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The Audience of Swedish Local Online Newspapers - a longitudinal study

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Abstract. We have conducted a partly longitudinal study using online questionnaires at four Swedish local online newspapers in two different studies. The objective of this paper is to describe the users' demographics and reading habits as well as the users' expectations of current and future issues regarding the online edition. We also discuss online questionnaires having tried three different approaches to receive as many answers as possible. We have found that the subscribing readers of online editions have increased from one fourth to more than a half of the audience, and concluded that the subscribers and non-subscribers have different reading habits. The findings also show that almost two thirds of the respondents are men and more than 80% prefer the paper edition of the newspaper. The results indicate an interest for a multimedia paper edition for the future.

1. Introduction

The formation of an online audience was an immediate effect of publishing news on the World Wide Web. In Sweden, this audience has been growing ever since the start in 1995. This growth has led to a stiff competition among online publications [1]. For the newspapers, this audience indicates a potential source of new readers and a way to keep the old ones. When newspapers launch online editions they might recapture young readers, who are not currently reading the printed edition of the paper [2], and yet get them attracted to online services. Gildner [3] describes the consumers' ability to personalize the online edition and the timeliness of online news as additional desirable elements of online newspapers. Interactivity is another characteristic of online news assumed to be of value to its audience [4].

Time must be reorganized if one wants to take part of the morning news paper or television series broadcast at certain times. Compared to print media and TV news, online users do not need to follow a particular ordered sequence for information.

Cyber Dialogue reported that although 49 percent of online U.S. adults visited a local newspaper site on a monthly basis, only 7 percent did so on a daily basis [5]. Bellman, Lohse and Johnson [6] reported that out of their survey with 10.180 respondents, 19,1% used the Internet at home to read news. Readers of online editions of local papers tend to be readers of that paper, but online editions of national papers

reach people who don't read the print edition [7].

In the findings of Chyi and Larosa [7] no relationship between gender and preferences for online newspapers versus the print edition were found, nor any relationship between the respondents education and preferences. But they found an age difference indicating that older people prefer the print edition [7].

Boczkowski [8] argues that "as the web has become more mainstream, the 'typical' user has switched from information seeking early adopters to entertainment-oriented late-comers" (p.276).

The objective of this paper is to describe an audience perspective on Swedish local online newspapers. The results partly form a longitudinal study regarding audience demographics. We also discuss the problems and benefits by using an online questionnaire having tried different approaches to receive as many answers as possible. In consequence, three research questions for this paper have been formulated as follows:

1. *Who are the users of the online newspapers?*
2. *What are their reading habits?*
3. *What are their opinions of the current and future issues regarding online newspapers?*

2. Method

The first part of the study was conducted in the spring of 2000 and the second part in December/January 2001/2002 (see table 1). The number of answers was 3.696 in the first part and 3.661 in the second part. The two studies partly form a longitudinal study of audience demographics and reading habits, and partly form two complementary studies, the first focusing on current issues for the online paper, and the second on future issues.

Table 1. The newspapers of the two studies

Study	Newspaper	URL	Circulation of copies per day	Unique visitors per day
1	Eskilstuna Kuriren	www.ekuriren.se	33.000	4000
1	Hallandsposten	www.hallandsposten.se	32.500	2500
1+2	Östgöta Correspondenten	www.corren.se	67.300	5000
2	Norrköpings Tidningar	www.nt.se	49.500	5.000

Using online questionnaires at the news sites made it possible to reach our target audience, which would otherwise be difficult using regular questionnaires. Moreover, Buchanan and Smith [9] have argued that web samples can be as representative or more representative than traditionally collected samples because of the heterogeneity of the online population. Although, admittedly there are inherent problems in controlling whom responds to online questionnaires. Control for cases with multiple submissions from the same IP number were handled in the data analysis.

For both surveys a one-page design was used, which is faster for the respondent than a multi-page design, although the item non-response is higher. There was no use of advanced graphics, which gives less partial non-response from modem users [10]. Only respondents who pushed the submit button were included in these surveys. In both

surveys, there were some multiple-choice questions. All reported differences between categories within different variables are significant at the 0.05 level (Chi-Square Test). Since only minor differences between the newspapers were found, we have analyzed them as one group.

Four local Swedish newspapers participated in the *first study*; Eskilstuna-Kuriren, Göteborgs-Posten, Hallandsposten and Östgöta Correspondenten (see table 1). The online questionnaire was shown to the potential visitors at each homepage for a period of a week in March 2000. The questionnaire contained 18 items. The last item was an open question. In total 3.836 answers were collected from the participating newspapers during the mentioned time period after the item non-respondents were removed. There is a skewness in the distribution of the answers collected from the four newspapers in the study, due to different procedures with the online questionnaires. Göteborgs-Posten's questionnaire had to be selected by the respondent, which resulted in a very low response rate (see section 2.4). As a consequence of that we have chosen not to include the answers from Göteborgs-Posten in the results, which gives us a total of 3.696 answers collected. The total number of possible respondents was not available in this study.

The *second study* was a part of the Electronic Newspaper Initiative (ELIN-IST-2000-30188) in which Östgöta Correspondenten is a partner. The other newspaper that expressed an interest for participating in this study was Norrköpings Tidningar (see table 1). At both newspapers, the survey was presented for approximately one week (see section 2.4). The questionnaire contained 19 questions, no open question included. Having corrected for item non-respondents for the demographic questions (1-5), a total of 3.661 answers were collected. The number of respondents will be given for each question except for the multiple-choice questions. The first full day the questionnaire was shown at Östgöta Correspondenten, 18% of the audience answered the questionnaire, at Norrköpings Tidningar 6% answered. In total there was an answering frequency of 4,5% of all potential respondents.

Three approaches were used in our two studies, a) a banner ad at the middle of the page, b) presenting the questionnaire in full as a pop-up window, and finally, c) presenting an invitation to the questionnaire as a smaller pop-up window.

a) While only using a banner at the middle of the page to invite users to participate in the study, the results was minimal. At Göteborgs-Posten, which is a newspaper with approximately 265.000 online visitors a day, we only received 154 respondents during 15 days of display. The first full day we received 37 answers and after that the average answering frequency was around 8 answers a day.

b) Using a full size pop-up window, as we have tried at the other four newspapers, resulted in a peak of answers during the first days followed by a decreasing number of answers, especially during the weekends. Our results indicate that one week is enough for displaying a full size pop-up window, after that the number of respondents are sporadic.

c) The last option tried was the use of a smaller pop-up window as an invitation to the questionnaire. It was used at Östgöta Correspondenten in study two. It replaced the full size questionnaire after one and a half-day and was shown for one week. This resulted in the answering frequency dropping to about 20%. But in all this approach gave us more answers than we received at Norrköpings Tidningar, where the questionnaire was shown in full size during one week. We can also compare the 1.971 answers received from Östgöta Correspondenten in study one, using a full size pop-up window, with the 2.311 answers received in study two, using this new technique.

3. Results

We have categorized the results in four different sections, starting with the partly longitudinal study on user demographics and reading habits. Then we present the results of the study on current issues, mainly from the first study, and finally the future issues from the second study.

3.1 User Demographics

In the 2000 study (N=3.696), 67,3% were men and 32,7% were women. 7,3% of the respondents were in the up to 20 age group, 63,5% between 21-40 years old, 25,4% were between 41-60 years and 3,9% were in the 60+ age category. 72,9% were non-subscribers of the newspaper visited online and 27,1% were subscribers of the newspaper. Nearly 75% of the respondents were from the area where the newspapers are located while 11% were located abroad.

In the 2001-2002 study (N=3.661), the gender proportion between men (61,6%) and women (38,4%) remains. A more detailed age categorization was used, resulting in 1,1% of the readers in the up to 15 age category, 22,6% were between 16-25 years, 31% were 26-35, 19% were 36-45, 15,5% were 46-55, 9% were 56-65 and 1,9% were in the 66+ age category. In this study the amount of subscribing readers has increased to almost 53%. 10,4% of the respondents had compulsory school as their most advanced education, 44,5% had comprehensive school and 45,1% had a university education. The occupation among the respondents were as follows; 60,5% full time workers, 18,9% students, 6,5% part time workers, 4,3% unemployed, 2,2% on sick leave, 1,3% on maternal leave and 2,6% choose the "other" alternative.

3.2 Reading Habits

Concerning reading habits, we have compared the two questionnaire results, regarding how often news is read and what content is read. The reasons for reading the online edition were looked into in both studies, in the first study to gain a general image of the purpose, whereas the in the second study we focused on content. In study one a question regarding the order of reading was included. Study two instead focused on the place and time of reading, comparing the printed and online editions.

How often? More than twice as many read the online edition more than once daily in study two, and the tendency is to read the online edition more often (table 2). No age or gender differences were found.

Table 2. Reading frequencies of the online edition

Reading frequency	Study one	Study two (N=3.661)
more than once a day	5,4%	11,6%
once a day	20,7%	23,5%
several times a week	25,6%	17,3%
once or twice a week	35,2%	32,3%
other	13%	15,3%

What? The information of the online newspaper that the respondents read in study one was; news (69,4%), local news (59,4%), sports (42,4%), domestic news (33%) and economy (15,4%), culture (18,6%) and foreign news (19,5%). Unfortunately the

"advertisement" alternative was not included in the questionnaire due to a programming error. In study two (N=3.574), the same pattern was found, and in addition the categories updated news and advertisements were included. The respondents read updated news (71,3%), local news (49,6%), sports (34%), domestic news (23,5%), economy (11%), culture (11,9%), foreign news (15%) and advertisements (19,6%). There were no age differences found, but more men (51% in study one, 45% in study two) than women (24% in study one, 17% in study two) read the sports section.

Why? The reasons why the respondents read the online newspaper in study one were; to stay informed/updated (58,5%), information search (25,5%), lack paper edition (23,9%), complement to printed edition (18,9%), to save money (8,3%) and to read advertisements (8%), while 18,3% chose the "other" alternative in this question. The respondents in study one only read what they were interested to read (66,6%) or what they were searching for (19,2%) in the online edition, while less than 2% read the whole "newspaper" online. In study two (N=3.574) the reasons for reading were to read updated news (57,1%), read local news (46,4%), advertisements (11,7%), the whole "newspaper" (6,2%), to discuss (2,5%), while 24,7% chose the "other" alternative. No age or gender differences were found.

Order? Almost two thirds (63,5%) of the respondents in study one did not read the online newspaper in any specific order, while 36,5% did. No age or gender differences were found.

Where? In study two, we found that the printed edition is primarily read at home, whereas the online edition is read at home and at work to the same extent (table 3). No age or gender differences were found, but the senior citizens that were not working read the editions at home instead.

Table 3. Place where the printed and online edition is read

Place	Printed edition (N=3.646)	Online edition (N=3.597)
at home	52,3%	40%
at work	17,7%	42,9%
during travel	3,3%	3%

When? In study two we can see that the printed edition is primarily read in the early morning, whereas the online edition is read during the day, with peaks in the early morning and in the evening (table 4). No age or gender differences were found.

Table 4. Time when the printed and online edition is read

Time	Printed edition (N=3.597)	Online edition (N=3.536)
early morning	51,1%	25,5%
morning	9%	19,3%
lunchtime	6%	12,3%
afternoon	5,7%	12,6%
evening	10,8%	25,9%

3.3 Current Issues

Study one focused on current issues for the online papers, mainly on the ease of reading the paper, comparing the online and printed editions. In study two we added a complementary question regarding their opinion on the current form of online advertisements. One third (32,9%) of the respondents in study one agreed that the paper edition of the newspaper is easier to read than the online version, while one third (31,2%) did not agree, and the rest (36%) did not perceive any difference. One third

(37,4%) of the respondents agreed that the online newspaper was more rapid to read than the paper edition, while one third (35,9%) did not agree and the rest (26,7%) did not perceive any difference. However, half of the respondents (51,5%) agreed that the search of a specific part of the newspaper was easier in the online version, while the rest were neutral or did not agree. 60,5% of the respondents agreed that it was easy to find previous pages visited in the online newspaper. Few respondents (12,2%) did not find previous pages again easily. However, 62,7% perceived that they unwillingly return to already visited pages in the online newspaper. 17,4% of the respondents stated that they did not know their position in the news site, while more than half (58,1%) of the respondents stated that they did know their position.

Of the respondents, 15,6% used to print articles from the online newspaper to read, and the respondents between 41-60 years old tend to print parts of the online newspaper more frequently than the once between 21-40 years old. As much as 82,1% of the respondents in study one preferred the paper edition of the newspaper to the online edition and there is a tendency that the older age groups prefer the printed newspaper more than the younger age groups. *"The feeling of having a newspaper in ones hand and read it anywhere, laying in the bed, sitting by the breakfast table and so on can not be substituted by an Internet newspaper"* (from an open question in the questionnaire). No age or gender differences were found. From study two we got the respondents preferences regarding advertisements (N=3.595), 21,8% were positive to advertisements, 43,3% were neutral and 33,2% were negative.

3.4 Future Issues

Study two focused on future issues for the online papers, regarding medium, form, content, and payment. Concerning alternative media for receiving news (N=2.339), 38,2% preferred to use their TV, whereas few people wanted news in their handheld computer (13,3%) or mobile phone (12,5%). The age groups up to 25 years preferred the mobile phone to a greater extent and the respondents with the lowest education preferred the TV more than the other groups. The preferred alternative forms for news was video news (23%) and radio news (22%), whereas only 14,2% of the respondents wanted SMS news. The age groups up to 25 years preferred SMS more than the other age groups and the respondents with lower education also preferred SMS more.

Regarding moving images and sound over broadband connections (N=3.573), as much as 56% thought it was OK, and 27,1% considered it very positive, making it more interesting, whereas 14,5% considered it disturbing. The younger age groups were most positive. As regards content, a majority (55,6%) would not like a fully personalized paper, whereas a substantial minority (20,3) were interested (N=3.610). Moreover, 16,6% of the respondents would like a special subscription to a topic of interest, 15,2% wanted "society/club news" whereas only 11,5% wanted to discuss their special interest in the paper, and a minority (5,4%) would like to write articles on their subject (N=1.772). As many respondents as 86,2% would not pay even a small sum of money for more and faster local news (N=3.566). No age or gender differences were found.

4. Discussion

The audience still consists of more male readers, which means that the paper could gain more readers by making it more attractive for female readers. There is a substantial audience in the ages 16-25, which indicates that the online edition is a good channel for

reaching young readers which is in line with the argument of Katz [2]. Our results show that the readers are mainly interested in the latest news, and in local news, which contradicts the findings of Boczkowski [8], who claim that the audience has switched into entertainment-oriented late-comers. However, it supports Gildner's [3] statement on the importance of timeliness for online news. Moreover, reading frequency does not affect what kind of news is read. There is a tendency to visit the news site more often, which probably corresponds to the constant updates during the day, that has increased substantially since the first study.

We find it alarming that almost 20% do not know their position in the news sites and that more than 60% stated that they unwillingly returned to visited pages in the web site. We believe that there is much to do in the design of navigation support at the online newspapers. Most respondents preferred the printed edition of the newspaper, which is an unsurprisingly result. Regarding gender, education and age, our results are in line with previous research [7].

The results show that a majority would like sound and moving images on the news sites, which indicates that this might change in the future. Almost no readers would like to pay for more and faster local news and only a minority would like a fully personalized paper that modulates Gildner's [3] statement that a personalized online edition is a desirable element. Furthermore, more respondents are negative than positive to advertisements, but most are neutral and not particularly interested in it. We believe that there is much to gain from making the advertisements more attracting for the consumers.

From study one the subscribers have changed from one forth of the audience to more than half in study two, which is in line with the Chyi and Larosa [7] findings. Two user profiles has emerged from our two questionnaires, the subscriber to the printed edition and the non-subscribing reader, having different reading habits and demographics.

The subscribing reader (N=1529) is male (66,9%) or female (33,1%), primarily full time workers (82,2%) or student (17,8%). The age curve shows that 46,8% of the readers are to 35 years resulting in a flat curve, with little variation in the 26 to 55 age groups. The subscribing reader read the printed edition in the morning, and later during the day the online edition, primarily to get news updates (76,5%), and secondarily to read sports (women 15,4% and men 44%) and local news (37%). During the day they primarily read from work, while at night they primarily read from their home. There is a tendency to read primarily early in the day from work, and then again at home at night.

The non-subscribing reader (N=1.378) is male (65,3%) or female (34,7%), primarily a full time worker (69,4%) or a student (30,6%). The age curve shows that 70,1% of the readers are up to 35 years old, resulting in a peak in the groups 16-35. Almost 60% of the non-subscribing readers sometimes read the printed edition. The non-subscribing reader read the online edition in the morning, primarily from work but also from their home. During the day they primarily read from work, reading primarily early in the day, decreasingly as the day goes by, and than again at home at night. They read the online paper mainly to read local news (65,2%) and to get news updates (66%). They also read sports, (women 22,8% and men 48,2%) and domestic news (28%).

From this, we see that the online edition mainly compete with the attention of the audience in the early morning. Furthermore, the non subscribing audience use the paper as their source for local news to a greater extent than the subscribing audience Thus the audience is at the sites primarily to get the unique content, which cannot be found elsewhere. For both groups the online paper is used at night, to a much greater extent

than the printed edition. Thus, in this way the paper has become a competitor to the traditional evening press.

5. Conclusion

We recommend the combined questionnaire approach, having a full size questionnaire for one or two days, followed by a smaller pop-up window advertising the questionnaire. We believe that one week is enough to receive a sufficient sample.

The users of the online newspapers are mostly highly educated male full time workers. The online paper catches the young audience, but most of the readers still prefer the printed edition. The subscribers have increased substantially between the two studies. *Their reading habits* are different, the non-subscribers read local news to a larger extent, and their demographics are different, as the subscribers has a flat age curve, whereas the non-subscribers has a peak in the young reader group. In general, the audience tends to read the online newspaper more often, mostly updated or local news to stay updated. The online edition is mainly read from work or at home in the early morning or in the evening. *Regarding current and future issues*, we firstly conclude that there is a need for better navigation aid at the news sites. Secondly, the newspapers could gain from making the advertisements more attractive for the users. Thirdly, multimedia could be the used in the future as there is an interest among the users.

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