

DAILY REACH FOR DAILIES - IT ALL STARTED WITH A PHONE CALL

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It all started with a phone call.

The caller turns out to be a client working for one of the major Swedish newspaper publishers. He explains that they are experiencing commercial pressure from advertisers and media agencies to deliver daily reach figures.

Our researcher at this point feels the need to explain to the client that he already has an abundance of data available and that it most probably is not the data but the usage of the data that is a problem.

The client sighs and admits that he is very much aware of that he today has two major data sources which he can use. The first source obviously, he says, is the NRS, which also works as the local TGI and cross media study. (The NRS consists of three yearly postal waves and achieving a yearly sample of approximately 50 000 respondents).

Secondly, he continues, he uses MediaPuls. (A day after recall telephone (DAR) study, which covers dailies and evening papers and achieves a yearly sample of approximately 30 000 respondents).

The researcher says that in that case he does not quite get it. He reminds the client that the NRS is also a huge target group study, which three times a year offers media and advertisers a planning foundation where they can recreate their own carefully selected target groups and secondly, using Mediapuls, the day after recall study they can show “fast” changes in readership. Not that there really are any fast changes, the researcher continues.

Trust me the client says – we know this. But our clients – the advertisers - say that to increase or actually even keep their investments in dailies we as media owners need to deliver figures that are more in line with the figures television reports. You know what I mean; faster, more efficient and more reliable data.

In other words, the caller continues, we need to deliver figures that give advertisers a receipt on the number of individuals he reached on the specific day on which he chose to advertise. We would need you to submit an offer on how we could achieve this. There is however a number of requirements that needs to be fulfilled.

Firstly the data obviously need to be statistically secure. We also need to cover both the main paper and all the supplements and last but not least we need to be able to measure every day throughout the year.

We need the data to be delivered weekly and we need to be able to break down the data by age and gender groups and by some of the largest Swedish cities, the client continues.

At this moment the researcher realises that he is being given a research task that would be worthy the Greek god Atlas. However he also hears the whisper from Mammon – this could be a fantastic opportunity. So he quickly explains that he will look into the matter immediately and then get back to the client very soon.

The researcher’s answer

As a background check - the researcher firstly makes a thorough comparison of the different measurement systems that different media use and their access to target group data, speed of reporting and reliability of the measurement.

It becomes obvious that the amount of target group data is a unique print measurement advantage while TV has the advantage of fast reporting. It could also be argued that TV is measuring on a higher level in the ARF model than any of the other media. Large random samples of individuals are a common characteristic for print and radio surveys, but not so for TV, research is based on small household (cluster) panels.

Secondly the researcher makes a cost and significance level comparison on a number of different amounts of daily telephone interviews. Obviously, the level of reliability corresponds with the number of interviews, thus this is vital information, since it unfortunately corresponds with the cost.

The reach of the client’s daily newspaper is roughly speaking 20 %. This level is used to calculate the margin of error.

The researcher also estimates that the interview would be two minutes long – the true interviewing time would for sure be longer but for matters of reasoning this is what he uses for his calculations.

He also chooses not to take the expressed need for the data to be broken down into age and gender groups into account at this point.

As an example the researcher shows that if the client makes 100 daily interviews it will give him a margin of error of +/- 7,8 % (at the 95 % confidence limit) on the result. The publisher would be able to say that his reach on a given day was between 12,2 and 27,8 % or put in absolute figures it would be between 826 000 and 1 882 000 readers. The researcher calculates a cost estimate to be about 230 000 euro.

He further shows the clients several alternatives between a 100 daily interviews to 4000 daily interviews.

4000 daily interviews will give the client a margin of error of +/- 1,2 % on the result. In other words the publisher would be able to say that his reach on a given day was between 18,8 and 21.2 % or put in absolute figures it would be between 1 273 000 and 1 435 000 readers. The researcher calculates a price estimate to be roughly speaking 9 000 000 euro.

He argues that it probably is not politically correct to deliver less daily interviews than television does on a daily basis (1,200 households containing 2 267 individuals). (The equivalent level of statistical comparability would be the 1200 sample not the 2267 individuals cluster in the households).

The researcher then proceeds to raise the question whether the publisher's clients will accept the data without any target group data given that they are used to use target group data in their print planning.

He also raises a warning that since print media planners are used to taking a margin of error into account there is a possibility that, given that the survey is meant to be a receipt of delivered contacts, the planner will only agree to pay for the part of the readership that is not probable but "certain" – which would be the lowest estimate of the margin of error calculation.

This could imply a serious financial backlash.

Starting to feel a lot like the devil's advocate at this point, he further stresses the point that the data would still only be on a media vehicle level and not on an advertising exposure level and given that the receipt was meant to facilitate a one to one comparison this could also backfire.

The data for a campaign would also only be possible to deliver on a gross level and no net reach and exposure level data could be released.

The researcher concludes, that no matter how much he would like to sell this project it just does not make sense and he has to recommend his client other solutions

Let us leave the initial question from the client and shortly describe the newspaper market in Sweden before moving on to look into the solutions, suggested by the researcher.

Newspapers in Sweden

There are a number of segments on the newspaper market:

Urban morning dailies. There are 4 of them, issued Monday-Sunday with their readers mainly in one of the three major cities, Stockholm, Göteborg or Malmö

Local dailies. Around 150 titles, issued 1-7 days a week

Urban Freesheets. One national actor and one local in Stockholm

Local Freesheets, A large number of titles, spread all over the country

Evening daily tabloids. 4 titles, 3 of which are marketed together as one

The urban and local dailies have the core of their readership in their local area. About 95 % of the circulation is subscribed.

There are no truly national dailies, even if the Stockholm titles can be bought in many parts of the country.

The tabloids are not subscribed; they build their circulation on newsstand sales exclusively and are really the only titles with truly national coverage.

What does this tell us about the Press?

Let us see what this story can tell us about the situation of the Press. It is a long known fact that the Press is feeling a strong pressure from television and actually has faced a long time ad sales decline, partly due to the success of television.

Given the problems that television is facing right now (advertising avoidance, fragmentation, media convergence, possible new measurement systems) it seems in the authors point of view a bit strange that print is looking at television's part of the playing field and tries to adjust to the digital house gods measurement systems instead of further developing their own uniqueness as a media and further develop it.

Jon Fine in Business Week puts his finger on the point when he describes the phenomena like this:

“No matter the numbers, advertisers have a hard time forsaking TV, for reasons that go beyond effectiveness studies and concerns about the model. One ad executive speaks of “the long-term mystical hold” that TV has on client and ad agency minds.

From the article - The “Mystical Hold” of TV. Viewers drift away, but ad clients don’t”

If this is the case, it could mean that the challenge is not really to change the content of the data which is produced by print but merely a question of selecting and changing into a more breathtaking surface.

The story however stresses the point that there seem to be a strong belief among publishers, that it actually is the way television is measured, which is part of television’s advertising selling success.

And if print only could copy that formula there will be a pot of gold waiting at the end of the rainbow. The authors believe that this is not true but a truism – a “truth” that has been repeated so many times in the board rooms of print media houses, so that it actually has been turned into a truth.

It seem as publishers want to move to a system like TV where newspaper ad space will be bought and sold as a commodity on the basis of volume/price with a very limited reference to audience quality – and where the post evaluation data is the arbiter.

The story also tells us something about the perceived need for faster delivery of data, both for planning and evaluation purposes – even though it really only makes sense in the later case.

Planning vs. post evaluation

This also points out the confusion that the industry is having with the concepts of media planning and post evaluation. In our work we often find that people are talking about post evaluation but believe they are talking about media planning and by all means the other way around.

Morgan Sandström and Peter Callius described it in the following fashion at the WWRS 2003:

“To be absolutely precise there is also a third meaning of the word evaluation and this is when our clients are not really talking about evaluation, but about a receipt concerning number of delivered contacts – which they then call evaluation). It is confusing and this is exactly the reason why it needs to be clarified.

Media planning is the art of trying to understand how and where to reach the target audience with the right message at the right time in the right environment. This is the art of sophisticated research followed by a thorough analysis and number crunching combined with the gut feeling acquired by the skilled professional. This is planning – this is forecasting – this is the art of trying to maximise the probabilities of success.

Post evaluation is the art of understanding sales or the mental responses the media plan (the final product of media planning) has reached. As mentioned before, this is the meaning it should have while we today sometimes are talking about it as a receipt on delivered contacts.

We believe that the print industry at times, in the competition with television, forgets the difference. This is partly understandable given the differences in research and evaluation models that exist between the two media.

In television, planning and post evaluation (in the context of delivered contacts) is very closely linked together and the whole concept of television planning is to plan and negotiate so well so that you “cheat” the system in the evaluation phase.

When TV evaluates the “result” of the campaign is where it gets tricky for print to follow, because TV is not really evaluating a result (as in mental response or in sales). TV is just evaluating (counting) the number of probable hits (GRP) on a specific issue level and on an advertising exposure level (in the vocabulary of print).

Peter Callius & Morgan Sandström WWRS 2003

If we do not assess the differences between planning and evaluation there is a strong risk that we are facing print’s devaluation of the target group thinking – which brings print in exactly the wrong direction compared to the path chosen by major advertisers , where a stronger focus on target groups is seen right now.

Given that we as an industry understand that planning and evaluation are different branches on the same tree there is a need that print has not been able to fill, the need for a simple receipt on the number of delivered contacts, which is not to be confused with the planning process and its more fine tuned targeting.

Pragmatic and trustworthy solutions

Let us look closer at the research and analysis solutions which were a result of this initial phone call.

At the end of the day the role of the media researcher is on one hand to be the producer of reliable and trustworthy figures and surveys and on the other hand he needs to keep a finger on the pulse of the media industry and produce solutions that are pragmatic and in line with the perceived needs of the market.

As Media researchers we are walking on a tightrope since we need to consider these two - at times - contradictory descriptions of our job.

The think tank and the solutions that were implemented

After looking into the whole problem description a number of possible ways to “solve” the dailies perceived problems were presented and implemented.

The problems could be summarized in the following way – print needed:

1. Faster delivery of data
2. A receipt on the number of delivered contacts
3. Delivery and measurement on a daily basis

Where it was possible we tried to base the new solutions on already performed research. There were two main reasons behind this. Firstly it was perceived as a great advantage if the project could be fully integrated with the existing currencies and secondly it would mean a solution, which was more cost efficient for the clients.

Step 1: Calibration of the DAR survey to the NRS - The combination of the telephone and the postal survey

The first need to tackle was the perceived need for faster reach data deliveries. The italics on perceived are partly there to explain that given the stability of the dailies readership this was really not a real planning question but more of a mental and marketing issue.

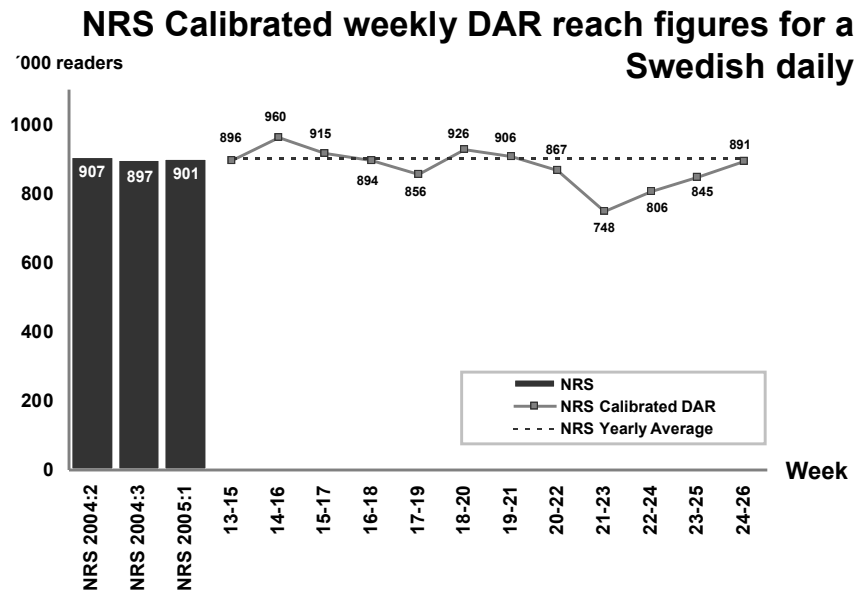
Print was seen as being slow and not in line with the fast reporting that TV could achieve. It is worth to note that once again planning and evaluation is being mixed up.

- The Swedish NRS Orvesto Consumer is a self completion postal questionnaire with approximately 50 000 annual respondents. The survey which apart from print data, the survey also covers TV, Radio, and Internet and has a full range of TGI questions is being reported four times a year
- As a complementary study a day after-recall survey (DAR) – Mediepuls is performed. The survey covers the readership of dailies and is conducted in a CATI operation. Mediepuls is in field 350 days per year since 1995 with 112 interviews a day. Mediepuls is reported each week of the year with the latest three week average totals, and each month with the latest two month average totals. The whole point of the survey has been to produce faster data than the NRS could produce. However, it was a stand alone survey and consequently no connection to Orvesto Consumer the “official” NRS was at hand. This was perceived as a problem by the clients and was a reason for the limited use of Mediepuls.

The decision was then taken to calibrate the Day after recall figures to the NRS levels. Generally speaking the recent reading method used in the day after recall telephone study produced between 0 and 30 % lower readership estimates than the frequency question based postal questionnaire survey.

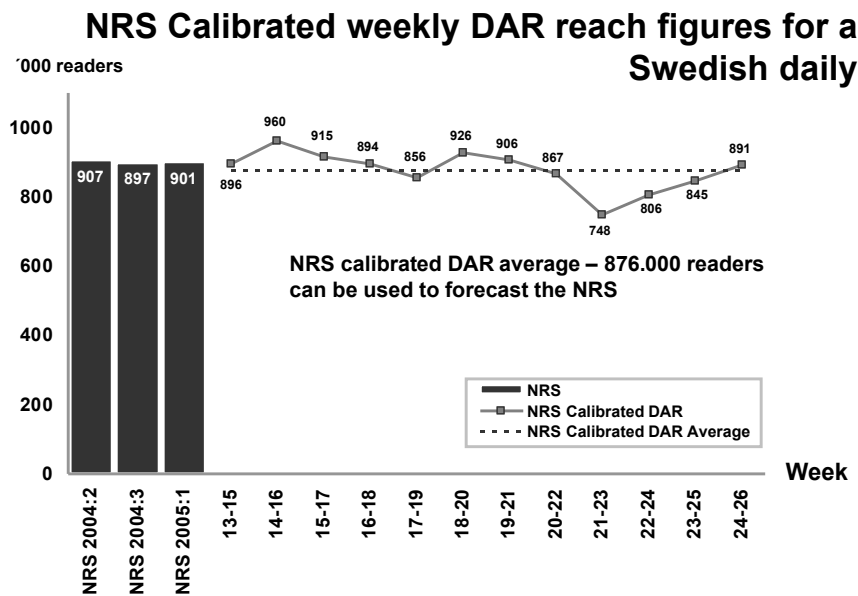
The calibration method is a pretty straight forward exercise. For each print title the numeric relation between the audience from one year of DAR data and NRS data from the same period is calculated.

The derived factor for each daily is then used to calibrate the new weekly data, this means that a time series over the year is derived, which the planner can use in planning and evaluation and forecasting.



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The bars show the last three NRS periods on which the DAR data has been calibrated. The straight line accordingly shows the “planning currency” as derived from the NRS, while the dotted line shows the weekly variations from the DAR. It is obvious from the graph above that the data becomes more vivid when more data points are added and it is possible to see how the audience varies over the measured weeks.



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The straight line shows the derived average from the DAR study. In a perfect world the DAR calibrated data can also be averaged and used to “forecast” the future postal NRS, which is being collected at the same time.

In the first working model the data from the DAR study was calibrated to the NRS thrice a year (corresponding periods from both studies).

The dilemma of this approach was that the data was only to be used between the official NRS releases thus reflecting changes that the NRS was not able to monitor.

Thus, this approach did not admit time series longer than a 4 month period since the data was re calibrated at each NRS release.

This lead to some confusion over the figures and the method first described is now the one which is used.

Summary: Since the DAR data was released weekly it meant that weekly “updates” were delivered to the clients and they were not limited to only three data releases per year. Seasonal patterns can also be observed and taken into account when planners are to foresee seasonal variations. This was however only the first step in the solution.

Step 2: Day type reach for dailies

The second step was a consequence of the first. The monthly DAR reports also included demographics and data for the reading on separate weekdays.

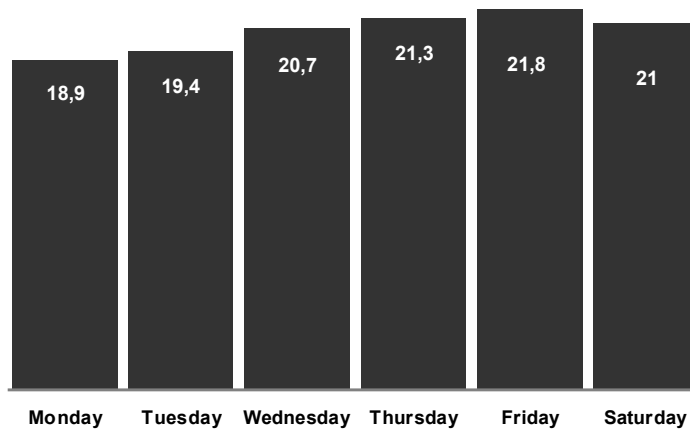
Since there seems to be systematic differences in the reach figures for the different dailies depending on the day of the week a decision was taken to calibrate the week day figures to the NRS average issue reach figure.

The decision was obviously most important in dailies with a lower level of subscriptions but even dailies with a high subscription rate show systematic differences.

This was also a decision which was taken in the light of time based planning – where magazines nowadays (given that you do not implement velocity studies in the NRS) really are the only missing link to make time based planning on weekly levels a reality.

The day type data from the DAR study is collected and averaged over the whole NRS field work period.

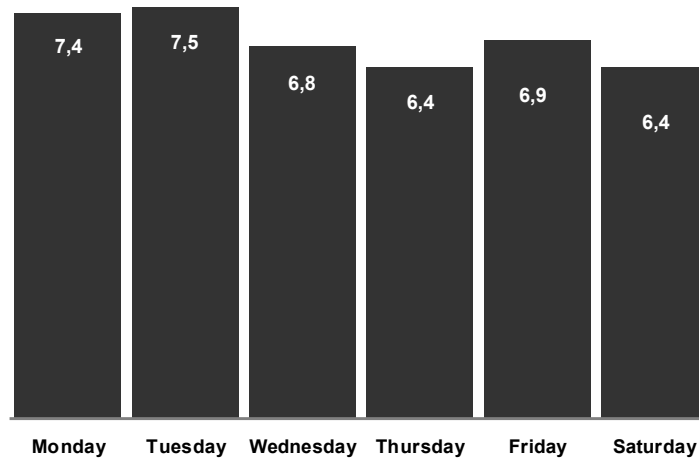
Day type audience variations for a non subscribed daily



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If we examine DAR data for a non subscribed evening paper, bought in news stand we can see some interesting relative differences. This can obviously together with other sets of data and information change the planning process.

Day type audience variations for a subscribed daily



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Even a subscribed morning paper shows day type variations that are quite substantial.

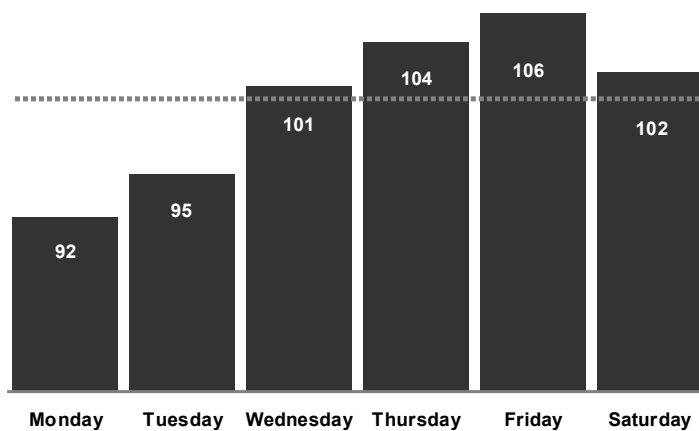
In the case of the largely newsstand sold evening papers it is easier to explain day type differences with the very hard focus on paid special interest supplements and the corresponding differences in audiences size according to the subjects popularity.

This does not however explain the systematic differences that we also see in the case of the subscribed dailies.

At WWRS 2003 Peter Callius and Morgan Sandström argued that the internal reading pattern is very different depending on readers' topical interest profiles, the reading of dailies is very much like a "smorgasbord" – very few eat everything but everyone eats/reads their favourite meals/subjects.

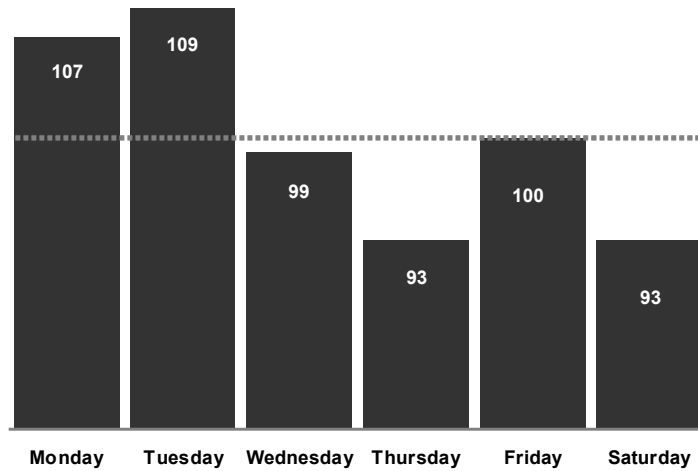
The differences in day to day reading could apart from sociological explanations be a consequence of the strong editorial focus on different subjects on different days.

Day type audience variations for a non subscribed daily



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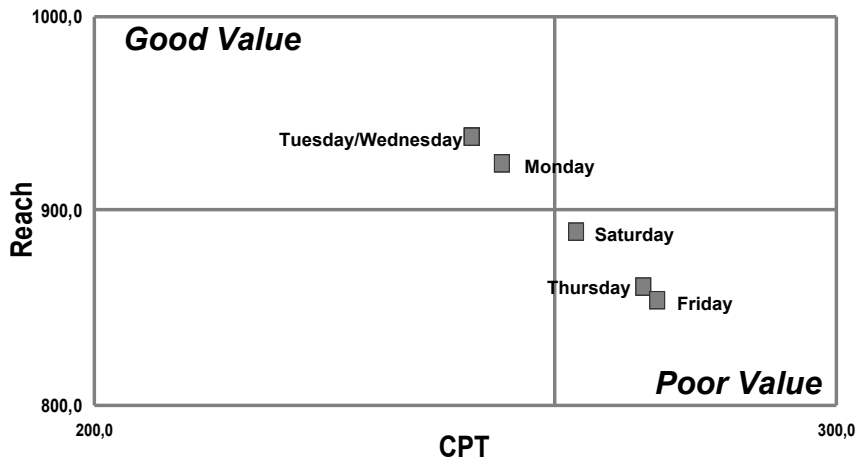
Day type audience variations for a subscribed daily



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Day type variations become even more obvious when we look at the same data and apply a “planning average index” which shows the data the way a planner (or buyer and seller) would use the data in an everyday working situation. The green bar represents the data as it is planned in the AIR situation, while the blue bar represents the “true” differences that the week days represent.

Reach vs CPT on day types – Subscribed daily



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To complicate matters further and include a cost element – we can see that relatively speaking “all things the same” some days apparently are a better choice from a financial point of view.

The sophisticated modelling behind the day type reach figures has been thoroughly covered in an earlier WWRS paper (Venice 2001) “Measuring the ‘daily reach of dailies’ and newspaper sections” written and presented by Peter Masson, Paul Sumner and Ingemar Lindberg.

To recap the thinking behind the modelling in short it could be said that the best reach and frequency models work at the individual level – they are not formula based. They however build on an assumption of independence.

Unfortunately in the case of supplements or daily reading on different day week days the assumption of independence is wrong and new models have been presented.

Thus a conditional probability treatment for Daily dailies has been implemented – this can vary by publication and by survey.

From a planning perspective this can have huge consequences since it changes the traditional way of looking at the data. The impact of conditional probabilities differs between morning and evening papers, where the morning papers are characterized by high levels of subscriptions. The net reach levels are however generally speaking unaffected.

Nevertheless, the conditional probability modelling increases reach on morning papers primarily on a 3 +, 5 + ...exposure levels while they decrease in the evening papers compared to the plans when assumption of independence model was used.

The conditional probability model is in our opinion in this case a lot more realistic than the models used normally and the day type figures provides the planning community with another piece of the media planning jig saw.

Summary: The inclusion in the planning software Sesame and the modelling of day type reach data for the dailies provide buyers and sellers with a strong tool to understand systematic differences in the composition of the AIR in reference to different week day's patterns.

This can change both the way dailies are being planned and the way dailies create their pricing models.

It also moves dailies a further step closer to time based cross media planning.

Step 3: Weekly delivery of “new” DAR data calibrated to the NRS

One of the classical problems with surveys which are not connected to the currency research is that they will not be used to the extent which was originally intended. This is why great effort has been taken to produce a software solution in Sesame which enables planners to download a new set of data every week – this is the DAR data, which was calibrated to the NRS as described in step 1.

Even though the system is ready to go - no formal launch has actually been undertaken and the reason is the general feeling that even if this very much is in line with prints wishes for faster and more accurate data it really puts the finger on the whole issue of the difference between planning and evaluation.

Imagine for example a planner who is planning a campaign and he bases his analysis on a historic “three week period” which was measured to achieve 4 % better than the AIR figure – However, when the plan has been inserted and it is time to evaluate the outcome it turns out that the result during this specific week was 3 % less than the AIR figure. The planner has now only given the client 93 % of the reach which the advertiser anticipated. This will not contribute to a higher trust in the planner and the print planning process.

This puts a focus on the fact that when we are planning (no matter which media) we need stable averages around which we can make reasonable assumptions.

Summary; Even though, implemented in the modelling and the Sesame planning system data has not yet been released as the market is still uncertain if it really wants to add this complexity and variability to the planning and buying process

This brings us to the last step in the described process which is about the receipt and the evaluation phase:

Step 4: The receipt on delivered contacts

One need described initially by the dailies was to produce a receipt on the number of delivered contacts.

Print obviously has a disadvantage compared to digital media since evaluation of the media cannot be done integrated in the planning system.

Even though it is the authors' belief that evaluation really should be done on a target group level - we assume that delivering a gross receipt on a total level, is an acceptable proxy, since it is considered reasonable to assume that the relative values between the target group and the total population would be constant.

In other words a 10 % over delivery, compared to the AIR would most probably mean that the target group also reached a 10 % over delivery.

A number of possible solutions were considered and later rejected. Among them the initially mentioned telephone survey which was considered to be too expensive to actually perform. The Swedish newspaper market is extremely local and in any interview based approach it would only be possible to measure a very small number of large dailies and thus a receipt on the number of delivered contacts would only cover a small portion of the market.

Another method to produce gross contact levels in a reasonably cost efficient way would be a panel. A SMS panel concept was however rejected due to limitations in the platform and fears of misrepresentation in the panel and also foreseen administrative problems in handling of the rolling panels.

At the end of the day all survey methods also had the enormous disadvantage that it became apparent that the true daily variations of the dailies generally speaking would be lesser than the margin of error.

Hence a completely new approach was considered and accepted.

The two building blocks of the model were the following:

1. Circulation figures

Research International in Sweden is not only the main supplier of reach and targeting data through the Orvesto survey, but also the Swedish ABC with the responsibility to produce and report circulation figures for printed media. Daily circulation figures are not reported within the reporting system, but technically all dailies have the capability to deliver these data, which can then be audited by the ABC.

2. The day-after-recall survey Mediapuls

As described earlier - Mediapuls is a Day-After-Recall survey on the readership of dailies, conducted in a CATI operation. Mediapuls in field 350 days per year since 1995 with 112 interviews a day.

A new approach with major advantages

The new approach was a joint venture with the Audit Bureau of Circulation (ABC) where by combining daily circulation and day after recall data, daily estimates on the number of reached contacts on a daily level per title or campaign could be produced.

1. One major advantage is that if readers-per-copy figures based on actual circulation can be established, the data will be significantly more stable than if the figures would be based solely on survey data.
2. Another advantage is that the model can be used on any daily newspaper no matter the size – this is absolutely essential on a newspaper market such as the Swedish, where newspapers often is a local matter and consequently any survey only approach would be enormously expensive.
3. It is also a cost efficient solution, since apart from the circulation figures, the only thing needed is the already existing survey data, that is used to define the RPC-values per weekday-type.

Establishing readers per copy per day type

Having the day type readership figures for a specific period, the only thing needed to be able to estimate an average RPC per weekday is the average circulation figures per weekday during the same period

Even though it is common knowledge among media researchers that there is not a clear cut and time consistent relation between readership and circulation figures the model is considered well working due to the continuous recalculations that take place during the year on the RPC figures. In a first step of the model the following calculation is being made on the measured dailies.

$$\frac{\text{Day Type Reach}}{\text{Day Type Circulation}} = \text{Day Type RPC}$$

Establishing daily reach

In a second step each of the measured dailies will together with the ABC calculate an audited daily circulation for each specific day.

Each day will then be multiplied with the day type RPC figure for that day and the result is a receipt on the daily number of delivered contacts that the daily delivered to the advertiser.

Day Type RPC x Specific Day Circulation = Receipt on delivered contacts

The data is then delivered in a web based application which is updated weekly, where the planner can firstly give an estimate on the number of contacts that the campaign is likely to reach and secondly he can evaluate the outcome of the campaign compared to the estimate.

Apart from delivering the “true” number of delivered contacts the system can also be used to establish a contact guarantee between the buyer and seller.

The tabloid newspapers’ joint sales package Impact has successfully used the model in this way and has discounted campaigns where the advertiser has not reached the expected levels. However, if the publisher over delivers no extra cost has up till today been charged.

Summary: A low tech combination between survey data and circulation data now provides the market with the possibility to get a receipt on the number of delivered contacts per insertion or print campaign even for smaller dailies.

It adds a new dimension to print planning and gives both buyers and sellers a confidence in what is actually delivered. This, could just make a difference in the cross media planning world as a matter of reinforcing print in the game of resource allocation between different media categories.

Research for learning vs. research for teaching

In conclusion it once again makes sense to remind ourselves of the dual role of the media researcher. The first role is as “the gatekeeper” of trustworthy, sensible and correct solutions to our client’s problems. The second is as the innovator of pragmatic solutions according to our clients needs.

The second role can however never supersede the first one.

Generally speaking, we find it rewarding to help our clients determining whether their need of research is for teaching or learning purposes.

We define research for learning as research which is aimed at a true understanding of the client’s situation. This kind of research shows the client as he is with no wish to “dress the bride”. This is the type of research that should be used for strategic development of the client’s business.

However, in research and in media research particularly research for learning is often mixed up with research for teaching. Research for teaching can be defined as research where the purpose of the research is to show how attractive you are.

These twofold purposes of research should not be mixed up. In the models described in the paper there exists an interesting mix of the two models.

A major leap forward?

So at the end of the day was the new research a major leap forward or just a jerk on the media ECG?

Given the fact that the perception on the market was that newspaper deliver their data to infrequent and that they were not able to show a receipt on the number of delivered contacts it could be said that the new research/modelling is closer to a major leap forward than to blip on an ECG.

1. Newspapers can now if they wish deliver weekly updates of their reach figures in the Sesame planning software.
2. The weekly DAR figures are calibrated to the NRS and can thus be used to mirror fast changes in readership
3. The newspaper planning process can be fine tuned by the usage of day of week in the planning.
4. The data can be used for forming a guarantee on number of delivered contacts and publishers can show advertisers a receipt on the number of delivered contacts.

From a publisher's point of view the initiatives show that the newspaper industry is proactive and that they take their clients demands seriously.

For planners the continuous reporting gives them a fuller picture of the newspaper market and the inclusion of day type reach figures brings more dynamics into the print planning process and in due time moves us towards more realistic weekly based cross media planning. There has however been some criticism towards print planners stating that they do not really want any more data that complicates the very streamlined planning process.

The receipt of the number of delivered contacts has been a very successful ingredient of an eminent "re launch" for the evening papers in Sweden. It is obvious that the new data gives both planners and buyers and sellers a greater feeling of control and thus the willingness to further investments increases.

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