

Czech Internet report: The rise of the Internet generation?

David Šmahel

Institute of Children, Youth and Family Research

Faculty of Social Studies, Masaryk University in Brno, Czech Republic

Introduction

The World Internet Project is a worldwide project which aims at realising a long-term study examining the influence of computers, the Internet and related technologies on the individual, family and society. The project has been organised by the Center for the Digital Future at USC Annenberg (<http://www.digitalcenter.org>) in the USA. Within the framework of this project, the first survey was carried out in 1999 in the USA; currently, there are over 20 countries participating in the project (USA, Great Britain, Germany, Italy, Japan, Spain, South Korea, Hungary, etc.). In the Czech Republic, the project is funded by a grant provided by the Ministry of Education, entitled "World Internet Project – Czech Republic", the first survey in the Czech Republic was carried out in September 2005. Therefore, the Czech Republic has participated in the "World Internet Project" since 2005¹.

The submitted paper aims at presenting 10 fundamental trends in the Internet development in the USA, as stated in the American report from 2004 "Ten Years, Ten Trends" (Cole et al, 2004). Furthermore, we intend to compare several basic characteristics of the Internet use in the USA and the Czech Republic; and finally, we are going to present the first results obtained within the Czech contribution to the project leading to the question mentioned in the article heading: "The rise of the Internet generation?"

Ten Years, Ten Trends of the American Internet

Let us begin with the ten trends of the Internet development in the USA, as described in the report issued by the "Center for Digital Future" (Cole et al, 2004):

(1) The report claims that in the USA, the much dreaded "digital divide" is nearly closed: 75% of the population can access the Internet from some location, and simultaneously, the Internet use has shown the fastest growth among those groups that were once considered

¹ The presented research was supported by the Czech Ministry of Education, Youth and Sports (VZ 0021622406 and 1P05ME751).

the first victims of the digital divide: Latinos, African Americans, older Americans, etc. Consequently, provided that it is understood as the Internet accessibility for the population, the "digital divide" does not exist. However, the "digital divide" still exists as far as the Internet accessibility at home is concerned; furthermore, a new digital divide has appeared among users with and without a broadband connection, or respectively between a broadband vs. dial-up connection.

(2) Internet users have taken their time for using it from the time they previously spent watching television. According to the research, it has been shown that, contrary to watching television, the Internet has had a less negative impact on other social activities, such as time spent with the family or friends, doing exercise, sleep, and hobbies. What is more, similar trends have been observed in all the countries participating in the World Internet Project.

What is interesting is the fact how Americans assess the role of television vs. the Internet after 11 September 2001: the Internet has played an important but not a compelling role in gathering information; television was much more important in terms of acquiring information quickly. However, it was email that played an important role following 11 September: people used the email to communicate with each other, and a quarter of Americans claimed that that had received a message from people outside the US territory.

(3) According to the report, the credibility of the Internet is dropping. When asked "how much information on the world wide web is reliable and accurate", those who said most or all information was reliable totalled 55% Americans in 2000, 58% in 2001, 53% in 2002, and 50% in 2003. Such result may also be, however, interpreted in a way that people are becoming more and more aware of the necessity to select credible information on the Internet; they tend to believe less the Internet as a whole and they tend to be more critical towards the credibility selection of individual web pages.

(4) The report mentions that in the past year, there have been changes in users' approach towards buying online. Although the concerns about credit card security while buying online remain high, their intensity is declining. Although many users previously said "I am concerned and not buying", these days, they are saying "I'm concerned but less concerned and I am buying". Whereas the Internet use continues to grow, online shopping is rising dramatically.

(5) It has also been shown that the Internet does not put social life of users at risk. According to the survey results, the Internet has little or no impact on the amount of time spent with family or friends, sleeping, doing exercise or pursuing hobbies and interests. As mentioned above, the only medium endangered by the arrival of the Internet is television, which may

hardly be perceived as a negative phenomenon. It has even been revealed that Internet users tend to be more socially active than non-users. It is not possible, however, to seek a causal link in a sense that the Internet "causes" a higher social activity of its users. Thanks to email and "instant messaging" applications, the Internet is also becoming a useful tool to build relationships; Internet users tend to communicate with others more, not less, than non-users.

(6) The report claims that privacy and security concerns on the Internet are still persistent among Americans, yet their intensity is decreasing. Users are concerned not only about personal security (such as credit card use) but also about companies or individuals tracking what they do online. Therefore, the issues are broader than traditional concerns about credit card use or purchasing issues; the concerns are related to email monitoring, virtual identity "theft", data security of the home PC with a broadband connection, online users monitoring, etc.

7) According to the report, the Internet has become a major source of current information for users. Although such result does not seem to be surprising, it is interesting that this function has been stronger primarily among broadband connection users: this is, above all, to its "always-on" feature. What is also interesting is the existence of a difference between searching for information on general subjects and searching for information during a crisis such as 11 September. While the Internet is clearly a dominant source of general information, it is television that reigns in the time of a crisis.

8) Another important issue is the Internet use among children and whether parents should potentially monitor such activities. The Internet opens access to a large number of information and entertainment to children; on the other hand, it is also strewn with pitfalls. When respondents aged under 18 years were asked about the importance of the Internet for their schoolwork, 4% claimed that it was not important at all, 35% said it was quite important, 40% very important, and 22% extremely important.

9) E-mail is the most important reason why people go online. E-mail opens opportunities to communicate more often with people, also broadening the circle of people for communication: we would not contact some of them via telephone or (ordinary) mail. E-mail is the need and, at the same time, a source of irritation – Internet users are irritated by spam, inbox overload, or long time commitments required to respond. No Internet user wants to get rid of their e-mail, but many of them are tired of email defining their lives.

10) According to last trend mentioned in the American report, broadband will change everything – again! The report claims that broadband is changing entirely the behaviour and

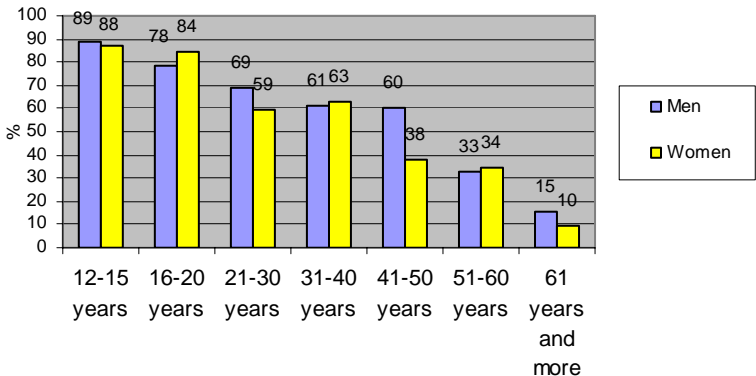
relationship of home users to the Internet – how often they go online, how often they stay online, and what they do online. Naturally, time spent online is significantly higher among broadband users; it is important, however, that their behaviour also changes – broadband users tend to use the Internet in a different way. Interestingly, the “always-on” function tends to be more important than the broadband speed: it is this function that is, according to the report's authors, the main reason for the change in behaviour of broadband users.

Comparison of the Internet Use in the Czech Republic and USA

We have described, in brief, 10 trends of the American Internet, as presented in the report issued by the “Center for Digital Future”. Since the USA is one of the most Internet-developed countries in the world, it may be expected that at least some of these trends will appear in the Czech Republic and Europe in the future. Now, we intend to describe shortly the comparison of the Internet development in the Czech Republic and the USA. Data in the Czech Republic were collected in September 2005, there were 1,832 respondents participating in the survey; data in the USA were collected from January to March 2005, surveying 2,072 respondents. Both surveys were representative with respect to the population of the given country and they were carried out within the framework of the “World Internet Project”.

In the Czech Republic, the Internet use totals 49.6% of the population, while the Internet is used by 53.9% men and 46.1% women. Graph No. 1 describes the Internet penetration in the Czech Republic according to the respondent's sex and age.

Graph 1: Internet penetration in the Czech Republic according to the age and sex

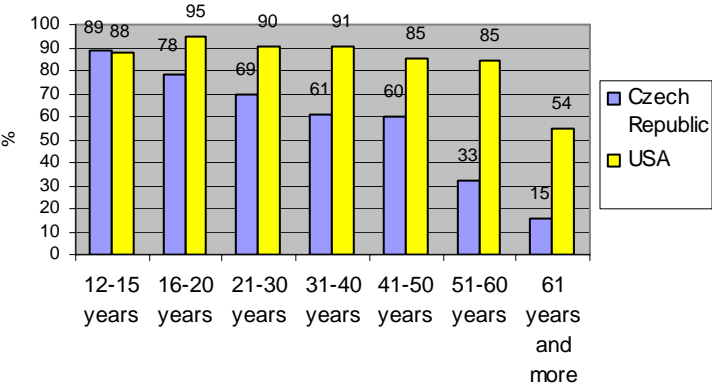


The results seem unambiguous: the younger the person, the more they tend to use the Internet. 88% of the youngest adolescents aged under 15 years use the Internet, whereas

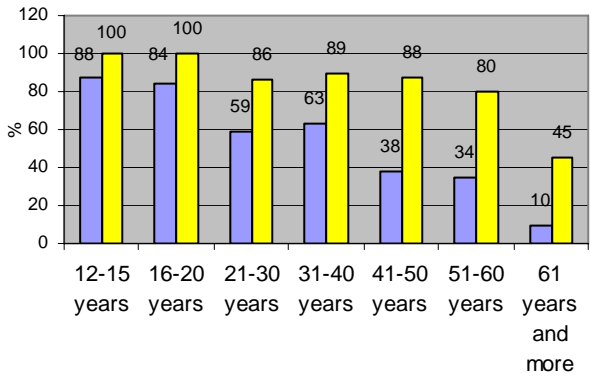
the result does not merely depend on the “school use” of the Internet – surprisingly, only 4% of the youngest respondents use the Internet at school, and similarly, only 7% of adolescents aged between 16 and 20 years use the Internet exclusively at school. The chart shows, above all, the existence of the “digital divide” in the Czech Republic; the differences as far as the age is concerned are tremendous.

Let us look at the comparison of the Internet penetration in the Czech Republic and the USA – Graphs No. 2 and 3 show individual comparisons for men and women.

Graph 2: Internet penetration according to the age (MEN only)



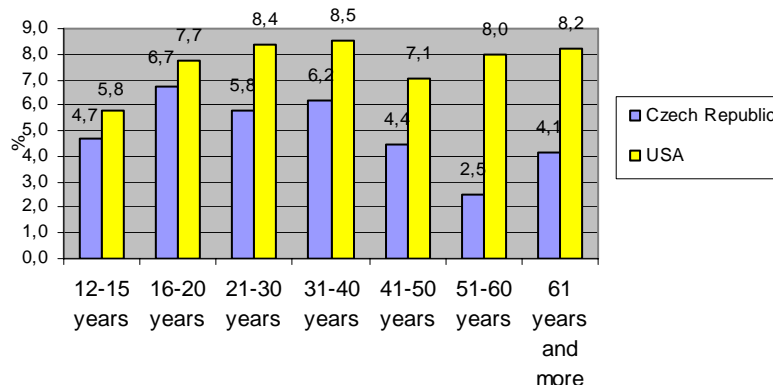
Graph 3: Internet penetration according to the age (WOMEN only)



Apparently, the differences in the Internet penetration in the USA are relatively small until 60 years of age; it is only the group of people aged 61 years and more who use the Internet significantly less than others. In the original sense, the “digital divide” has almost disappeared in the USA, which is contrary to the current situation in the Czech Republic. From the point of view of comparing the Czech Republic and the USA, a similar Internet penetration may only be found in the group of boys aged between 12 – 15 years; with the growing age, the differences are becoming substantially deeper.

Graph No. 4 shows average numbers of hours per week people spend using the Internet at home in the Czech Republic and the USA (only including those who use the Internet).

Graph 4 : Internet use at home - hours on average weekly



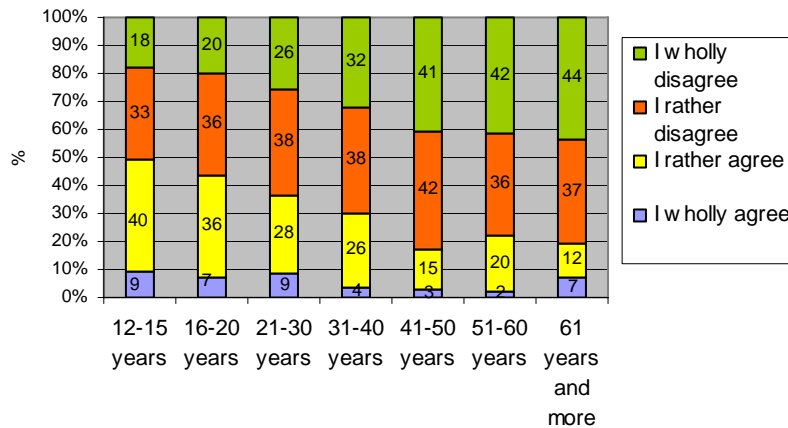
Again, similar trends may be observed as in the case of comparing the Internet penetration: the smallest differences in the extent of using the Internet have been found among the youngest age groups, whereas they are growing with respondents' age. From the point of view of the Internet use among older age groups, the total difference amounts to the sum of both mentioned charts: for instance, in the Czech Republic, approximately 12% of 61-and-more year olds use the Internet, spending on average 4.1 hours a week online (home access), whereas in the USA, approximately 50% of the population aged 61 years and more use the Internet, spending on average 8.2 hours online a week. In the future, the Czech Republic might expect similar trends to what has been observed in the USA: bridging the "digital divide" is the target to which we should aspire.

Rise of the Internet Generation?

When surveying Czech population, it has been revealed that there are not only intergenerational differences related to the Internet penetration as a whole, but also huge differences, from the point of view of respondents' age, among those who already use the Internet, both in the way of using the Internet, and in its perception as a means of communication. One of the survey questions was the following:

"I find it easier to express myself on the Internet than in a normal conversation", while a respondent was provided with such scale: "I wholly agree", "I rather agree", "I rather disagree", and "I wholly disagree" (the same scale was also used for the subsequent questions). In total, 32% of the respondents agreed with this question, the difference between men and women not being statistically significant. The results of the surveyed respondents, with respect to their age, are shown in Graph No. 5.

Graph 5: "I find it easier to express myself on the Internet than in a normal conversation" according to the age



It seems that it is younger age categories who tend to agree to a significantly higher extent with the statement that it is easier for them to express themselves on the Internet than in a normal conversation, the result being statistically significant [$\chi^2(1, N = 899) = 62.34, p = .000, \phi = 0.263$]. What is more, a total of 49% of adolescents aged between 12 and 15 years agreed with the above mentioned statement, whereas only 19% of those aged over 61 years expressed their consent. Apparently, younger generations seem to be better at expressing themselves on the Internet than in face-to-face conversation.

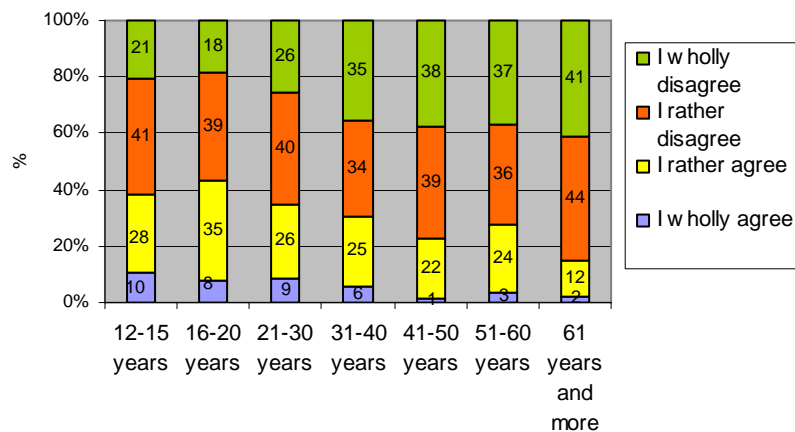
From the point of view of age, there have been equally significant differences in responses to the following question: "I can better express my emotions (feelings, senses) on the Internet". 27% of the population agreed with the statement without any statistically significant difference between men and women. A total of 40% respondents aged between 12 and 15 years agreed with the statement, and the same opinion was expressed by 33% respondents aged between 16 and 20 years, whereas among those aged 51 – 60 years the number of affirmative replies totalled to 21%, and among respondents over 61 years of age, it was only 17% [$\chi^2(1, N = 899) = 59.74, p = .000, \phi = 0.258$]. Apparently, younger people, once again, tend to perceive the expression of their emotion via the Internet to be easier.

The third question through which we present the differences in the perception of the Internet among various age groups was dealt with a more open approach in virtual environment. The exact wording of the question was as follows: "I am more open on the Internet than in reality". In total, 32% of the population agreed with the question, i.e. a third of the population claimed to be more open on the Internet than in reality. Interestingly, however, there is a statistically significant difference between men and women: it is men who, contrary

to women, tend to claim more often to have a more open approach on the Internet than in reality [$t = -2.32$, $df = 896$, $p = .021$]. When testing the differences between both sexes in various age groups, it has been found that there are no statistically significant differences among adolescents aged 12 – 20 years [$t = -0.71$, $df = 243$, $p = .478$], in other words, that adolescents boys and girls are more open on the Internet to a similar extent. On the contrary, statistically significant differences between men and have been found in the age group of 21 – 50 years [$t = -3.05$, $df = 518$, $p = .002$].

The respondents' replies, according to their age, are shown in Graph No. 6.

Graph 6: "I am more open on the Internet than in reality" according to the age



With respect to respondents' age, we may once again see large (statistically significant) differences [$\chi^2(1, N = 897) = 43.52$, $p = .001$, $\phi = 0.220$]. It is the group of 16 – 20 years olds who tend to perceive themselves to be the most open on the Internet: a total of 43% of them agreed to that question, whereas the same reply was obtained by 38% of those aged 12 – 20 years. On the other hand, only 14% of the respondents over 61 years of age share the same opinion and 27% of those aged 51 – 60 years. Thus, it is younger age groups who tend to claim more often to be more open on the Internet than in reality.

Conclusions

At the beginning of the submitted paper, we presented 10 trends of the American internet as described by the report issued by the "Center for Digital Future" (Cole et al, 2004). In the context of the article and comparison with the Czech Republic, the trends related to the slowly disappearing "digital divide" seem to have a particular importance: in the USA, the

groups that, on a long term basis, previously used the Internet significantly less are going online more and more frequently (Latinos, African Americans, older groups of people, etc.). The comparison of the Internet penetration between the USA and the Czech Republic was shown in Graphs No. 2 and 3, whereas the differences in the use of the Internet found, in particular, among older groups of people are substantial. In the long-term, however, we may expect that the Czech Republic will follow the trends similar to those in the USA, i.e. the "digital divide" will close gradually.

Furthermore, the survey has revealed differences between various age groups not only as far as the Internet penetration is concerned: huge difference among various age groups have been found in the way users perceive the Internet and in the ways they use it as a communication medium. It seems that it is mainly younger age groups who prefer the Internet as a communication medium; they tend to express themselves and their emotions more easily through the Internet, and they tend to be more open online than in reality. The biggest differences have been found between adolescents (approximately under 20 years of age) and other age groups. The question that arises refers to the extent to which the differences in the use and perception of the Internet are actually given by the rise of a new "Internet" generation and the extent to which they are determined by the differences in the Internet use between adolescents and adults. However, there has so far been no direct answer to the question; all we can do is to "guess and estimate" on the basis of several indications. A clear answer may be found after comparing the data with the American survey, which, for the time being, have not been available, though. Since we have been, on the other hand, able to trace differences even between other age groups, excluding "teenagers" and "the others", we tend to incline to the hypothesis of the rise of the "Internet generation". In the following years of the research, we hope to find out how such new generation will behave – it is also possible that the Internet euphoria as a communication tool will gradually fade as the respondents grow older. What is highly probable to have an impact on the situation as a whole, though, is the speed with which new technologies and the Internet are currently developing. The answers to the above mentioned questions may depend, to a large degree, on qualitatively different ways of communication, its increased speed and availability. Ten years ago, who would have claimed that these days there would be 50% of the population online and a third of these people would assert that they express themselves better on the Internet than in the real world? In ten years' time, everything may be completely different again.

References

Cole, I., J. et al (2004). Surveying the Digital Future: Ten Years, Ten Trends. Downloaded 4th November 2005 from: <http://www.digitalcenter.org>