WORLD INTENET PROJECT

2002

„Mapping the digital future”

Hungarian Society and the Internet

2002

ISTRI-TARKI

HUNGARY

The World Internet Project (WIP) was initiated
at the University of California (UCLA).

The Hungarian WIP is conducted jointly by the Information Society and Trend Research Institute (ITTK) and Social Research Centre Inc. (TARKI Rt).
The research program is lead by Zoltan Fabian and Tibor Dessewffy.

This report is published by the Infonia Foundation.

Main sponsors of the WIP research programme: Ministry of Informatics and Communications, Antenna Hungaria, ORTT (National Radio and Television Comission).

Also supported by Axelero and Sun Microsystems Hungary.

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Introduction

Information Revolution is one of the most important drives in our global world, or to borrow the term used by Anthony Giddens in a 'runaway world'. Information Revolution is the engine as well as the consequence of the transformations we are experiencing. What is the essence of the IT (Information Technology) revolution that the ordinary observer, especially in Hungary, may not consciously perceive? The influence of the development of computer devices and of computer technology can be felt in more and more sections of the economy. Digital technology, as a series of 0,1 codes, can now be reached relatively quickly and easily. Technological convergence resulted in a convergence in the media industry, in the telecom sector and in the IT enterprises. That is one of the reasons for IT becoming ICT i.e. Information and Communication Technologies. Users can access computer-produced information on the Internet through their cell phones, also in multimedia form, and digital broadcasting makes it possible to access these digital contents through television as well. Despite all the wonders of technological development, these processes in Hungary have just begun. Therefore we must be very careful in discussing the effects of ICT devices on society, on everyday life and on human relationships, since we are making statements in relation to a continuously and unpredictably changing environment.

The intensification of financial, economic and cultural interactions between regions, nations and civilisations through info-communication technologies are just one aspect of globalisation. Besides these positive processes, communication also opens up new space (and infrastructure) for misunderstandings and conflicts. Political conflicts between different fundamentalist identities (national, ethnic, regional and religious) appeared in world politics on a global scale parallel to the evolvement of ICT- revolution. The civil wars following the disintegration of former Yugoslavia and the counteractions of NATO against Serbia, as well as the "messages" of Osama Bin Laden were and are presented in the electronic media and on the Internet. ICT devices did not only serve to ease conflicts, but often intensified them by supplying war propaganda and the infrastructure of terror. The dilemma inevitably arises again and

again to what extent can we regard ICT-revolution as a benign, useful phenomenon if it corresponds to the increasing inequalities between and within nations, and to the erosion of traditional cultural identities. Scholars, who are more sceptical, tend to point out that new technologies provide new opportunities for repressive and dictatorial governments to increase control over their citizens to "Orwell-like" heights. Especially because of the wide variety of possible and competing interpretations we consider it essential to present annually updated panel-like data, based on empirical research within the framework of the World Internet Project, on each stages of the Hungarian expansion of ICT and on its social impact.

ICT-revolution undoubtedly carries new possibilities and new problems at the same time. The European Union became aware of the productive potentials in the new economy and in the Internet to reinforce social integration and to improve economic compatibility and ever since it has been trying to act accordingly. Hungary will join a Europe that is flexible, has a vigorous labour market, a know-how economy and is able to respond effectively to global challenges. Meanwhile, this Europe seeks to guarantee that an increasing number of social groups have access to the services provided by the information society. The World Internet Project (with the initiative of the United States and Singapore) aims primarily at examining the social impact of the expansion of the Internet in the framework of an international longitudinal research project. This research started last year in Hungary, thus we followed up the same respondents to answer our questionnaires again.

Here we present our flash report of the data collected by October 2002 to those readers who are interested in the development of the Hungarian information society.

Before presenting our findings in detail, we would like to point out the basic trends in Internet and computer access and use from last year's experiences.

The degree of expansion in access to home computers slowed down compared to previous trends. This is worrisome especially concerning the future, even if the proportion of online home PC-s and Internet users increased during last year. The problem is that most Internet non-users say that the primary reason for not being online is that they have no computer. We can add that disinterest in the web has not declined, but has slightly increased among non-web users. Compared to the dynamic

expansion of cell phone use, the spread of Internet- and computer use is still slow. However it is a positive change that 75 % of the 15-17 year old "school-net" generation uses the World Wide Web. This high rata highlights the importance of the generation and cultural differences, which determine the use of the Internet and of information and communication technologies in general. There are two important dividing lines. The first one is between the youngest and the adult generations. It is positive that the youngest ones are provided by a basic knowledge about digital writing skills and the basics of how to use computers already in primary education. The other important line is between the older generation over 60 and the younger age groups. Among the older generation, the proportion of computer and Internet users is around 1-2 %, and the 50-59 age group is also lagging behind. As a positive trend we recorded that Hungarian households started to access the Internet with broadband: 17% of Internet users at home connect with a cable or with ADSL. Nevertheless, these changes do not really alter the rather gloomy picture of the Hungarian situation. In the Far East, in the States and in many European countries the Information Revolution has launched basic changes, but in Hungary this breakthrough has not yet happened. If Hungary wants to become a successful participant in the Information Age, a new strategy is needed to accelerate the slowly improving trends, and – as it is a national concern – an intensive and productive partnership should be formed between the actors of the political and economic sectors, the representatives of research development and the non-profit organisations. On our own part we are proud that WIP sets the prospects for such a co-operation.

Tibor Dessewffy and Zoltán Fábián
Project directors

Summary

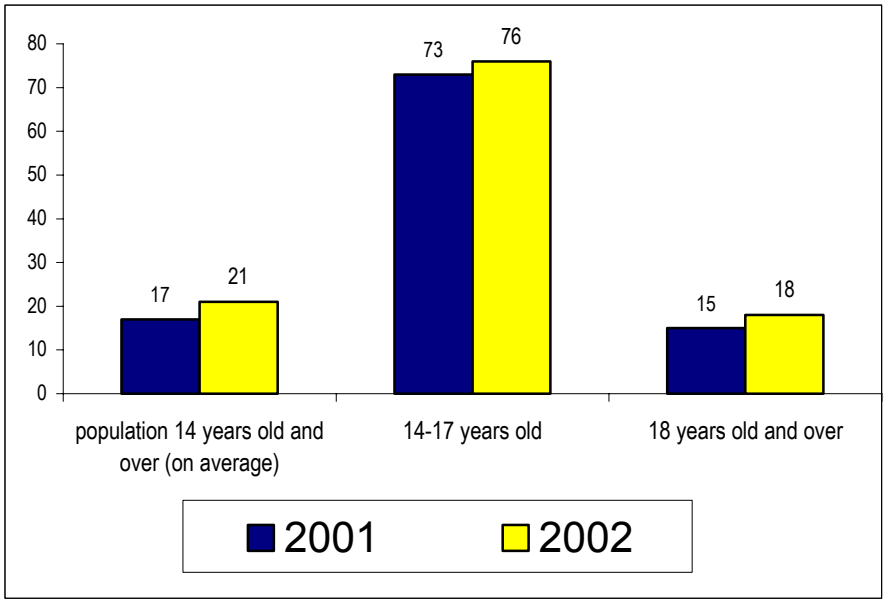
Personal Computers in the households

- In autumn, 2002, 26% of the Hungarian households had at least one computer; whereas in 2001 the rate was 22%, hence the growth is 4%.
- The growth rate of computer penetration seems to slow down in 2002; in 2001 the rate of households with a computer increased by 29 % from 2000, this year the increase was only 14% from 2001.

Internet connection and Internet use at home

- 8 % of the Hungarian households have Internet access, compared to 6% last year. While only 27 % of those who owned a PC at home were able to connect to the Internet earlier, in 2002 this rate is 31%.
- In 2002 21 % of the Hungarian population over the age of 14 and 18% of those over 18 use the Internet at least once a month. Internet use is exceptionally high among secondary school children aged 14/15-17, the so-called "school-net" generation.
- The workplace and the school are still the main places for Internet access. 15 % of the population aged 15 or above use the Internet at the workplace or at school, while only 7% use the Internet at home.

The proportion of Internet users in the population younger than 18, and 18 or above, 2001-2002 (%)



Most popular activities on the Internet

- Similarly to last year's results, the most popular activities on the Internet are using e-mail and searching for work-related information. 20% of Internet users send or receive e-mails every day, while almost 50% do so several times a week. 16 % of users browse the Internet for work-related information every day, and almost 50 % do that on a weekly basis.
- Leisure time activities, such as chatting and visiting online forums is less widespread.
- 90 % of respondents have never used the Internet for online banking services, while only 4% uses the net for banking services more than once a week
- The frequency of buying online is still relatively low: 91 % of users have never purchased anything online.

Non-users: why not online?

- The primary reason why people do not use the Internet is still not having a computer.
- 40 % of respondents who do not use the Internet say they are not interested in it.
- 20 % of respondents who do not use the Internet say that it is too expensive, while 17 % explain their abstinence by 'lack of access'.

Will non-users go online?

- Only 9 % of those who currently do not use the Internet say they are likely to become regular Internet users within a year.
- Only 29 % of those who last year said they were somewhat likely to become regular Internet users by now have actually become ones.

Standard telephone line and cell phones

- In 2002 74 % of households own a land line phone, while 63 % own a cell phone.
- Among the 15 years old and older persons the use of cell phones grew dynamically during last year: 55 % of the population aged 15 and above own a cell phone, compared to 40% last year.

Television, teletext and TV programme reception

- 95 % of households own a colour TV in 2002, and 48 % have a set with teletext. 40 % of the population aged 15 and above use teletext regularly. The access to teletext and also its use increased from last year.
- In 53 % of households there is cable installed for cable television. These households receive an average of 29 programmes.
- Parabola aerial is installed in 17 % of the households, enabling the reception of 36 channels on average.

Multimedia devices in the family

- More than 50% of households owned a VCR already in 2001, and this year this rate grew to 54%.
- The rate of households equipped with home-cinema, DVD players have doubled since last year, and shows 4% penetration in 2002.

Does the spread of New Technologies make the world a better place?

Our data shows that respondents' views on new media have improved even more compared to last year's already positive results. Last year 66% thought that the spread of new communication technologies make the world a better place, now 70% holds this view. At the same time, the number of those who think the opposite has declined (from 10 % to 8%).

Opinions about the Internet

- The majority of Hungarian Internet users are satisfied with the web itself.
- The Hungarian users are most satisfied with the amount of the information available on the Internet, while they are least satisfied with the speed of connection to the Internet.
- Both users and non-users strongly agree with the statement that there are many webpages on the Internet that are not 'appropriate' for children.
- The two groups agree alike that Internet saves time.

The Internet and other media

- For Internet users the Internet is a more or less equally important source of information to newspapers, books and TV.
- The number of those users who consider the Internet important as a source of entertainment has somewhat grown, but their proportion is still insignificant. Users use the Internet on the first place for orientation and seeking information.

Internet in the family

- Despite the general consensus, our data shows that using the Internet does not alienate family members from one another. 90% of those who have Internet

access at home say that the family members spend the same amount of time with each other as before and only 9 % say less.

- Internet has become a form of social activity. In 69% of the households with Internet connection the family members use the Internet together at least once a week.
- From the data at our disposal it seems that parents do not fear that the Internet will have a harmful effect on their children's school performance or on their friendships.

The Internet at the workplace

- 61% of users in Hungary use the Internet at the workplace.
- More than 50% of the respondents say that their work efficiency has improved, since the instalment of the Internet there.

The Hungarian population and the Internet, 2002. Detailed results

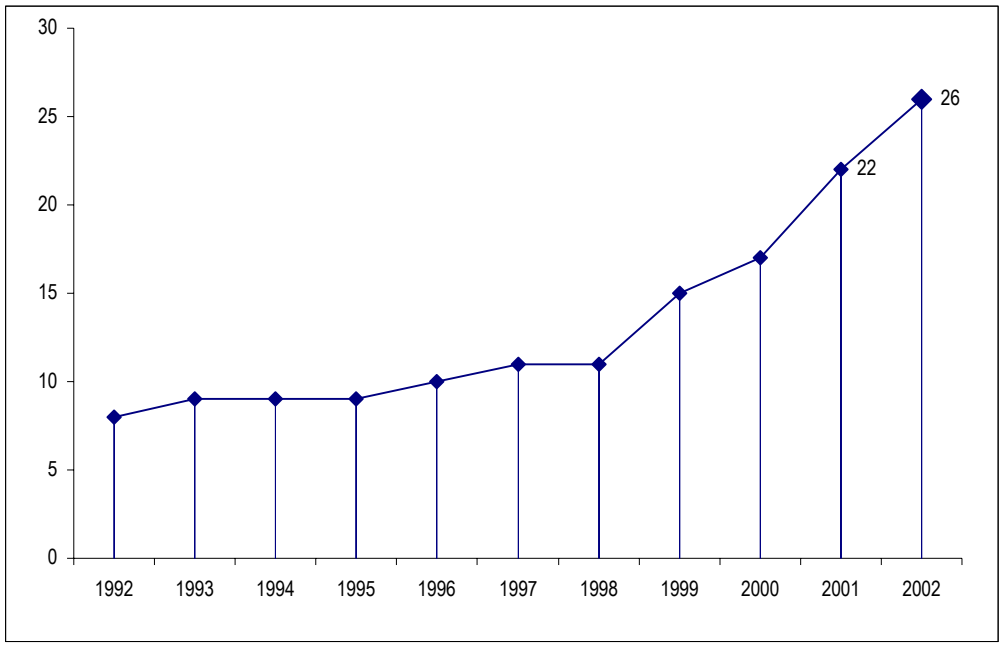
Access

As a first step in mapping out the different dimensions of Internet use, it is worth to examine the penetration of info-communication devices, which are essential for connecting to the web. Therefore, before discussing the data about Internet use, we present our data on the Hungarian population's access to computers and standard telephone line.

Household access to computers

26% of households own at least one computer, so the increase is 4% from 2001, when this figure was 22%. The growth of computer penetration seems to be slowing down in 2002: last year the increase was 30% from 2000, this year it is only 14%.

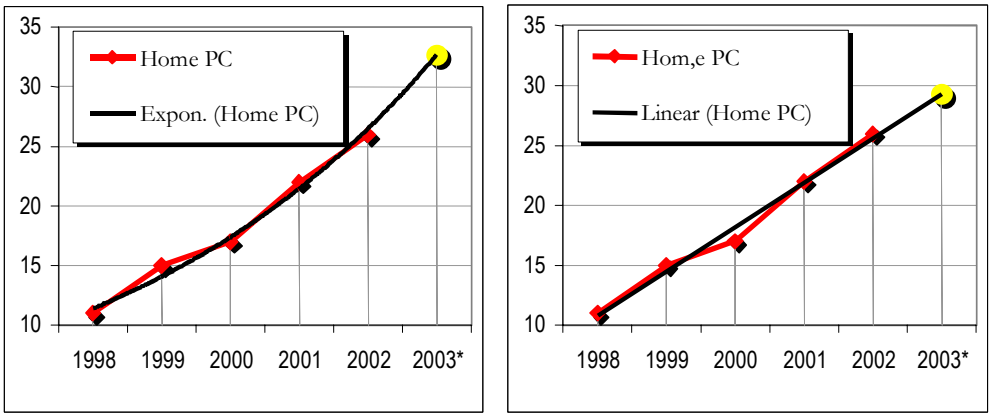
PC penetration in households, 1992-2002 (%)*



*Source: Household surveys and WIP 2001-2002, TÁRKI

According to trend-analyses we made last year – measuring trends since 1998 – the households' penetration rate should have reached 25% by 2002 if calculated with a linear trend, and 28 % with an exponential trend. We registered a penetration rate of 26%, which is closer to the linear trend. That implies that the dynamic growth-era of the expansion of home computers has not yet started. With a similar method (taking the trend between 1998 and 2002 into account) the access to computers at home can be predicted to fall between 29-33% next year, unless the chances of households to acquire computers will be altered significantly.

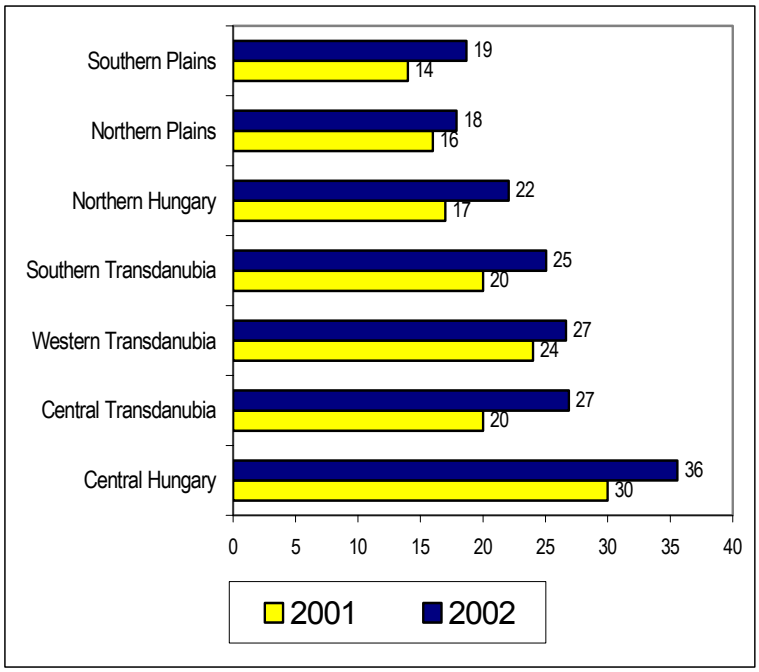
Computer penetration in households, prediction for 2003



* Figures forecast in 2002.

There are significant regional differences in the PC penetration of households. Primarily in the region of Budapest and relatively in Western Hungary (Transdanubia) computer penetration is higher than the average. The smallest proportion of households with computers can be found in the Plains (Alföld) region. However, it is precisely in the Southern Plains where the most dynamic expansion can be recorded: the 19 % PC penetration is a 34 % increase from last year; such great increase was only observed in Central Transdanubia.

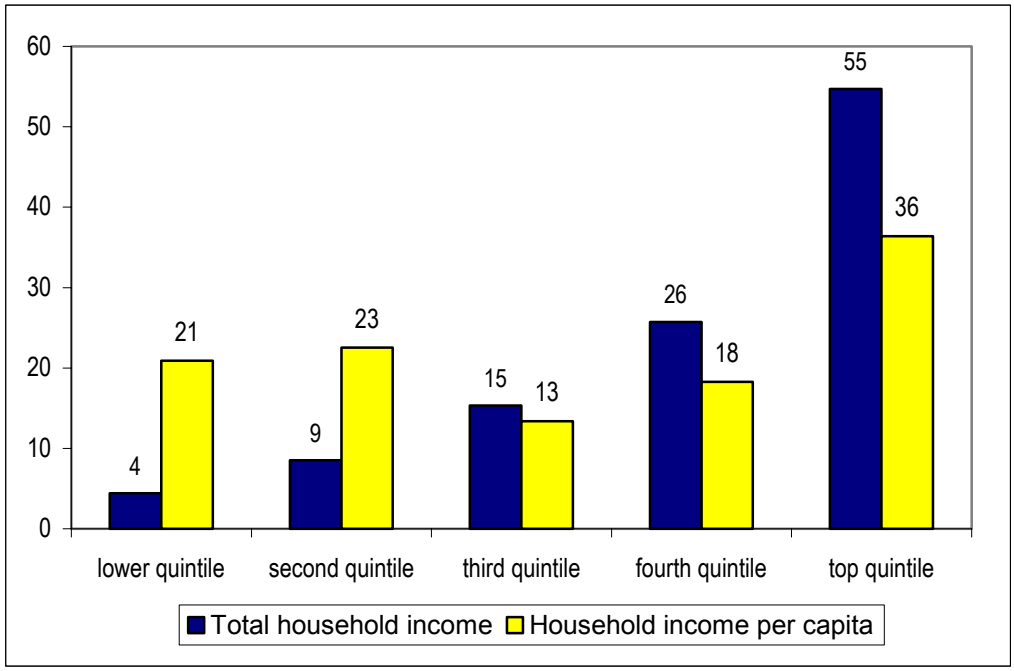
Households with PC according to regions, 2001-2002 (%)



The household's possession of a computer is significantly related to income. The determining factor is the total income of the household: according to total income quintiles, only 4% of the households own a computer in the lower, while 55% in the top quintile. Per capita household income also influences the access to computers, although to a lesser extent: around 20% of households own a computer in the lowest four quintiles, while 36% in the top quintile.

Households with PC according to household income quintiles

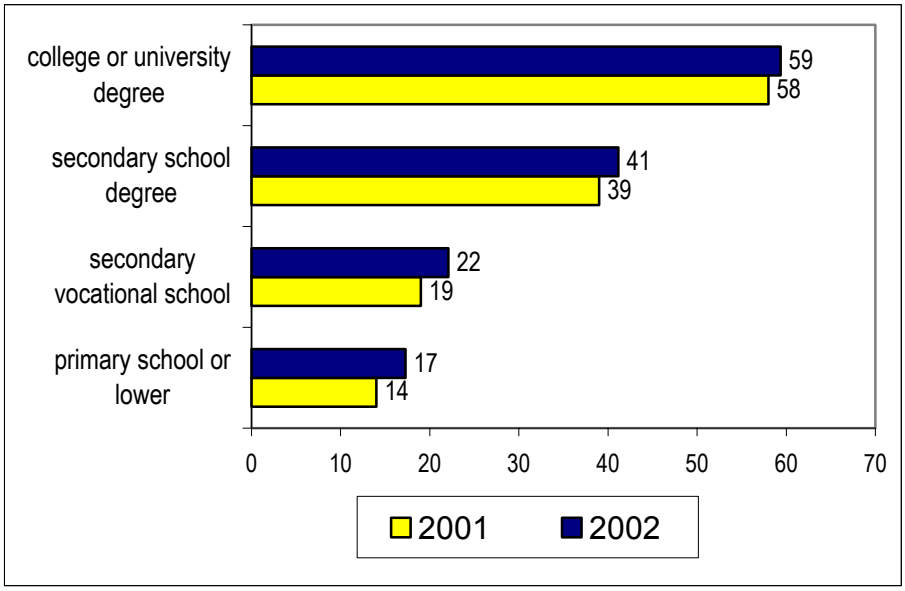
2001-2002 (%)



Computer penetration can be measured not only on the household level, but on the personal level as well. In this case we find that 30% of the Hungarian population have a computer at home, which is a 3% increase from last year. However, there are significant variations according to the respondents' education and age.

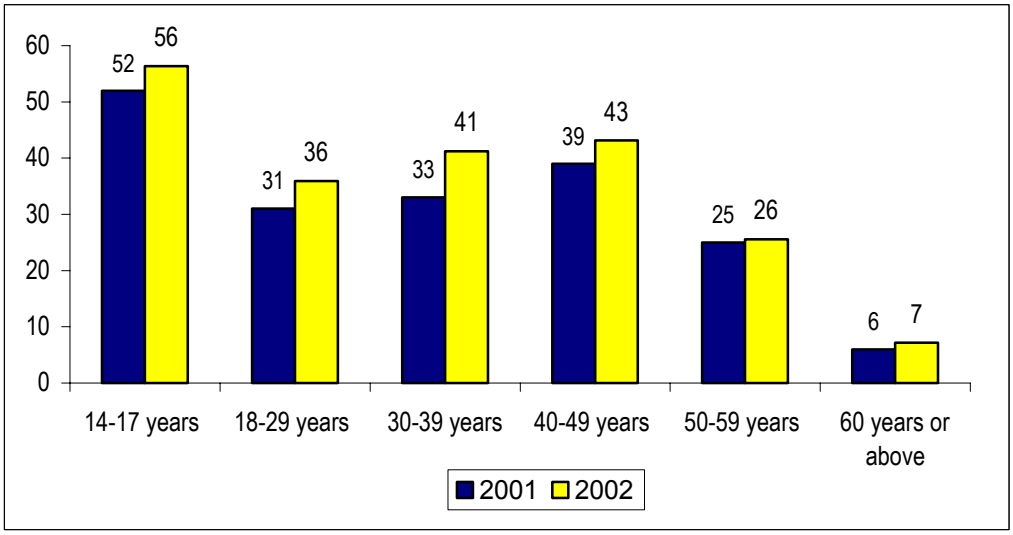
The likelihood of owning a computer is below the average among people who only completed primary school or secondary vocational school. Those with a secondary school, college or university degree are more likely to live in households with a computer. Nevertheless, the differences between the educational groups are getting smaller: computer penetration showed the greatest increase among the population with lower education (23%), while the growth was only 2% among people with a college or a university degree.

The proportion of people with PC at home according to education, 2001-2002 (%)



Age is also a significant factor for computer ownership, just as last year. The highest rate of computer access at home was measured in the 15-17 age group, followed by the 40-49 age group and the 30-39age group. In the oldest group, 60 years or above, access to computer at home is way below the average.

The proportion of people with PC at home according to age, 2001-2002 (%)



This year we could detect the social disadvantages of the Roma population again. Of those, whom the interviewers marked 'Roma' only 10% live in households with PCs, while 31% of the 'non-Roma' majority have PCs. Nevertheless, the disadvantage of the Roma seems to be diminishing. Within the Roma population the number of those who have a PC at home has doubled since last year when it was only 5%. At the same time, the growth was only 11% among the 'non-Roma' population .

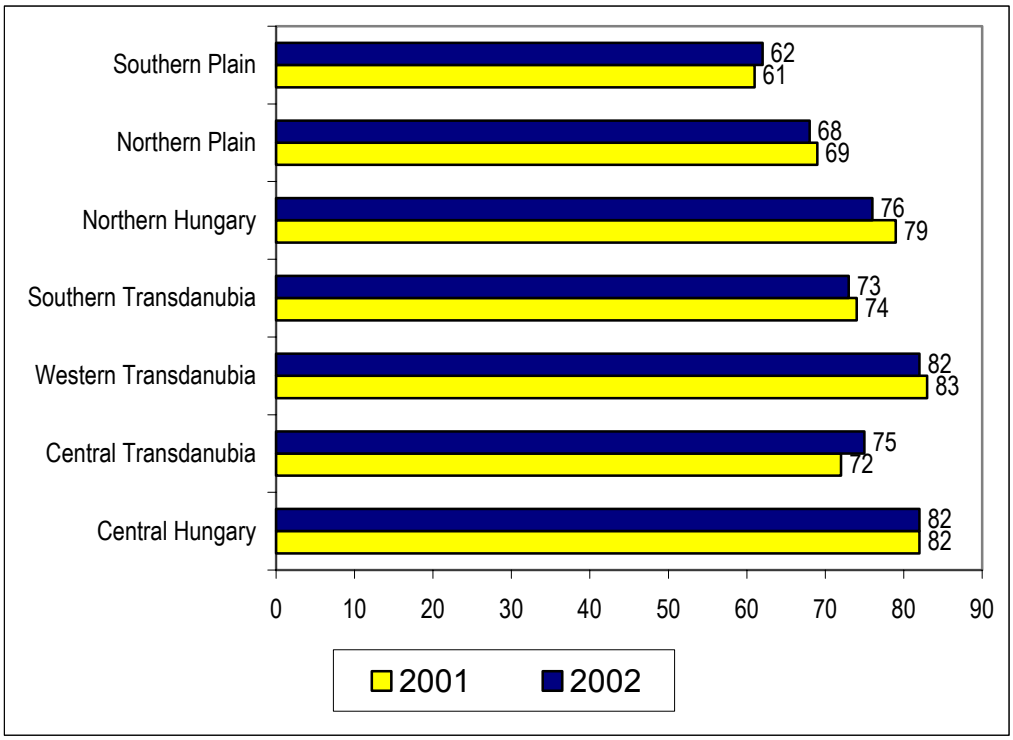
Standard telephone line and cell phones

Since most households connect to the Internet through standard telephone line with a dial-up modem, it is important to examine standard telephone line penetration in the households.

In 2002 75% of the households have a standard telephone line, but this differs to a great extent according to regions. The telephone line penetration is greatest in Central Hungary and in Western Transdanubia (83%), while in the Southern Plains less than two thirds of the households have standard telephone line.

The dispersion of standard telephone lines in total, as well as according to regions is similar to the previous year: in some regions there is a few percentage point difference compared to the figures of last year, but there have not been any significant changes.

Households with standard telephone line according to regions. 2001-2002 (%)



There is at least one cell phone in 63% of the households. This rate has not changed much compared to last year (61%). The dynamics of cell phone penetration can be demonstrated only the personal level. The reason for this is that penetration did not grow by the involvement of more households, but by the involvement of new members of the same household. Last year 40% of the population over the age of 14 had cell phones, by the autumn of 2002 this rate went up to 55%. It is important to mention that the proportion of WAP set (capable of connecting to the Internet) users has doubled in one year reaching 16%. Therefore, cell phone penetration followed a very dynamic trend in time, which is contrary to the slower trend of PC penetration.

Television, teletext, TV programme reception

95 % of households own a colour TV in 2002, and 48 % have a set with teletext. 40 % of the population aged 15 and above use teletext regularly. The access to teletext and also its use increased from last year.

In 53 % of households there is cable installed for cable television. These households receive an average of 29 programmes. Parabola aerial is installed in 17 % of the households, enabling the reception of 36 channels on average.

Multimedia devices in the family

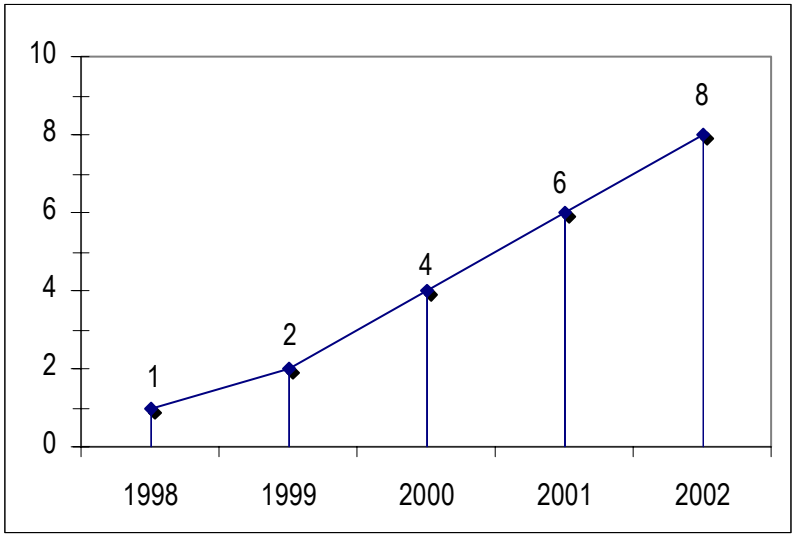
More than 50% of households owned a VCR already in 2001, and this year this rate grew to 54%. The rate of households equipped with home-cinema, DVD players have doubled since last year, and shows 4% penetration in 2002. The percentage of households with HIFI equipment has also increased from 31% to 36%.

Internet-access and use

Access

The slowly forming information society in Hungary was characterised by very low rate of Internet penetration in the homes also in previous years. The dynamic growth, expected by many, is still to come: 8% of the Hungarian households had an Internet access in the autumn of 2002, while it was 6% a year ago.

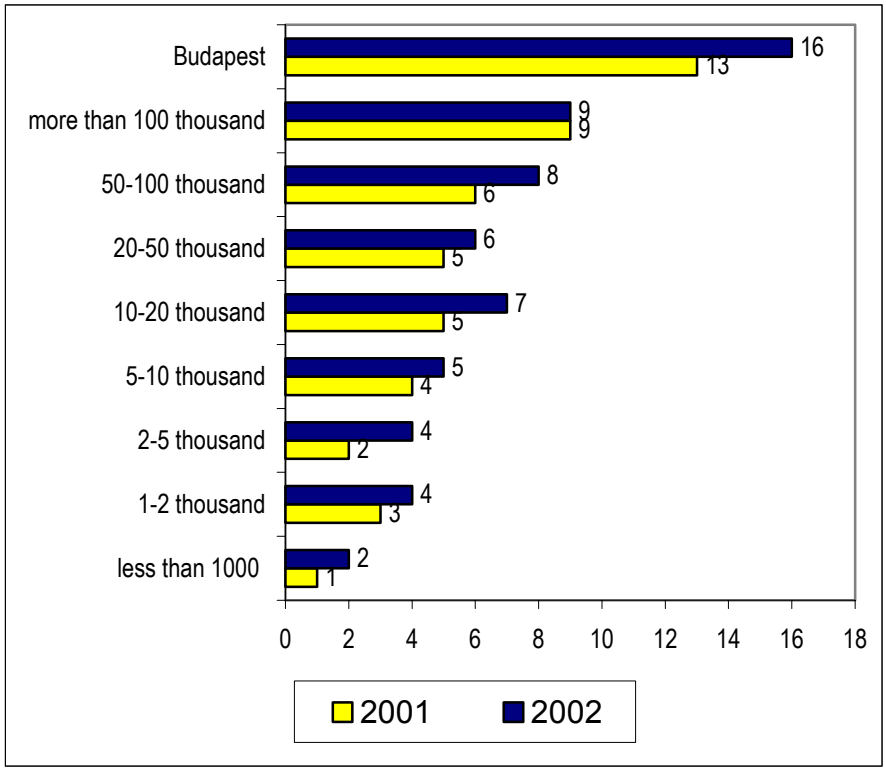
The proportion of households with Internet access at home (1998-2002)*



*Source: Household surveys and WIP 2001-2002, TÁRKI

Internet access positively correlates with settlement size: the greater the settlement is, the greater proportion of households in the particular settlement have access to the net. While in the villages with less than 1000 inhabitants only 2% of the households have Internet access, in Budapest this ratio is 16%.

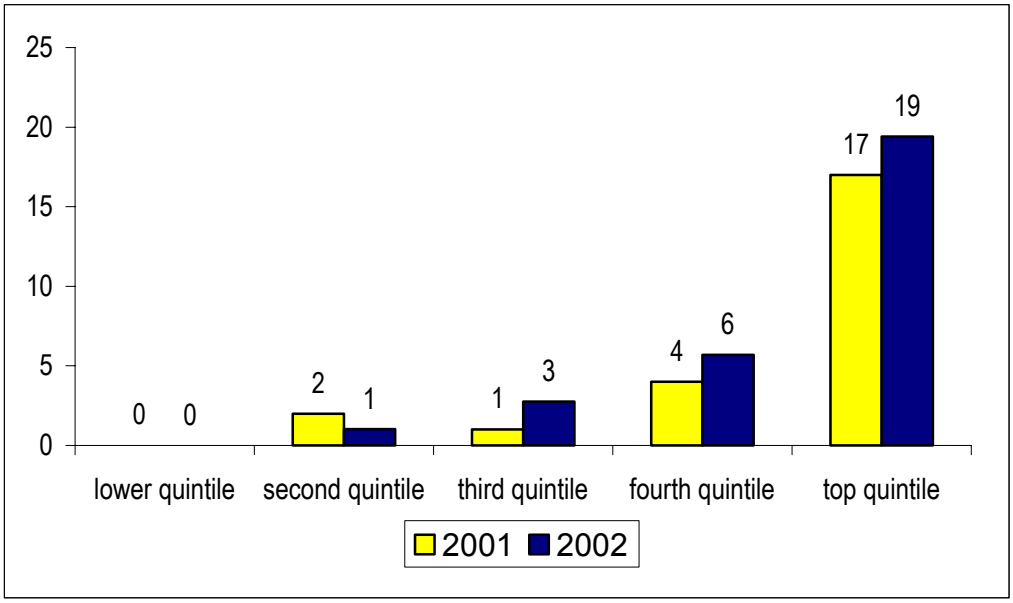
Internet access at home according to the size of settlement, 2001-2002 (%)



It is definitely a positive tendency that the number of households with Internet access is growing not only in Budapest, but also in the smaller settlements. This ratio has grown from 13% to 16% in Budapest between 2001 and 2002, while in the settlements with less than 1000, and between 2 and 5 thousand inhabitants it has doubled.

The income of the household is a significant factor in determining Internet access at home, just like in determining the computer penetration in the households. According to total income quintiles, households in the lowest quintile do not have Internet access at all, just like last year, while 25% of the households in the top quintile do. But the growth is not even: the ratio of the top quintile is still more than three times greater even compared to the fourth quintile.

Internet access at home according to total household income quintiles, 2001-2002 (%)



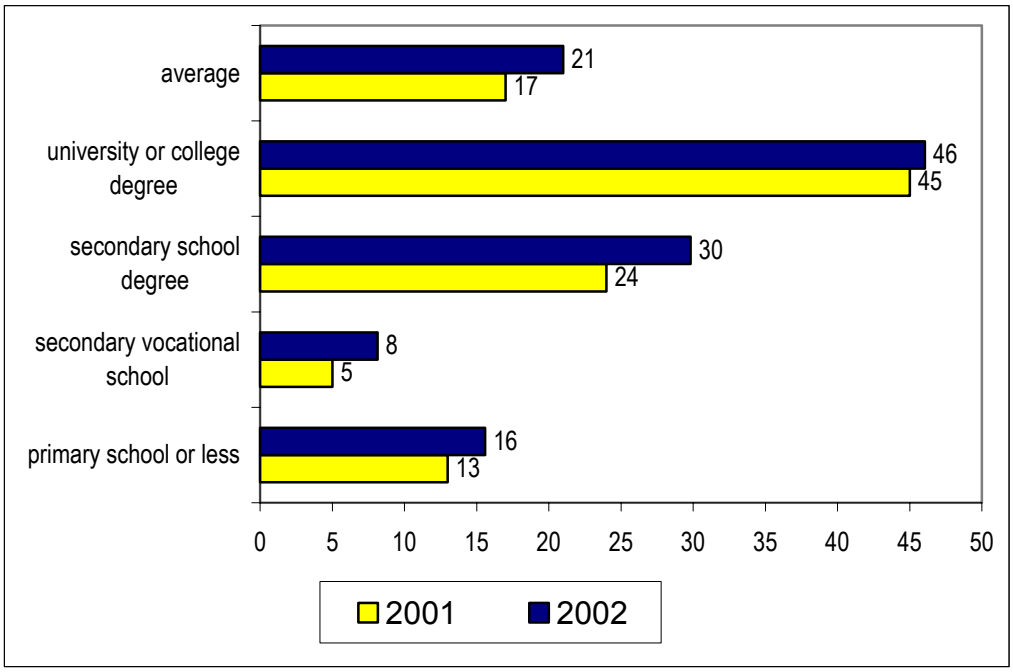
More than half (54%) of the households with Internet access connect to the world wide web with a telephone modem. 21% connect through ISDN, 14% through broadband cable and 3% have ASDN connection.

Use of the Internet

According to our survey, in the autumn of 2002, 21% of the population over the age of 15 use the Internet on a regular basis. Of the people 18 years old and older the Internet users make up 18%.

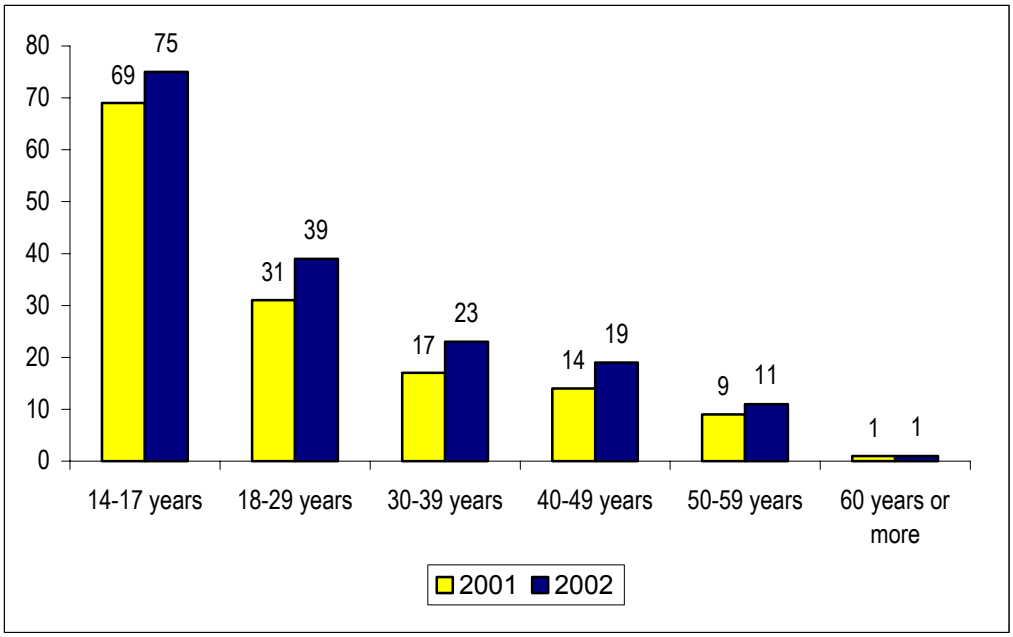
In our sample men are more frequent Internet users (24%) than women (18%). Following the international trend, and also the results of the WIP's 2001 survey, the more qualified one is, the more likely that he or she will use the Internet. Almost half of those with a university or college degree use the net, while 16% of those with primary school education. (The lowest ratio is for people with a vocational school degree. The reason behind this is that the majority of these people have finished their educational history, while the majority of those with max. 8 grades are still learning.)

Internet use in the population aged 14/15 and above according to education, 2001-2002 (%)



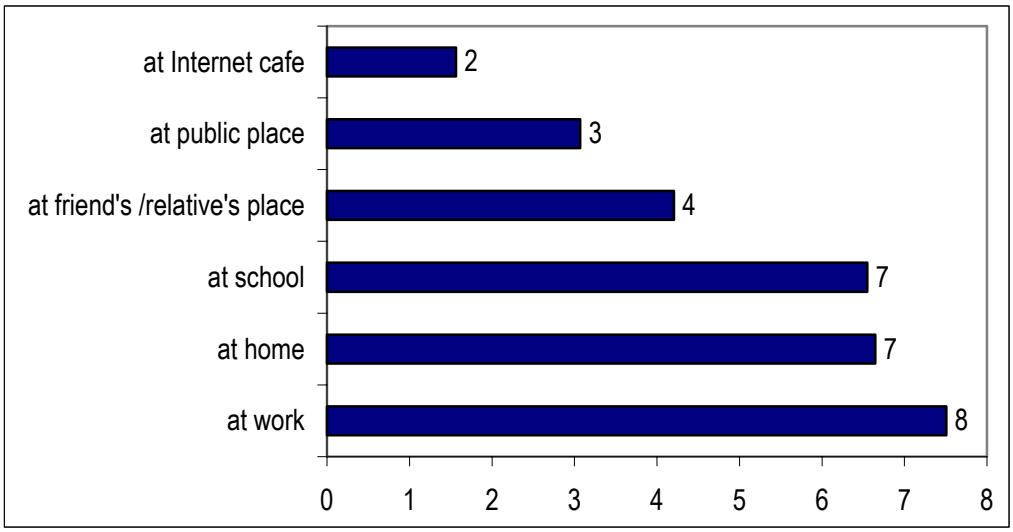
There is a similar correlation between Internet use and age. The older the respondent is, the less likely it is that he/she uses the Internet: while the proportion of Internet users is strikingly high in the 'school-net' generation aged between 15 and17, only 1% of the population over 60 use the Internet. Compared with the results of last year, the rate of Internet users grew in all age groups, except for the group above 60, where the Internet use has not changed.

The proportion of Internet users according to age groups, 2001-2002 (%)



The majority of Internet users connect to the Internet at the workplace or at school, and a similarly great percentage uses the net at home. 31% of all Internet users go online at home (as well) and to project it to the entire population over 15, home users make up 7%. A very small portion of the population use public access facilities to connect (library, Internet cafés, Community centre).

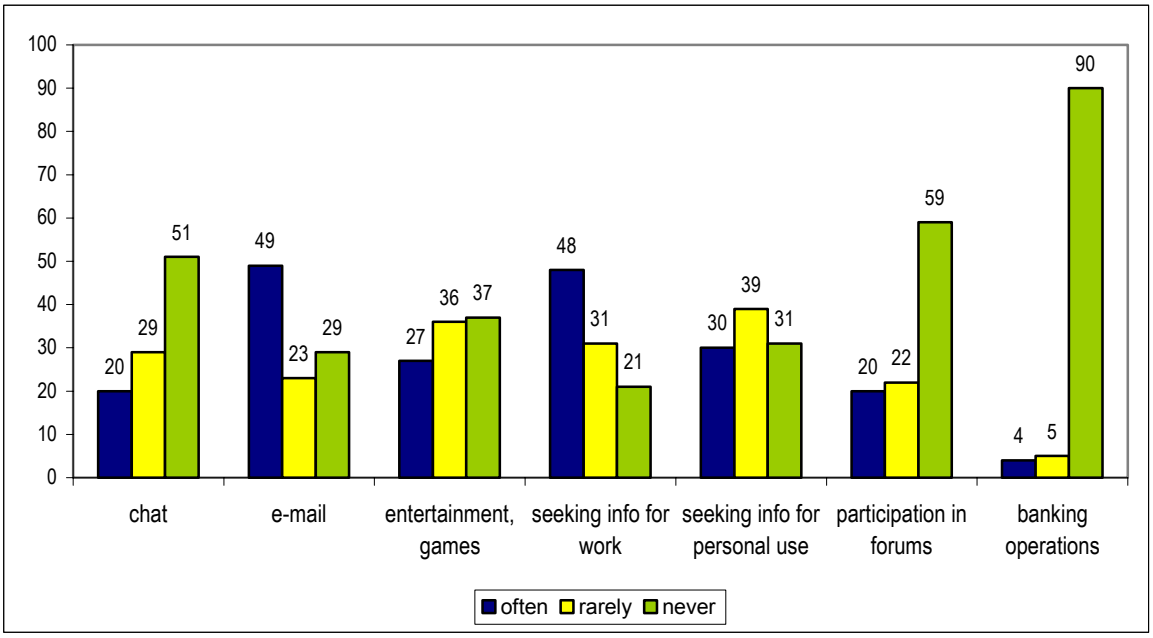
Locations where the Internet is used, 2002 (%)



What is the Internet used for?

The most popular Internet activities are the same as last year: using e-mail and searching for information related to work. Almost half of the Internet users (49%) send or receive e-mails several times a week, while 46% search for information this often. Information browsing for personal reasons is less frequent: 30% of Internet users do it often and 39% of them do it rarely. Online chatting, participating in forums and Internet games have a much lower popularity. 90% of Internet users never use online banking services, while only 4% do so often.

What is the Internet used for? 2002 (often=more than once a week, rarely=at least once a month)



Using E-mail

Besides the growing proportion of e-mail users in the population, the number of letters, especially work related emails received and sent per e-mailer has also increased somewhat since last year. In 2002, e-mail users sent 8,8 work related e-mails per week on average, compared to last year's 6,4. The number of work related letters received per week has increased to 13,5 from 9,9. The number of personal letters received and sent has not changed significantly since last year. E-mail users get 5,5 and send 8 personal e-mails every week.

It is typical that men trade more electronic letters than women, especially e-mails related to work. Men get 19 letters per week and send 11,2 for work on average, while women send 6 letters and receive 7,3. According to age, the number of business letters exchanged was highest in the age group between 30 and 39, while the age group between 20 and 29 exchange the greatest number of personal letters.

Respondents' opinions about e-mail have not really changed over the last year. The majority still does not think that sending and receiving e-mail takes too much time. They regard it as useful, since it provides the means to communicate with those, whom they could not contact otherwise. 22% of e-mail users completely agree, and 20% more or less agree that they are more likely to be in touch with e-mail users, than with non-e-mail users. However, it does not correlate with a discriminating attitude: only 5% of the e-mail users mind if others have no e-mail, 7% are neutral on the question and the great majority does not mind it at all.

Online shopping

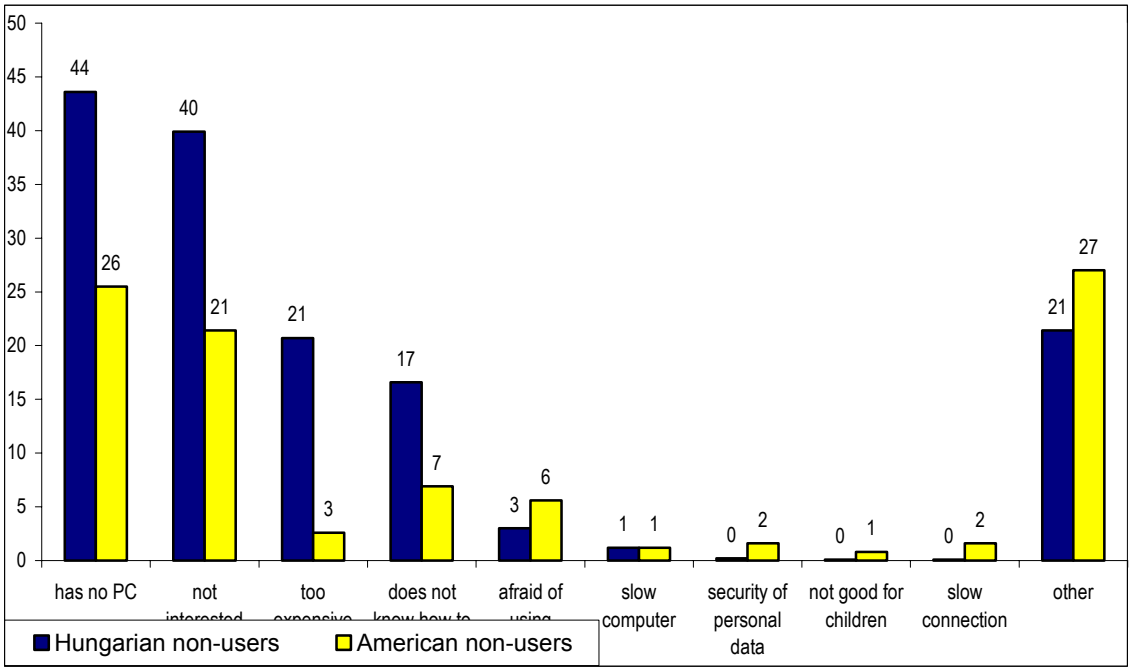
The great majority of Internet users have never bought anything online, thus the situation in this respect hasn't changed much since last year. 2% buy at least once a month or more online, and 7 % buy more rarely, but have already done so. One of the reasons for the small ratio of online purchasing can be the difference in prices of online products and of products at the retailers. However almost 40% of the Internet users could not answer when asked about the differences in prices, and more than half of those who responded thought that the prices of the products online and in the stores are basically the same, a slightly greater proportion of the other respondents thought that online products were more expensive. Another reason for the low interest in online purchasing can be the distrust of credit card payment. More than 50% of those, who have already purchased online do not feel or feel only slightly that the data of their credit cards are safe when buying online. This lack of trust can also be the reason why online buyers most prefer to pay after they have received the product.

Non-users: why not online?

This year we examined again the reasons why people decide not to use the Internet. Compared to last year there were only a few changes in the reasons mentioned. The lack of a computer is still the most frequently mentioned reason, and still a relatively high proportion of people - 3% more than last year- do not use Internet because they are not interested.[1] There are still many who find Internet access too expensive, and a significant number do not use it for lack of technical knowledge and skills.

Why not online?

Non-users' answers (% of respondents) in Hungary and in the USA*



*Source: WIP USA, 2001

Lack of computer and high price is a much less frequently cited reason for non-use among American non-users. They also have a big group, not as big as in Hungary, who are simply not interested in the possibilities provided by the Internet. 7 % of Americans are non-users because they do not know how to use it. According to the data, "fear of technology" is a slightly more important factor overseas than here in Hungary.

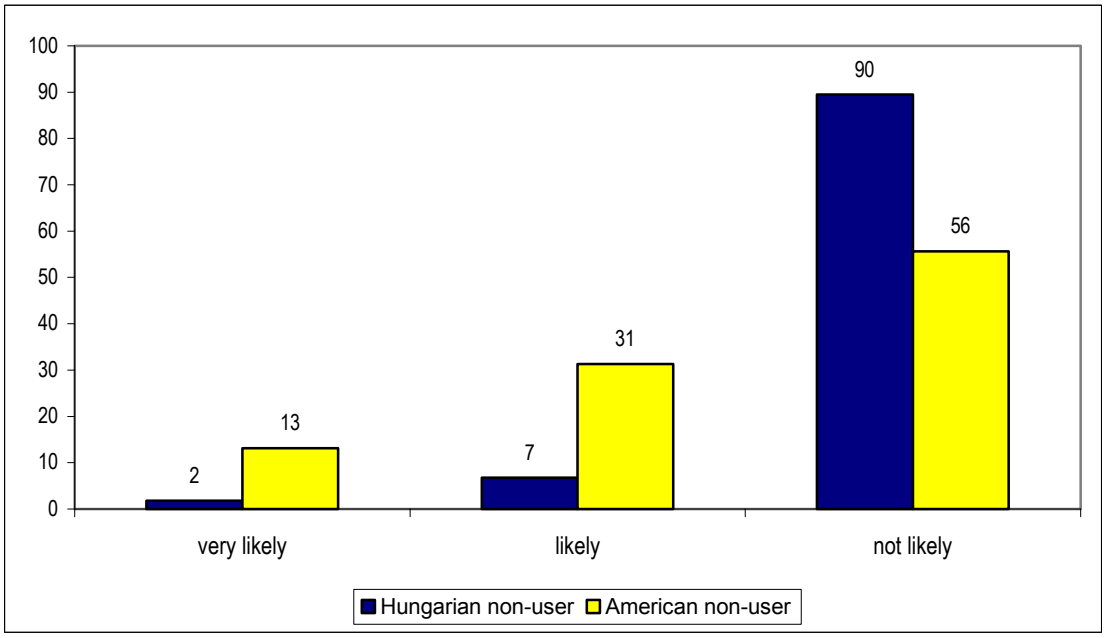
[1] More than one answer possible.

Here, the proportion of people saying that they do not use the net because they are not interested gradually increases with the advancement of age (14% for the youngest and 56% for the elderly). At the same time the ratio of those who do not use it for lack of computer declines with age (55% for the age group between 15 and 17, and 37% for those over 60).

The intent of joining Internet users

After having discussed data on non-use, it is worth looking at how many of the current non-users intend to become users in the near future. This year, even less than last year, only 9% said they thought it very likely or likely to become regular Internet users within a year. 90% of non-users thought that they were not going to join the Internet users. Compared to Hungarians, Americans show a much greater interest in joining: 13% of non-users think it very likely and 31% think it likely to become a regular user within a year.

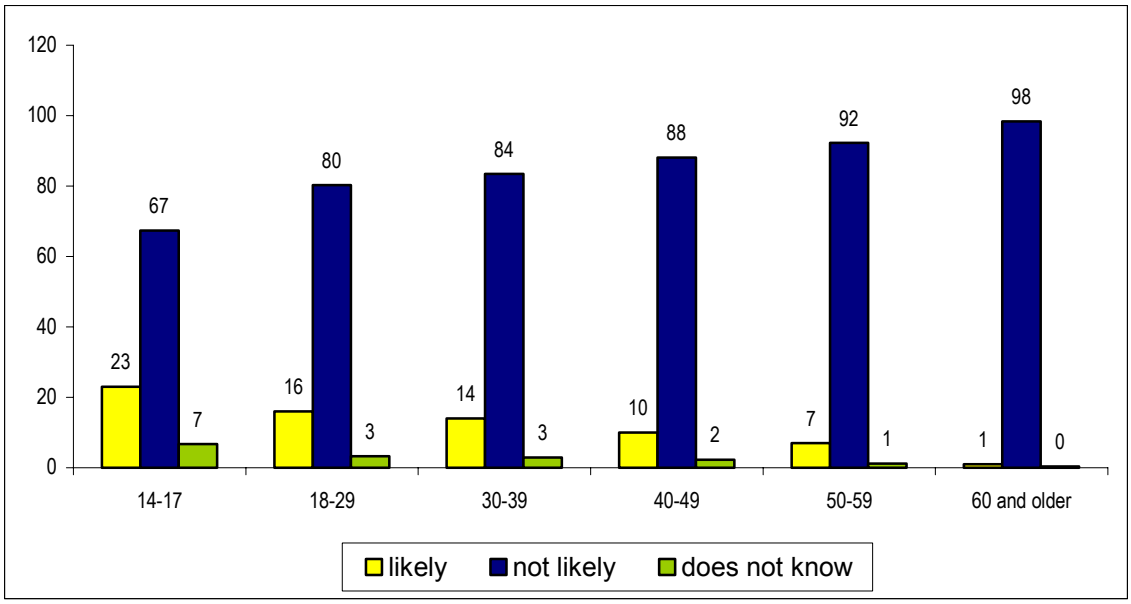
How likely is it that you become a regular Internet user within a year?
Non-users' answers (%) in Hungary and in the USA* 2002



*Source: WIP USA, 2001

Age is a significant factor here as well: 26% of the 15-17 year olds, and only 1% of the oldest age group think of becoming Internet users next year.

How likely is it that you become a regular Internet user within a year?
2002 (% according to age groups)



Nevertheless it is ambiguous how many of those, who think it likely to become Internet users will indeed become one, if only 29% of those who said they were likely to join the net users last year did actually do so.

Views about the Internet

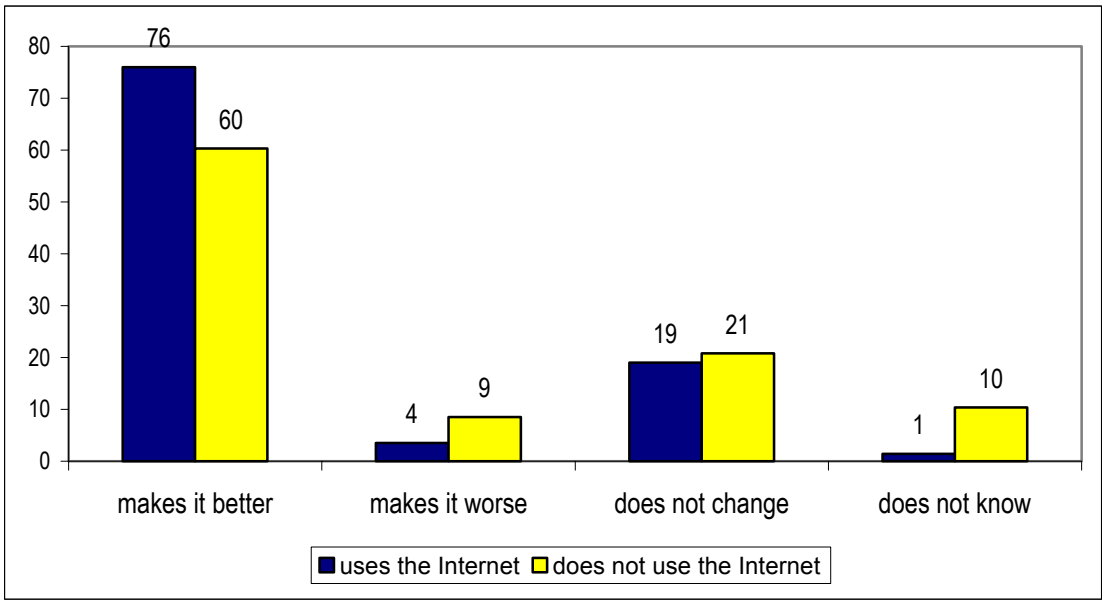
Has the Internet made the world a better place?

The analyses of facts relating to the use of the Internet should be supplemented with the examination of attitudes and beliefs, because such information can help us to interpret some of today's tendencies and to predict future ones.

This year we asked again what users and non-users thought of the expansion of new communication technologies (Internet, cell phones): do they make the world a better or a worse place? This year's data show that people's opinion on the issue improved further. In 2001 66%, while this year 70% of the respondents had a positive view on new media. At the same time, the ratio of those who think that Internet has harmful effects on the world has declined (from 10% to 8%), and the number of those who believe that it has no effect on our world has also decreased (to 22% from 24%).

This year's data show a slightly different picture if we take into account those who did not answer this question. In this case, 64% appear to be 'techno-optimist', 8% 'pessimist', and 20% think this phenomenon does not have an impact upon the world. Besides these, 9% of the people could not answer the question. If we compare the opinion of Internet users and of non-users, it turns out that users are more likely to be optimists. 76% of users and only 60% of non-users think new media make the world a better place. It also becomes clear that among non-users there are more people, who expect negative effects of the new technology (9% against 4% of the users) as well as those who have no opinion (10% against 1% of the users).

The impact of new technologies on the world 2002 (%)



Surprising as it may sound, in the American data an opposite tendency can be detected. Among users overseas, the proportion of optimists declined from 66% to 62%, and among the non-users much less (only 50%) believe that new technologies have a positive impact on the world.

In Hungary technological optimism gradually declines with the increase of age: 78% welcomes the changes among the 15-17 year olds, and only 46% does so over 60. There are significantly more optimists among people in Central-Transdanubia (71%) and among the students (76%).

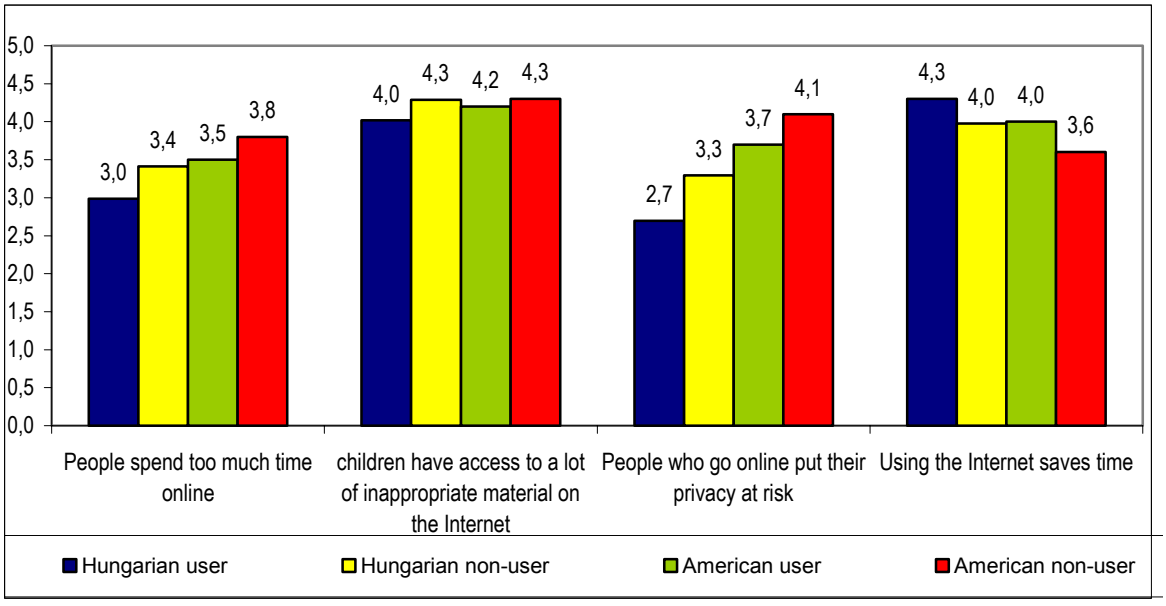
Attitudes towards the Internet

In the WIP research we tried to explore the respondents' opinions about the Internet by asking seven questions. The respondents could indicate on a 5 point scale how much they agreed with the statements (1- completely disagree, 5- completely agree).

The answers to the four attitude questions below also reflect the technical optimism of the Hungarians. American respondents agree much more strongly with statements relating to problems of Internet use. For example with 'people spend too much time online' (Hungarian user: 3,0 American non-user: 3,8); as well as with the statement that Internet users put their privacy at risk (Hungarian users: 2,7 American non- users: 4,1). The same optimism is displayed when Hungarians agree more strongly with the timesaving function of the Internet. Hungarian users give a rating of 4,3 to the statement that Internet saves time, while American users are more sceptical on the issue (3,6).

Attitudes about the Internet in Hungary and in the USA*, 2002

(5- strongly agree, 1- strongly disagree)

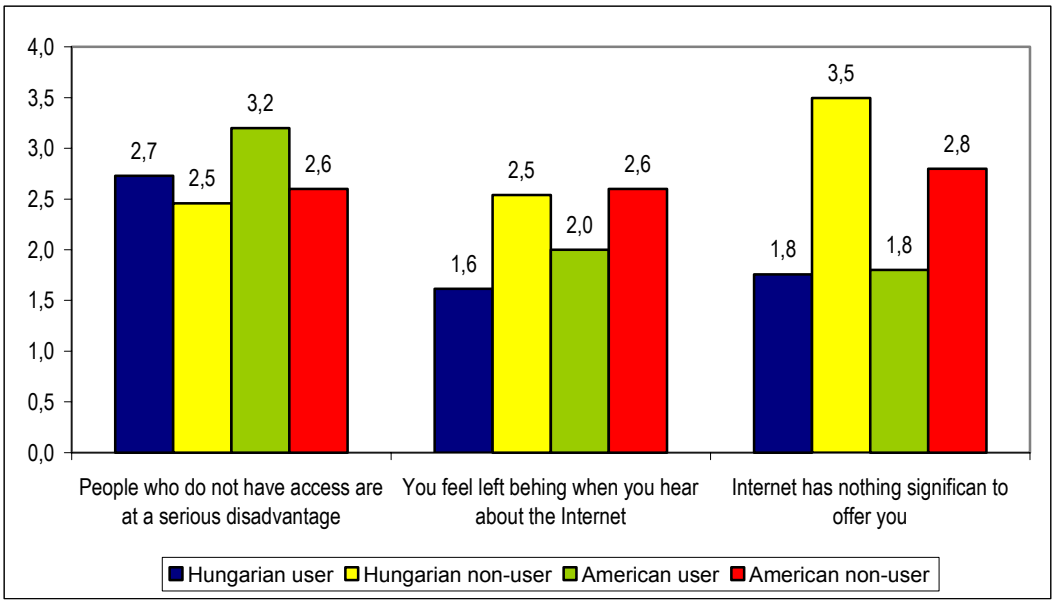


*Source: WIP USA, 2001

Nevertheless, the Hungarian non-users are less likely to agree with statements about the usefulness of the Internet. There is a high rate of agreement (3.2) with the statement: 'The Internet has nothing significant to offer you'. Only 2,8% of American non-users agree with the same statement. The technical optimism surprisingly cannot be detected either with relation to the statement 'People who do not have access are at a serious disadvantage'. Hungarian users gave on average a rating of 2,7, non-users 2,5, while the American users gave on average a rating of 3,2 i.e. they rather agreed, than disagreed with the statement.

Attitudes about the Internet in Hungary and in the USA*, 2002

(5-strongly agree, 1- strongly disagree)

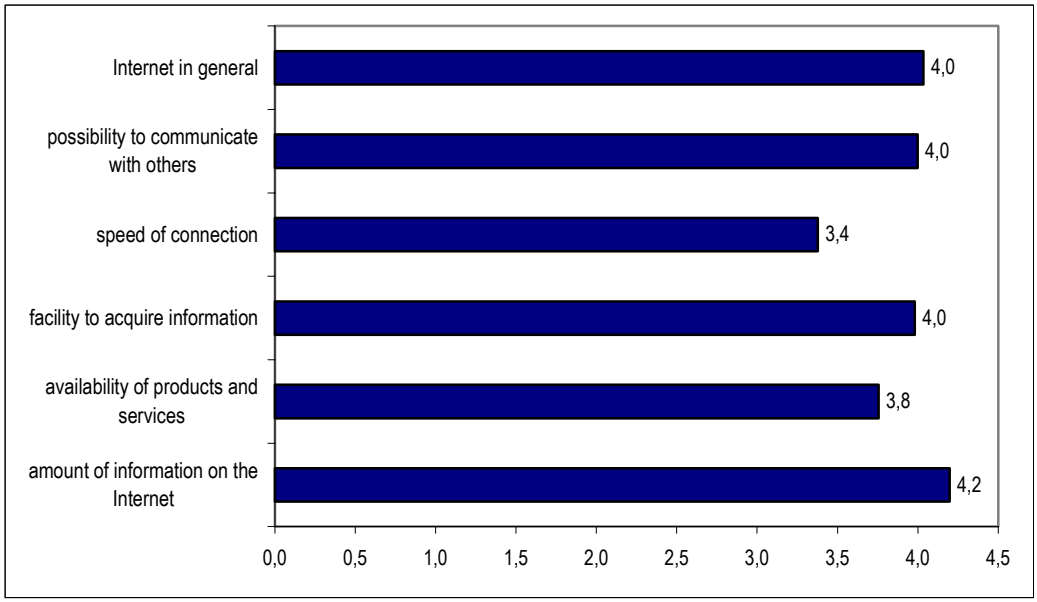


*Source: WIP USA, 2001

Satisfaction with the Internet

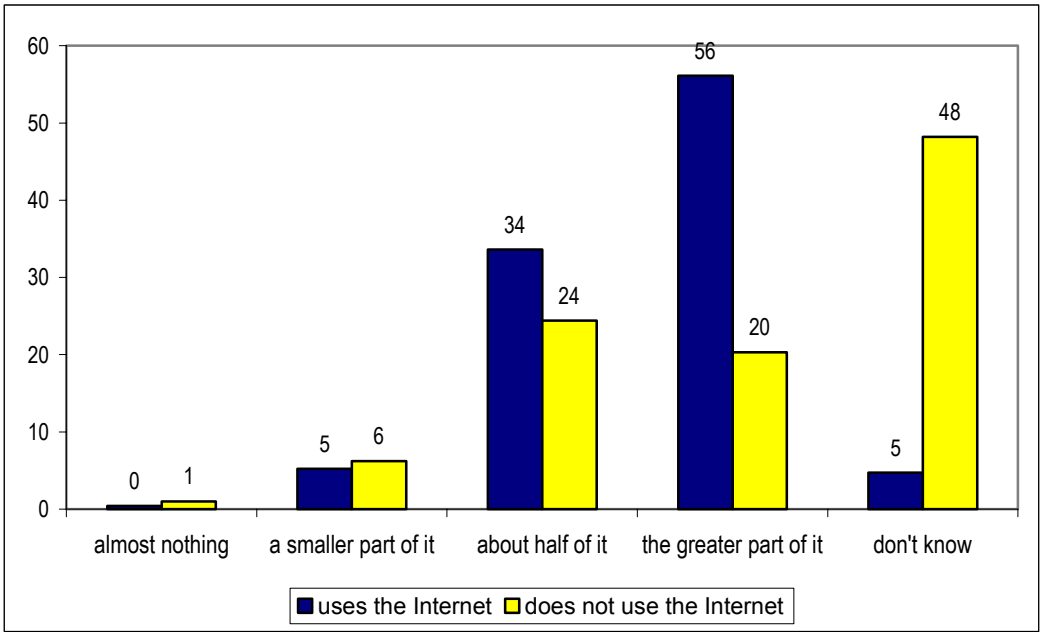
The Hungarian Internet users are mostly satisfied with the web itself. On a five-point scale (5 - complete satisfaction, 1- complete dissatisfaction) Internet as a medium was given 4 points on average. Hungarian users are the most satisfied with the quantity of information available on the web, and they were least satisfied with the speed of connection. People judged the possibility of communication with others and the easiness of getting information quite good. In this respect there aren't any significant differences between the Hungarian and the American users.

Satisfaction of Internet users, 2002 (5- very satisfied, 1- not satisfied at all)



The research also examined how reliable the users and non-users find the information available on the Internet. The two groups differ very much in this respect. More than half of the Internet users think that the great majority of the information on the Internet is reliable, a third thinks half of it is exact, while 6% think that even less or nothing is reliable on the Internet. As opposed to them only 20% of non-users think the Internet is generally a reliable source of information, 24% of them think half the information and 7% think even less is accurate. Of course 48% of non-users, since they do not know this medium, could not answer this question.

How much of the information found on the Internet is reliable and accurate? 2002 (%)

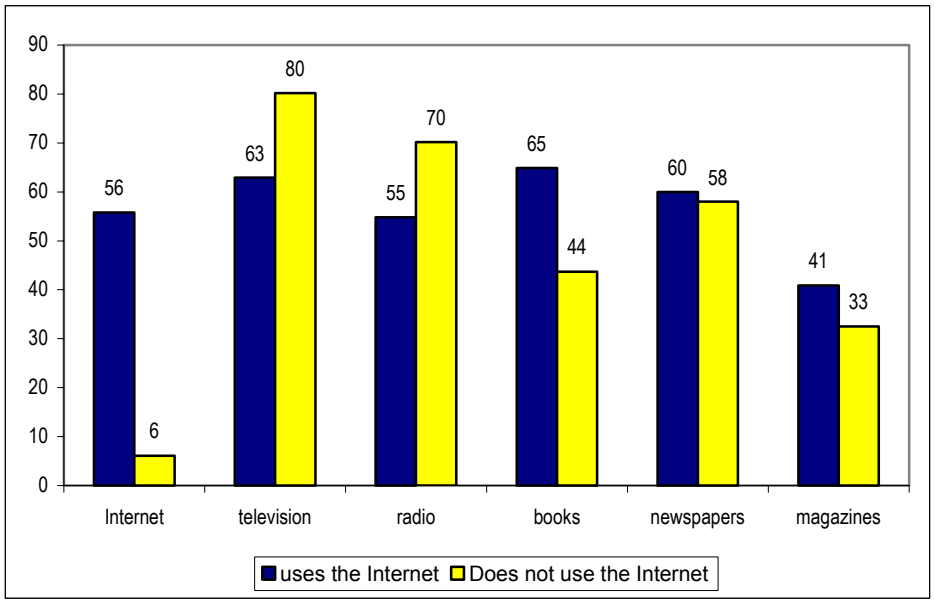


Age seems to be an important factor here as well. Starting at the youngest generation and advancing to the older, the proportion of those, who considers the Internet a reliable source of information gradually decreases. While only 53% of the 14-17 year olds feels that the information online is generally reliable, in the age groups over 60 only 8 % does so. At the same time the proportion of those who cannot answer the question, increases at the same rate (from 5 to 69%). Out of those with a college or university degree, more than the average believe that the bulk of the information online is reliable (38%) and they are also more likely to be optimist about the new technologies (35%).

The Internet and other media

Internet users consider the Internet as being a similarly important source of information as the print media i.e. magazines, newspapers, books and the TV. Non-users regard the TV and the radio as more important sources of information, while books and the Internet of course appear less important.

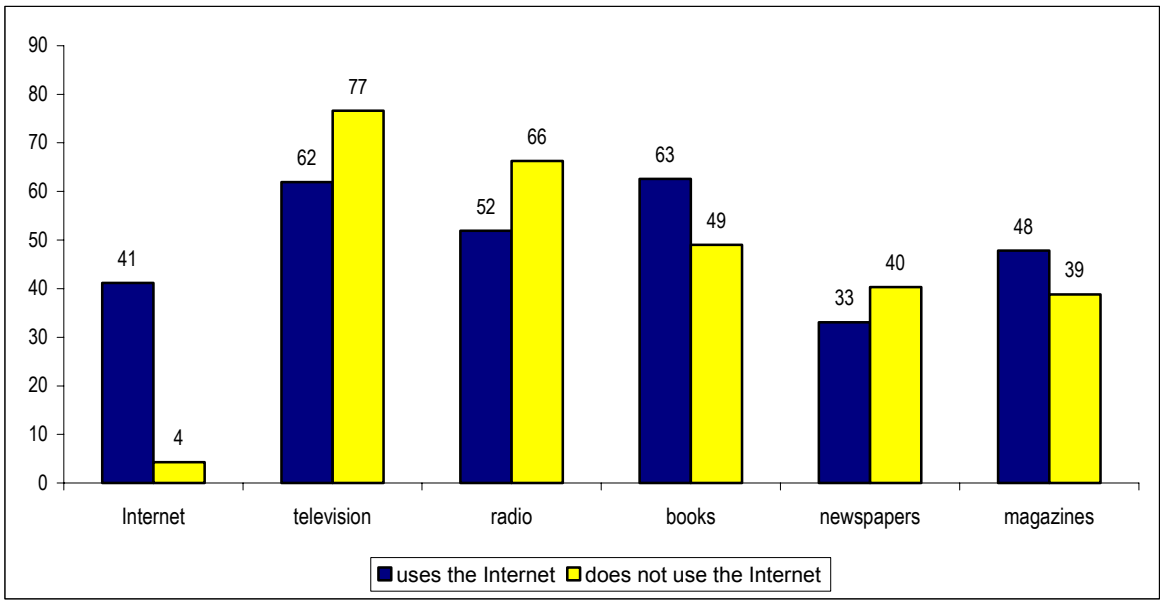
The proportion of those, who consider the here listed media '(very) important' source of information, 2002 (%)



Age is again an important factor. 39 % of the 15-17 year-olds feel the Internet is an important medium for information gathering, while only 3% do so among the elderly. On the other hand, an opposite tendency can be recorded about TV: 66% of the youngest and 84% of the elderly regard it as important. The role of the Internet is most important in Budapest (27%) and among those, who belong to the highest income quintile (27%).

The number of those, who find the Internet important for entertainment, is still quite low, but slightly increased from last year. For Internet users, it is still the books and the TV, which is ranked first in that respect. For non-users, TV is still on the top, but the radio's entertaining function is also ranked high.

The proportion of those who consider the here mentioned media "(very) important" medium in entertainment, 2002 (%)



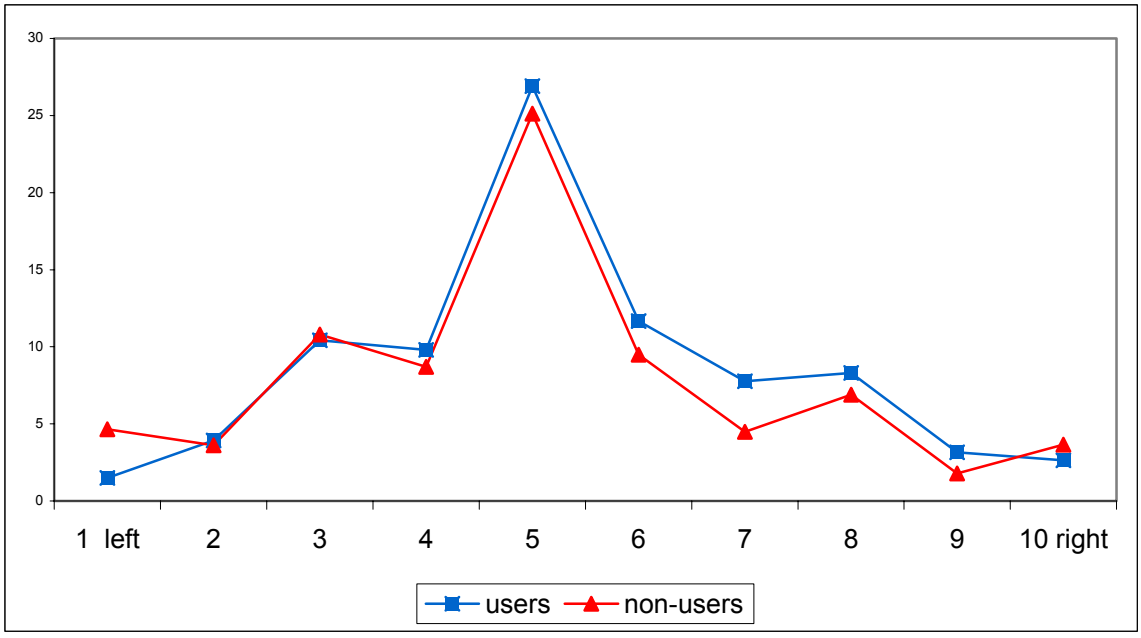
With the advancement of age, the entertainment function of the Internet gradually declines. 55% of the 15-17 year olds and 22% of the 18-29 year olds regard the net as an important source of entertainment, while only 1% of the elderly does so. The men and those who belong to the top income quintile also say that they find the Internet an important source of entertainment.

Political affiliation of users and of non-users

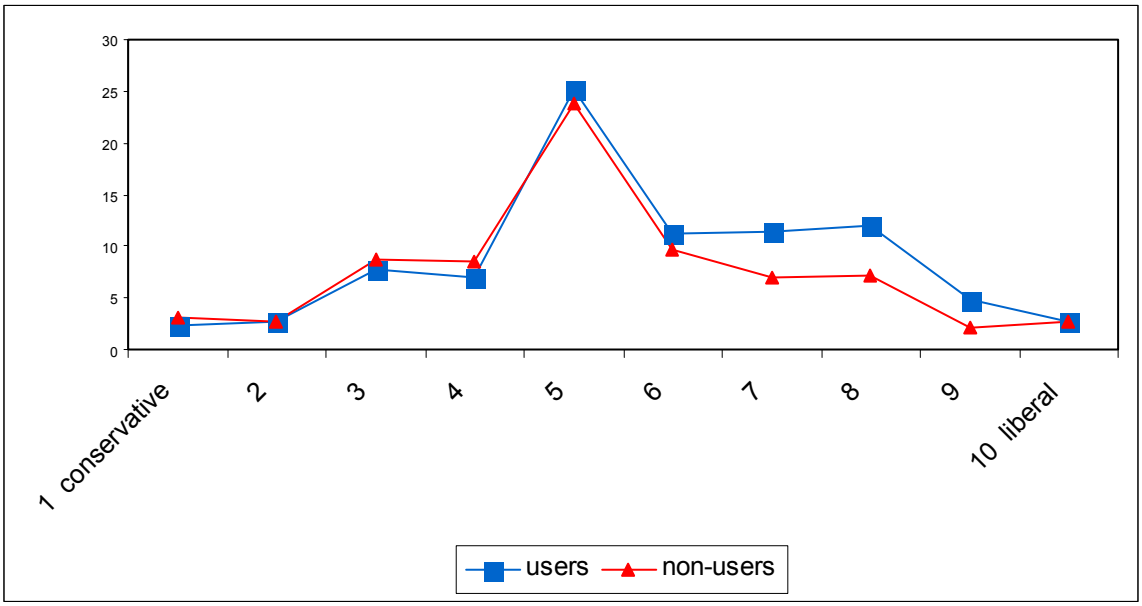
Although Internet users in Hungary represent only a minority, reports of public opinion in newspapers tend to pay special attention to this group. Therefore it might be interesting to see the political affiliations and value orientations of this group. In our questionnaire we measured the political dispositions of the respondents on a ten-grade scale on a left-right axis and on a conservative/liberal axis.

The comparison of Internet users and non-users according to their political self-collocation shows an interesting distribution. While in both groups the medium values are very high, we could also observe that according to political orientation there are slightly more net users among the right than non-users, and that more users claim to be liberal than non-users. It is also important to note, that the number of those who refused to answer or were uncertain was also considerable: every fourth –fifth non-user could either not answer or did not want to answer both questions, and 13-14% of the users did not give a valid answer.

The distribution of Internet users and non-users according to political orientation



The distribution of users and non-users on the liberal/conservative scale



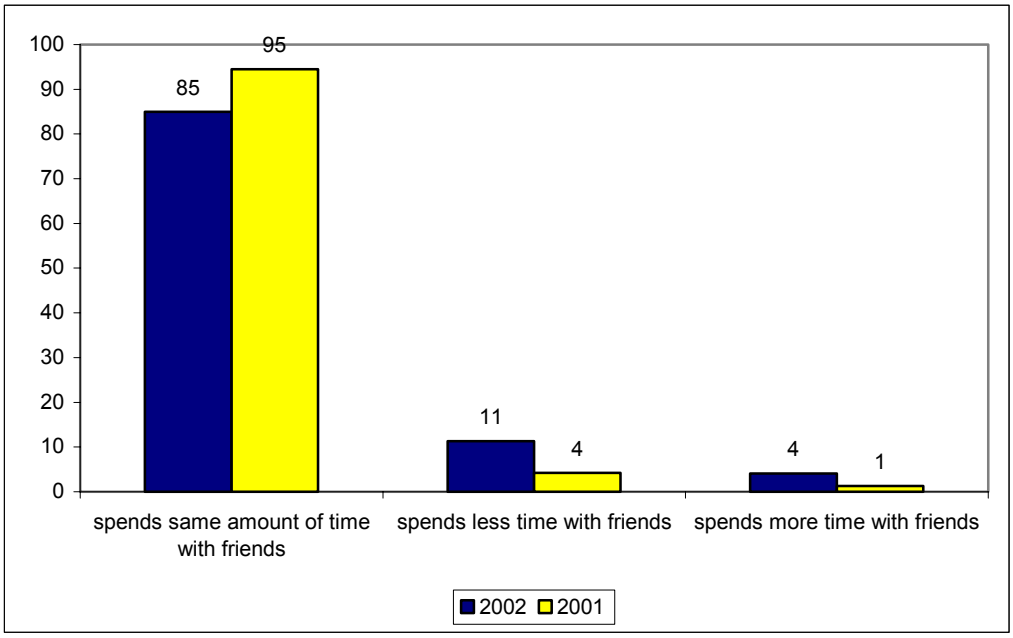
Internet in the family

Despite the general consensus, our data shows that using the Internet does not alienate family members from one another. 90% of those who have Internet access at home say that the family members spend the same amount of time with each other as before and only 9 % say less. The great majority of the respondents (86%) have never felt that their family members ignored them because of the Internet. Although differences have declined since last year, television viewing is still a more frequent cause of negligence than the Internet.

Moreover, Internet has become a form of social activity. In 69% of the households with Internet connection the family members use the Internet together at least once a week.

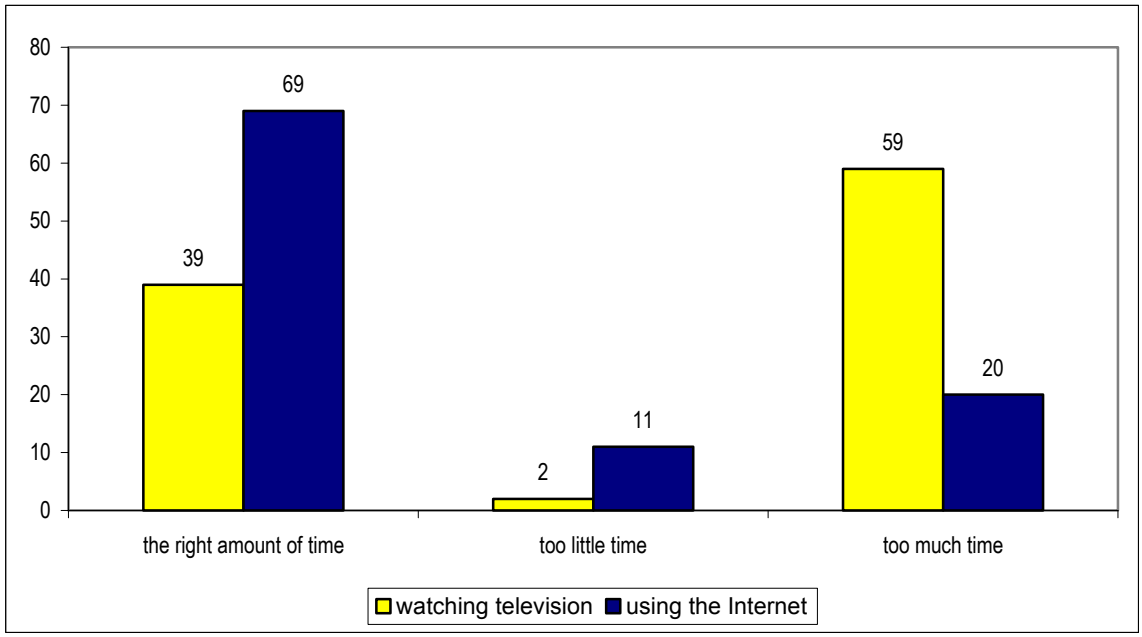
Given that in our sample there are altogether 61 parents who have children under 18 using the Internet at home, we must treat the results concerning children's Internet use very cautiously. From the data at our disposal it appears that parents do not regard Internet as being dangerous for their child's school achievement, nor for their social life. 92% of respondents say their children's school grades have not changed, and 5% say their grades even improved, since connecting to the Internet at home. Nevertheless, we must add that 3% of parents felt their children's grades got worse, while last year nobody reported that. Parents increasingly reported that their children spend less time with friends, as well as reported more time spent with friends.

Since you have Internet at home, does your child spend more, less or about the same amount of time with his/her friends? 2001-2002 (%)



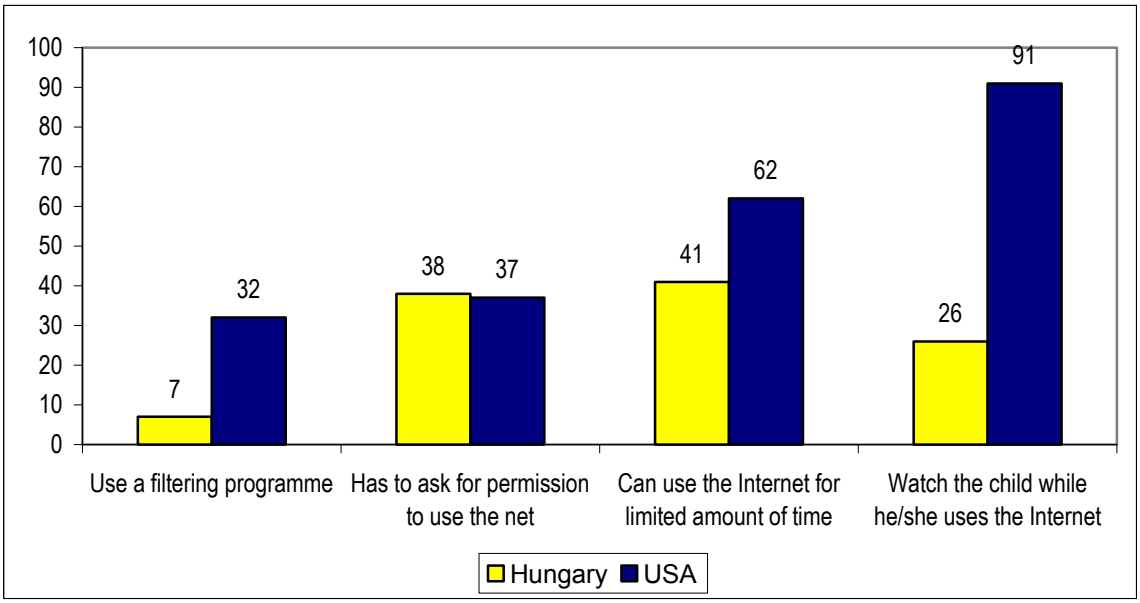
Taking the low case number into consideration we can carefully conclude that the number of those who felt neutral about the impact of the Internet has dropped since last year, but the majority of parents still do not have bad experiences. While 59% of parents think their children spend too much time watching TV, yet only 20% say this about Internet. What' s more, 11% think their children should spend even more time online.

How much time does your child spend watching TV and online? 2002 (%)



In spite of these facts parents control somehow their children's online activity in more than half of the households (58%). The most frequent control technique is the limitation of Internet time: 41% choose this method. It might be interesting to note that the American and the Hungarian households apply very different controlling methods. Namely the majority of the American parents also cheques what their children do online, and they also control more often by installing filtering programmes.

How do you control your child's Internet use? (%)*

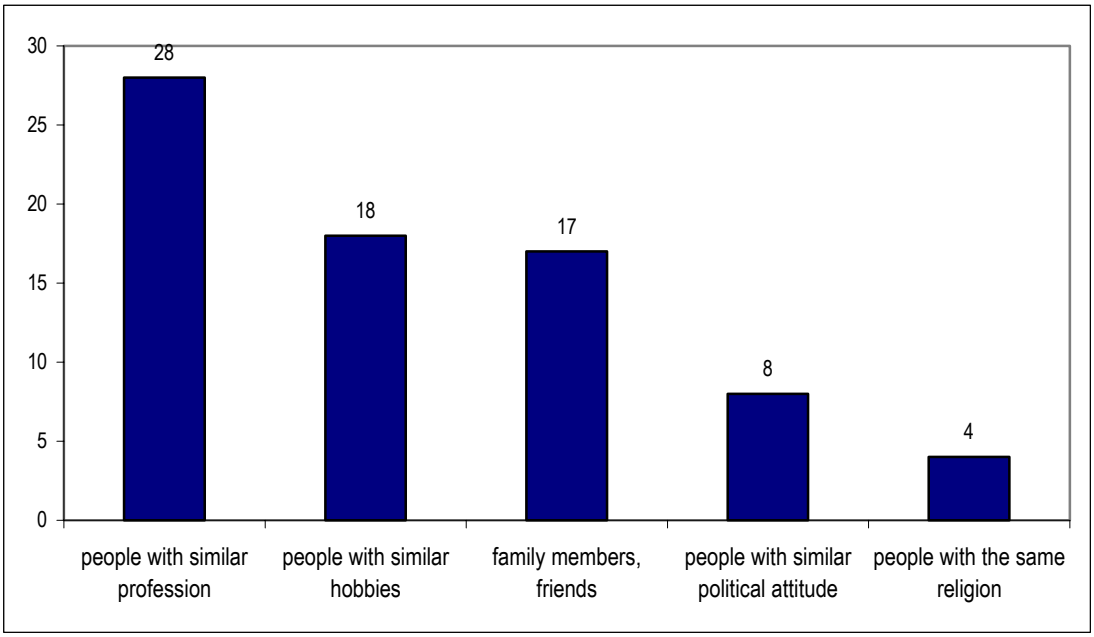


*Source: WIP USA, 2001

Online contacts

According to the data people can expand their social net via the Internet. Namely, 38% of users have acquaintances whom they met online. It seems that the Internet is most helpful for maintaining contacts with members of the same or similar profession: 28% of respondents reported to communicate more intensively with people of similar profession as a result of using the Internet. 18% of respondents reported similar experiences regarding people of similar hobbies, and 17% regarding family and friends. The rate of more intensive communication is lower when asked about people with similar political beliefs (8%) and with identical religion (4%).

As a result of using the Internet, do you have more contact with people belonging to the following groups? 2002 (the distribution of those, who answered '(much) more')

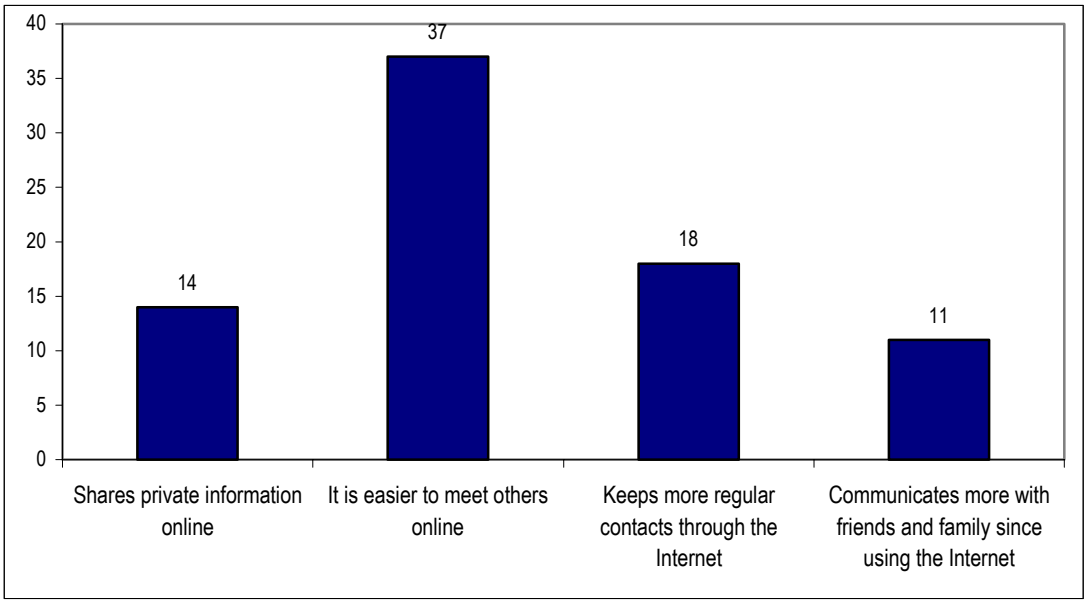


In our questionnaire, we had four further questions enquiring about respondents' opinion on the Internet's function to make and maintain contacts.

37% of users agree that it is easier to get acquainted online, and 18% agree that since using the Internet they have made more regular contacts. Less people agree with the statement that since being online they communicate more with their families and friends, and even less say they would share intimate information online.

Opinions about the Internet, 2002

(The distribution of those who '(strongly) agree' with these statements.)



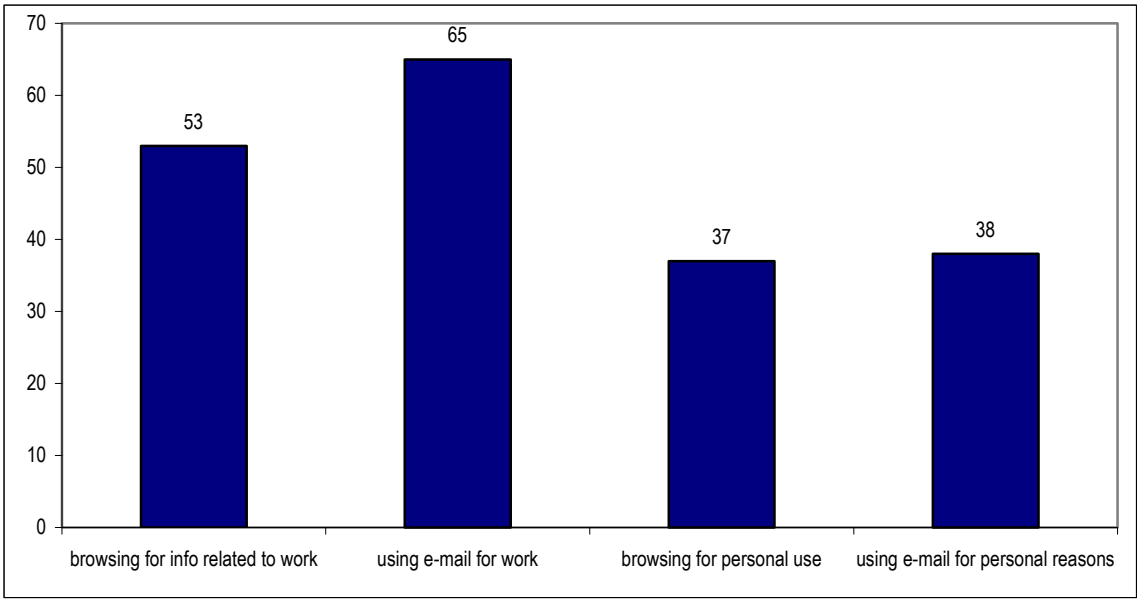
Internet at the workplace

69% of Hungarian users use the Internet at work (as well). It is a substantial decline from last year, when 75% did so.

The most frequent activity online is e-mail exchange for work, 65 % of users at work do that several times a week. The second most popular activity is browsing in connection with work (53%). Personal use is also quite frequent.

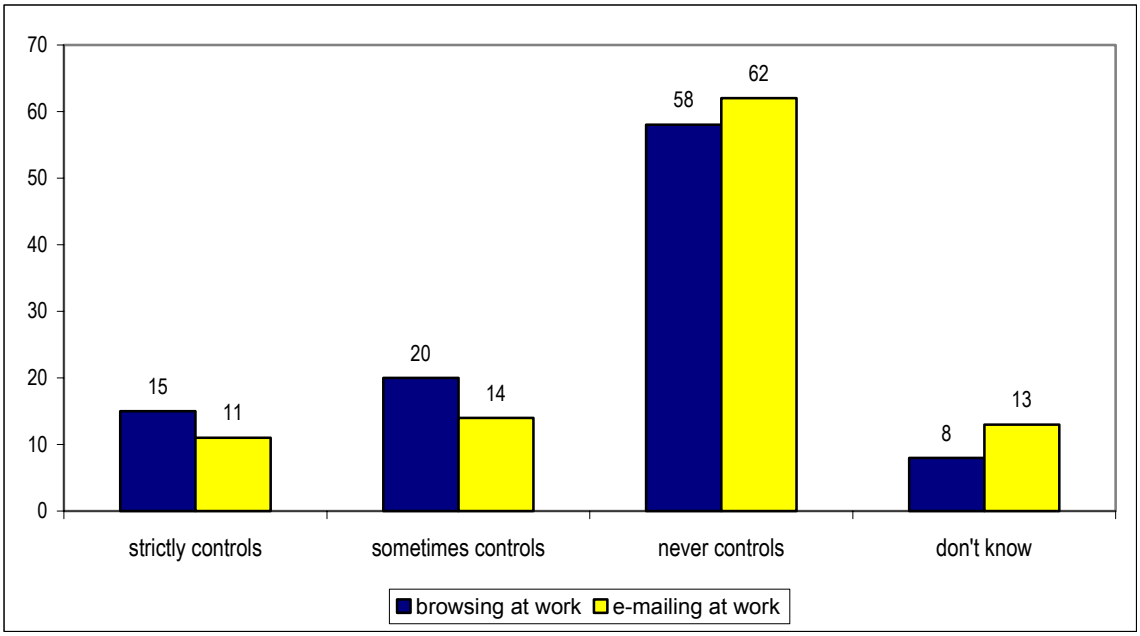
What do you use the Internet for at your work? 2002

(The distribution of those who do the following activities more than once a week)



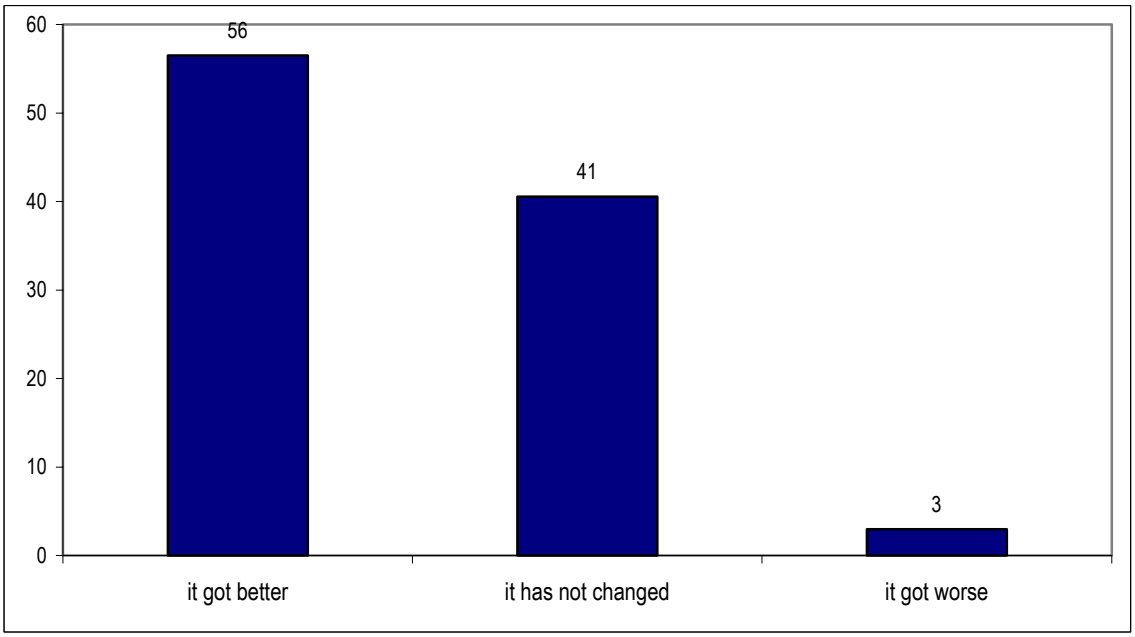
11% of the respondents reported that their employers strictly control the content of their e-mails at work, and 14% reported controls at random. The employers are stricter about Internet use in general: 15% of respondents think their employer cheques it severely and 20% think they do it sometimes.

Does your employer control your e-mail and Internet use? 2002 (%)



According to the data, most of those who use the Internet at their workplaces, are basically satisfied with it, since more than half think they work more efficiently since the Internet has been installed.

How did your work efficiency change since there is Internet connection at your workplace? 2002 (%)



Sampling and weighing methods

The World Internet Project is a panel-like survey, i.e. the same people are interviewed each year in order to examine the changes regarding the expansion of Internet use and the opinions about the Internet.

The first wave of data collection took place in September 2001. Then a total of 5032 face-to-face interviews were completed with Hungarian inhabitants aged 14 and over. 4400 of these respondents agreed to answer our questionnaires in the following year. In September and in October 2002 we managed to interview 3763 from these people, aged 15 and over.

Besides the panel-sample, a supplementary sample was added in 2002. A significant part of the questions in the WIP research also appeared in the questionnaire of the Omnibusz's survey in August 2002. In this survey 1508 adults – a sample representing the total Hungarian adult population – were asked. For cross-sectional analysis we combined the two samples, hence we possess data on 5271 individuals.

The data of the Omnibusz survey was also collected from a random sample. Similarly to WIP's sample, this was also a proportionally layered, multiple-stage sampling. In the first stage we randomly selected towns from the 9 settlement stratum previously determined. Then we determined the number of individuals that would be included in our sample according to the proportion of inhabitants in the settlement layer and the settlement. In the second stage the right number of individuals were randomly selected from the settlements. Thus, every adult with a permanent address in the sample location had an equal chance to get into the sample.

The cross-sectional analyses - where it is possible – are conducted on the combined sample of the second wave of the WIP research and the supplementary sample of Omnibusz. The sample was compared to the regularly updated data of the 1996 Micro Census of the Hungarian Central Statistics Office (CSO) according to age, education, gender and settlement type.

To correct for the discrepancies, our data was later weighed according to the four dimensions (age, school, gender and settlement type). It was all the more necessary, because the two samples do not represent identical populations: the data from the WIP in 2001 was collected among the population aged 14 and over, while the Omnibusz research examined the 18 year olds and older. With the weighing method we made sure that the distribution of the respondents by gender, age, education and type of settlement matched the distribution of the Hungarian population over 14. We also compared our household data to the data of the CSO by the size of the household and by the type of settlement. To correct for the discrepancies we created household-weighs. The 5271 cases of our database weighed according to these dimensions represent 8.282.114 individuals aged 14 and over, and 3.820.876 Hungarian households.

We created separate weighs for the analysis of the second panel of the WIP research only, and for the analysis of the longitudinal database combining the first and the second panels. In these cases we could control our sample's distortion along other factors than the already mentioned ones as well, since the first wave of the WIP research provided us with much information about both those respondents who answered in the second wave and about those who restrained from answering this time. With regression analysis we examined what factors determined whether someone answered for the second interview. We found that besides the age and the size of the household, the opinion about new technologies also indicates whether somebody answers the second interview or not. Of those, who think that 'new technologies make the world a better place' and who think that 'people spend too much time with the Internet' a significantly greater number answered the second wave of interviews as well. In the case of the longitudinal database combined from the two waves of WIP, taking into account these variables, we created a correcting weigh, which adjusts the simultaneous distribution of the four variables to the distribution seen in the first wave of WIP. For the database of the second wave we created a cross-sectional weigh, that takes not only the typical weighing factors (gender, age, education, type of settlement) into account, but also the distribution of the two above mentioned opinions as well. In this case we weighed the opinions according to the distribution observed in the Omnibusz research.

About the World Internet Project in a Nut shell

The World Internet Project (WIP) is an international research program, created for a comprehensive study of the social impacts of the Internet. The program was initiated by the UCLA Centre for Communication Policy and by the NTU School of Communications Studies in Singapure in the summer of 1999.

WIP researchers believe that the Internet will fundamentally transform the social, cultural, and economic spheres, and might prove to be even more significant than television, the most influential media in the last fifty years. The basic assumption of WIP researchers is that these impacts require scientific analyses with a common methodology, to allow for international comparison.

Research about the Information Society so far have collected data partly about the penetration rates and regional characteristics. Such researches, usually conducted by international organisations, mostly represented a collection of raw statistical data. However, these do not allow for the formulation of subtle analysis on the social and cultural impacts of the Internet.

At the same time surveys and reports about certain issues of the information society are being made at the order of international and local companies almost on a daily bases. In most cases however, these reports reflect on those questions that are determined by the business strategies of the companies and what they regard as being important. What is more, they are often not available for the members of the scientific field or for a wider audience.

It is obvious then that there is a shortage of systematic analysis that attempts to discover the social consequences of Internet use with a truly scientific approach. WIP researchers believe that the issue about the changes in various fields initiated by the expansion of Internet use is getting more and more crucial. What effects does the new medium have on social relationships, on the forms of communication, on political activity, on work and entertainment?

We should also take into account that the phenomena in question are quickly and constantly changing processes. Therefore there is a need for research that follows the course of events in the long run, rather than only trying to record momentary facts.

We also believe, that it is important, that within the framework of WIP we should be able to explore the phenomena at a relatively early stage of the expansion with a scientific soundness. Thus, we do not run a risk of being able to comment on the

conditions prior to the technological expansion and on the causal relationships arising from the changes only as a postscript. Professor Jeffrey Cole, head of the American research project has emphasised several times that as far as media theory is concerned, WIP research is filling the gap that came into being in the forties, before the expansion of the television. As a result of that gap we might only guess the cultural and social impacts of the television for the lack of a scientific comparison with the world without TV.

The expansion of the Internet, which is far from unanimous and synchronous, is a global phenomenon. Therefore, WIP followed the ambitious plan of an international comparative analysis, which made the international comparison of effects on social life possible from the very beginning. One of the preliminary goals of the project is the participation of as many regions of the world as possible by the involvement of other co-operative partners.

World Internet Project is the first professional international programme that gives priority to the above mentioned requirements and considerations in the field of research. We can summarise its significance in the following four points:

- Analysis of the social impacts of the Internet

  WIP-programme does not only aim at exploring the levels of growth and penetration as previous research did, but attempts to give a comprehensive interpretation of the use of the Internet and of its effects with the inclusion of attitude, value, and behaviour variables.

- Inclusion of both users and non-users in the research

  One of the important innovations of the WIP is that it aims to examine non-users as well, unlike previous researches with a focus on users mainly. The inclusion of non-users allows for the examination of the transit between the groups of users and non-users and for the observation of the dynamics of these changes. Moreover, it enables the comparison of the two groups' views and attitudes, which might explain the reasons for non-use.

- Longitudinal research

  WIP does not conduct its analyses from one perspective only, but aims at mapping out the social impacts of the Internet in general. To do that, we

developed the plan of a so-called longitudinal research lasting for ten years repeated every year. It is also a panel-like survey, i.e. we interview the same sample of people each year. This makes it possible to discover the short and long term effects of Internet use on people's opinions, habits and relationships, as well as on the life of their households who were either users at the beginning of the research or became one in the meanwhile. The results of the WIP can also help business and governmental politics to be able to follow the changes and create strategies that are flexible and focus on questions and problems that are most relevant at the time.

- International comparison

The project, as we emphasised several times, is an international comparative survey. Thus, we get a picture about the social changes connected to the Internet in other countries and regions as well. Among the questions distributed to every nation there are the ones measuring the general 'social feeling', the opinions about electronic technologies and about the Internet, and the trust in different institutions. Therefore comparisons in these fields are also possible. Given that the questionnaires can include unique, country specific questions and issues, researchers in each country can satisfy their individual curiosity relating to the subject. Research teams involved in the WIP can report on their experiences and conclusions at the annually held conferences.

Many countries participate in the WIP programme from all over the world, among them are: Italy, Japan, Singapore, Taiwan, South-Korea, China, Great Britain, France, Finland and India.

The official webpage of WIP is www.worldinternetproject.net. Those who would like to read about the Hungarian WIP research can find information on the webpages of ITTK (http:/www.ittk.hu/huna/wip index.html) and of TÁRKI (www.tarki.hu).