9
40–49	88	40	24	4	7	14
50-59	89	37	20	3	6	12
60–74	90	39	20	6	7	15
75+	84	34	8	2	2	8
Age group and education						
16-39 and comprehensive school	60*	15	6	1	4	4
16-39 and secondary-level education	on 76*	32	16	2	6	7
16–39 and higher education	87*	36	19	2	3	10
40-74 and comprehensive school	85	28	13	4	4	9
40-74 and secondary-level educati	-					
on	87	35	20	4	7	13
40-74 and higher education	95	52	29	5	9	18
Main activity						
Student	80	26	14	3	4	8
Employed	85	36	20	3	6	11
Retired	88	34	17	4	6	13
Unemployed	70	25	10	0	9	9
Degree of urbanisation						
Helsinki metropolitan area	87	32	15	1	6	11
Other major cities	86	30	14	3	6	11
Other cities and towns	82	35	19	2	7	9
Semi-urban areas	84	36	21	3	7	11
Rural heartland areas	84	38	21	5	5	13
Sparsely populated rural areas	82	38	24	7	3	13
All persons aged 16–74	83	35	18	3	6	11

^{*} Per cent of persons aged 18 or older in 2007

- a Did you vote in the last parliamentary election (2007)? (persons aged 18 or older were asked this).
- **b** Did you participate in the activity of organisations or associations as a regular member?
- c Did you participate in the activity of organisations or associations as nominated to a task?
- **d** Did you participate in the activity of a political party?
- e Did you send a letter to the editor of a newspaper or a magazine?
- f Did you contact a political decision-maker? Source: A separate section of the Survey of ICT use 2008. Source: Survey of ICT use 2008. Statistics Finland.

the different population groups in Tables 6.5a and 6.5b.

According to Tables 6.5a and 6.5b, it seems as though compared with the Kuntalainen kansalainen study, persons aged 50 to 59 are not the most active participant group, and that persons aged 40 to 49 and 60 to 74 are now more active. Since the target groups are different, care must be taken when interpreting this change. It could be explained by the facts that, during the four years, part of the active population has reached the age of 60 and younger people's more active use of the Internet has increased interest. Young people's voting activity is lower than that of other groups. Only 60 per cent of young people who have only completed primary school voted. The voting rate of unemployed people was also low.

When examining the traditional forms of participation in Table 5a, it is evident that activity still continues to increase along with age and level of education. Participation through association activity is more common in rural areas than in major cities. The forms of participation in Table 6.5b seem to be used more by young people than old people, and are more common in major cities. These differences can be analysed with the theory of diffusion of innovations. It is a

Table 6.5b Forms of participation of Finnish residents by different background variables in spring 2008, %

	Signed a petition, g	Participated in demonstrations etc., h	Participated in web discussions, i	Sent an electronic message to a national-level decision-maker, j	Sent an electronic message to a municipal-level decision-maker, k	Has spoken out on the web, I
Age group						
16-29	42	5	44	4	5	5
30-39	42	2	25	5	7	11
40-49	32	2	15	6	7	5
50-59	31	1	7	5	6	5
60-74	21	1	3	5	5	4
75+	12	0	*	0	0	*
Age group and education						
16-39 and comprehensive school	30	2	42	3	2	5
16-39 and secondary-level education	n 45	5	35	4	6	7
16-39 and higher education	48	2	32	4	7	10
40-74 and comprehensive school	20	1	4	3	3	2
40-74 and secondary-level education	on 27	1	8	4	5	4
40-74 and higher education	35	2	12	9	10	7
Main activity						
Student	41	4	45	4	6	6
Employed	36	2	20	6	7	6
Retired	24	1	8	4	5	4
Unemployed	30	3	16	1	3	2
Degree of urbanisation						
Helsinki metropolitan area	40	5	24	8	5	9
Other major cities	35	4	20	5	8	6
Other cities and towns	35	1	20	3	5	5
Semi-urban areas	33	2	20	4	6	5
Rural heartland areas	26	1	15	4	6	6
Sparsely populated rural areas	26	1	12	5	5	3
All persons aged 16-74	34	2	20	5	6	6

^{*} Per cent of persons aged 18 or older in 2007

Did you sign a petition?

Did you get involved in demonstrations, squatting, boycotts or other similar forms of participation?

Did you participate in web discussions?

Did you send e-mail or text messages to a national-level decision-maker?

Did you send e-mail or text messages to a municipal decision-maker?

Did you speak out or make a public initiative on a societal matter via the Internet (e.g. Otakantaa.fi, contributions to blogs)? Source: Survey of ICT use 2008. Statistics Finland.

Table 6.6 Internet uses in spring 2008 by following politics on the Internet, % (has used the Internet in last 3 months)

Per cent of people engaging in activity	Follows politics on the Internet	
	Yes	No
Jploading self-produced content to any website	35	10
Creating or maintaining a personal blog	15	4
eplacing printed news with online news often	53	21
sing browser-based news services	45	22
sing the online services of public services and public administration often to replace visiting or calling	31	16
eading blogs	70	36
ending instant messages	54	35
earching for information on websites run by public authorities during the past 3 months	81	55
ave you looked at content sent by users on the Internet	81	57
ave you placed bets or gambled on the Internet	25	19
eading online newspapers or news services	87	68
Writing messages on discussion boards during three months	45	43
at least one newspaper subscription at home	72	71

well-known fact that innovations in information and communications technology are adopted first by young people living in cities. Regarding such forms of participation, it would even seem as though the effect that level of education has on increasing activeness is decreasing compared with the older age group. (Table 6.5b, Table 6.6)

The conclusion that new forms of participation that use the Internet reduce the effect of education among young people raises the question of whether the accumulation of activity is decreasing. That is why the next subject of examination will be whether those people who follow politics on the Internet (35 per cent) differ from

Table 6.7 Finnish residents' willingness to vote online in spring 2008, %)

Background variables	Probably	Possibly	Probably not	No	Don't know
Age group					
16–29	54	25	8	13	0
30–39	59	23	6	11	0
40–49	53	21	8	17	1
50-59	44	19	10	27	0
60-74	18	16	11	54	1
75+					•
Age group and education					
16-39 and comprehensive school	47	28	9	16	1
16–39 and secondary-level education	56	23	7	13	0
16–39 and higher education	64	22	7	6	0
40-74 and comprehensive school	23	15	8	52	1
40-74 and secondary-level education	38	19	11	31	1
40–74 and higher education	51	20	8	20	1
Main activity					
Student	51	27	8	13	1
Employed	52	22	8	18	Ö
Retired	26	16	10	48	ĭ
Unemployed	36	20	8	32	Ò
Degree of urbanisation					
Helsinki metropolitan area	51	22	8	18	0
Other major cities	47	23	9	21	ĭ
Other cities and towns	45	19	8	27	ò
Semi-urban areas	47	19	8	26	ŏ
Rural heartland areas	40	21	10	28	1
Sparsely populated rural areas	37	20	iŏ	34	i
People that follow politics on the Internet	60	19	7	14	
People that do not follow politics on the Internet	45	21	9	25	1
All persons aged 16–74	45	21	9	25	1

the Internet users that do not follow politics (65 per cent) as users of various services.

Table 6.6 contains 13 factors that were compared between those who follow politics on the Internet and those who do not. The hypothesis of accumulation of activity receives strong support because, for the first seven activities, the proportion of participation of those who do not follow politics is at most around 50 per cent of the proportion of participation of those who do follow politics. (Table 6.7) In the four following activities, the difference is smaller yet still significant. Only when it comes to writing blogs and subscribing to a newspaper was there no difference between the groups.

It has been suggested that it could be possible to reach those who do not participate through new channels that make use of the Internet but it is not very easy, at least at this stage, because the rates of Internet use of those who do not follow politics are so much lower. The activation channels should probably have a similar user interface to those of the most commonly used Internet

The question, "If it were possible to vote online in the next Parliamentary elections, would you do so?" also featured in the interviews. The distributions of responses are presented in Table 6.7. One in four said with certainty that they would not vote over the Internet. However, two in three people had at least a somewhat positive attitude towards voting on the Internet. Age, low level of education and living in rural areas reduced the willingness to vote on the Internet. If the figures of this table are compared with young people's actual voting activity in 2007 in Table 6.5a, it can be concluded that voting on the Internet would not dramatically increase the number of young people voting, but could raise it somewhat. It is conceivable that Internet voting could be used as an option to complement the current practice of preliminary voting. It is worth mentioning though that of those who do not use the Internet, just 16 per cent would either probably or possibly vote on the Internet.

6.6 Conclusions

Based on the findings of this article, around a third of Internet users follow politics. Interest and activity on the Internet continue to stick to the well-known hypotheses of accumulation of activity, although it may be that Internet use slightly reduces the differences between levels of education, for instance. Comparing people who follow politics on the Internet with other Internet users provided an indication that, also in Internet use, there is a strong accumulation of competence and use for the benefit of people who follow politics. However, this hardly satisfies expectations regarding the Internet's democracy-increasing nature. It may be that the many

ways in which the Internet can be used are only at the first stage of the theory of diffusion of innovations. However, the Internet and current forms of e-participation do not seem to be solutions to the ills of democracy and lack of trust presented by Professor Nieminen. Perhaps participation should be regarded from an altogether new point of view. It has been suggested that those who prepare political decision-making should follow and participate in public Internet discussions. Preparation needs to go to municipal citizens and residents in the same way that Mohamed is said to have gone to the mountain.

7 Will all old forms of communication shift to the Internet?

In previous decades, people kept diaries, guest books, photo albums, weather logs, baby diaries, note pads, lecture notes, scrapbooks, recipe books, sleep diaries, etc. They wrote on toilet walls, sent letters to the editor, posted notices on telephone poles, in newspapers, and on notice boards, and had discussions in sewing clubs, organisations, cafés, pubs, stairways, yards, shops, etc. Now that we have the Internet, these things are referred to as social media. Is this the case? Does the Internet complement the old customs or has it replaced them? Are people divided depending on whether they use the Internet or engage in the old customs? Or do active writers and doers use both while more passive people sit at home alone watching television?

Wikipedia defines social media as follows: "Social media refers to media content on the Internet that is produced or at least shared on a communal basis." In these, users share opinions, views, experiences and points of view. These are services that have been generally grouped under the name Web 2.0 and include wikis, chat

rooms, podcasts and blogs, for example. Social media content is referred to as user-generated content.

According to this definition, none of the older communication methods listed above are cases of social media, as they are not on the Internet. However, some can be produced collectively, such as guest books and cub scouts' illustrated activity reports which are written up by a different scout every time. Some are meant to be shared, such as photo albums, family trees, scrapbooks, etc.

In all products intended for distribution, opinions, views, experiences and viewpoints are exchanged. Are they shared though? If sharing means commenting, comments are not placed directly on the product in the old communication methods, but when people look at them together, reactions and experiences are shared, possibly even to a greater extent. I would even say that in the past, a reading experience could often be more social than commenting on the Internet.

7.1 From personal to shared with others

Previously, jointly produced content was produced manually by writing in a book or notebook, gluing photos and drawing pictures. Many of these creations have probably remained in their creators' bookshelves. These days, keeping a scrapbook is called scrapbooking, if done by hand in a book, and e-scrapbooking if the scrapbook is shared on the Internet. Various scrapbooking products can be purchased on the Internet, and so can baby books, etc.

In the computer age part of this creation process has turned into web pages that are made on a computer and easily shared. However, shelf life is not assured. In 50 years, will it still be possible to view any of the creations produced with today's social media on the Internet? Will they still be viewable even in five years when programmes and servers have changed? One way to improve their shelf life is to print and collect the most important pages.

Photo albums have been in existence as long as photographs, i.e. well over 100 years. Photos are

increasingly taken with digital cameras and camera-equipped mobile phones. Mobile phones can be used to send a picture to another mobile phone or to a website. An album of photos taken with a mobile phone can be collected on a website.

In this article, I will examine the various ways of using the Internet by age group in proportion to the entire population. In my opinion, this key indicator illustrates the significance of the method of use with respect to the entire population. Most of the tables examine whether the respondent has used Internet functions during the previous three months, so in that sense the figures may give the impression of greater use than is actually the case.

Men and women aged 25 to 34 sent the most pictures from mobile phones, men slightly more than women. Among persons under 24, women sent more pictures than men, which was also the case for persons aged 65 to 74, though in the latter group, only around six per cent sent pictures.

Persons who have sent photos or video clips with a mobile phone during the past three months, per cent of persons aged 16-74 in spring 2008

	Men	Women	All	
16-24	36	38	37	
25-34	51	47	49	
25–34 34–44	42	34	39	
45-54	24	20	22	
55-64	16	15	15	
55–64 65–74	4	6	5	
Total	30	27	29	

Table 7.2 Persons who have bought photographic products or services on the Internet during the past 12 months, per cent of persons aged 16-74 in spring 2008

	Men	Women	All	
16-24	10	17	13	
25-34	26	29	28	
34-44	18	20	19	
45-54	15	12	13	
55-64	6	6	6	
16-24 25-34 34-44 45-54 55-64 65-74	3	1	2	
Total	14	14	14	

Source: Survey of ICT use 2008. Statistics Finland.

For the sake of comparison, let's see how many people have bought computer programs and games on the Internet:

Persons who have bought computer programs and games on the Internet during the past 12 months, per cent of persons aged 16-74 in spring 2008

	Men	Women	All	*
16-24	24	6	16	
2534	23	10	16	
34-44	17	10	14	
45-54	11	6	9	
55-64	3	1	2	
16–24 25–34 34–44 45–54 55–64 65–74	2	1	1	
Total	14	6	10	

Source: Survey of ICT use 2008. Statistics Finland.

As mentioned before, taking photographs and looking at them together is nothing new. The increase in popularity of digital cameras has increased the volume of photos taken, and people's computers are often full of photos. Photos are also shared on the Internet and albums are made, either independently or with the help of a photographic studio.

For the sake of comparison, let's see how many people have bought computer programs and games on the Internet.

In all age groups, it is equally common for men and women to buy photographic products and services. Men and women in the older age groups still very rarely buy photographic products. They may use their favourite photographic studio or have pictures on a digital camera printed so they can be placed in an album, or even have ready albums made. Sending pictures with a mobile phone is much more common than using Internet picture services. There are no data on sending photos as e-mail attachments. Internet galleries are included in the figures on content production in Table 7.17. A total of 9 per cent of persons aged 16 to 74 have uploaded images, text and videos, which indicates that sharing pictures with everyone is not very common. Photographs may be considered such a personal matter that people prefer to keep them on

their computers or send them directly to another person's mobile phone or e-mail.

A fact that supports preconceptions is that the differences between men and women are much greater when it comes to purchasing computer programmes and games than with photographic products and services. The largest group of computer program and game buyers is men under the age of 24. However, only a quarter of these have bought them on the Internet. Among persons over the age of 45, less than 10 per cent buy computer programmes and games on the Internet, and only around 5 per cent of women do so. These figures include utilities.

Being reachable 7.2

It is necessary to use the Internet almost every day to participate in social media requires. How is this use distributed by gender and age?

Although the figures for use seem high, they also reveal that nearly one in three persons aged 16 to 74 does not use the Internet on an almost daily basis and 80 per cent of persons aged 65 to 74 do not use the Internet on an almost daily basis. Only 2 per cent of persons aged above 74 used the Internet during the previous three months, and they used the Internet at home.

One reason for not using the Internet may be a lack of resources required for communication: there is no Internet connection or the user cannot or does not want to use the Internet. The following table shows that the percentage of house-

Table 7.4 Persons who use the Internet daily or almost daily, per cent of persons aged 16-74 in spring 2008

	Men	Women	All	
16-24	85	91	87	
25-34	84	88	86	
34-44	80	78	79	
45-54	65	67	66	
45–54 55–64	51	47	49	
65–74	27	14	20	
Total	68	65	66	

Source: Survey of ICT use 2008. Statistics Finland.

Appliances seem too expensive (no Internet connection). Skills are deemed to be insufficient (lack of skill), Internet does not seem necessary (lack of motivation)

	No Internet connection	Lack of skill	Lack of motivation
16-44	41	21	42
45-54	37	47	66
55-64	35	52	73
65-74	47	67	74
Total	40	51	67

Source: Survey of ICT use 2008. Statistics Finland.

E-mail use during past three months, per cent of persons aged 16-74 in spring 2008

	Men	Women	All	
16-24	92	96	94	
25-34	93	96	95	
34-44	82	91	86	
34–44 45–54 55–64	73	77	75	
5564	59	52	55	
65-74	32	25	28	
Total	74	74	74	

Table 7.7 Persons who use e-mail daily, per cent of persons aged 16-74 in spring 2008

	Men	Women	All	
16-24	64	74	68	
25-34	73	82	77	
34-44	63	73	68	
45-54	48	59	53	
55-64	36	33	34	
65-74	15	8	11	
Total	52	56	54	

Table 7.8 Internet calls made during past three months, per cent of persons aged 16-74 in spring 2008

	Men	<u>Women</u>	All
16-24	18	17	18
25-34	21	27	24
34-44	16	14	15
45-54	13	14	13
55-64	13	10	11
65–74	5	7	6
Total	15	15	14

Source: Survey of ICT use 2008. Statistics Finland.

holds with no Internet connection agree or more or less agree that the equipment is too expensive, they cannot use the equipment properly or they do not need the Internet.

In all the age groups, lack of motivation seems to be clearly the biggest reason for not getting an Internet connection at home. For persons under the age of 44, the expensiveness of equipment is an almost equally important reason. However, younger people do not consider inability as a reason so often (one fifth), whereas in the eldest age group, inability plays a bigger part than excessive price. All in all, price is the least important reason for not getting an Internet connection at

In the times before the Internet, letters and telephone calls were the means of personal communication. On the Internet, e-mail and Internet calls correspond to these.

Over 90 per cent of women under 44 and men under 34 can already be reached by e-mail. However, people often say that young people no longer read their e-mails, even if they have e-mail. This probably holds true better for school pupils - students and employed persons are likely to check their e-mails more often than school pupils as their other activities are more dependent on e-mail. If e-mail is complemented by text messaging, almost all young people should be within reach. However, nearly half of persons aged over 55 do not even use e-mail. This causes problems for associations and organisations because notifications also have to be sent in the traditional way.

Daily e-mail use ensures that recipients can be reached this way. Young adult women are the most ardent users of e-mail. However, among the population aged 16 to 24, around 60 per cent of boys and 70 per cent of girls can be reached daily by e-mail. If the claim regarding the change in behaviour of pupils is true, persons aged 16 to 18 are rather difficult to reach by e-mail. Half of Finns on average can be reached by e-mail.

The main reason for making Internet phone calls is probably their low cost. If a person already has an Internet connection that is paid for on a monthly basis, there is no additional cost for Internet calls to another Internet address. However, in order to make an Internet phone call the person you want to call also has to have his or her Internet connection open at the time of the call. Young women aged 25 to 34 make Internet phone calls the most, with as many as a quarter having made Internet calls. The high percentage of persons aged 65 to 74 using this form of Internet use compared with other Internet use is

Table 7.9 Video or Internet calls made during past three months, per cent of persons aged 16-74 in spring 2008

	Men	Women	All	
16–24 25–34 34–44 45–54 55–64 65–74	13	13	13	
25-34	10	13	11	
34-44	9	7	8	
45-54	8	6	7	
55-64	6	3	4	
65-74	3	5	4	
Total	8	8	8	

Table 7.10 Sending of instant messages during past three months, per cent of persons aged 16-74 in spring 2008

1.7	Men	Women	All	
16-24	13	13	13	
25-34	10	13	11	
34-44	9	7	8	
45-54	8	6	7	
55-64	6	3	4	
16–24 25–34 34–44 45–54 55–64 65–74	3	5	4	
Total	8	8	8	

Source: Survey of ICT use 2008. Statistics Finland.

probably also explained by the low cost. However, less than 15 per cent of all persons aged 16 to 74 is not a very large number of users, so Internet calls have not yet broken through or replaced other telephone services.

Video calls are a novelty that would be expensive to implement without the Internet (except with new mobile phones). I recall my first video call at a communications camp for deaf people in 1989. It was great to see that deaf people could communicate with each other using sign language via video phones despite the slightly grainy and jerky picture.

Based on the figures of Table 7.9, it is impossible to tell whether calls included a video link.

men and 24-year-old 34-year-olds make Internet and video calls most often, 13 per cent of these had made such a call. A surprisingly large proportion - almost 5 per cent - of women aged above 65 had made video calls. Grandchildren may play a part in this.

Equivalents can be found for e-mails and calls from the times before the Internet. Instant messaging was used at least in school: all kinds of notes would get passed around. However, the Internet has taken this practice to an entirely different level - people can be reached at a distance and in real time. However, instant messaging also replaces the notes that used to be passed around, as instant messages are also sent between people in the same place. Instant messaging is used in the different groups as follows:

In the younger age groups, instant messaging increased, with three in four under 24-year-olds using instant messaging. How does the remaining quarter get information, then? Half of persons aged 25 to 34 also use instant messaging, half do not. For persons over 65, sending instant messages is a rarity and even video calls are more common than simple instant messaging. Whether messages are sent between two people or in groups was not specified in the question. If the communication is between two people, it can be thought to replace a telephone call, e-mail or a passed note. If the communication takes place in a group, we can already speak of social interaction. My informant told me that he/she can hold several conversations with several people at the same time via instant messaging, and sometimes also group discussions among friends. The data do not reveal which is more common. Based on my own observations and discussions among friends, separate conversations are more common. Having separate conversations with numerous people at the same time was quite difficult before the Internet.

Participating in discussions, implementing freedom of speech 7.3

Discussion boards, newsgroups and chat rooms are things that did not really exist before the Internet. Few people who write in to newspapers have had their letters to the editor printed, as the letters always have to be worthy of publishing newspapers had and continue to have their own gatekeepers.

In discussion boards, the voice of youths and young adults can be heard. Young men are most active in these discussions. This can be explained by activity on information technology-related pages. Discussion boards cannot be said to represent the opinions of persons of over 45 years, and hardly even those of persons aged above 34, let alone older people. It should not come as a surprise that the voice of over 65-year-old women cannot be heard here, either. In fact, I believe that they could be heard better through co-operation: a matter is discussed together first, then a considered opinion is jointly placed on the discussion board.

Discussion boards usually deal with topics that have been suggested by an active person, and other persons' opinions have to be taken into account in discussions. Blogs (diaries, columns, pamphlets), on the other hand, contain text on a

subject selected by the author and his or her own opinions or thoughts. Outside the Internet, blogs have their counterparts in diaries, columns, letters to the editor, unpublished aphorisms, etc. Of these, diaries were not and are often still not intended for other people, and are often even kept locked. The Internet has brought along with it a new phenomenon: even the most closely guarded secrets may be distributed for all to see. This would seem to be common especially among young people's web diaries. Opinions and comments, on the other hand, have previously been intended to be public, but have often lacked a forum, with the possible exception of notice boards. In the numbers of blog writers, these different uses become mixed - maybe age distribution can give some indication of what is in question.

Young girls are the most active blog writers. Their blogs are usually diaries chronicling their own lives. The equivalent of bygone years can be found in many women's homes in diaries written during childhood. I, for one, used to keep a diary, and although I kept it locked, I only wrote things that others would possibly be allowed to read. I kept my deepest secrets to myself. Did I want

Table 7.11 Discussion in groups, newsgroups and fora during past three months, per cent of persons aged 16-74 in spring 2008

	Men	Women	All	
16-24	64	51	59	
25-34	43	41	42	
34-44	27	18	22	
45-54	13	14	14	
55-64	8	7	8	
65–74	5	3	4	
Total	28	22	25	

Source: Survey of ICT use 2008. Statistics Finland.

Table 7.12 Persons who have used the Internet to create or maintain their own blog during the past three months, per cent of persons aged 16-74 in spring 2008

	Men	Women	All	
16-24	3	14	8	
25-34	8	11	10	
34-44	3	3	3	
45-54	2	2	2	
55-64	2	0	1	
16–24 25–34 34–44 45–54 55–64 65–74	1	1	1	
Total	3	5	4	

Table 7.13
Persons who have sent a letter to the editor during the past 12 months, per cent of persons aged 16–74 in spring 2008

	Men	Women	All	
16-24 25-34 34-44 45-54 55-64 65-74	4	7	5	
25-34	5	3	4	
34-44	8	7	7	
45-54	6	5	5	
55~64	11	4	7	
65–74	10	6	7	
Total	7	5	6	

Source: Survey of ICT use 2008. Statistics Finland.

Table 7.14
Persons who have read blogs during the past three months, per cent of persons aged 16–74 in spring 2008

	Men	Women	All	
16-24	49	53	51	
25-34	48	49	48	
34-44	29	33	31	
45-54	27	25	26	
55-64	18	18	18	
65–74	12	10	11	
Total	31	31	31	

Source: Survey of ICT use 2008. Statistics Finland.

others to read my diary back then? No, but I was afraid it might happen. The difference between old-fashioned diaries and web diaries is clear: one hopes that others will read the web diary. Are friends the only people that read them? Keeping blogs does not appear to be as widespread as researchers and the media often seem to assume.

The aim of writing letters to the editor is to gain publicity and, consequently, to influence society.

Although only part of blog posts correspond to letters to the editor, the number of people who write letters to the editor significantly exceeds the number of blog writers. In line with expectations, men aged 55 to 64 are the most en-

thusiastic writers of letters to the editor, but young women are also surprisingly avid writers of these. The Internet has not taken them all!

Communication always involves two parties: the sender and the receiver(s). This applies also to blogs. The age distributions of blog writers and readers are similar, and blogs written by young people are probably read by young people and those written by older people read by older people. However, as boys read more than girls in relative terms, perhaps they also read girls' diaries, scrapbooks, etc? This is speculation, though. With respect to reading blogs and writing them, too, different kinds of content are behind the same key figures.

7.4 The Internet – also a form of entertainment

Let's compare reading blogs on the Internet to watching Internet television and listening to Internet radio. Both methods of using the Internet are very common. It looks as though, despite much talk of social media, the Internet is also used just as much for watching television and listening to the radio.

Playing online games with others is a way for young men to communicate with each other, and

no less than 55 per cent of men aged 16 to 24 have played online games. Girls do not seem to be nearly as interested in playing online games, with less than 20 per cent having played them with others on the Internet. Men aged 25 to 34 also fall in the same category, while other groups remain at 10 per cent or significantly less. Over 45-year-olds are not interested in online games. Is it the case that playing games does not con-

Persons who have watched television and listened to the radio on the Internet during the past three months, per cent of persons aged 16-74 in spring 2008

	Men	Women	All	
16-24	45	52	53	
25-34	56	48	52	
34-44	43	32	38	
45-54	30	19	24	
55-64	17	19	18	
65-74	11	6	8	
Total	36	29	32	

Source: Survey of ICT use 2008. Statistics Finland

Table 7.16 Persons who have played games with others on the Internet during the past three months, per cent of persons aged 16-74 in spring 2008

1 * *	Men	Women	All	a managangan se
16-24	56	18	40	
25-34	17	7	12	
34-44	11	8	9	
45-54	3	3	3	
55-64	3	3	3	
16-24 25-34 34-44 45-54 55-64 65-74	2	1	1	
Total	16	7	11	

Source: Survey of ICT use 2008. Statistics Finland.

tinue from one stage of life to another but is popular particularly among young people? Recently, playing board games has recently become very popular even among young "nerds", too. Could this be a weak (or possibly even strong?) indication that the web is losing its charm at least as a

place for spending leisure time? This indication is also strengthened by the fact that the Makuuni video rental shop has started selling the most popular board games.

7.5 Putting user-generated content into circulation

According to the definition, social media is placing self-produced content on the Internet with the objective of the maximum number of people seeing it. Blogs and diaries are not necessarily created for a wide audience, as opposed to YouTube, where videos are placed for wide-scale distribution. However, personal videos are shared via personal websites, as attachments, etc.

Once more, young men are the most avid at uploading content on sites, though only less than a quarter of them have done so. In the light of these figures, the Internet does not yet contain content produced by everyone, let alone persons over the age of 65. This may be caused by a combination of inability and modesty: people feel that content produced by themselves does not have a wider significance. Protection of privacy in the distribution of pictures, for example, may also be an obstacle to distributing content. Could

it be possible to share content created by older persons creating something in a group? In this case, the value and significance of content would be evaluated already during the creation process.

Do people look at content created by other people? Young people are the most active viewers of other people's content, and among men, this also includes persons aged 25 to 34. Over half of 45 year olds have not viewed content produced by others. In the oldest age group, more than 90 per cent of respondents have not viewed content produced by others.

Looking at banks' figures of use, at a glance it would seem as though everyone is already using e-banking. However, upon closer inspection, we find that nearly half of persons aged 55 to 64 do not use the Internet for banking purposes, and only one in four persons aged 65 to 74 uses it for banking purposes.

Table 7.17 Persons who have uploaded user-generated content (text, images, videos, music etc.) for distribution to others during the past three months, per cent of persons aged 16-74 in spring 2008

and the second s			the state of the s	
	Men	Women	All .	
16-24	24	15	. 20	
25-34	19	14	16	
3444	8	9	9	
45-54	6	7	6	
55-64	2	5	3	
65-74	1	1	1	
Total	10	8	9	

Source: Survey of ICT use 2008. Statistics Finland.

Table 7.18 Persons who have looked at content produced by others during the past three months including YouTube and Flickr, per cent of persons aged 16-74 in spring 2008

	Men	Women	Áll	
16-24	94	86	91	
25-34	89	67	78	
3444	66	49	58	
45–54 55–64	43	30	36	
55-64	21	13	17	
65–74	9	5	7	
Total	56	41	48	

Source: Survey of ICT use 2008. Statistics Finland.

For the sake of comparison, let's see how many people have used e-banking services:

Persons who have used the Internet for taking care of banking matters including e-banking during the past three months, per cent of persons aged 16-74 in spring 2008

	CONTRACTOR OF THE CONTRACTOR O		Market Co.	
	Men	Women	All	
16–24 25–34 34–44 45–54 55–64 65–74	75	78	76	
25-34	96	97	96	
34-44	86	87	87	
45-54	77	76	77	
55-64	56	54	55	
65–74	30	21	26	
Total	73	71	72	

Source: Survey of ICT use 2008. Statistics Finland.

How do the rest take care of their financial affairs? 81 per cent of persons aged over 74 pay their invoices by direct debit. The low proportion of three in four for the youngest age group is explained by the fact that school-aged children may not even have a bank account. However, the popularity of Internet banking indicates that neither access to the Internet nor ability would appear to be an obstacle to participating in discussion boards, among other things. Thus, it is more a question of motivation.

Fora for social interaction 7.6

Mari Hatakka, researcher of folklore studies has written about Facebook as a modern-day friend book. She adds that, to a researcher of traditions, Facebook brings to mind the girls' tradition of notebooks. poetry Salminen-Nikander draws a comparison between Facebook and a modern-day version of an adult's book of memoirs.

As its name indicates, Facebook is a medium shared by people who know and recognise each other. In Facebook, people appear under their own name. Someone may pretend to be Donald Duck, for instance, but will anyone accept this person as their friend?

In her master's thesis for the University of Tampere entitled "MySpace and Facebook as structural elements of society", Piritta Pyykkönen says that MySpace is a used predominantly by vouths and Facebook by older and more highly educated people. Not a very large proportion of the Finnish population belongs in either environment, but women do slightly more often than men. Is Facebook an echo of a book of memoirs after all? In fact, Facebook is much more than a book of memoirs. Facebook cannot be said to be very communal, but rather a network that con-

tains various communities, with various groups as one possibility. In addition to networking, Facebook is a place to exert influence that has been discovered by various organisations and politicians according to Mari Hatakka. Unlike someone's memoirs, Facebook lives in the now of online life. Will it still be possible to find Facebook pages after decades in the way that a book of memoirs can still be found after half a century? Moreover, can politicians reach the vast majority of their supporters through Facebook?

Finally, let's compare general activeness in society with the figures on belonging to associations and organisations that describe face-to-face social media:

Participation in associations and organisations is divided surprisingly evenly: people from all age groups participate. For men, the focus is in the older age groups more than for women. In light of these figures, it would seem as though investing in participating in the arenas of social media through associations and organisations is justified. Through social media, more and more voices can be heard and made part of the information society.

Table 7.20 Persons who have used social web services (MySpace, Facebook, IRCs, etc.) during the past three months, per cent of persons aged 16-74 in spring 2008

	m - r - r - r	* ****	The same of the sa	A
-	Men	Women	All	:
16-24	31	41	35	
25-34	17	31	24	
34-44	8	7	7	
4554	3	6	4	
55-64	1	2	1	
16–24 25–34 34–44 45–54 55–64 65–74	0	1	0	
Total	10	14	12	

Source: Survey of ICT use 2008. Statistics Finland.

Persons who have participated in the activities of associations and organisations during the past 12 months

	Men	Women	All Mark Mark
16-24	18	25	21
25-34	36	31	33
34-44	35	39	37
45-54	39	38	38
55-64	40	34	37
16-24 25-34 34-44 45-54 55-64 65-74	46	38	42
Total	35	34	35

Source: Survey of ICT use 2008. Statistics Finland.

7.7 Conclusions

Looking at the preceding sections, the impression arises that on the Internet, social media portals, in particular, are places where some talk, few reply and most people read or at least visit the sites. Even in Wikipedia's definition of social media it is said that users share (rather than exchange/form/develop) opinions, views, experiences, etc. together. Thus, the definition holds true in the sense that it is more a question of sharing one's thoughts, videos and pictures than exchanging them. An image of a market place with all kinds of performers and public speakers comes to mind. People will stop and listen to some, but pass by others without paying any attention to them. At this market place, some (the majority) of the people have a paper bag over their heads and they are shouting insults at each other through a voice disguiser, says Mikko-Pekka Heikkinen in his column in the Helsingin Sanomat newspaper. It is possible that blogs and YouTube, for example, are based on the need to be seen and heard without any greater desire to affect anything or anyone in particular.

As the sharing often takes place anonymously, even less genuine interaction takes place.

Facebook and other media, where people register with their own name and picture, are good in the sense that there, people know who they are with. These may be compared with a cocktail party, street or other random get-together. Always depending on the company and the situation, people either talk about matters affecting the world or engage in small talk. These meetings are by no means insignificant.

There have always been different places to meet - saunas, beer drinking groups, associations, hobby groups, sandpits, workplace coffee tables, etc., and people of different ages have always communicated differently. How does the Internet break this pattern when I, for example, can read about what my grandchildren are doing on Facebook? Will the arrival of parents drive them away? Or will they form closed groups that are strictly off limits for parents?

If we look at the social media from the point of view of basic human needs being organised, being part of something and being active, on the one hand, the Internet and its various services may help in satisfying all of these, but on the other hand, it may also be that these hamper the satisfaction of these needs by breaking previous ways of being organised, part of something and active. The Internet may take up time and take away the desire to seek genuinely interactive situations such as hobby groups, singing in a choir, playing board games,

participating in sports, etc. In these activities, people meet and do things together, get to know each other and build social capital. The Internet is a very effective tool for gathering communities and for arranging events, and of course, for continuing interaction between several people between meetings, either one on one or as a group.

It is good to remember that the Internet is still young, and trends that have emerged or are emerging have not yet demonstrated their durability or significance. We are still learning to talk. The various forms of communication produced with the help of a pen and paper and camera are old, and as an extension to these, various forms of communicating have been born on the Internet: diaries, scrapbooks, guest books, baby books, picture galleries, etc. Sound and video, on the other hand, are new media. The creative communication methods enabled by them are yet to emerge. Videos, own music, talking books, etc. Have, of course, come about, but their proportion and quantity are small compared with text and pictures.

Communications services applications are normally created either to streamline the operations of organisations (e-mail and attachments), to be sold to consumers (mobile services) or as a forum for advertisements (blogs, Facebook, MySpace, etc). Services that are created directly for the needs of users or their communities are open source code services such as IRC (Internet Relay Chat). Services could also be developed based on users' wishes, while taking their communication needs into account. Perhaps the spread of social media could spread also to the older age groups.

The utilisation of social media at work and in hobbies in various communities is made difficult by the large number of service platforms, and members of a community will have their own selections of services (Facebook, Messenger, Skype, iCall, MySpace, IRC, eLGG, eDelfoi, discussion boards, various learning platforms, intranets, etc.) and it is difficult to reach everyone with just one service. Competence and resolute motivation are required to ensure that each member of a community is in the know, and that they receive all the necessary information on matters, events, and changes to these, etc. In this capacity, social media do not yet replace mailed newspapers, telephones and text messages.

On the other hand, if you are motivated, knowledgeable and have the right equipment, you can quickly gain information on virtually anything. In this case, the responsibility lies with the individual.

Access to services in the information society

8.1 Migration patterns and service provision

Services in both the public and private sectors have in recent years shifted away from sparsely populated areas to more densely populated areas and to centralised locations, in parallel with the migration of people to growth centres around the country and the loss of population in sparsely populated areas. This raises the question of whether people are moving to where the services are, or vice versa? The average distance to the post office, library and many other services has grown over the past ten years.

The 1970s was a time of considerable migration to towns and cities, a pattern that faded as the 1990s came but has re-emerged since the turn of the millennium. The current migration pattern exhibits somewhat different features from that of the 1970s, however. Migration between municipalities, for example, is now more vigorous than ever. People are migrating to urban areas and particularly to country districts close to towns and cities. Within larger urban areas, populations are dispersing from centre to periphery, reinforcing the internal division between central and outlying districts (Aro 2007). In the fastest growing municipalities, the most important engine of growth is no longer net in-migration but a high birth rate (Myrskylä 2007). At the same time, net out-migration has continued from sparsely populated parts of the country, such as the main agricultural regions and especially the thinly populated rural areas (Aro 2007; Population and cause of death statistics. Statistics Finland).

The structural changes in the network of services are attributable not only to migration patterns but also the drive for greater efficiency. The structure of the services network was already changing before the effects of the economic recession in the 1990s. The number of stores selling daily consumer goods, for example, halved in the period 1980-2000, although figures for 2003-2005 for the country as a whole appear to show a reversal of this trend, with the number of stores actually increasing. However, the store chains are not building new stores in sparsely populated areas to any notable extent (Kytö & Väliniemi 2007).

The factors guiding the location of services differ to a great extent between the public and the private sector. One of the means for guiding the location of public-sector services funded through taxes is the Government's regional policy. Other considerations affecting service location today include the fact that many public-sector organisations nowadays purchase services from private service providers, such as in the health care sector. In the field of postal services, many such services have been relocated to premises operated by other businesses, and accountability for the results transferred to private entrepreneurs.

Here, we examine the changes that have occurred over the past ten years in the availability of two public services, namely library services and post office services. Following this, we look at the growth in e-services in recent years and consider whether the increasing daily use of these online services makes it less essential to have a diverse array of conventional services. We then consider the extent to which not only library and post office services but other services too are available to people in practice, focusing on the perspective of elderly people living in remote regions.

8.2 Survey results from 1999, 2004 and 2008 concerning access to services

The results are based on the Statistics Finland surveys of ICT use in 1999, 2004 and 2008, which included questions about the distances to services. About 3,000 persons aged 15 to 74 were interviewed in each of these surveys. The surveys included specific questions concerning the distance from the respondent's home to various different services.

The responses given are the respondents' own assessments. The questions did not indicate how the distance should be assessed, and most respondents probably assessed the distance in terms of the shortest route available rather than as the crow flies, except perhaps in sparsely populated areas. Below we examine how the distances from home to everyday services, such as post office and library services, have changed over the period 1999-2008.

Distance to post office 8.3

Most respondents had a longer journey from home to post office in 2008 than in 1999. The biggest increase in the average distance to the post office occurred between 1999 and 2004, though there was also an increase between 2004 and 2008. Table 8.1 shows these distance changes for 1999-2008 for the country as a whole, while Table 8.2 shows the distance according to size of settlement, based on the statistical groupings of municipalities in 2008 (see information box).

As shown in Table 8.1, distances to the post office of less than half a kilometre had fallen and those of more than half but less than two kilometres in length were unchanged, while distances of over two kilometres had increased between 1999 and 2008. In 2008, almost six in ten distances to the post office were of less than two kilometres, and one in five was less than half a kilometre. The proportion of such distances that were more than 10 kilometres in length was unchanged in 2008 compared with 1999.

Table 8.1 Distance from home to post office in 1999, 2004 and 2008, per cent of households of persons aged 15-74

	1999	2004	2008	
less than 0.5 km	26	22	20	
0,5-1,9 km	42	40	41	
2,0-9,9 km	25	32	33	
10 km	7	6	6	
Total	100	100	100	

Source: separate sections of the Survey of ICT use 1999, 2004 and 2008

Table 8.2 Distance from home to post office by degree of urbanisation in 2008, per cent of households of persons aged 15-74

	Less than 0.5 km	0.5–1. 9 km	2,0-9,9 km	10– km	Total
Urban municipalities	5 29	51	20	0	100
Semi-urban municipalities	20	45	34	1	100
Rural municipalities	16	35	39	10	100
All	20	41	33	6	100

Source: separate section of the Survey of ICT use 2008

In urban municipalities, 80 per cent of households had less than two kilometres to travel to the post office; in semi-urban municipalities the corresponding percentage was 65 per cent, and in rural municipalities 51 per cent (Table 8.2). In 2008, the post office was less than two kilometres away (i.e. reasonable walking distance) for 83 per cent of households in the Helsinki metropolitan area, for 70 per cent of households in other settlements with over 75,000 inhabitants, and for 52 per cent of households in smaller settlements and rural areas. The time spent travelling to the post office is not directly propor-

The statistical grouping of municipalities is a classification of degree of urbanisation that was developed at Statistics Finland and has been used since 1989. It divides municipalities according to the proportion of people living in urban settlements and the population of the largest urban settlement into urban, semi-urban and rural municipalities.

Urban municipalities include those municipalities in which at least 90 per cent of the population lives in urban settlements or in which the population of the largest urban settlement is at least 15.000.

Semi-urban municipalities are those municipalities in which at least 60 per cent but less than 90 per cent of the population lives in urban settlements and in which the population of the largest urban settlement is at least 4.000 but less than 15.000.

Rural municipalities include those municipalities in which less than 60 per cent of the population lives in urban settlements and in which the population of the largest urban settlement is less than 15,000; and those municipalities in which at least 60 per cent but less than 90 per cent of the population lives in urban settlements and in which the population of the largest settleis less than (http://www.stat.fi/meta/kas/til_kuntaryh mit_en.html).

tionate to the distance, as the routes available will not always be very direct.

The Finnish postal service has been reorganising its post office network, and this has included transferring post office services to local entrepreneurs in conjunction with franchised post offices operating in local stores or other businesses, especially in small municipalities. Some respondents may not have been aware that post office functions had been transferred to other premises used by a franchised post office, and so they may have inadvertently given an exaggerated assessment of the journey length to the post offices.

8.4 Distance to library

Every municipality in the country has at least one library. Finland's network of libraries continues to be very extensive, despite it having been shrinking for some time. In 2007, there were 386 main libraries, about one tenth fewer than in 2000 (Cultural statistics 2007). With the merging of many municipalities, a lot of former main libraries have become branch libraries, though overall the number of branch libraries has remained more or less unchanged since 2004 (Finnish Public Library Statistics). The way in which library services are arranged varies widely between municipalities, depending on their populations, degree of urbanisation and the region. Eastern and northern Finland include municipalities which are large in size but have only one library, which means that mobile libraries are of great importance in such municipalities (Kirjastolehti 5/2008). The library services of remote areas have been adversely affected by cuts in the number of mobile library services in the current decade (Cultural statistics 2007).

The reduction in the number of libraries means longer trips to the library for customers. Table 8.3 shows the distances travelled from home to library in the three survey years studied. Most customers had a longer trip from home to the library in 2008 than in 1999. The average distance to the library grew by about as much between 2004 and 2008 as it did between 1999 and 2004. Illustrative of these changes is the fact that in 2008 one in two distances to the library was less than two kilometres, whereas in 1999 the figure was two distances in three.

In 1999, 23 per cent of households had less than half a kilometre to travel to the library. compared with 19 per cent in 2004 and 16 per cent in 2008. The reduction in library services is also evident as an increase in the proportion of households travelling at least two kilometres to reach a library, although the proportion travelling more than four kilometres was no greater in 2008 than in 2004.

In 2008, the distance to the nearest library was less than half a kilometre for one in four house-

holds in urban municipalities, and one in eight households in rural municipalities. For one in seven households in rural municipalities the distance to the library was at least 10 kilometres, while in urban municipalities such a distance was extremely rare (Table 8.4).

In 2008, the library was less two kilometres away (i.e. reasonable walking distance) for 74 per cent of households in the Helsinki metropolitan area, for 64 per cent of households in other settlements with over 75,000 inhabitants, and for 47 per cent of households in smaller settlements and rural areas.

The survey revealed that the variation in average distance according to degree of urbanisation of the municipality was much greater in the case of post offices than libraries. This holds true for distances in the range 0.5-9.9 kilometres, but not for distances of 10 kilometres and more.

Table 8.3 Distance from home to library in 1999, 2004 and 2008, per cent of households of persons aged 15-74

	1999	2004	2008	
less than 0.5 km	23	20	16	
0.5-1.9 km	41	37	39	
2.0-9.9 km	28	35	37	
10 km	8	8	8	
Total	100	100	100	

Source: separate sections of the Survey of ICT use 1999, 2004 and 2008

Distance from home to library by degree of urbanisation in 2008, per cent of households of persons aged 15-74

	Re Survey	•	0,5-1,9 km	2,0-9,9 km	10	Total
Urban muni	ipalities	24	45	30	1	100
Semi-urban municipalitie	es.	17	45	35	3	100
Rural munic	palities	12	34	40	14	100
All		16	39	37	8	100

Source: separate section of the Survey of ICT use 2008

8.5 Use of online services

Post office and library services are among the wide range of services nowadays available to customers online. The supply of online services has become very diverse in recent years, and the opportunities for using these services have increased as use of the Internet has grown. E-services are used to supplement, replace or revise particular services that are otherwise available only at a certain time (official public-sector opening hours), a certain place (specific service facilities) or in a certain manner (personal visits, post, phone, fax). With the advent of online service provision, the concept of availability has become more relaxed: physical distance, transport links and travel time lose their significance if all you need to do is sit at your computer. In its day, the arrival of the telephone had a significant impact, too, reducing the need to travel to be served as a customer.

Examples of the growing use of e-services are many and varied. In 2006, six in ten people (i.e. a total of some two million of the country's inhabitants) who had used the Internet said they had at one time or another visited the website of a municipality, central government agency or the Social Insurance Institution. During the first few months of 2008, information searches on such public authority websites had been made by more than one in two Internet users. The most heavily used of these sites were those of the

user's local municipality, the Ministry of Employment and the Economy, the tax authorities, the Social Insurance Institution and public libraries.

E-banking services have become very widely used in just a few years. In 2004, some 50 per cent of those aged 15 to 74 used e-banking, whereas in 2008 the corresponding figure had risen to 72 per cent. Almost nine in ten Internet users do their banking online.

According to a survey by Itella Corporation, the post office's online services are used by 42 per cent of persons who access the Internet weekly. The posti.fi website is indeed one of the busiest of today's e-services. NetPosti, accessed from the posti.fi site, is an online post office service for customers offered free of charge by Itella.

On the public library website, users can search for material, recommend the acquisition of particular titles or, for instance, reserve time to use the Internet at the library. ICT user surveys for 2004–2008 show that in 2008, 8 per cent of the population had used the Internet at a public library, while in the early part of 2004, 25 per cent of Internet users and 18 per cent of the population as a whole had searched for library books or other loan material via the Internet. Interest in library material appears to be on the increase.

8.6 Change in structure of services

What are the consequences of the growing use of online services and the deteriorating availability of conventional customer services? Kytö (2007) believes that the increase in online services and the disappearance of conventional services could, in the worst case scenario, make remote areas uninhabitable.

The adverse effects of an increasingly less dense services network are first visible in sparsely populated rural areas, specifically in the daily lives of low-income consumers who cannot afford to use e-services. The focus of service provision on self-service online can thus lead to regional inequality and affect the choice of where to live. The need for good transport connections is also highlighted in these circumstances, to ensure users can travel to obtain services where

necessary. This differentiation in service provision is probably accelerating the selective internal migration within the country, which could lead to a spiral of regional marginalisation (see Kytö 2007 and Tuorila 2007).

The results presented in this study do not allow conclusions to be drawn as to whether the addition of online services has led to any deterioration – or improvement – in the provision of conventional services, or indeed whether there is any connection between them. If deteriorating service availability encourages migration, this could lead to a downward spiral whereby a contraction in service provision occurs in areas already suffering net out-migration, and this in turn reinforces the migration.

8.7 Internet use at home

The Internet allows services to be used online regardless of location of residence, as long as the user has an Internet connection. The latest survey shows that 80 per cent of those aged 16 to 74, and 72 per cent of all households, had an Internet connection for home use in 2008 (Figure 8.1). Correspondingly, one in five persons aged 16 to 74, and almost one in two in the 60 to 74 age group, did not have an Internet connection for home use in 2008. A greater proportion of family households had an Internet connection than other households. In all one-person households of persons aged 60 to 74, only one in four had an Internet connection.

Persons of pensionable age live farther from built-up areas - and from the services they contain - than students or employed persons. The average age of the population is higher in sparsely populated areas than in more densely populated areas. Persons living in rural municipalities had slightly fewer Internet connections than those living in urban areas in 2008. Forty-seven per cent of the households of persons aged 60 to 74 in semi-urban municipalities had an Internet connection, while in rural municipalities the corresponding figure was 37 per cent, which was also much more than a few years

ago (Surveys of ICT use 2003-2008). Most users had the opportunity to use the Internet outside the home, too. The everyday business conducted by elderly residents in sparsely populated areas, and particularly those living alone, will be affected if service points are discontinued and if there is no opportunity to conduct this business online.

Not everybody is even interested in using the Internet. In the survey of ICT use conducted in spring 2006, a majority of persons over the age of 50 who did not use the Internet were of the view that nothing would prompt them to use the Internet, as they were either uninterested or would not learn to use it. One respondent summed things up by saying that he would use the Internet if it were possible to learn through common sense, and that it might become essential to do so if the world becomes more technology oriented. Some people preferred to do their banking business in person on account of the human contact, or because they preferred others to deal with the Internet. E-banking and keeping in touch by e-mail were two factors that attracted people to use the Internet.

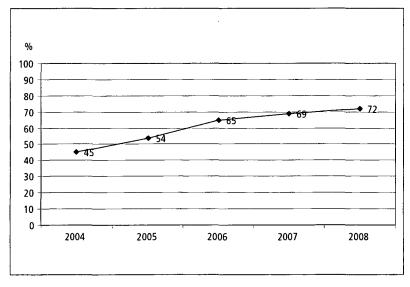


Figure 8.1 Internet connection in households in 2004-2008, per cent of households of persons aged 16 to 74

Source: Survey of ICT use 2004-2008

Regional variation in trips for everyday business 8.8

According to the latest surveys, daily consumer goods shopping, post office services, libraries, banks and health centres are all at a greater distance from home than ten years ago (separate sections in the surveys of ICT use 1999, 2004 and 2008). The longest such trips are made in sparsely populated areas, but the length of such trips has grown the most in relative terms in semi-urban municipalities; in urban and rural municipalities the increase in the length of these trips has been comparatively slower.

Today's service-oriented society favours self-service, which allows matters to be dealt with outside normal office hours. Most services cannot, however, be separated from time and place and are not available as such online. One example of this is library lending services. Libraries do, however, have online loan and search services that are very popular, but the demand for conventional library services remains strong.

The bleak outlook at least for sparsely populated areas is that reasonable access to many basic services, such as education, social and health services, the post office, libraries and shops, will be in jeopardy if service facilities are reduced.

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Appendix 1 Quality description

Extensive face-to-face interview surveys based on random samples drawn from the Population Register Centre's registers were carried out within "The Finns and the Future Information Society" project in 1996 and 1999. In 2002 the data were collected in connection with Statistics Finland's Leisure Survey. As from 2003, interview data have been collected in annually conducted telephone interviews. Since then the survey has, for the most part, been EU harmonised and contains the questions necessary for the compilation of pan-European indicators as well as the questions agreed on with parties interested in the development of the Finnish information society. Key issues connected with the 2008 data collection are described below.

The majority of the survey questions relate to persons. Some questions, however, relate to the entire household. Thus the survey has two populations: private households and their members. To ensure regional coverage, the sample of individual persons was drawn with systematic random sampling of the population aged 16 or over by place of residence.

The populations of the Survey on ICT usage in households and by individuals conducted in the spring of 2008 consisted of the population aged 16 or over. The interviewees were persons of Finnish or Swedish mother tongue and living at home. Two samples were drawn comprising a total of 4,540 persons. Of them 4,300 were aged 16 to 74 and 240 were aged 74 or over. The interviews were conducted from Statistics Finland's telephone interview centre CATI in April-June. A few weeks before the interview a letter was sent to respondents which briefly described the contents of the interview, its purpose and details related to data security.

The non-response rate of this survey is roughly on level with the interviews of the two preceding years, and acceptable responses numbered 3,043. When a 24 case over-coverage is deducted from the sample, the response rate is 67.2 per cent. Respondents who could not be contacted (incl. persons without a telephone) made up 57 per cent of the non-response, some 33 per cent refused to be interviewed and the remainder consisted of other non-response cases, partly invalid responses. The survey data were weighted to correspond to the population of the whole country and non-response was taken into account. In the person weighting the numbers data of both respondents and the population were tabulated by gender, age, region and statistical grouping of municipalities. Households' probability of inclusion in the sample was based on the distributions according to household size and number in NUTS3 area classes obtained from the income distribution statistics.

A household's probability of inclusion in the sample was directly proportional to the number of household members aged 16 or over. Basic weights were calculated on the basis of data obtained from the income distribution statistics concerning the breakdown of households according to household size and regional distribution.

Appendix 2 Tables for 2008

This table contains the distributions of responses of the telephone interview survey carried out in spring 2008. The tables present as percentages the number of Finnish people answering the question when the sample is raised to the population level using a weighting coefficient that corrects for non-response. Some questions are presented only to the people using the application in question or to some other defined groups; this explains why the population bases differ from one question to another. The specific conditions attached to each question are shown separately. The questions on household ownership of ICT equipment and other household-related questions are tabulated based on household size and degree of urbanisation of place of residence. Ouestions regarding individuals are tabulated in varying ways by age group, gender, population group and degree of urbanisation of municipality of residence. For the purposes of the survey a random sample of some 4,500 persons was drawn from the population aged 16 and above without an upper age limit. The answers are presented mainly in the age group persons aged 16 to 74. who are interviewed every year. The total number of interviewees was 3,043. The non-response rate was 33 per cent.

Questions for households

Household appliances and Internet connections

K40

Do you have a computer in your household?

Excluding game consoles such as PlayStation, Nintendo, Xbox, etc.

	% of all household	5	
	Yes	No	
16-24 yrs	94	6	
25-34 yrs	94	6	
35-44 yrs	90	10	
45–54 yrs	80	20	
55–64 yrs	64	36	
65-74 yrs	36	64	•
74– yrs	8	92	
1-person household	58	42	
2-person household	78	22	
3-person household	95	5	
4+-person household	98	2	
Helsinki metropolitan area	82	18	
Cities with over 100,000 population	78	22	
Urban municipalities	75	25	
Semi-urban/rural municipalities	72	28	
All aged 16–74 yrs	76	24	

Does your household have a computer in its use

	% of all households					
	K40k1	K40k2	k40k3	k40k4		
	a laptop?	a palmtop computer (PDA) or mobile phone with a keyboard?	a gameconsole? (PlayStation, Xbox, (e.g. communicator)	(e.g. communicator)		
16-24 yrs	62	57	9	44		
25-34 yrs	61	62	19	37		
35-44 yrs	68	56	18	49		
45-54 yrs	60	43	12	27		
55-64 yrs	45	32	7	8		
65-74 yrs	27	14	2	2		
74-yrs	6	2	0	1		
1-person household	33	33	6	12		
2-person household	56	41	10	17		
3-person household	72	56	16	49		
4+-person household	80	62	20	66		
Helsinki metropolitan area	53	55	19	27		
Cities with over 100,000 population	55	44	10	27		
Urban municipalities	53	39	10	25		
Semi-urgan/rural municipalities	52	40	8 -	28		
All 16-74 yrs	53	43	14	27		

K44 Do you or anyone in the household have Internet access at home?

	% of all households		
	Yes	No	
16–24 yrs	90	10	
25-34 yrs	93	7	
35-44 yrs	86	14	
45-54 yrs	75	25	
55-64 yrs	60	40	
65–74 yrs	33	67	
74– yrs	6	94	
1-person household	53	47	
2-person household	75	25	
3-person household	93	7	
4+-person household	97	3	
Helsinki metropolitan area	81	19	
Cities with over 100,000 population	75	25	
Urban municipalities	70	30	
Semi-urban/rural municipalities	68	32	
Ali 16–74 yrs	72	28	

Does your household have Internet access from

	% of all households	% of all households				
•	K44_1	K44_2	K44_4	K44_5		
	a desktop computer?	a laptop?	a game console?	a PDA?		
16-24 yrs	58	51	7	7		
25-34 yrs	57	58	5	13		
35-44 yrs	64	52	6	14		
45-54 yrs	56	40	3	6		
55–64 yrs	39	29	0	4		
65-74 yrs	23	13	0	0		
74– yrs	4	2	0	0		
1-person household	28	31	2	4		
2-person household	52	38	1	6		
3-person household	69	51	5	11		
4+-person household	76	59	8	15		
Helsinki metropolitan area	50	52	5	14		
Cities with over 100,000 population	51	40	4	6		
Urban municipalities	48	36	3	6		
Semi-urban/rural municipalities	48	36	2	5		
All 16-74 yrs	49	40	3	7		

K461 Which of the following types of Internet connection do you have in your household?

All Internet connections of the household. It is not relevant whether the connection is used or not.

% of all	households	
Ordinary landline phone modem or ISDN subscription	6	
ADSL or other DSL broadband subscription (via fixed telephone network)	51	
Broadband connection via cable(television) network	7	
Wireless connection from home to a WLAN network	7	
Mobile phone via a GPRS subscription	3	
Mobile phone via an UMTS or 3G subscription	4	
Some other type of connection	1	
Don't know	4	

Is your home Internet access paid for by your employer or otherwise free of charge for you due to e.g. a position of trust?

	% of all households		
Age of respondent	Yes	No	
16–24 yrs	6	94	
25-34 yrs	15	85	
35–44 yrs	15	85	
45–54 yrs	10	90	
55–64 yrs	4	96	
65–74 yrs	0	100	
All16–74 yrs	8	92	

K92 Does your dwelling have a wireless network?

A wireless dwelling network has a base transceiver station to which the computer establishes a wireless link.

	% of all household	5		
Age of respondent	Yes	No	Don't know	
16-24 yrs	28	69	3	
25-34 yrs	41	58	1	
35-44 yrs	34	64	2	
45-54 yrs	23	75	2	
55-64 yrs	13	83	4	
65-74 yrs	5	93	2	
All 16-74 yrs	23	75	2	

k13_1 - k13_9 Have the following factors affected your not having Internet access at home to a great extent, to some extent or not at all?

	% of households with Internet access							
	To a great ex	ktent	To some exte	ent	Not at all		Don't kno	w
	Age of respo	Age of respondent						
	16-74 yrs	74- yrs	16–74 yrs	74- yrs	16-74 yrs	74 yrs	16-74 y	rs 74– yrs
Access to Internet elsewhere	20	6	17	5	62	85	1	4
Don't want Internet at home	45	65	13	4	40	29	2	3
Internet seems unnecessary	50	79	17	5	31	11	2	4
Appliances are too expensive	20	24	20	19	57	43	3	13
Access costs too high	19	22	17	15	56	44	8	19
User skills are insufficient	30	59	21	13	47	22	2	6
Concerns about privacy or data protection	n 12	6	23	14	59	62	6	19
Physical disability prevents use of Interne	t 2	7	1	6	94	79	3	8
Some other reason	11	8	3	1	74	77	12	15

Data protection

NE46Pm

Does your home computer/Do your home computers have firewall software?

	% of households with Internet access							
Age of respondent	Yes	Probably	No	Don't know				
16-29 yrs	82	5	9	4				
30-49 yrs	82	7	6	5				
50-74 yrs	74	9	7	10				
All16-74 yrs	79	7	7	6				

NE46Vt Are e-mails received to your household computer automatically checked for viruses?

	% of households with Internet access						
Age of respondent	Yes	Probably	No	Don't know			
16–29 yrs	62	13	16	8			
30-49 yrs	76	11	6	7			
50-74 yrs	70	12	7	12			
All 16-74 yrs	70	12 -	9	9			

NE17

During the past year, have e-mail or other computer viruses impeded your computer's functions in a way which has caused data leaks or loss of time?

Age of respondent	% of households computer at hom	that have used the Internet during the	ng the past three months ar	id who have internet access or a
	Never	Once or twice	More often	Don't know
16-29 yrs	76	19	4	1
30-49 yrs	77	16	4	3
50-74 yrs	82	12	5	1
All 16-74 yrs	79	15	4	1

When producing text, images or other material with your computer, do you take backup copies?

	% of households that have used a computer during the past year and who have a computer at home						
Age of respondent	Always or almost always	Sometimes	Hardly ever	Not applicable as respondent doesn't keep files on a computer			
16-29 yrs	28	37	33	2			
30-49 yrs	27	35	33	5			
50-74 yrs	24	27	40	9			
All 16-74 yrs	26	31	36	7			

Which of the following do you use when taking backup copies?

	% of households who answer question In1 with Always or almost always or Sometimes						
Age of respondent	External hard drive	Memory stick (USB)	CD or DVD	Online service?			
16-29 yrs	40	74	60	16			
30–49 yrs	48	65	70	20			
5074 yrs	39	64	58	14			
All 16-74 yrs	41	67	60	16			

Questions for individuals

Use of computer and location of use

Have you used a computer in the past three months?

	% of entire population		
	Yes	No	
16–24 yrs	100	0	
25–34 yrs	99	1	
35–44 yrs	96	4	
45–54 yrs	90	10	
55–64 yrs	72	28	
65–74 yrs	36	64	
74– yrs	3	97	
Man	86	14	
Woman	83	17	
Helsinki metropolitan area	91	9	
Cities with over 100,000 population	85	15	
Urban municipalities	85	15	
Semi-urban/rural municipalities	80	20	
All persons aged 16–74 yrs	84	16	

K17_1a - K17_5a Have you used a computer in the past three months in the following locations?

	% of entire population					
	At home	At work	At school or other educational	At another person's home	Somewhere else	
16-24 yrs	95	25	59	68	31	
25–34 yrs	94	70	21	56	28	
35-44 yrs	89	71	12	28	23	
45-54 yrs	83	68	10	17	19	
55-64 yrs	61	37	5	14	14	
65-74 yrs	31	1	1	7	7	
Man	80	48	17	32	21	
Woman	76	49	18	32	21	
Helsinki metropolitan area	86	59	21	37	27	
Cities with over 100,000 population	79	51	21	39	25	
Urban municipalities	77	48	18	33	21	
Semi-urban/rural municipalities	73	42	1 5	25	15	
All persons aged 16–74 yrs	78	49	18	32	21	

Internet use, places of use, frequency of use

K19Uv Have you accessed the Internet in the past three months?

	% of entire population		
	Yes	No	
16-24 yrs	100	0	
25–34 yrs	99	1	
35–44 yrs	95	5	
45–54 yrs	88	12	
55–64 yrs	67	33	
65–74 yrs	33	67	
74– yrs	2	98	
Man	84	16	
Woman	82	18	
Helsinki metropolitan area	90	10	
Cities with over 100,000 population	83	17	
Urban municipalities	83	17	
Semi-urban/rural municipalities	78	22	
All persons aged 16–74 yrs	83	17	

K20 How frequently have you accessed the Internet since the beginning of January?

	% of Internet users			
	Daily or almost daily	Weekly	Less often?	
16-24 yrs	88	10	3	
25–34 yrs	87	10	3	
35–44 yrs	83	13	4	
45–54 yrs	75	20	5	
55–64 yrs	72	19	9	
65–74 yrs	60	26	15	
•			0	
Man	81	15	4	
Woman	80	14	6	
Helsinki metropolitan area	89	8	3	
Cities with over 100,000 population	84	14	3	
Urban municipalities	81	14	6	
Semi-urban/rural municipalities	73	20	7	
·			0	
All persons aged 16-74 yrs	80	15	5	

K20_1a - K20_6a Where have you accessed the Internet in the past three months?

	% of entire p	% of entire population						
	At home	At work	At school or other educational institution	At another person's home	Somewhere else			
16-24 yrs	93	23	57	63	27			
25–34 yrs	92	68	20	56	27			
35–44 yrs	87	68	10	25	20			
45–54 yrs	79	60	8	16	17			
55-64 yrs	58	32	5	12	11			
65-74 yrs	29	1	1	6	7			
74– yrs	2	0	0	1	1			
M an	77	44	16	29	20			
Woman	73	46	17	30	17			
Helsinki metropolitan area	85	58	19	36	25			
Cities with over 100,000 population	76	48	20	37	21			
Urban municipalities	74	44	16	30	19			
Semi-urban/rural municipalities	70	37	14	23	13			
All persons aged 16–74 yrs	75	45	17	30	19			

K21_1 - K21_5 Have you accessed the Internet in the following places in the past three months?

	% of entire	population			
	At a library?	At a municipal or state office or some other public point of access	At the facilities of some association or organisation	At an Internet café or similar	Hotspot
16-24 yrs	15	3	4	6	6
25–34 yrs	9	4	4	10	11
35–44 yrs	7	1	3	3	6
45-54 yrs	7	4	2	3	4
55–64 yrs	3	2	1	2	2
65–74 yrs	4	2	2	1	1
74– yrs	0	0	0	0	0
Man	6	3	4	5	8
Woman	9	3	2	4	3
Helsinki metropolitan area	10	4	4	7	10
Cities with over 100,000 population	8	3	2	4	4
Urban municipalities	7	3	2	4	5
Semi-urban/rural municipalities	6	2	3	3	3
All persons aged 16–74 yrs	8	3	3	4	5

Use of the Internet

Have you accessed the Internet in the past three months for the following private purposes?

k24_01 - k24_12b

	All 16-74 yrs	16–24 yrs	25–34 yrs	35–44 yrs	45–54 yrs	55–64 yrs	65-74 yrs
Sending or receiving e-mail	90	94	96	91	86	82	83
Searching for information about goods and services	88	89	95	92	86	79	76
E-banking	87	89	95	92	86	79	76
Browsing travel and accommodation websites	70	60	73	73	73	68	68
Reading online newspapers	69	64	74	73	69	68	58
Searching for information related to illnesses, nutrition or nealth	62	58	69	65	60	56	54
Viewing content uploaded by other Internet users, e.g.	58	91	78	61	45	25	20
/ouTube, Flickr	56	46	69	64	54	47	43
Searching for information on websites run by public authorities	44	59	50	46	42	26	16
Listening to Internet radio or watching Internet TV	40	53	52	40	28	26	25
Listening to music or downloading music onto a computer or other device	39	70	52	35	24	14	18
Reading blogs	38	51	49	32	30	27	32
Searching for information for study purposes	37	69	39	37	26	18	12
nstant messaging	35	78	49	25	17	12	10
Downloading software onto a computer	32	45	43	32	23	19	13
ooking for work or filling in job applications	32	61	40	33	21	8	2
Nriting messages to discussion boards or news groups	30	59	42	23	16	11	11
Participated as a registered user in so-called social web ervices e.g. Facebook, MySpace, IRCs	25	61	40	13	5	2	1
Buying second hand goods at online auctions	23	29	33	24	18	12	9
Jsing browser-based news services (e.g. RSS)	23	31	28	22	20	14	11
nternet phone calls	18	18	24	16	15	17	18
Selling own goods, products and services at online	47	2.2	2.4	20	43	10	_
auctions	17 17	22	24	20	12	10	8
Studying online	17	34	20	14	11	8	3
Downloading films and video clips onto a computer	16	34	26	13	6	2	3
Playing games online	14	40	12	10	4	5	4
Uploading self-produced contents to any website for sharing with others	11	20	17	9	7	5	3
/ideoconferencing	10	13	12	9	8	6	12
Permanent subscription of some online publication or news service	9	6	13	11	10	7	4
Downloading games onto a computer	9	21	8	7	5	3	3
Jsing a P2P networks for exchange films, music, etc	7	20	13	5	0	0	0
Jsing podcasting services	5	9	9	5	2	2	1
Creating or maintaining a personal blog	5	8	10	3	2	1	2

	% of persons having used the Internet during the past three months							
	All 16-74 yrs	16–24 yrs	25–34 yrs	35–44 yrs	45–54 yrs	55–64 yrs	65–74 yrs	
Searching for information on websites run by public authorities	56	46	69	64	54	47	43	
Downloading official forms onto a computer	38	34	46	42	37	34	26	
Returning completed forms to authorities	22	18	28	25	21	19	8	

K24_18b

During the past 12 months, have you used some authority's Internet customer services which require e-banking codes, an identity card with a chip or a user ID + password combination? (E.g. making appointments, giving notices of moving, amending a tax deduction card, etc. Does not refer to online banking.)

	% of persons having used the Internet during the past 12 months		
	Yes	No	
16-24 yrs	42	58	
25-34 yrs	49	51	
35-44 yrs	38	62	
45-54 yrs	28	72	
55-64 yrs	23	77	
65-74 yrs	8	92	
All 16-74 yrs	35	65	

tyko14b

Were you able to take care of the matter over the Internet?

	% of respondents who answered Yes to question k24_18b					
	Entirely	Partly	Not at all	Don't know		
16-24 yrs	80	18	1	1		
25-34 yrs	84	14	2	0		
35–44 yrs	83	13	4	1		
45-54 yrs	80	16	. 3	1		
55–64 yrs	81	14	4	1		
65–74 yrs	82	18	0	0		
All 16-74 yrs	82	15	3	1		

K27 How often have you downloaded music and/or films from the Internet during the past three months?

	% of persons havin	% of persons having used the Internet during the past three months				
	All 16-74 yrs	16-29 yrs	30-49 yrs	50-74 yrs		
Daily	2	5	1	0		
Weekly	5	14	3	1		
Monthly	8	16	8	1		
Less often	27	36	29	17		
Not applicable (respondent has only listened to music and/or watched films)	54	29	56	75		
Don't know	3	1	3	5		

New practices replacing earlier ones

Have you replaced:

reading printed news, newspapers or magazines with reading online news?

	% of Internet use	ers		
	Often	Sometimes	Not at all	Don't know
16-24 yrs	29	38	32	0
25-34 yrs	34	34	31	1
35-44 yrs	21	35	43	1
45-54 yrs	13	31	55	0
55-64 yrs	13	27	59	0
65–74 yrs	12	21	67	0
Man	23	33	44	0
Woman	21	33	45	1
Student	32	38	30	1
Employed	21	33	45	0
Retired	19	27	53	0
All persons aged 16–74 yrs	22	33	45	0

k18b purchasing CD's with downloading music files?

	% of Internet us	ers			
	Often	Sometimes	Not at all	Don't know	
16-24 yrs	20	31	49	0	
25-34 yrs	9	26	65	0	
35-44 yrs	3	15	81	0	,
45-54 yrs	0	8	91	0	
55-64 yrs	1	4	95	1	
65-74 yrs	0	2	98	0	
Man	8	18	73	0	
Woman	5	14	81	0	
Student	20	32	48	0	
Employed	5	15	80	0	
Retired	1	10	89	1	
All persons aged 16–74	yrs 6	17	77	0	

purchasing or renting DVD's with downloading films and videos from the Internet?

	% of Internet us	ers		
	Often	Sometimes	Not at all	Don't know
16-24 yrs	11	21	68	0
25–34 yrs	4	11	85	0
35–44 yrs	1	6	93	0
45–54 yrs	0	4	96	0
55–64 yrs	0	2	97	1
65-74 yrs	0	2	98	0
Man	5	10	85	0
Woman	1	7	92	0
Student	12	22	67	0
Employed	2	7	91	0
Retired	1	5	93	0
All persons aged 16–74 yrs	3	9	88	0

k18d listening to regular radio with listening to Internet radio?

•	% of Internet us	sers			
	Often	Sometimes	Not at all	Don't know	
16–24 yrs	11	27	62	0	
25-34 yrs	10	23	67	0	
35-44 yrs	5	13	82	0	
45-54 yrs	3	11	86	0	
55–64 yrs	1	6	92·	1	
65–74 yrs	0	6	94	0	
Man	7	18	74	0	
Woman	5	13	82	0	
Student	10	29	61	0	
Employed	6	14	80	0	
Retired	2	11	86	1	
All persons aged 16–74 yrs	6	16	78	0	

a personal visit or phone call to public authorities' customer services with using their online services?

	% of Internet us	ers		
	Often	Sometimes	Not at all	Don't know
16-24 yrs	15	40	44	1
25–34 yrs	27	47	25	0
35–44 yrs	18	44	37	0
45–54 yrs	13	39	47	1
55–64 yrs	10	33	56	1
65–74 yrs	2	25	72	1
Man	14	39	46	1
Woman	18	42	39	1
Student	15	36	48	1
Employed	18	42	40	1
Retired	9	39	52	1
All persons aged 16–74 yrs	16	40	43	1

Listening to music with a portable device k_28b

Do you listen to music, radio or similar (e.g. language courses) with a portable device when moving outside your home?

	% of entire	population				
	All	16-29 yrs	30-49 yrs	50-74 yrs	Man	Woman
Daily	7	18	6	1	8	7
Weekly	11	22	12	2	12	10
Monthly	6	12	6	2	6	5
Less often	9	13	11	5	10	8
Not at all	67	34	65	89	64	70

Placing online orders

Have you ever bought or ordered something via the Internet for your own personal or household use?

	% of entire population		
	Yes	No	
16-29 yrs	85	15	
30–49 yrs	74	26	
50-74 yrs	32	68	
Man	60	40	
Woman	59	41	
All persons aged 16–74 yrs	60	40	

K26b When did you last buy or order goods or services for private use via the Internet?

	% of entire population	of entire population				
	After the beginning of January	During the past 12 months	Sometime earlier	Never		
16-29 yrs	49	26	10	15		
30-49 yrs	43	22	8	27		
50-74 yrs	15	10	6	69		
Man	31	19	9	41		
Woman	35	17	7	41		
All persons aged 16–74 yrs	33	18	8	41		

During the past 12 months, have you placed bets in the Internet services of Veikkaus or some other enterprise?

	% of entire population	of entire population	
	Yes	No	
1629 yrs	23	77	
30-49 yrs	21	79	
50-74 yrs	9	91	
Man	22	78	
Woman	11	89	
All persons aged 16–74 yrs	17	83	

K30b Have you played online poker at some time?

	% of entire population	1	
	Yes	No	
16-29 yrs	19	81	
30–49 yrs	4	96	
50–74 yrs	1	99	
Man	11	89	
Woman	2	98	
All persons aged 16-74 yrs	7	93	

K31_02a - K31_18

What have you ordered or bought online for private purposes during the past 12 months?

Purchases and Internet use as part of work duties are not included in this question.

	% of persons having made online purchases during the past 12 months				
	All 16-74 yrs	16-29 yrs	30-49 yrs	50-74 yrs	
Travel, hotel reservations, etc.	60	50	67	63	
Tickets to theatre, concerts, cinema or similar	47	48	49	39	
Clothes or shoes	43	50	45	27	
Books or magazines	35	29	40	34	
Products related ot other leisure activities	31	34	33	20	
Music, films or videos	31	41	31	11	
Home textiles, furniture or toys	28	22	35	22	
Photographic material or services	27	25	30	25	
Consumer electronics or domestic appliances	24	25	24	20	
Products related to health and beauty	20	19	22	17	
Computer software or games	19	22	20	11	
Computers or peripherals	19	23	19	14	
Products related to sports	19	24	21	9	
Products related to motoring	13	17	12	8	
Insurances	11	13	10	10	
Entrance tickets to sporting events	9	7	10	7	
Online study materials	9	12	8	6	
Food or daily consumer goods	3	4	3	2	
Something other than the items listed above	6	5	7	5	

Q e3b1

Was the music/film/video/their upgrades delivered electronically via the Internet?

	% of p	% of persons having made purchases in this product group		
	Yes	No	Don't know	
All persons aged 16–74 yrs	43	55	1	

Qe3b2

Were the books/magazines/e-learning material/their upgrades delivered electronically via the Internet?

	% of persons having made purchases in this product group		
	Yes	No	
All persons aged 16–74 yrs	24	76	

Q e3b3

Were the computer games/video games/programmes/their upgrades delivered electronically via the Internet?

	% of persons having made purchases in this product group		
	Yes	No	
All persons aged 16–74 yrs	61	39	

K31YHT

How many orders in total have you made via the Internet after in the past three months?

	% of persons having made online purchases during the past three months
	All persons aged 16–74 yrs
1	13
2	19
3-5	42
More than 5	26

K36

How did you pay for online purchases during the past 12 months?

	% of persons having	made online purchas	es during the past 12 mo	nths
	All persons aged 16–74 yrs	16-29 yrs	30-49 yrs	50-74 yrs
Credit card	36	28	41	36
Via online bank	56	57	56	54
Invoice or cash on delivery	53	59	51	46

K4 a-d

Where have you made purchases during the past 12 months?

	% of persons having	made online purchas	ses during the past 12 mo	onths
•	All persons aged 16–74 yrs	16–29 yrs	30–49 yrs	50-74 yrs
Finnish online stores	89	88	90	86
Other EU countries' online stores	29	32	29	23
Some other countries' online stores	12	12	13	9
Don't know	3	2	2	5

Paying invoices

PO4a

Do you pay any invoices with direct debit?

•	% of population aged 18	or over	
Age of respondent	Yes	No	
18–24 yrs	30	70	
25–34 yrs	45	55	
35–44 yrs	50	50	
45–54 yrs	55	45	
55–64 yrs	61	39	
65–74 yrs	80	20	
74- yrs	81	19	
All persons aged 16–74 yrs	53	47	

PO4b Do you pay invoices with direct invoicing in which the invoice is sent direct to your online bank account for approval and payment?

	% of population aged 18	or over	
Age of respondent	Yes	No	
18–24 yrs	13	87	
25–34 yrs	17	83	
35–44 yrs	16	84	
45-54 yrs	11	89	
55–64 yrs	10	90	
65–74 yrs	8	92	
74 yrs	4	96	
All persons aged 16–74 yrs	13	87	

Newspaper subscriptions

PO17

How many paid newspapers that have at least four issues a week does your household subscribe to?

	% of all househ	nolds		
Age of respondent	0 kpl	1	2	at least 3
16-24 yrs	59	26	10	5
25–34 yrs	50	41	8	1
35-44 yrs	33	53	11	3
45–54 yrs	26	57	14	3
55–64 yrs	21	55	18	6
65–74 yrs	16	53	22	9
74– yrs	24	57	14	5
All persons aged 16–74 yrs	33	48	14	5

Mobile phone

Do you have a mobile phone in your own use?

Nih t	% of entire population			
	Yes	No		
All persons aged 16–74 yrs	97	3		
74– yrs	62	38		

Have you used a mobile phone in the past three months for private purposes?

For navigation to find a route or address? (routing and information services, e.g. receiving information on travel and shopping opportunities or

Q d9h

% of entire popular

	• •		
	Yes	No	
All persons aged 16–74 yr	10	90	

Have you used a mobile phone to pay for products or services (instead of cash or credit card)?

Q d9g			
	% of entire population		
	Yes	No	

Have you browsed WWW or WAP pages with your mobile phone?

Mp3	% of entire population		
	Yes	No	
All persons aged 16–74 yrs	26	74	

Do you use any of the following devices to access the Internet?

k46i

Mobile phone via GPRS (or WAP)

	% of population whose households have access to the Internet via a mobile			
	Yes	No	Don't know	
All persons aged 16–74 yrs	41	57	2	

k46k

Do you use the following to access the Internet?

	% of population whose household have access to the Internet via a mobile phone			
	Yes	No	Don't know	
All persons aged 16–74 yrs	56	42	2	

E-participation and e-democracy

During the past 12 months, have you used the Internet to do the following?

OM1a

Keep up with politics			
	% of persons having used the Internet during the past 12 months		
	Yes	No	
16–24 yrs	34	64	
25-34 yrs	46	54	
35-44 yrs	39	61	
45-54 yrs	30	70	
55-64 yrs	26	74	
65–74 yrs	24	76	
Man	37	63	
Woman	33	67	
Student	39	61	
Employed	36	64	
Retired	28	72	
All persons aged 16–74 yrs	35	65	

Om1b

Participate in political debate

	% of persons having used the Internet to follow politics (persons who answered Yes to question om1a)		
	Yes	No	
16-24 yrs	10	90	
25–34 yrs	9	91	
35-44 yrs	12	88	
45–54 yrs	6	94	
55–64 yrs	11	89	
65–74 yrs	16	84	
Man	12	88	
Woman	8	92	
Student	9	91	
Employed	10	90	
Retired	9	91	
All persons aged 16–74 yrs	10	90	

Did you look for information concerning politics from the following?

OM2a

Online magazines on the Internet

	% of persons having used the Internet to follow politics (persons who answered Yes to question om1a)	
	Yes	No
16-24 yrs	67	33
25–34 yrs	68	32
35–44 yrs	51	49
45-54 yrs	60	40
55–64 yrs	49	51
65–74 yrs	55	45
Man	64	36
Woman	55	45
Student	68	32
Employed	59	41
Retired	52	48
All persons aged 16–74 yrs	60	40

OM2b

Web pages of political parties or politicians

	% of persons having used the Internet to follow politics (persons who answered Yes to question om1a)			
	Yes	No	Don't know	
16-24 yrs	33	67	0	
25–34 yrs	33	67	1	
35–44 yrs	31	69	0	
45–54 ýrs	30	70	0	
55–64 yrs	36	64	0	
65–74 ýrs	48	52	0	
Man	32	68	0	
Woman	34	66	0	
Student	36	63	1	
Employed	31	69	0	
Retired	43	57	0	
All persons aged 16–74 yrs	33	67	0	

OM2c Parliament web pages

•	% of persons having used the Internet to follow politics (persons who answered Yes to question om1a)	
	Yes	No
16-24 yrs	22	78
25-34 yrs	19	81
35-44 yrs	22	78
45-54 yrs	29	71
55–64 yrs	30	70
65–74 yrs	33	67
Man	23	77
Woman	25	75
Student	28	72
Employed	24	76
Retired	27	73
All persons aged 16-74 yrs	24	76

OM2d Ministry web pages

	% of persons having used the Internet to follow politics (persons who answered Yes to question om1a)	
	Yes	No
16-24 yrs	26	74
25-34 yrs	34	66
35-44 yrs	22	. 78
45-54 yrs	32	68
55-64 yrs	34	66
65–74 yrs	13	87
Man	30	70
Woman	28	72
Student	35	65
Employed	29	71
Retired	21	79
All persons aged 16-74 yrs	.29	71

OM2e Web pages of your municipality of residence

	% of persons having used the Internet to follow politics (persons who answered Yes to question om1a)	
	Yes	No
16-24 yrs	35	65
25-34 yrs	47	53
35-44 yrs	58	42
45-54 yrs	69	31
55–64 yrs	67	33
65–74 ýrs	71	29
Man	54	46
Woman	55	45
Student	40	60
Employed	57	43
Retired	58	42
All persons aged 16–74 yrs	55	45

OM2f Other sources on the Internet

	% of persons having used the Internet to follow politics (persons who answered Yes to question om1a)		
	Yes	No	Don't know
16-24 yrs	41	59	0
25-34 yrs	39	60	1
35-44 yrs	33	65	2
45-54 ýrs	29	69	2
55-64 yrs	29	70	1
65–74 yrs	16	81	3
Man	40	60	1
Woman	27	73	1
Student	35	64	1
Employed	35	63	2
Retired	23	76	1
All persons aged 16–74 yrs	34	65	1

During the past 12 months have your searched for information on the Internet about the following?

OM3a

Issues dealt with by town or municipal boards or committees

	% of persons having used the Internet during the past 12 months		
	Yes .	No	
16-24 yrs	15	85	
25–34 yrs	33	67	
35-44 yrs	40	60	
45-54 yrs	37	63	
55-64 yrs	33	67	
65–74 yrs	30	70	
Man	30	70	
Woman	34	66	
Student	17	83	
Employed	35	65	
Retired	29	71	
All persons aged 16–74 yrs	32	68	

OM3b

Issues and decisions dealt with by town and municipal councils

	% of persons having used	% of persons having used the Internet during the past 12 months	
	Yes	No	
16–24 yrs	14	86	
25–34 yrs	28	72	
35–44 yrs	35	65	
45-54 yrs	34	66	
55-64 yrs	31	69	
65–74 yrs	30	70	
Man	28	72	
Woman	29	71	
Student	16	84	
Employed	32	68	
Retired	26	74	
All persons aged 16–74 yrs	29	71	

ОМЗс

Issues and decisions dealt with by Parliament

	% of persons having used the Internet during the past 12 months	
	Yes	No
16-24 yrs	19	81
25–34 yrs	20	80
35–44 yrs	9	91
45–54 yrs	11	89
55–64 yrs	10	90
65–74 ýrs	5	95
Man	16	84
Woman	11	89
Student	23	77
Employed	13	87
Retired	8	92
All persons aged 16–74 yrs	13	87

OM3d

Bills and decisions by the Government

	% of persons having used the Internet during the past 12 months	
	Yes	No .
16-24 yrs	16	84
25–34 yrs	16	84 .
35–44 ýrs	8	92
45–54 ýrs	10	90
55–64 yrs	9	91
65–74 yrs	4	96
Man	13	87
Woman	10	90
Student	19	81
Employed	12	88
Retired	6	94
All persons aged 16–74 yrs	11	89

OM3e

Ministry draft bills and other proposals of their preparation

	% of persons having used the Internet during the past 12 months		-
	Yes	No	
16-24 yrs	16	84	
25–34 yrs	22	78	
35–44 yrs	10	90	
45-54 yrs	13	87	
55–64 yrs	11	89	
65–74 yrs	2	98	
Man	16	84	
Woman	12	88	
Student	17	83	
Employed	16	84	
Retired	6	94	
All persons aged 16–74 yrs	14	86	

OM4 If it were possible to vote online in the next Parliamentary elections, would you do so?

1	% share of enti	share of entire population			
ı	Probably	Possibly	Probably no	No	Don't know
16-24 yrs	50	26	9	14	0
25-34 yrs	58	24	7	10	0
35-44 yrs	58	20	6	15	0
45–54 ýrs	49	21	9	21	1
55–64 ýrs	33	18	11	37	1
65–74 ýrs	15	13	11	61	1
Man	44	21	9	26	0
Woman	47	21	8	24	1
Student	51	27	8	13	1
Employed	52	22	8	18	0
Retired	26	16	10	48	1
All persons aged 16-74 yrs	45	21	8	25	1

OM5a

Did you vote in the previous Parliament elections in 2007?

	%-osuus 18 vuotta	täyttäneistä	
	Yes	No	Don't know
18–24 yrs	55	45	0
25–34 yrs	78	21	1
35–44 yrs	85	15	0
45–54 ýrs	89	11	0
55–64 yrs	89	11	0
65–74 yrs	91	9	0
74– yrs	84	14	. 2
Student	55	45	0
Employed	84	16	0
Retired	88	12	0
Man	81	19	0
Woman	83	17	0
All persons aged 16–74 yrs	82	18	0

Some forms of societal participation are listed below. Which of the listed forms have you participated in during the past 12 months?

OM5c

Participated in organisations' and associations' activities as a regular member

	% of population ag	% of population aged 18 or over	
	Yes	No	Don't know
16-24 yrs	21	79	0
25–34 yrs	33	67	0
35–44 ýrs	37	63	0
45–54 yrs	38	62	0
55–64 ýrs	37	63	0
65–74 ýrs	41	59	0
74– yrs	34	65	1
Man	35	65	0
Woman	34	66	0
Student	26	74	0
Employed	36	64	0
Retired	35	65	0
All persons aged 16–74 yrs	35	65	0

OM5f

Contacted a political decision maker

	% of entire population		
	Yes	No	
16-24 yrs	5	95	
25–34 yrs	7	93	
35–44 yrs	11	89	
4554 yrs	14	86	
55–64 ýrs	13	87	
65-74 yrs	16	84	
74– yrs	8	92	
Man	13	87	
Woman	9	91	
Student	8	92	
Employed	11	89	
Retired	13	87	
All persons aged 16–74 yrs	11	89	

OM5i

Participated in an online discussion

	% of persons having used the Internet during the past 12 months		
	Yes	No	
16-24 yrs	45	55	
25–34 yrs	36	64	
35-44 yrs	18	82	
45–54 yrs	11	89	
55–64 yrs	9	91	
65–74 yrs	3	97	
Man	25	75	
Woman	20	80	
Student	45	55	
Employed	21	79	
Retired	13	87	
All persons aged 16–74 yrs	23	77	

OM5j

Sent e-mail or a text message to a political decision-maker at the state level

	% of entire population		
	Yes	No	
16-24 yrs	4	96	
25–34 yrs	4	96	
3544 yrs	5	95	
45-54 yrs	5	95	
55–64 yrs	7	93	
65-74 yrs	4	96	
Man	6	94	
Woman	4	96	
Student	4	96	
Employed	6	94	
Retired	4	96	
All persons aged 16–74 yrs	5	95	

OM5k

Sent e-mail or a text message to a political decision-maker at the municipality level

	% of entire population		
	Yes	No	
16-24 yrs	4	96	
25–34 ýrs	7	93	
35–44 yrs	7	93	
45–54 yrs	6	94	
55-64 yrs	7	93	
65-74 yrs	5	95	
Man	7	93	
Woman	5	95	
Student	6	94	
Employed	7	93	
Retired	5	95	
All persons aged 16–74 yrs	6	94	

Questions related to studying

(asked from full-time students)

Have you studied the selection of courses and teaching provided by educational institutions on the Internet?

	% of full-time students		
	Yes	No	
Man	85	15	
Woman	89	11	
All persons aged 16–74 yrs	87	13	

Op8b

Have you registered on a course or other training programme via the Internet?

	% of full-time students		
	Yes	No	
Man	46	54	
Woman	59	41	
All 16-74 yrs	52	48	

Op3c

Have you checked exam, assignment, etc. results via the Internet?

	% of full-time students		
	Yes	No	
Man	62	38	,
Woman	68	32	
All 16-74 yrs	65	35	

Have you used the text messaging of multimedia features of your mobile phone in study-related matters?

	% of full-time students		
	Yes	No	
Man	18	82	
Woman	19	81	
All persons aged 16–74 yrs	18	82	

Op3e

Have you used ready-made digital learning materials available on the Internet in your studies?

	% of full-time students		
	Yes	No	
Man	63	37	
Woman	65	35	
All persons aged 16–74 yrs	64	36	

Op3f

Have you received tutoring via the Internet?

,	% of full-time students		
	Yes	No	
Man	52	48	
Woman	55	45	
All persons aged 16–74 yr	53	47	

Have you exchanged messages in a common electronic forum with others participating in the same course?

	% of full-time students		
	Yes	No	
Man	38	62	
Woman	46	54	
All persons aged 16–74 yrs	41	59	

Have you followed a study-related lecture or teaching online (audio and video) or participated in teaching via videoconferencing?

	% of full-time students	
	Yes	No
Man	16	84
Woman	18	82
All persons aged 16-74 yrs	17	83

Op4a

Since the beginning of the autumn term, have you attended online courses in which most of the tuition is provided on a platform specifically designed for online teaching?

	% of full-time stude	ents	
	Yes	No	Don't know
Man	19	80	1
Woman	21	78	1
All persons aged 16-74 yrs	20	79	1

0p4b

What was your experience of such online studying?

	% of full-time students			
	Positive or fairly positive	Negative or rather negative	Don't know	
Man	92	8	0	
Woman	82	15	3	
All persons aged 16–74 yrs	87	11	2	

Since the beginning of the autumn term, have you followed teaching programmes via digital television?

	% of full-time students		
	Yes	No	
Man	17	83	
Woman	19	81	
All persons aged 16–74 yrs	18	82	

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