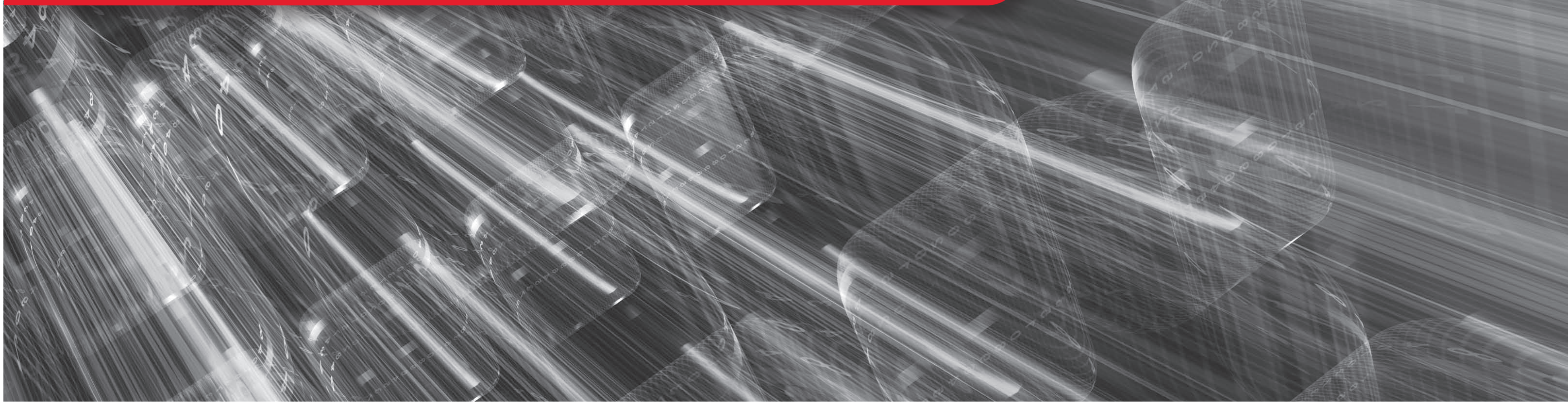
Digital Society – Six user types in comparison (2009-2011)



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INITIATIVE D21

E-CLIC

European Collaborate Innovation Centres for Broadband Media Service

The North Sea Region Programme 2007–2013

Investing in the future by working together for a sustainable and competitive region.

EUROPEAN REGIONAL DEVELOPMENT FUND

In our media society the usage of information and communication technologies are seemingly omnipresent. Our children are growing up with a smartphone, in school it can be taught on a smart board and parents are already employed at digital workplaces. But is the entire German population using such modern life-schemes? The existing broadband channels in any case could approach the users needs a little more. And I'm also wondering: where is the place of the digital Germany compared to the rest of Europe?

Initiated by the European E-CLIC project (www.e-clic.eu) media scholars from the North Sea region have concerned themselves with this topic. The participating universities were annexed centers of innovation, working in the field of new media. In the sense of a transnational cooperation, we have established a "digital bridge" between the particular centers. The sustainable aim is: working together on an interdisciplinary collaboration of research, development and application of innovative broadband services. Students were fully involved, key qualifications were identified and new market-orientated services were created according to the requirements. There should be more of such projects – best with the participation of as many players as possible. Because it is not enough to consider an innovative internet or the participating enterprises only regarding to economic aspects. Life is in motion; this includes the man-made communication technologies. It is always important to harmonize as much point of views and progresses as possible, to take the fears seriously and to communicate the interests of the players sober. At last we are all users! I can see a lot of chances in the digital future.

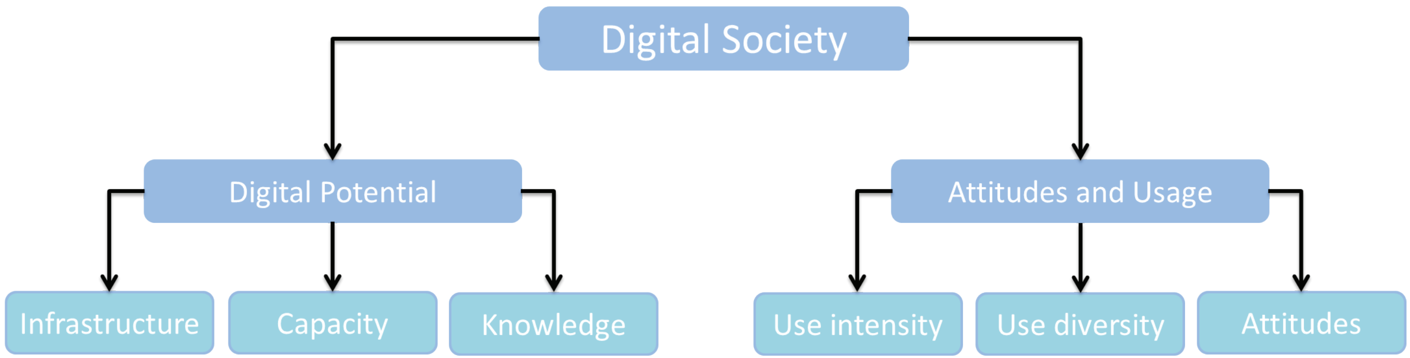
Tim Brauckmüller
Managing Partner atene KOM GmbH
Member of the board of the Initiative D21 e. V.

Introduction

Since 2001 the (N)ONLINER Atlas of the Initiative D21 documents empiri-cally in cooperation with TNS Infratest the utilisation patterns of the medium Internet from a demographic and geographic view. The digital society of Germany is being observed and analysed. 2009 the first edition of the study "Digital Society" was published and since then the institution is observing the development. This summary is intended to compare this development of the Digital Society within the last three years.

The study: methodology profile

Main unit:	German-speaking resident population aged 14 years with a landline infrastructure
Sampling:	random last two digits on basis of the "ADM-Telephonemastersample"
Number of Interviews:	every year approx. 1000 Interviews; representative, to the main unit extrapolated sample
Survey method:	Computer Assisted Telephone Interviews (CATI)



The Study “Digital Society – Six user types in comparison” is based upon six columns, which detect the handling with digital media holistically. Thereby, three pillars carry one dimension.

- **Digital Potential** and
- **Attitudes and Usage**

In this case, the digital potential, which is composed of inf-rastructure, ca-pacity and knowledge, can be valued posi-tive: The more knowledge, capacity and infrastructure are available for the respondents, the better the digital poten-tial is evaluated.

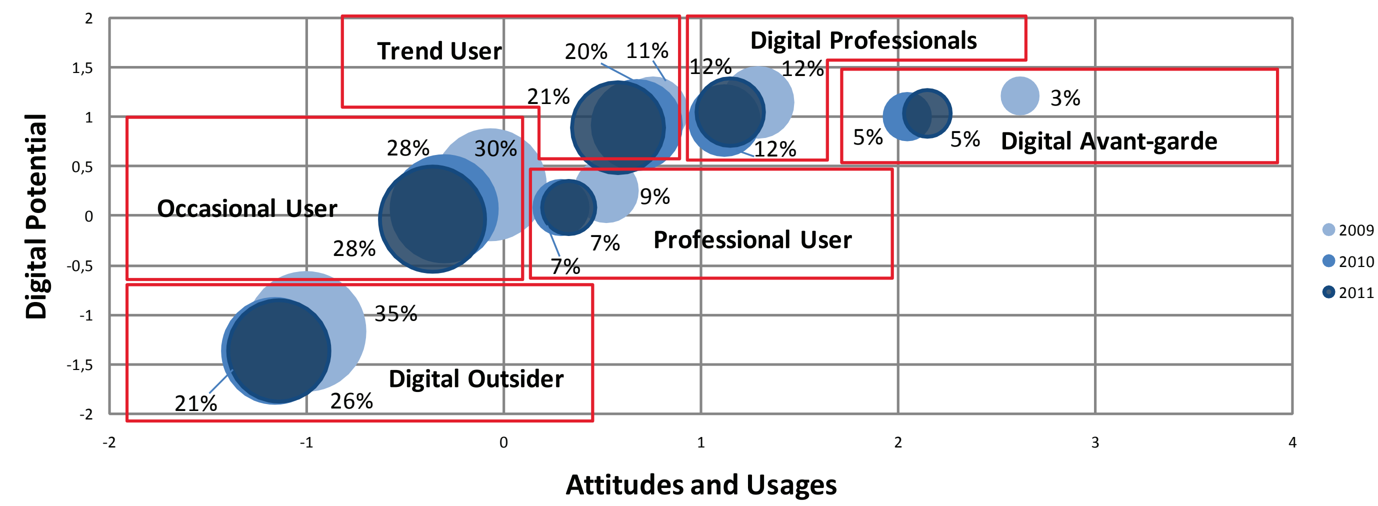
On the contrary, attitudes and usage are considered diffe-rentiated and neutral. Certainly an open attitude towards digital media and a measured use is evaluated extremely positive. At an excessive usage and uncritical attitude the dimension can also turn into negative.

Segmentation of the digital society

The segmentation on hand has the aim to classify the digital society in clear definable user types. In terms of digital potential and attitudes and usage the identified groups shall be comparable (homogeneous) as possible but among themselves definable (heterogeneous) as possible. Accordingly the prior described columns of the digital society - infrastruc-ture, capacity, knowledge, use intensity, use diversity and attitudes - flew in as active variable into the cluster analysis and revealed the six types of the digital society.

These user types – from digital outsider to digital avant-garde – will be described below and compared over the last three years (2009 – 2011).

The digital society comparison 2009 - 2011



Type 1: Digital Outsider

	2009	2010	2011
Average age (years)	62.5	64.9	62.5
Percentage of woman (%)	66	65	59
Education level	predominantly low formal	predominantly low formal	predominantly low formal
Professional activity (%)	26	28	27
Household income	below average	below average	below average
Household size	78% in one or two person households (34% of them in one person households)	82% in one or two person households (36% of them in one person households)	30% in one person households 43% in two person households

Type 2: Occasional User

	2009	2010	2011
Average age (years)	41.9	45.4	46.8
Percentage of woman (%)	55	53	64
Education level	basic and medium formal	basic and medium formal	basic and medium formal
Professional activity (%)	56	55	53
Household income	average	average	slightly below average
Household size	88% households with two and more persons	85% households with two and more persons	81% households with two and more persons

Type 3: Professional User

	2009	2010	2011
Average age (years)	42.2	44.8	47.8
Percentage of woman (%)	48	60	70
Education level	basic and medium formal	basic and medium formal	medium formal
Professional activity (%)	85	75	80
Household income	above average (33% more than 2500 EUR/month)	above average (31% more than 2500 EUR/month)	above average (43% more than 2500 EUR/month)
Household size	84% households with two and more persons; 52% with three and more persons	85% households with two and more persons; 49% with three and more persons	33% households with in one person; 37% with two person

Type 4: Trend User

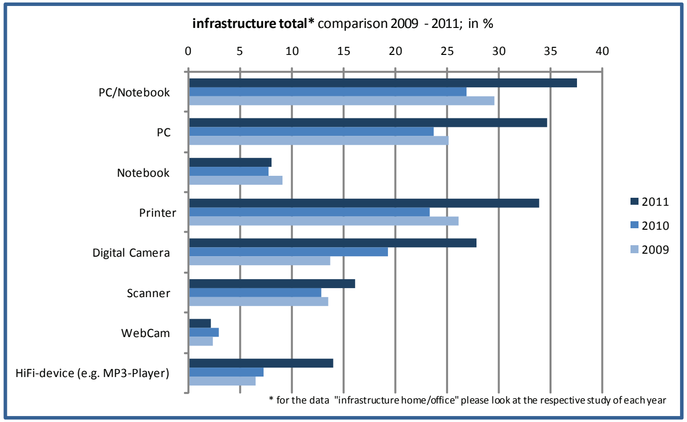
	2009	2010	2011
Average age (years)	35.9	36.9	37.5
Percentage of woman (%)	22	37	35
Education level	medium formal (40%), pupils (13%)	medium formal (38%), pupils (13%)	medium to high formal
Professional activity (%)	65, pupils (13%)	53, pupils (13%)	55
Household income	above average (34% more than 2500 EUR/month)	slightly above average (26% more than 2500 EUR/month)	above average (38% more than 2500 EUR/month)
Household size	56% households with three and more persons; or partnerships	52% households with three and more persons; 35% with two persons	47% households with three and more persons; 42% with two persons

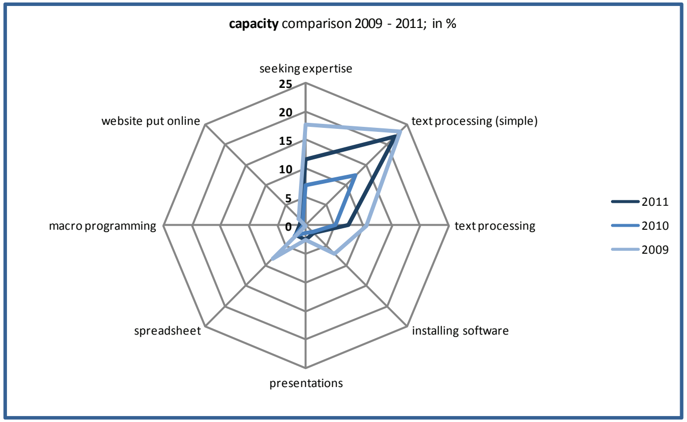
Type 5: Digital Professionals

	2009	2010	2011
Average age (years)	36.1	38.4	37.2
Percentage of woman (%)	34	38	31
Education level	high formal (40% with university degree)	high formal (36% with university degree)	Above average high formal
Professional activity (%)	81	86	87
Household income	well above average (51% more than 2500 EUR/ month)	highest average household income	highest average household income
Household size	84% households with two and more persons; 33% of them with two persons	41% households with two persons; 24% single-households	25% households with three persons; 29% with four persons

Type 6: Digital Avant-garde

	2009	2010	2011
Average age (years)	30.5	33.8	34
Percentage of woman (%)	40	47	28
Education level	high formal (40% with university degree); 9% pupils	high formal (49% with university degree)	medium to high formal
Professional activity (%)	74	68	79
Household income	slightly below average (52% less than 2500 EUR/ month)	above average	above average
Household size	26% single-households	no characteristics	26% single-housholds; 38% households with two persons


infrastructure total* comparison 2009 - 2011; in %
0
5
10
15
20
25
30
35
40
PC/Notebook
PC
Notebook
Printer
Digital Camera
Scanner
WebCam
HiFi-device (e.g. MP3-Player)
2011
2010
2009
* for the data "infrastructure home/office" please look at the respective study of each year


capacity comparison 2009 - 2011; in %
seeking expertise
text processing (simple)
text processing
installing software
presentations
spreadsheet
macro programming
website put online
25
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15
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2011
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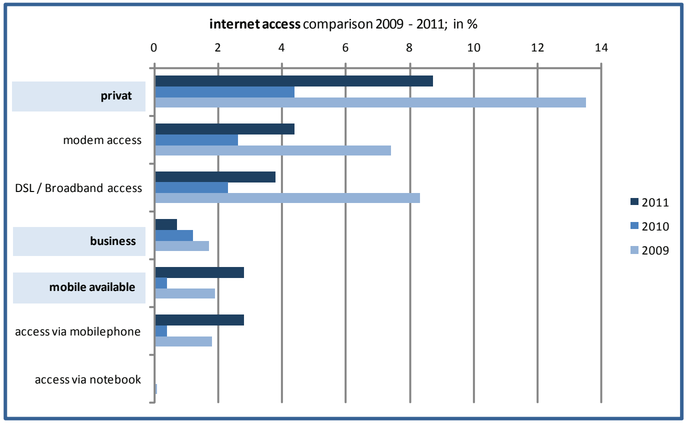
2009


internet access comparison 2009 - 2011; in %
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2
4
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8
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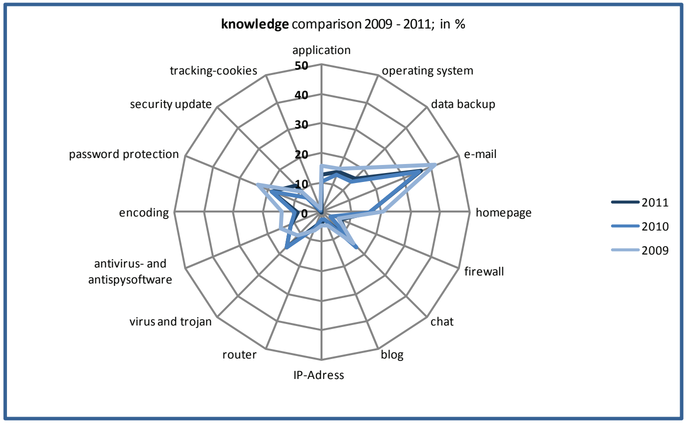
12
14
privat
modem access
DSL / Broadband access
business
mobile available
access via mobilephone
access via notebook
2011
2010
2009


knowledge comparison 2009 - 2011; in %
application
operating system
data backup
e-mail
homepage
firewall
chat
blog
IP-Adress
router
virus and trojan
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encoding
password protection
security update
tracking-cookies
50
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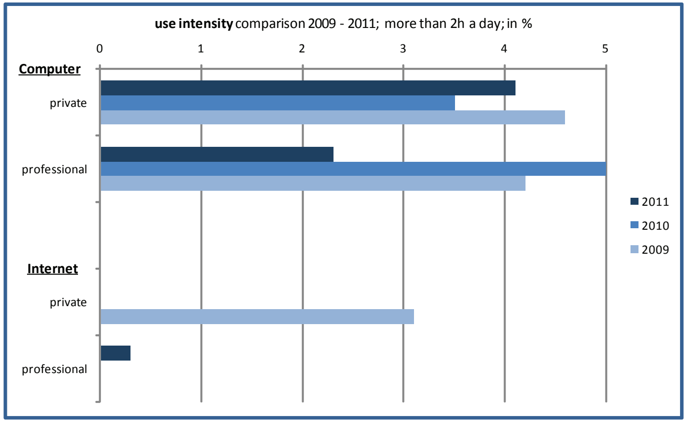
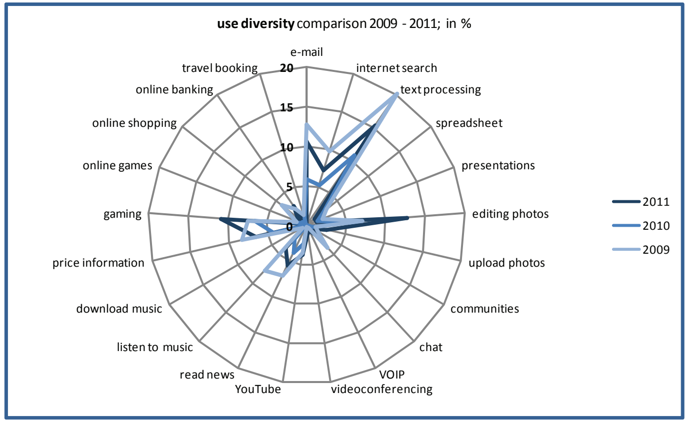
2009



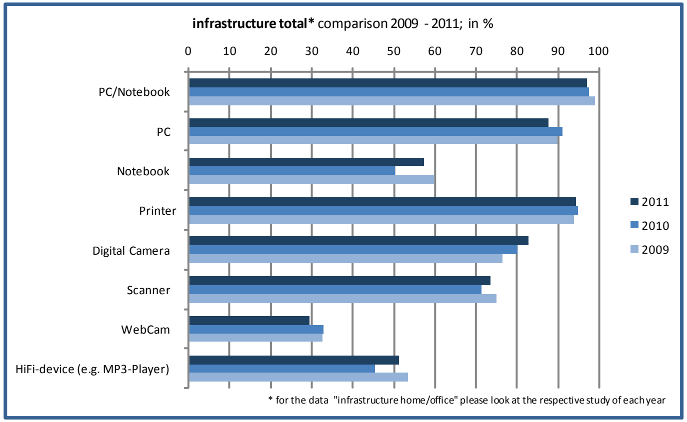


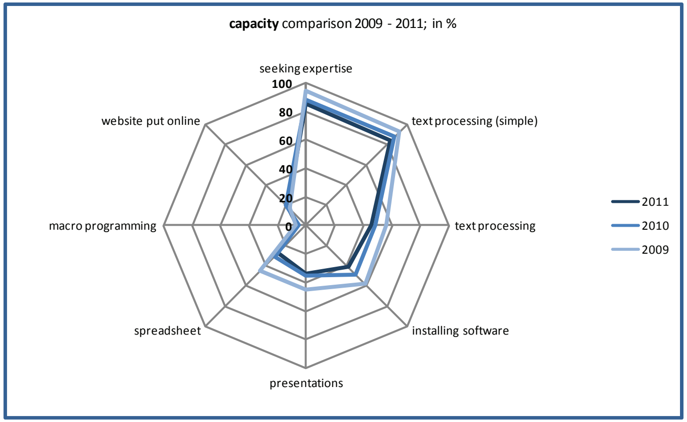
The number of the digital outsider is shrinking constantly to 26% in 2011. The digital potential of the digital outsider is after a severe relapse in 2010 again increasing. With the exception of infrastructure all topics are showing this trend. But still even 10% don't have a private internet access. Just the business internet access shows a constant slight increase from about half percent in 2009 to nearly 2% in 2011. The internet access via notebook is 0%. In contrast to this trend the infrastructure increased. The digital outsider has the largest capacity in the simple text processing and the seeking expertise. Almost 40% know what an e-mail is. 35% have a PC and 34% a printer.

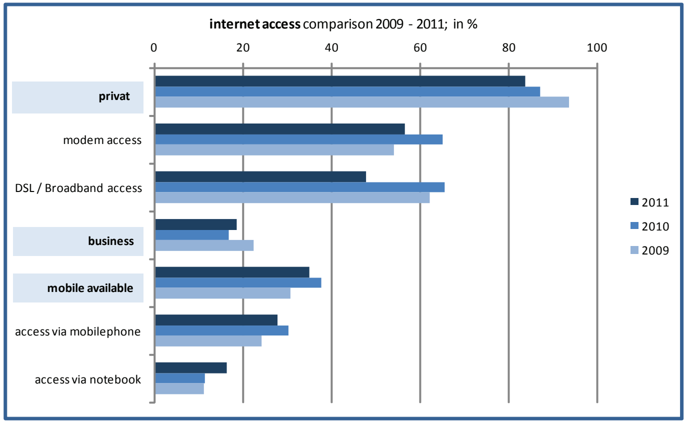
In 2009 this value was at 25% resp. 26%. The division attitudes and usage draw a similar picture. The use intensity decreased heavily, especially the professional use of the computer, relapsed from 5% in 2010 to 2.3% in 2011. The computer is most frequently used for text processing, editing photos and checking e-mails.

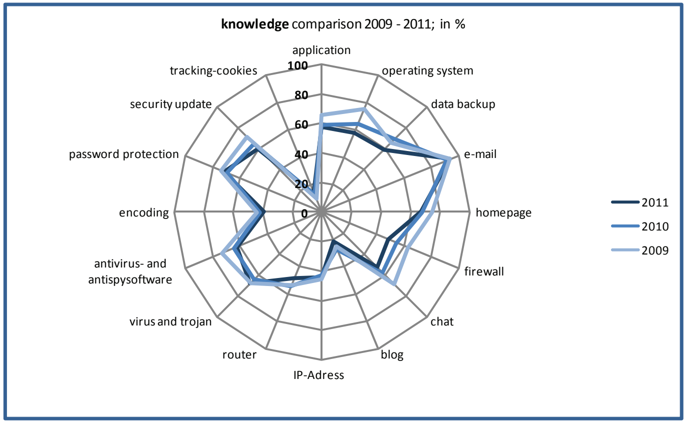
The reason for the severe relapse in 2010 might be an upset in this part of the society, particularly due to the data and consumer protection. There is a recovery observed in 2011.

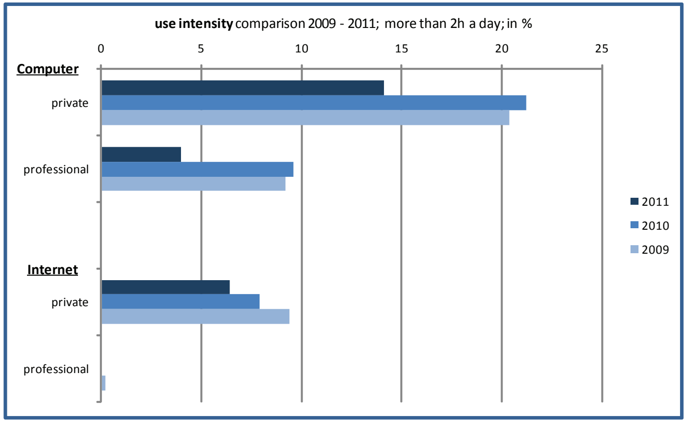
Occasional User: Digital Potential

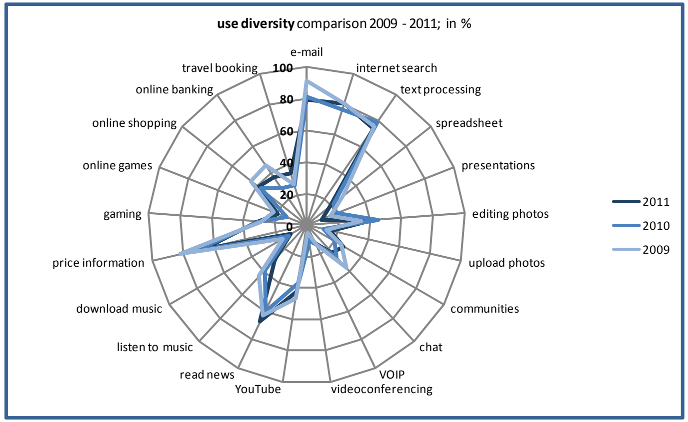












The number of the occasional user shrank slightly from 30% in 2009 to 28% in 2011. The digital potential of the occasional user is much higher than the digital outsider. While the values of the digital outsider can be stated in the lower range (not more than 40%) the occasional user reaches values up to almost 100%.

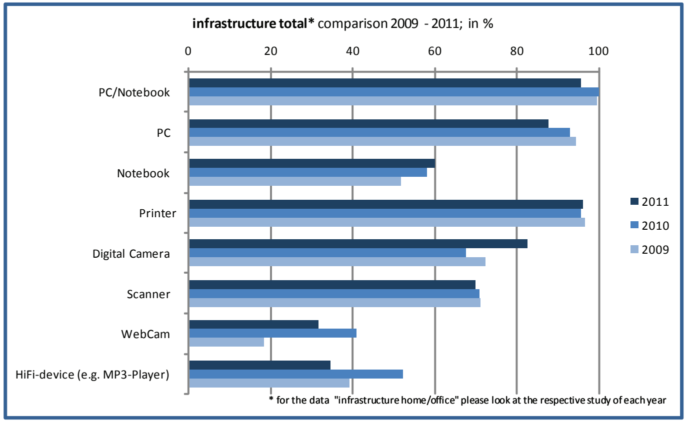
Nearly everyone has a PC/Notebook and a printer. The value of user with a digital camera is increasing constantly from 76.5% in 2009 to 83% in 2011. The private internet access is decreasing steadily. Compared over the years the capacity and the knowledge are also decreasing.

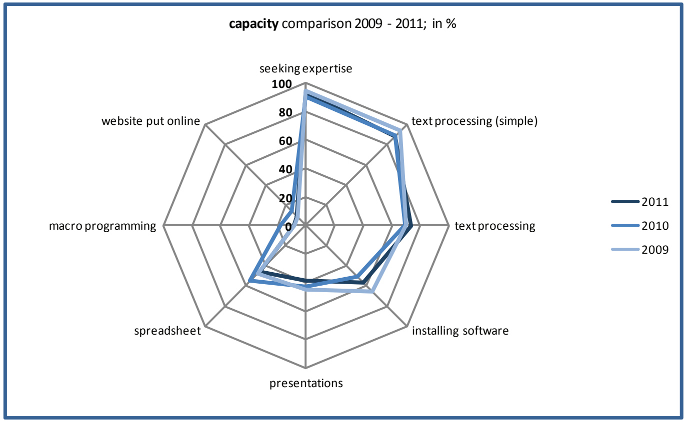
Similar to digital outsider the majority master text processing and internet research. E-mail, password protection and security update are well known terms.

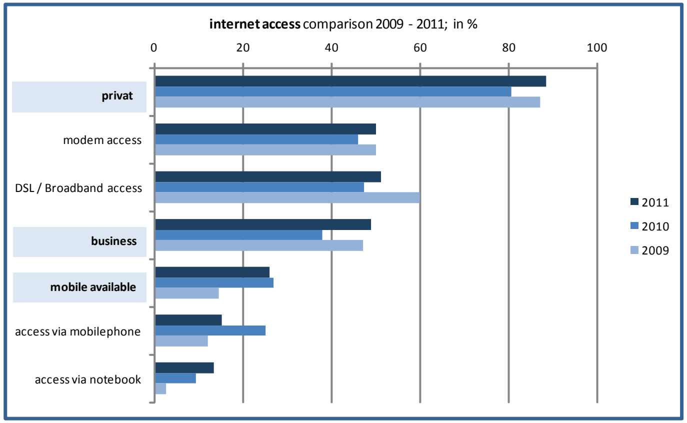
On the other hand, in the field of attitudes and usage, the use intensity of the computer and the internet is decreasing. Professional internet using does not exist. The occasional user is mainly checking e-mails, text processing and informing about prices.

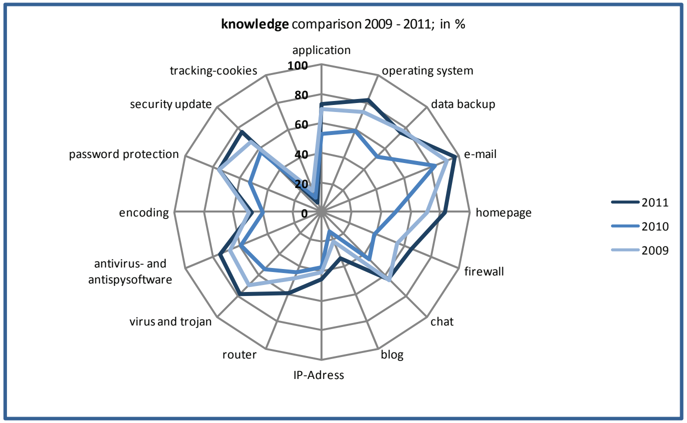
In this user category there is also a general decrease. The reason could be the same, the upset due to data and consumer protection.

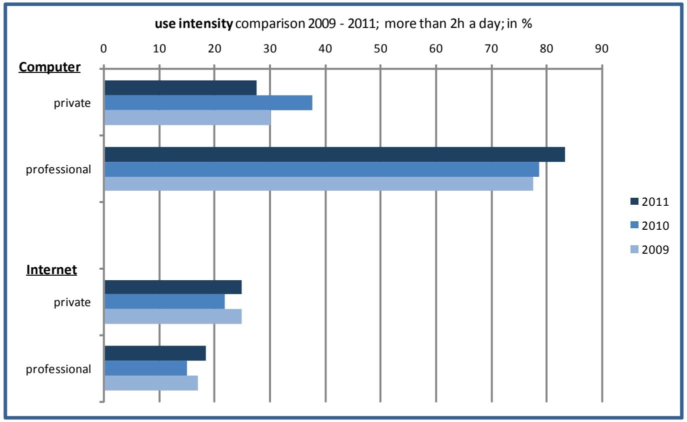
Professional User: Digital Potential

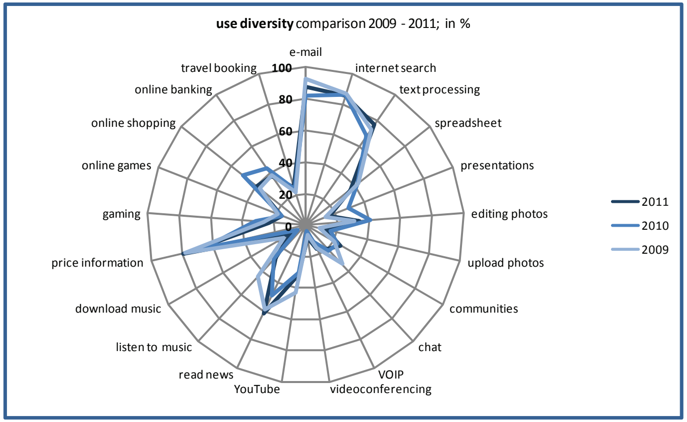






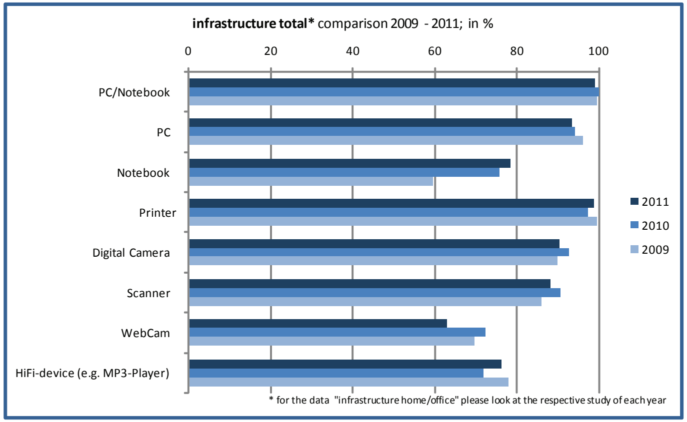






The professional user has just a proportion of 7% in 2011. This value was in 2009 about 9%. This small group of the digital society is well equipped, the property of notebooks increased from 52% in 2009 to 60% in 2011. But conversely the broadband access decreased from 60% in 2009 to 51% in 2011. The mobile internet access via notebook has reached a value of 13.5% in 2011 (in 2009 not even 3%). Approximately half of the professional users have business internet access. The capacity and knowledge show similar characteristics as referred to the occasional users. But in contrast to them the professional user extended his knowledge.

The professional computer usage increased from 77.5% in 2009 to 83.3% in 2011. And the first time a professional internet usage is present (18.4% in 2011).


infrastructure total* comparison 2009 - 2011; in %
0
20
40
60
80
100
PC/Notebook
PC
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Printer
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WebCam
HiFi-device (e.g. MP3-Player)
2011
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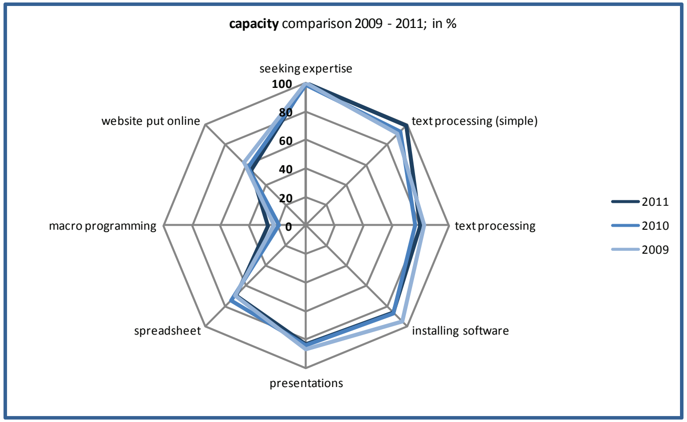
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website put online
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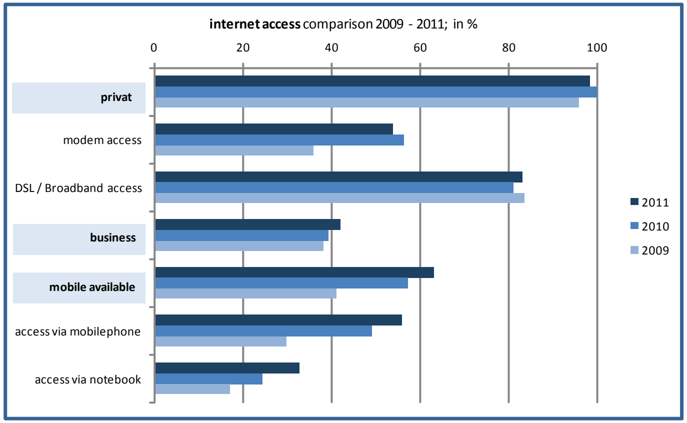
internet access comparison 2009 - 2011; in %
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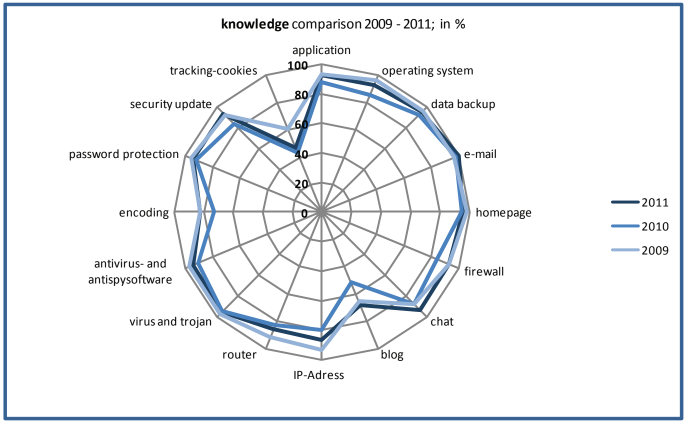
100
privat
modem access
DSL / Broadband access
business
mobile available
access via mobilephone
access via notebook
2011
2010
2009


knowledge comparison 2009 - 2011; in %
application
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homepage
firewall
chat
blog
IP-Adress
router
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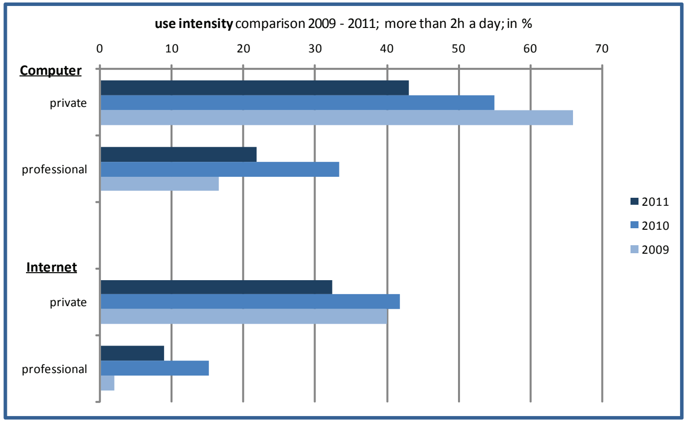
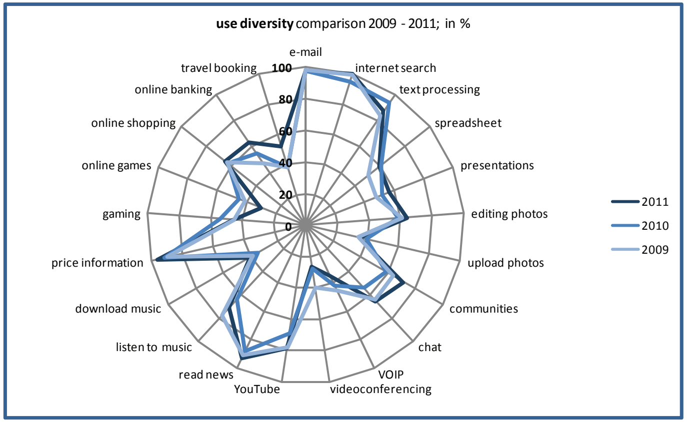
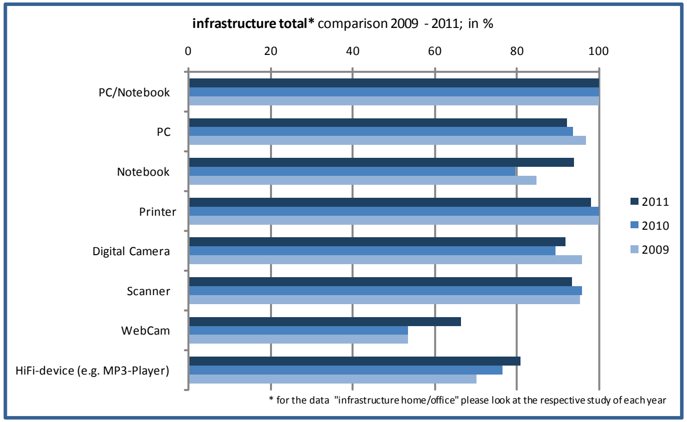




The transition from professional user to trend user shows a distinctive change. The first three categories can be labeled as beginner. The trend user is much more professional than the first three groups and is claiming more and more a larger space in the digital society. 2009 were just 11% categorized as trend users; this value grew to 21% in 2011.

The infrastructure is well developed, especially the value of notebook increased from 60% in 2009 to 78% in 2011. The mobile internet access in general is getting much better. Very conspicuous is the growth of the mobile internet access. But due to the development in technologies (smartphones, tablets) this trend is not unexpected. Compared to the previous groups the trend user has more capacity and much better knowledge. Nearly every term the user can assign.

Surprisingly the private computer usage intensity decreased heavily from 66% in 2009 to 43% in 2011. Also the private internet usage intensity shrank from 40% in 2009 to 32.4% in 2011. In contrast, the professional usage intensity grew in both categories. The use diversity is more pronounced (e.g. upload photos, VoIP or gaming); also an increase of travel booking can be noticed.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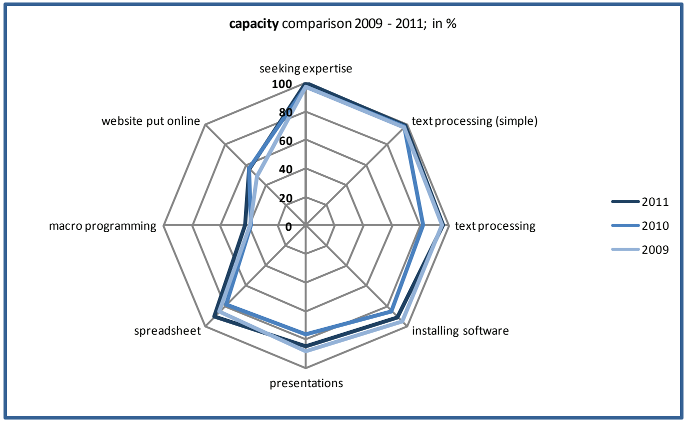
capacity comparison 2009 - 2011; in %
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text processing (simple)
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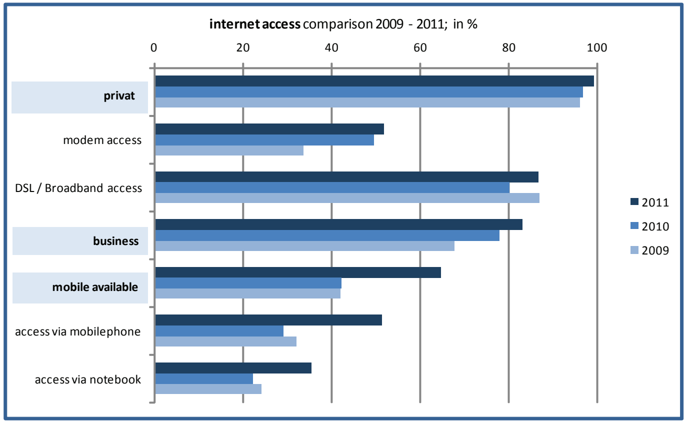
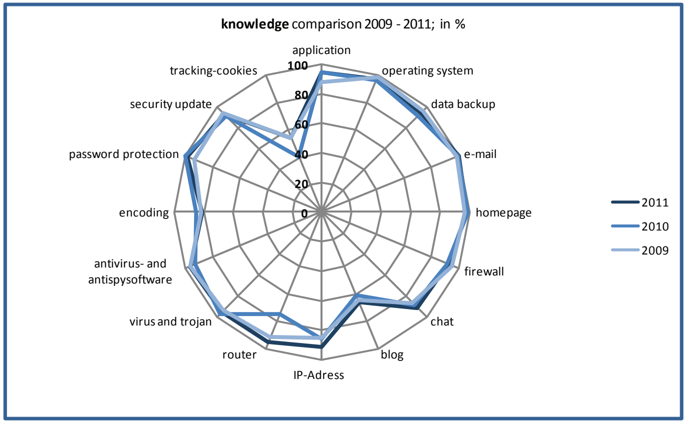

internet access comparison 2009 - 2011; in %
0
20
40
60
80
100
privat
modem access
DSL / Broadband access
business
mobile available
access via mobilephone
access via notebook
2011
2010
2009


knowledge comparison 2009 - 2011; in %
application
operating system
data backup
e-mail
homepage
firewall
chat
blog
IP-Adress
router
virus and trojan
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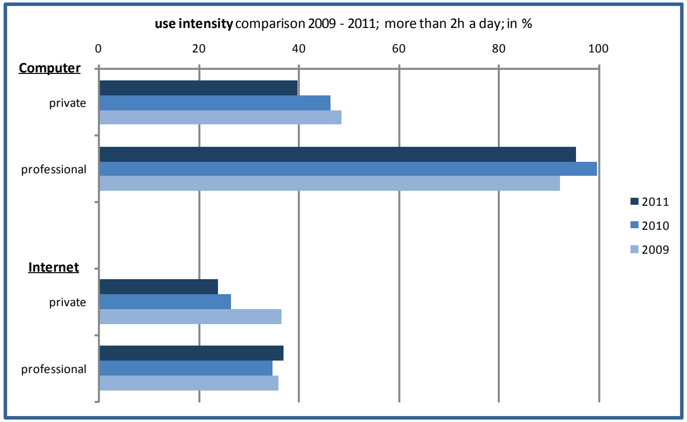
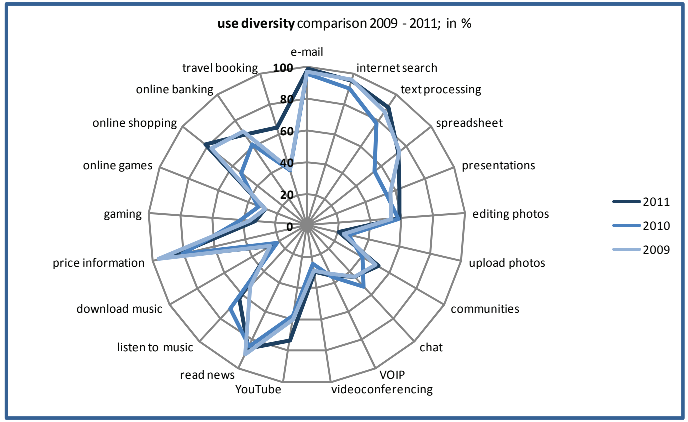
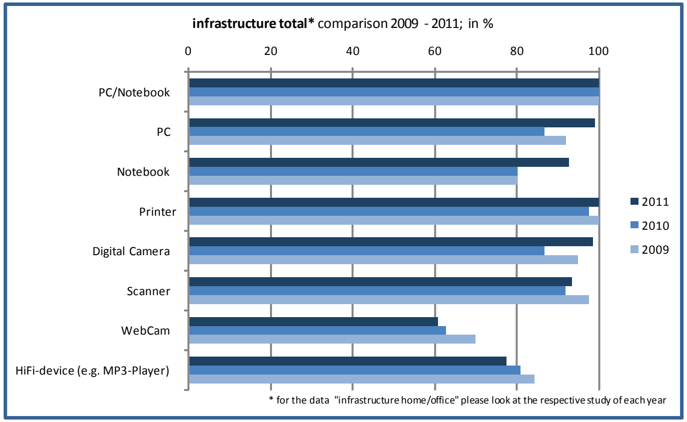


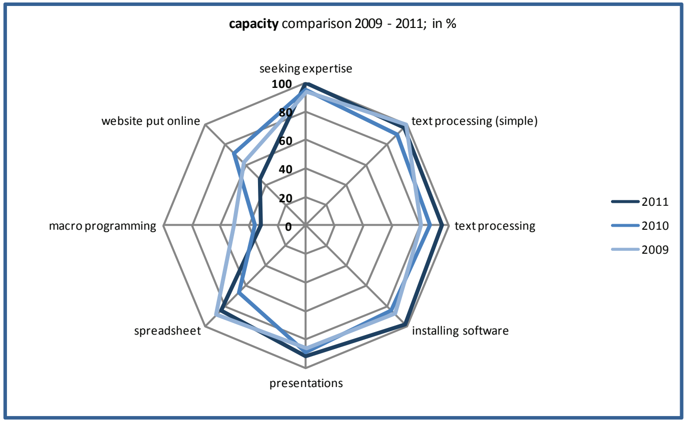


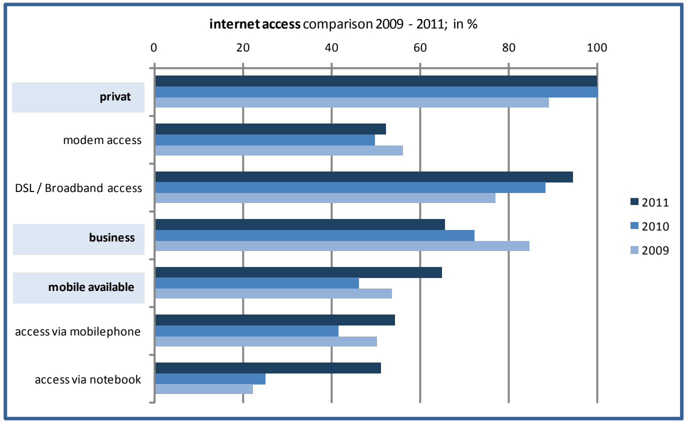
The proportion of the digital professional within the digital society over the years has remained constant (12%). In addition to the good infrastructure the percentage of notebooks, webcams and HiFi-devices increased. In the category internet access every possibility has grown but especially the mobile internet access (from 32% in 2009 to 65% in 2011). This is due to the technology, similar to the trend user. A difference to them has to be seen in the capacity of macro programming. An increase of about 20% may be listed here. For the digital professional nearly every ICT term is well known, except of tracking cookies with a value of about 60% and blogs with about 65%.

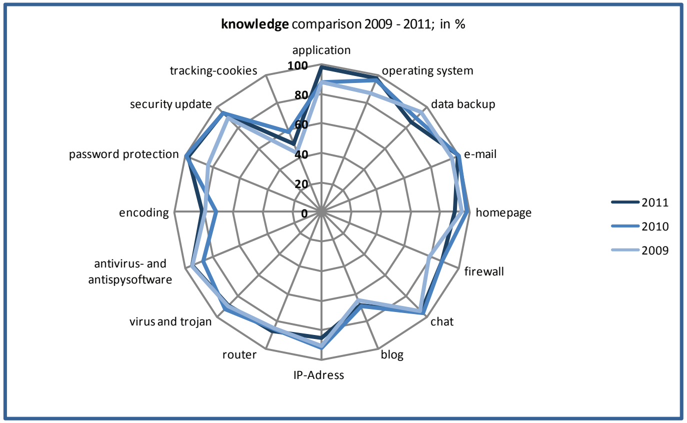
In contrast to the digital potential the attitudes and usages don't show a unique picture of increase. For example the private computer usage is shrinking constantly but the professional computer usage is growing. A look at the use diversity primarily shows a marked increase in travel booking, YouTube and presentations. Online shopping and spreadsheet are making the difference of this user type in comparison to the trend user.

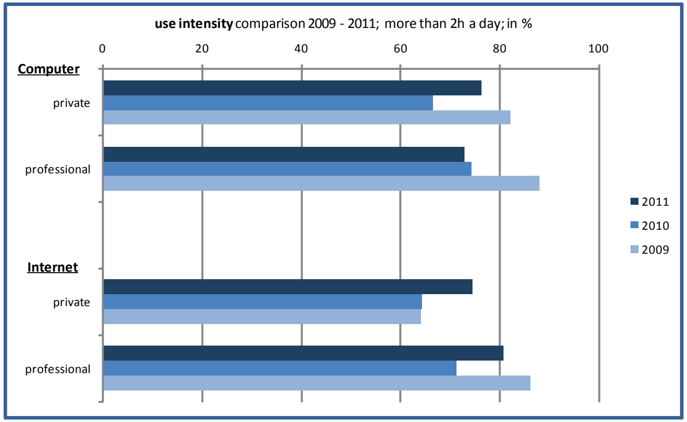
Digital Avant-garde: Digital Potential

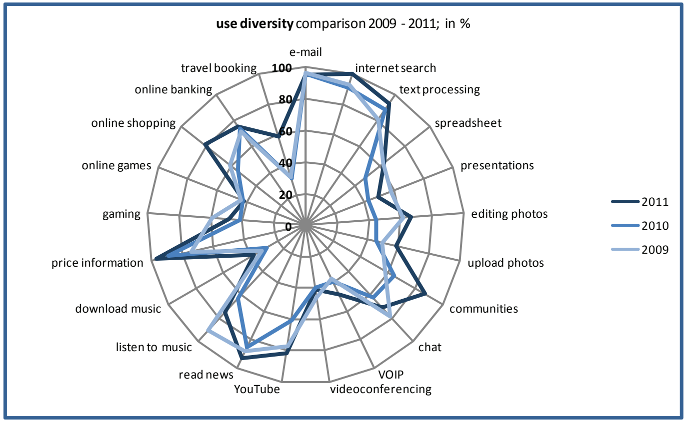












The last group of this categorization is the digital avant-garde with a slight increase of 2% in two years to 5%. The members of this very small group are digital specialists and are very well equipped. Nevertheless there is a decrease in webcam and HiFi-devices. The comparison of the internet access over the years shows a distinctive increase especially in the mobile availability (particularly via notebook from 22% in 2009 to 52% in 2011), private broadband access (from 77% in 2009 to 95% in 2011) and a decrease in business internet access (from 85% in 2009 to 65% in 2011).

The capacity grew in text processing (in two years from 80% to 95%) and software installing (in two years from 88% to 98%); but in macro programming (in two years from 51% to 31%) and putting website online (in two years from 62% to 46%) it shrank. The picture of the knowledge is similar to the user type digital professional.

The use intensity of computer and internet is decreasing (except of private internet use intensity). An increase in the use diversity is in travel booking, communities, online shopping and internet search.

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