„Mapping the Digital Future”

Hungarian Society and the Internet
The World Internet Project (WIP) was initiated at the University of California. The Hungarian WIP is conducted jointly by the Information Society and Trend Research Institute (ITTK) and Social Research Centre Inc. (ITTK-TÁRKI). The research programme is lead by Dr Tibor Dessewffy and Dr Zoltán Fábián.

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Introduction

The WIP survey has been going on in Hungary for three years now. During these years we have conducted fifteen thousand interviews, more than 8300 of which were made with the same set of 2770 people.

We are familiarised with our respondents’ behaviour in media use, their attitudes towards info-communication technologies, their household equipment, socio-economic environment, social network as well as their family relationships.

Our survey, maintaining a relatively big sample of 5000 respondents, has also been providing the eEurope benchmarking programme of the European Union with population indicators since 2001. These data have also confirmed the fact, highlighted by other findings of previous years, that Hungary is lagging behind the other countries in the region, at least in terms of Internet access and use at home. We found a range of financial and cultural reasons such as high price of PCs and high costs of Internet use, lack of attractive contents and digital literacy that hinder Internet penetration. These reasons do not weigh at same level in the delay of the longawaited push for Internet diffusion. The 2003 survey found that there was a rearrangement in the rating of these reasons: the proportion of those who do not use the Internet in lack of a computer has decreased significantly from 44 percent to 30 percent, and the most cited reasons for not going online are not needing it (36 percent) and not being interested (26 percent). Besides of the peculiar character of the Hungarian telecommunication market and serious obstacles to solvent population demand, the WIP survey has also raised experts’ awareness of the importance of cultural aspects several times. Our latest findings, which are beyond the scope of this summary report, found differences between the Hungarian patterns of a digital gap dividing Internet users from non-users and those of countries in the European Union. In Hungary the largest gap divides the elderly and the less educated from the majority, separating significant groups of relatively high proportion from using the services that information society provides to improve the quality of life.

With some delay, still, something seems to have started: raw indicators for Internet penetration reached 25 percent last year, that is, yet with differences in extent and form, a quarter of Hungarians consider themselves Internet users. It is also welcomed that there has been a dynamic increase in home online access (12 percent of the households have an online PC, up from 8 percent in 2002), and currently four out of ten Internet users also use the net from home.
One of the most important drives of Internet penetration is the students’ online activities at school and at home. In the 14-17 age range more than three quarters (77 percent) of respondents use the Internet. Children acquire digital writing skills at school, and in many cases computers and the Internet are brought into homes by them, especially to lower-status households. Home use of the Internet has a considerable impact on the time-balance and interactions in the family as well as on child rearing and household time together.

In America, where the Internet access and use rates are considerably higher,* the digital gap is not so much viewed across the rates of access as the intensity of use and ways of connection (narrow versus broadband). There are differences in patterns of Internet use between new users and experienced ones. New users rank Internet higher as a source of entertainment, and they also buy online more often. This tendency is not detectable in Hungary yet. Among experienced users certain functions of the web are used more intensively in every respect. Concerning this tendency, it is also worth noting that there has been a significant take-up in online shopping since 2002: one-tenth of users purchase online at least on a monthly basis.

Besides providing a comprehensive report on technological diffusion every year, the WIP Database also enables us to look beyond mere indicators and make comparisons about the social effects of the Internet at both an international and a longitudinal level. In this summary report we can only highlight a few major relations, more profound analyses can be read in studies published in the Internet.hu series.

American data appearing in this report are excerpted from The UCLA Internet Report 2002 – “Surveying the Digital Future”: international reports can be downloaded from www.worldInternetproject.net. The Hungarian reports of earlier years can be read on www.tarki.hu and www.ittk.hu. The Hungarian WIP databases of 2001 and 2002 are available for a second analysis in the TÁRKI Databank.

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* The American WIP survey found that home Internet access rate reached 59 percent and Internet use was at 71 percent in 2002. (www.worldInternetproject.net)
Summary

Personal computers and other communication technology in Hungarian households

- There is at least one computer in nearly one-third of Hungarian households, which is a 5 percent increase in PC diffusion, compared to 26 percent in 2002.
- After a prolonged state of stagnation and slow growth in PC penetration (only a 3 percent increase between 1992 and 1998), the penetration rates of households with at least one computer have been increasing steadily since 1998 (4-5 percent increase every year).
- In 2003 nearly three-quarters of Hungarian households have a fixed telephone line.
- There is a colour TV in nearly all households, and the proportion of households with at least one cellular phone is relatively high as well.
- Nearly two-thirds of the households are equipped with a satellite dish or cable TV, while there is a VCR in more than half of the households.
- The 2003 findings, as well as the 2002 data, found that the number of households with a DVD player have doubled since last year, which means that there is a DVD player in nearly one out of ten households.

Internet access and use

- 12 percent of Hungarian households have Internet access, which is a significant increase compared to 8 percent last year.
- Half of the online households connect with an analogue telephone modem. Broadband technologies such as cable, ISDN and ASDL are used at nearly the same level: each rates between 14 and 15 percent, altogether accounting for the other half of all households with Internet connection.
- The 2003 WIP survey found that 25 percent of Hungarians use the Internet currently, while only 22 percent of users say that they go online at least on a monthly basis.
- The 2003 survey, in contrast to previous years, found that most of the users also started to use the Internet outside work and school: of all Internet users 41 percent report they go online at home as well. This accounts for 10.3 percent of the entire population aged 14 and over. Thus, home has moved to the top of the list of possible Internet access loca-
tions. However, a high proportion of all users continue to use the Internet at school or at work.

- The top reasons why users go online are access to email, obtaining information for work or study needs, as well as finding entertainment and managing daily business: one-third of users do so at least weekly on these accounts. Also very frequent online activities are reading news, obtaining information of certain products and chatting, one-quarter of users do so at least on a weekly basis. Altogether 11 percent of Internet users purchased online on a weekly or monthly basis in 2003, which is a significant take-up compared to 2 percent last year.

**Why not online?**

- The 2003 survey found that the primary reason for non-use is lack of motivation. 36 percent of non-users report they do not use the Internet because they do not need it.
- “No computer” (30 percent) is still an important reason, however, less often cited than in 2002.
- One-fifth of non-users (26 percent) say that they are not even interested in the web.
- In 2003 financial reasons continue to be important. 18 percent of non-users are not online, down from 21 percent in 2002, because they find Internet access too expensive.
- In addition, lack of knowledge and skills can be also considered significant since 17 percent of non-users report they do not use the web because they are not competent enough.

**The intent of joining Internet users**

- In 2003, as in 2002, of respondents who are not online, nearly one-tenth say that they are likely to join users in the near future.

**Is the new communication technology making the world a better place?**

- Attitudes about the effects of the Internet and other new communication technologies on the world remain stable; 73 percent of users say that communication technology, including the Internet, makes the world a better place, while only an insignificant number of users (5 percent) say that their diffusion makes the world a worse place.
- The number of non-users who think that communication technology makes the world a better place has decreased to 54 percent. However, 25 percent of non-users say that these technologies do not have an impact upon the world at all.
Views about the Internet

- Compared to 2002, we found no considerable changes in opinions about the Internet in 2003. So it continues to be a widespread view that children can have access to too much inappropriate information on the Internet, still, many agree that using the Internet can save a lot of time.
- Hungarian users are generally satisfied with the amount of relevant information available online and the ease of obtaining information, indeed, the rate of satisfaction has increased since 2002. Overall, users are satisfied with the Internet.
- Still, users are less satisfied with the speed of their connection than last year, which may well derive from the growing use of benefits provided by broadband.

The Internet and other media

- Of all mass communication media, TV is still considered as the most important source of information, and this view is especially high among non-users. However, behind TV, rankings of other media are in fact levelled out among users: the Internet and other media such as books, daily newspapers and radio have come to rank at the same level as an important source of information.
- Both users and non-users still consider TV to be the most important source of entertainment. Thus, the Internet continues to be a less important source in this respect since even among users it is ranked only fourth highest.

Internet in the family

- The 2003 data prove that Internet uptake at home does not disarrange family life. Namely, 86 percent of those who have Internet access at home say that, since their household acquired the Internet the family members spend nearly the same amount of time together as before.
- Parents do not consider children’s Internet use as having too harmful effects either on their school grades or on their relationships with friends. 85 percent of the parents say that since their household was connected to the Internet, their child(ren) spend the same amount of time with their friends, and the same number think that the grades of their children have not changed.
- In online households, with children under age 18, 53 percent of the parents report that they monitor the Internet use of their children somehow. As for monitoring methods, it can be reported that in Hungarian households the use of filtering softwares is also an increasing trend.
Online contacts

• According to the 2003 data a number of users also consider the Internet to be a place for creating new contacts. Of Hungarian Internet users 32 percent report that they have at least one, while 26 percent say they have more than one contacts acquired via the Internet.

• Our data found that the Internet is most useful for creating and maintaining contacts with people who share the same or similar profession: 28 percent of users say they communicate more intensively with people of the same profession as a result of their Internet use. As for people with similar hobbies as well as family and friends, equally 22 percent feel likewise. Fewer respondents report about more intensive communication due to the Internet when asked about online contacts with similar political views and religion.

Internet at work

• Workplace is one of the most popular locations for Internet use, 67 percent of users with a workplace use the net at work (as well).

• The most frequent online activities are emailing and browsing for work needs: a vast majority of users at work do these several times a month. Going online in the workplace for personal purposes is not rare either: more than half of those who use the Internet at work also access their personal e-mail or browse the web for personal use from work.

• In Hungary it is rather less frequent that employers monitor the Internet and e-mail use of their employees. Only 27 percent of employees report that their employers monitor their Internet use at work somewhat, and 20 percent report similarly concerning their e-mailing from work. These rates are far behind the American ones.

Youth and the Internet

• In the youngest age group (14-19 year olds) the use of various information and communication technologies is much more widespread than in older age groups.

• The 2003 data found that young people are also ahead of older ones in question of digital writing skills.

• Examining online habits, we may find that popularity rates of certain Internet activities in the youngest age group differ from those in age groups above them. In the 14-19 age range the most popular Internet activities are finding entertainment and listening to music, while in older age groups emailing ranks highest. Besides, chatting is also rather more popular among young users.
Hungarian society and the Internet, 2003

ACCESS

As a first step in surveying Internet use, it is worth examining how penetrated certain information and communication technologies such as PCs and fixed-line telephones are in the Hungarian population. For the penetration levels of these two devices fundamentally determine the levels of Internet diffusion, this step is necessary.

Who has a computer?

There is at least one computer in nearly one-third of Hungarian households, which is a 5 percent increase in PC diffusion compared to 26 percent in 2002. This growth mainly results from the increasing number of one-computer households, but the rate of households with two or more computers has also started to rise.

PC penetration in households 2001, 2002, 2003 (%)

After a prolonged state of stagnation and slow growth in PC penetration (only a 3 percent increase between 1992 and 1998), computer penetration has been a mostly steadily growing trend since 1998: every year there is on average a 4-5 percent increase in the rates of households with at least one computer.
The 2002 trend analyses – based on data measured between 1998 and 2002 – found that household penetration rate should have reached 29 percent by 2003 when calculated with a linear trend, while it should have been 33 percent with an exponential trend. Falling between the two values, the currently registered penetration rate of 31 percent implies that the era of dynamic growth in computer penetration is still to come.

With a similar method for the 1998–2003 data, computer penetration rate of households can be expected to fall between 34 and 39 percent by 2004.

There are significant regional differences in the PC penetration of households. Our survey found the penetration level to be highest in the region of Budapest (41 percent), however, it is also over the average in Western and Middle Hungary (Trans- danubia, 35-36 percent). The smallest proportion of households with a computer can be found in the Great Plain (23-24 percent). Concerning the dynamism of the growth, the Western and Middle Hungarian regions still occupy posi-
tions in the top half of the survey, while in the Great Plain and Northern Hungary the level of growth corresponds more or less to the countrywide average. At the same time, in Southern and Middle Hungarian regions PC penetration in the home is less dynamic than the average.

Households with PC by regions (%)

Income inequalities in the PC penetration of households aren’t still relaxed: the 2003 data also found that computer diffusion in the households is highly determined by household incomes, with the total household income as even more significant: while in the bottom quintile of total income the proportion of households with a computer is only 6 percent, it reaches 60 percent in the top quintile.

PC penetration in households by total income quintiles (%)
Yet to a less extent than total income, income per capita also influences the computer diffusion: the rate of households with a computer is around 20 percent in the first four quintiles while it is 39 percent in the top quintile.

Obviously, the computer penetration of households can be examined not only at a household level, but also at an individual level. In this case we find that 36 percent of Hungarians have a computer at home, which is a 21 percent growth compared to last year, yet with significant differences by respondents’ education level and age.

The level of computer penetration is below the average among those who have completed only primary or secondary vocational school (21 and 30 percents), while those with a high school or a university degree are far more likely to live in a household with a computer. Nevertheless, it can be noted that the educational differences in PC penetration are, if slowly, declining: in 2003 PC penetration rates increased more dynamically at all educational levels than in 2002. Indeed, the largest growth rates were among those with a secondary vocational degree and those with a high school degree. Reaching only a growth rate of 23 percent, those who have completed primary school at most lag somewhat behind them, yet the smallest growth rates were among those with a college or university degree (14 percent), that is this group is gradually losing its advantage over the other groups.

Percent of computer owners by education level (%)
In 2003, as well as in 2002, age continues to be a significant factor in computer penetration. PC penetration is highest (65 percent) in the 14-17 age range, followed by the 18-49 age range with nearly identical penetration rates of 46-49 percent. Compared to last year, even those aged 50-59 are showing some progress: this year nearly one-third of them live in a household with a computer. However, the oldest age 60 and over are still lagging behind with only a PC penetration rate of 8 percent, up from 7 percent last year.

**Percent of computer owners by age (%)**

<table>
<thead>
<tr>
<th>Age Range</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>30-39</td>
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<tr>
<td>40-49</td>
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<td>50+</td>
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In 2003, as in 2002, the social disadvantages of the Roma population also became obvious in terms of computer access: of the respondents who the interviewers considered to be of Roma origin, only 13 percent live in a household with a PC, while in the ‘non-Roma’ majority this rate reaches 38 percent.

**Fixed telephone line**

For most households still connect to the Internet via fixed telephone line with a dial-up modem, fixed telephone line penetration in the households is an important determinant when surveying Internet use.

In 2003 nearly three-quarters of Hungarian households have a fixed telephone line. However, the fixed telephone line diffusion in the households is not levelled out at a national level: it is largest in Central Hungarian regions (82 percent), while in the Great Plain less than two thirds of the households have fixed telephone line.
Due to the rapid diffusion of cellular phones the fixed telephone line rates of households are showing decline: there is a 2-6 percent decrease in five out of the seven regions in the country, while it increases by 1 percent in the Southern Great Plain and stagnates in Central Hungary.

Other ICT and multimedia technologies

Nearly all Hungarian households own a colour TV, and households with at least one cellular phone rank rather high as well. Nearly two-thirds of the households are equipped with a satellite dish or a cable TV, while there is a VCR in more than half of the households.

The rate of households equipped with a DVD player has doubled again since last year, which means that there is a DVD player in nearly one out of ten households.
INTERNET ACCESS AND USE

Access

Home access is a significant factor in Internet use. Twelve percent of Hungarian households have Internet access, with a rate of 13 percent among those age 14 and over.

Internet access rates correlate positively with the urbanisation levels of the settlements: while in villages the Internet is accessible only in 6 percent of the households, in Budapest this proportion reaches 24 percent.

The Internet access rate of households is 13 percent in county towns, and 10 percent in other towns.
It is definitely a positive trend that not only in Budapest is there a growing proportion of households with Internet but also in smaller settlements. Between 2002 and 2003 this proportion increased from 16 percent to 24 percent in Budapest whereas it doubled in villages, and performed a more than 50 percent growth in other cities as well.

Just as computer diffusion, home Internet access is also strongly influenced by household incomes. Of the households that belong to the bottom quintile of total income only 2 percent have Internet access in comparison with 29 percent of the households with the highest incomes. However, the growth is not even: the Internet access rates of households in the top quintile are nearly triple of even those in the fourth quintile.

Yet to a considerably slight extent, income inequalities seem to decline in home Internet access compared to last year’s findings. In online household rates the 2002 survey found a two-fold increase between the third and fourth total income quintile, and a 3.2-fold one between the fourth and the top total income quintile. This year the level of growth was 1.7-fold and 2.9-fold, respectively.
Half of the online households connect with an analogue telephone modem. Broadband technologies such as cable, ISDN and ASDL are used nearly at the same level, each rates between 14 and 15 percent, altogether accounting for the other half of all households with Internet connection. Cellular phones do not yet mean a serious threat to fixed telephone line regarding the Internet use since only 3 percent of the households connect to the Internet with a cellular phone.
Use

The WIP survey found that 25 percent of Hungarians use the Internet currently, while only 22 percent of users say that they go online at least on a monthly basis. Yet, men are rather interested in the world of the Internet: 24 percent of men use the Internet monthly in comparison to 18 percent of women.

For comparisons with international results, the table below shows the rates of Internet users among three different population groups by three different definitions for Internet use.

In accordance with both earlier Hungarian WIP and international results, the 2003 data also found that the higher the educational level, the more likely the Internet use.

59 percent of users with a college or university degree use the Internet, while this proportion is 17 percent among those who completed primary school. (The Internet use rates are lowest among those with a secondary vocational school education for the possible reason that they have finished their educational history while those with primary school education are still learning and are expected to reach a higher level of education).
There is a similar correlation between Internet use and age: the older the respondent, the less likely he is to use the Internet: while in the 14-17 age range respondents typically use the Internet (77 percent), of those age over 60 only 2 percent go online. Compared to last year’s findings, the rates of Internet users increased in all age ranges, yet, the differences among age groups did not decline significantly. This year, as well as from 2001 to 2002, the Internet use grew most dynamically in the 18-29 age range, which is partly due to the fact that former members of the 14-17 age group with the highest use rates, are gradually replacing the age group right above them.

Percent of Internet users by age groups
Location of Internet use

The 2003 survey, in contrast to previous years, found that most of the users also started to use the Internet outside work and school: of all Internet users 41 percent report they go online at home as well. This accounts for 10.3 percent of the entire population aged 14 and over. Thus, home has moved to the top of the list of possible Internet access locations. However, a high proportion of all users continue to use the Internet at school or at work. Considered as same (since they are mutually exclusive), school and work prove to be the most frequent locations of access.

The proportion of those who use the Internet at friends’ increased somewhat compared to last year. As for public access facilities such as library, cyber café and community centre, no significant change occurred: this year these locations continue to rank low among Internet users.

Internet use rates by location of access (%)

**WHAT IS THE INTERNET USED FOR?**

The top reasons why users go online are access to email, obtaining information for work or study needs, as well as finding entertainment and handling daily business: one-third of users do so at least weekly on these accounts. Also very frequent online activities are reading news, obtaining information of certain products and chatting, one-quarter of users do so at least on a
weekly basis. Only one-fifth of Internet users visit online forums weekly and a near-equally high number do so less often. Only 9 percent of users search for health-related information frequently and two-thirds of them never do so. Only 5 percent of Internet users use online banking services at least weekly, while 89 percent of them never do so. Altogether 11 percent of Internet users purchased online on a weekly or a monthly basis in 2003, which is a significant take-up compared to 2 percent last year. However, 89 percent of users have never shopped online yet.

Frequency of online activities among Internet users (%)

* The use of banking services applies only to users over the age of 18.

**NON-USERS: WHY NOT ONLINE?**

With the not too rocketing pace of Internet penetration in Hungary, the question arises and it is therefore surveyed from year to year: what reasons do non-users have for not going online? This year again an open question asked about the reasons for not using the Internet, and the answers were categorized thereafter. Seeming to be determinant, a new category was introduced for the 2003 survey: namely, a great number of respondents report they do not need the benefits provided by the Internet. This year’s answers seem to find the main reason for non-use in this: more than one-third of non-users (36 percent) say they do not use the Internet because they do not need it. In addition, “no computer” continues to be an important reason...
(30 percent), though it is much less often cited than last year. One-fifth of non-users (26 percent) say that they are simply not interested in the web and financial reasons continue to be important this year as well. In 2003 18 percent of non-users are not online, down from 21 percent in 2002, because they find Internet access too expensive. At the same time, (assumed) lack of knowledge and skills proved to be a depriving force of great significance for both 2002 and 2003 as 17 percent of non-users reported in both years that they did not use the net for lack of necessary knowledge and skills.

**Why not using the Internet?**

(Percent of non-users)

Interestingly, among executives it is more frequently cited than the average that they do not go online because they do not need the benefits offered by the Internet (48 percent), and this way of thinking is also overrepresented among middle managers (48 percent). Examining more detailed data it is also outstanding that of those who live in Budapest a greater proportion cite that Internet use costs too much (26 percent) than of those not living in the capital.

Regarding the motivations of non-users the Hungarian data bear a strong resemblance to the American results of 2002. Lack of computer (28.5 percent) and lack of interest (23 percent) proved to be the most important factor among American non-users as well, and even overseas nearly 15 percent report that they are not members of the Internet users’ community for lacking technological competence.
THE INTENT OF JOINING INTERNET USERS

The 2003 survey found no considerable shifts concerning the number of those who feel they will become more or less regular users of the Internet in the next year. This year, as well as in 2002, nearly one-tenth of non-users say that they are likely to join users. But as neither did the number of Internet users increase by nine percent from 2002 to 2003, nor should we expect the group of Internet users to enlarge in any case by the rates below.

How likely are you to become a regular Internet user within a year?
(Percent of non-users)

When we examine the intent of logging on by age groups, moving towards older age groups a declining tendency can be perceived.
OPINIONS ABOUT THE INTERNET

Will the world be a better place?

Although currently the expansion of Internet users is mainly hindered for financial and technological reasons, it is obviously influenced by attitudes towards the Internet and other communication media. Therefore, it is worth examining from year to year what people think of the changes caused by the new media, as well as of the Internet itself.

While last year kind of a techno-optimism was detectable among Hungarians in comparison with Americans, this year’s data found no difference of this kind. Attitudes about whether communication technology is making the world a better or a worse place have shifted modestly in 2003 compared to last year. Especially among non-users attitudes about the positive effects of these technologies on the world dropped slightly (to 54 percent), while the proportion of non-users who think these technologies do not really have an impact upon the world grew to 25 percent. Practically, these two data are in accordance with the currently available American data of 2002. (Of American non-users 54 percent say that these technologies have positive effects, and 29 percent say that they have no effects on the world.) However, there is difference regarding the fact that the spread of the Internet, cellular phones and other new
communication technologies are making the world a worse place: of Hungarian non-users still few (8 percent) think so, in comparison with 17 percent of American non-users.

Nevertheless, the opinion that new communication technologies, including the Internet, are making the world a better place continue to be considerably stable among Hungarian users (73 percent), with only an insignificant number (5 percent) saying that their diffusion is making the world a worse place.

Is new communication technology making the world a better or a worse place? 2002, 2003 (%)

As last year, this year again we found that enthusiasm about changes declines with the increase of age. While in the 14-17 age range 74 percent welcome the changes caused by new media, only 41 percent age over 60 think so.

Views about the Internet

We have found no considerable changes in opinions about the Internet since last year. Thus it continues to be a widespread view that children can have access to too much harmful information on the Internet, still, many agree that using the Internet can save a lot of time. Obviously, views of users differ somewhat from those of non-users. For instance, users are slightly less concerned about online contents harmful to children (giving on average a rating of 4.0 on a scale of 5) than non-users (4.3). And vice versa, users seem to agree more about the time-saving function of the Internet (4.3) than non-users (4.0)
Compared to last year’s data, we found several shifts in attitudes towards the questions asking about conditions of Internet use and obtaining online contents. Opinions about the ease of finding information changed the most: while last year users gave on average a rating of 3.4, this year users rated their satisfaction as 4.0 (on a scale of 5). This could mean that in the meantime either users’ ability to obtain information has improved, or online contents themselves have become more easily available. Satisfaction with the amount of information available online has increased considerably as well: users gave on average a rating of 4.3, up from 4.0 last year, that is they find online information rather relevant and sufficient. Also, a slight growth is perceived regarding how people judge the ability to communicate with others (rating it 4.0, up from 3.8), while satisfaction with the speed of connection declined significantly. This year users rated the speed of connection only as 3.6, down from 4.0 in 2002. Having access to faster ways in data transmission such as ADSL and ISDN may well account for this phenomenon, however, they are not yet available in all homes. Overall, this year respondents generally seem to be satisfied with the Internet at about the same levels as last year (rating it 4.1, down from 4.2 in 2002).
With our questionnaire we also intended to examine other aspects of satisfaction with the Internet. Findings about the credibility of online information also highlight how much users as well as non-users consider this information as a useful knowledge base.

Regarding reliable information on the Internet, hardly any change occurred compared to last year. This year survey found that the greatest differences are still between users and non-users. Most of users believe that more than half of the information on the Internet is reliable (56 percent), whereas most of the non-user population cannot judge the credibility of online contents (48 percent). Very few state that none or only a smaller portion of the information is reliable, while relatively many think that about half of the online contents can be trusted safely (34 percent of users, 25 percent of non-users think so).
Age appears to be an important factor here as well. Namely, the number of those who cannot answer this question grows gradually along with age: in the 14-17 age range only 7 percent cannot judge what portion of online material is credible, with even 45 percent among those 50-59 years of age, and 68 percent among those age 60 and over. We may tend to think that there is correlation for the only reason that the number of actual users also decreases with the increase of age, still, it is not the only factor that matters. Indeed, among non-users the share of those who cannot answer this question increases as gradually along with age as among users, which shows that the older age group has already defined himself as an outsider in this question. On the other hand, it is also clear that with the advancement of age rates decrease among those who think that most of the contents available on the Internet are reliable, and this correlation can also be found among those who are not currently users.

THE INTERNET AND OTHER MEDIA

To accomplish a thorough survey on attitudes towards the Internet, we must examine its role and importance in comparison with other media. Our questionnaire therefore also explores how important people consider certain media as a source of information and entertainment in their lives. Of all mass communication media, TV still plays the most important role as a
source of information, and this view is especially true for non-users. Television received on average a rating of 4.5 among non-users and 4.0 among Internet users on a scale of 5 (1 = absolutely not important, 5 = very important), thus it plays a very significant role as a source of information. However, among users rankings of other media behind TV in fact levelled out: the Internet (3.7), books (3.7), newspapers (3.7) and the radio (3.6) are at the same level as a source of information. Among Internet non-users radio is considered to be a much more important source than among users, placed second with an average of 4.1. Nevertheless, books are much less important in this group (3.0).

**How important are the followings to you as a source of information?**
(Averages on a scale of 5 among users and non-users, 5 = very important, 1 = not at all important)

Among those who completed secondary vocational school the radio (4.2), while among executives (4.3) and middle managers (4.2) newspapers are considered to be important as a source of information.

Similar results to the above are obtained when examining how important these media are as a source of entertainment in respondents’ lives. Of the media listed above TV is the most important source of entertainment among both users (3.9) and non-users (4.4). In this respect the Internet is still not among the most important sources, ranked only fourth – at nearly the same level as newspapers (3.3) – even among net users.

Among non-users a gap divides TV and radio – the latter with a rating of 4.1 as a source of entertainment – and the rest of the examined media. Lagging behind the two channels of mass
communication (TV and radio), books (3.2), newspapers (3.1) and magazines (3.0) are considerably less important in terms of entertainment among the members of this group.

TV is considered to be less important as a source of entertainment among those with a college or university degree (3.7) as well as among employed intellectuals (3.6), with high importance of books (4.4) among the latter.

How important are the followings to you as a source of entertainment?
(Averages on a scale of 5 among Internet users and non-users, 5 = very important, 1 = not at all important)

POLITICAL AFFILIATION OF USERS AND NON-USERS

It would be reasonable to assume that with its free structure the World Wide Web attracts more than the average number of people who are of a liberal attitude themselves. Many even suppose that not only the conservatives but also right wingers are represented among net users below the average. These two assumptions are tested by evaluating the questions asking about the political dispositions of the respondents on a conservative-liberal and a left-right wing scale.

The 2003 data found that there is little difference among Hungarian users in terms of their political orientation, that is who considers himself left-wing or rather right-wing. The only perceptible difference is that there are fewer Internet users than non-users among those who placed themselves on the far left side of the scale, considering themselves as firmly convinced left-wingers.
Still, users and non-users do differ somewhat in the number of liberals and conservatives. While among non-users the distribution is more or less symmetric on both sides of the scale, among users a considerably higher number claim to be liberal and there are therefore fewer conservatives.

Are you conservative or liberal?
(Percent of respondents)
THE INTERNET IN THE FAMILY

The 2003 data prove that Internet uptake at home does not particularly disarrange family life. Namely, of those who have Internet access at home 86 percent say that since being connected to the Internet, the family members spend nearly the same amount of time together as before, while 11 percent report less amount of household time together. Although 16 percent of those who have home Internet access feel that occasionally their family members neglect them to spend time online, 84 percent never experienced that. Also worth noting that, yet to a small extent, but television viewing is still a more frequent reason for negligence than Internet use.

How often do you feel that a member of your family neglects you to watch TV or to use the Internet?

In addition, Internet can also become a form of family activity: of households with Internet access 74 percent say that family members go online together at least once a week.

Parents do not consider children’s Internet use as having too harmful effects either on their school grades or on their relationships with friends. 85 percent of the parents say that since their household acquired the Internet, their child(ren) spend the same amount of time with their friends, with only 10 percent saying that this time dropped. A great majority of parents (85 percent) think that the grades of their children have not changed, indeed, 7 percent report that the grades improved since having Internet access at home, while only 6 percent say that the children got worse grades.
How have the school grades of your children changed since you acquired the Internet at home?

Moreover, the majority of parents (76 percent) think that their children spend just enough amount of time using the Internet, while 6 percent think that their children should be online even more. Although 17 percent think that their children spend more time surfing on the web than they should, apparently parents are much more dissatisfied with their children’s TV viewing habits for half of the parents find children’s TV viewing time too much.

How much time do you think your child spends using the Internet or watching TV?
In online households, with children under age 18, 53 percent of the parents report that they monitor the Internet use of their children somehow. Rankings of monitoring methods have changed slightly since last year: the use of filtering softwares is also a more and more increasing trend in Hungarian households, with a parallel decrease of other methods, especially of personal supervision. In spite of these facts the most frequent means of supervision are asking for parental permission by children to access the Internet and limiting online hours.

How do you supervise your child’s Internet use? 2002–2003

Overall, we can see that the Internet use is getting a more and more emphatic role in family life. Although relatively few report significant changes, we can conclude that using the Internet has become a form of household time together for most of the families with home access to the web, and that parents feel they need to monitor their children’s Internet use.
ONLINE CONTACTS

The 2003 data found that a number of users also consider the Internet to be a place for creating new contacts. Of Hungarian Internet users 32 percent report that they have at least one, while 26 percent say they have more than one contact acquired via the Internet. In addition, the Internet can also be an efficient tool for maintaining already existing friendships and acquaintances, proved by the data that 33 percent of users report that they have contacts or friends whom they originally met in person but with whom nowadays they keep in touch mostly via the Internet.

Among users 32 percent agree with the statement that it is easier to meet new people via the Internet than in person, while 24 percent agree that the Internet increased the number of their regular contacts. Despite all these and besides the fact that online communication implies lack of physical presence and possible anonymity, only a very small number of users (9 percent) agree with the statement that online they share private matters that they would generally not reveal face-to-face.

Views about the Internet
(Percent of those who “completely agree” with the statements below)
Our data found that the Internet is most useful for creating and maintaining contacts with people of the same or similar profession: 28 percent of users say they communicate more intensively with people who share their profession as a result of their Internet use. As for people with similar hobbies as well as family members and friends, equally 22 percent feel likewise. Fewer respondents report more intensive communication due to their Internet use when asked about contacts with similar political views and religion.

As a result of your Internet use do you have more contact with people belonging to the following groups?

(Percent of those whose answer is “much more”)

THE INTERNET AT WORK

Workplace is one of the most popular locations for Internet use, 67 percent of users with a workplace use the net at work (as well). Interestingly, though, a continuously decreasing trend can be discovered in the rates of those who also go online at work: as mentioned above in 2003 67 percent of all Internet users accessed the Internet from work as well, down from 69 percent in 2002 and 75 percent in 2001.

However, this does not mean that Internet use at work is becoming less significant. These data can rather be attributed to the phenomenon that the number of users who do not have, or else do not yet have a job (applying to students and young users especially) is increasing yearly.
Our data found that those who go online at work are generally satisfied with the Internet: more than half of the respondents (52 percent) believe that their productivity has increased since having Internet access at work, in comparison with only 2 percent reporting a decline in their productivity.

The most frequent online activities are emailing and browsing for work needs: a vast majority of users at work do these several times a month (73-74 percent). Going online in the workplace for personal purpose is not rare either: more than half of those who use the Internet at work (also) access their personal e-mail or browse the web for personal use from work.

In Hungary it is rather less frequent that employers monitor the Internet and e-mail use of their employees. Only 27 percent of employees report that their employers monitor their Internet use at work somewhat, and 20 percent report similarly concerning their e-mailing from work. It can be seen well in the figures below that monitoring Internet use at work is much more widespread in the United States, for instance.

What do you use the Internet at work for? 2003
(Percent of those who do the listed activities several times a month)
Does your employer monitor your Internet use at work?
(Percent of those who use the Internet at work)

Does your employer control your emailing at work?
(Percent of those who use the Internet at work)
As seen previously, young people lead in the adoption of info-communication tools. It seems therefore reasonable to take a closer look on the youngest age group in itself in terms of their ICT use and habits, as well as their views about the Internet.

First of all, it is worth noting that the use of various info-communication technologies is far more frequent in the youngest age group than among the older ones. The figure below apparently displays that may it be about the possession of a cellular phone or using a computer or the Internet, there are higher rates of users in the 14-19 age range than in above age groups.

**ICT penetration in the 14-19 age range, among those over age 19 and in the entire population**

(Percent of those who use these technologies)

Internet use rates in this age group are also high at an international level: though in the United States the rate of users is above 90 percent in the 14-19 age group, in Germany this rate is far behind that observed in Hungary (61 percent).

Besides these, young people are also ahead of older age groups regarding digital writing skills. Namely, of this age group 88 percent say that they can use some PC office programs at least on a basic level, while among those age over 19 only 31 percent give account of such skills.
Considering the fact that 89 percent of the youngest age group have taken part in computing education or course (probably within the framework of scholar education), this data is not surprising at all. By comparison, among older people only 24 percent obtained such education, which can well be attributed to the fact that a high number of those belonging to this age group did not have the opportunity to learn about computing tools and their use within the framework of public education.

Given the data above, it may not well be surprising either that young people themselves (the 14-19 age range) rate their ability to use a computer higher than that of age groups above them.

How do you judge your ability to use a computer?
(Percent of the various answers among 14-19 year olds and those over age 19)

It is obvious from the figure above that among over-19s the proportion of those who rate their ability as rather poor is considerably higher than of those who consider it as not-bad or good. Examining online habits, we may find that popularity rates of certain Internet activities in the youngest age group differ from those in above age groups. In the 14-19 age range the most popular Internet activities are finding entertainment and listening to music, 72 percent of users do so several times a month. Browsing for study just follows them. Among older users emailing and browsing for work needs rank definitely highest, while finding entertainment settle considerably below the rates perceived among young users. These two groups
also differ outstandingly in the popularity rate of chatting: while of young users more than half chat several times a month, this rate reaches only 22 percent among older users. The data found that it is rather participating in thematic forums and newsgroups, and reading online news that are more popular among over-19s.

**Popularity of different Internet activities among 14-19 year olds, among over-19s and in the entire population**

(Percent of Internet users that do the given activity at least several times a month)

After surveying this range of various online activities we may conclude that the Internet is of great importance as a source of entertainment among young users, indeed, more important than among over-19s. What also proves this is that in the 14-19 age range the Internet is more important as a source of entertainment than as a source of information. Among older users the case is just vice versa: the Internet is more important as a source of information, and they consider this function to be more significant than young users. Nevertheless, data show that the Internet as a source of information also plays an important role in young users’ lives.
How important is the Internet to you as a source of information and as a source of entertainment?
(Averages of answers on a scale of 5, among 14-19 year olds and over-19s, 5 = very important, 1 = not at all important)

What also confirms this is that in the 14-19 age range the Internet is important at the same level as radio, thus it ranks third highest as an important source of information preceded by friends, family and TV.

How important are the followings to you as a source of information?
(Averages of answers on a scale of 5, among 14-19 years old Internet users, 5 = very important 1 = not at all important)

Only friends and television precede the Internet as a source of entertainment, and the net proves to be an even more important form of entertainment than books and radio.
The popularity of chatting mentioned above, could be related to the fact that young people are more active to use the online opportunities to make contacts. What also supports this conclusion is that 45 percent of net users say that they have a friend or an acquaintance they met via the Internet, while among over-19s 27 percent give account of such contacts.

In addition, in the youngest age group a larger proportion agrees with the statement that they share private matters online that they would not reveal in person, and a much greater proportion agree that it is much easier to meet people via the Internet than in person. Nevertheless, among old users fewer agree with the statement that they have more regular contacts online.
Young people show positive attitudes towards technology in other questions as well. For instance, in the figure below it can be seen clearly that in the 14-19 age range a greater number think that the new technologies make the world a better place.

**How are new technologies changing the world?**

(Percent of various answers among 14-19 year olds, over-19s and in the entire population)
When examining other specifically Internet-related attitudes, we find that young and old users agree at nearly the same level (and rather strongly) that using the Internet saves time. In the 14-19 age range respondents agree to a lesser degree that the Internet has nothing important to offer them and that people spend too much time online, nor do they feel that they put their privacy at risk online.

Opinions about the Internet
(How much do you agree with the following statements?)
(Averages of answers on a scale of 5, among 14-19 year olds and over-19s, 5 = agrees completely, 1 = disagrees completely)
About the WIP survey

The World Internet Project was initiated at the UCLA Centre for Communication Policy and the NTU School of Communications Studies in Singapore in the summer of 1999. This survey is particularly unique and special in its character compared to the, fortunately, increasing number of researches observing the social effects of the Internet.

- Inclusion of both users and non-users in the survey
  One of the important innovations of the WIP survey is that unlike previous researches with a main concentration on users it also expands its focus on non-users. This inclusion of non-users contributes to the examination of the transit between users and non-users as well as of the dynamics of these changes. It further enables us to compare comprehensively views and attitudes of the two groups, which might reveal the reasons for non-use.

- Longitudinal and panel survey
  The WIP does not survey one certain aspect but aims at mapping out the social effects of the Internet in general. To achieve this objective, we developed a plan to conduct a longitudinal, year-to-year research lasting 10 years. Furthermore, being a panel survey, it looks at the same households every year. That makes it possible to explore the short and long term effects of the Internet use on people’s opinions, habits, relationships, as well as how the Internet affects the lives of those who are continuing users and those who move from non-users to users during the research. The WIP findings can also help business and government policy-makers to track changes and create policy that is flexible enough and focuses on issues that are most relevant at the time.

- International comparison
  The WIP is an international comparative survey. Thus, it provides a picture of changes associated with the Internet in different countries and regions. In a basic set of questions there are variables measuring the general ‘social feeling’, the opinions about digital technologies and about the Internet, as well as the trust in different institutions. International comparisons in these fields are therefore also possible. Given that the questionnaires can include unique, country-specific questions and issues, researchers from each country can
satisfy their individual curiosity concerning the subject. At annual conferences research
teams participating in the World Internet Project can present their findings as well as ex-
change their experiences and conclusions.

**SAMPLING AND WEIGHTING METHODS**

Over the course of 10 years the World Internet Project intends (1) to track year-to-year
to-track changes in the dynamism of Internet penetration, (2) to map out social and socio-
psychological effects of Internet use, and (3) to explore what social, economic, and psychological mo-
tives stimulate or hinder Internet use. The research is a follow-up panel survey, which con-
tacts the same people each year in order to track shifts in Internet penetration and views about
the Internet. Still, this year’s survey had to face two problems: on the one hand, the panel sam-
ple is decreasing gradually as a result of answer refusals, on the other hand, the 14-17 age
group of the original sample is growing older, an age range that is very important in Internet
penetration therefore disappears slowly from the sample. We added supplementary samples
to solve these problems. For a good understanding of the composition of database used in
cross-sectional analyses, we shall first outline the course of earlier surveys.

**Precedents: the first and second waves of the WIP research**

The first wave of data collection took place in September 2001. The original sample of the WIP
survey was a probability design made with a multiple-stage, proportionally layered sampling.
In the first stage we randomly selected settlements from the 9 settlement strata initially de-
termined. Then we determined the number of individuals that would possibly be included in our
study by the proportion of inhabitants in the settlement layer and the settlements themselves. In
the second stage the right number of respondents was randomly selected from the inhabitants of
the selected settlements. Thus, this selection ensures that every adult with a permanent address
has an equal chance of selection.

From the sample, a total of 5032 face-to-face interviews were conducted with Hungarian resi-
dents aged 14 and over. The second wave of the survey took place in September 2002: of peo-
ple also asked in the first wave 3763 aged 15 and over were interviewed again. For the loss in
the panel sample, a supplementary survey was made in 2002. A significant part of WIP sur-
vey questions also appeared in the questionnaire of the Omnibusz research in August 2002.
This latter study questioned a sample of 1508 adults, representing the total adult (over 18)
population of Hungary and selected by a sampling methodology similar to that of the WIP survey.
The third wave of the WIP survey

This year the data collection process included three parts. From the original sample of the WIP research, we managed to interview 2770 persons this year. Of respondents asked in the supplementary Omnibusz survey last year 881 answered our questionnaires this year again, we therefore had a total of 3651 respondents in the sample who had already participated in the survey earlier. This year, as in 2002, a supplementary sample was added to the sample representing the adult population. Of the 2003 Omnibusz survey 1033 respondents were also asked a significant part of the WIP survey questions. We further asked 590 persons from the 14-17 age range to replace those growing older and leaving this age group. Their selection was in accordance with the sampling procedure discussed in details above. The figure below shows the composition of the sample.

Individual weighting

Obviously, the individual composition of the sample got heavily distorted as a result of answer refusals and the supplement of the 14-17 age group. The tables below display the sample compared to the 2001 Census by gender, age, education and settlement type. In the Chi2 tests all these variables show significant divergence from population distributions expected from the 2001 Census, with the most significant divergence in age distribution. Thus, to correct for the discrepancies we created a weight variable that adjusts the overall distribution of the sample to the CSO distributions by gender, age, education and settlement type. When the over-14 population is being observed, this weight variable is to be used in making estimates.
Household weighting

In the research each person interviewed also represents a household for only one member of a household can be included in the study. Several questions do not survey persons but households. In these cases it is not the above mentioned individual weighting but the household weighting that should be used, which adjusts the overall distribution of the sample to the 2001 CSO distributions by household size (number of people in the household) and settlement type. The tables below show the sample distribution compared to the census, as well as the distribution of the raw (unweighted) survey data prior to the weighting effort.

Similarly, we also created an individual weight variable and a household weight variable for those questions that are not included in the Omnibusz survey in September 2003. These weight variables were designed to align the distribution of the sample excluding the Omnibusz data with the census.