

## Internet Usage by Households and Individuals

Online Survey



Client: National Media and Infocommunications Authority (NMIA, Hungarian abbreviation: NMHH)

Research providers: NRC Market Research Ltd. – Ariosz Ltd.

Timing of the field work: 7.12.2010 – 31.12.2010

Methodology: online interviews with standardised questionnaires

Average length of interviews: 33 min

Basis: Hungarian citizens aged 14+ with residence in Hungary and using the Internet at least once a week

Sample size: 3389 persons

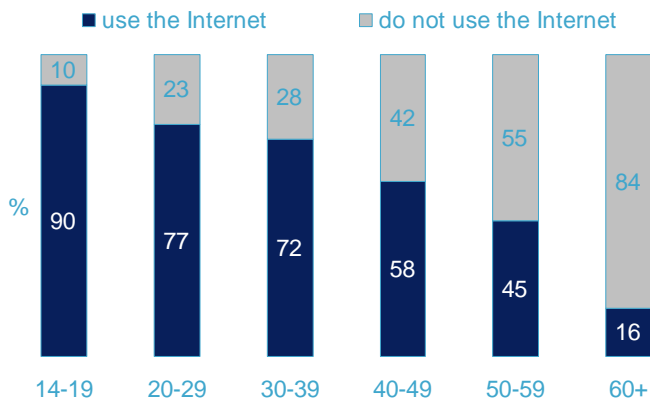
Weighting: on the basis of the nationally representative survey 'Use of Telecommunication Services in the Households' conducted for the NMIA in November 2010. Weighting items in case of households: size of the household, type of settlement, technology of Internet subscription, and number of children under 18 in the household. In case of individuals: gender, age, and the level of education.

Weighting method: RIM weighting

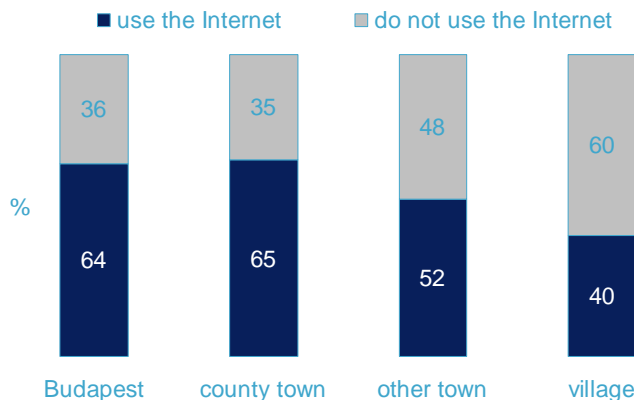
# Internet Usage

More than half of the Hungarian population aged 14+ use the Internet at home or somewhere else.

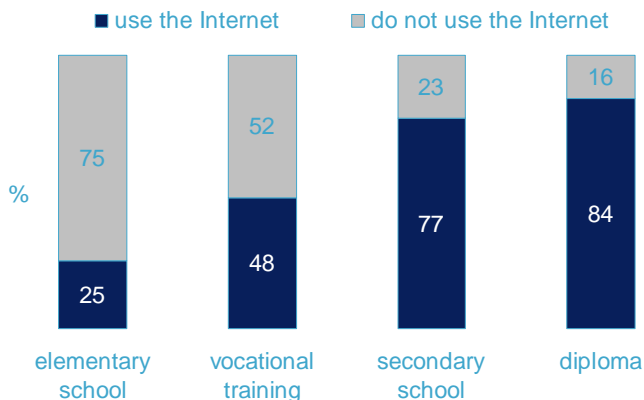
### Age groups



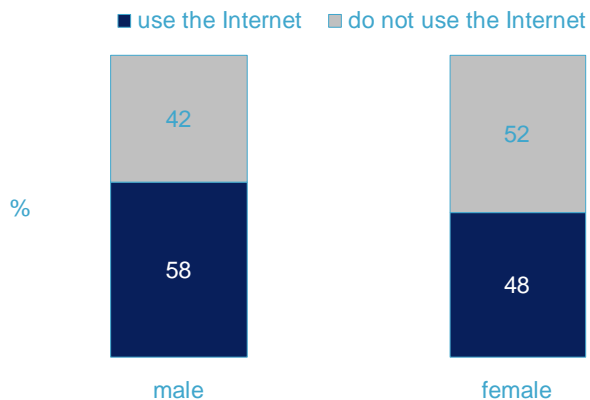
### Place of living



### Level of education

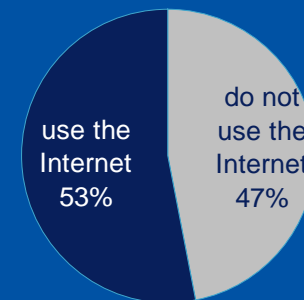


### Gender



An unequal distribution can be noticed in Internet usage of the Hungarian society according to several indicators.

There are fewer Internet users among women, the elderly, and people with lower education compared to other social groups.

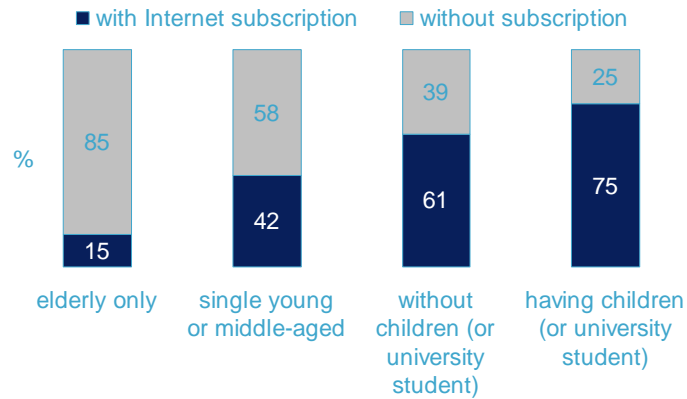




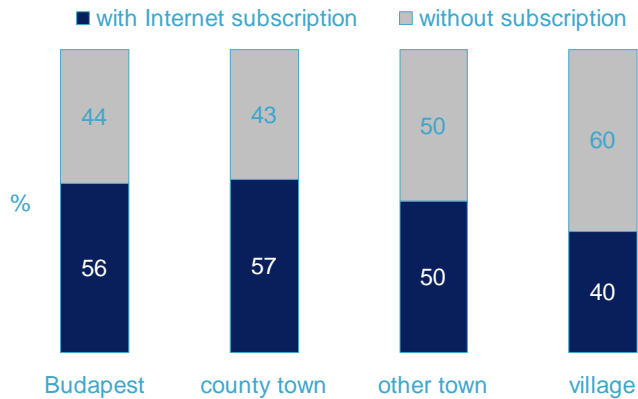
# Penetration of Internet Subscriptions

Half of the Hungarian households have Internet subscription.

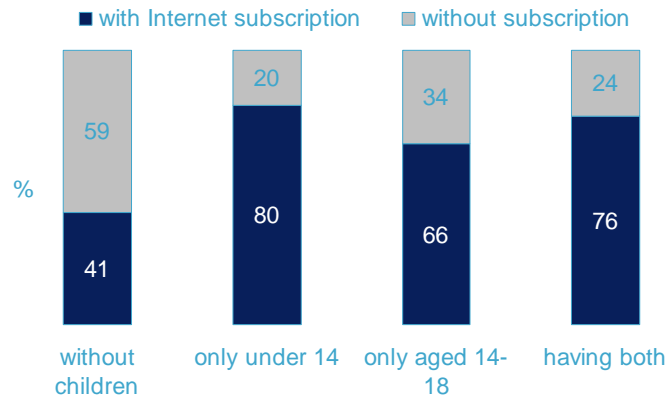
Type of household



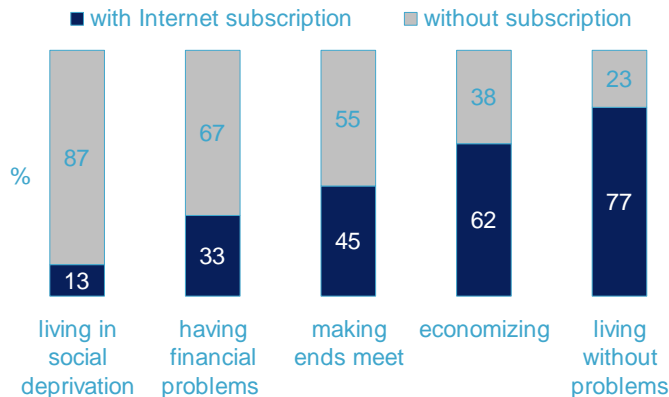
Place of living



Children in the household

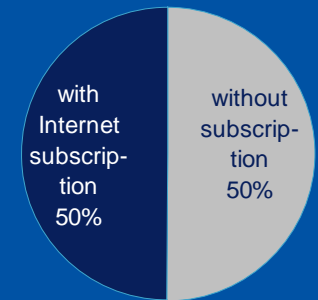


Subjective economic status



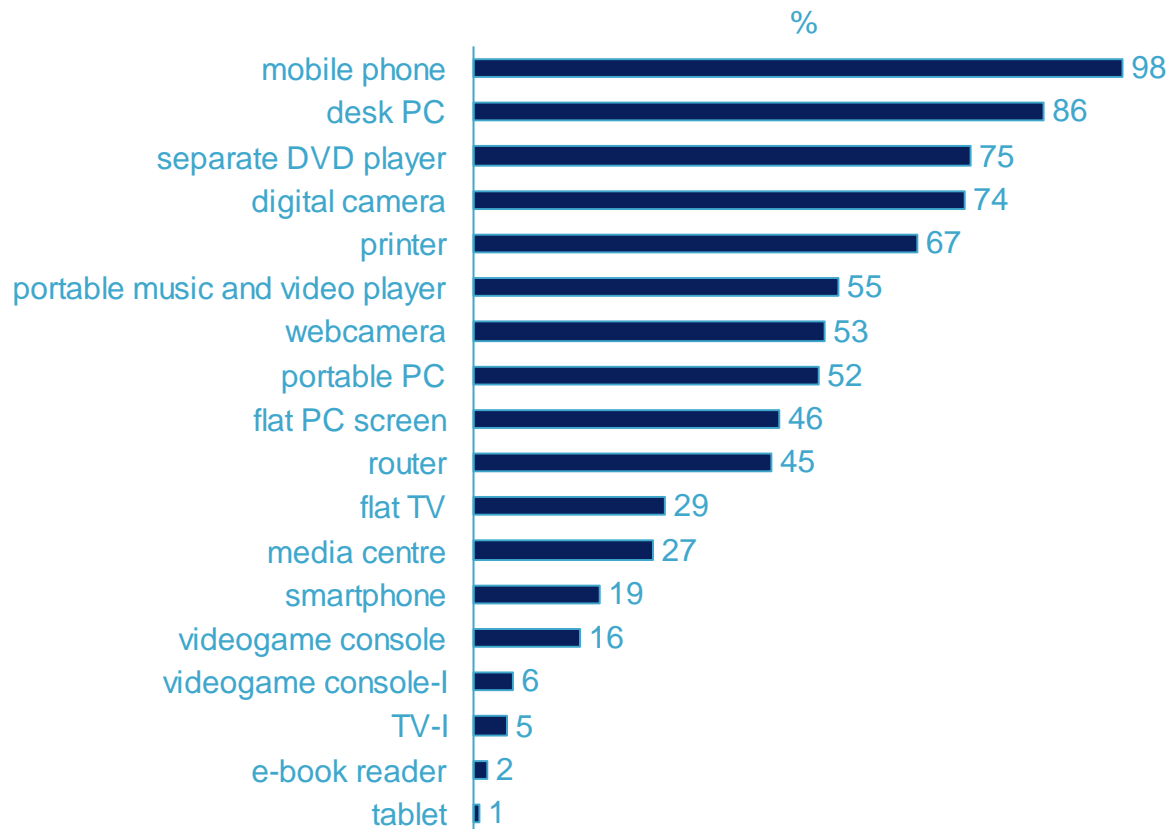
There is an unequal distribution in the incidence of Internet subscriptions in the households as well.

The proportion of Internet subscriptions is under the average 50% in villages, elderly and 1-person households, families without children, and among those who live in social deprivation or have financial problems.



# Penetration of ICT devices

In 2010, new devices were getting more widespread in the households: TVs and game consoles appropriate for using the Internet, e-book readers, tablets, and most importantly, smartphones.



Practically, all households with a member using the Internet have a kind of computer: desktop, laptop, tablet (altogether: 98%), or mobile phone (98%). Households having a smartphone usually have a traditional mobile phone as well (98%).

58% of households have a portable device appropriate for Internet use and having an operation system: laptop, tablet or smartphone.

Households have 7.2 devices on average out of the 18 types of devices covered in the survey. They own more pieces of some of these types of devices, so they have 10.6 devices on average. There are 4.7 devices per person aged 14+ in a household on average.

I: device appropriate for Internet usage

Flat screen: plasma, LCD, OLED, LED



Households  
n=3389

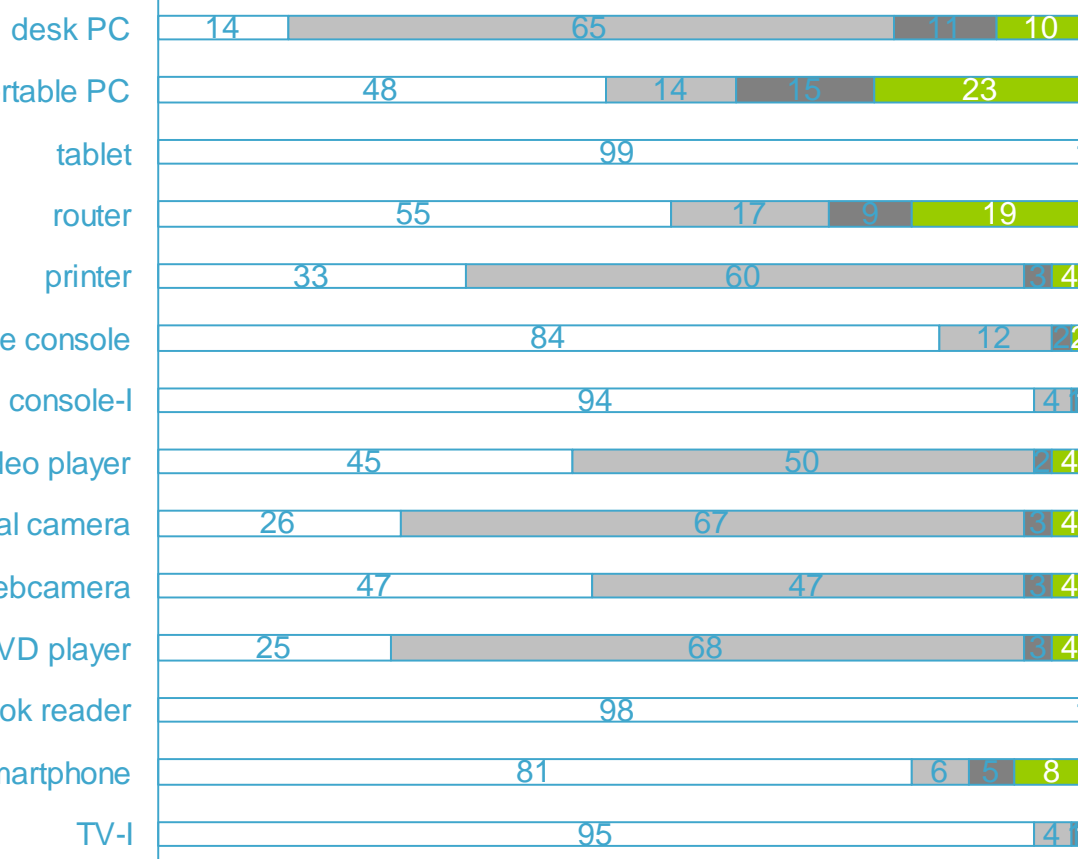


# Penetration of devices appropriate for wifi

56% of households have a kind of equipment appropriate for using wifi.  
28% of them have wifi router.

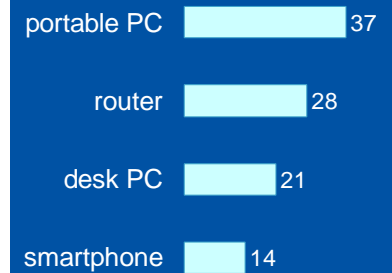
□ no device in the household    ■ no wifi    ■ having but not using wifi    ■ using wifi

%



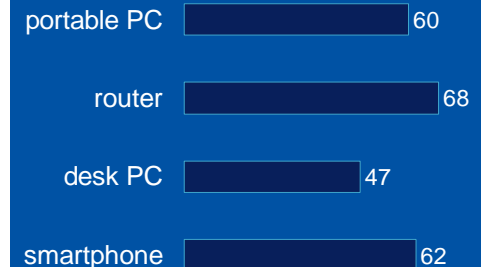
## Proportion of households with devices appropriate for wifi

%



## Households using wifi of those who have the appropriate devices

%



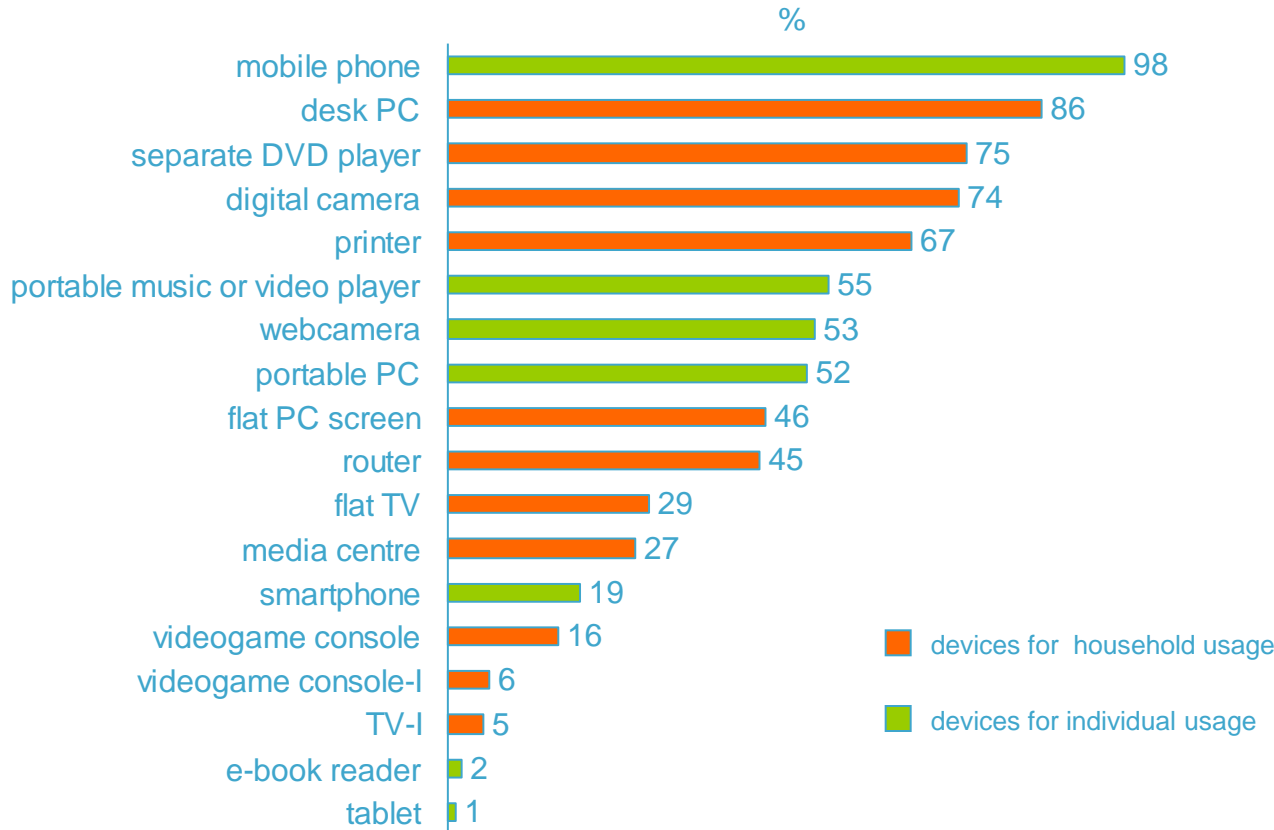
Households n=3389

I: device appropriate for Internet usage



# Penetration of ICT Devices

In 2010, new devices was getting more widespread in the households: TVs and game consoles appropriate for Internet usage, e-book readers, tablets, and most importantly, smartphones.



Taking into account the Hungarian lifestyle, we clustered all ICT devices into two groups: devices for household usage and for individual usage.

In case of mobile phones, we mean traditional mobile phones and smartphones together.

By devices appropriate for Internet usage we mean the following: desktop, laptop, notebook, netbook, tablet, and smartphone (PDA). These are all portable devices and appropriate for Internet usage (having an operating system) – except desktops.

I: device appropriate for Internet usage

Flat screen: plasma, LCD, OLED, LED

It is possible to use the Internet on some traditional mobile phones to some extent, but we did not take it into consideration at this analysis.



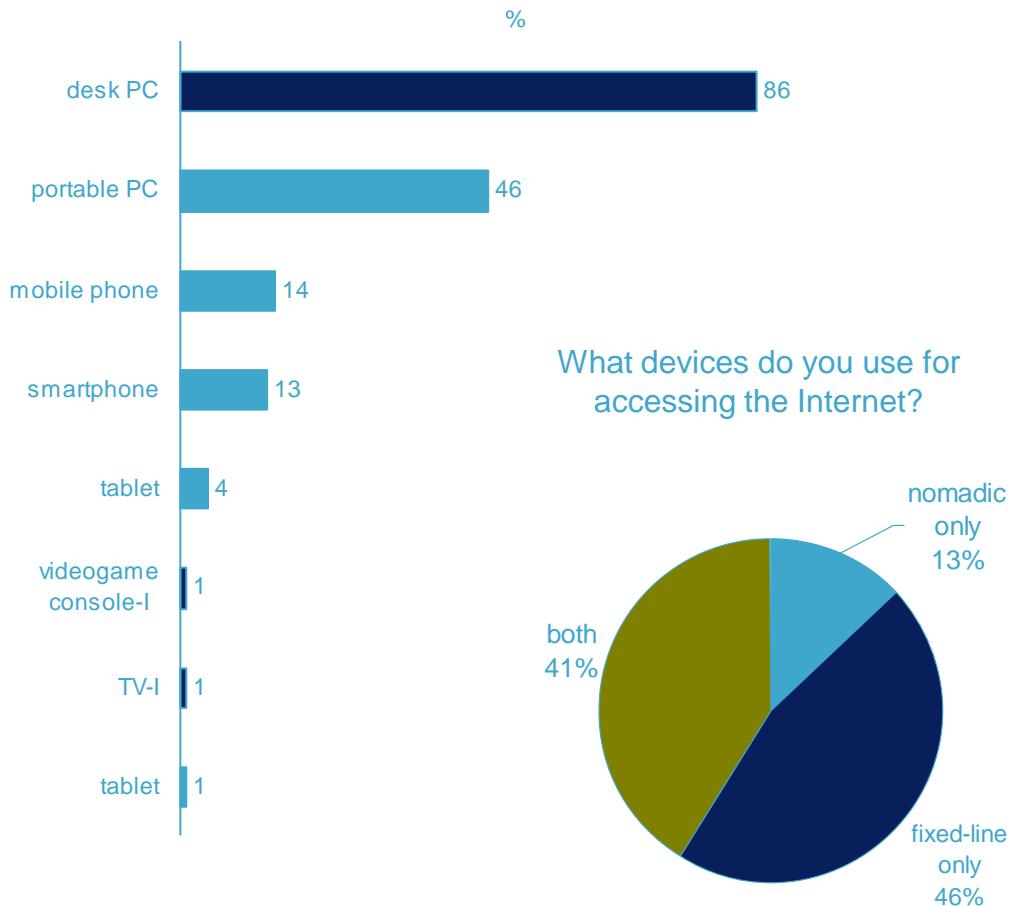
Households  
n=3389



# Tools of Internet Usage

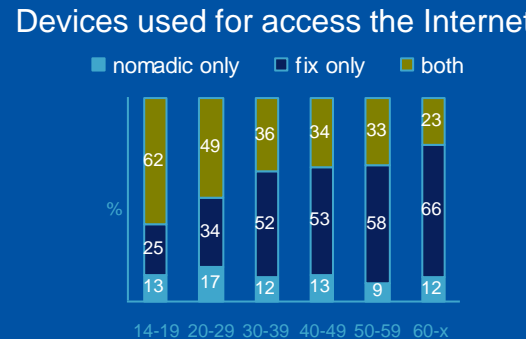
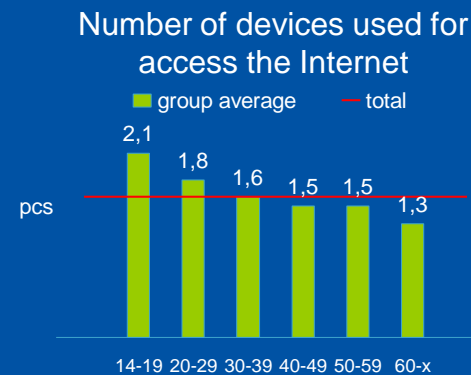
87% use the Internet at home or somewhere else with fixed-line devices and 54% with portable devices.

Our comparison by age groups shows that the main trend is not to switch from fixed-line to nomadic devices but to use the two parallelly.



In general, Internet users use 1.6 devices on average for access the Internet. Teenagers and high level Internet users use more than 2 devices on average.

There are both technical and social reasons behind the parallel usage: there is not an ideal nomadic device on the market yet (a telephone screen is too small for Internet usage while tablets are too big for using as a phone), 3G is slow, the worldwide web is designed for fixed-line devices, and the level of prices and ordinary habits strengthen to keep the fixed-line devices.



I: device appropriate for Internet usage

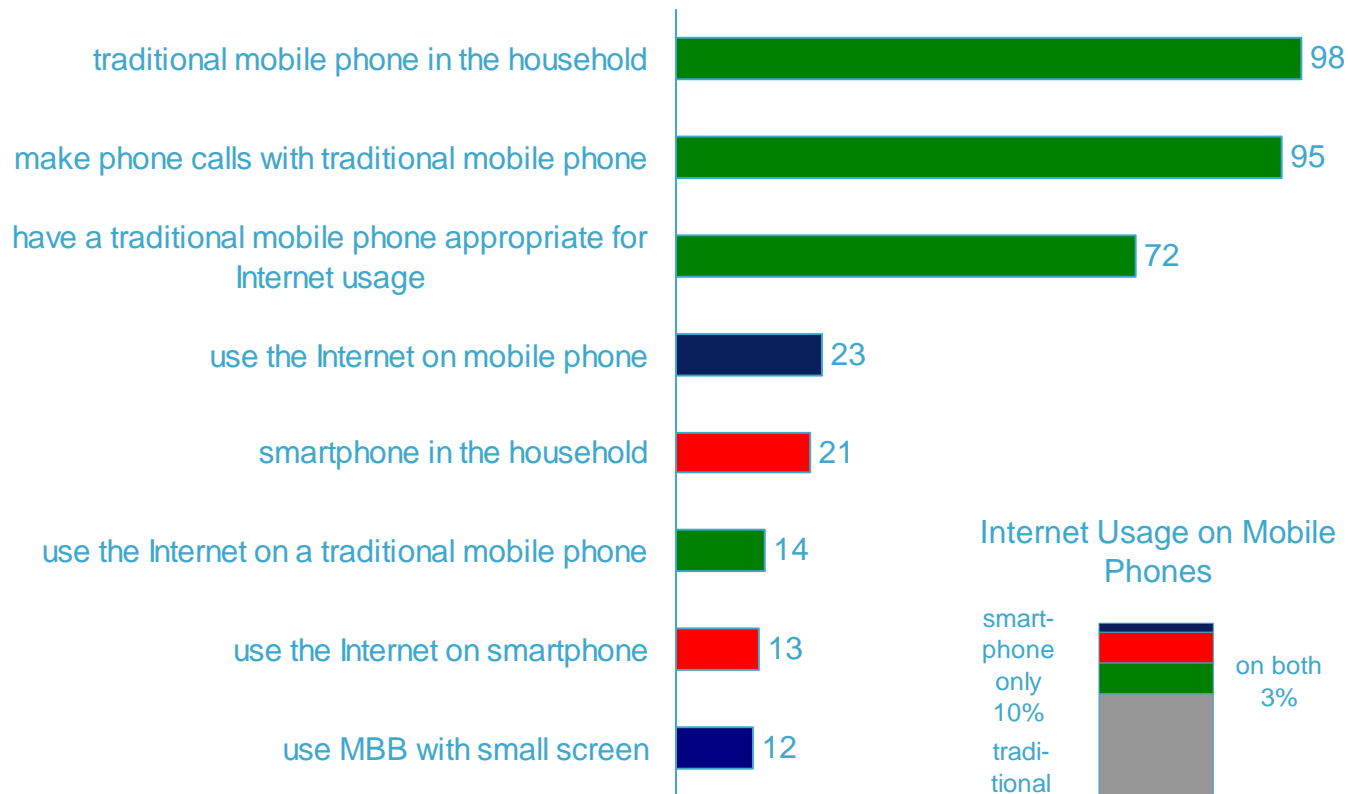




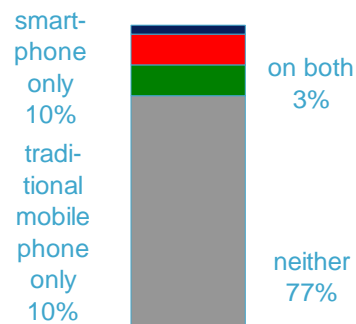
# Internet Usage on Mobile Phones\*

Nearly all Internet users make phone calls, but only one fifth use their phone for accessing the Internet, although, 73% have a mobile phone appropriate for using the Internet.

%



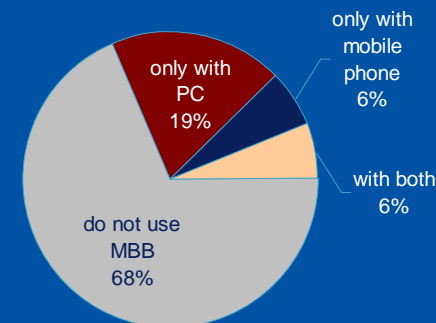
### Internet Usage on Mobile Phones



Those who do not use their mobile phones appropriate for Internet usage for accessing the Internet are mostly women, middle-aged (40+) persons, villagers, newcomer and starter Internet users.

23% of Internet users access the Internet on their mobile phones, but only 12% use the MBB technology for this purpose. The remaining users use wifi networks or wifi router of a fixed-line Internet connection.

### MBB Usage





# Internet Subscriptions of Households

1.8 million households have Internet subscription for fixed-line technology and about 500,000 households have MBB subscriptions.

### Subscription



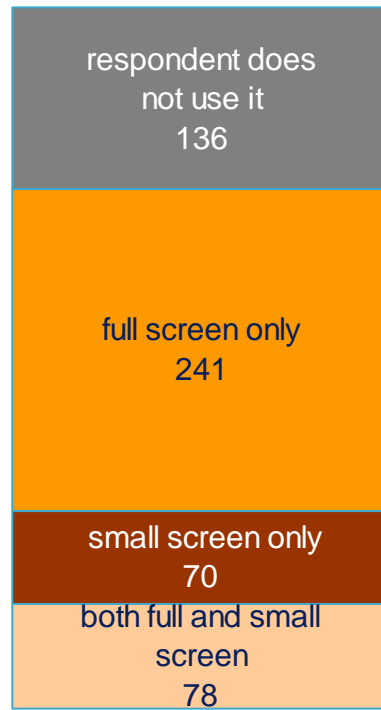
2 286

Households having a member who uses the Internet

2 032

Households with Internet subscription

### Subscription and Usage



525

Households with MBB subscription

319

Households with MBB subscription and using it on full screen

90% of households having a member who uses the Internet subscribe for the Internet. 79% of them subscribe for fixed-line technology and 23% for MBB while 10% of the latter have only MBB (substituent MBB usage) and 13% have both fixed-line and MBB connection (complementary MBB usage).

In 74% of households with MBB subscription, it is the respondent who (also) uses the MBB, while in the remaining households, the respondent does not use it, only other family member(s).

In 46% of households with MBB subscription, the respondent uses it only on PC (full screen), in 13% s/he uses it on mobile phone only (small screen), and in 15% s/he uses MBB on both full and small screens.



Households n=3389



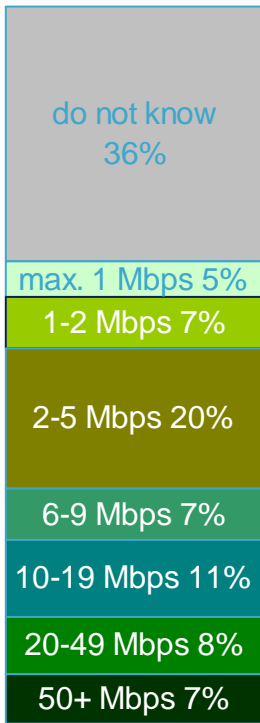
Households with MBB subscription n=784



# Bandwidth of Subscribed Internet Connections

Only one out of three Internet users has any idea about the downloading speed undertaken in the service contract, indicated in the name of the package or announced in another way, but some of the answers are obviously mistaken.

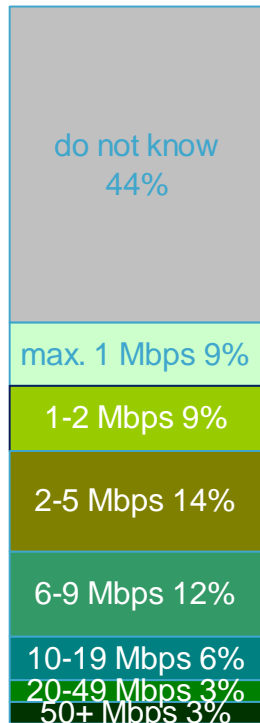
Fixed-line



max. 5 Mbps  
32%

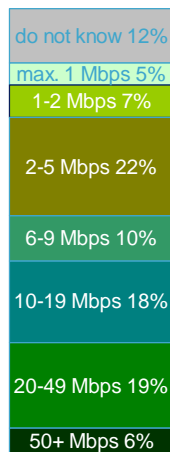
10+ Mbps  
26%

MBB



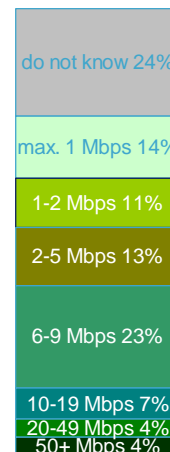
Answers of high level users

Fixed-line



max. 5 Mbps 34%  
10+ Mbps 43%

MBB



One quarter of subscribers to fixed-line technology say that they pay for a package of 10 Mbps or more download speed. Another one third say to have a package of 5 Mbps or less.

The vast majority of MBB subscribers simply do not know it or mention a speed which is impossible regarding the present technological possibilities.

More experienced users who identify themselves as high level users can say more often the nominal download speed of their Internet subscription, but their answers cannot be transferred to the whole Internet population, because they subscribe to broader bandwidth more often than the average.



Households with subscription to fixed-line technology  
n=2709

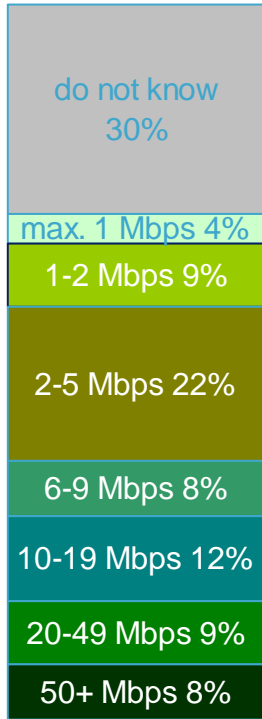


Households with MBB subscription  
n=784

# Download Speed of Subscribed Internet Connections

One third of subscribers have faster download speed than in 2010, because of several reasons.

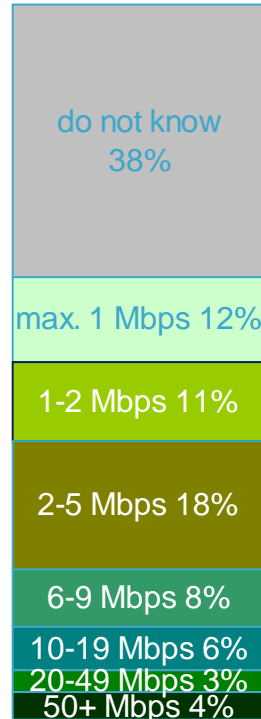
Fixed-line



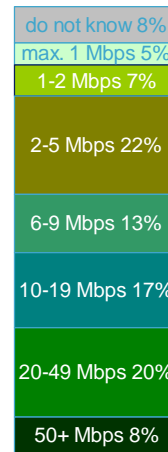
max. 5 Mbps  
35%

10+ Mbps  
28%

MBB

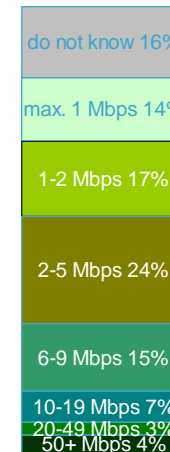


Answers of high level users  
Fixed-line MBB

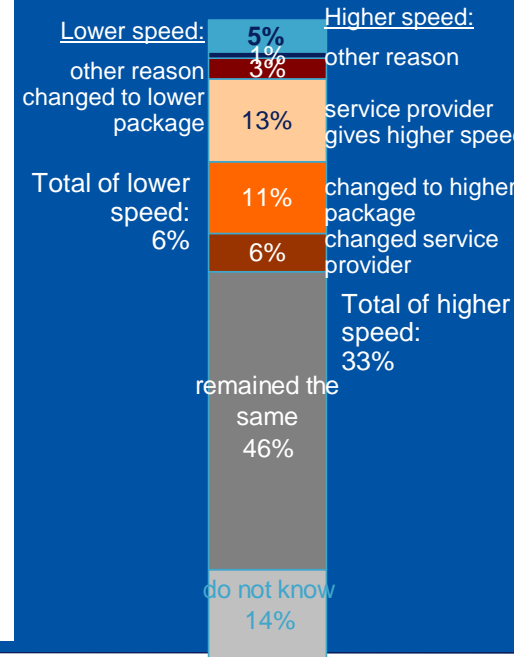


max. 5 Mbps  
34%

10+ Mbps  
45%



Change in speed of the Internet connection used the most often in the last year



Households with subscription to fixed-line technology, n=2709



Households with MBB subscription n=784



Households with Internet subscription n=3049

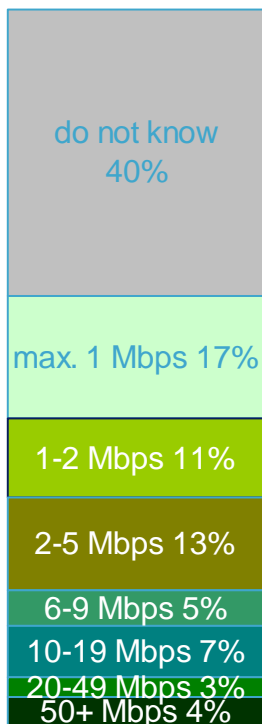




# Upload Speed of Subscribed Internet Connections

Internet users have “real” knowledge about the upload speed of their Internet connection even less than about their download speed. It is especially true for subscribers of MBB.

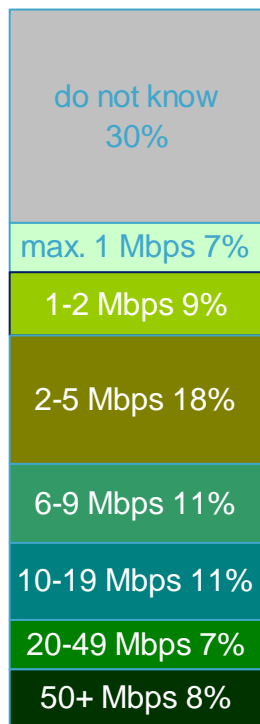
Fixed-line



max. 5 Mbps  
41%

10+ Mbps  
14%

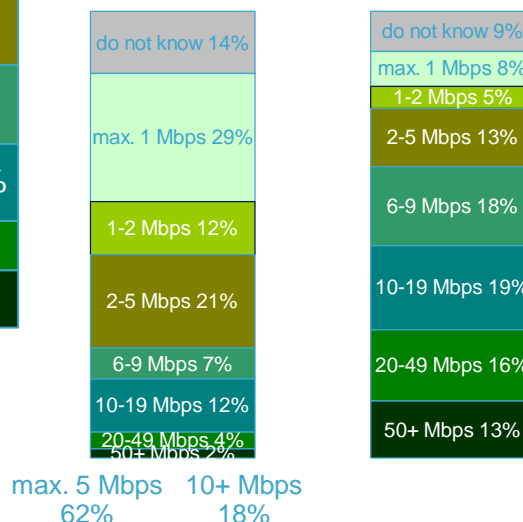
MBB



Unawareness may have several reasons, for example:

- unfamiliarity with the measurement unit
- only users of large data sets use softwares which inform about the current speed
- many users are not experienced enough to do the speed test
- service providers do not emphasize the speed of MBB in their communication
- users confuse the speed of MBB with its limit of data trafficking

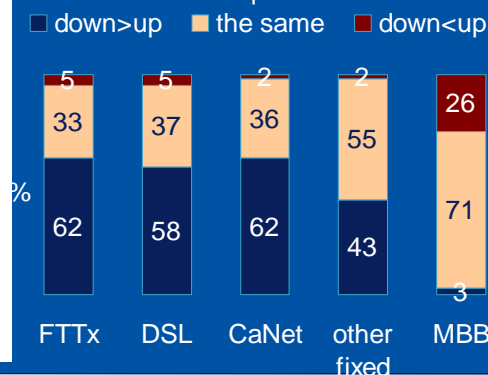
Answers of high level users



The majority of subscribers of FTTx, DSL or Canet technology and those who answered both questions about speed usually say that their download speed is higher than their upload speed.

Another example for the significant unawareness of subscribers of MBB that the vast majority of those who answered both questions say that the two speeds are the same or their upload speed is higher than their download speed.

Upload and download speed among those who answered both questions



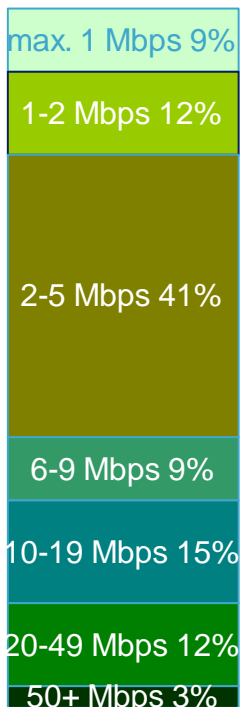


# Tested Speed of Subscribed Internet Connections

21% of fixed-line and 42% of MBB had only 2 Mbps download speed during the testing. 30% of fixed-line and 5%\* of MBB was high-speed connections (10+ Mbps).

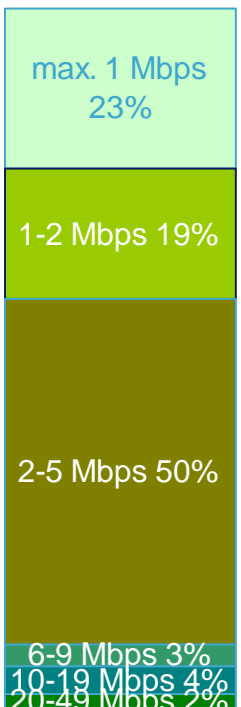
## Download

### Fixed-line



max. 5 Mbps 61%  
10+ Mbps 30%

### MBB

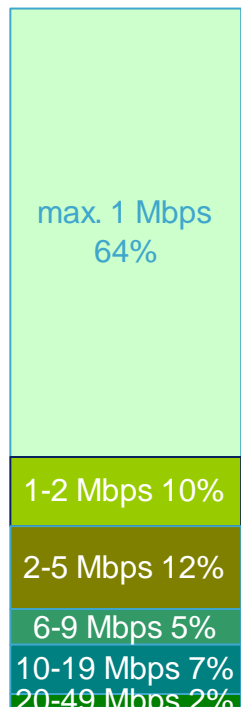


max. 5 Mbps 92%  
10+ Mbps 5%

\*The high observed speed result at MBB subscribers implies that these respondents were wrong when stating that they filled out the questionnaire through their MBB connection.

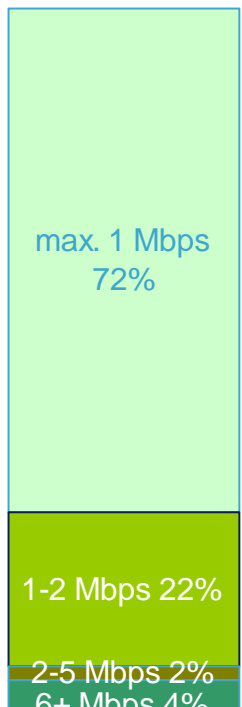
## Upload

### Fixed-line



max. 5 Mbps 86%  
10+ Mbps 9%

### MBB



max. 5 Mbps 96%  
10+ Mbps 2%

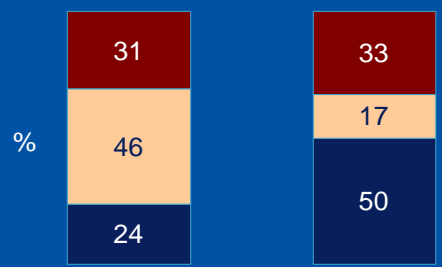
One third of those who provided us with the two data are in a lower category of observed download speed than their subscribed package.

Subscribers of MBB are often wrong as half of them have higher download speed in reality than their expected nominal bandwidth.

## Observed download speed (O) and bandwidth (B)

Among those who gave their bandwidth and could take the test successfully

■ B<O    ■ the same    ■ B>O



Fixed-line    MBB



Households with subscription for fixed-line technology and done the test successfully n=1542

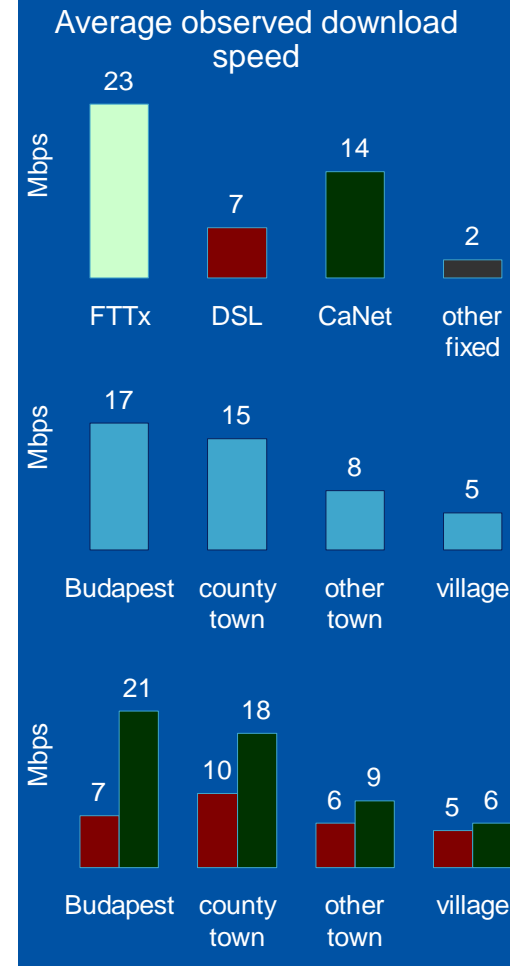
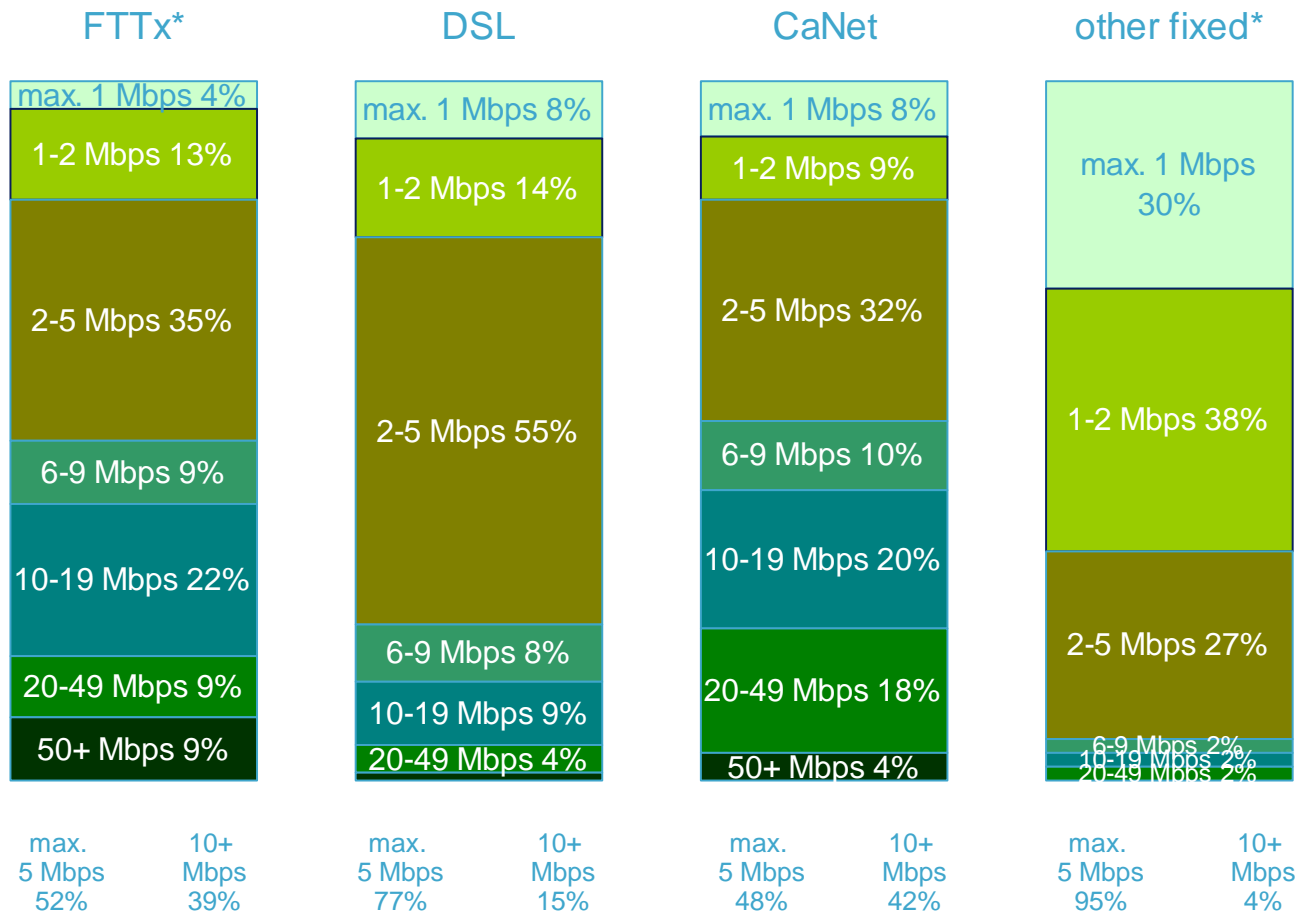


Households with subscription for MBB and done the test successfully n=136



# Tested Download Speed of Fixed-line Internet Technologies

Two fifth of subscriptions for optical cable and cable net, while 15% of DSL subscriptions were found to be high speed (10+ Mbps) during the speed tests. While the speed of DSL and cable subscriptions were nearly the same about 1-2 years ago, cable net is much faster now, especially, in bigger cities.



Households with subscription for fixed-line technology and done the test successfully n=1542

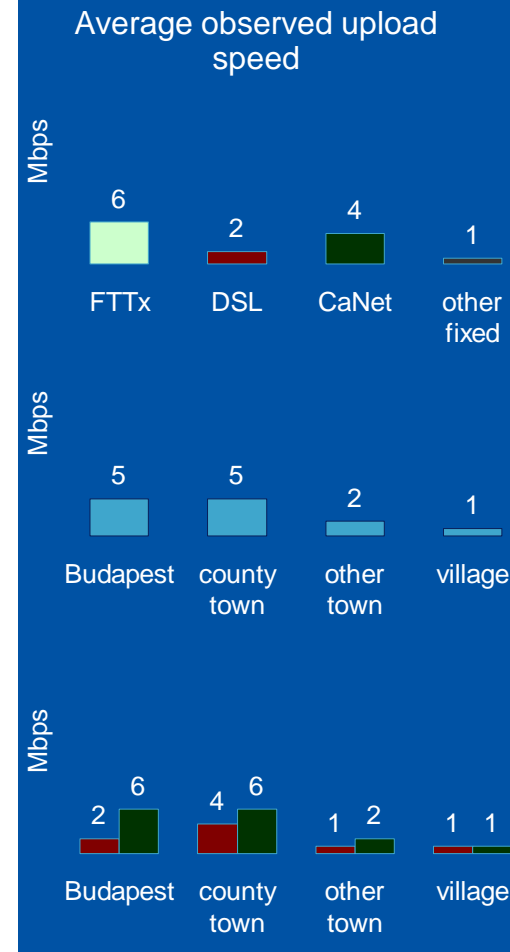
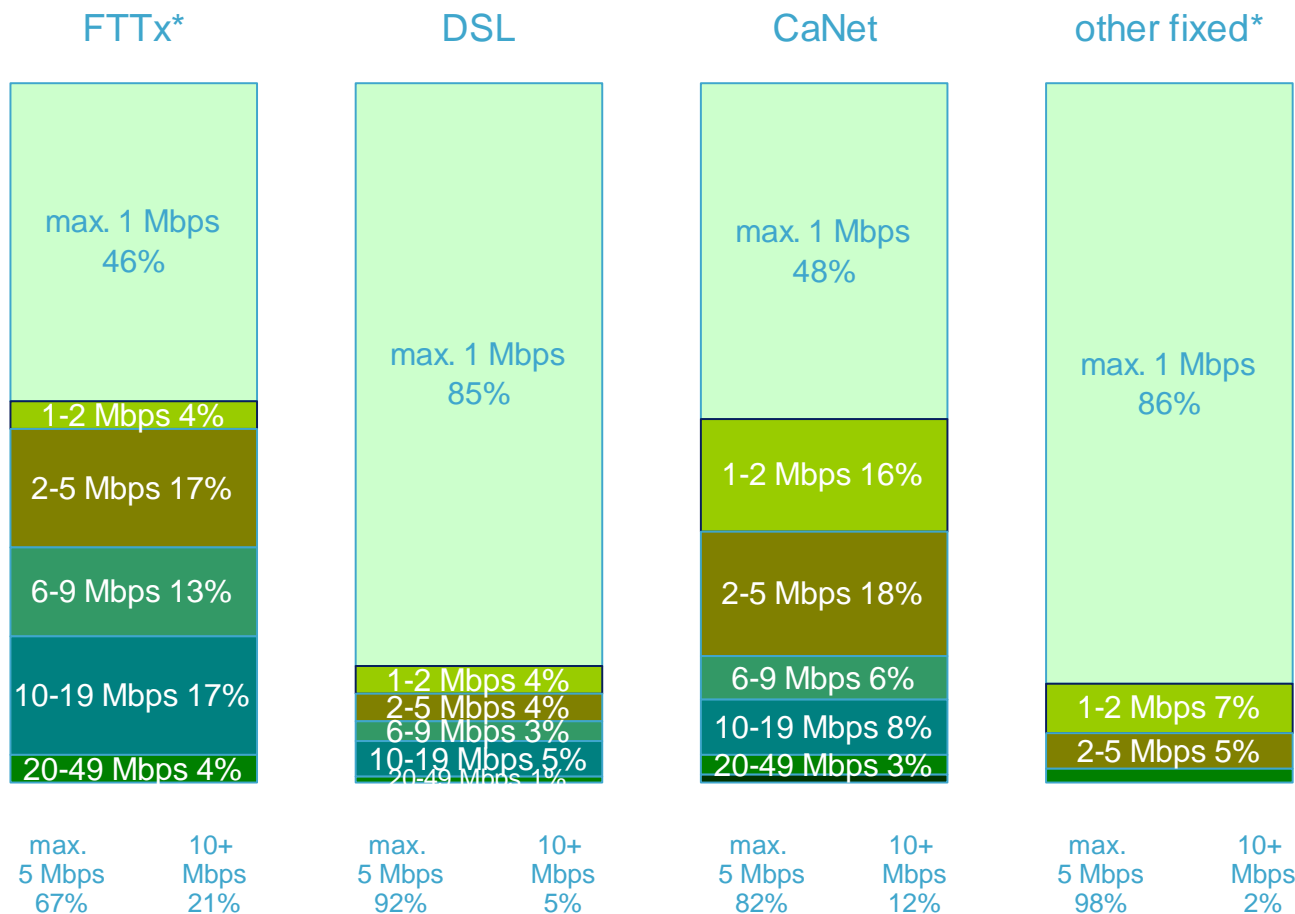
\*Less trustable data because of the low number of subscribers





# Tested Upload Speed of Fixed-line Internet Technologies

Consumers get nearly the same quality of services of electricity, gas, water supply, and telephone in different areas of the country. But the quality of Internet services is much lower in smaller settlements than in big cities.



Households with subscription for fixed-line technology

and done the test successfully  
n=1542

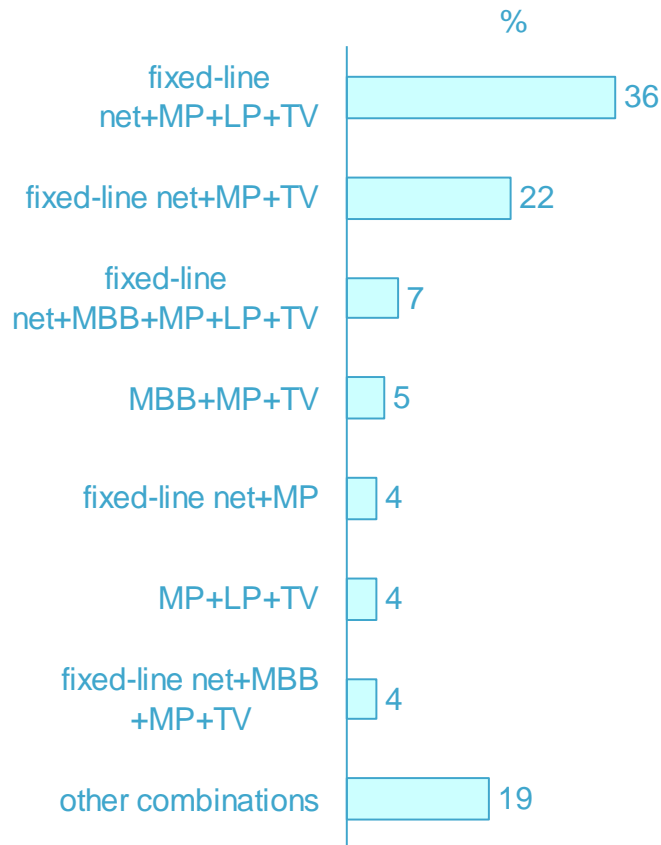
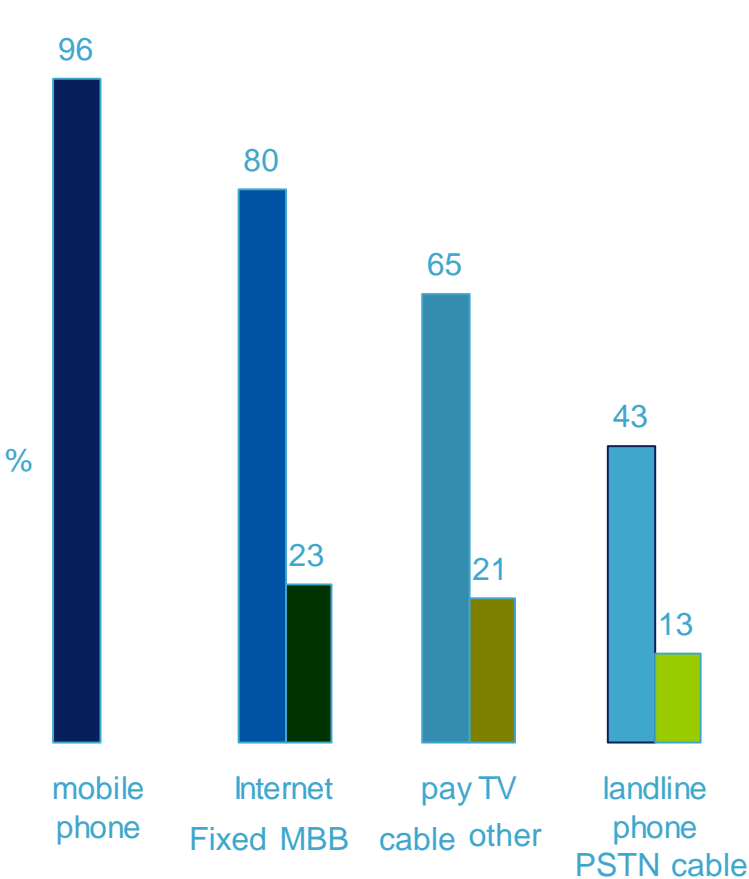






# Subscriptions for Communication Services

The vast majority of households having Internet access subscribe for three or more communication services.



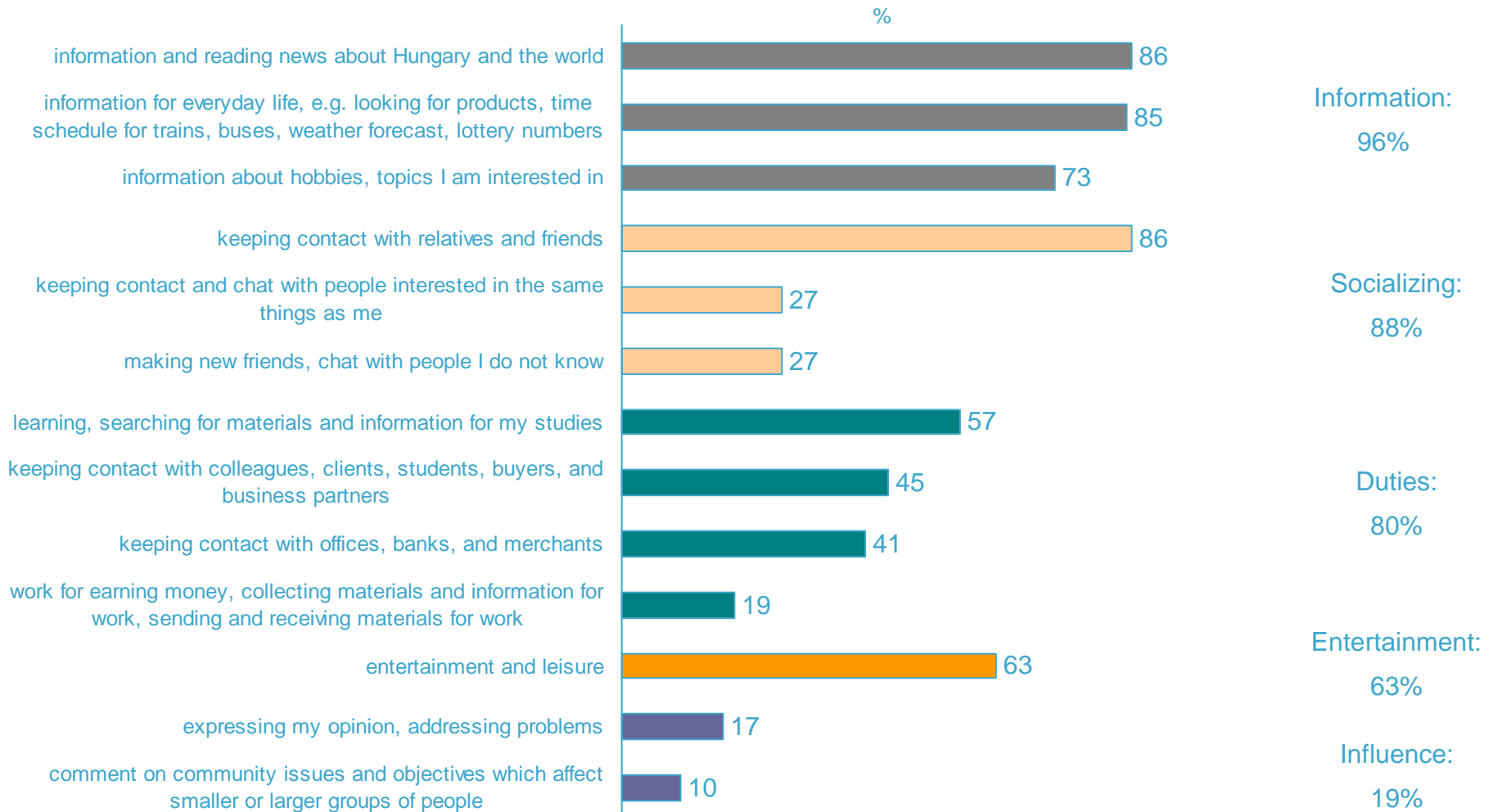
Practically, all households subscribe for mobile phones where there is a member using the Internet. 90% of households subscribe for the Internet, while 86% for TV, and 56% for landline phone.

The most usual combination is that households subscribe for fixed-line Internet and three other communication services, (36%); or they subscribe for fixed-line Internet, mobile phone, and TV.



# Purpose of Internet Use

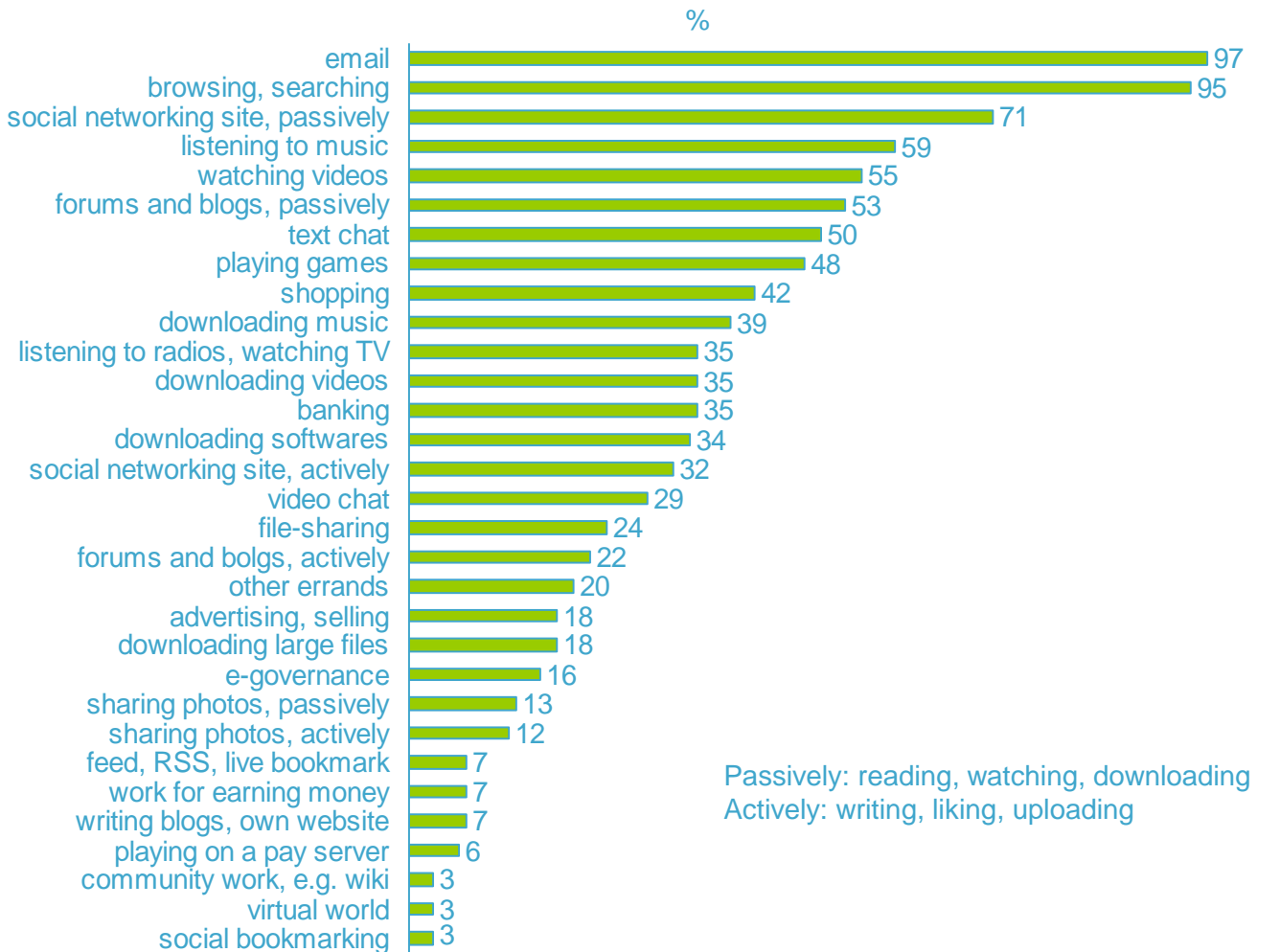
Five clusters could be created based on the purposes of Internet usage. Nearly all Internet users search for information, but keeping contact with others is also an important function. The fifth cluster, i.e. influencing public issues seems to be less important.





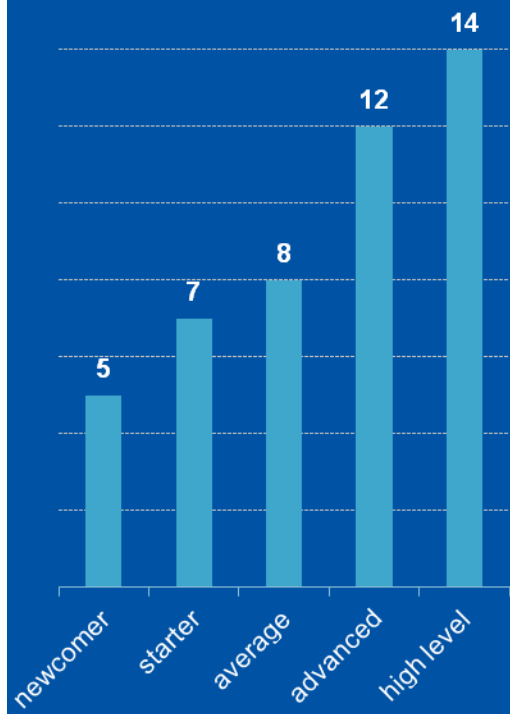
# Activities on the Internet – one week before the survey <sup>19</sup>

In general, Internet users did 10 out of the 31 activities listed in the questionnaire during the week before the survey. The most important factor in the variability of activities is familiarity with the Internet (type of user).



Passively: reading, watching, downloading  
Actively: writing, liking, uploading

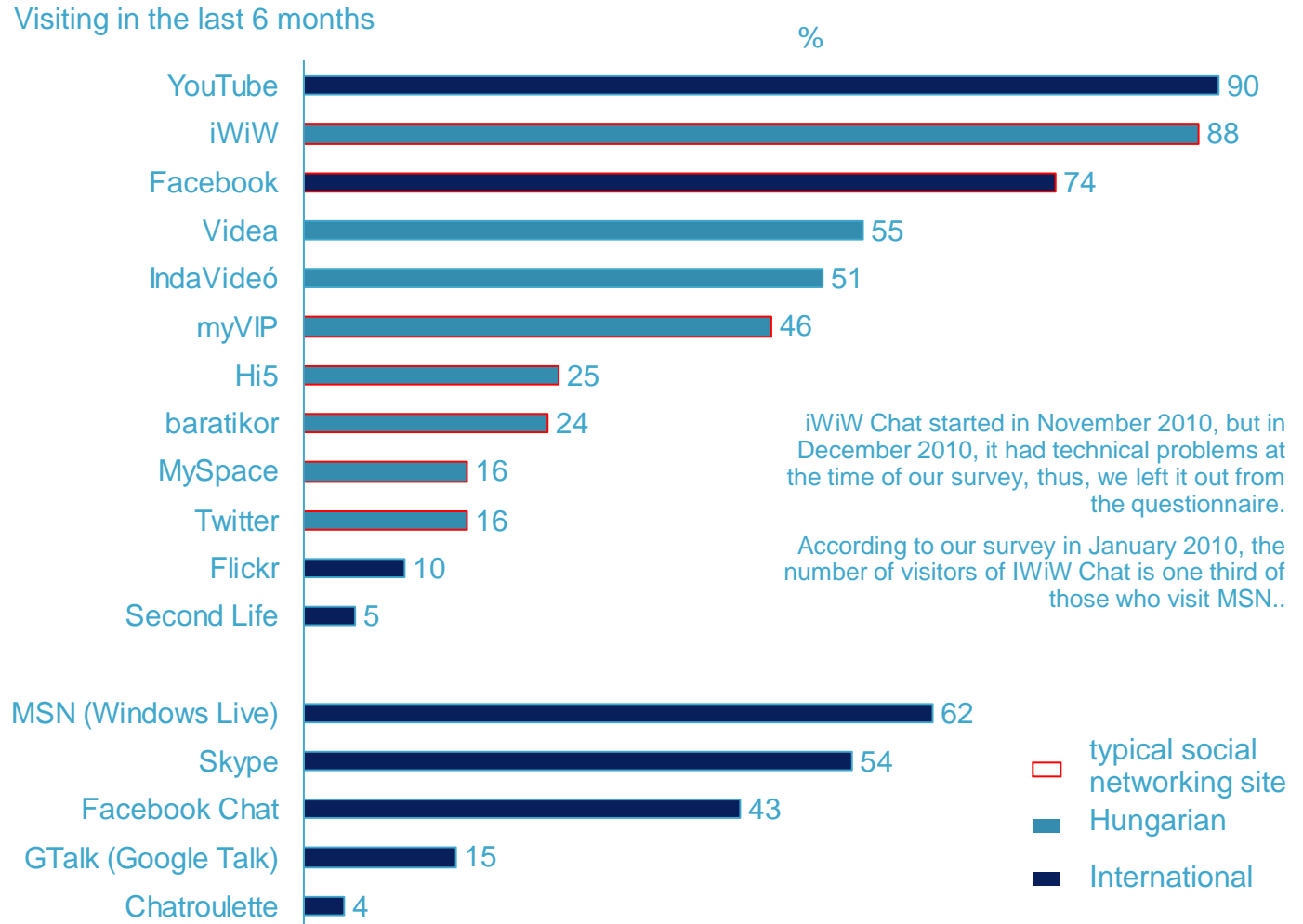
Number of activities by type of users, during the week before the survey



# Social Networking Sites



Facebook became popular among Hungarian Internet users in 2010, some years after it had launched. The proportion of visitors was 26% in 2009 and 74% in 2010. By now, Facebook Chat has also become more and more popular while Twitter is rarely used in Hungary, yet.

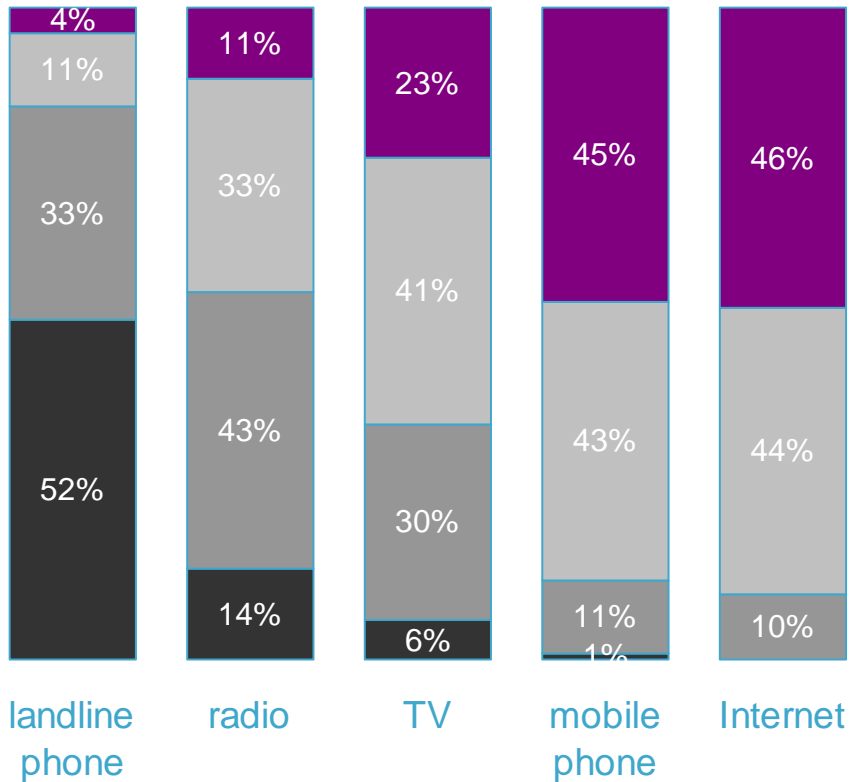


Hungarian Internet users prefer the Hungarian social networking sites (with Hungarian owners) despite that some international sites have Hungarian versions as well. In the second half of 2010, 91% used the services of Hungarian networking sites and 78% the international ones. (Video and photo sharing sites, virtual worlds having a secondary socializing function, and chat programs are not incorporated here.)

The reason for the fast advancement of Facebook in Hungary might be that Hungarian users reached the critical mass when it is worth for new users to join FB, i.e. there are as many users that it is probable to find friends. Another factor for the success of Facebook might be the late development of the Hungarian site iWiW, the problems with its new version, and that many of its users did not like the upgrade in itself. At the end of last year, a huge amount of the following message could be read on iWiW: „Bye, I left for Facebook”.

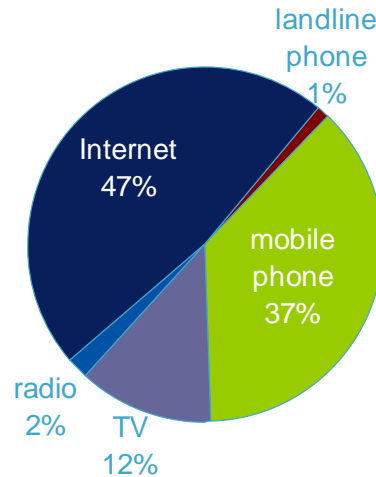
# Rivals of the Internet

The Internet seems to be a strong rival for other media. The older a communication technology is, the less tempting it is for Internet users.

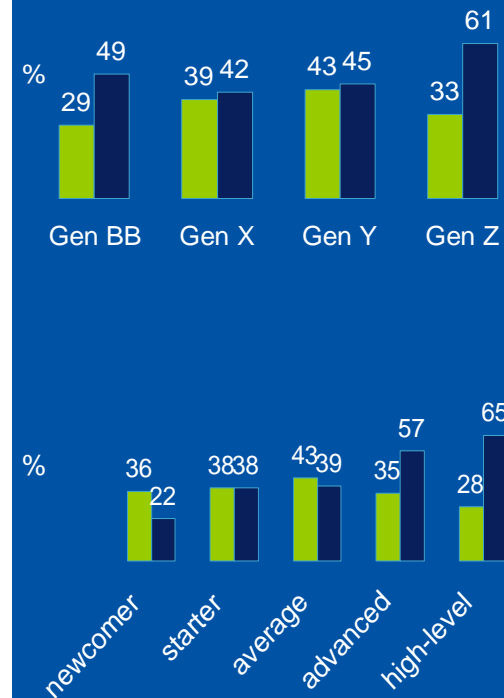


- indispensable for me
- I could hardly live without it
- I would easily neglect it
- unnecessary for me

If you could keep only one out of them, which one would you choose?



Frequency of those who would choose the mobile phone or the Internet

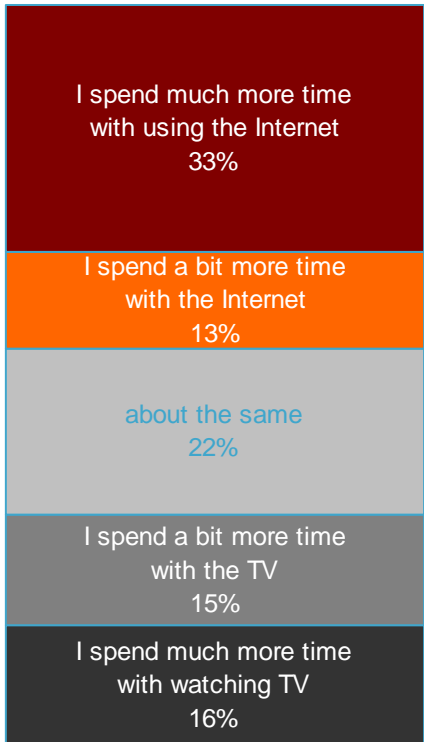




# Rivals of the Internet

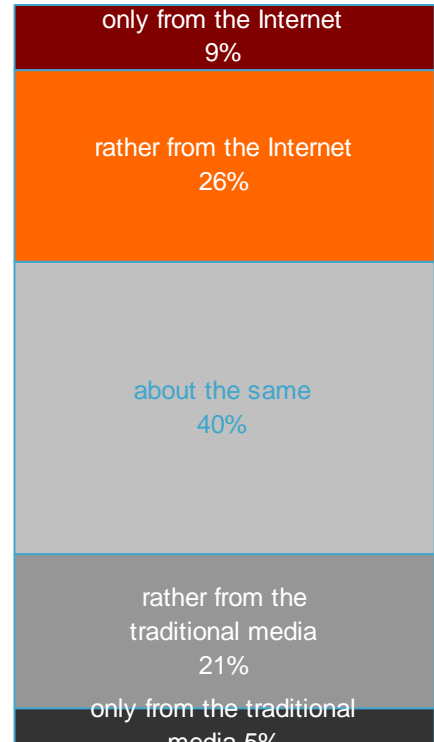
As time passed on, TVs downplayed radios, mobile phones downplayed landline phones and now, the Internet downplays all other mass media and mobile phones as well.

Do you spend more time with watching TV or with using the Internet?



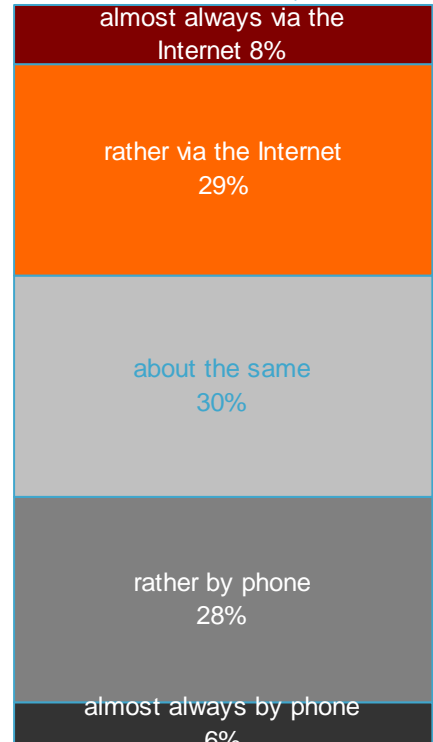
Time balance: Internet vs. TV

Do you get information and daily news mostly from the TV, radio, and the press or from the Internet?



Getting information: Internet vs. traditional media

If you might like to discuss something or share an information with somebody else who has Internet access, would you rather call him/her on the phone or contact him/her via the Internet (eg. by email or chat)?



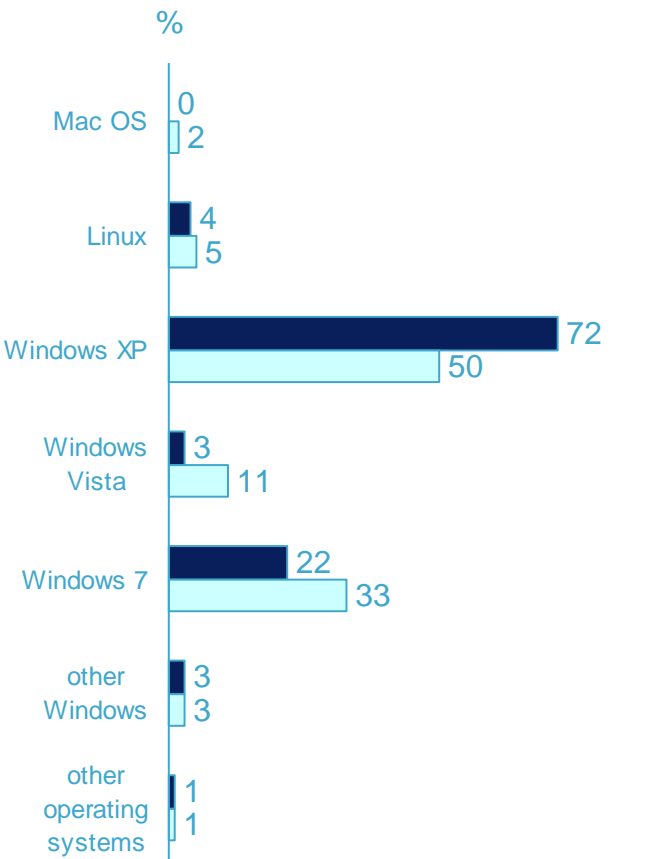
Interpersonal communication: Internet vs. telephone

Those who do not use the Internet spend the vast majority of their leisure time with watching TV, this is their main source of getting information and having fun. They contact others almost exclusively by telephone. Among Internet users, traditional media such as the TV in getting information, news, and having fun and the phone in contacting others are started to be substituted by the Internet. As it can be noticed on the following slide, this change takes place mostly among the youth as they are less used to and like less the traditional media, thus, they adapt more easily to the new ones.

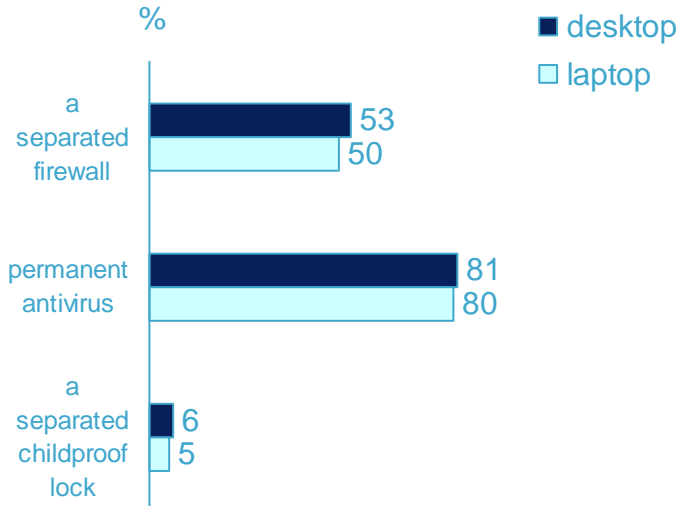


# Operating Systems and Security Softwares

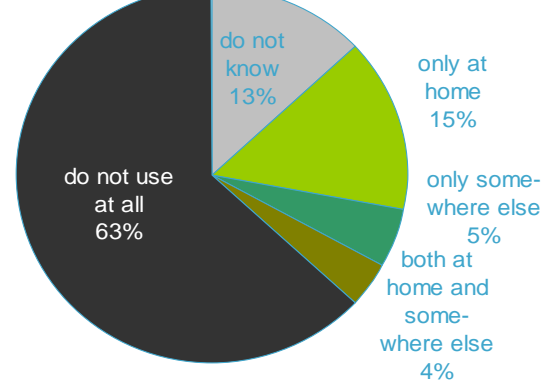
The majority of Internet users have Windows, i.e. the operating system exposed to security risks very much both on desk and portable PCs. Free security softwares are rather wide-spread.



The sum of percentages exceeds 100, because some people use more PCs.



Use of content filtering tools (browser settings, softwares)

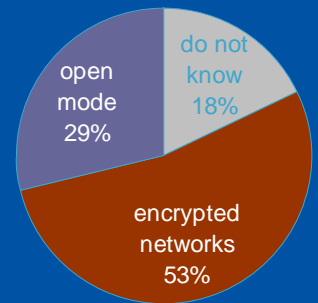


Windows is the generally used operating system in all groups of the society.

Windows 7 which is a safer operating system than the previous versions is mostly used by young and more experienced users .

About half of the users of any version of Windows operating systems use a separated firewall despite that Windows XP and the newer versions have their own firewalls.

Through what kind of wifi connection do you access the Internet?

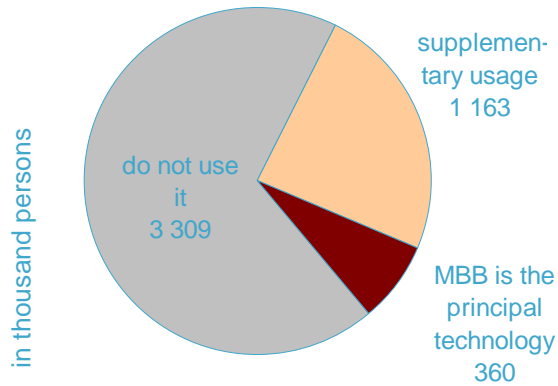


# Awareness of MBB

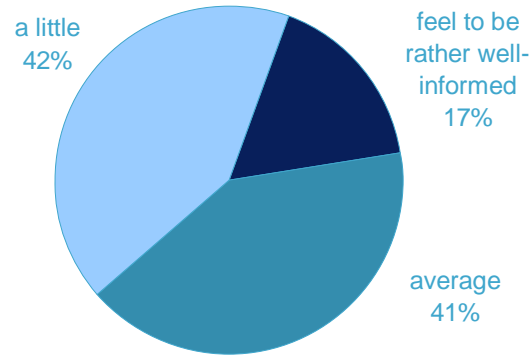
People have little and rather unfavourable knowledge about it.



Usage of MBB



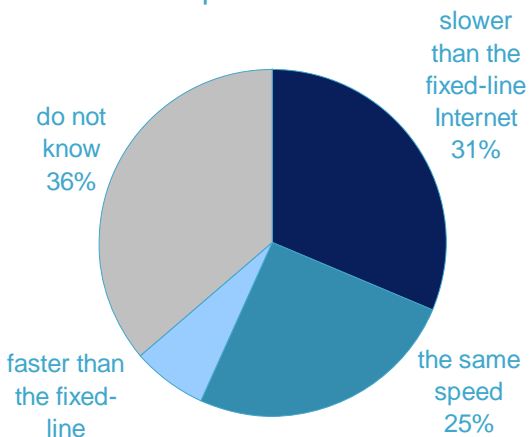
How much do you know about MBB?



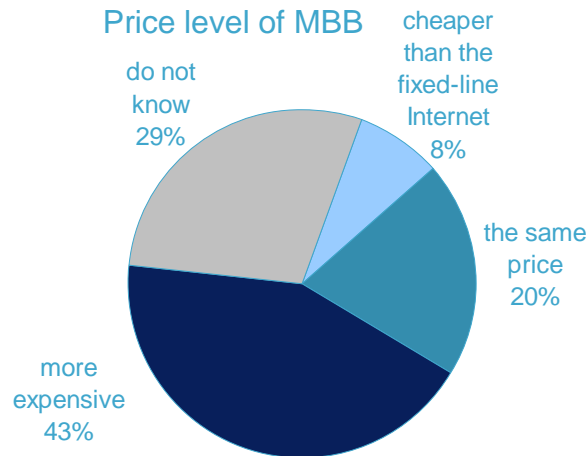
68% of Internet users do not have direct experiences about MBB as they neither use it at home, nor somewhere else and neither as the principal, nor as a complementary technology for accessing the Internet.

Two-fifths know little about MBB, another two-fifths have general knowledge and only 17% feel to be well-informed about it. Men, younger generations, and high-level users say to be more informed.

Speed of MBB



Price level of MBB



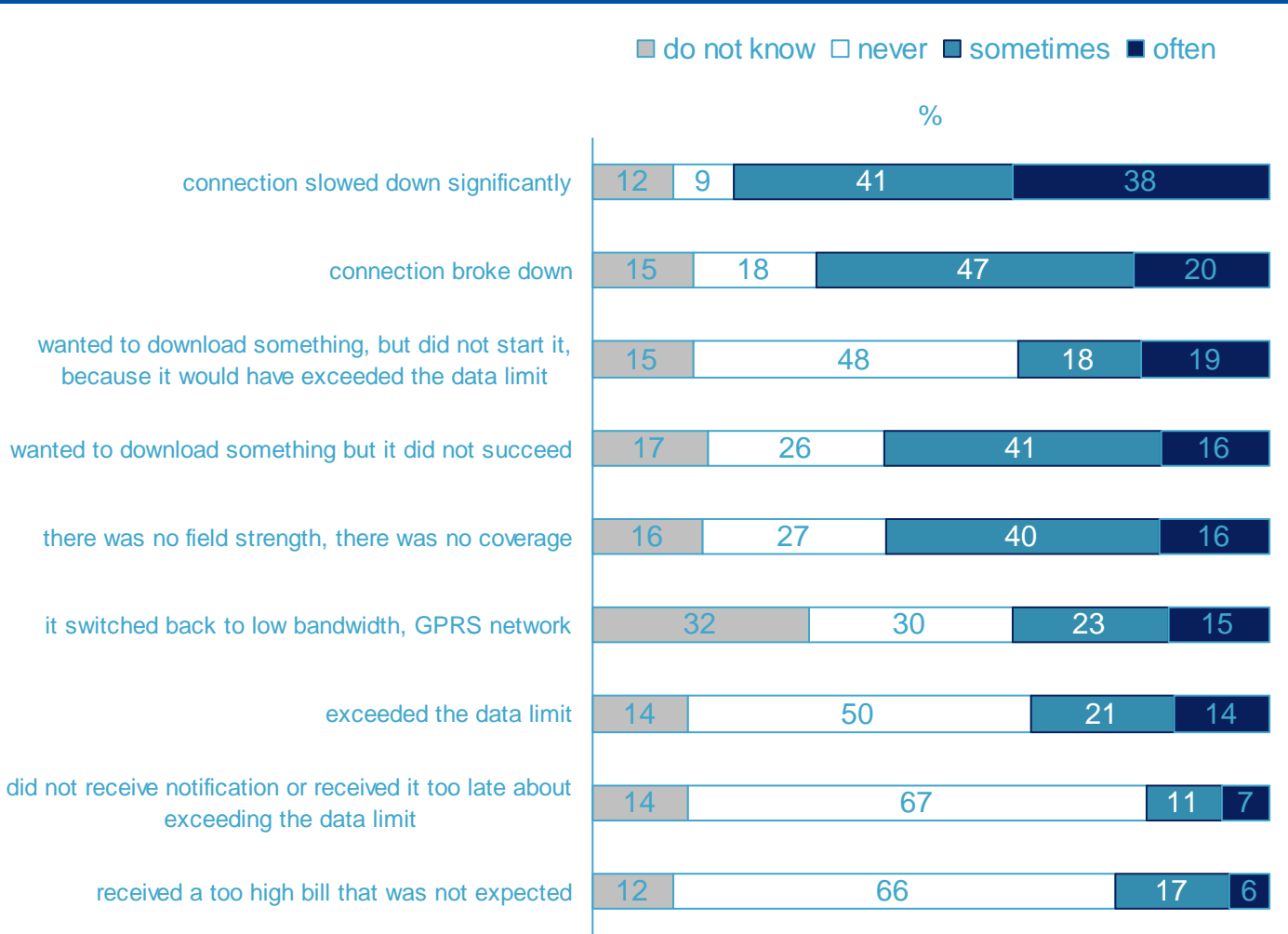
Nearly one third of non-users do not know anything about the speed and price of MBB in Hungary. The remaining respondents think that it is slower and more expensive than fixed-line connections. They rather agree on it about the speed and strongly agree about the price. The majority of those who feel to be well-informed say that MBB is slower and more expensive.





# Problems experienced in the last six months

81% of Internet users say that MBB has some disadvantages and 60% state that MBB cannot substitute fixed-line connections in all respects. They criticize its data limit and price the most frequently.



Both users and subscribers of MBB experienced 3.5 types of problems while using MBB in the previous six months. There are no significant differences regarding the average number of problems among users of the big service providers.

Those who download more data by MBB (purchasing activities) faced with more problems than others.