INTERNET USAGE BY INDIVIDUALS

ONLINE SURVEY

2014

Conducted by:

ARIOSZ

nrc insights & ideas
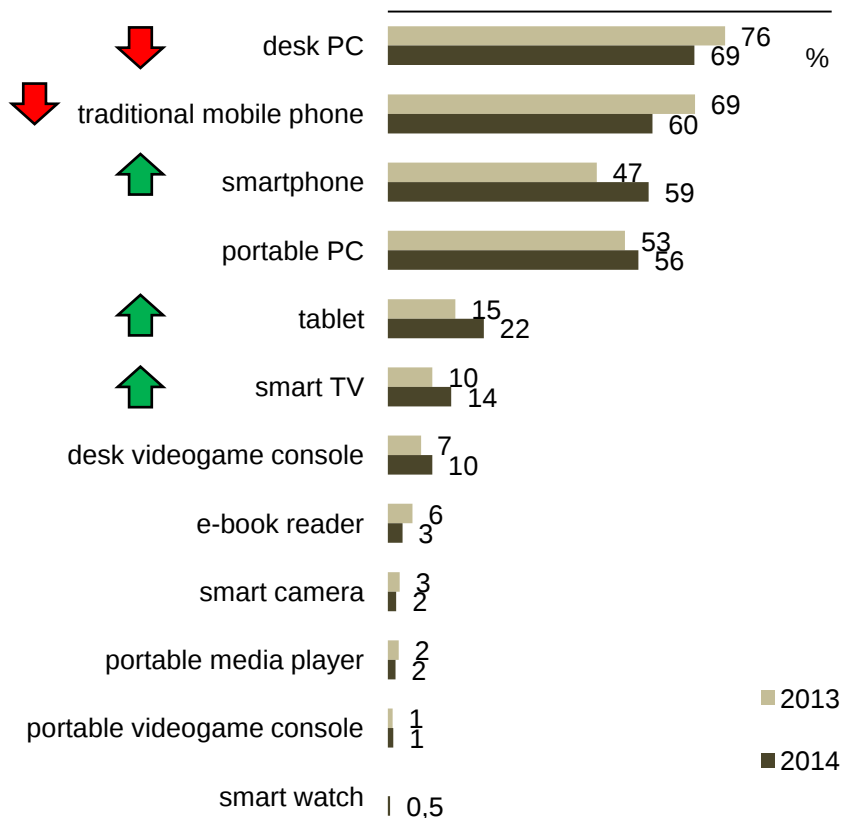
BACKGROUND OF THE SURVEY

|	
Client	National Media and Infocommunications Authority (Hungarian abbreviation: NMHH)
Service provider	NRC Market Research Ltd. Ariosz Service, Informatics, and Consulting Ltd.
Fieldwork period	27.11.2014 – 17.12.2014
Survey method	online interviews with standardised questionnaire
Population	individuals aged 14+ with residence in Hungary who use the Internet at least once a week
Sample size	3125 respondents
Weighting	multidimensional factor weighting by age, gender, level of education, and type of settlement
Statistical error of sampling	±2,5% at most between the whole samples of 2013 and 2014; and ±2% at most in case of proportions of one data collection
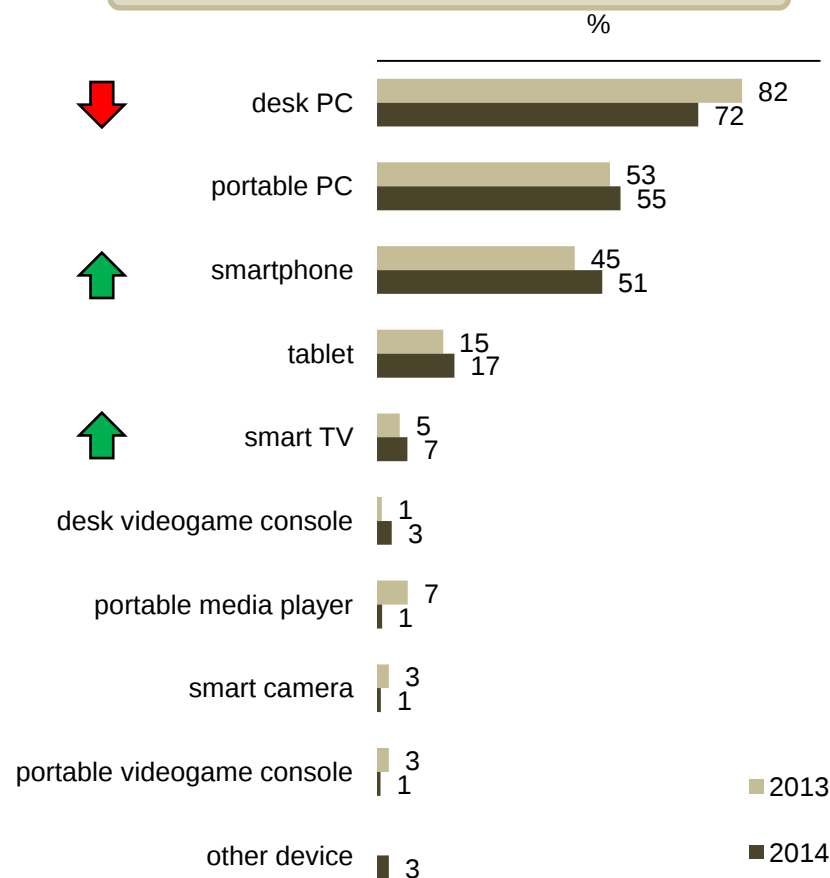
DEVICES FOR INTERNET USE ownership and usage

In 2014, Hungarian Internet users owned 12 types of devices suitable for accessing the Internet. The proportion of people having desk PC or traditional mobile phone has been declining while smartphones, tablets, and smart TVs are becoming more and more widespread. Smart watch was the first wearable device to access the Internet that appeared among Hungarian users. The same trend can be noticed in case of the use of devices. Regarding portable devices, smartphones and tablets have started to replace traditional devices (i.e., traditional mobile phones and laptops).

Possession of devices suitable for Internet use*

Device	2013	2014
desk PC	76	69
traditional mobile phone	69	60
smartphone	47	59
portable PC	53	56
tablet	15	22
smart TV	10	14
desk videogame console	7	10
e-book reader	6	3
smart camera	3	2
portable media player	2	2
portable videogame console	1	1
smart watch		0,5

%

Devices used for accessing the Internet**

%

Device	2013	2014
desk PC	82	72
portable PC	53	55
smartphone	45	51
tablet	15	17
smart TV	5	7
desk videogame console	1	3
portable media player	7	1
smart camera	3	1
portable videogame console	3	1
other device		3

*data refer to household ownership in case of devices used usually by the family

**at home and somewhere else together

Internet users   n=3125   N=5.7 m
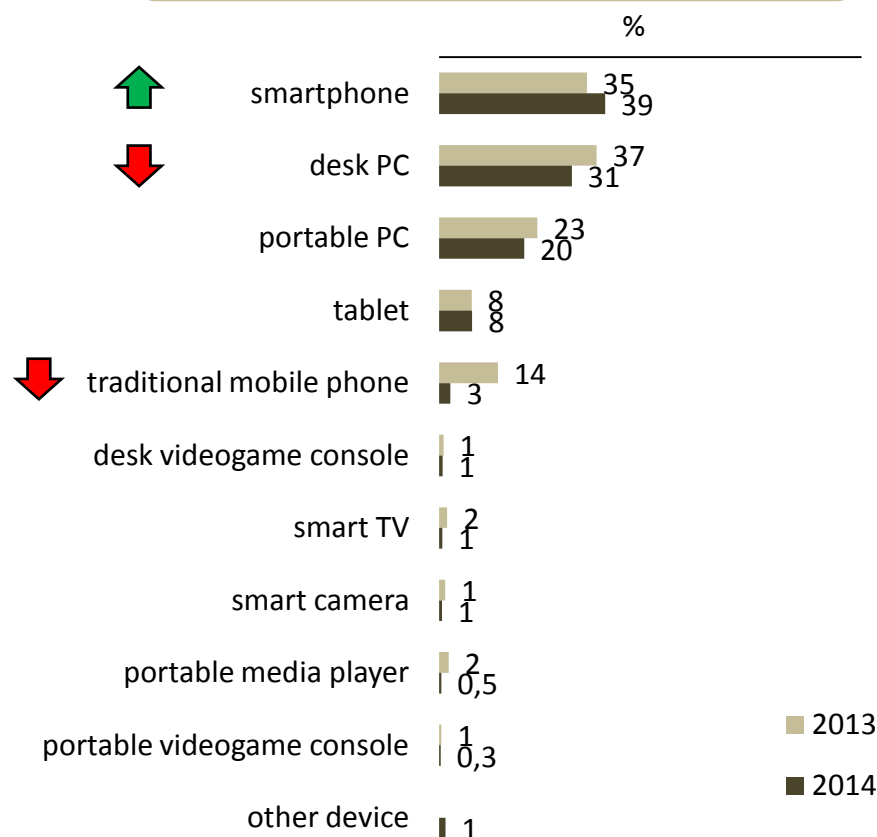
DEVICES FOR INTERNET USE Internet use at home and elsewhere

Data on Internet usage both at home and out of home show that traditional mobile phones and desk PCs are becoming less and less important. Smartphones are also more and more widespread both at home and elsewhere while tablets have become more popular for accessing the Internet rather at home than somewhere else.

Devices used for accessing the Internet at home

%

Device	2013	2014
desk PC	74	62
portable PC	50	51
smartphone	42	47
tablet	13	16
smart TV	6	6
traditional mobile phone	33	4
desk videogame console	5	3
portable media player	6	1
portable videogame console	1	1
smart camera	2	0,4
other device		2

Devices used for accessing the Internet somewhere else

%

Device	2013	2014
smartphone	35	39
desk PC	37	31
portable PC	23	20
tablet	8	8
traditional mobile phone	14	3
desk videogame console	1	1
smart TV	2	1
smart camera	1	1
portable media player	2	0,5
portable videogame console	1	0,3
other device		1

People using the Internet at home — n=3028 — N=5.5 m — People using the Internet elsewhere — n=2058 — N=3.8 m
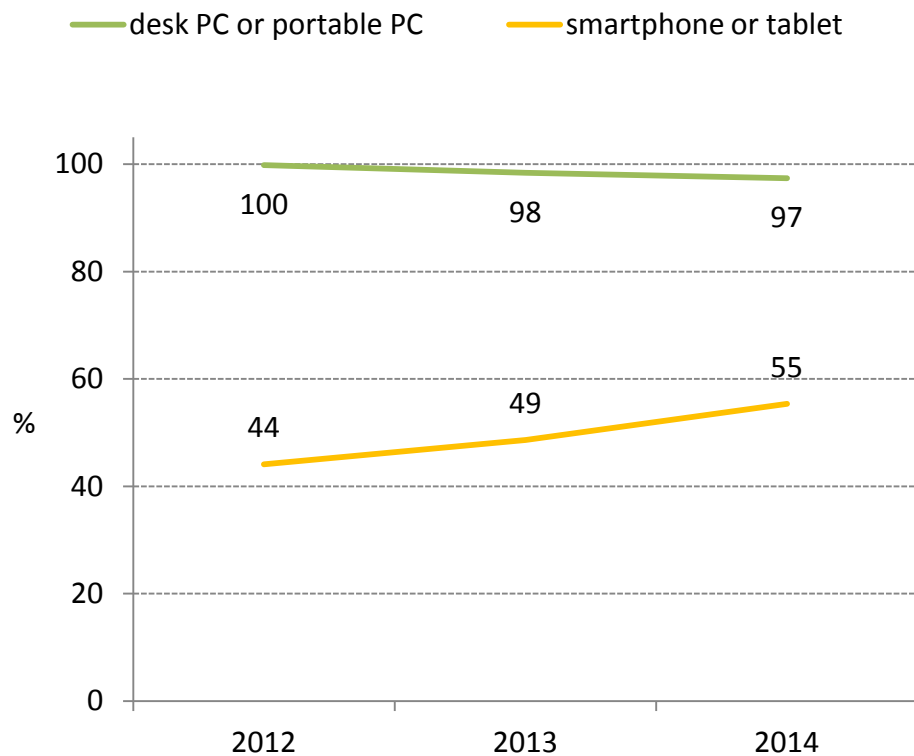
DEVICES FOR INTERNET USE types of devices – 1

In 2014, four devices suitable for about the same kind of online activities have been used in Hungary, and these are desk PCs, portable PCs, smartphones, and tablets.
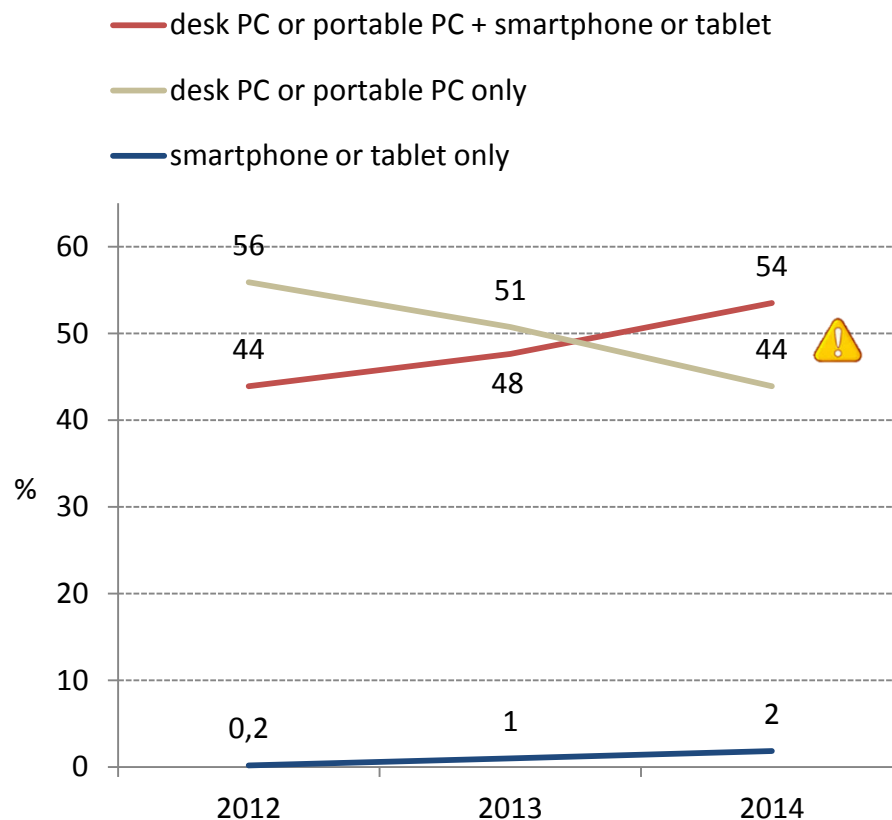
2014 was the first year when more people accessed the Internet on both desk/portable PC and on smartphone/tablet together than those accessed on desk/portable PC only.

The proportion of users accessing the Internet on smartphone/tablet has been slowly increasing, but it is still very low.*

Type of devices used for Internet browsing

— desk PC or portable PC   — smartphone or tablet

Type of devices used for Internet browsing

— desk PC or portable PC + smartphone or tablet

— desk PC or portable PC only

— smartphone or tablet only

Left chart (%):
desk PC or portable PC: 100 (2012), 98 (2013), 97 (2014)
smartphone or tablet: 44 (2012), 49 (2013), 55 (2014)

Right chart (%):
desk PC or portable PC + smartphone or tablet: 44 (2012), 48 (2013), 54 (2014)
desk PC or portable PC only: 56 (2012), 51 (2013), 44 (2014)
smartphone or tablet only: 0,2 (2012), 1 (2013), 2 (2014)

*Rates indicated here may be higher as recruiting people using the Internet on a hand held device is challenging because of the rather long questionnaire.

Internet users   n=3125   N=5.7 m
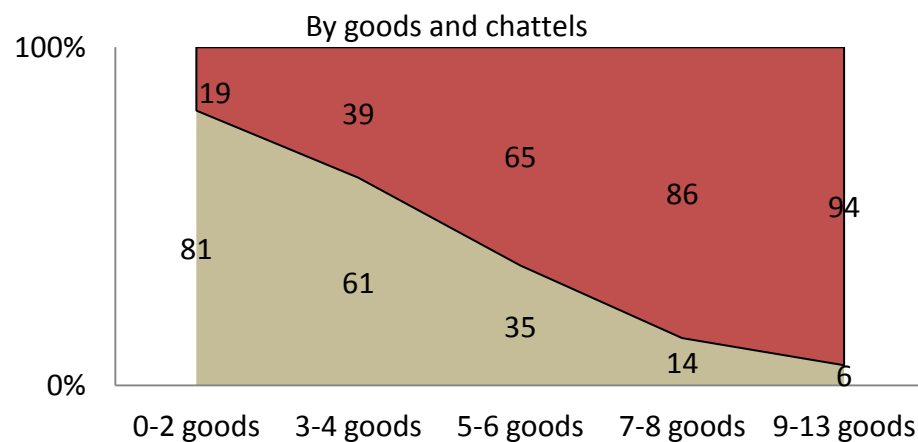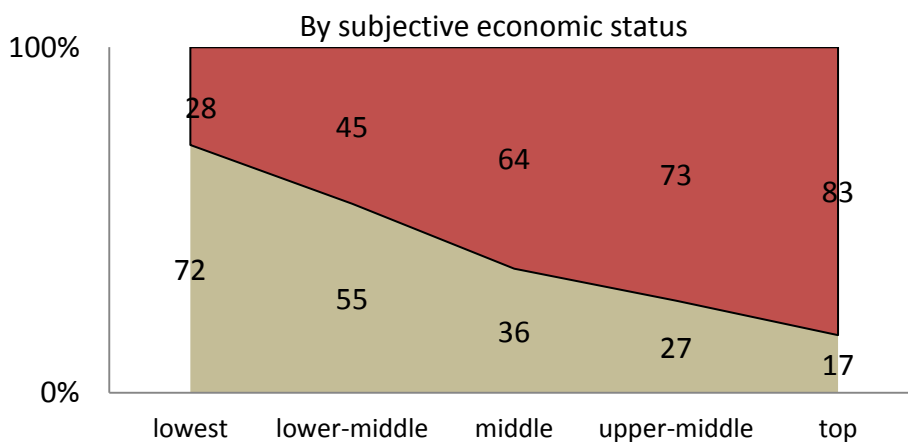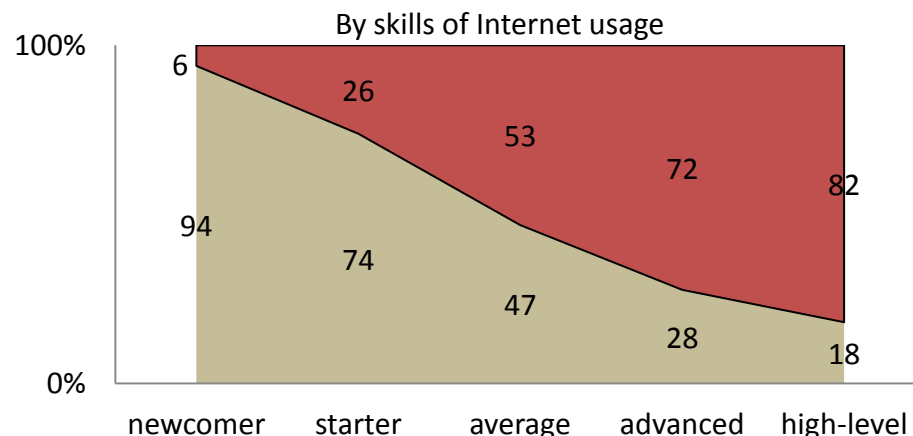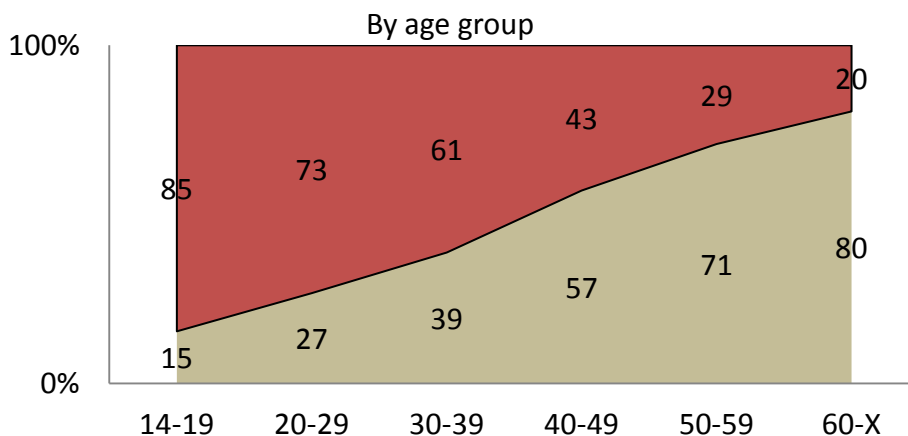
DEVICES FOR INTERNET USE   types of devices – 2

As smartphones and tablets have become widespread rather slowly and Internet usage on these devices require new and special skills, there are significant social inequalities in Internet usage on these two hand held devices. The main reasons of this inequality may be the different adaptive skills (which strongly correlate with age and skills of Internet usage) and different economic status of users.

Type of devices used for the Internet

■ Smartphone or tablet (as well)   ■ Desk or portable PC only

By age group

	14-19	20-29	30-39	40-49	50-59	60-X
Smartphone or tablet	85	73	61	43	29	20
Desk or portable PC only	15	27	39	57	71	80

By skills of Internet usage

	newcomer	starter	average	advanced	high-level
Smartphone or tablet	6	26	53	72	82
Desk or portable PC only	94	74	47	28	18

By subjective economic status

	lowest	lower-middle	middle	upper-middle	top
Smartphone or tablet	28	45	64	73	83
Desk or portable PC only	72	55	36	27	17

By goods and chattels

	0-2 goods	3-4 goods	5-6 goods	7-8 goods	9-13 goods
Smartphone or tablet	19	39	65	86	94
Desk or portable PC only	81	61	35	14	6

Internet users   n=3125   N=5.7 m

DEVICES FOR INTERNET USE preference for mobile phone

38% of users accessing the Internet both on PC and mobile phone do it more often on mobile phone than on PC while only 7% preferred this modality, i.e. mobile phone to PC. Both rates have increased significantly since the year before.
More young people prefer their mobile phone for using the Internet than elderly people.

Preference for mobile phone for accessing the Internet by frequency of usage* and popularity

By age group
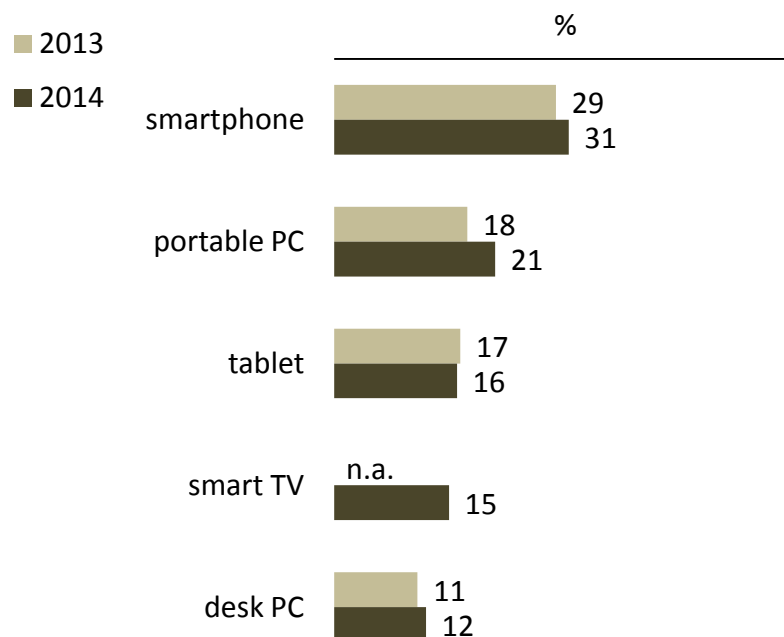
# TOOLS OF INTERNET USAGE   purchasing plans – 1

Purchasing plans for the next 6 months have not changed significantly compared to 2013.
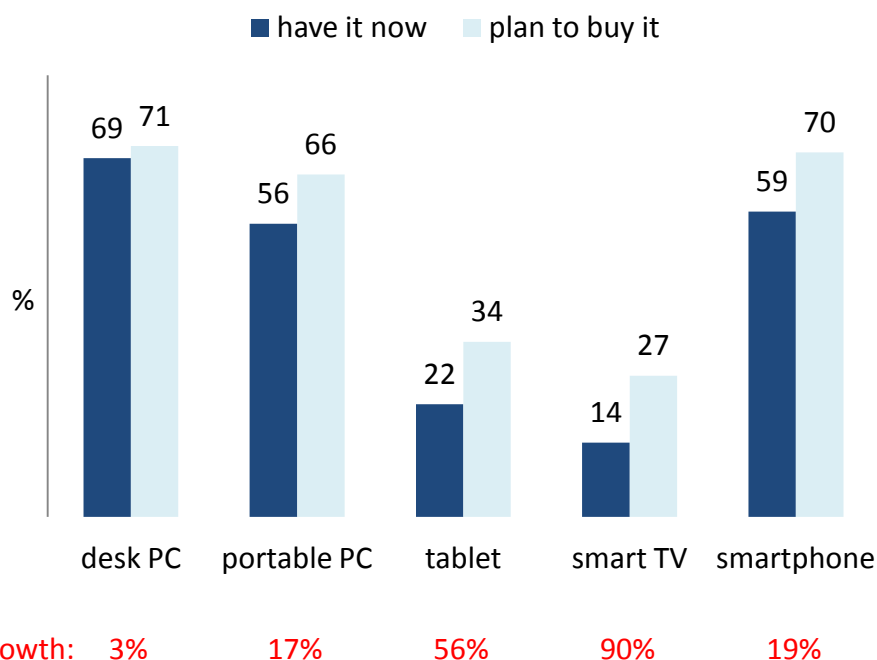
The largest growth in take-up may be forecasted in case of devices of lowest penetration such as tablets and smart TVs.

If all purchasing plans come true, take-up of smartphones will reach the penetration level of the presently most widespread desk PCs in 2015.

Purchasing plans for the next 6 months

Proportion of device owners now and after all purchasing plans come true

- 2013
- 2014

%

	2013	2014
smartphone	29	31
portable PC	18	21
tablet	17	16
smart TV	n.a.	15
desk PC	11	12

■ have it now   ■ plan to buy it

%

	have it now	plan to buy it
desk PC	69	71
portable PC	56	66
tablet	22	34
smart TV	14	27
smartphone	59	70

Rate of expected growth: 3%   17%   56%   90%   19%

Internet users   n=3125   N=5.7 m
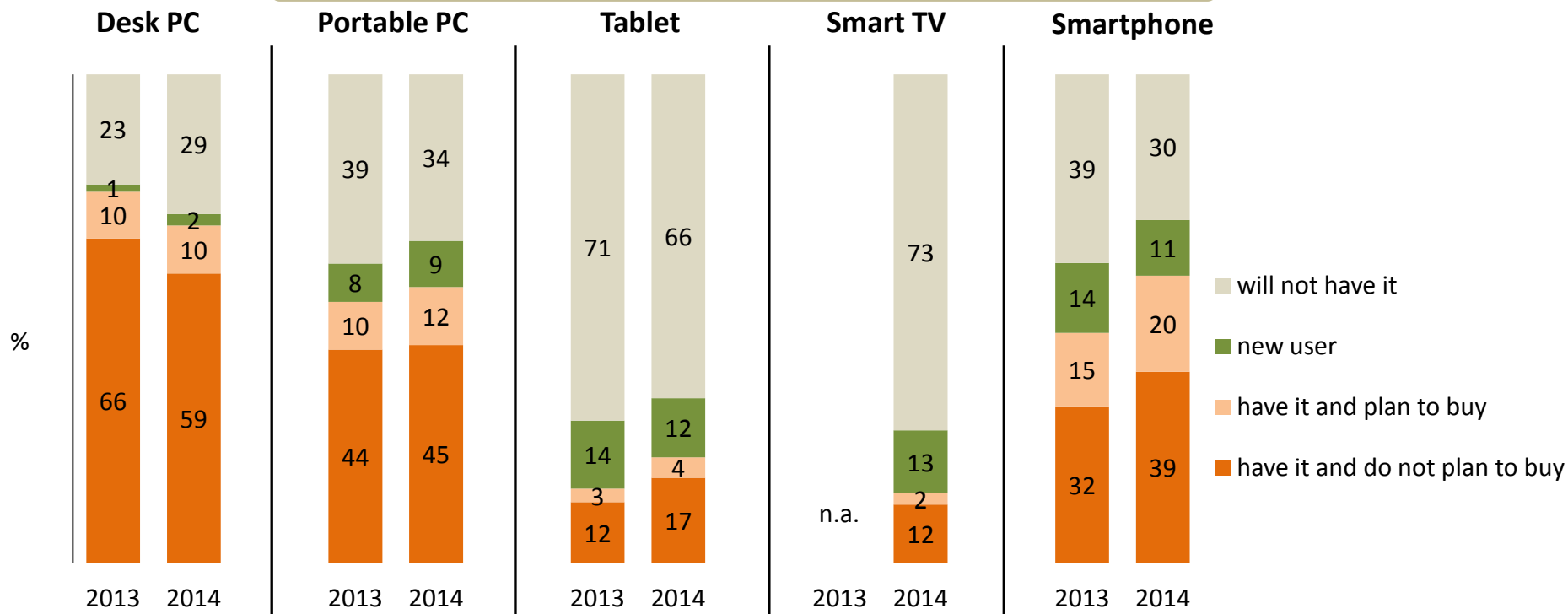
TOOLS OF INTERNET USAGE   purchasing plans – 2

In case of desk PCs, purchasing plans mean mostly upgrade or extent the number of PCs at home.

Regarding portable PCs and smartphones, the proportion of users planning upgrade or extension of the present devices is also higher than of possible new users who do not have these devices yet. This is the first year when more people plan to upgrade their smartphone than those who plan to buy their first one.

In case of devices showed up on the market recently, i.e. tablets and smart TVs, more people plan to buy their first devices than those who plan to upgrade the existing ones.
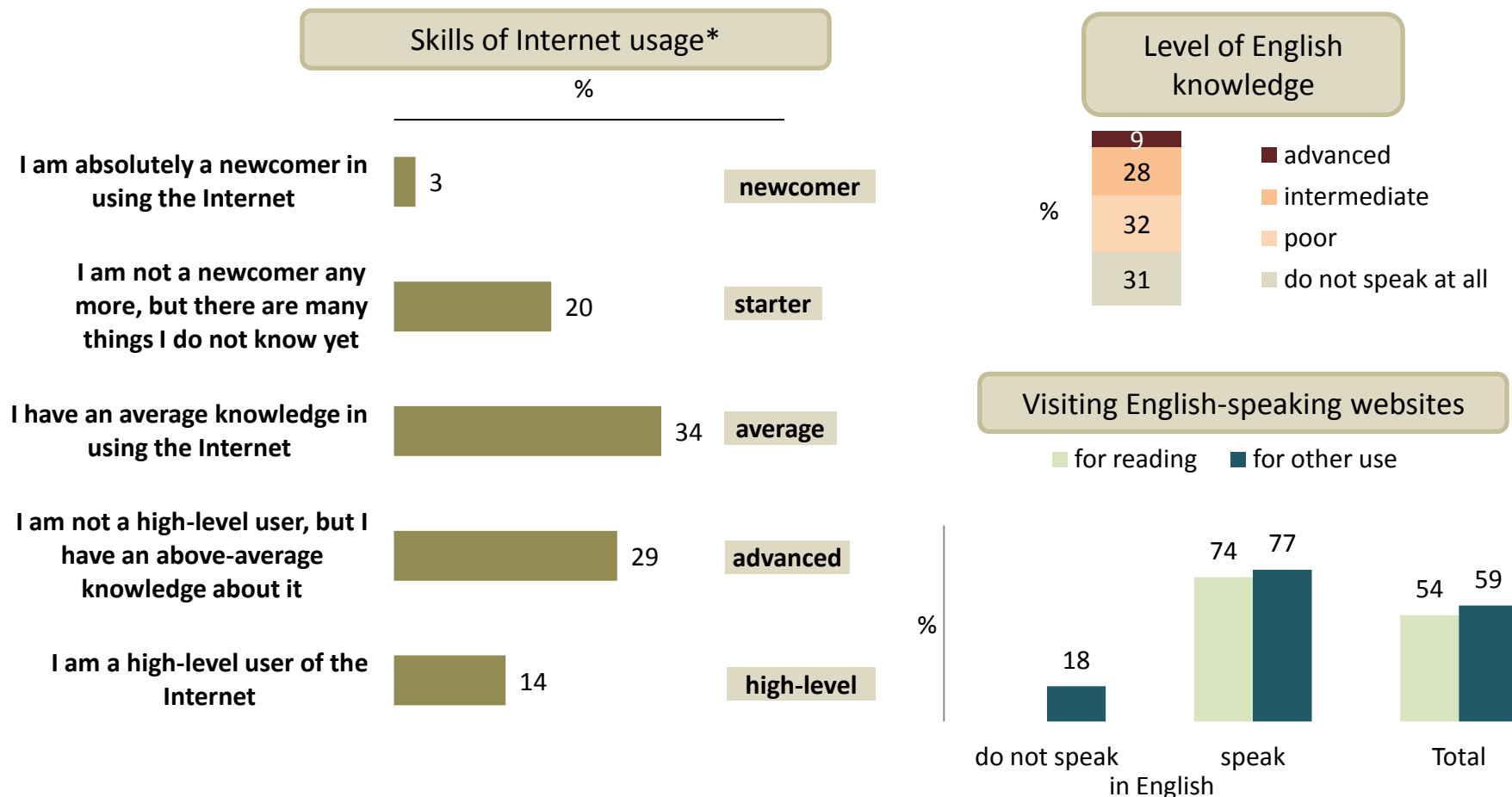
Possession of devices and planning to buy them in the next 6 months

Desk PC

	2013	2014
will not have it	23	29
new user	1	2
have it and plan to buy	10	10
have it and do not plan to buy	66	59

Portable PC

	2013	2014
will not have it	39	34
new user	8	9
have it and plan to buy	10	12
have it and do not plan to buy	44	45

Tablet

	2013	2014
will not have it	71	66
new user	14	12
have it and plan to buy	3	4
have it and do not plan to buy	12	17

Smart TV

	2013	2014
will not have it	n.a.	73
new user		13
have it and plan to buy		2
have it and do not plan to buy		12

Smartphone

	2013	2014
will not have it	39	30
new user	14	11
have it and plan to buy	15	20
have it and do not plan to buy	32	39

Legend:
- will not have it
- new user
- have it and plan to buy
- have it and do not plan to buy

Internet users · n=3125 · N=5.7 m

INTERNET USAGE   skills of Internet use and English knowledge – 1

Proficiency on Internet usage have a strong impact on online activities. It is an important indicator of forecasting possible changes in the near future: the activities of advanced users of today will be done by average users tomorrow and by newcomers on the day after.
English knowledge fosters Internet usage (and vice versa as well). 69% of Hungarian Internet users have some kind of English knowledge. The majority of users speaking in English and even the minority of people without English knowledge visit English-speaking websites.

Skills of Internet usage*

%

I am absolutely a newcomer in using the Internet	3	newcomer
I am not a newcomer any more, but there are many things I do not know yet	20	starter
I have an average knowledge in using the Internet	34	average
I am not a high-level user, but I have an above-average knowledge about it	29	advanced
I am a high-level user of the Internet	14	high-level

Level of English knowledge

%

- 9 advanced
- 28 intermediate
- 32 poor
- 31 do not speak at all

Visiting English-speaking websites

- for reading
- for other use

%

	do not speak in English	speak	Total
for reading		74	54
for other use	18	77	59

*Because of lack of space, only short labels of Internet skills are used on other slides of this presentation.

Internet users

n=3125   N=5.7 m
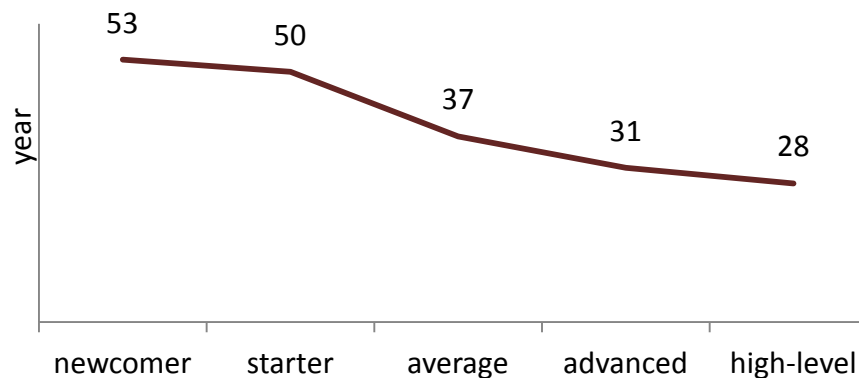
INTERNET USAGE   skills of Internet use and English knowledge – 2

Age still have a great impact on skills of Internet usage. High-level users are in their 20's while newcomers and starters are about 50 years old. More than 90% of young people in their 10's and 20's speak English in a certain level and four-fifth of them use English-speaking websites constituting the vast majority of the world wide web.

Proficiency on Internet usage

Means on a 5-point scale (1: not familiar, 5: very familiar)

3,8 — 3,9 — 3,5 — 3,0 — 2,7 — 2,4

14-19   20-29   30-39   40-49   50-59   60-X
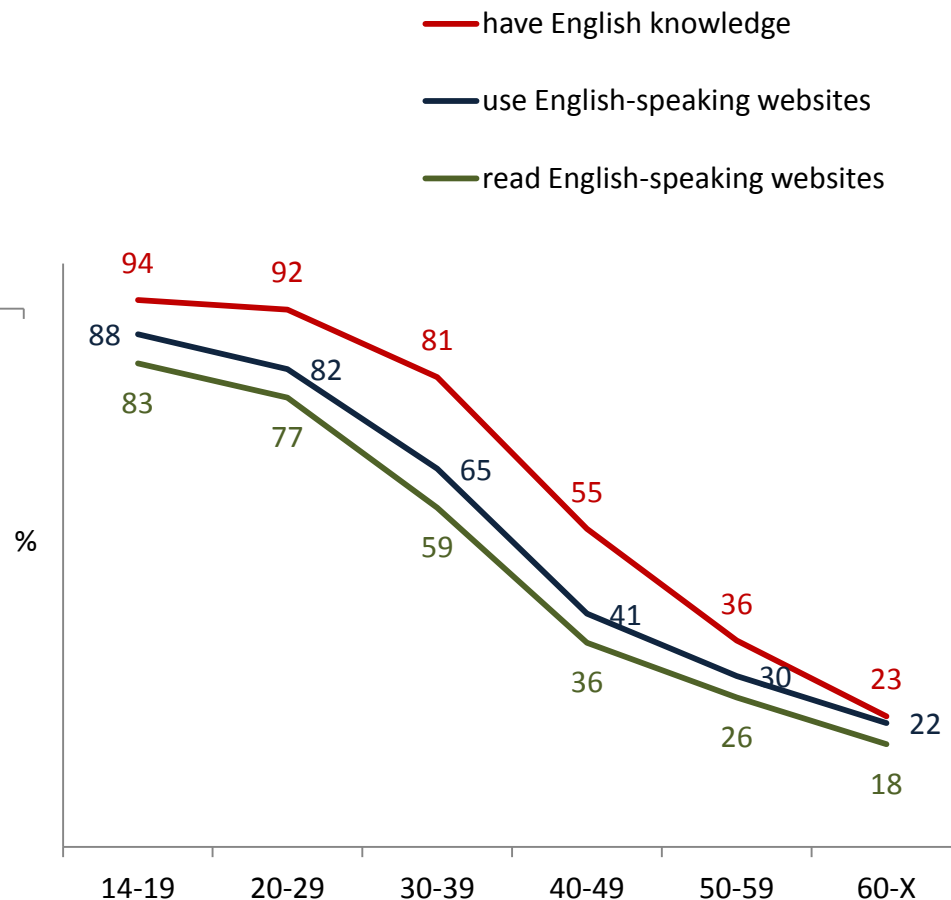
English knowledge and use of English-speaking websites

— have English knowledge
— use English-speaking websites
— read English-speaking websites

%

	14-19	20-29	30-39	40-49	50-59	60-X
have English knowledge	94	92	81	55	36	23
use English-speaking websites	88	82	65	41	30	22
read English-speaking websites	83	77	59	36	26	18

Average age

year

53 — 50 — 37 — 31 — 28

newcomer   starter   average   advanced   high-level
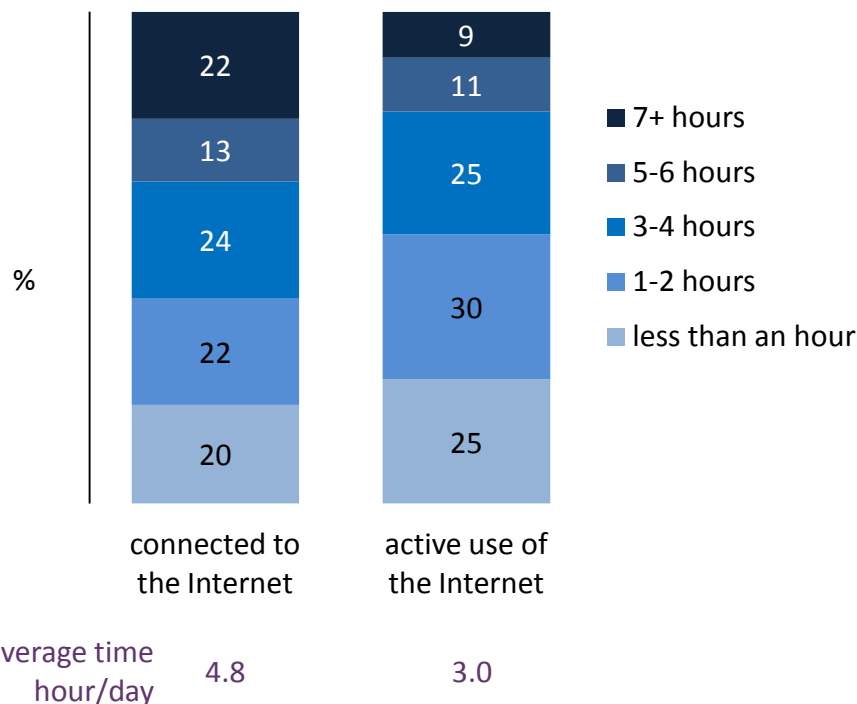
INTERNET USAGE time spent online per day – 1

The wish of being constantly online is wide spreading globally and it is intensified by the spread of smartphones. This demand has a strong influence on the development of devices, networks, and applications, and on the lifestyle of consumers.
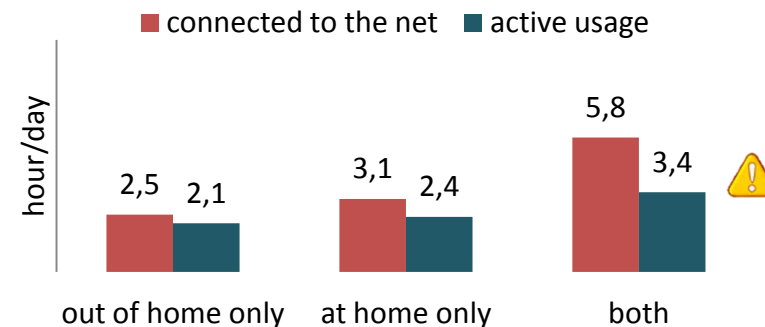
Hungarian Internet users spend 4.8 hours a day connected to the Internet on average, out of which 3 hours are spent on active usage. The difference between these two intervals is larger among people who use the Internet both at home and out of home and who access the Internet on smartphone or tablet as well, respectively.

Time spent on the Internet per day
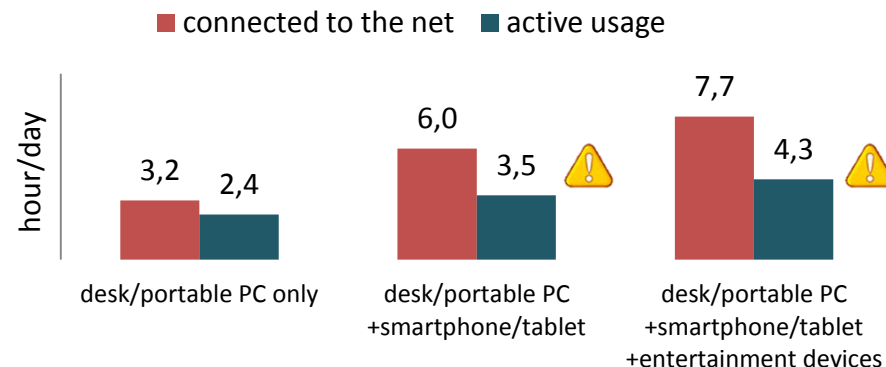
Average time spent on the Internet per day

By location of Internet usage

By location of Internet usage
- connected to the net
- active usage

	connected to the net	active usage
out of home only	2,5	2,1
at home only	3,1	2,4
both	5,8	3,4 ⚠

By devices used for the Internet
- connected to the net
- active usage

	connected to the net	active usage
desk/portable PC only	3,2	2,4
desk/portable PC +smartphone/tablet	6,0	3,5 ⚠
desk/portable PC +smartphone/tablet +entertainment devices	7,7	4,3 ⚠

Time spent on the Internet per day (stacked)

Legend:
- 7+ hours
- 5-6 hours
- 3-4 hours
- 1-2 hours
- less than an hour

| %	connected to the Internet	active use of the Internet
7+ hours	22	9
5-6 hours	13	11
3-4 hours	24	25
1-2 hours	22	30
less than an hour	20	25
average time hour/day	4.8	3.0

INTERNET USAGE time spent online per day – 2

Men, the youth (especially college and university students), people living in Budapest, with higher economic status, doing office work, managers, and entrepreneurs spend more time than others both by being connected to the Internet and with active usage.
Among people who spend the most time on the Internet, average time of being connected to the net is much higher than the average time of active usage compared to other social groups who spend less time online.
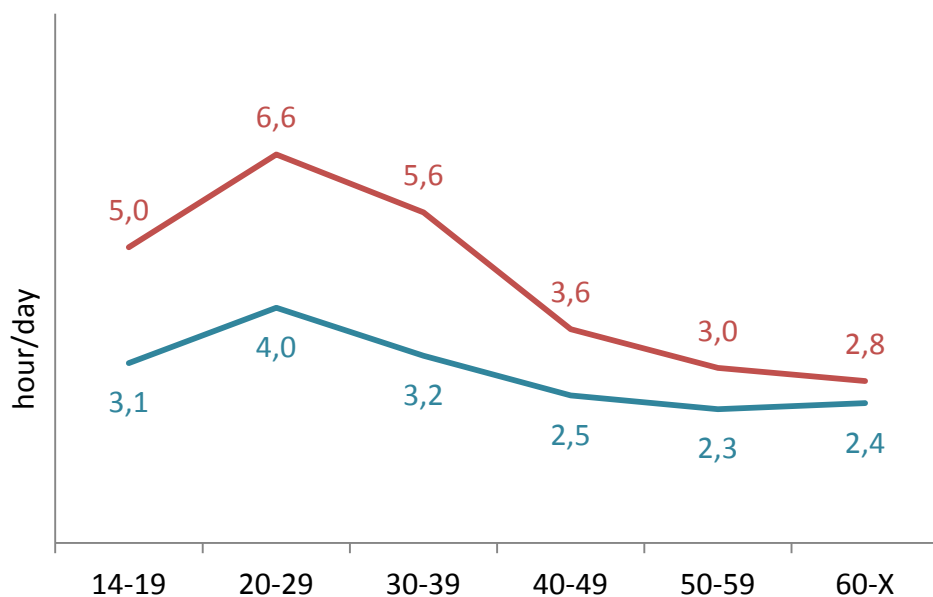
Average time spent on the Internet per day

By age group

— connected to the net　— active usage
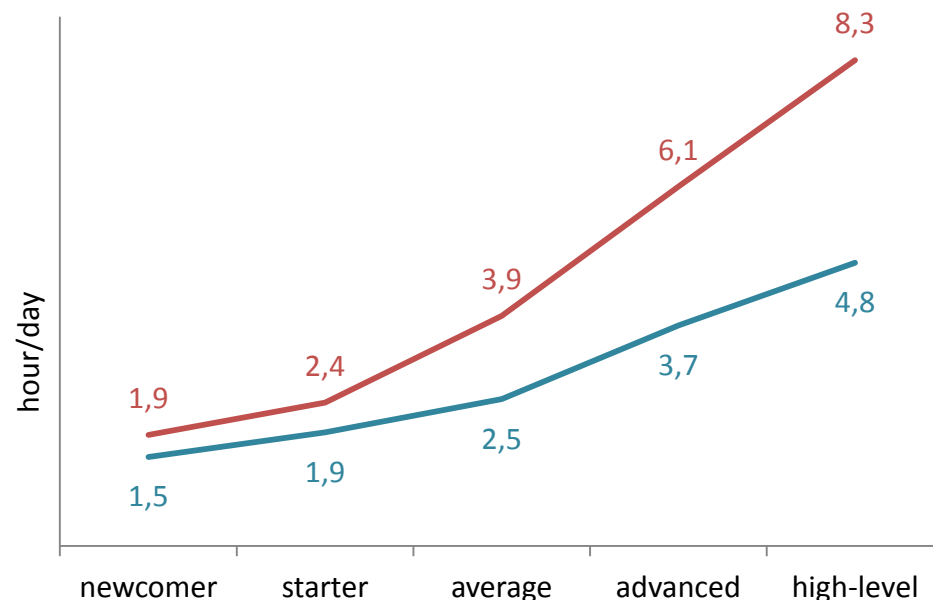
By skills of Internet usage
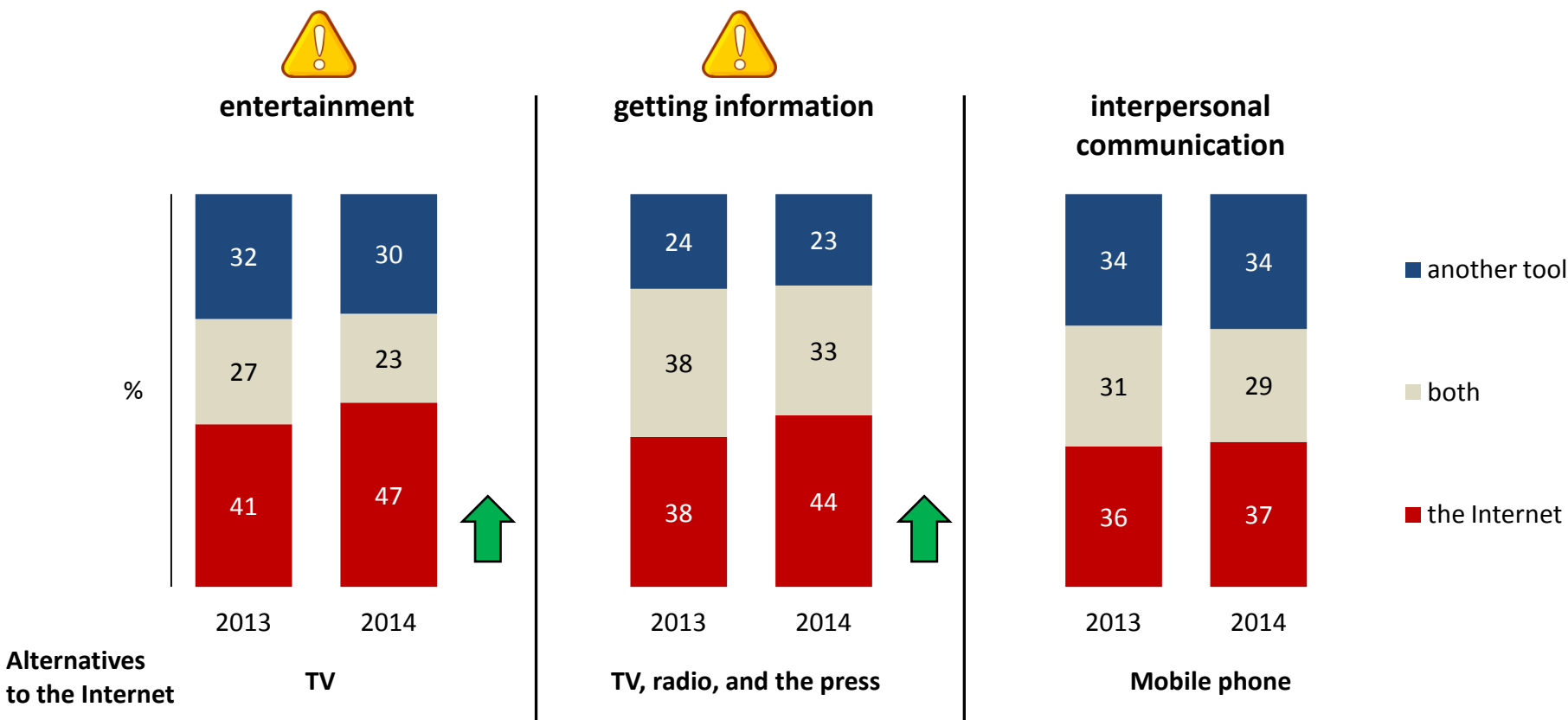
— connected to the net　— active usage


| Internet users | | n=3125 | N=5.7 m |

INTERNET USAGE   change in habits

Regarding entertainment, getting information, and interpersonal communication, the proportion of users preferring the Internet to other competing communication tools has been increasing significantly. 2014 is the first year when the Internet has overtaken its rivals in all three categories, although, the difference from mobile phone is still minor in case of interpersonal communication.
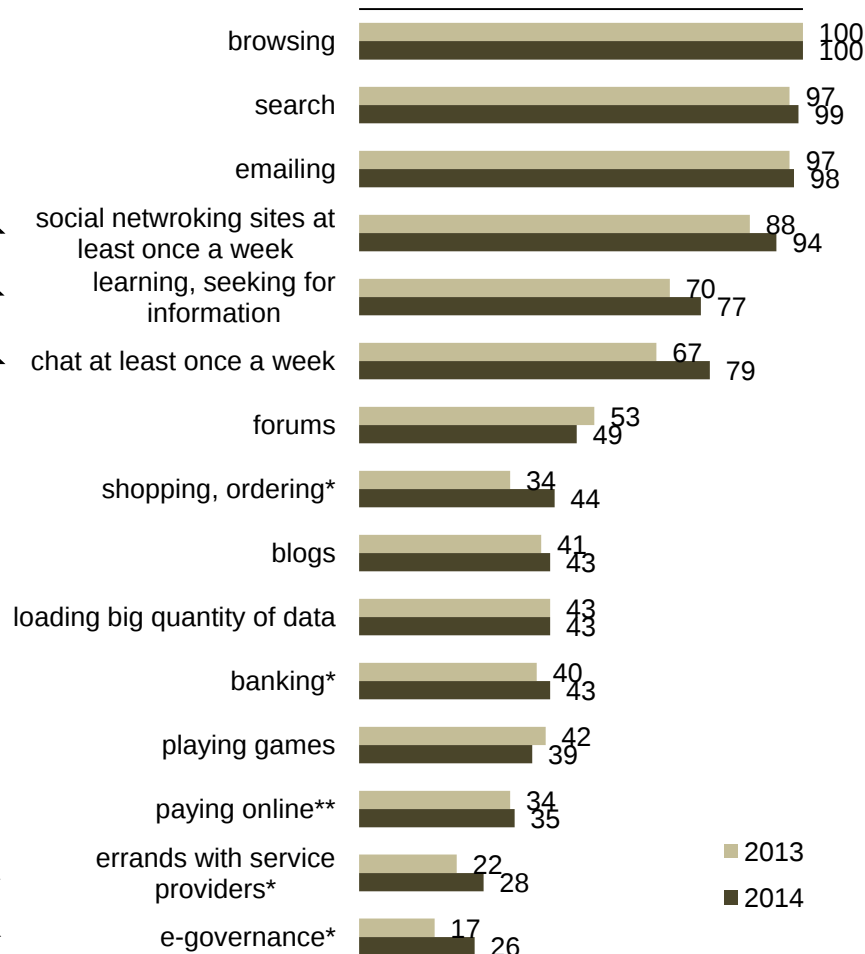
Which tool do you use more for the following purposes?

entertainment

	2013	2014
another tool	32	30
both	27	23
the Internet	41	47

getting information

	2013	2014
another tool	24	23
both	38	33
the Internet	38	44

interpersonal communication

	2013	2014
another tool	34	34
both	31	29
the Internet	36	37

■ another tool
■ both
■ the Internet

%

Alternatives to the Internet

TV

TV, radio, and the press

Mobile phone

INTERNET USAGE penetration of activities

Activities done in the last 6 months

%

Activity	2013	2014
browsing	100	100
search	97	99
emailing	97	98
social netwroking sites at least once a week	88	94
learning, seeking for information	70	77
chat at least once a week	67	79
forums	53	49
shopping, ordering*	34	44
blogs	41	43
loading big quantity of data	43	43
banking*	40	43
playing games	42	39
paying online**	34	35
errands with service providers*	22	28
e-governance*	17	26

In 2014, there were four activities that were done by about all Hungarian Internet users. In 2013, 93% used social networking sites/information sharing sites/applications, but 2014 was the first year that more than 90% have done these at least on a weekly basis.

The proportion of users learning and seeking for information online and who chat online at least once a week, respectively has increased significantly in 2014.

2013 and 2014 data on activities marked with asterisk cannot be compared precisely, because the questionnaire of 2014 has been redesigned to unify the time period of all activities to be 6 months. Thus, the referred time period is different in 2013 and 2014 in case of some activities.

*In 2013, activities done in the last month   **In 2013, activities done in the last 12 months

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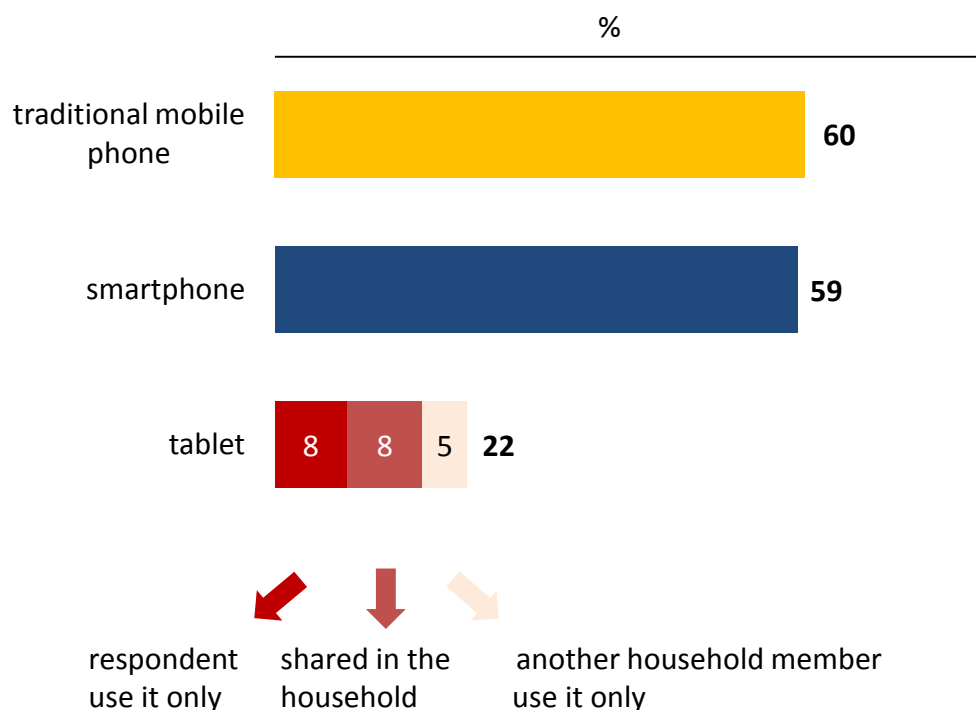
MOBILE PHONE, SMARTPHONE, TABLET   possession
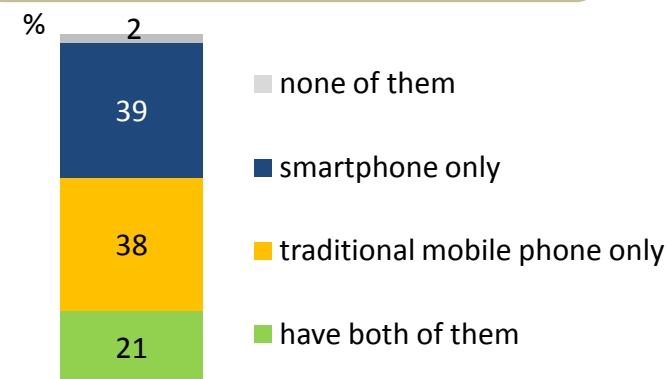
All Internet users have a mobile phone or smartphone and one fifth have both.
While mobile phones and smartphones are rather personal devices, tablets are often used as a common device of the household. Tablet users usually have smartphone as well.
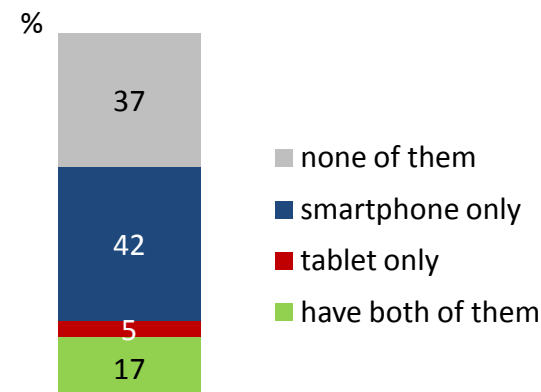
Possession of hand held devices suitable for the Internet

%

- traditional mobile phone: **60**
- smartphone: **59**
- tablet: 8 | 8 | 5 — **22**

respondent use it only | shared in the household | another household member use it only

Possession of mobile and smartphones

%
- 2 — none of them
- 39 — smartphone only
- 38 — traditional mobile phone only
- 21 — have both of them

Possession of smartphone and tablet

%
- 37 — none of them
- 42 — smartphone only
- 5 — tablet only
- 17 — have both of them
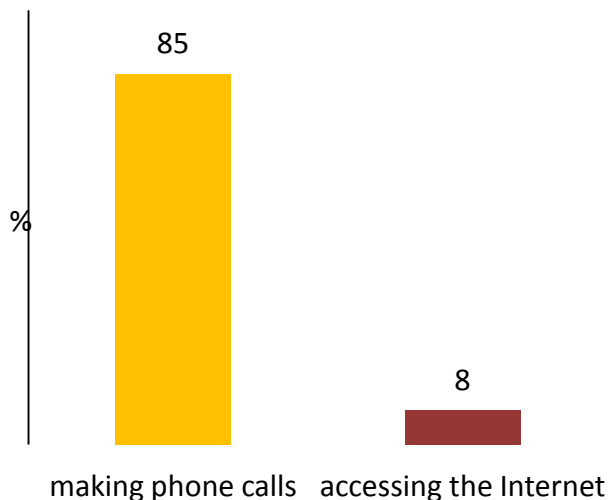
MOBILE PHONE, SMARTPHONE function
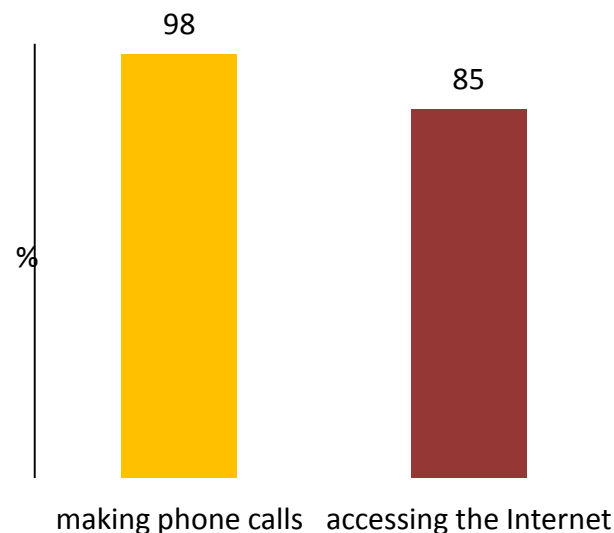
Practically all smartphone users make phone calls and the vast majority use the Internet as well on their device.
Traditional mobile phones are mostly used for making phone calls.

The function of traditional mobile phones

The function of smartphones

There are users of traditional mobile phones (15%) who use their device neither for making phone calls nor for accessing the Internet but for other functions (e.g. playing games, calendar, alarm clock) and who keep it for reserve, respectively.

SMARTPHONE, TABLET   social background – 1

Still more males than females have smartphones and tablets, respectively, but the inequality noticed in previous years has declined significantly. Regarding the type of settlement of Internet users, three stages can be identified: inhabitants of the capital have smartphones and tablets, respectively the most often while penetration is the lowest in villages.
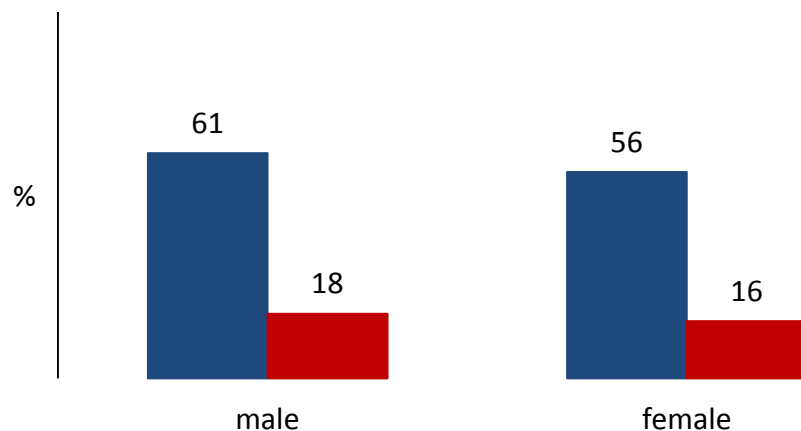
Total sample

smartphone 59%
tablet   17%

Possession of smartphones and tablets
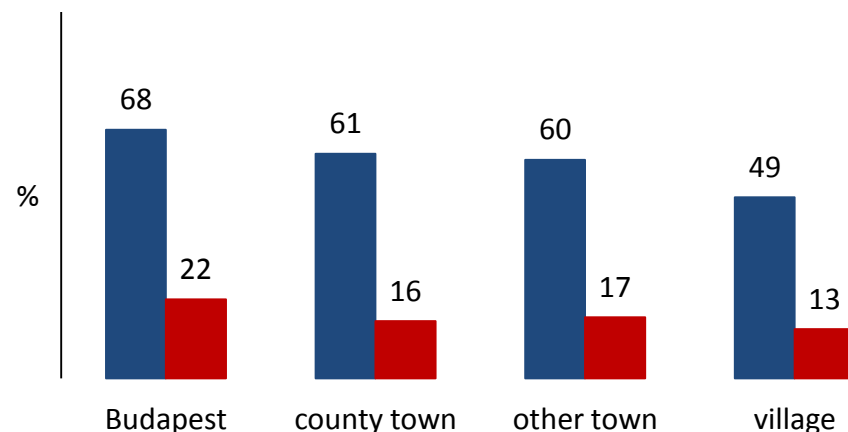
By gender
■ smartphone ■ tablet

	smartphone	tablet
male	61	18
female	56	16

By place of living
■ smartphone ■ tablet

	smartphone	tablet
Budapest	68	22
county town	61	16
other town	60	17
village	49	13

SMARTPHONE, TABLET   social background – 2
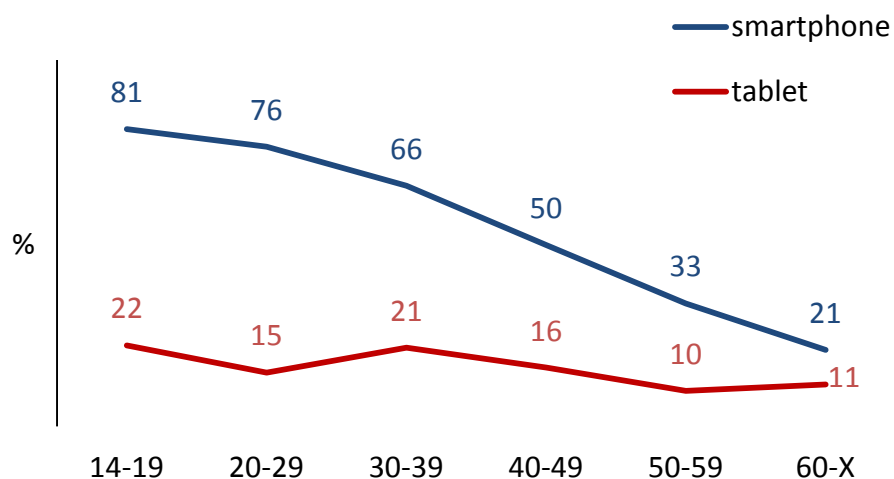
The largest difference in the penetration of smartphones can be noticed by age groups and skills of Internet usage.
Penetration of tablets is also unequal by these two indicators.

Total sample
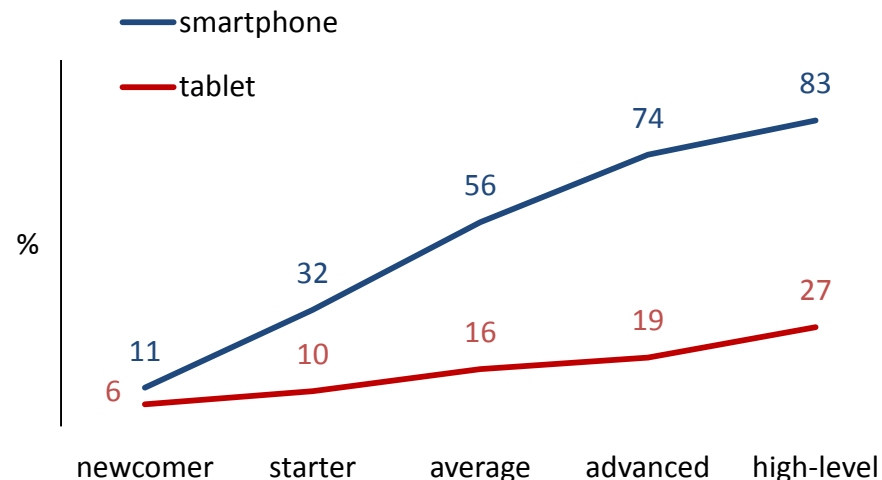
smartphone 59%
tablet   17%

Possession of smartphones and tablets

By age group

smartphone: 81, 76, 66, 50, 33, 21
tablet: 22, 15, 21, 16, 10, 11

14-19   20-29   30-39   40-49   50-59   60-X
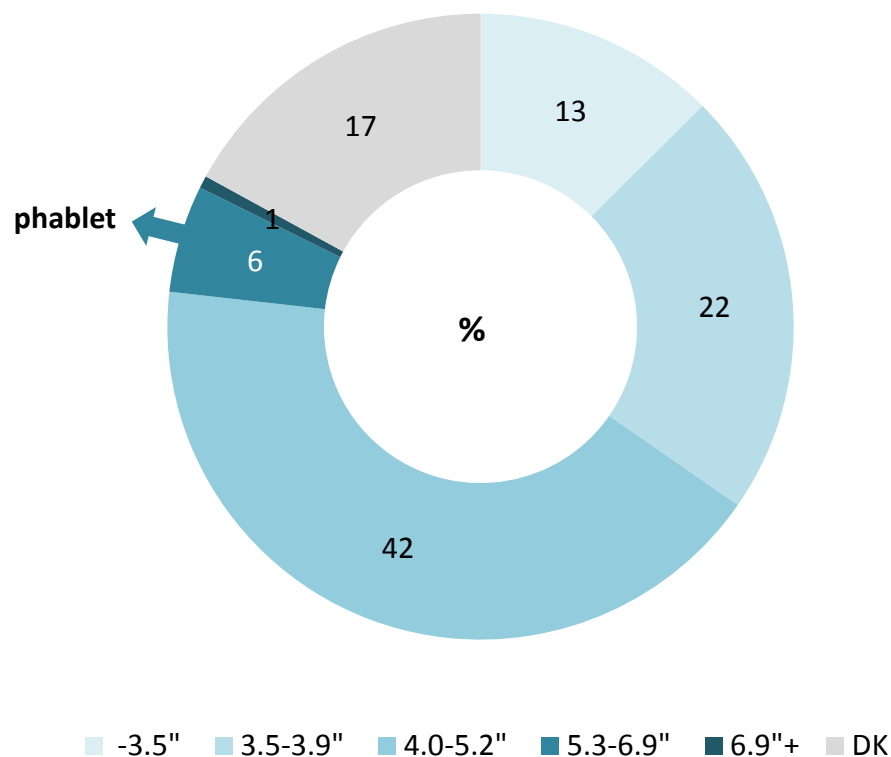
By skills of Internet usage

smartphone: 11, 32, 56, 74, 83
tablet: 6, 10, 16, 19, 27

newcomer   starter   average   advanced   high-level
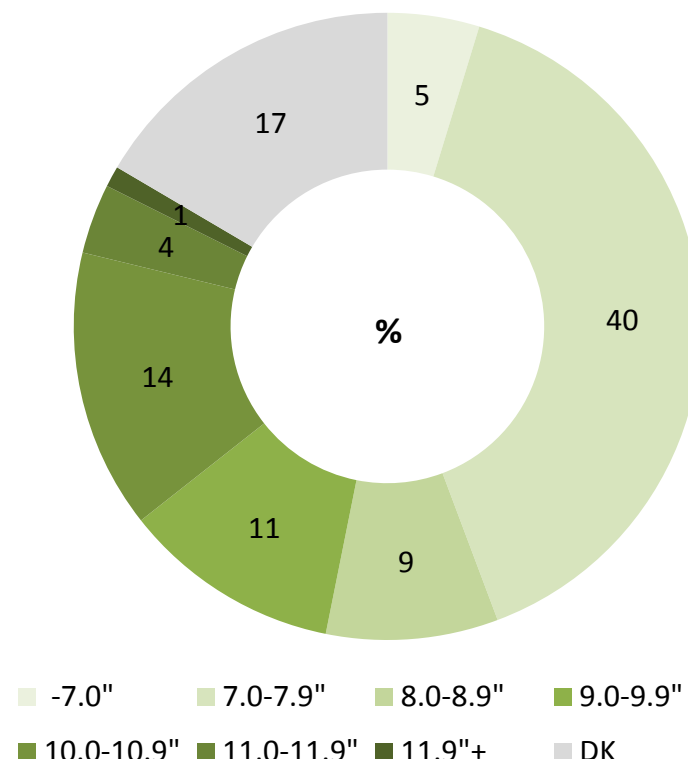
SMARTPHONE, TABLET   size

The majority of smartphone users, and tablet users, respectively have small screens. The main reason of this may be the lower price of these devices. The relatively low proportion of phablets may be explained by their price and the fact that these are new devices in the Hungarian market, and besides, that their huge size make them less practical for certain users.

Smartphone screen size

- 13
- 22
- 42
- 6
- 1
- 17

phablet

Legend: -3.5" | 3.5-3.9" | 4.0-5.2" | 5.3-6.9" | 6.9"+ | DK

Tablet screen size

- 5
- 40
- 9
- 11
- 14
- 4
- 1
- 17

Legend: -7.0" | 7.0-7.9" | 8.0-8.9" | 9.0-9.9" | 10.0-10.9" | 11.0-11.9" | 11.9"+ | DK

SMARTPHONE, TABLET operating systems and applications

The Android operating system is the most widespead in case of both hand held devices. The proportion of Apple products is very low compared to certain developed countries, because these devices are too expensive for Hungarian consumers.
Almost everybody who access the Internet with smartphone and tablet, respectively uses applications. (Those who do not use any application are mostly do not access the Internet on these devices.)
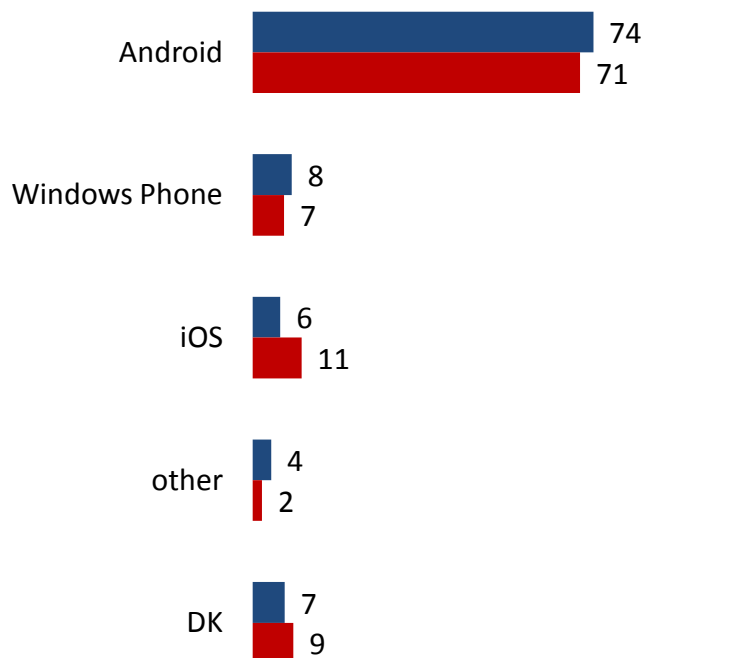
Operating systems

- smartphone
- tablet

%

	smartphone	tablet
Android	74	71
Windows Phone	8	7
iOS	6	11
other	4	2
DK	7	9
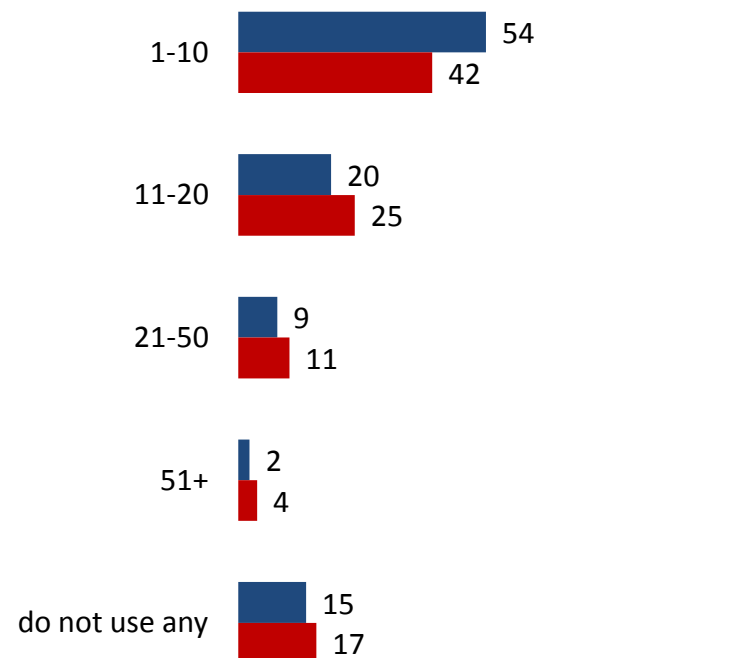
Number of applications used

- smartphone
- tablet

%

	smartphone	tablet
1-10	54	42
11-20	20	25
21-50	9	11
51+	2	4
do not use any	15	17
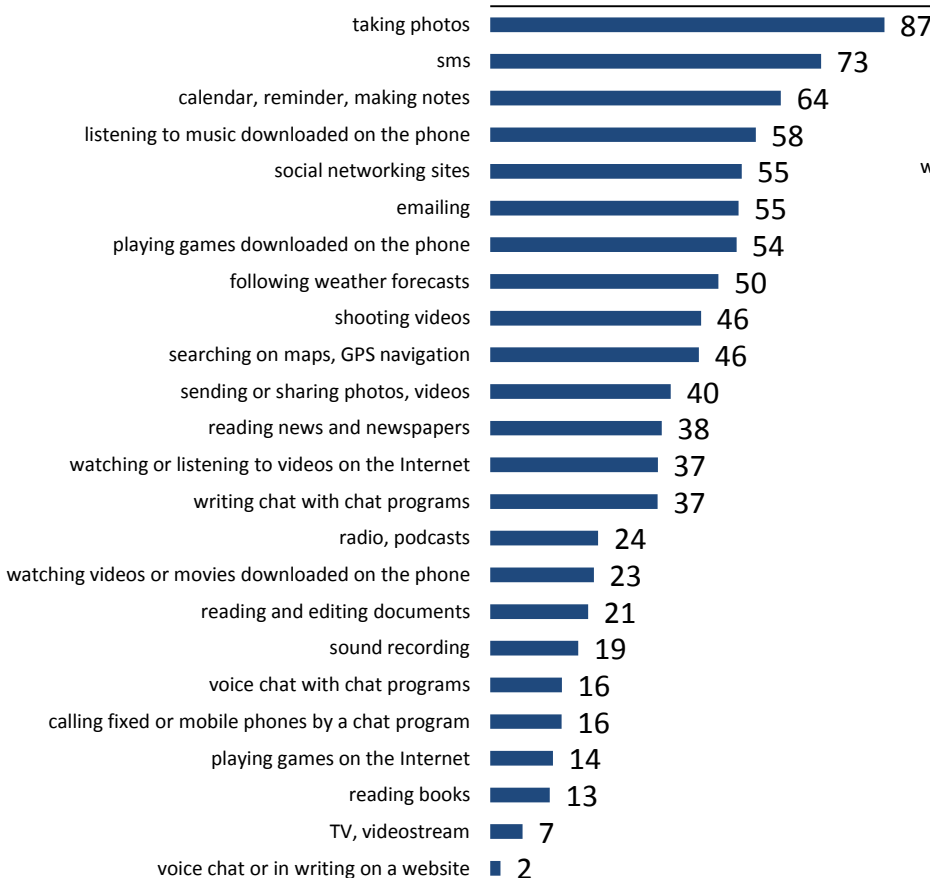
SMARTPHONE, TABLET activities

Internet users use both devices tailored to their physical characteristics. Although both devices are portable, can be used en route, both have operating systems and storage capacity, there is a major difference in their usage as smartphones are smaller and keep only one hand occupied. Thus, smartphones are rather used as a feature phone and a personal assistance device for shorter activities while tablets are rather used as a portable PC for more time consuming activities.
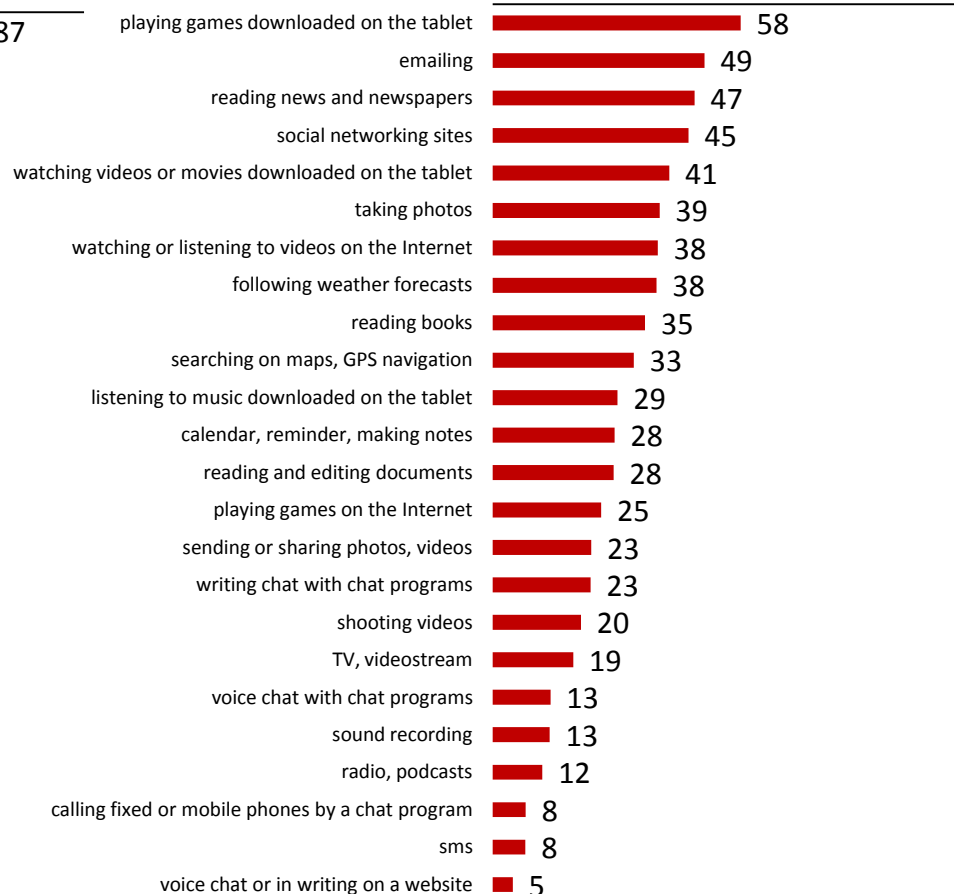
Activities on smartphones

%

Activity	%
taking photos	87
sms	73
calendar, reminder, making notes	64
listening to music downloaded on the phone	58
social networking sites	55
emailing	55
playing games downloaded on the phone	54
following weather forecasts	50
shooting videos	46
searching on maps, GPS navigation	46
sending or sharing photos, videos	40
reading news and newspapers	38
watching or listening to videos on the Internet	37
writing chat with chat programs	37
radio, podcasts	24
watching videos or movies downloaded on the phone	23
reading and editing documents	21
sound recording	19
voice chat with chat programs	16
calling fixed or mobile phones by a chat program	16
playing games on the Internet	14
reading books	13
TV, videostream	7
voice chat or in writing on a website	2

Activities on tablets

%

Activity	%
playing games downloaded on the tablet	58
emailing	49
reading news and newspapers	47
social networking sites	45
watching videos or movies downloaded on the tablet	41
taking photos	39
watching or listening to videos on the Internet	38
following weather forecasts	38
reading books	35
searching on maps, GPS navigation	33
listening to music downloaded on the tablet	29
calendar, reminder, making notes	28
reading and editing documents	28
playing games on the Internet	25
sending or sharing photos, videos	23
writing chat with chat programs	23
shooting videos	20
TV, videostream	19
voice chat with chat programs	13
sound recording	13
radio, podcasts	12
calling fixed or mobile phones by a chat program	8
sms	8
voice chat or in writing on a website	5

| Smartphone owners	n= 1837	N=3.4 m	Tablet owners	n=518	N=0.9 m

SMARTPHONE, TABLET communication activities

Regarding communication activities, chat and VoIN (i.e. unmanaged VoIP) are more frequent on smartphones than on tablets. Smartphone capability for FM radio broadcasts may be the reason for the higher proportion for radio and podcasts listening on smartphones The larger screen of tablets may be a reason for the higher proportion of users watching TV or videostream on this device.

Since 2013, watching videos, listening to radio, and using VoIN among smartphone users have slightly declined.

Activities on smartphones and tablets

■ smartphone
■ tablet

%

Activity	smartphone	tablet
emailing	55	49
chat with chat program	39	26
watching or listening to videos on the Internet	37	38
listening to radio, podcasts	24	12
calling fixed or mobile phones by a chat program	16	8
watching TV, videostream	7	19

Activities on smartphone in 2013 and 2014

■ 2013
■ 2014

%

| Activity	2013	2014
making traditional phone calls	98	98
sms	n.a.	73
emailing	56	55
chat with chat program	41	39
watching or listening to videos on the Internet	42	37
listening to radio, podcasts	32	24
calling fixed or mobile phones by a chat program	22	16
watching TV, videostream	9	7

TV SET take-up

93% of Internet users watch TV at home and half of them have LED TV, OLED TV or plasma TV.

30% of Internet users have a TV set that can be connected to the Internet , i.e. online contents can be watched on the TV screen. Having a TV set suitable for Internet usage is in strong correlation with the economic status of users, especially, in case of smart TV.

22% of users watch online contents on TV screen instead of on the screen of their PC and 6% on TV instead of the display of their smartphone (with wired or wifi connection).

Take-up of TV sets

%

- any type of TV set: 93
- flat screen: 52
- TV set suitable for the Internet*: 30

%
- set-top box connecting the TV to the Internet: 21
- smart TV: 14
- TV "made smart" (e.g. ChromeCast): 6

Take-up of TV sets suitable for accessing the Internet

By goods and chattels

- TV set suitable for accessing the Internet
- set-top box connecting the TV to the Internet
- smart TV
- TV "made smart"

%

	0-2 goods	3-4 goods	5-6 goods	7-8 goods	9-13 goods
TV set suitable for accessing the Internet	10	20	35	48	64
set-top box connecting the TV to the Internet	7	16	23	29	40
smart TV	6	6	17	27	45
TV "made smart"	1	2	6	10	16

*Some Internet users use several technical solutions for connecting the TV set to the Internet, e.g. because they have more than one TV sets.
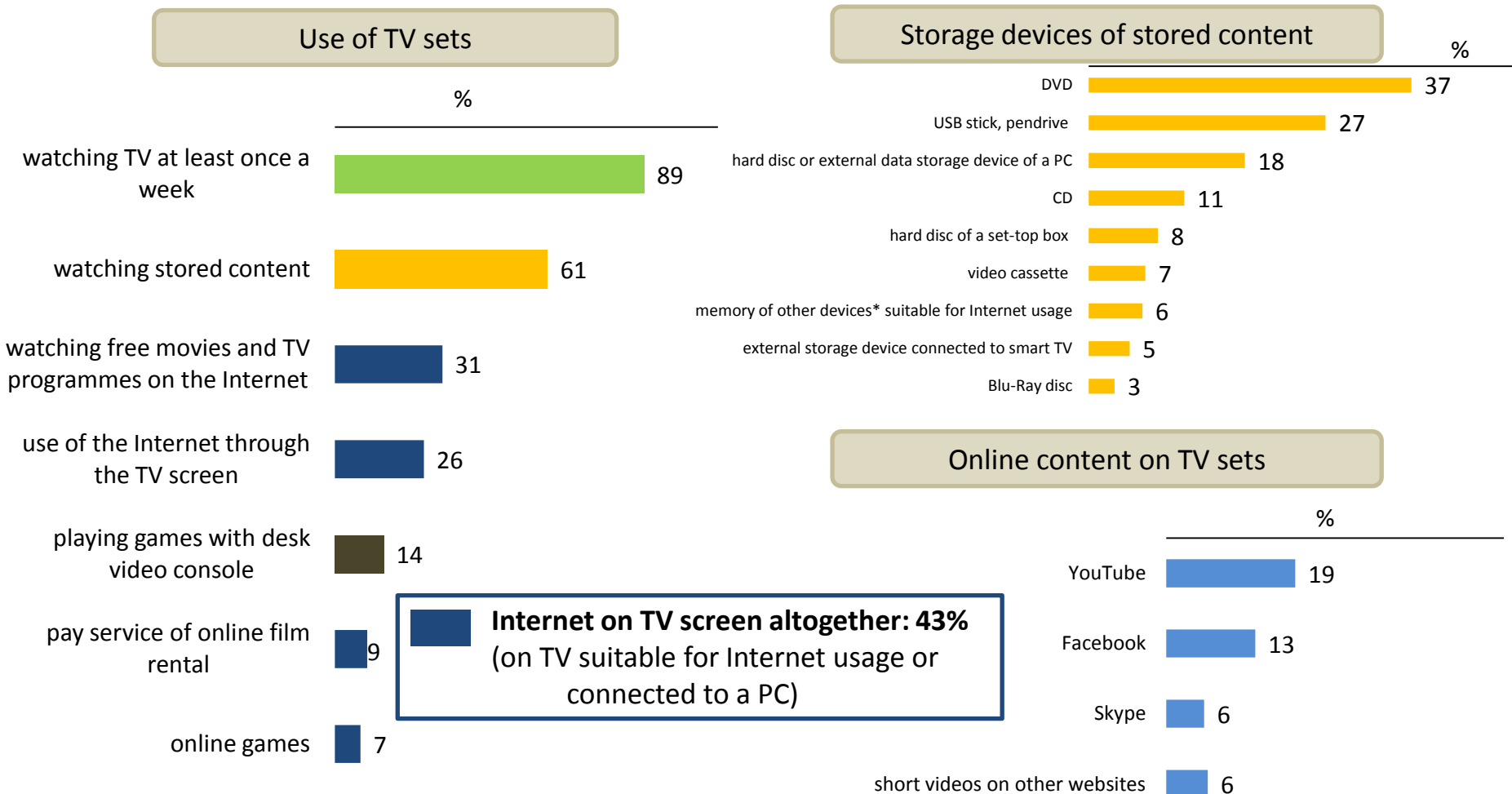
Internet users   n=3125   N=5.7 m

TV SET usage

Internet users mostly use their TV set for watching TV programmes and the majority watch stored contents as well.
43% watch online content on TV screen connected to the Internet by any device, and most of them watch free movies and TV programmes on the Internet.

Use of TV sets

%

watching TV at least once a week	89
watching stored content	61
watching free movies and TV programmes on the Internet	31
use of the Internet through the TV screen	26
playing games with desk video console	14
pay service of online film rental	9
online games	7

Internet on TV screen altogether: 43%
(on TV suitable for Internet usage or connected to a PC)

Storage devices of stored content

%

DVD	37
USB stick, pendrive	27
hard disc or external data storage device of a PC	18
CD	11
hard disc of a set-top box	8
video cassette	7
memory of other devices* suitable for Internet usage	6
external storage device connected to smart TV	5
Blu-Ray disc	3

Online content on TV sets

%

YouTube	19
Facebook	13
Skype	6
short videos on other websites	6

*Smartphone, tablet, video camera, smart camera, portable media player

TV set owners   n=2906   N=5.3 m

OTT CONTENTS

We defined consumption of OTT contents in our survey by the following online activities and use of websites, applications, and services, regardless of the device used for accessing the Internet.

| Video contents	Audio contents	Voice and chat
▪ watching online movies, video or videostream ▪ watching live or catch-up TV programmes online ▪ use of pay service of online film rental ▪ IndaVideó, Indafilm ▪ Videa ▪ YouTube ▪ iTunes ▪ Google Play Movies ▪ Telenor MyTV ▪ Telekom TV GO ▪ Fuso ▪ HBO GO ▪ ITT/OTT TV ▪ UPC TV Apps	▪ listening to music online ▪ listening to live or catcht-up radio programmes online ▪ listening to podcasts ▪ YouTube ▪ iTunes ▪ Google Play Music ▪ Telenor Deezer ▪ Vodafone Zene! 24/7 ▪ Telekom Spotify ▪ Telekom Zenecenter	▪ voice chat or in writing with chat programs, chat applications or on a website ▪ calling fixed or mobile phones by a chat program ▪ Skype ▪ Facebook Chat ▪ GTalk ▪ Viber ▪ WhatsApp
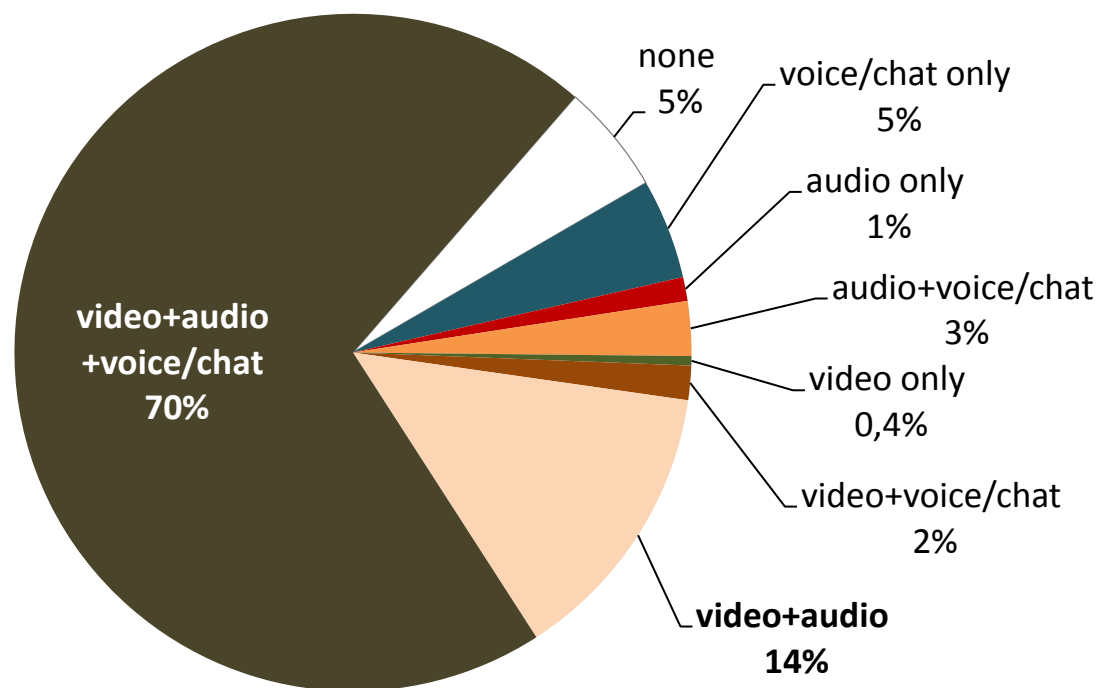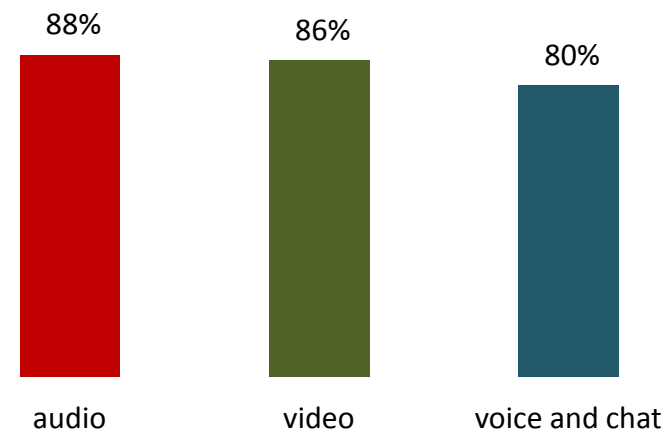
USE OF OTT CONTENTS types

95% of people using the Internet at least once a week use OTT contents, out of which 70% use all three types of video, audio, and voice or chat contents.

Use of OTT contents

- none 5%
- voice/chat only 5%
- audio only 1%
- audio+voice/chat 3%
- video only 0,4%
- video+voice/chat 2%
- **video+audio 14%**
- **video+audio +voice/chat 70%**

Use of each type of OTT contents

audio	video	voice and chat
88%	86%	80%
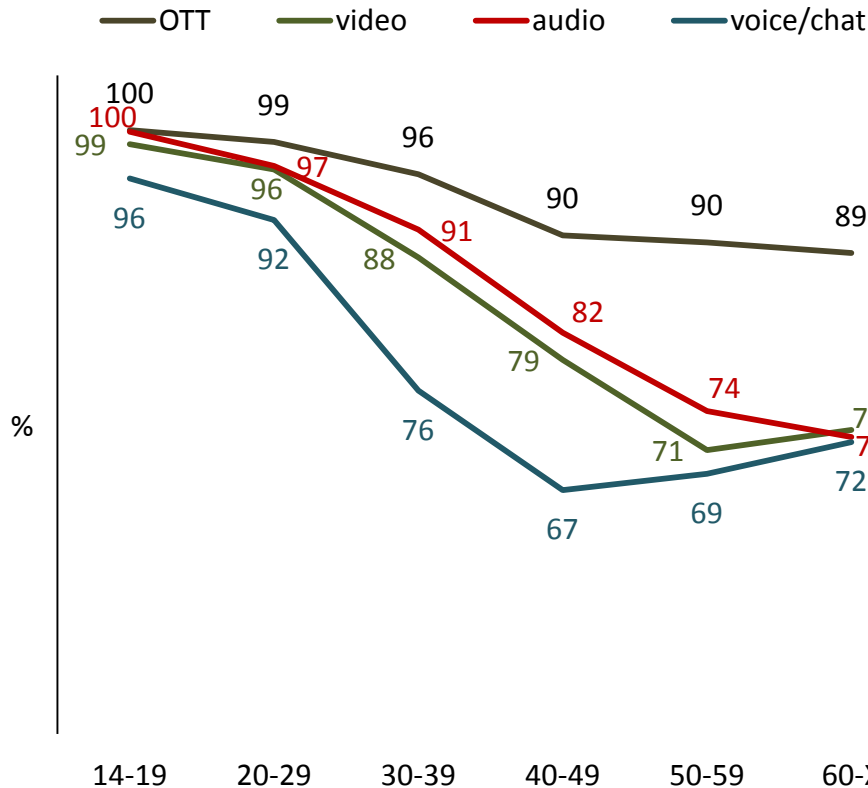
USE OF OTT CONTENTS demographic background

The use of OTT contents is so widespread that only newcomers of Internet usage are lagging behind.
Mostly all three types of OTT contents are accessed by both young users spending a great amount of time on the Internet and experienced Internet users.
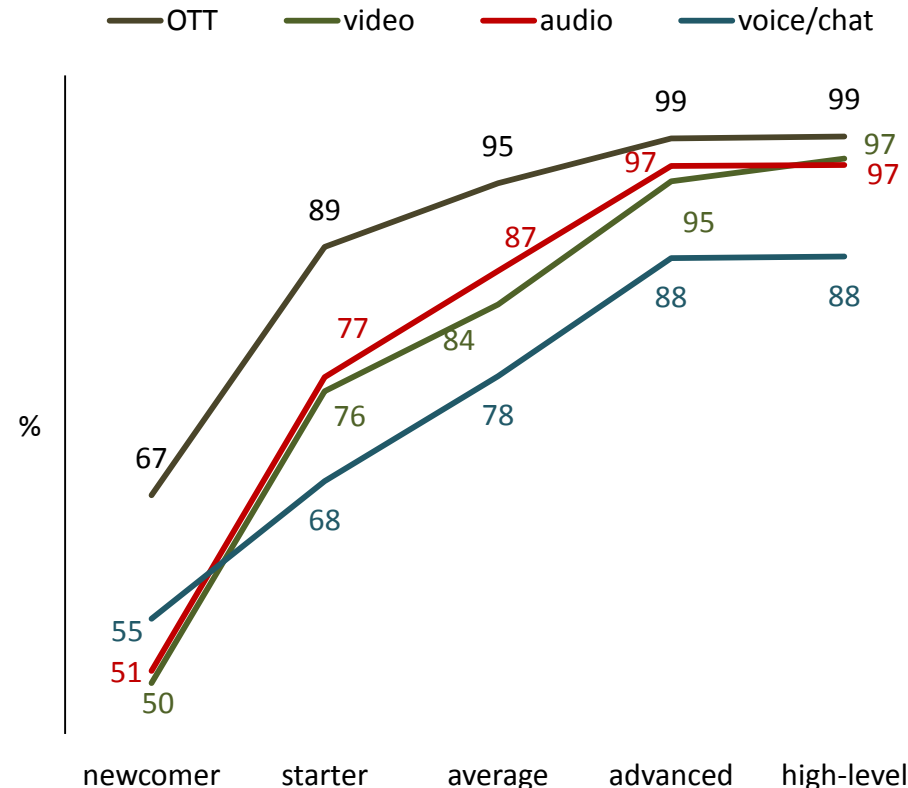
Use of each type of OTT contents
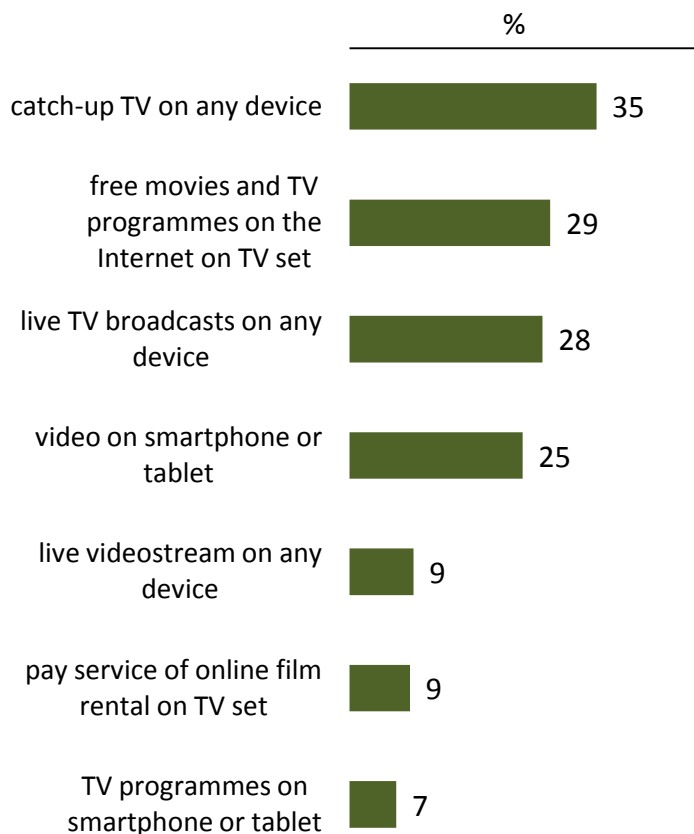
| Users of OTT contents	n= 2961	N= 5.4 m	Video content	n= 2694	N= 4.9 m	Audio content	n= 2746	N= 5.0 m	Voice and chat	n= 2485	N= 4.6 m
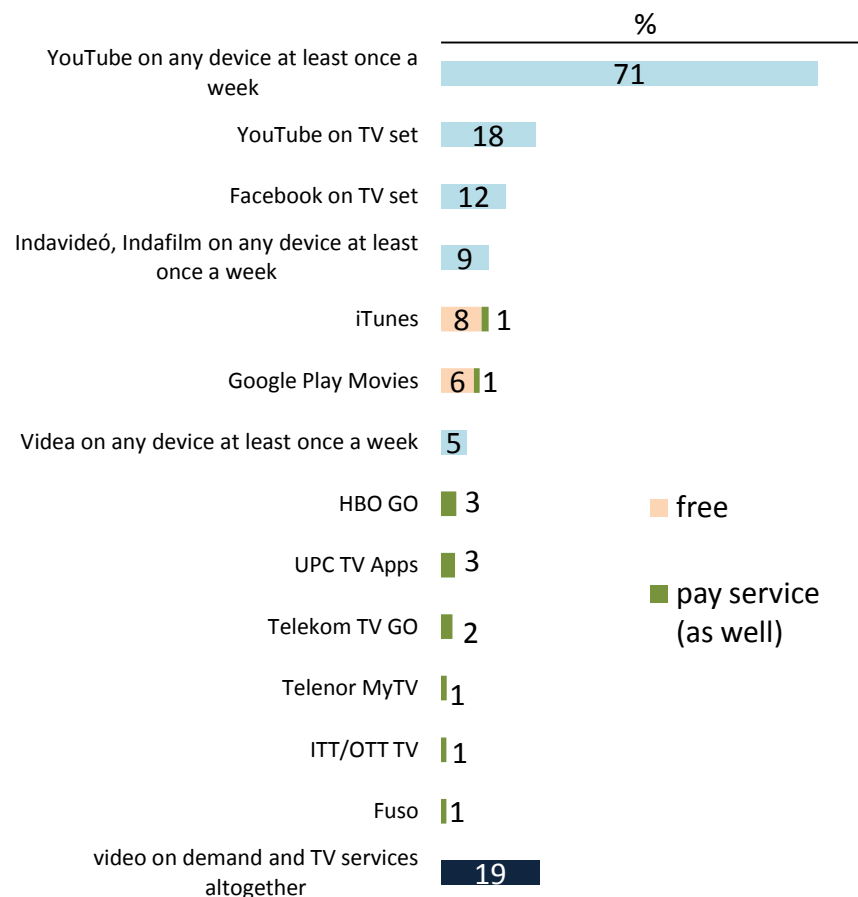
OTT video contents

86% of people using the Internet at least once a week use OTT video content, mostly on YouTube. 35% watch TV programmes and TV series they either missed during normal broadcast times or are broadcasted on a channel they do not subscribe for or are not broadcasted in Hungary at all. 19% use any of the video on demand (VoD) or TV services listed in our questionnaire. 12% have already used pay service of OTT video contents.

Watching OTT video contents

%

catch-up TV on any device	35
free movies and TV programmes on the Internet on TV set	29
live TV broadcasts on any device	28
video on smartphone or tablet	25
live videostream on any device	9
pay service of online film rental on TV set	9
TV programmes on smartphone or tablet	7

Watching OTT video contents

%

YouTube on any device at least once a week	71
YouTube on TV set	18
Facebook on TV set	12
Indavideó, Indafilm on any device at least once a week	9
iTunes	8 / 1
Google Play Movies	6 / 1
Videa on any device at least once a week	5
HBO GO	3
UPC TV Apps	3
Telekom TV GO	2
Telenor MyTV	1
ITT/OTT TV	1
Fuso	1
video on demand and TV services altogether	19

■ free

■ pay service (as well)

Internet users n=3125 N=5.7 m

OTT — advantages of OTT video contents

In general, consumers of OTT video contents say that the biggest advantage of this mode is that they can choose contents by their preferences (and other aspects of this opinion). The lack of commercials and fees (i.e. it is free) are also advantageous for many users.

Advantages of OTT video contents

%

Advantage	%
I can decide independently what and when to watch	71
I can watch movies and TV series without cut by commercials	47
I can watch movies, TV programmes, and TV series that I missed when they were broadcasted on TV	44
I can watch again movies, TV series, and TV programmes which I like	38
I can watch movies, TV series, and TV programmes for free	36
I can choose from a great variety of movies, TV programmes, movies, and videos	36
I can watch full TV series and not only in weekly episodes	31
I can watch movies, TV series, and TV programmes which are not broadcasted by Hungarian TVs	28
I do not have to store movies, TV programmes, and videos (e.g. on the hard disc of a PC, on DVDs)	26
I can watch movies and TV programmes by HD picture quality (while there are few HD broadcasts on the Hungarian TVs)	20
I can watch movies, TV series, and videos in original languages	19
I can watch movies, TV series, and videos with subtitles	17
I can watch movies and current episodes of TV series even on the day they are shown first	14
I can use the Internet as well on my TV at the same time, so I do not have to switch on another device	8

choosing contents by preferences

OTT   audio content

88% of people using the Internet at least once a week listen to OTT audio content, mostly sound contents and music on YouTube. Listening to traditional radio broadcasts on the Internet is also rather usual. 19% of people use any of the audio on demand services listed in our questionnaire, out of which 15% use free services only.

Listening to radio

%

live radio programmes on any device	46
catch-up radio programmes on any device	25
online radio programmes and podcasts on any device	16
radio or podcasts on smartphone or tablet	15
live videostream on any device	9
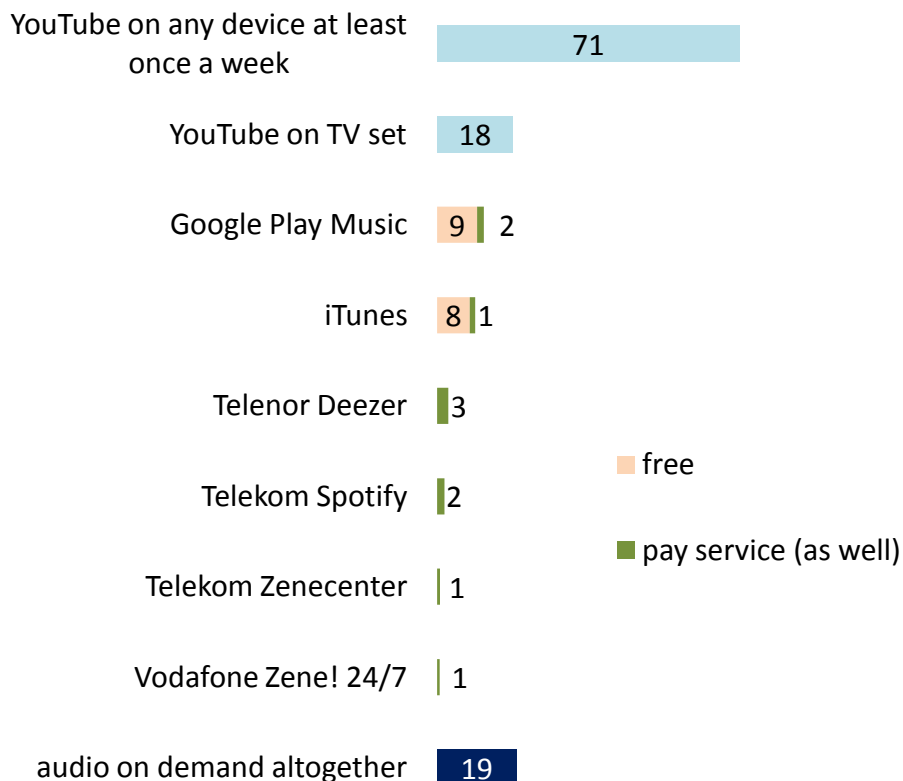
Listening to music

%

	free	pay service (as well)
YouTube on any device at least once a week	71	
YouTube on TV set	18	
Google Play Music	9	2
iTunes	8	1
Telenor Deezer		3
Telekom Spotify		2
Telekom Zenecenter		1
Vodafone Zene! 24/7		1
audio on demand altogether	19	

■ free
■ pay service (as well)
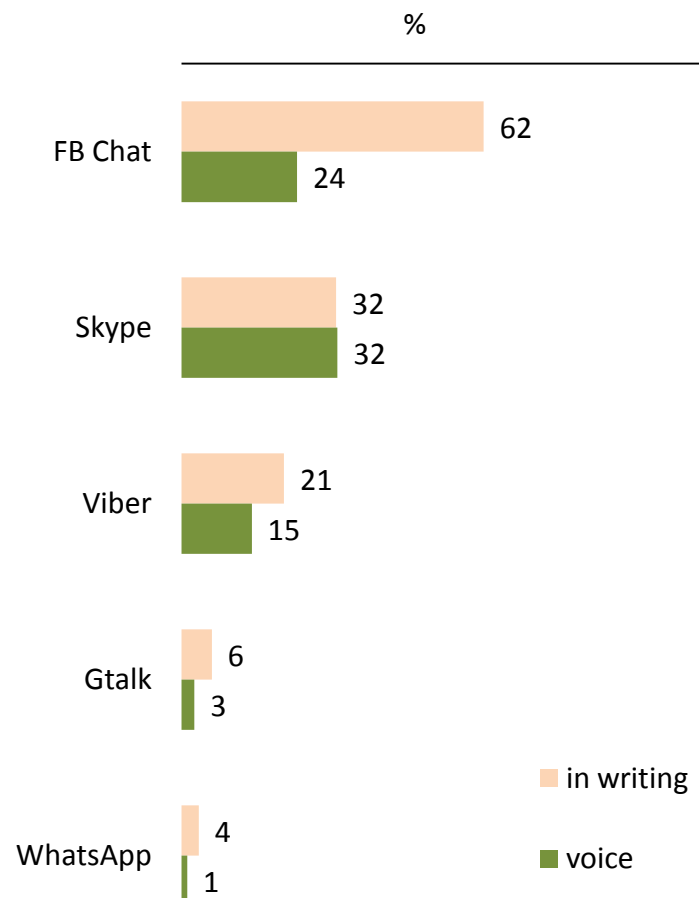
OTT   voice and chat

80% of people using the Internet at least once a week use OTT voice chat or chat in writing, out of which 77% use messaging and 54% use voice chat. Facebook Chat/Messenger is the front runner in chat in writing while Skype is the most popular chat program in case of voice chat.

Chat and VoIN (i.e. unmanaged VoIP) with chat programs

%

voice chat or in writing on any device	79
chat in writing on any device	77
voice chat (VoIN) on any device	54
chat in writing on smartphone or tablet	23
voice chat (VoIN) on smartphone or tablet	10

Chat on any device

%

	in writing	voice
FB Chat	62	24
Skype	32	32
Viber	21	15
Gtalk	6	3
WhatsApp	4	1

■ in writing

■ voice

Internet users   n=3125   N=5.7 m

USE OF OTT CONTENTS change in habits

About one quarter of the users of each type of OTT contents admit that they watch TV, listen to radio and make phone calls less, as a result of accessing OTT contents. This experience is not shared entirely among all users, there are a few people who say they use the traditional communication modalities more often than before.
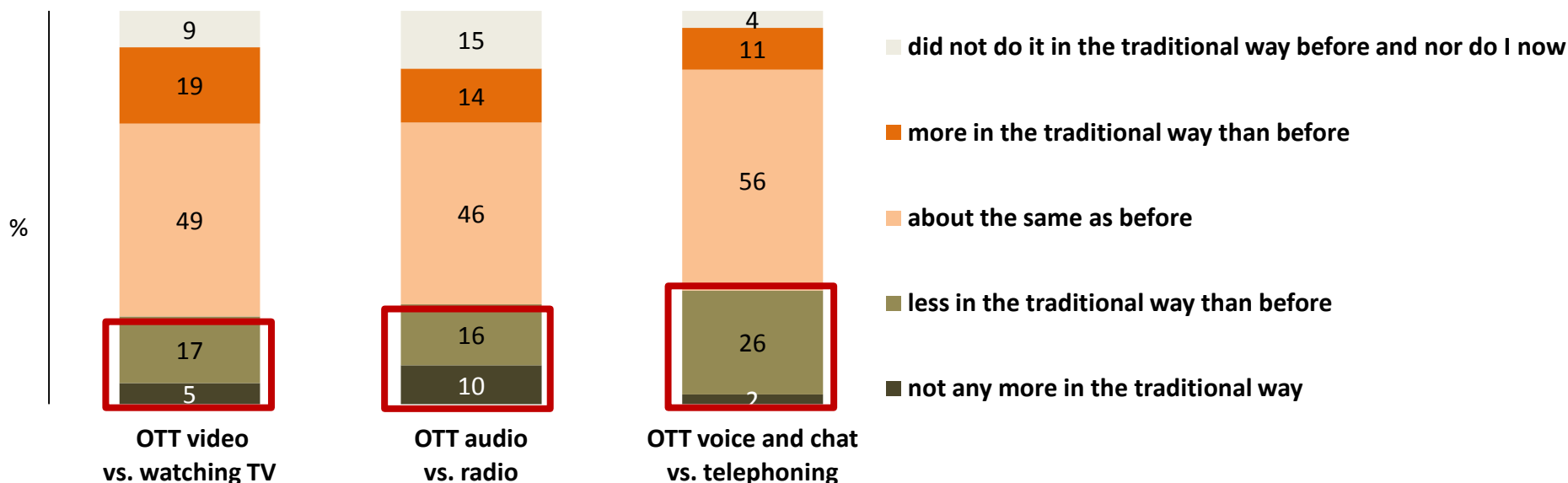
Impact of OTT usage on the frequency of traditional communication modes

Q: Since you have been using this new way of:
watching TV, videos, and movies,
listening to music or radio,
using voice or text chat,

do you use it more, less or the same:
TV in the traditional way?
radio in the traditional way?
fixed and mobile phones in the traditional way?
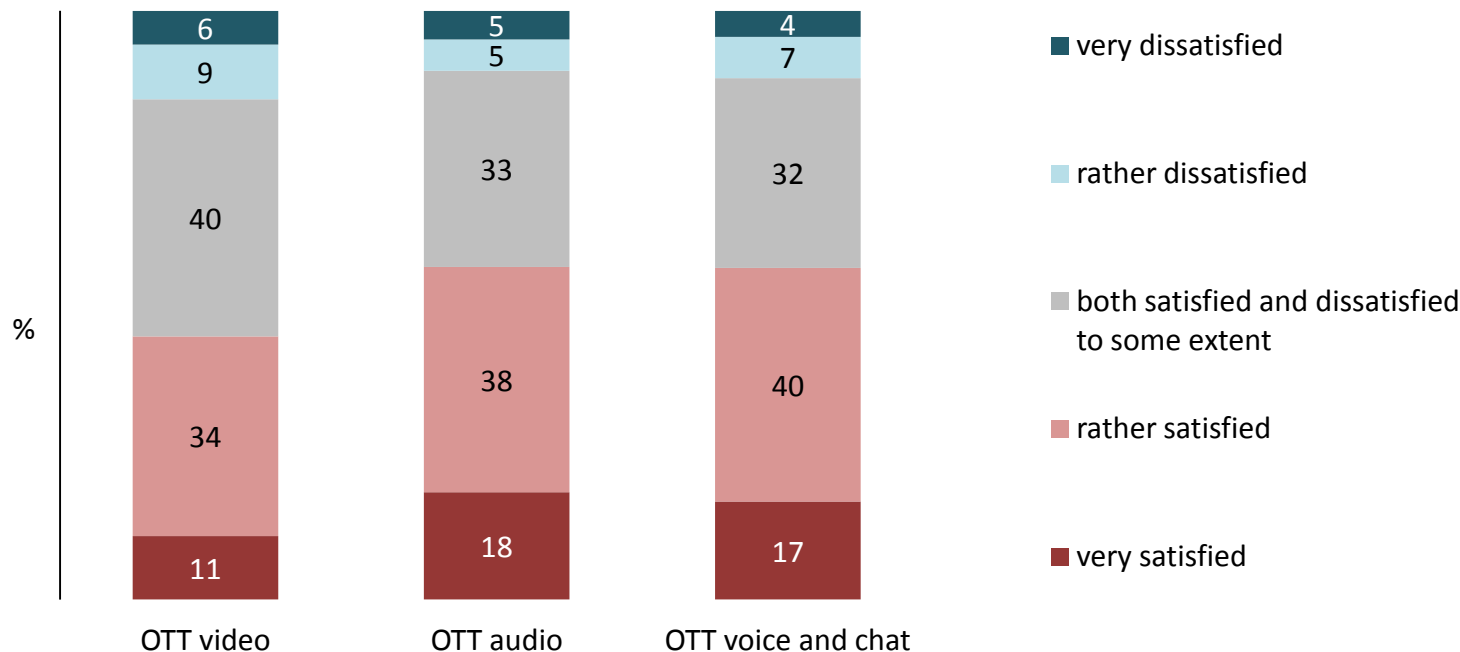
| | did not do it in the traditional way before and nor do I now |
| more in the traditional way than before |
| about the same as before |
| less in the traditional way than before |
| not any more in the traditional way |

OTT video vs. watching TV: 9, 19, 49, 17, 5
OTT audio vs. radio: 15, 14, 46, 16, 10
OTT voice and chat vs. telephoning: 4, 11, 56, 26, 2

USE OF OTT CONTENTS satisfaction

Only a few OTT users are dissatisfied with the contents offered. 45% of people using OTT video contents while 56% of people using audio contents and users of voice and chat contents, respectively are satisfied with OTT communication modalities.

Satisfaction with OTT usage

	n=	N=		n=	N=		n=	N=
Video content	2694	4.9 m	Audio content	2746	5.0 m	Voice and chat	2485	4.6 m

CHILDREN ONLINE parental control

39% of Internet users live in a household with a member under 18.* In 85% of these households there is a child using the Internet at home.

Among Internet users aged 14-17 or living with a household member under 18 (altogether, 39% of Internet users):

- there is a child using the Internet on any device   85%
- there is a child using the Internet on tablet or smartphone   68%
- there is a child using the Internet on desk PC or portable PC   81%
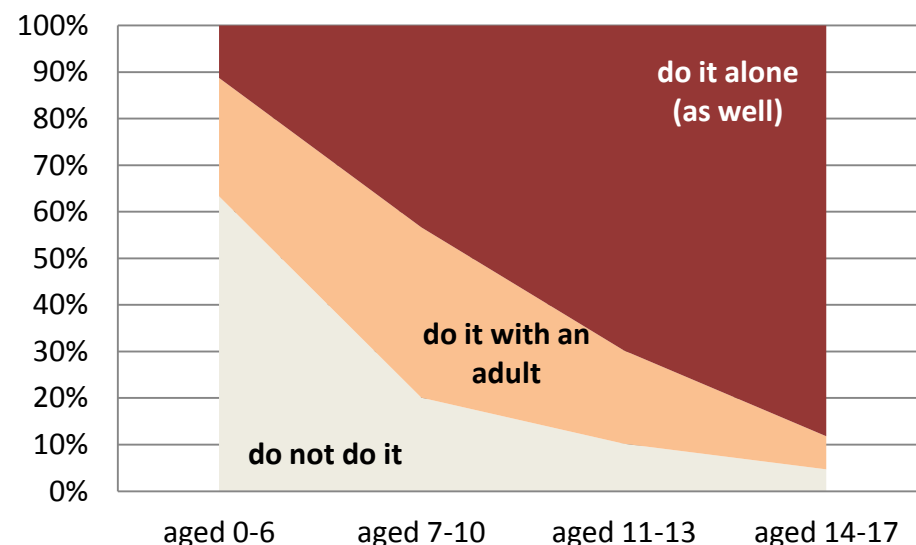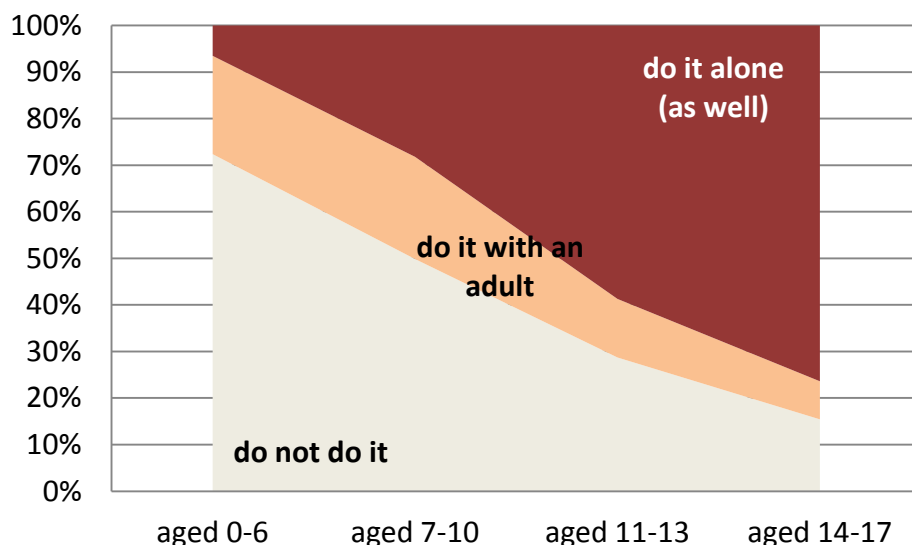
Children accessing the Internet at home on:

Tablet or smartphone

By age of children

Desk PC or portable PC

By age of children

do it alone (as well)

do it with an adult

do not do it

aged 0-6   aged 7-10   aged 11-13   aged 14-17
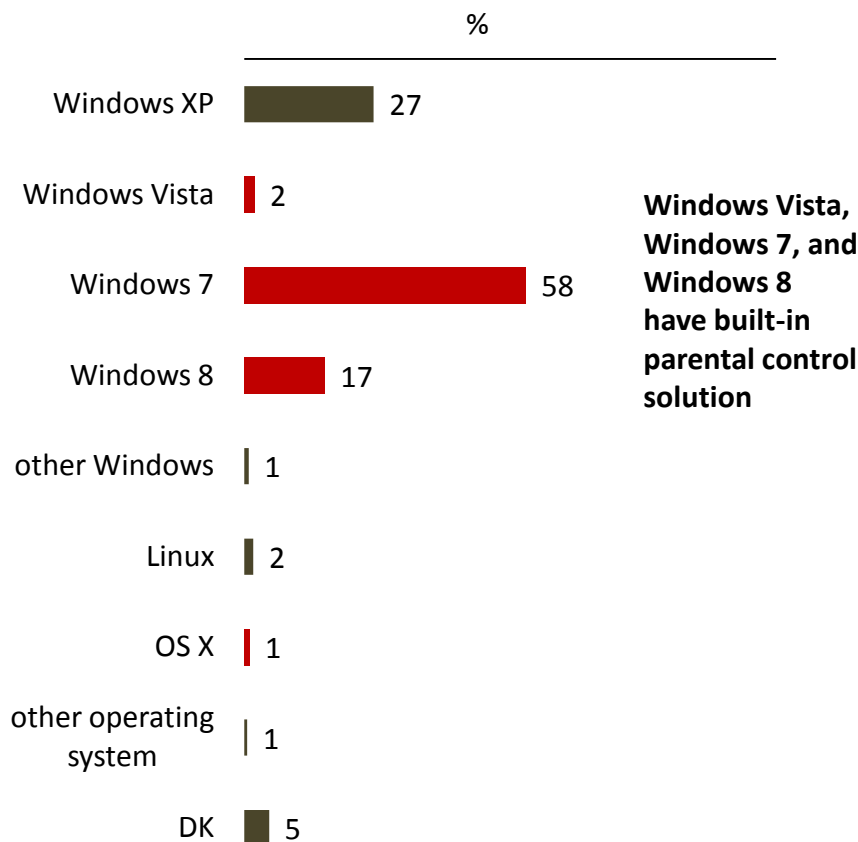
Internet users living in a household with a member under 18   n=1218   N=2.2 m

CHILDREN ONLINE technical background of parental control
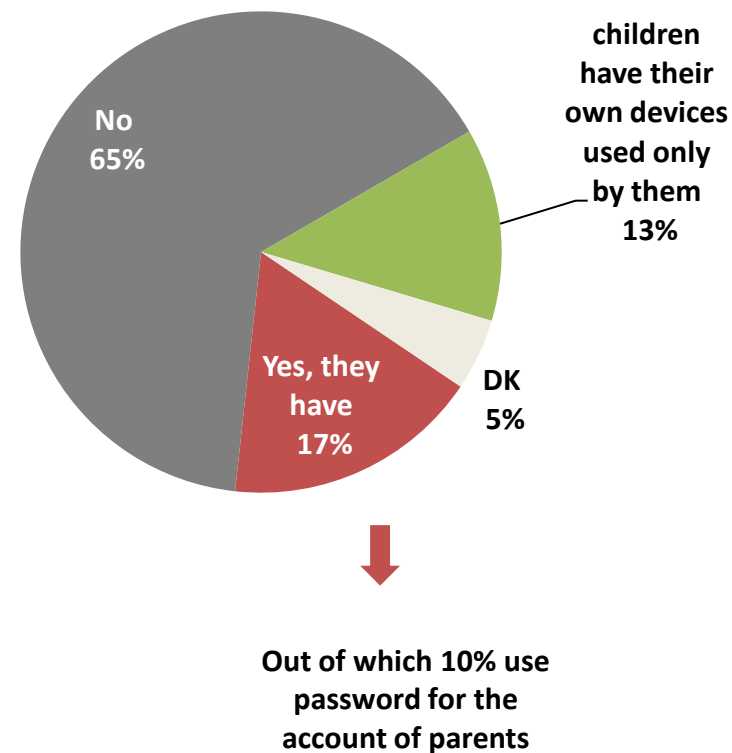
Almost all children accessing the Internet at home on PC and who live in a household with an Internet user use Windows operating system on this PC out of which Windows Vista, Windows 7 and 8 have a built-in parental control software.

10% of Internet users living with a child who access the Internet at home on PC have contents in a separated user account locked by password for adult family members.

Operating system of the PC used by children at home*

%

	%
Windows XP	27
Windows Vista	2
Windows 7	58
Windows 8	17
other Windows	1
Linux	2
OS X	1
other operating system	1
DK	5

Windows Vista, Windows 7, and Windows 8 have built-in parental control solution

Separate user account for children

- No 65%
- children have their own devices used only by them 13%
- DK 5%
- Yes, they have 17%

Out of which 10% use password for the account of parents
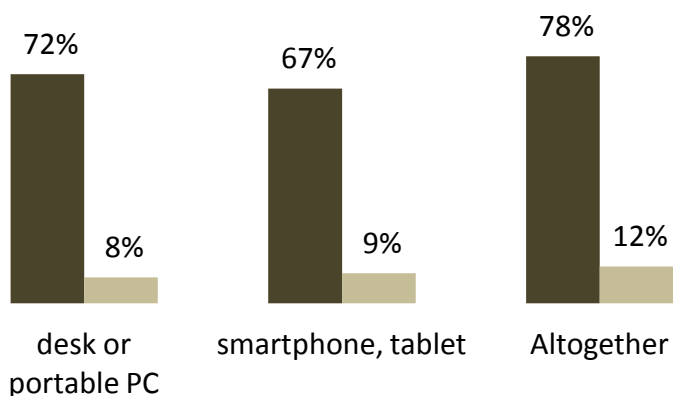
*The sum of percentages exceeds 100, because some children use more than one PC at home for accessing the Internet.

Internet users living in a household with a child who access the Internet at home with desk or portable PC | n=990 | N=1.8 m

CHILDREN ONLINE parental control softwares

In the households of Internet users living with a member under 18 who also use the Internet at home, parents are mostly aware of parental control softwares for monitoring and limiting the time and content of Internet usage of children. 12% of Internet users living with a child who also use the Internet say they use these softwares, browser extensions or settings at home.

## Awareness and use of parental control softwares, browser extensions, and settings
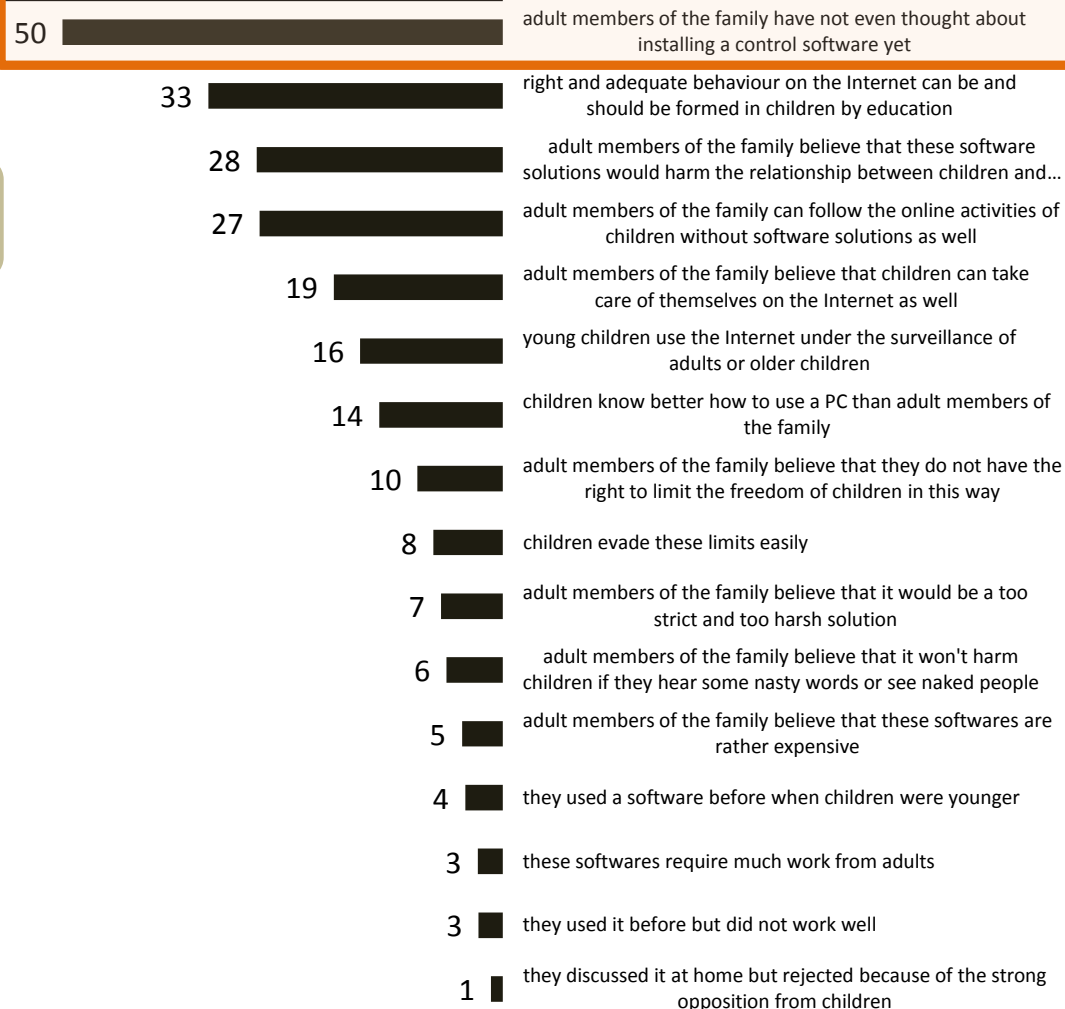
■ heard about them   ■ use them

| desk or portable PC	smartphone, tablet	Altogether
72% / 8%	67% / 9%	78% / 12%

6% of them could mention a software or browser by name that they think to be suitable for parental control

## Reasons for not using parental control softwares

%

| Value	Reason
50	adult members of the family have not even thought about installing a control software yet
33	right and adequate behaviour on the Internet can be and should be formed in children by education
28	adult members of the family believe that these software solutions would harm the relationship between children and…
27	adult members of the family can follow the online activities of children without software solutions as well
19	adult members of the family believe that children can take care of themselves on the Internet as well
16	young children use the Internet under the surveillance of adults or older children
14	children know better how to use a PC than adult members of the family
10	adult members of the family believe that they do not have the right to limit the freedom of children in this way
8	children evade these limits easily
7	adult members of the family believe that it would be a too strict and too harsh solution
6	adult members of the family believe that it won't harm children if they hear some nasty words or see naked people
5	adult members of the family believe that these softwares are rather expensive
4	they used a software before when children were younger
3	these softwares require much work from adults
3	they used it before but did not work well
1	they discussed it at home but rejected because of the strong opposition from children

THE ELDERLY ONLINE motives of non-use

The elderly is the age group in Hungary that lagging behind the most in using the Internet.
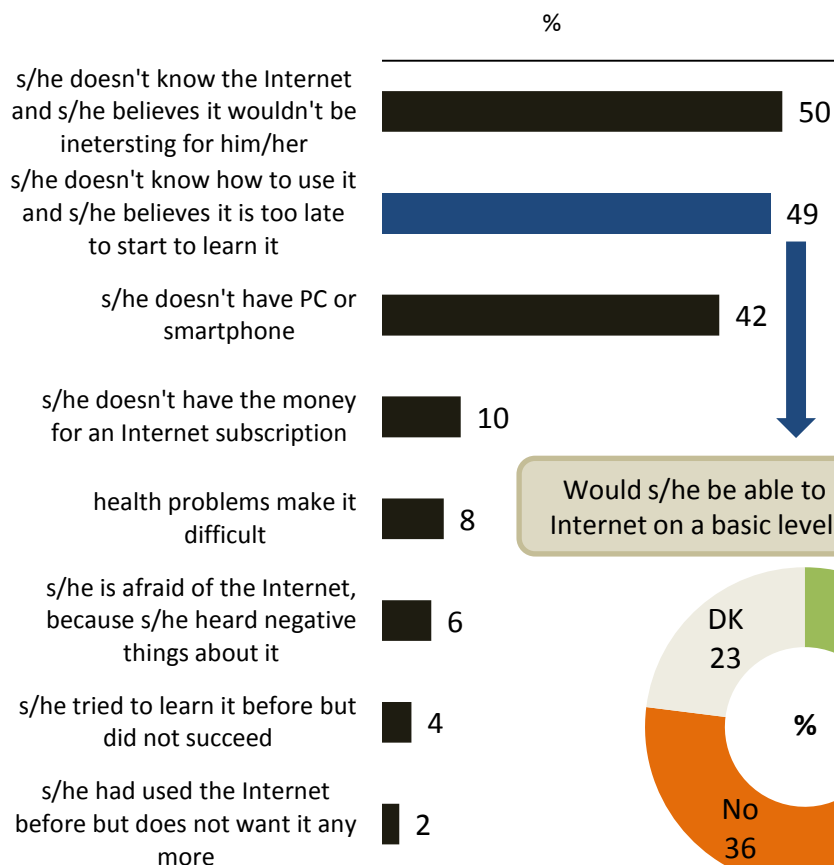
77% of respondents have at least one relative aged 60+. In their opinion, lack of knowledge, lack of devices, and negative attitudes are the main obstacles of using the Internet among their elderly relatives, although, they admit that many of them would be able to learn how to use it if they got help.

Internet use of elderly relatives

- 51
- 25
- 20
- 4
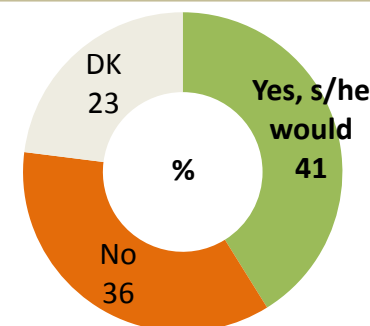
Legend:
- ■ none of them use the Internet
- ■ at least one of them use it
- ■ all of them use it
- ■ DK

Why elderly relatives do not use the Internet

%

s/he doesn't know the Internet and s/he believes it wouldn't be inetersting for him/her	50
s/he doesn't know how to use it and s/he believes it is too late to start to learn it	49
s/he doesn't have PC or smartphone	42
s/he doesn't have the money for an Internet subscription	10
health problems make it difficult	8
s/he is afraid of the Internet, because s/he heard negative things about it	6
s/he tried to learn it before but did not succeed	4
s/he had used the Internet before but does not want it any more	2

Would s/he be able to learn to use the Internet on a basic level if s/he got help?

- Yes, s/he would 41
- No 36
- DK 23

| Internet users with a relative aged 60+	n= 2404	N=4.4 m	users with a relative aged 60+ not using the Internet	n= 1839	N=3.4 m
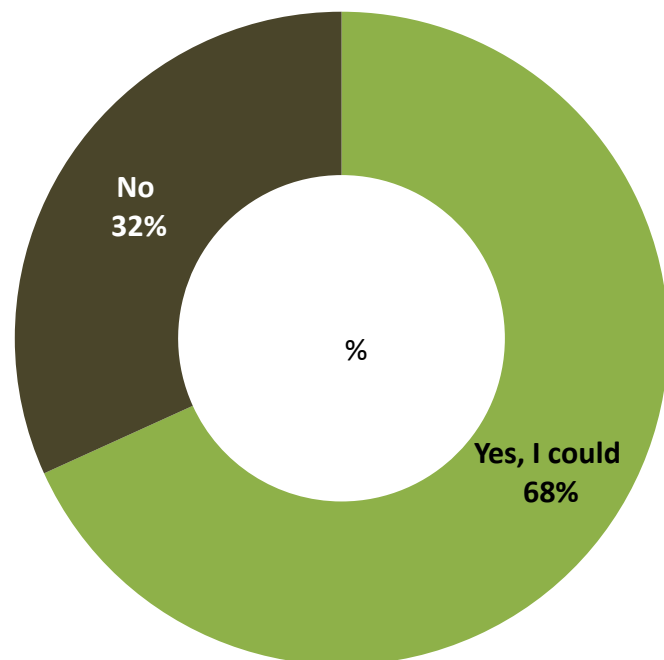
THE ELDERLY ONLINE help from the family

The majority of Internet users who have an elderly relative not using the Internet believe that s/he could help their elderly relatives to start using the Internet.
Most of them would help elderly relatives by teaching them how to do it.
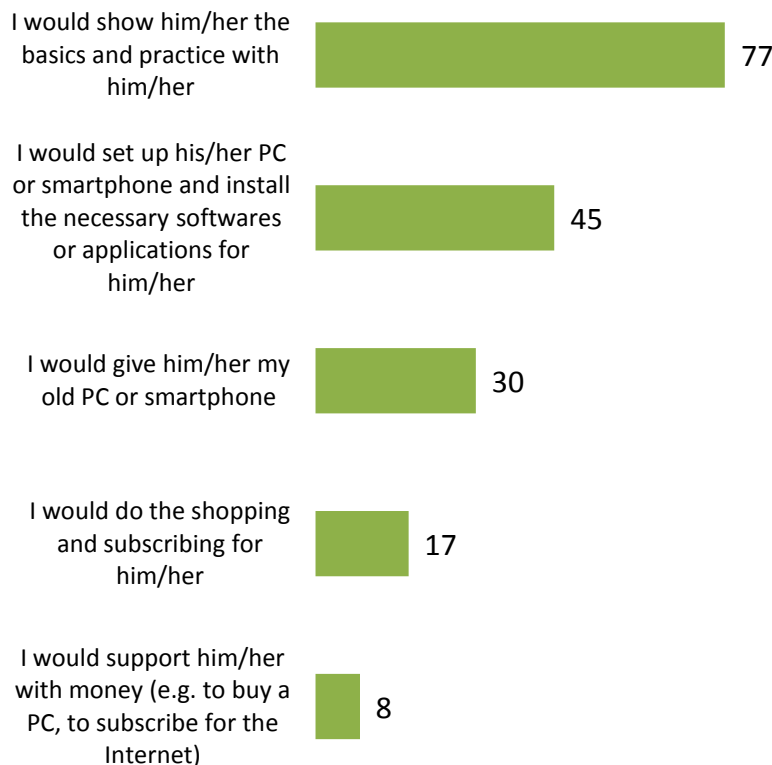
Could you help your elderly relative?

No
32%

Yes, I could
68%

%

How could you help your elderly relative?

%

|	
I would show him/her the basics and practice with him/her	77
I would set up his/her PC or smartphone and install the necessary softwares or applications for him/her	45
I would give him/her my old PC or smartphone	30
I would do the shopping and subscribing for him/her	17
I would support him/her with money (e.g. to buy a PC, to subscribe for the Internet)	8

Users with a relative aged 60+ not using the Internet | n= 1839 | N=3.4 m | Those who could help | n=1254 | N=2.3 m

# THE ELDERLY ONLINE usefulness
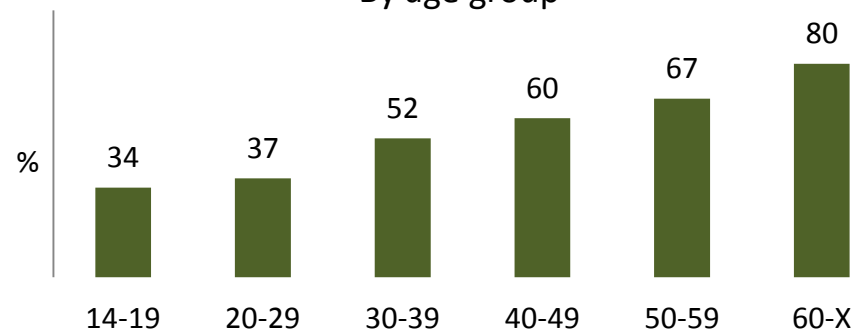
52% of Internet users believe it would be useful for the elderly and their family if they learned to use the Internet. This opinion is more popular among Internet users aged 60+ and who have elderly relatives using the Internet.

How useful it would be for the elderly and their family if the elderly learned to use the Internet

not useful at all 4%

DK 7%

very useful 24%

not particularly useful 13%

both useful and not to some extent 23%

rather useful 28%

%
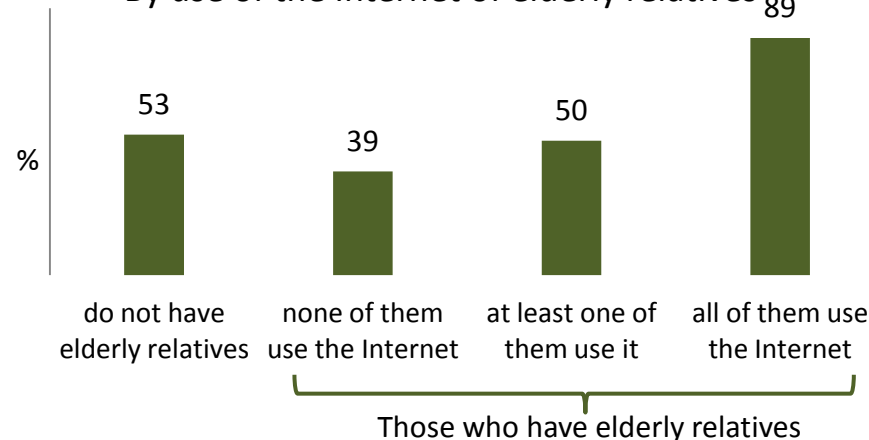
Proportion of those who believe it would be useful if the elderly learned to use the Internet

By age group

14-19	20-29	30-39	40-49	50-59	60-X
34	37	52	60	67	80

%
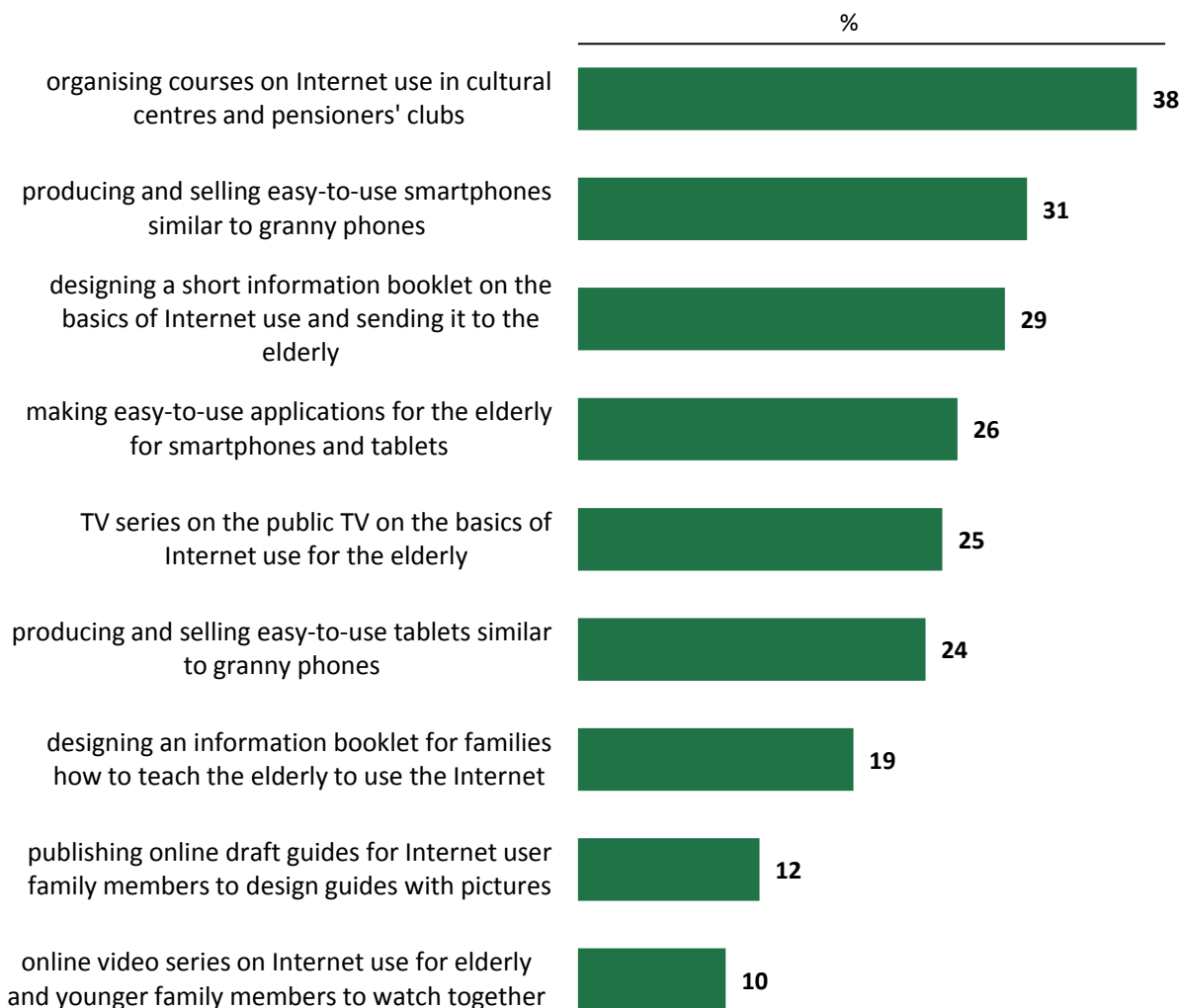
By use of the Internet of elderly relatives

do not have elderly relatives	none of them use the Internet	at least one of them use it	all of them use the Internet
53	39	50	89

%

Those who have elderly relatives

THE ELDERLY ONLINE help from the society

How to help the elderly to learn to use the Internet

%

Category	%
organising courses on Internet use in cultural centres and pensioners' clubs	38
producing and selling easy-to-use smartphones similar to granny phones	31
designing a short information booklet on the basics of Internet use and sending it to the elderly	29
making easy-to-use applications for the elderly for smartphones and tablets	26
TV series on the public TV on the basics of Internet use for the elderly	25
producing and selling easy-to-use tablets similar to granny phones	24
designing an information booklet for families how to teach the elderly to use the Internet	19
publishing online draft guides for Internet user family members to design guides with pictures	12
online video series on Internet use for elderly and younger family members to watch together	10

We listed some ideas in the questionnaire on how to help elderly people to learn to use the Internet. Respondents were asked to choose the three most suitable suggestions.

Respondents made further suggestions on their own as well on how to help the elderly effectively.
Respondents' own ideas refer to several important aspects and options:
- Complex help is necessary: devices, education, and motivation.
- Production of elderly-friendly devices and softwares should be incentivized by the State.
- Teaching should focus on the specialities of the elderly: with many repetition and practice.
- Besides learning courses, elderly users learning Internet use should be assisted by remote or on-site technical help.
- Commercials on public TVs to raise attention of the elderly on the advantages of the Internet and on web contents which may be interesting and important for them. Commercials demonstrating that the Internet facilitates personal communication would be eminently motivating for them.

Internet users		n=3125	N=5.7 m

HOW TO HELP THEM? typical answers from respondents

They could be taught by people of similar age. Teachers should be elderly people as well, so they will see that others could learn it and they can be examples for elderly students

Free client service on telephone that elderly people can ask if they have stalled and their relatives are not available at that moment

Basics should be taught for them in group work and after that, they could explore and deepen their knowledge on their own

Free or cheap courses should be organised for them to learn easily some simple basic things and first steps

Things should be translated into a very simple language for them to explain and with much patience and insistence

In an offline way, e.g. by audio books that explain what to do

If they could learn together with people in the same age, they would not feel lost that much
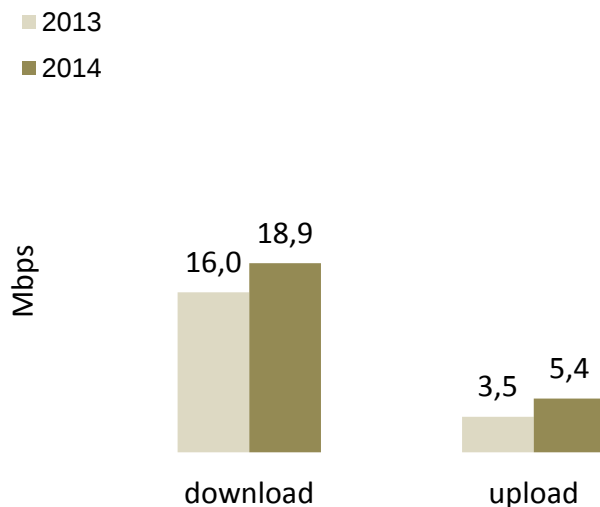
Broadcasting TV series is a good idea, but advantages should be emphasized so that the elderly would not be afraid of or be averse to using the Internet

MEASURING SPEED WITH SOFTWARE observed speed
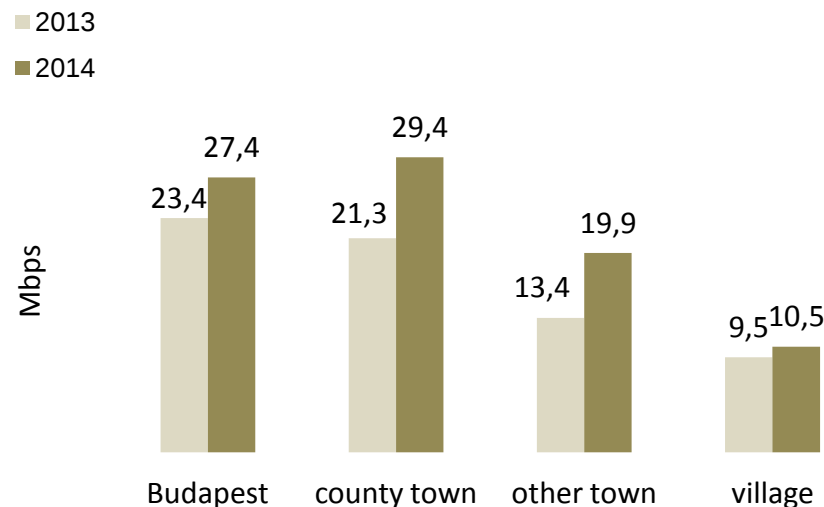
Both in 2013 and in 2014, we asked our respondents filling in the questionnaire from their own device to measure the current speed of their Internet connection with the same speed testing software*. Although, 85% of respondents used their on devices to fill out the questionnaire in both years, we have been provided data on more people (69%) in 2014 compared to 2013 (48%). The reason may be that we incorporated the speed testing application directly into our online questionnaire this year.
Both average upload and download speed** have increased significantly during 2014. This increase has been much larger in cities, especially, in cities in the countryside than in villages.

Average speed measured by software

2013
2014

download: 16,0 / 18,9
upload: 3,5 / 5,4

Average download speed measured by software

2013
2014

Budapest: 23,4 / 27,4
county town: 21,3 / 29,4
other town: 13,4 / 19,9
village: 9,5 / 10,5

*Application of Ookla. www.speedtest.net   **Trimmed means on a 95% basis

Internet users who have done the speed test during the survey   n= 2151   N=3.9 m