Measuring total readership – the Dutch model

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1. Synopsis/Abstract

NOM, the Joint Industry Committee responsible for national readership survey in The Netherlands, has changed its scope from measuring readership of printed editions into measuring total readership of the brand. A model was constructed for measuring total readership, consisting of four data sources. By means of integration of these data sources readership of a newspaper and magazines brands can be obtained.

The first step NOM took was to redesign the national readership survey NOM Print Monitor in order to get suitable hooks which can help data integration with the internet audience data. Redesigning readership questionnaire had a double effect: on the one hand it produced an interesting and valuable set of new data on readership of paper editions and digital products; on the other hand it had an influence on the currency of readership of printed editions.

In this paper we evaluate the results and the consequences of the new design of the Dutch national readership survey. How was the questionnaire redesigned? Which new insights did we get from the new questionnaire? Are the data we get on print and digital readership valid? How did the changes in the questionnaire influence the currency for readership of printed editions of newspapers and magazines? And finally, did the new design of national readership survey help us to move closer to measuring total readership of media brands?

2. Measuring readership

In the past years the question of how to measure total readership of brands has become a hot topic in many countries. There are basically two main approaches to this topic: the one we call "the promotional approach" and "the media planning approach". An example of the promotional approach is the MPA 360° in the USA; the metrics of different platforms on which the content of a brand is distributed are basically added, so as to get the gross brand audience. There is no calculation of the overlap between the platforms, and therefore media planning is not possible. The second approach is the one that tries to get metrics which make media planning possible; therefore a measure for overlap between the platforms is necessary. Different European countries are developing measures that can produce total readership suitable for media planning. This can be either obtained by introducing questions about digital reading in the national readership surveys or by integrating two currency surveys (print and digital) by means of a fusion.

NOM is a Joint Industry Committee in The Netherlands responsible for delivering currency for print media planning. In the Dutch media market, as in the rest of the world, the publishers and media buying agencies have been asking for figures that show not only the readership of the printed editions of newspapers and magazines, but of the whole footprint of the media brands. Therefore NOM has changed its scope from measuring readership of printed editions into measuring readership of the total brand. In other words, we want to measure "total readership".

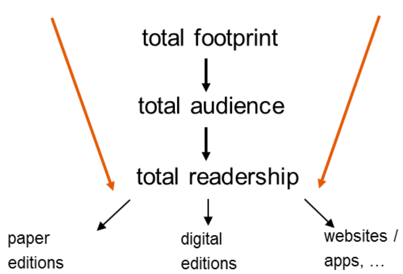
At the same time other media types have been going through the same kind of change in the way of thinking; from measuring television to measuring of total viewing, from measuring radio to measuring of total listening. In the audience measurement business we are nowadays talking about viewing – listening – reading, and not any more about television – radio – print.

Terminology

Let us make a small step aside and determine the terminology of what we are talking about. A tricky subject for non-native speakers.

In different countries different terms are used when talking about this issue: total footprint, total audience, total readership. In our opinion these are three different notions.

Figure 1. Terminology



Total footprint: all touchpoints of a brand. Paper edition, digital edition (copy, replica), website, app, event, TV programme, PR, sponsoring, advertising etc.

Total audience: only those touchpoints where measuring audience is involved. Paper edition, digital edition (copy, replica), website, app, event, TV programme.

Total readership: it involves only measuring reading, text. Paper edition, digital edition (copy, replica), website, app.

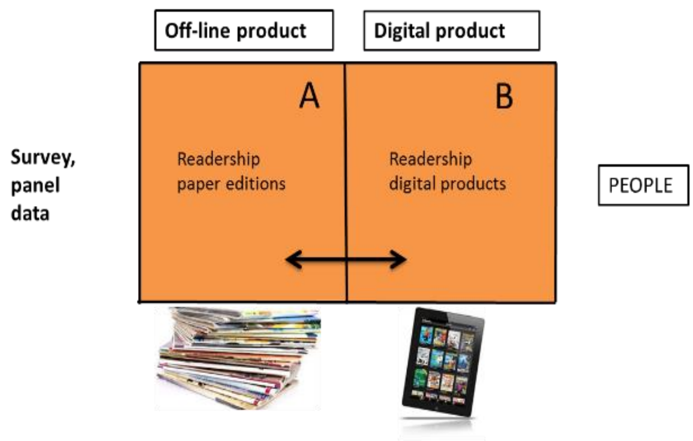
Total readership consists of measuring reading on different platforms. We make a distinction between measuring digital editions (copy, replica) and the rest of the digital products (websites, apps etc.). The main difference between these two types of digital products is that the first one is a static product ("bundle") and the second one is a dynamic product ("feed"). Usually the two types of products are measured in a different way / different surveys.

In this paper we are limiting ourselves to measuring total readership of newspaper and magazine brands.

Model for measuring total readership of a brand

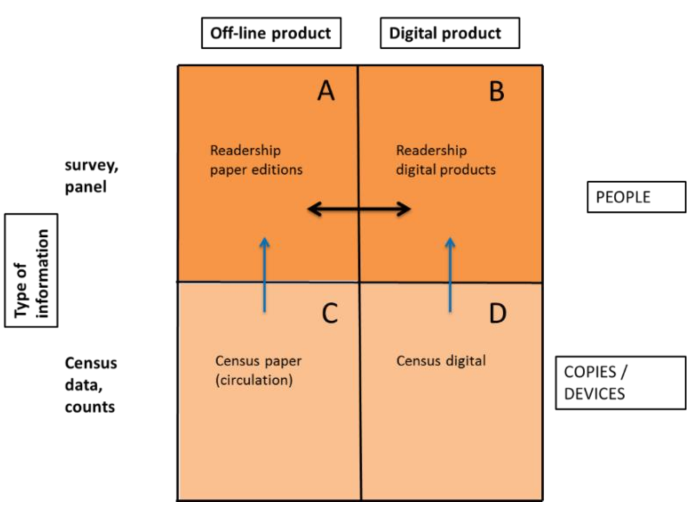
Basically there are two data sources we need: print readership survey and internet audience survey. In our case these are the NOM Print Monitor (NPM) for print readership and NOBO (Nationaal Online Bereiks Onderzoek), the internet audience survey that measures readership / reach of digital products (websites, apps) on different devices. This survey is currently being designed by SKO (TV JIC) and Vinex (association of internet media owners). The two surveys have to be integrated in order to get the total readership of newspaper and magazine brands.

Figure 2. Integration of print readership survey and internet audience survey



However, there are several problems that arise when reviewing the suitability and quality of these two data sources, especially for smaller brands. Digital readership in NOBO is measured in a panel of 5.000 respondents – if we consider that most of the media brands we want to measure are rather small, will the panel size be sufficient to produce robust figures on digital reading? On the other hand, print readership measurement has diminished its sample in 2015 to 17.000 per year because of cutting costs; will the sample be sufficient in the future to measure all the newspaper and magazine brands reliably enough?
How do we tackle this problems? Which additional data sources can we use to diminish the problems? A model was designed using four data sources in order to construct total readership of media brands.

Figure 3. Model for total readership; four data sources



We decided to use two additional data sources: census data for print and digital products. These are simply counts (circulation for printed editions, counts for digital products), and they can be collected for both big or small brands. These two additional data sources will be used to improve / calibrate the readership data obtained from a panel / sample.
Digital census data are also a part of the design of NOBO; they will be used for calibration of the panel data in order to get more robust audience figures for all the brands. NOM is cooperating with NOBO in this field: decisions on definitions of digital products for newspapers and magazines have to be constructed, and relevant metrics have to be decided on.
Print census data (circulation) can be used at a certain point in the future to do exactly the same: improve the readership data obtained in the national readership survey for smaller brands. Algorithms for this calibration have to be made for the future.

Since January 2015 NOM is responsible not only for the national readership survey, but also for collecting and auditing circulation / census figures for the Dutch market. This means that we now have two types of data in one organisation, which should make it easier to come to the integration of different data sources into total readership of media brands.

Preparing data sources for data integration

In order to enhance the integration of different data sources, we have introduced several changes in the national readership survey NOM Print Monitor starting in January 2015. Based on learnings from the symposia in San Francisco and Nice and the experiences from a pilot study (the results of which were presented in Nice), it was decided to include digital reading into the screening questions for all newspapers and magazines. Average Issue Readership is still measured for the paper editions of all titles. For the 20 biggest newspapers and magazines, additional information is gathered regarding the device that is used for reading, the platform which is used to read the brand and information on frequency of reading digital versions.

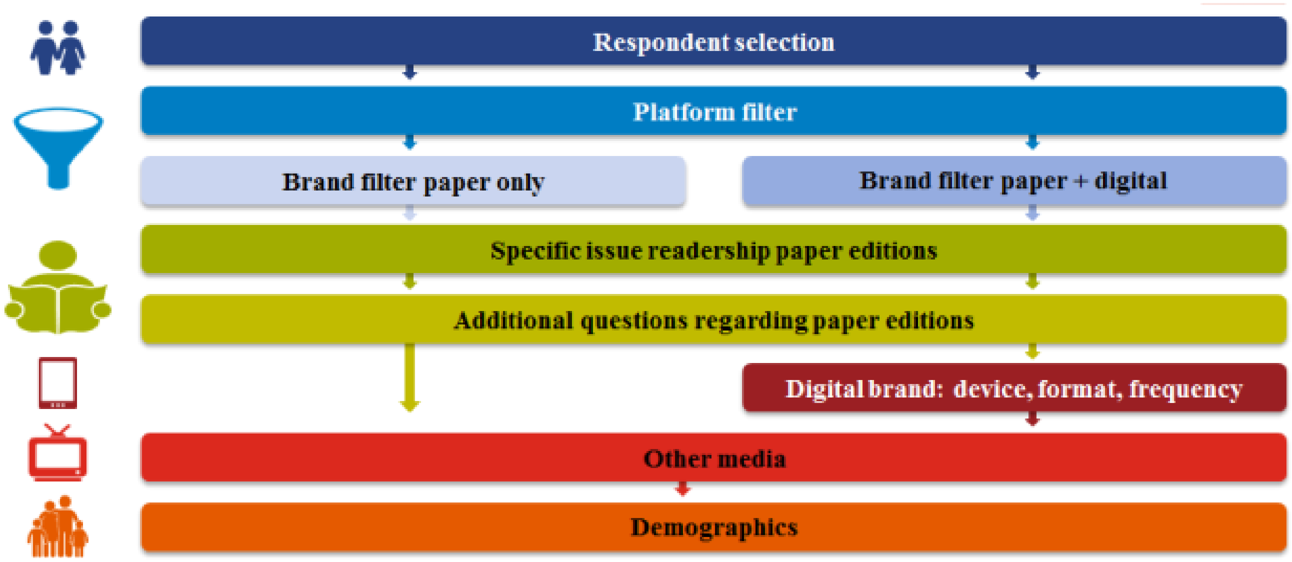
In this paper we discuss the design of the new readership survey which includes digital reading, looking at overlap with print readership and incremental reach. The findings are based on analyses of the data of six months of data collection (January – July 2015). Although the changes in the questionnaire were made in order to get better hooks for the integration with digital audience data, valuable information on the usage of media brands was obtained. The analyses also give insight into the impact of the changes in the questionnaire on the reported readership of the printed editions, as well as measurement issues that result from the change in the questionnaire.

3. Questionnaire design

The design of the readership measurement in NOM Print Monitor has been unchanged since 2006. After the respondent selection, the questionnaire started with the filter question (screen) for paper editions: for each title, respondents were asked to indicate whether or not they had read or looked through the title in the past 12 months. If they screened in for a title, then specific issue question was asked for that title plus additional questions such as source of copy and amount of reading.

In January 2015, the questionnaire was changed to incorporate the measurement of digital products of a brand. This resulted in a new structure for the questionnaire, which is shown in figure 4.

Figure 4. New structure questionnaire



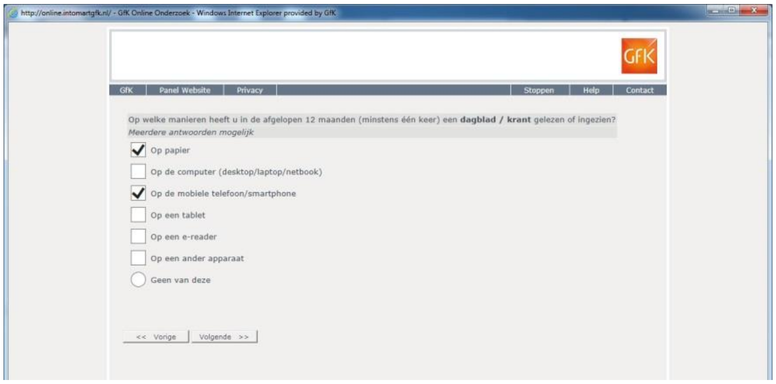
The questionnaire now starts with a so called "**platform filter**", in which respondents indicate on what platform they have been in contact with newspapers and with magazine in the past 12 months. These questions have actually been added to NPM already in 2011, but until 2015 they were placed after the readership questions for paper editions (the second part of the questionnaire).

Moving this platform filter to the beginning of the questionnaire is a way to reduce the respondents' burden: only those respondents who claim to be digital readers are directed / routed to questions about digital reading on the brand level.

In displays prior to the platform filter and again prior to the brand filter question paper + digital, respondents are informed about the definition of digital reading: using any device (e.g. computer, smartphone, tablet, e-reader), visiting the website, using an app and reading/looking through an e-paper, at least once in the past 12 months. In figure 5 and figure 6 the display and filter question are shown.

Figure 5. Explanation of reading on different platforms

Figure 6. Platform filter for newspapers



If respondents answer that they have used a digital device – pc/laptop, tablet, smartphone, e-reader or other electronic device – to read either newspapers or magazines in the past 12 months (platform filter), they are routed to the brand filter question for paper AND digital. If they answer in the platform filter that they have used no digital device for reading in the past 12 months – or even if they answer they have read no newspapers and no magazines at all – they are routed to the brand filter question for paper only, i.e. the same filter question that has been used since 2006. An example for both **brand filter questions** (readership in the past 12 months) is shown in figure 7.

Figure 7. Brand filter

After the brand filter questions, the questionnaire continues as it has in the past: for the screened in paper titles, the specific issue readership questions and additional title questions are asked. After completing the section on paper editions, digital readers move on to the section with additional questions about digital reading on brand level for a selection of 20 brands. Non-digital readers of course skip this section. The questionnaire then deals with other media and socio-demographic characteristics are collected.

4. Total brand readership

In this paragraph, we will discuss the results of the new questionnaire for the digital audience. Which new insights do we get? How confident are we about the results, i.e. can respondents give valid answers to our questions about digital reading?

New metrics for digital reading

The new measurement gives insight into total brand readership and readership per platform (paper and digital), gross and net (unduplicated). For all titles/brands in the NOM Print Monitor, we asked respondents if they have read the brand in the past 12 months. Respondents answer this question for a. the paper edition and b. for any digital product. For all brands, we can therefore report on the following metrics:

- Total readership of the brand: the number of people who have been reached by either the paper edition or the digital product in the past 12 months. Total readership can be a duplicated, gross number (the sum of the reach of the paper edition and the reach of the digital products, including the overlap) or an unduplicated, net number (the unduplicated reach of paper + digital products in the past 12 months)
- Total readership per platform, i.e. a. for the paper edition (including the overlap with digital) and b. for the digital product (including the overlap with paper)
- Unduplicated readership per platform: we can also report on the number of people who have been reached exclusively by the paper edition (paper only) vs. those who have been reached by the digital product (digital only) vs. those who have been reached by paper as well as the digital product in the past 12 months.

Table 1 shows the described metrics for the publication groups of the NOM Print Monitor. The last column shows the increase of the net total readership compared to the total readership reached by paper (i.e. index of net brand / platform paper). All indexes are >100, meaning that each of the publication groups (and in fact, every single brand/title in the survey) gains from including the digital part of the brand. To put it in other words: every brand has digital only readers, which would not be measured if digital would not be included in the questionnaire.

Table 1. Total brand readership

Readers past 12 months x 1,000	Brand		Platform		Brand Structure			Gain by including digital reading
	Gross	Net	Paper	Digital	Paper only	Overlap	Digital only	Paper = 100
All titles	187.687	165.060	148.754	38.933	126.127	22.628	16.305	111
Daily newspapers	51.635	40.855	33.356	18.279	22.576	10.780	7.499	122
Magazines	136.052	124.204	115.398	20.654	103.551	11.848	8.806	108
National dailies	30.212	23.376	17.715	12.496	10.880	6.836	5.660	132
Sports magazines	3.531	2.886	2.441	1.090	1.795	646	445	118
Automotive magazines	5.511	4.811	4.133	1.378	3.434	700	678	116
News weeklies	4.328	3.838	3.302	1.026	2.812	490	536	116
Regional dailies	14.530	11.286	9.722	4.807	6.478	3.244	1.564	116
Special interest magazines	2.921	2.610	2.250	671	1.939	311	360	116
Travel magazines	2.853	2.582	2.268	585	1.996	271	314	114
TV guides	12.832	11.878	10.644	2.188	9.690	954	1.234	112
Parenting magazines	3.100	2.764	2.493	607	2.156	337	270	111
Men's magazines	2.248	2.053	1.865	383	1.670	195	188	110
Science magazines	8.259	7.565	6.914	1.345	6.219	694	651	109
Newspaper supplements	3.232	2.825	2.604	629	2.196	408	221	108
Home and deco magazines	9.963	9.302	8.620	1.343	7.959	661	682	108
Mind- and body magazines	5.788	5.369	4.992	796	4.572	420	377	108
Womens' magazines	32.484	30.197	28.608	3.876	26.321	2.287	1.589	106
Food magazines	10.835	8.856	8.451	2.384	6.472	1.979	405	105
Youth magazines	7.300	6.704	6.398	902	5.802	596	306	105
General magazines	20.603	19.745	19.277	1.326	18.419	858	468	102

Daily newspapers have a well-established digital readership, as we know from other sources such as the internet audience measurement and e.g. GfK study ‘Trends in Digital Media’, which has been following the possession and use of smartphone and tablet since 2010. The results of those sources are in line with the results of NPM: the total brand readership of newspapers is 22% higher compared to the paper readership. National dailies have the highest rise, with a 32% higher reach. The increase for magazines is on average 8%, varying from 2% for general magazines (among which yellow press) to 18% for sports magazines.

In figure 8 an example is given for the use of the new metrics on a brand/title level. It shows how digital reading can differ between brands. De Telegraaf attracts the most digital readers, in absolute numbers as well as the proportion of the total readership. The split into overlap and unduplicated reach can also be made for target groups. Figure 9 shows a comparison of paper/digital reading in different age groups for two national dailies. We selected three age groups which correspond with life phases:

- 13-24 year old: education time
- 25-64 year old: the work force
- 65+: retired

Overall and not unexpected, younger readers read digital products more often than older readers. The difference between 13-24 year olds and 25-64 year olds is small. Brands themselves differ in this regard. De Telegraaf has a higher digital only readership among its younger and working audience than de Volkskrant; both newspapers have an equal proportion of duplicated readership in these two age groups. For 65+ readers, it's the other way around: readers of de Volkskrant choose digital products (in combination with paper or on its own), while a larger proportion of De Telegraaf-readers prefers paper only.

Figure 8. Net readership of national daily newspapers (readers x 1,000)

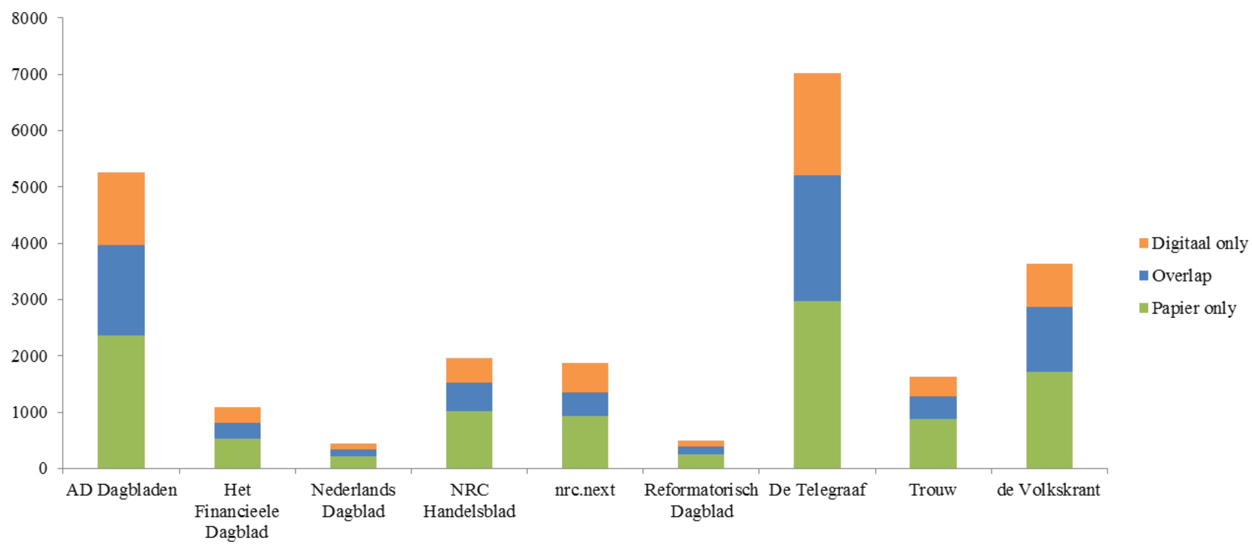
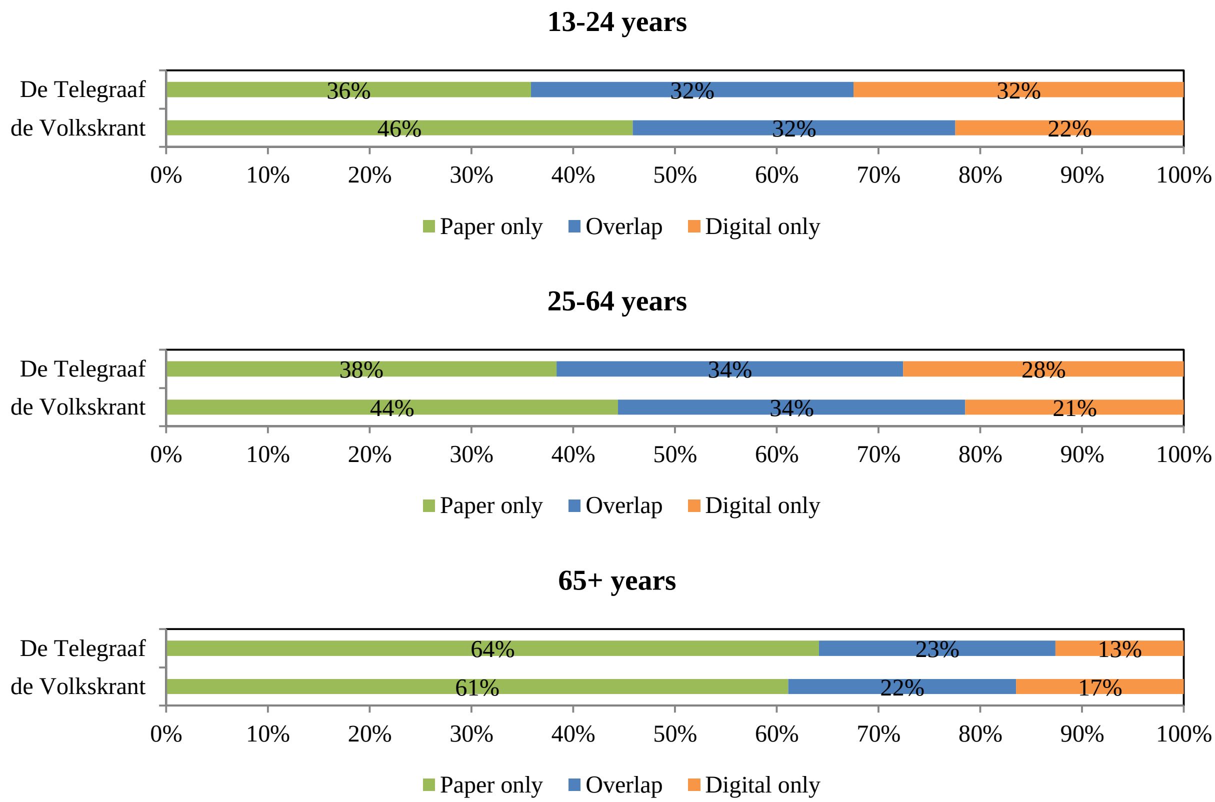


Figure 9. Comparison of net readership by age group



Validity of answers

The usefulness of the results depends on the validity of respondent's answers. Can respondents answer the question whether or not they have been in contact with the digital product(s) of a brand? Based on earlier testing (Petric & Bassler, PDRF 2013) we concluded that respondents are able to answer these questions, albeit a challenging task especially if many devices and/or products are read.

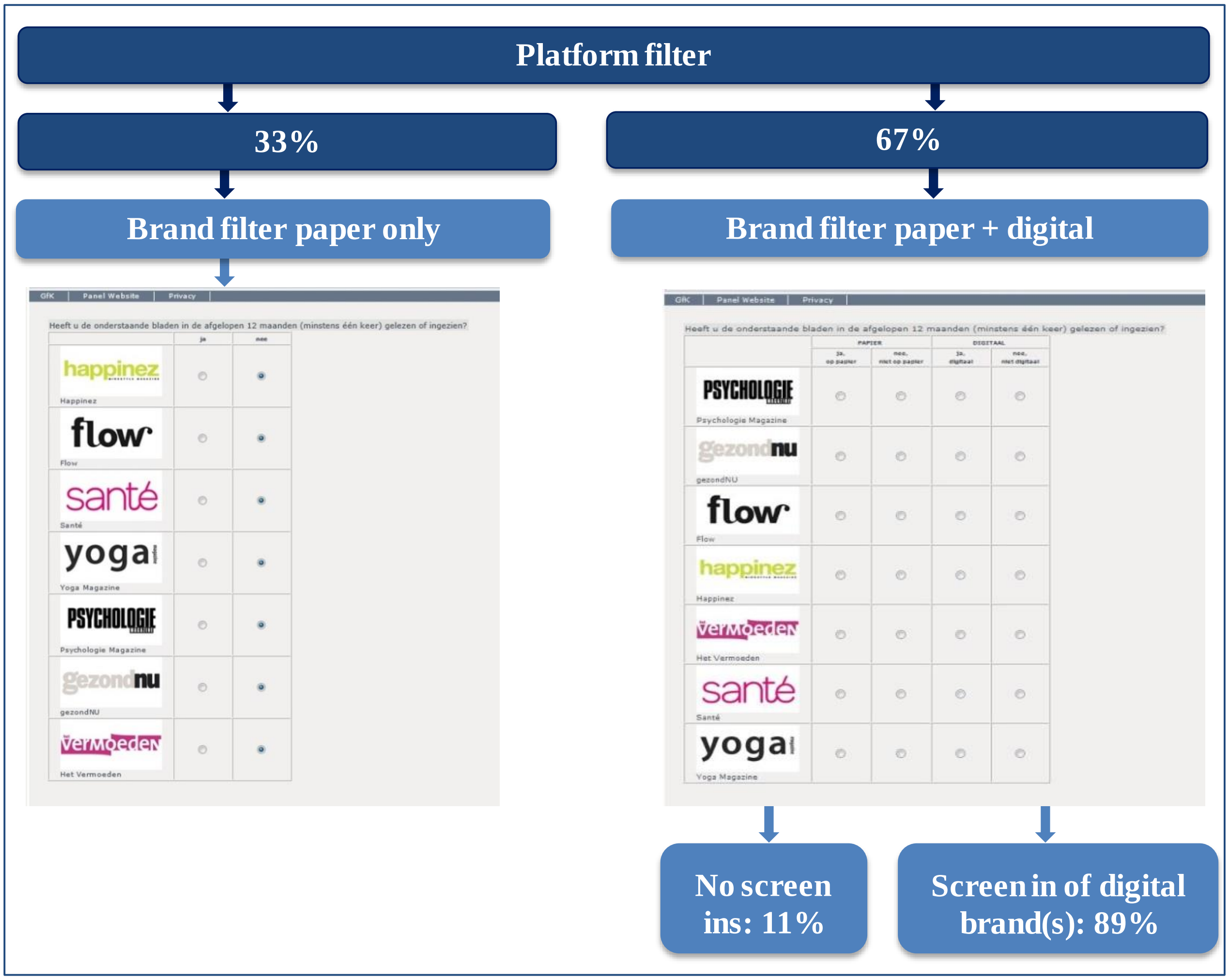
Consistency between platform filter and brand filter

To investigate whether the current results are valid, we first looked at the consistency of answers between the platform filter (measuring reading on different platforms on a general level) and the brand filter and secondly compared the results to digital reach data from passively collected internet audience measurement data.

All respondents answer the questions in the platform filter: on which platform have they been reading newspapers, on which platform have they been reading magazines in the past 12 months. 67% of all respondents indicate that they have been reading on a digital platform, either newspapers and/or magazines. Those respondents are then routed to the brand filter for both paper and digital products. 33% of the respondents answer that they have not read newspapers/magazines on a digital platform in the past 12 months. Those respondents are routed to the brand filter questions for paper editions only. This includes those respondents who say they have read neither newspapers nor magazines at all in the past 12 months, they are also asked to fill in the brand filter question for paper editions.

Those respondents who have identified themselves as digital readers answer the brand filter question for both paper editions and digital versions. 89% of them select one or more digital brands, 11% select no brand (see figure 10). This high consistency between the platform filter and the brand filter indicates that respondents understand the questions we are asking them. 11% possibly do not find the brand they are reading digitally.

Figure 10. Consistency between platform filter and screen ins



We have looked at consistency separately for newspapers and magazines. The answers for newspapers are more consistent than the answers for magazines: 83% of those who say they read newspapers digitally in the platform filter, subsequently screen in one or more newspaper brands. For magazines, the percentage of consistent answers is 71%.

We find a higher percentage of consistent answers among higher educated respondents. This might mean that the filter questions are not clear to everyone. However, we need to consider other possibilities.

For magazines, we need to take into account the long tail of publications. There are approximately 1200 consumer magazines in the Netherlands, of which 117 are measured in the NOM readership survey. A respondent might very well read a digital brand of a magazine not shown in the brand filter question.

If we look at newspapers, we see that younger respondents more often do not select a digital brand after answering that they read newspapers digitally. It is possible that they are thinking of other news brands that have no print origin when they are answering the platform filter question. There are several popular news apps in the Netherlands (e.g. nu.nl) that have no print equivalent.

Comparison to passive measurement results

For a final check we compare the total readership on a brand level from the NOM Print Monitor to the passively measured GfK DAM internet audience results. GfK DAM is based on a panel of 8,000 respondents, representative for the Dutch population including noninternet users. The panelists install LEOtrace software on their devices – pc, smartphone, tablet – which measures visits to websites/use of apps. The results of this passive measurement are compared to the results of the total brand readership and ranking in the NOM Print Monitor questionnaire. Total brand readership (read in the past 12 months) from NOM is compared to monthly reach from GfK DAM. Table 2 shows the comparison for newspapers, table 3 shows the comparison for women's magazines. The levels of readership and the rankings are remarkably similar, especially considering that they are based on different samples and different measurement techniques. Especially for daily newspapers the match is very good. An exception to this is the readership level of AD, which seems to be underestimated in the questionnaire, but nevertheless has a corresponding second place in the rankings of both studies. We have also looked at the GfK DAM results for a longer period than monthly reach: the results show higher reach. This indicates that infrequent contacts with the digital brand are not reported in the questionnaire, whereas regular and recent contacts are.

Table 2. Comparison results questionnaire vs. passive measurement – daily newspapers

	NPM		GfK DAM	
	digital brand readership	rank	monthly reach	rank
Telegraaf	28,6%	1	34,9%	1
AD	20,4%	2	32,3%	2
de Volkskrant	13,5%	3	11,4%	3
NRC	9,7%	4	9,9%	4
Metro	6,9%	5	7,7%	5
Trouw	5,3%	6	5,6%	6
Het Parool	3,3%	7	4,0%	8
De Gelderlander	3,1%	8	4,4%	7
Brabants Dagblad	2,8%	9	3,1%	10
De Stentor	2,4%	10	3,4%	9
Eindhovens Dagblad	2,3%	11	2,5%	12
Dagblad van het Noorden	2,3%	12	1,6%	17
BNdeStem	2,2%	13	2,1%	14
Noord Hollands Dagblad	1,7%	14	3,1%	10
Reformatorisch Dagblad	1,7%	15	2,5%	12
Nederlands Dagblad	1,6%	16	0,9%	20
Tubantia	1,4%	17	1,8%	15
Leeuwarder Courant	1,3%	18	1,0%	19
PZC	0,8%	19	1,8%	15
Leids Dagblad	0,7%	20	0,6%	22
Gooi en Eemlander	0,6%	21	0,7%	21
Haarlems Dagblad	0,5%	22	1,3%	18
Barneveldse Krant	0,3%	23	0,3%	23
Friesch Dagblad	0,2%	24	0,2%	24
IJmuider Courant	0,2%	25	0,1%	25

Table 3. Comparison results questionnaire vs. passive measurement – women's magazines

	NPM		GfK DAM	
	digital brand readership	**rank**	**monthly reach**	**rank**
LINDA.	3,9%	1	4,8%	1
Libelle	2,5%	2	4,0%	2
Viva	1,9%	3	2,1%	4
Margriet	1,7%	4	3,3%	3
Vogue	1,6%	5	0,3%	11
Cosmopolitan	1,6%	6	2,0%	5
Elle	1,4%	7	1,7%	7
Grazia	1,4%	8	1,8%	6
Flair	1,2%	9	0,2%	14
Womens' Health	0,9%	10	0,4%	10
Glamour	0,9%	11	0,8%	8
Vriendin	0,8%	12	0,6%	9
Kek Mama	0,7%	13	0,1%	16
Jan	0,6%	14	0,3%	12
Beau Monde	0,5%	15	0,2%	15
Opzij	0,5%	16	0,1%	17
Knip Mode	0,4%	17	0,3%	13
Vorsten	0,4%	18	0,1%	18

Those cases that show substantial difference between the results from the questionnaire and passive measurement can be explained per case.

Regarding newspapers, distribution can be regional and therefor measurement in the questionnaire is limited to a regional selection of the sample. However, the digital consumption can be more widespread, e.g. when people after moving are still interested in the news from their previous home town.

In the case of Vogue the questionnaire delivers a much higher result than the passive measurement. We attribute this to the fact that respondents do not limit their answers to the Dutch license of the brand (as it is done in GfK DAM), but probably also report contacts with the international digital products.

Based on the above evidence we conclude that respondents are able to give valid and useful answers to the questions on digital reading of newspaper and magazine brands. We have to stress that we do not ask respondents on which specific platforms they have read a brand (computer, tablet, smartphone); this seems to be a more difficult task which probably produces less reliable answers, as our own testing and experiences in other countries have shown. We therefore conclude that the questionnaire is a suitable instrument to identify digital readers on a brand level.

5. Impact on the print currency, Average Issue Readership

"The message of the CIM to the industry is clear and simple: any comparison with the past is strictly forbidden! Any comparison is therefore excluded. Even for the indicator paper. This being said… let's compare!" (Cools et al, PDRF 2013).

In the prior paragraph we showed that measuring digital reading in a questionnaire is possible and that print brands have a lot to gain from extending the measurement to total readership. However, the currency for print media planning is still unchanged: Average Issue Readership of paper editions. In these sections we will discuss how the change in measurement affects the currency.

Besides changing the questionnaire to make it possible to measure the digital brand, other changes have been implemented in the most recent half year (2015-I):

- The sample size has been reduced from n=21,000 to n=17,000 per year. The reduction of the sample size has been made due to cost considerations and has been implemented in the random probability sample, leading to a changed proportion of the random probability sample in the total sample. Prior analyses on the impact of using the hybrid approach have shown that differences in demographic characteristics in the two samples account for a small part for differences in readership (Petric & Appel, PDRF 2011).
- The reduced sample size made it necessary to adapt the weighting structure, to include weighting by half year (because of the different sizes of the 2 periods in the current publication) and combining the weighting of teenagers from 13-15 into one category instead of separate weighting cells.

This means that – besides the actual developments in readership and change in the questionnaire – these factors need to be considered when evaluating the development of readership. In table 4 total readership (reach in past 12 months) and AIR are compared for the current publication (based on the second half of 2014 and on the first half of 2015, using the new questionnaire design) with the previous publication (based on 2014, with the old questionnaire design). The table shows that readership decreases with 6% for both newspapers and magazines. In previous publications, this decrease was around 3% to 4% from one publication to the next. Table 4 shows the differences for the current publication vs. the previous publication for various publication groups.

Table 4. Index current publication compared to previous publication

	12 months readership	AIR
All titles	94	94
Daily newspapers	93	94
Magazines	94	94
National dailies	92	92
Free newspapers	94	94
Regional dailies	95	95
Newspaper supplements	98	99
TV guides	91	92
News weeklies	91	91
Management magazines	92	99
Womens' magazines	93	96
Men's magazines	95	96
Youth magazines	91	88
General magazines	95	95
Automotive magazines	96	96
Sports magazines	91	96
Food magazines	98	97
Parenting magazines	96	97
Travel magazines	92	91
Home and deco magazines	94	93
Science magazines	94	91
Special interest magazines	96	98
Mind- and body magazines	98	95

Figure 11 shows the development of total readership of printed editions over the past years, as an index of the sum of all titles compared to the same titles in the prior half year. In 2015-I the change in the questionnaire was implemented. The figure shows a steeper decrease in readership of newspapers than in prior periods (index 86). The same goes for magazines, albeit that they are decreasing less than newspapers and that magazines have had other periods in which the reach decreased almost as much (index 90). Figure 12 shows the development for average issue readership of paper editions. Again, we see that newspapers decrease more than magazines. Furthermore, the decrease of average issue readership is slightly less than that of total readership reach.
We have to point out that the publications of the NOM Print Monitor are based on a yearly rolling average (published two times a year); for the sake of analyses in this paper we have presented the results in half year periods.

Figure 11 . Development of total readership paper editions per half year

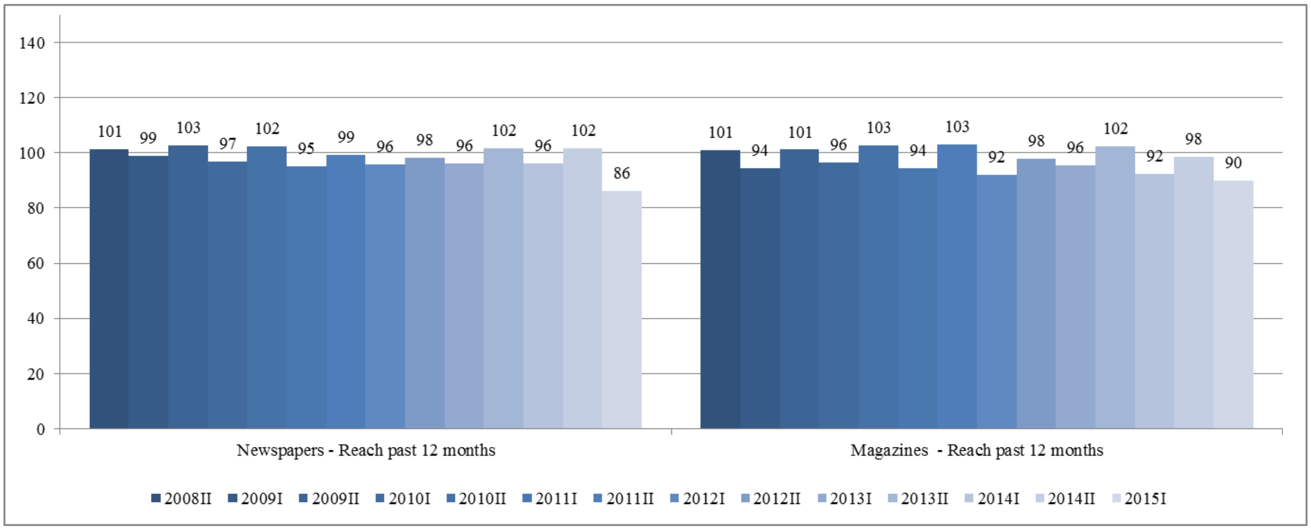
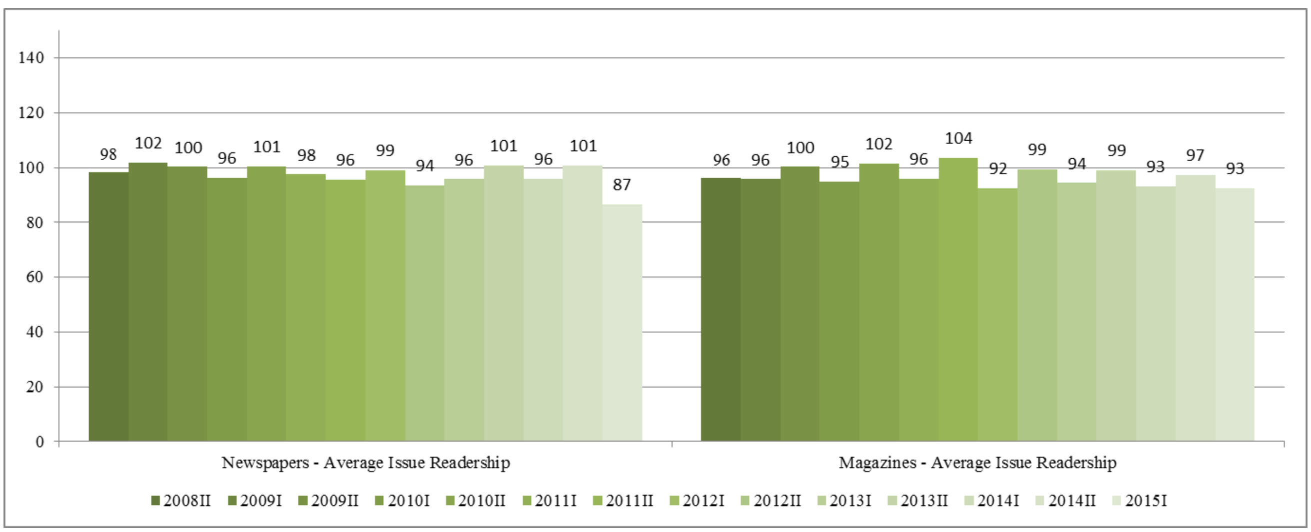
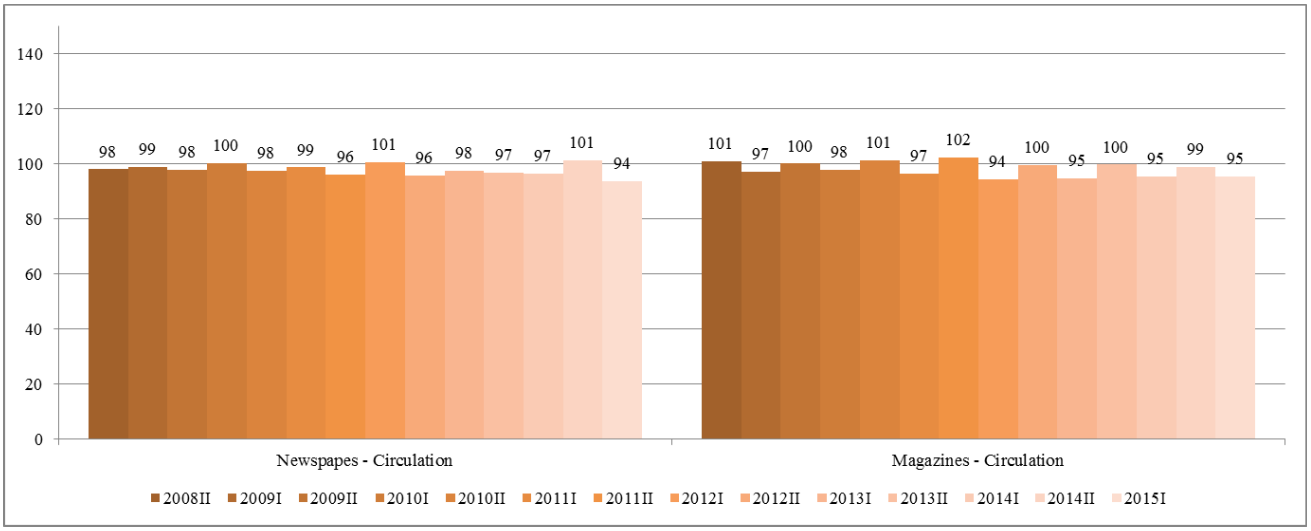


Figure 12. Development of average issue readership paper editions per half year



In order to find an explanation for the decrease in readership of paper editions we have first looked at the development of circulation of newspapers and magazines that are measured in the NOM Print Monitor. This can be seen in Figure 13. The correlation between the development in Average Issue Readership and circulation for newspapers is 0,69, for magazines 0,89. We can conclude that a part of the explanation of the decrease of readership of paper editions in 2015-I is the development of the title itself.

Figure 13. Development of total circulation



How much did the change in the questionnaire contribute to the decrease in readership? There are two major changes in the questionnaire in 2015-I: the new platform filter in the beginning of the questionnaire (1) and the addition of digital products in the brand filter for total readership in the past 12 months (2).

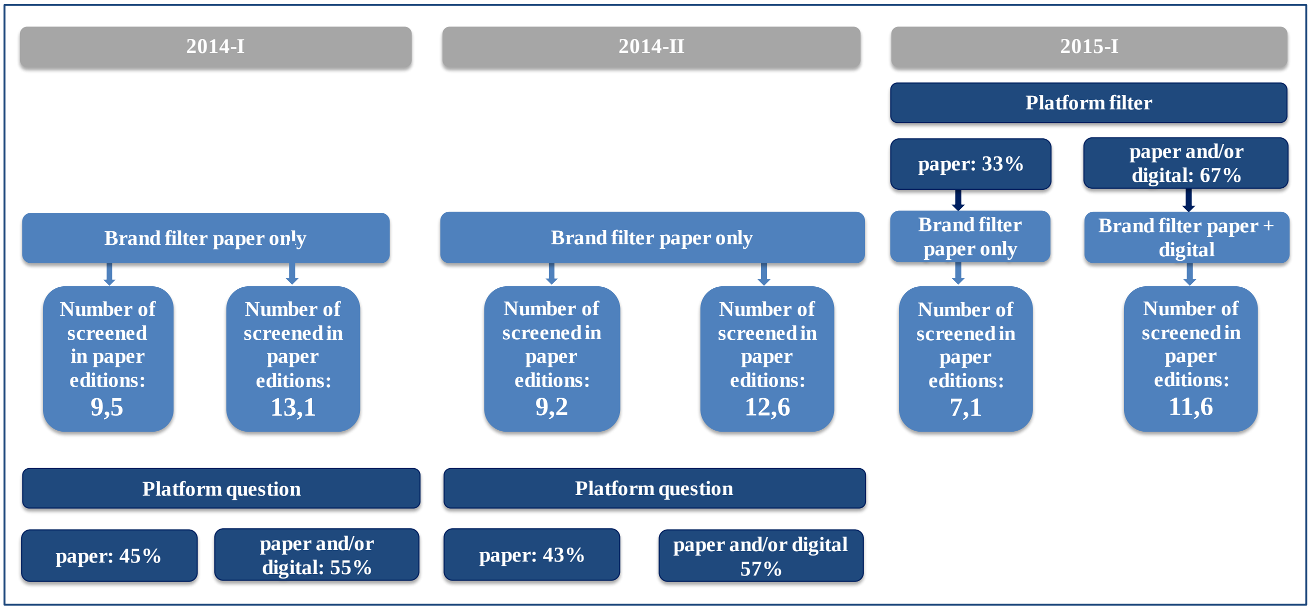
We first looked at the platform filter. From 2011 to 2014, this question about reading on different platforms was in the second half of the questionnaire, after the questions on readership of printed editions. In 2015 this question was placed at the beginning of the questionnaire as a filter. The percentage of people who claim any kind of digital reading has increased in 2015: from 55% in the first half of 2014, 57% in the second half of 2014 to 67% in the first half of 2015. We have to take this into account when evaluating the influence of platform filter.

The influence of the new platform filter at the beginning of the questionnaire can be investigated for the respondents who did not indicate any digital reading in the platform filter, and thus are routed to the "old" total readership question (brand filter paper only). We examined the number of titles selected in the brand filter question for the 33% of the sample that still get the same brand filter questions as in the past (print only). This group has an average of 7,1 screen in titles (figure 14) . The same groups in 2014-I and 2014-II had 9,5 and 9,2 screen in titles. This decrease in the number of titles / screen ins could be attributed to the platform filter which is now at the beginning of the questionnaire.

The second change in the questionnaire was the addition of digital reading in the brand filter. In order to investigate this we looked at the group which claims to read digital newspapers and/or magazines. In 2015-I, 67% qualify as digital readers and therefore get the brand filter question for paper + digital. This group has an average of 11,6 screen in print titles in the brand filter question. Similar groups in 2014 had 13,1 (2014-I) and 12,6 (2014-II) screen in titles. The decrease in the number of screen in titles is smaller than the decrease of screen in titles in the group with paper only. On the basis of this we can conclude that the placement of platform filter to the beginning of the questionnaire has a larger effect on readership results than the addition of digital reading questions in the brand filter.

The analysis also shows that respondents who claim to read only paper editions generally read less print titles than respondents who read any type of digital products.

Figure 14. Screen ins before and after questionnaire change



There is one more possible explanation for the decrease of print readership levels for brands that have rather large proportion of digital readers. In the past years, respondents might have over claimed readership of printed editions, while they were in fact digital only readers of the brand. This could be the case for large national dailies – news brands with very strong presence on digital platforms. Even though we instructed the respondents in the beginning of the questionnaire that the questions are about the printed editions of newspapers and magazines, especially young respondents could have easily make a mistake and claim to read a paper newspaper while they were only reading the digital edition / website / app of the brand.

When preparing this paper, we set out to analyze which part of the decrease in readership of printed copies is due to an autonomous development and which part should be attributed to the change in the survey design. In the attempt to separate the effects, we used regression analyses to predict average issue readership based on circulation and also to explain the variance in the number of titles respondents screen in. To give away the punch line: we did not succeed.

First, we used the back data of the past 15 fieldwork periods to build a model in which the cases were AIR per half year for the 157 titles in the recent questionnaire. We found that circulation is a good predictor of difference in average issue readership. We than added the variable ‘changed survey design’ to the model, i.e. was the case from the most recent half year or from before 2015? We found a very small (but significant) negative effect. This finding encouraged us to further analyze the change. The regression analysis itself has not been included in this paper, as the assumption of independent observation is not met because we used the results for the same titles in subsequent years and because the variability of the variable ‘changed survey design’ is limited.

We then tried to analyze on a respondent level if the change has an impact on the number of titles which are screened in. This necessary aggregation of individual readership into a single number comes at a price – as in prior analyses only a limited part of the variance can be explained by respondents’ characteristics. The biggest problem in this approach however is the operationalization of the various changes. We can identify the effect of changing the sample composition and using a larger group of access panel respondents: for each respondent in the analyses, we know if s/he is from the random probability sample or from the access panel. We also know if a respondent has had to fill in the platform filter or not. However, when it comes to defining the double brand filter (paper + digital), we encounter a problem: respondents who had to fill in the paper + digital brand filter are also digital readers. From the analyses of the number of screen ins for paper only vs. digital readers described above, we know that digital readers read more paper editions – a result that can be seen before the platform questions were used as a filter or in other words: it is a real respondent characteristic that influences the readership. But in the new situation it also describes the survey design, i.e. answering the new brand filter question. The regression showed that platform filter as well as digital reading have a significant impact on the number of titles screened in, but it does not help to determine which part is ‘real’ and which part is caused by the survey design.

In conclusion, the question on how much the change in the questionnaire has influenced the results of the readership survey is not easy to answer; we did not succeed in quantifying which proportion of the decrease in readership is due to the change in survey design.

6. Conclusion and further thoughts

NOM, the Joint Industry Committee responsible for national readership survey in The Netherlands, has changed its scope from measuring readership of printed editions into measuring total readership of the media brand. A model was constructed for measuring total readership, consisting of four data sources. By means of integration of these data sources readership of a newspaper and magazines brands can be obtained.

The first step NOM took was to redesign the national readership survey NOM Print Monitor in order to get suitable hooks which can help data integration with the internet audience data. Redesigning readership questionnaire had a double effect: on the one hand it produced an interesting and valuable set of new data on readership of paper editions and digital products; on the other hand it had an influence on the currency of readership of printed editions (total reach and average issue readership).

The following conclusions can be drawn from the whole project:

- Extending the readership survey with questions on digital reading is possible on the overall brand level; we find the results valid and plausible.
- Although we cannot quantify it, there is some evidence for impact of redesigning the questionnaire on the paper currency for newspapers. For magazines, this evidence is less clear. Newspapers and magazines react differently to the redesign of the questionnaire; the reason for that is probably the fact that newspapers have more digital products with larger audiences than magazines.
- You gain some, you lose some: titles that profit most from the new design on the brand level, because they have a large digital and/or digital only readership – i.e. national dailies – experience a sharper drop in AIR than titles that gain less on the digital front.
- It is possible that including the questions on digital readership ‘cleans up’ platform confusion in the traditional readership surveys; respondents were probably overestimating readership of certain titles in the past (which they were reading on digital platforms).

Can we draw an overall conclusion? Was redesigning the national readership survey a right step towards our goal of delivering total readership of newspaper and magazine brands? Is the measurement of readership of printed editions “damaged” in the process or did it gain on quality?

When answering these questions we have to keep in mind one important thought: what does the market ask from us? More and more the market wants us to deliver a broader picture, cross platform and cross media. With regard to that, we have succeeded in creating hooks for the integration of readership data for printed editions with the results of the internet audience survey. In the process we have obtained interesting single source insights about cross platform readership.

On the other hand, the game of selling and buying advertising space is often still reduced to single platforms. Therefore it is still very important to preserve the quality of national readership surveys and the currency for readership of printed editions.

How far can we go in guarding and improving the quality standards of readership measurement in the future? Our stakeholders ask us to cut costs and at the same time produce more information on the cross media level. McPheters & McDonald investigated the result of investments in the improvement of measurement and concluded: “There is limited evidence to support a hypothesis that better measurement increases a medium’s share of ad spending among traditional media. ….While we were encouraged to see some examples of instances in which improved measurement appeared to have an impact, we were sobered by the fact that none of these instances involved print.” (McPheters & McDonald, PDRF 2011).

There may come a time when we will have to seek for more efficient solutions for measuring / calculating readership of newspapers and magazines. Using other data sources for calibration of readership data – for example census data – is one possible way to go. We have to prepare for these times, but in the meantime try and keep the quality of our current readership measurement as high as possible. The fact remains that we need reliable, valid and representative data sources in order to integrate them into total readership data of a brand.

7. References

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