

## **The Role of Internet in a Changing Mediascape: Competitor or Complement?**

**Olle Findahl**, World Internet Institute, Sweden

### **Abstract**

Today Internet has existed as a mass medium during more than ten years and has become an important part of everyday life for a lot of people. What are the effects of this introduction of a new medium in the world of traditional media? What have happened to newspapers, television and radio? It is not only a matter of time; people are spending minutes and hours online instead of reading, listening or viewing. It is also about content; information, news, music and film exist on Internet and to make it even more complicated even newspapers, radio and television exist online. And the content is usually free. So what have happened to traditional media? At first sight it looks like Internet has become a strong competitor, severely affecting the use of newspapers and television. But a more thorough analysis shows that in Sweden Internet has become more of a complement and the use of traditional media go on as before at the same time as the use of the Internet develops and increases.

**Keywords:** internet; ICT; media studies; audience statistics; Sweden.

Today Internet has existed as a mass medium during more than ten years and has become an important part of everyday life for a lot of people. What are the effects of this introduction of a new medium in the world of traditional media? What have happened to newspapers, television and radio? It is not only a matter of time; people are spending minutes and hours online instead of reading, listening or viewing. It is also about content; information, news, music and film exist on the Internet and to make it even more complicated even newspapers, radio and television exist online. And the content is usually free. So what have happened to traditional media?

A common answer is that both television viewing and newspaper reading have declined since Internet was introduced (Kraut, et al., 1998; Haythornthwaite & Wellman, 2002; Nie & Erbring, 2000). And it is true that many newspapers have had economical problems during the last years and that for example the traditional TV-channels in US have lost a part of their audience. But is it the Internet that is to blame? Usually the evidence comes from a comparison of those who are using the Internet and those who are not. A simple comparison that shows that Internet users are spending less time watching television. But it can be a premature conclusion to say that it is the use of the Internet that has caused the decline in television viewing. We know that older people watch more television than younger and that younger people are using Internet more than older people (Findahl, 2007). Thus, the less time spent watching television among Internet users can be an effect of age, not an effect of the Internet. Anyway, a more deep analysis is required.

## Newspapers

Swedes like people in Norway and Finland have a long tradition of reading newspapers. Among adults more than eighty percent are daily readers. Usually they subscribe to a local newspaper. Has this strong tradition been negatively influenced by the increasing number of Swedes who have started to use the Internet?

This suspicion is reinforced by the answers of the users of the Internet. They were asked in what way the Internet use had influenced their traditional newspaper reading? Most of the users answered that they were reading like before, but there were 5-10 percent who said much less and 10-15 percent who said somewhat less. Among the heavier Internet users, more people answered that they were reading much less. There is also a difference between morning newspapers and evening papers. The negative influence at the reading of evening papers is much stronger, according to the subjective judgements of the Internet users.

### 1. Subjective judgement of the influence of Internet use at Newspaper reading

Proportion of Internet users	<i>much less</i>	<i>somewhat less</i>
<i>2000</i>	5	10
<i>2005</i>	7	17
<i>2007 (18+ years)</i>	6	13
<i>2007 (18-29 years)</i>	13	39

### 2. Subjective judgement of the influence of Internet use at Evening paper reading

Proportion of Internet users	<i>much less</i>	<i>somewhat less</i>
<i>2000</i>	9	20
<i>2005</i>	10	25
<i>2007 (18+ years)</i>	12	16
<i>2007 (18-29 years)</i>	21	51

Source: World Internet Institute 2007

Instead of these subjective judgements we can look at how much time, in hours and minutes, that people say they spend reading newspapers. A simple comparison between those who use and not use the Internet 2007 shows a clear difference between the two groups. Internet users read newspapers, on average, two hours and 49 minutes a week, compared to four hours and 3 minutes for those who are not using the Internet. There is also a similar difference when it comes to reading tabloids, evening papers.

3. A comparison of average reading time between those who are using and not using the Internet

18+ years, N= 2017	<i>Reading Newspapers</i>	<i>Reading Evening Papers</i>
<i>No use of Internet</i>	4 hours 3 minutes	1 hour 5 minutes
<i>Internet users</i>	2 hours 49 minutes	39 minutes

Source: World Internet Institute 2007

However, this is not a fair comparison, as there are more old people among those who are not using the Internet, and old people spend more time reading newspapers. If we make the comparison between those who use and not use the Internet inside every age group, the outcome is different. In three age groups the internet users are reading more newspapers, in three age groups there are no differences and in one age group (65-75 years) the internet users are reading less. But when it comes to evening papers the simple comparison holds for most age groups. A tentative conclusion can be that the use of Internet has had a negative influence on the reading of evening papers, but not at the reading of the daily newspaper.

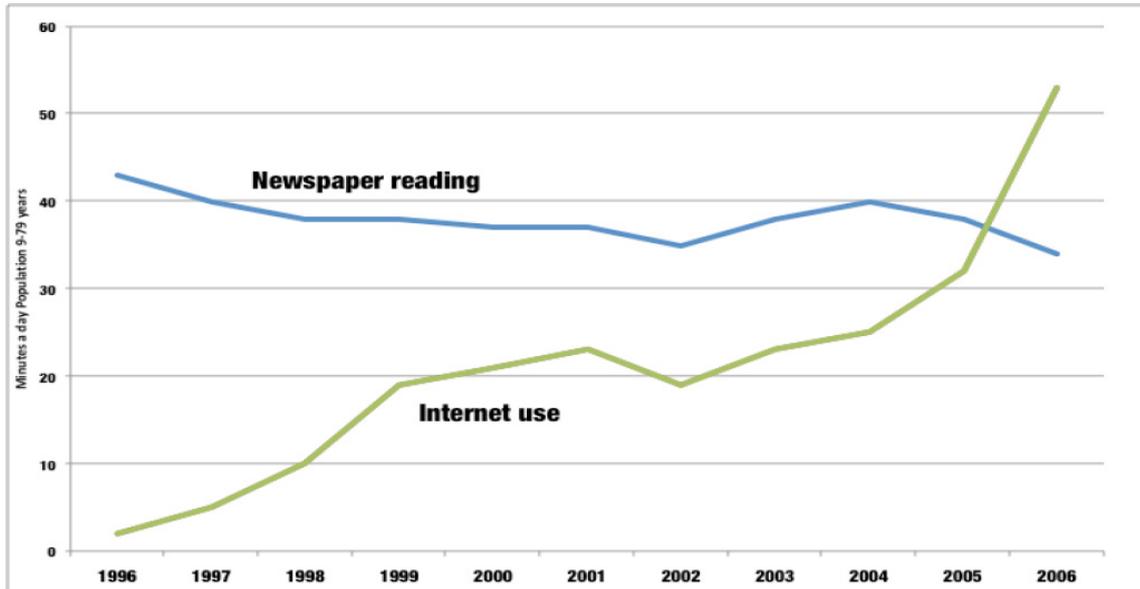
4. A comparison of reading time in seven age groups between those who are using and not using the Internet.

	<i>Internet users read more</i>	<i>No differences</i>	<i>Internet users read less</i>
<i>Newspapers</i>	3 age groups	3 age groups	1 age group
<i>Evening papers</i>	1 age group	2 age groups	4 age groups

Source: World Internet Institute 2007

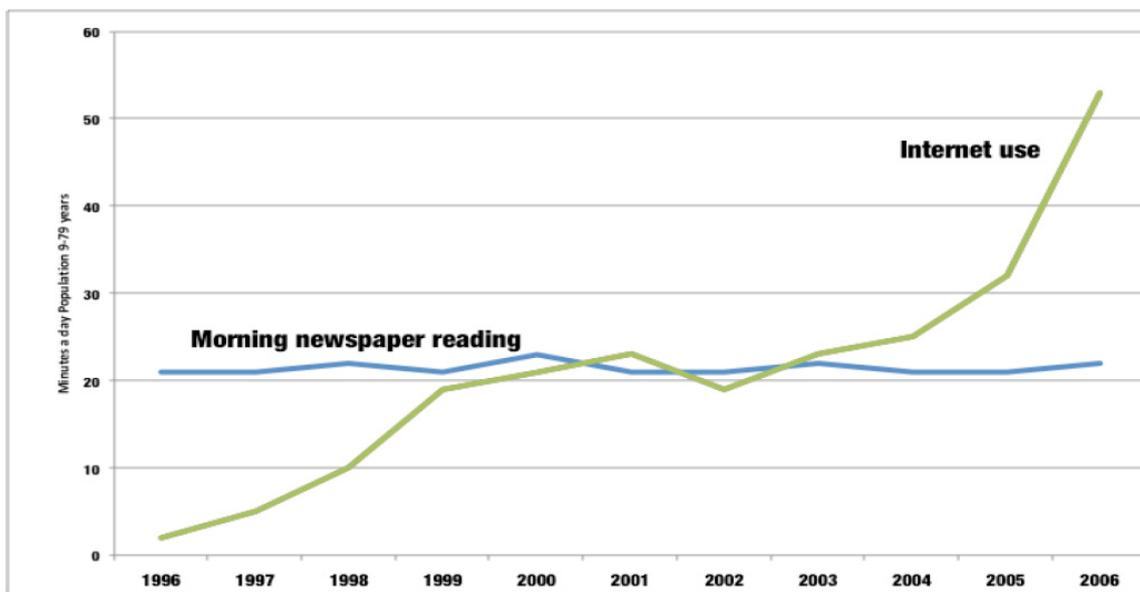
Another way to analyse what has happened is to study changes over the years. From our own data (WII 2007) we can see that 83 percent of the Swedes were reading a newspaper daily, year 2000. Seven years later 87 percent say that they are daily readers. From this figures we cannot say that the introduction of Internet has had a negative influence on newspapers. But people are perhaps reading less today? They read newspapers like before but do not spend so much time reading?

As we can see from the diagrams, people are spending more and more minutes using Internet. During the last ten years there has been an increase from zero to nearly sixty minutes a day (average among all adults). The major increase has happened during the last years when the broadband penetration has accelerated. Today 86% of the Internet users have a broadband connection.



5. Daily use (9-79 years) in minutes of Internet and Morning + Evening Newspapers 1996-2006.

Source: Mediabarometern 2006



6. Daily use (9-79 years) in minutes of Morning Newspapers and Internet 1996-2006.

Source: Mediebarometern 2006

Let us first look at the competition for time. There is a steep increase of the use of Internet but the minutes people are spending reading newspapers are about the same from 1996 to 2006. It seems, however, like there is a decrease of newspaper reading (the upper diagram) in the beginning (1996-2002) and a small decrease during the last years (2005-2006), but no decrease when it comes to reading of morning newspapers (the lower diagram). So if there is an influence from Internet use it can be towards a lesser interest for evening newspapers, tabloids, during the last years. Earlier the use of Internet was not widely spread. But there can also be a lot of other circumstances influencing the tabloids.

Looking closer at the way people are getting their traditional newspapers we can see that, although more people are reading newspapers today, there are small decreases in how many are buying single copies, reading free newspapers, reading newspapers at work and even a small decrease in subscriptions. Buying less single copies and reading less newspaper at work is a general phenomenon, but it is only the youngest who have become less interested in subscriptions. They are, however, reading a little more free newspapers, contrary to the others who have become a little less interested in those. But on the whole, the habits of reading newspapers, in paper format, in Sweden have changed very little since Internet was introduced.

The exception is found among the young ones (18-25 years). Seven years earlier more than half of them (59%) subscribed to a newspaper. Today the figure is close to one third (38%). They are reading a little more of free newspapers but buying less single copies and do not read as much newspaper at work as before. Totally, however, 71 percent of the young ones are reading a traditional daily newspaper in paper format. That is exactly the same figure as seven years ago.

	<i>Daily reader of a newspaper</i>	<i>Subscribe to a newspaper</i>	<i>Buy single copies</i>	<i>Read free newspaper</i>	<i>Read news-paper at work</i>
<b>2000</b>	83%	76%	13%	12%	22%
<b>2007</b>	87%	72%	6%	9%	12%
N= 2000	Swedish population	Daily newsreaders	Daily newsreaders	Daily newsreaders	Daily newsreaders

7. Comparison of the habits of newspaper readers, year 2000 to year 2007

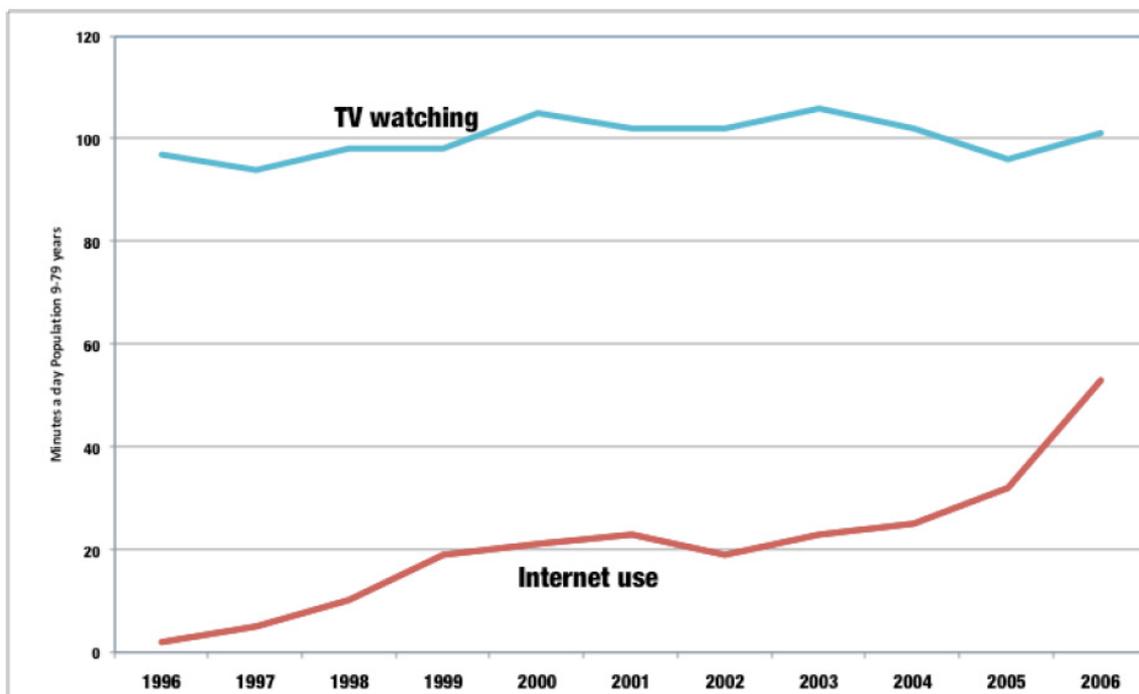
Source: World Internet Institute 2007

This strong tradition of reading a daily newspaper seems to survive at least during the first ten years of the Internet. That is remarkable as reading a newspaper online is one of the most popular activities among the users of the Internet in all ages and most Swedish newspapers have a net version of their newspaper (Findahl, 2007).

Focusing on the young adults, where some changes have happened, we can note that ninety percent of them are using the Internet and seventy-two are reading a newspaper online at least daily or a few times a week. That is the same figure as we noticed earlier for reading the paper format of a traditional newspaper. So even among the youngest adults the online format and the paper format exist more like complements than competitors. From where the extra time comes is not so clear (Robinson, et.al. 2000). The subjective judgements from table 1 and 2 are not compatible with the audience statistics and the time measures.

### Television

Television viewing is a more time consuming activity than newspaper reading. And even if the Swedes do not spend as much time in front of the TV set as Americans, Japanese or Englishmen, television viewing should be an activity that could be affected if many people started to use the Internet during the evenings. But studying the audience statistics we can see that the use of Internet has increased during the last ten years, but the time for TV viewing seems to be constant.



8. Daily use (9-79 years) in minutes of Internet and Television 1996-2006

Source: Mediabarometer 2006

This diagram does not fit so well with the subjective judgments of the Internet users. Already seven years ago more than one quarter of the Internet users said that they were watching less television since they started to use Internet. This proportion of users is still about the same, even if the time people are using Internet has trebled.

*9. Subjective judgement of the influence of Internet use at Television viewing*

Proportion of Internet users	<i>much less</i>	<i>somewhat less</i>
<i>2000</i>	7	24
<i>2005</i>	5	17
<i>2007 (18+ years)</i>	4	17
<i>2007 (18-29 years)</i>	8	29

Source: World Internet Institute 2007

A simple comparison, between those who use and not use the Internet, is supporting the subjective judgments. Internet users watch television, on average, twelve hours and 38 minutes a week, compared to fourteen hours and 38 minutes for those who are not using the Internet.

*10. A comparison of TV viewing time between those who are using and not using the Internet*

18+ years, N= 2017	<i>Watching television during a week</i>
<i>No use of Internet</i>	14 hours 38 minutes
<i>Internet users</i>	12 hours 28 minutes

Source: World Internet Institute 2007

This simple comparison between users and non-users is as we have seen before, not fair. Those who are watching TV the most are the old ones and a lot of them are not using the Internet. If we compare instead how much, users and non-users, are watching television among people in the same age group the comparison will be more unbiased.

*11. A comparison of television viewing in seven age groups between those who are using and not using the Internet.*

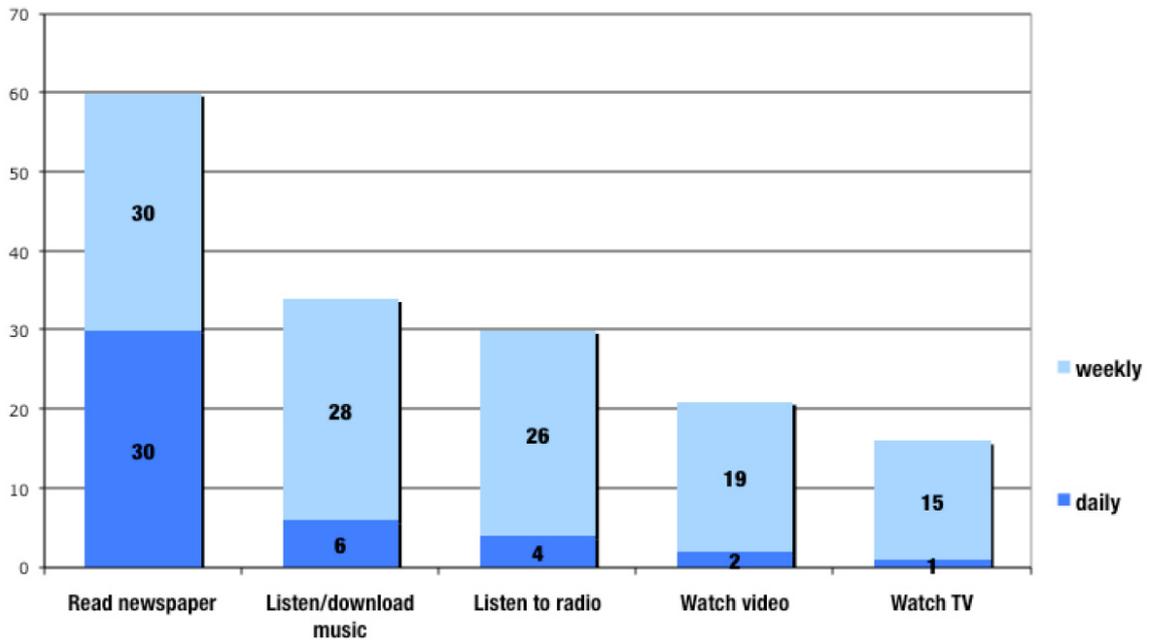
	<i>Internet users watch more</i>	<i>No differences</i>	<i>Internet users watch less</i>
<i>Television</i>	2 age groups	3 age groups	2 age group

Source: World Internet Institute 2007

Just as the audience statistics say, the time people are spending watching television, is about the same today as seven years ago. In two younger age groups the Internet users are watching more television and in two older age groups they are watching less. In three age groups there are no differences. So there is no strong evidence that the use of Internet has a negative influence on television, even if the subjective judgements point in that direction (Findahl, 2007b; Nielsen, 2006).

### **Traditional Media Online**

In Swedish media there has been a lot of attention at the possibility to watch television online. But very few are watching television on a daily base in that way. Internet has become a new platform where you can find television programs and video but Internet has not replaced the traditional way to watch television. Reading newspapers online has become much more common and a majority of Swedes are doing this daily or nearly daily. But the same people are still subscribing to a daily newspaper in the traditional paper format.

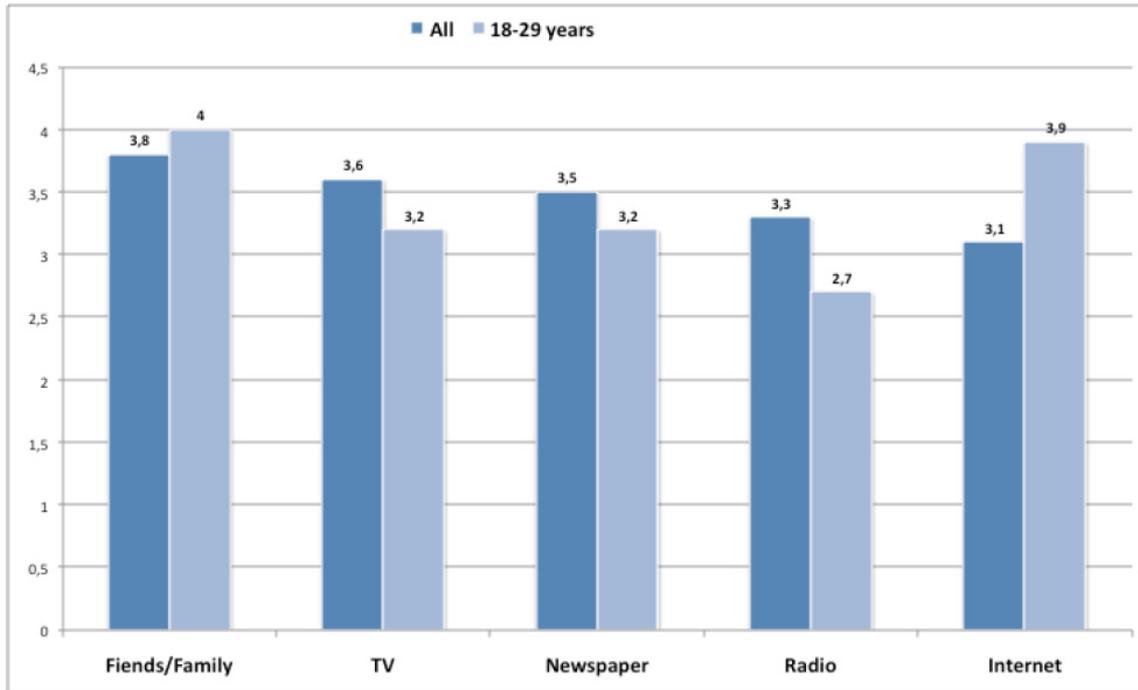


12. Proportion of the population using Internet for traditional media

Source: World Internet Institute 2007

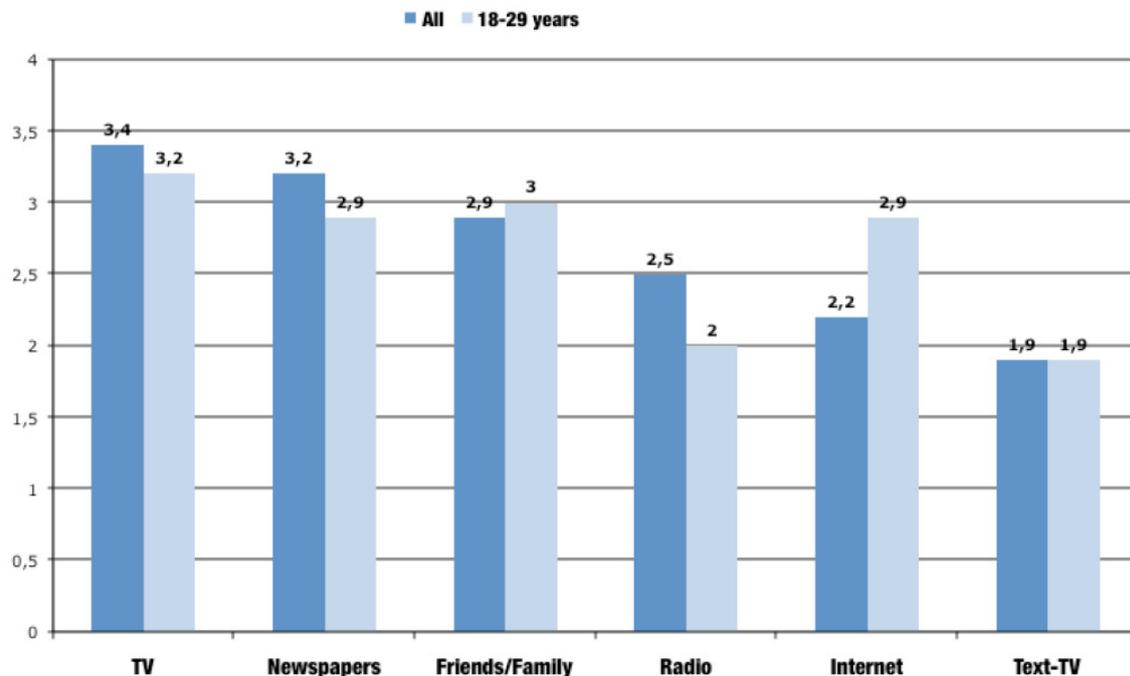
### How important is the Internet?

Traditional mass media, radio, television and newspapers, are still the main sources of information, news and entertainment in Sweden. There are no major changes during the last seven years. But among the young people, the importance of Internet has slowly increased, and today for them Internet is the most important source of information even if television still is the most important source of entertainment.



13. How important are different media as a source of information?

Source: World Internet Institute 2007



14. *How important are different media as a source of entertainment?*

### Summary

The diffusion of Internet has continued rapidly in many countries. In Sweden today 80 percent of the population are using the Internet. With access to broadband connections people are spending more and more time online. The question we have tried to answer is what are the consequences of this advancement of a new media for the traditional media, newspapers and television. Will there be competition and rivalry, when the Internet as a newcomer tries to get a position in the old media world? Three times during the last one hundred years there has been an introduction of a new technology, a new mass medium. There was radio in the twenties, television in the fifties and Internet in the nineties.

However, this last time it is not only about new and old media competing for people's time and attention or competing for the money of the advertisers. This time there is also a change of the economical conditions. The digital technology and the digitization of content have caused the rise of "freeconomics". The price of bandwidth and storage is dropping, coming closer to the price of digital distribution that already is close to zero. That means that the marginal costs, the change in total costs that arises when the quantity produced changes by one unit, is quickly decreasing. According to economical theory, goods will be sold at their

marginal cost of production if there is not, monopoly power that allows a producer to maintain prices above the marginal costs, consumers are insensitive to the prices or the supply of the product is limited. Even if the old actors of yesterday still try to maintain their monopolistic positions, the supply of content – news, information, entertainment – is not limited and the consumers are very sensitive to the prices (Findahl, 2006; Selg & Findahl 2006; Findahl, et.al., 2006).

The general assumption is that traditional newspaper reading will decline as there are a lot of newspapers available online for free. And television viewing will also decline because people will not have time watching television when they are busy using the Internet. At first sight these assumptions seem to be true. A simple comparison of those who use and not use the Internet shows that Internet users are reading less traditional newspapers and watching less television. Their subjective judgements support this finding. But a more thorough analysis reveals that this is a spurious correlation. Holding age constant the correlation disappears. The same result appears using audience statistics, following the audience figures during the last ten years. However there are ongoing changes in media habits among the young generation, but these changes are slow and not as profound as usually is assumed. To better understand what is happening over the years, there is need of longitudinal data.

A comparison of what is happening in other countries shows that the effects of Internet on traditional media are not the same in all countries (Findahl, 2004; Findahl, 2007b). In some countries Internet has become a strong competitor, severely affected the use of newspapers, radio and television and in some other countries Internet has become more of a complement and the use of traditional media go on as before. The reasons for these different outcomes will be the subject for another study.

## References

Findahl, O. (2007). *The Swedes and the Internet 2007*. World Internet Institute.

Findahl, O. (2007b). *Tio år med Internet. Ingår i Ulla Carlsson & Ulrika Facht (red)*

Mediesverige 2007. *Göteborgs universitet, Nordicom-Sverige*.

Findahl O (2006). *Trends in downloading and filesharing of music*. Musiclessons – Deliverable 5. [xml.nada.kth.se/media/Research/MusicLesson](http://xml.nada.kth.se/media/Research/MusicLesson).

Findahl, O. (2006). Thieves or Customers? File-sharing in the Digital World. In P. Cunningham & M Cunningham (eds.), *Exploiting the Knowledge Economy: Issues, Applications, Case Studies*. Amsterdam: IOS Press

Findahl, O. (2004). Internet i världen. En internationell jämförelse av Internettillgång och användning mellan länder inom World Internet Project. World Internet Institute.

Findahl, O., Eriksson, L-E., Selg, H., & Wallis, R. (2006) The IPR regime and the Open Source/Open Content movement – an alternative stimulus for creativity or on a collision course? In P. Cunningham & M Cunningham (eds.), *Exploiting the Knowledge Economy: Issues, Applications, Case Studies*. Amsterdam: IOS Press

Findahl, O., Eriksson, L-E., Selg, H., & Wallis, R. (2006) The IPR regime and the Open Source/Open Content movement – an alternative stimulus for creativity or on a collision course? In P. Cunningham & M Cunningham (eds.), *Exploiting the Knowledge Economy: Issues, Applications, Case Studies*. Amsterdam: IOS Press

Galacz A, Kuo E & Mahel D (2006). Information Society from a comparative perspective. Some results of the World Internet Project. Brno. November 2006.

Haythornthwaite, C & Wellman, B. (2002). The Internet i Everyday Life. An Introduction. In b.Wellamn & C. Haythornthwaite (Eds.), *The Internet in Everyday Life*. Oxford: Blackwell.

Kraut, R., Lundmark, V., Patterson, M., Kiesler, S., Mukopadhyay, T., & Scherlis, W. (1998). Internet paradox: A social technology that reduces social involvement and psychological well-being? *American Psychologist*, 53(9), 1017-1031.

Mediebarometern 2006. Medienotiser, nr 1, 2007. Göteborgs universitet , Nordicom-Sverige

Mikami et.al (2004). *Internet Usage Trends in Japan*. The National Institute of Information and Communications Technology. Tokyo.

Negroponte N (1996). *Being Digital*. New York: Vintage books.

Nie, H & Erbring L. (2000). Internet and society: a preliminary report. <http://www.stanford.edu/group/siqss/>

Nielsen (2006). US TV viewing still rising, says Nielsen. UK: *Digital TV Group*, 25.09.06

Robinson JP, Kestnbaum M, Neustadt A, Alvarez A. (2000). IT, the Internet, and time displacement. Paper presented at American Association Public Opinion Research, Portland OR, May 2000.

Selg, H., & Findahl, O. (2006). *File sharing and downloading - actors, motives and effects*. MusicLessons, Deliverable 4. Stockholm: [xml.nada.kth.se/media/Research/MusicLesson](http://xml.nada.kth.se/media/Research/MusicLesson)

Tapscott D & Williams A (2006). *Wikinomics, How mass collaboration changes everything*. Portfolio.