

IF YOU BUILD IT – WILL THEY COME?

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In the 1989 film Field of Dreams – While walking in his cornfield Ray Kinsella, played by Kevin Costner, hears a voice that whispers, "If you build it, they will come".

He takes this as a sign that he should not farm his fields but instead build a baseball field.

Nothing happens and Ray soon faces financial ruin.

****At the same time in the media world – enormous efforts has been invested in creating research and data bases to facilitate multi-media planning. But the question is: If you build it, will they come?**

A new media world requires a new planning model. Multi-media planning has for a long time been seen as the holy grail of media planning. But in reality it would only be the media planning world aligning with the real world – the real world where consumers do not live their lives in media silos.

Interest in multi-media planning and selling varies:

- To advertisers the ability to get their 'silo' media investments coordinated and their media expenditure to work harder is irresistible.
- To media houses with multiple platforms the possibility to coordinate the media brand and sales is being grasped and is leading to reorganization and new ways of managing the brand.
- To single media owners the concept of multi-media is double edged. On the one hand multi-media gives access to a larger chunk of advertisers' budgets but on the other hand it's somewhat scary since they do not have other in-house media to create synergies or package with.
- To media agencies - The concept of multi-media planning is in theory a potential gold mine since it so clearly shows advertisers the complexity of a new media environment thus giving agencies a more consultative role.
- To advertising agencies – Multi-media planning shows the advantages of combining more media. More media leads to more creative executions. This gives more creative freedom and possibly financial benefits
- To Consumers – When the consumers are not put in media silos – overspending of advertising in the different silos can be reduced which will have a potentially positive effect on advertising avoidance.

But quite frankly – we believe that most advertisers think that multi-media planning is already a fact at their media agency.

But in most agencies in most countries, even if communication planning is not silo based on a strategic

level, it is at a media planning level. But in a world where advertisers demand multi-media planning and multi-media databases mushroom - what is the reason for the slow uptake?

Media agencies have responded a lot more slowly than would have been expected. This phenomenon has been reported from a number of multi-media markets. It is largely explained by the way the 'Media' and the 'Media Buying Agencies' have organized over the last 5 decades the buying and selling of time and space on a medium by medium basis. This of course has driven and sustained the 'silo' approach of media research. Thus it has been hard to find drivers for change and largely explains the lack of multi-media competence/staff.

The result is that there exists a wide gap between the tools used for strategic media planning and those for 'silo' tactical media planning and buying. The strategic planner has been unable to use the tools that have been designed for 'single' media channel trading. The data by media group have been neither comparable nor integrated and cross-media planning tools have not been available to make the process practical.

Consequently strategic planners have turned to macro econometric models as a means to decide budget levels and media group allocations.

In this macro econometric modeling environment relative media values are only one area of input and are inevitably treated quite crudely. As the multiplicity of media opportunity has expanded (away from largely TV only inputs) it has become sensible for strategic planners to use the wealth of detailed data on precise and comparable multi-media exposure distribution capabilities available through integrated cross-media data bases. This usage can be directly for strategic cross-media planning or indirectly to refine both the econometric model and its inputs on relative media performances.

The definition of Multi-media databases and Tactical Multi-media planning abilities

Different people and companies in different countries will refer to multi-media data bases and mean very different things. An excellent overview study by the WEMF (the provider of the Swiss media ‘currencies’) showed a great variance in multi-media solutions between the 15 different countries surveyed. There were huge differences in the number and depth in which media were covered. Only 2 of the surveyed countries actually had datasets that included 5 or more media categories as primary media and only 8 of the countries had TGI type marketing data included in the survey.

Some would call a ‘single source’ survey with overall media consumption a multi-media data base.

Some would call a fused data set with overall media consumption data a multi-media data base.

Even though none of these statements are necessarily wrong it is not what the authors refer to as a full multi-media data base.

Our definition requires the cross-media database to provide the market with the possibility for both strategic and tactical media planning/buying.

This requires (1) that in the cross-media data base schedule evaluation results for each media group will either be or match the **reach and exposure frequency levels** from the ‘silo’ currency research and (2) that the data integration process has maintained the **cross-media duplication patterns** found in the ‘single source’ data between all media types and (3) provides event based data allowing analysis of exposures by medium by **time period** and (4) that the data set will include TGI type **target group information**.

The strategic planner’s role is (within an overall budget level) about **targeting** (including regional) strategy, **allocation of budget** to achieve given **media exposure opportunities** to target groups **by time period** from a combination of available and suitable media types (within the context of the creative approach, competitive advertising activity and the product consumption cycle) with the objective to **maximize advertising ‘response’** during the campaign period.

It is clear that unless the cross-media data base can be interrogated to produce reach and (OTS) frequency estimates of the delivery offered by each medium, separately and combined, across time within detailed/relevant target groups then the needs of the strategic planner will not be met.

However this still leaves that requirement to be able to assess the ‘response’ to given ‘doses’ of advertising for given combinations of media at given time periods as a means to evaluating different media schedules and timing options. The paper will therefore look first look at the advantages and opportunities of being able to make convenient and realistic assessments of the OTS ‘distributions’ from alternative cross-media schedules and then look at the issues surrounding the measurement of ‘response’ and the building of response models.

Practical advantages of multi-media planning

From both a strategic and practical planning perspective there are a number of major advantages in working with an integrated cross-media and market data base

Firstly: *all media* can be analyzed and compared using *the same and appropriate target group definition*. It is often possible to evaluate print media in terms of reach, profile etc., directly in market behavior terms (for example, loyal users of brand x) as large sample print surveys are often linked with TGI type data.

This is seldom the case in TV research based on relatively small continuous panels or radio research based on diaries. Planners are therefore forced to use ‘proxy’ definitions (like women 18-34 with at least one child in household). These different target definitions obscure the true reach and efficiency comparison between media.

Secondly: the plan can be designed to perform better from a distributional point of view (Reach and Frequency).

Since all media plans, single or multi-media, suffer from diminishing returns – the addition of some exposures in a new media and the replacement of some exposures in the old media will generally add extra ‘Net Reach’ to a campaign.

But as important as adding Net reach is the frequency of exposure distribution can be better controlled. It may well be that, within a given time period, the weight of exposure using a single medium leads to a proportion of the target receiving excessive numbers of OTS (overkill), for example heavy TV viewers, while another group, light TV viewers, does not receive enough (underkill). Within the structure of TV viewing it is not normally possible to (economically) redirect exposures to light TV viewers (who may be heavy product purchasers) and there is therefore an ‘imperative’ to add other media (e.g. print) which have a strong profile of light TV viewers.

We can say therefore that a multi-media planning approach can improve ‘*Reach and Frequency Distributive strategy*’.

Thirdly: Better performance from a communication point of view. There is growing body of evidence that mixed campaigns work better because of the synergies that are created.

Numerous studies and research has been conducted on the concept of synergies (note the work of the FIPP in compiling many examples of the ‘media multiplier’ effect). Scholars and practitioners alike agree that magic happens when a message is received from different places and at different times. The force of the message is multiplied and reinforced. Mixed campaigns simply work better.

We can classify the synergy factors as follows:

Response synergies - By using multi-media we approach an individual at different times and in different ways – we let each media fill their part in the orchestra. We surround the consumer with our messages according to their own media repertoire. This will help find the way through a person's 'selective perception' more effectively than the repetition of the message from a single direction.

Content synergies - Each medium has its own inherent communication abilities. Even though TV offers sight, sound and movement there is no touch (or smell). It may be for the 'total communication' of the product and its attributes that all the senses are required. In this sense media complement each other and the 'total effect' can be greater in communication terms than the sum of the constituent parts.

Memory reinforcement synergies - Contact with the different media take place at different times and provide the capability of reinforcing the previously gained knowledge. We can postulate that a poster or a radio ad. can trigger recall (and cement knowledge) of the story told in the TV ad. seen earlier.

In this respect the incremental value of that exposure may well be as powerful in maintaining awareness as a further TV exposure (and a lot more economic). The use of cheaper/more continuous media within a media mix to stretch campaign continuity (knowledge retention) is common within strategic media planning. It would certainly seem inappropriate therefore to apply simplistic overall relative media performance weights.

Stimulus synergies - An Internet banner may have a limited impact on its own but if a TV commercial had triggered interest in the company/product the banner may be clicked for detailed information, or a press ad. read in detail.

We all know the 'multiplier' force is out there but no one has really been able to pin point the exact value of different synergy scenarios. When a planner tries to maximize the overlap between different channels - this is what we could call a '*qualitative multi-media strategy*'.

A campaign can therefore benefit from using a multi-media approach through better targeting, extended reach, improved distribution of exposures over the target by time and through synergy effects that enhance communication 'effect'. There is far more to the value of multi-media planning than just added Reach.

Response model

We remain missing a systematic and realistic means by which we can evaluate the 'effect' of large numbers of multi-media schedule combinations of reach and exposure frequency by time. Traditional 'effect' measures used in media evaluation are simply too crude – for example the 3+ (or n+) reach score is 'effective' and that the TV ad. has 2 times the 'effect' of a Press ad'. These are simply nonsense conventions. It is incumbent upon media researchers and media modelers to establish better evaluation criteria.

In a step to understand better exposure 'effect' Bucknull and Masson commissioned the Department of Psychology at Nottingham University UK to conduct a study in which the following variables were systematically varied and 'effects' measured:

| | |
|--------------------|------------------------------|
| Medium type, | Exposure timing |
| Media combination, | 'Effect' retention over time |
| Advertising weight | |

Details of the study design are given in **Annex 1**

Here is one example of the kind of data that was generated and a summary of insight gained.

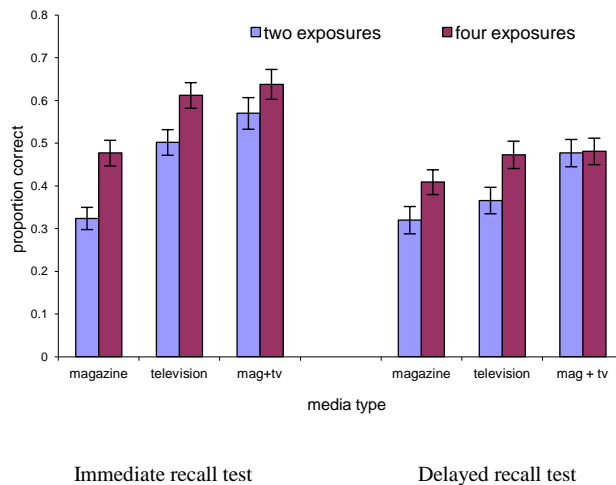


Figure 1. Brand name recognition as a function of media type, media combination, frequency of exposure and retention interval. Differences are significant between two and four exposures of magazines and TV (**) in the immediate recall test and (*) in the delayed (* $p < .05$, ** $p < .01$, *** $p < .001$).

Brand name recognition was better with four exposures than with two exposures, $F(1,76) = 25.63$, $p < .001$. Retention dropped by an average of 10% between the immediate and delayed retention test, $F(1, 76) = 32.18$, $p < .001$. Furthermore, there were significant differences in brand name retention for the types of media, $F(2,152) = 26.90$, $p < .001$. The brands that were presented in both types of media (TV) and magazine) were remembered best, followed by the ones presented in TV and the ones in magazines, respectively.

Looked at from a planning and schedule evaluation point of view:

1. There are diminishing returns from the doubling of the exposure weight in the period – less so for magazines
2. There is a clear synergy effect from the mixed media exposure group (in terms of brand name recall)
3. The retention of the knowledge (brand name recall) is much better following magazine exposure (average 93% of the immediate recall) than for TV (average of 75% of the original recall).

It is clear that for the evaluation (and optimization) of multi-media schedules we need to build response evaluation models. These must take into account the complex interaction of exposure source, source combinations and weight within time period and the ‘forgetting’ curve as well as ‘learning’ curve which are both influenced by the type of media exposure. We need therefore to conduct more extensive and more generalized studies of this nature.

Obstacles in creating multi-media databases

Even though the advantages are obvious the creation of multi-media databases and their adoption have been slower than would have been expected. The authors find a number of fundamental reasons for this.

- Methodological - Even though the benefits of ‘single source’ research are undisputed the difficulties are well known. The burden on respondents is most often too heavy to cover all media especially when coupled with a wide range of target group information. This has made the issue of data integration ‘top of the bill’ at many research conferences.
- For many years the big discussion has been focused on how to create the multi-media data bases. To the authors it seems that data integration techniques have developed to the point that multi-media data bases can be made readily available to most markets. The difficulties are not to be ignored but the answers are out there and there are quite a number of markets and surveys to use as benchmarks.
- Political – The main difficulty is most often the political ‘game’ both between different media categories and their JIC and the different data suppliers. Obviously each ‘silo’ needs to make sure that they are treated justly in the creation of the multi-media database but different ‘silo’ research might be owned by different research suppliers and they might not be easily talked into making their data available to competitors. The political ‘game’ threatens the whole multi-media initiative. Possible solutions could be to calibrate (as in the Swedish example) the ‘silo’ currency data to a TGI study (obviating the need for individual informant data to be made available). Another solution could be to create advertiser driven multi-media JIC’s which would ensure the multi-media nature of the project.
- Financial – Really a twofold issue. Unfortunately someone has to pay for the creation and maintenance of the multi-media database. Normally the media which perceive themselves as a winner in the multi-media ‘war’ will be the most likely sponsor. This

unfortunately makes others less inclined to pay. It could mean that a strictly commercial approach is the most likely to succeed. A research company or a multi-media JIC creates the data base (given that methodological and political issues are solved) and sells subscriptions. But this also brings up the issue of who is to “own” the data base. In most countries this will be a highly contentious issue and an advertiser driven multi-media JIC is most likely to succeed.

Obstacles in creating usage of multi-media databases

The obstacles in creating usage of existing multi-media databases can be described as follows:

- **Lack of knowledge** – Even though the 1+1=3 concept of multi-media planning might be simple and the pressing of multi-media software buttons might not be overly complicated, the “art” of understanding tactical multi-media planning might not be as easy.

‘Silo’ planners and ‘silo’ sales reps need to transform themselves into ‘super planners’ and ‘super reps’ understanding how all different media are measured and work together. This is not an easy task and it might be that we need a whole new generation of planners who are not burdened by the silo approach.

- **Business models** – Business models in many media agencies do not really support media neutrality. That is even if the overall business model of the agency will support media neutrality the different silo/department goals might not. Each silo will do its best to maintain their budget goals and the overall result might not be factored.

The same goes for the media houses. Some of the media work with neutral client offers but many maintain their internal department budgets which still force individual sales reps to focus on ‘silo’ sales. Where sales (media houses) and planning (media agencies) are integrated and the silo approach is relegated – advertisers are more likely to get ‘more bang for the buck’.

- **Internal structures** – This factor is closely linked to the previous point. Media agencies will have gifted people doing the strategic resource allocation and gifted people handling the planning in each of the ‘silos’ but rarely does there exist anyone responsible for the tactical multi-media planning and for bringing the ‘silos’ together. Of course when multi-media data bases do not exist there is no need for such a position. But when they do – a new structure is needed.
- **The “we still miss” factor** – Many multi-media planning bases will not include all of the media. Unfortunately this gives the ‘Luddites’ a possible way out. “Well, if the planning tools do not cover advertising on bicycles we cannot really use it, can we?”. This is really no good reason for ignoring multi-media databases. Bringing two media together is better than single media planning; bringing three together is even better and so on. We need to plan for the majority of the campaign and consider the exceptions as exceptions.
- **The “can we really compare them” factor.** The Masson & Callius paper “War of the media weights” from the 2009 Valencia WWRS Symposium covered the topic. Different media are measured differently and as a consequence the OTS measures are different. These differences have to be factored in multi-media planning process. Every media agency should have a white paper on their thinking when it comes to comparisons of different media. Just because it requires some hard thinking it cannot be ignored and, of course, the media can be compared. We do it every day but now we have to put some figures on it.
- **Lack of interest in media planning issues amongst advertisers.** To anyone involved in the media industry and knowing the levels of advertising expenditure it is certainly strange to hear reports from media agencies that advertisers are rather cold when it comes to discussing media planning issues. It is also strange to observe the statements of the World Federation of Advertisers in regard to the importance of multi-media planning and the non practice of this by many advertisers around the world.

This media interest will by all means vary a lot amongst clients but it is the authors’ opinion that advertisers who themselves have appointed media specialists and have a high degree of interest will actually will receive better media planning. On the contrary it is not the authors’ view that disinterest leads to bad planning but it is just a fact that if they have a media specialist the possibilities for joint creative magic are a lot higher.

So how have the cross-media challenges been met been met in major agencies to-day?

In Sweden the media agency Mediacom has responded to the changes and cross-media challenges in the market place by creating a new multi-media planning environment within the agency. This is the background to the development.

Cross-media team - The first step was to appoint a cross ‘silo’ team with wide ranging experience and performing three complementary but distinct functions:

- **Strategic Insight Director** – to support the client account teams from an insight planning perspective. The Strategic Insight Director will have a strong focus towards learning and understanding the client’s market, competitors and consumers.
- **Cross-media Director** – to support the client account teams in relation to optimizing the use of different media categories. This involves both strategic cross-media planning (which is nothing new) and tactical multi-media planning (which has not really existed beforehand).
- **Innovation Director** – to support the client account teams around issues involving new “creative” solutions which do not necessarily fit into a ‘silo’ world.

The cross-media team acts as support to the account director when he/she forms the client team. It is not the intention that the cross-media team get involved on each and every account. Rather to work on a range of different accounts across the account teams to bring multi-media insights and tactical multi-media planning into focus for these teams. The idea is not just to impart the theoretical advantages of multi-media thinking but for 'silo' planners to use 'hands on' the actual cross-media planning tools that the agency now has available.

Training programs - To extend the understanding of media, other than the one they work on day to day. A cross disciplinary training program has been initiated where the 'silo' specialists get a broader understanding of the other media categories.

The program has led to both a better understanding of other media channels and a wider perspective on the part the specialist's own media takes in the purchase/decision cycle and the cross-media jigsaw. It has also led to an increased willingness to learn from the other channels' best practice and has also had a positive side effect in that the movement of staff between the different media categories and specialty areas has been seen as more attractive.

Staff rotation programs between the different the specialty areas have not been initiated but the mere wish amongst consultants to know more and understand more has had the desired effect.

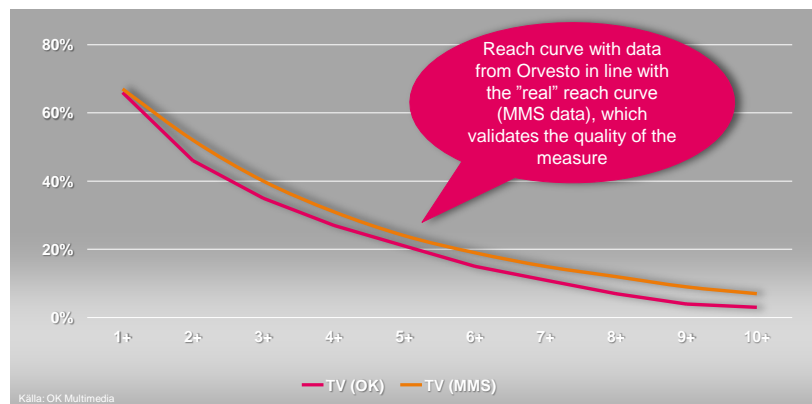
Cross-media training has also been initiated amongst account directors to help them make best use of new thinking and possibilities.

New media - Another area which has been seen to fit naturally with the cross-media team is to catch the vehicles that do not fit into any (or possibly all) of the different 'silos'. The cross-media team can then act as the support group to the 'silo' organizations and help them create a wider holistic perspective on 'new media' vehicles.

Validation - One important task initially for the cross-media team was to validate the 'currency' calibrated TV and radio data. Namely did the planner get the same R&F results when interrogating the cross-media base (OK) as when using the 'silo' base (MMS)?

Reach TV – MMS vs. Orvesto*

A20-69 y.o



* Reduction factor 0,9 included in the Orvesto figures

Without proper validation planners would not have felt confident in using the cross-media data and a barrier would have been created. The graph above shows an example of the validation process of the calibrated television data. The agency took an existing client TV schedule (target adults 20-69) and ran a reach frequency evaluation on the TV panel data (MMS) and on the Orvesto Consumer Multi-Media base. The chart shows the reach reported by each data base at each level of exposure.

The shape of the reach curves through each level is virtually identical. The multi-media data curve is slightly lower due to the fact that an advertising exposure probability weight (of 0.9) had been included for TV. (Technical note – including such an ADX weight impacts proportionately on the Gross Reach reducing it by 10 % but the impact on the Net reach is much less hence the very small differences observed in the Net Reach curves even with the weight included). After securing the validity of the calibrated multi-media data planners are now confident in using the cross-media data.

Multi-media vs. Multi-activity - But tactical multi-media planning is obviously only part of an agency's brief. One can't overlook the 'new and ever changing' media landscape when discussing multi-media tools. The link between the strategic planning and the tactical planning used to be called an internal 'media brief'.

Nowadays we call it a 'multi-channel activation brief'. Not the fanciest of names, but still a sign of the times. In our daily work, we as a media agency handle more and more touch points that don't fit into the 'classic' definition of multi-media. Whether it is sponsorship, branded entertainment, mobile, the client's website, social media or gaming - they're all becoming more and more important elements of the media plan.

So, is the quest for the holy grail of a multi-media tool in vain? Absolutely not! Bought media is still a substantial part of a media agency's assignment and we must always deliver a solid rationale as to the investment mix we put behind each channel.

Budget distribution vs. objectives and TRP's - We have also changed the briefing process from a budget distribution to an objective and TRP-based brief. The account director defines the role of each media in the media mix, and then defines the objectives and sets the TRP's for each media type.

This is extremely important since a channel may have multiple roles;

- i.e. Brand TV versus Direct Response TV.
- i.e. online campaigns aiming for awareness vs. consumer dialogue.

The specialist planner then checks whether the objectives and TRP's are achievable, selects the tools to achieve them, defines the benchmarks and calculates the budget needed to achieve the objectives.

Then, the account director and specialist planner agree on the final objectives and TRP's. And our cross-media team is also supporting this rather iterative process (instead of linear...) before the media mix and budget distribution is finally set.

Will we come...? - Mediacom will definitely come! The creation of true multi-media planning possibilities in Sweden has increased the need for even more iterative steps in the client teams' work before finalizing the media plans. But as discussed earlier in this paper, the use of multi-media tools will not happen overnight...

We also have a responsibility to teach advertisers to ask the right questions. If they do not know that multi-media exists as a possibility they will probably not ask for it.

Embracing the silos - In our opinion, the first step towards 'full scale' multi-media usage can be described as 'embracing the silos'. Just by getting all the silos to share the same nomenclature and use the same data, an important step has been taken towards multi-media analysis in its most extensive meaning.

The best lubricant – improved targeting - Building the multi-media tool in Sweden using a TGI survey as a hub survey makes a huge amount of target group data available and this fact is probably the 'best lubricant' for starting thought processes in all silos. By discussing and analysing 'real' target groups (instead of using proxy target groups) we automatically increase the relevance for each silo specialist.

Our cross-media team has also made both fusions of client databases as well as replications of proprietary client segmentations into the Swedish TGI. This has both improved targeting and increased understanding of target groups (also from the client's side) which the use of proxy targets never could have done.

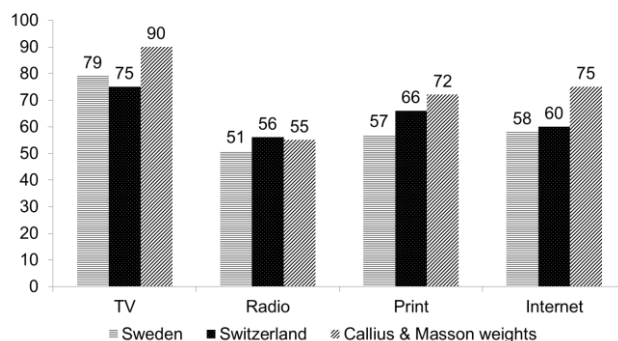
So in brief, we need to see multi-media as a tool amongst others: but it is definitely easier to put the jigsaw together when you have all the pieces!

War of the media weights - Another hot topic has also been how to equate the different definitions of OTS between the media categories. When we measure media in 'silos' it is not critical what the definition of OTS is, as long as it is consistent between all the (print) media in the survey. But it is highly critical in a cross-media survey for the comparison of reach and cpt.

We know that opinions differ amongst planners and it has therefore been deemed as a necessity to have at least a common starting point from which to start developing specific values for each campaign. This has led to a deeper understanding amongst planners and when exceptions to the 'rules' might be applicable.

The recommendation from the 'War of the media weights' paper by Callius & Masson, presented at WWRS 2009 has been used by the cross-media team to create a starting point around which to build a Mediacom model.

Media weights



In the ‘War of the media weights’ paper - a survey amongst Swedish planners were presented and it showed a great variability in the individual planner’s weights. But an interesting point is that when Erwin Weibel (WEMF) did the same study with planners in Switzerland the average figures of the different media weights were very close to the Swedish averages (see table above).

In other words the “who gets to plan the campaign factor” is of utmost importance to any media owner and by all means advertiser. And as unlikely it is that you will be just hunted by an average lion as unlikely it is that the campaign will be planned by an average planner.

By creating a common ground on which to decide OTS media weights an agency can minimize individual differences and come closer to best practice solutions

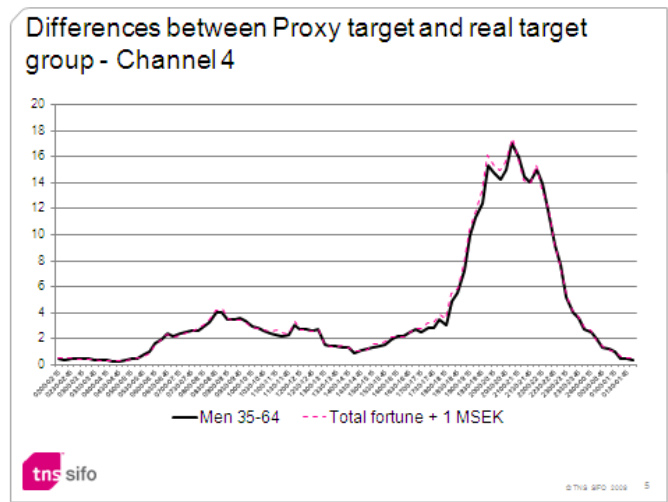
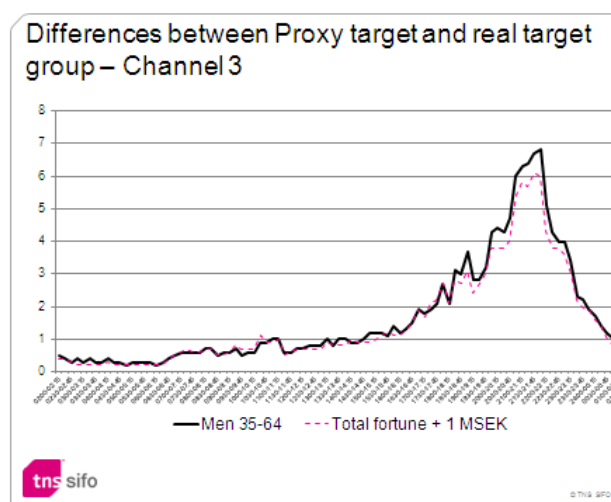
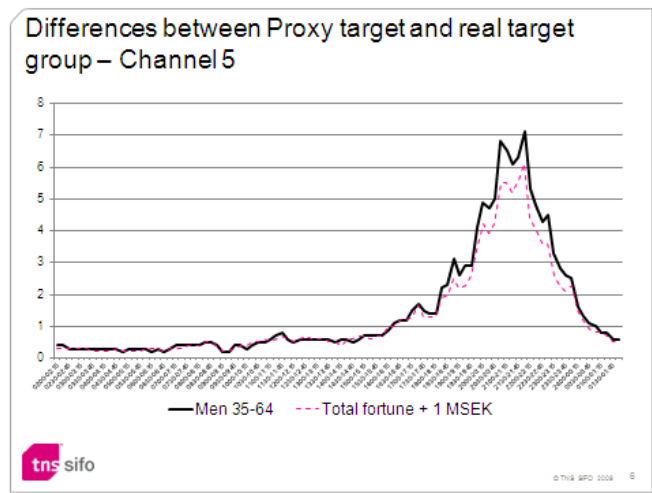
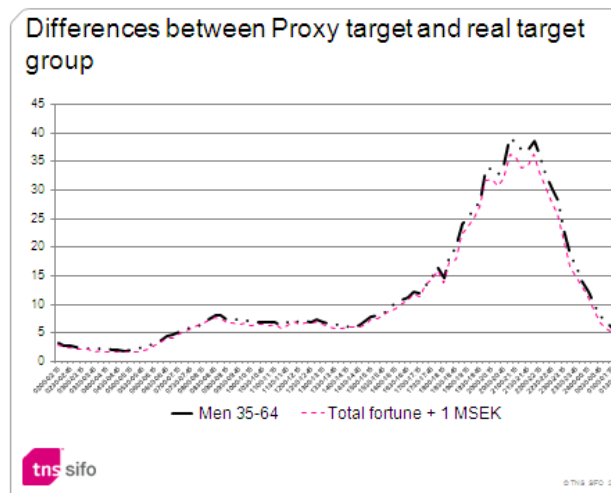
From theoretical advantages to the practical use of the multi-media planning tool

In this section we will outline a number of areas that can be and are used and the resulting practical implications.

Evaluating TV performance against target group data (or any other media which normally lacks target group data)

One of the “hidden” advantages of centering a cross-media study on a TGI type survey is the abundance of target group data.

The target group data can then be used directly from the survey (e.g. irregular users of brands X,Y,Z) or subjected to segmentation analysis (PCA/Cluster Analysis) to create unique target solutions or be used to recreate client specific segmentations or the data can be integrated with the advertisers CRM systems. This means that segmentations can be created out of the “soft” target group data and the “hard” CRM data.



In the example above a 'proxy' target was created (men 35-64) as a basis to evaluate TV channel segment performance. Compared to the real target group (net worth 1m+ SEK) a quite similar level of overall viewing behavior for the 3 channels combined was found but with lower reach levels during peak time. In this case it turned out to be a matter of difference in peak time levels but we have encountered other cases where the patterns across the day between proxy and target group have also been dissimilar.

When the team drilled down further into the data – they found that the differences between the three major channels were quite substantial and led to a new rate discussion particularly for channels 3 and 5.

While this comparison was made for an average weekday it was refined at the next stage with an analysis at the individual day level.

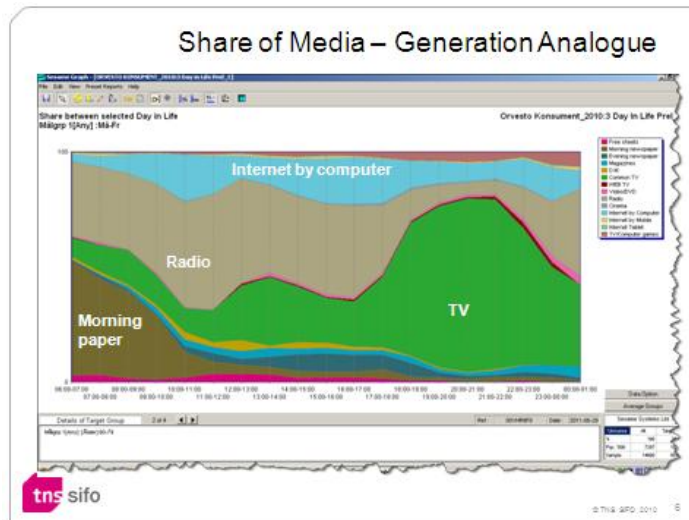
It is a major leap forward for planners to be able to use the same target group definition both in the strategic insight and the tactical planning phase for media which normally do not give access to target groups.

Improved targeting in television which, albeit a bi-product to multi-media, will lead to significantly better television planning which then will lead to better multi-media planning. However both the client (and their performance auditors) have to recognise that assessing buying performance should no longer be couched in 'cpt adults or men' but in terms of the specific target group.

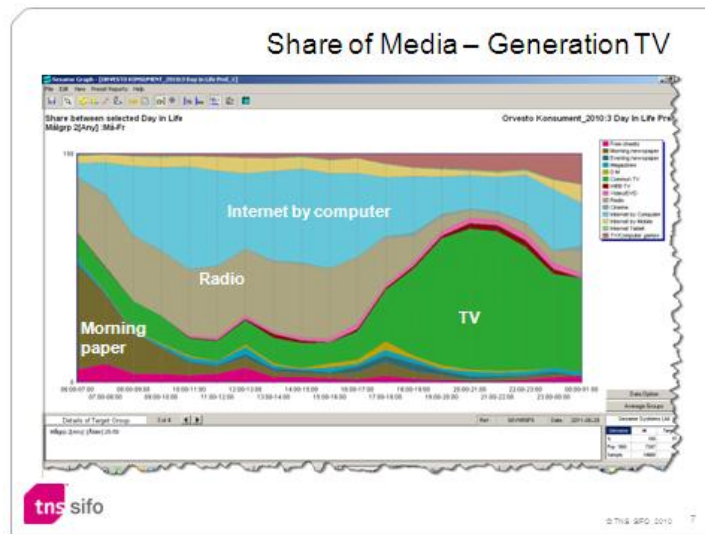
Different share of media patterns

Multi-media can (should) also include 'day in life' type data which can be of great strategic importance to planners enabling them to pinpoint different media usage patterns between, for example, different generations (or indeed any target group compared to another).

In the following three graphs the planner examined media usage in three different generations of the population and was able to show his client the differences by age within the overall target group.

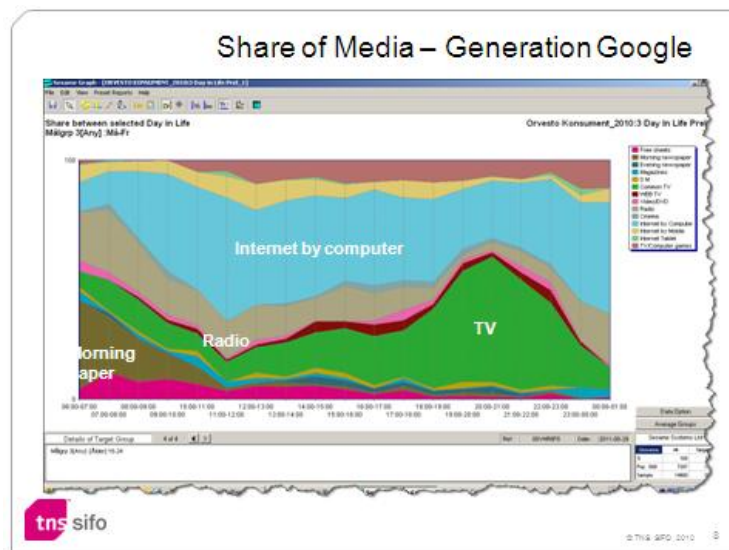


The 'Analogue generation' shows a pattern media planners are well equipped and used to handle with limited Internet and dominant TV.



The 'TV generation' (broadly defined as age 25-59) shows a pattern which will be more of a challenge since the digital arena has become significant and will need to be added in the everyday media plan.

The necessity to bring Internet together with all other media categories here becomes apparent. To handle the Internet as an isolated island not connected to the rest of the media archipelago is quite simply wrong and will lead to suboptimal planning.



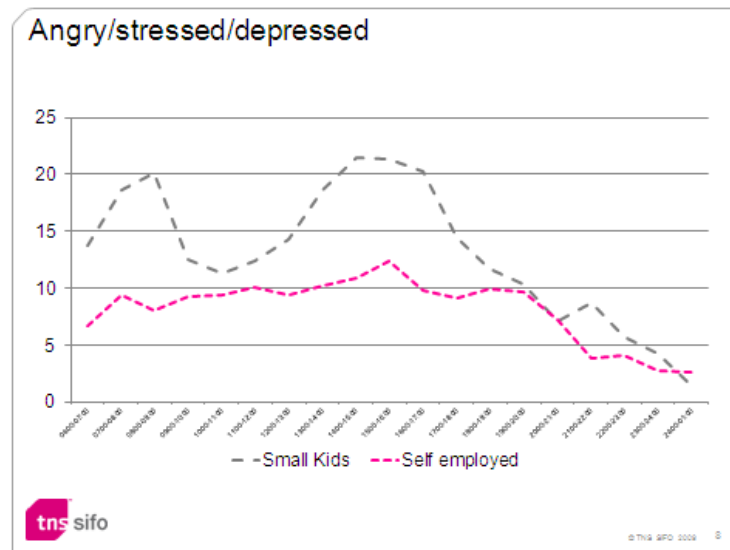
When the planner changes his focus to the 'Google generation' the pattern changes again. The media behaviour becomes more fragmented and digital media on any screen will be consumed at any time. This is the new world planners are faced with and need to adapt to.

From a researchers perspective it is interesting to note that since media research in itself will always be lagging behind new technology - planners need to accept the fact that they will have planning data on most media categories but most probably not all at any given time.

To handle the known and to have both an analytical and creative skill set to be able to combine it with the unknown is where planning and Art and science meet.

But 'day in life' data can also be used to determine the most optimal time of day to reach the target group. In the example below two quite different patterns are shown. In the first one the planner wanted to reach a target group of people with small kids.

Relatively this is a target group which has high stress levels that are probably far beyond what any planner would accept, from a communicative perspective. But even so the planner could now determine the most likely point of time where a meaningful communication effect could take place.



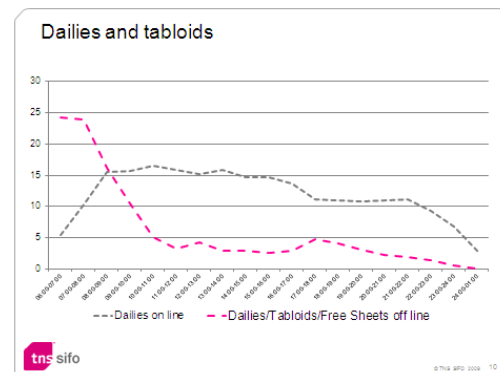
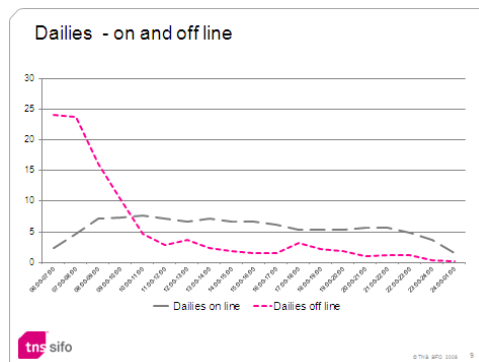
The second red-dotted line was made by a planner who needed to reach self-employed people.

Self-employed are clearly less stressed so the timing aspect of ad. placement (at least for this reason) is less critical than for a target of people with small children.

The analysis could then be taken further by the planner examining where people were at certain times and the possibilities of contextual advertising could be examined.

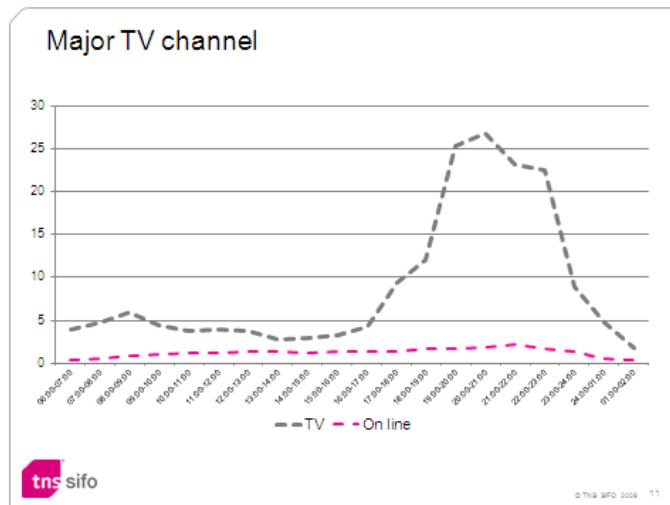
Creation of synergies by timing of messages

By analyzing time of day data at channel or individual vehicle level the planner can also create the possibilities to either disperse the exposures over the day/days or to try to create immediate synergies by buying media which are consumed around the same time.



Looking at dailies as a media category it is interesting to note how the 'on line' edition prolongs the possible effects of a campaign. To a planner it could be tempting to create synergies by linking the messages in the different media together to increase the chance of breaching the consumer's 'selective perception' barriers.

This is even more tempting when we add the Swedish tabloids to the mix (second chart above). The late night 'on line' presence is rather impressive. Media houses with strong 'on' and 'off' line presence covering both dailies and tabloids will have a strong position.



Looking at a major TV channel it is strange to see that the reach strength in today's digital environment remains so focussed on the traditional television viewing period. A major TV channel should have all possibilities to have a strong 'on line' presence.

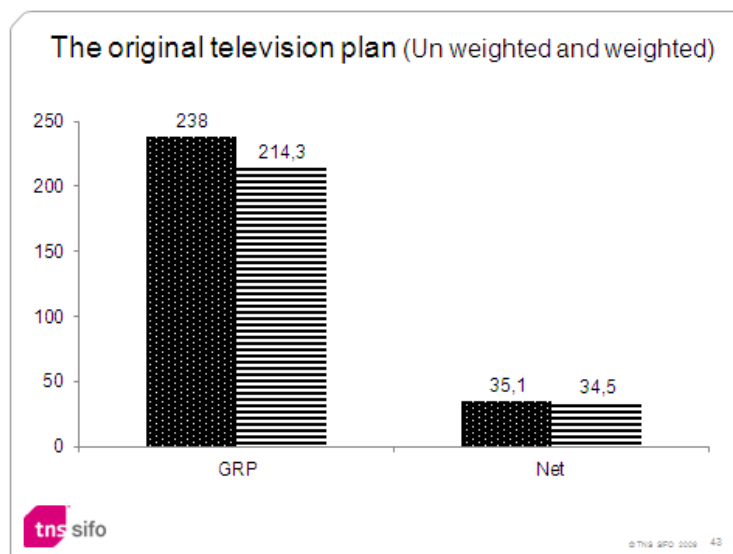
A strong 'on line' presence at the same time as the target group is viewing television would offer the planner possibilities to create immediate synergies. This certainly seems to be an area which could be interesting for TV channels.

The dairy product case history

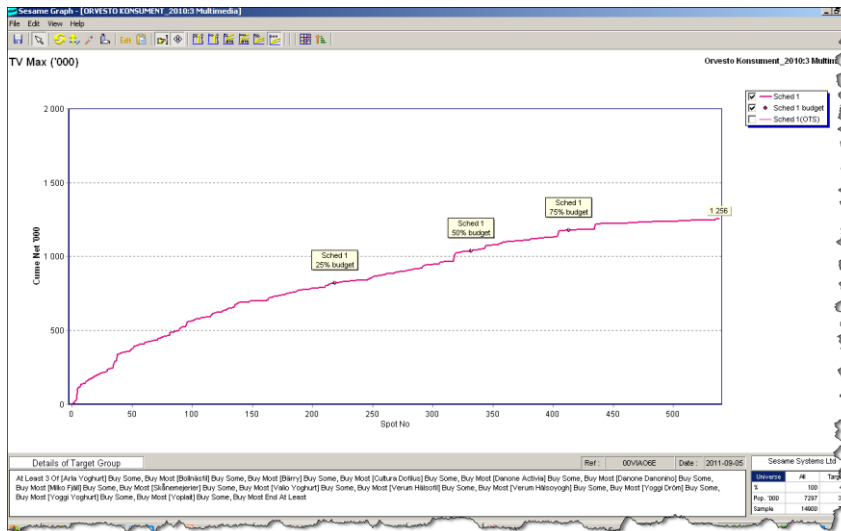
In the dairy (Yoghurt) product case the planner had to handle the fact that the media budget traditionally had had a 100 % television share divided 77/23% between two TV channels in the same media sales house. While this is by no means wrong the planner had a suspicion that the media plan could be enhanced using the new tools and went through the following steps.

First the planner created a 'real' target group consisting of people buying at least three different yoghurt brands at any frequency – still a very broad target group of 49 % of all adult Swedes.

Second the planner evaluated a historical monthly schedule in reach and frequency terms. To prepare for a multi-media schedule comparison he also down weighted the TV measurement by 0.9%. This being an estimate of the proportion of the TV meter recorded audience who were not present in the room or paying attention during a commercial break.



Further analysis of the media plan indicated to the planner that his suspicion was correct. The media plan suffered from diminishing return (In all fairness – all media plans no matter the media suffer from diminishing return) – this is obviously more evident in single media plans (see following chart)



He also examined the exposure distribution pattern between light, medium and heavy TV viewers within his target group revealing the following very skewed pattern:

| Profile %> | V. Light/Non TV viewers | Light TV | Medium TV | Heavy TV |
|-------------------------|-------------------------|----------|-----------|----------|
| Target | 17.6 | 25 | 32 | 25.4 |
| TV only schedule | | | | |
| Gross OTS | 11 | 15.9 | 32.2 | 40.9 |

The (yogurt) target market is distributed relatively evenly across non/light/medium/heavy TV viewers but this was not the case for the distribution of TV advertising weight. While 25% of the target are heavy TV viewers 41% of the Gross TV weight is directed at them. In contrast non and very light TV viewers represent 18% of the target but get only 11% of the advertising weight. He finds there is an 'imperative' to rebalance this distribution of advertising weight. This cannot be done (economically) within the TV medium since one cannot practically buy light only TV viewers and thus there is the 'imperative' to add another medium with a strong profile of light TV viewers.

On the basis therefore of this 'imperative' and the declining reach the planner decides that he could cut off the television budget at 75 % and spend the balance elsewhere.

Normally in the planning process media are evaluated first on their ability to reach the communication goals before a decision is made on the media budget allocation but in this case the planner wanted to turn the process around establishing first where he could increase target group reach and target exposure distribution – and then to review the media communication qualities.

Up to now it had not made sense to introduce 'advertising exposure weights' since only one media category was in the plan where the research Opportunity to See definition was the same for all channels involved. But from this point such ad. exposure factors have to be part of the planning process to bring the different research OTS measures to a consistent level for all the different media groups that are to be considered.

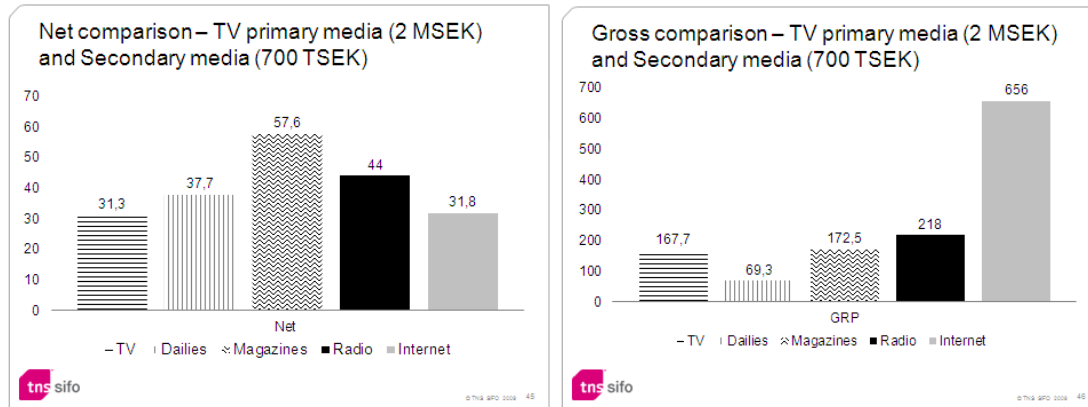
The planner applied the OTS adjustment weights:¹

| | |
|-----------|------|
| TV | 0.9 |
| Radio | 0.55 |
| Magazines | 0.75 |
| Dailies | 0.7 |
| Internet | 0.75 |

The planner started the process by rebuilding the TV plan but now with a 25 % lower budget. The new net reach was found to be 31,3 %.

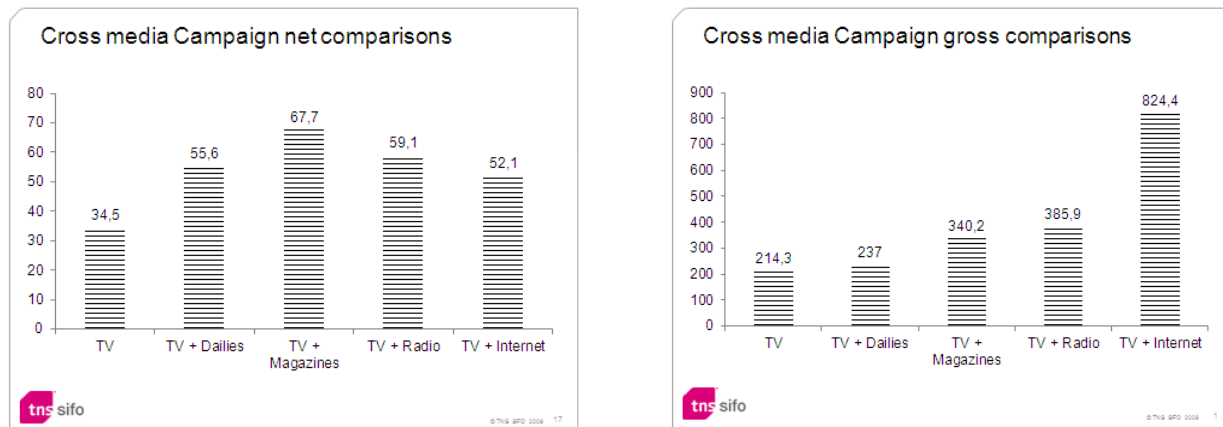
¹ for a further discussion on media weights see "War of the media weights" from the Valencia 2009 World Wide Readership Symposium

For TV and radio 30 seconds spots were used and for the Internet panorama display banners placed above the scroll on the start page were chosen. For magazines full page colour units were chosen and because of budget restraints half page full colour units were chosen for the dailies. Since the planner now had free approximately 25 % of the budget he could start working with different 'what if' scenarios. Firstly he wanted to study the different media categories ability to create further net and gross reach if that media were chosen to complement the TV plan.



The planner could see that from a distributive perspective in target group reach terms magazines and radio seemed to be the most attractive secondary media. While in gross contribution terms he could see the large Internet contribution. However he noted that the Internet gross OTS estimates are defined as television – in other words the panellists receives a new OTS every minute the panellist is on screen). This is different from a 'page impression' which requires the browser to re-enter the site (but with no time constraint).

The planner then continued to create a number of multi-media schedules consisting of Television and each of the other media singly and in combination.



The mixed media plans performed significantly better on both the number of gross contacts (GRP's) and net reach (number of different individuals in the 'real' target group) on the basis of the original budget being split approximately 75 % television and 25 % to the second medium.

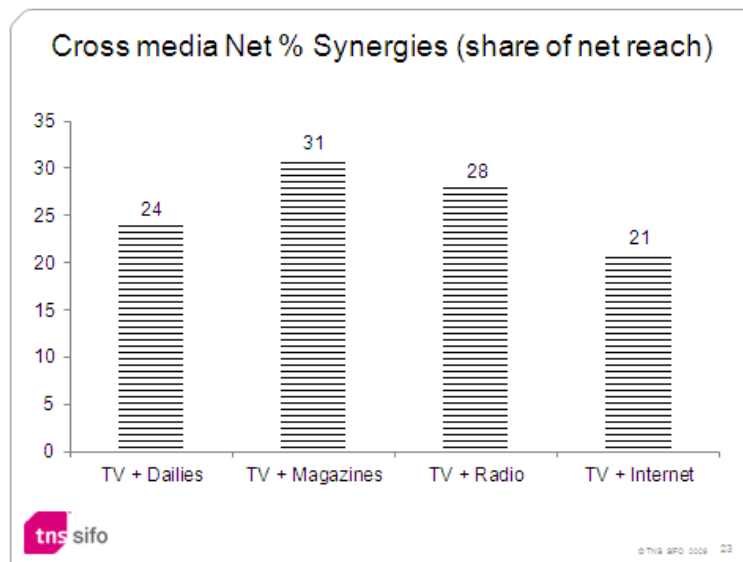
From a net reach perspective Dailies and TV performed 61 % better than the original television plan. Magazines improved the television plan by 96%, radio 71% and Internet 51%. There is little doubt that multi-media schedules have the possibility to get to wider sections of the target group and indeed to deliver a more balanced distribution of advertising weight as the following analysis of the TV/Press schedule indicates.

| Profile %> | V. Light/Non TV | Light TV | Medium TV | Heavy TV |
|--------------------------|-----------------|----------|-----------|----------|
| Target | 17.7 | 25 | 32 | 25.4 |
| TV only schedule | | | | |
| Gross OTS | 11 | 15.9 | 32.2 | 40.9 |
| TV Press schedule | | | | |
| Gross OTS | 15.5 | 21.5 | 33.3 | 29.7 |

The addition of Press (at 25% of the budget) has substantially improved the advertising weight distribution so that now the 18% of very light and non TV viewers receive 16% of the Gross contacts while heavy TV viewers are much less over-weighted with 30% compared to 25% for the target market.

After analysing the multi-media data in this fashion and by creating different ‘what if’ scenarios the planner gained a whole new insight on how to improve the distribution structure of their campaigns and all of a sudden the initial frustration has been turned into fascination and new insights.

The planner, interested to see the extent of possible synergy effects of combined media group exposure, continued with the analysis to establish the degree of contribution to target reach provided by each of the media used. This media contribution to net and gross reach is a means to assess possible ‘effect’ synergies available for those exposed to 2 or more media during the campaign period.



The proportion of the net reach of each of the (TV+ one other medium) combinations ranged from 21% to 31% with an average of 26%. That is to say around for one quarter of the net audience we could expect an enhanced synergy ‘effect’. Quantifying this is of course very difficult.

However one qualitative measure that was considered was the timing of the newspaper reading.

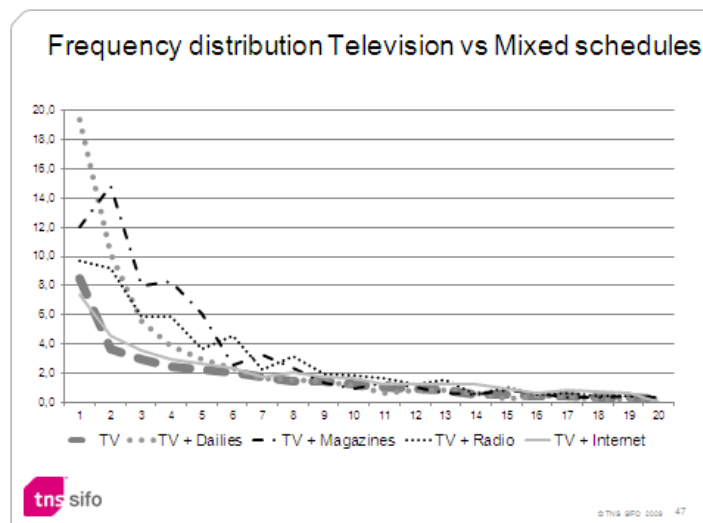
If home subscribed morning papers were selected it could have been seen as a premium worth paying to get the media consumption taking place at the same time as most yoghurt consumption.

But since the optimization showed that from a reach/cost perspective the evening tabloids were preferable this was just a theoretical consideration. On the other hand if dailies would have achieved a larger share of the budget this could once again been a consideration. There are no absolutes in media planning.

From a learning perspective and from this example the planner could see that when he reduced a TV budget by 25 % and added it to any of these media the average overlap (possible synergy) will be approximately 25 %.

This might not be true for all cases and all media plans but it is the starting point for the creation of a bank of knowledge.

The planner could then continue the schedule evaluation by examining the different frequency distribution patterns that the different schedules had.



The planner could see that Internet and television had similar FD patterns where a larger proportion of the contracts were at the higher frequency levels. On the other hand the Press, radio and Magazine combinations while providing higher Gross contacts than TV alone tended to distribute a higher proportion of them in lower frequency levels.

The levels of frequency required must be judged in the context of the TIME period over which they are delivered. It is quite one thing to consider 10 OTS delivered in one day from one medium to 10 OTS delivered in a week from a range of media or 10 OTS delivered over 10 weeks also from a range of media. In the first case we might consider this to be ‘overkill’, where the additional exposures have no effect or even a negative effect. In the last case we might consider this to be ‘underkill’ where there are insufficient exposures to breach the ‘selective perception’ threshold. We have very little ‘hard’ data to indicate the required levels within time period.

The ‘recency’ theory of planning demands that frequency of exposure is paramount and that a ‘continuous’ level of exposure (reminder) is required to keep the brand ‘top of mind’ for when the time of purchase will occur for that consumer. The planner is to design the schedule so that the FD range around the optimal level per week is minimized. The ‘optimal’ level being determined by the current level of brand knowledge, the complexity and objectives of the new message (two extreme being repositioning of the brand or a ‘price off’ offer) and the definition of the target group. If the target group is already brand aware (loyal user) then the ‘optimal’ frequency level will be lower than where the targeting objective is to convert, for example, irregular users of competitive brands on non user of the sector to use the product.

The planner observing these differences in exposure distribution (reach versus frequency) will see that this has to be discussed with the creative (advertising) agency in the context of the overall campaign strategy and in terms of the creative execution being designed to work across multiple media platforms and harnessing the available synergies. Multi-media planning leads to a more complex world and openness and collaboration between advertising agency and media agency is a must.

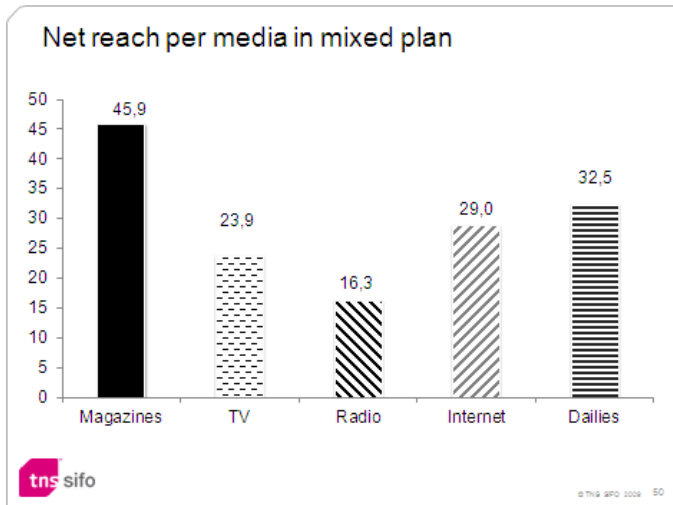
Given that frequency and continuity over the campaign period is the crucial requirement it is incumbent on the planner to use the possible synergies between the media to maintain frequency by using the more ‘powerful’ communication media (like TV with sight sound and movement) to create the knowledge which is reinforced across TIME by the use of (lower cpt) media like radio and Internet.

For example Radio with its close relationship to television is very suitable to create memory reinforcements. When you hear the radio spot you will see the television spot.

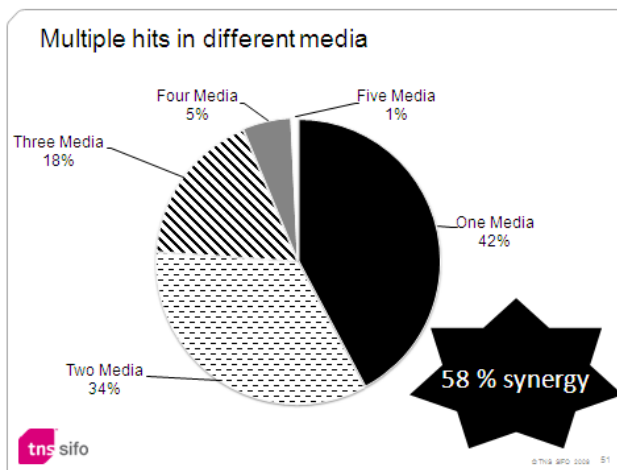
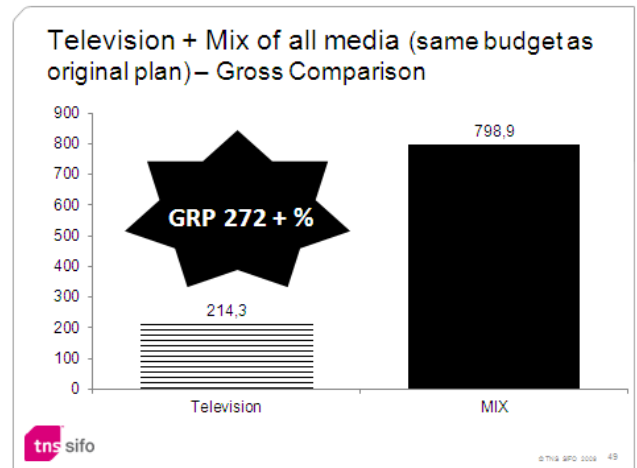
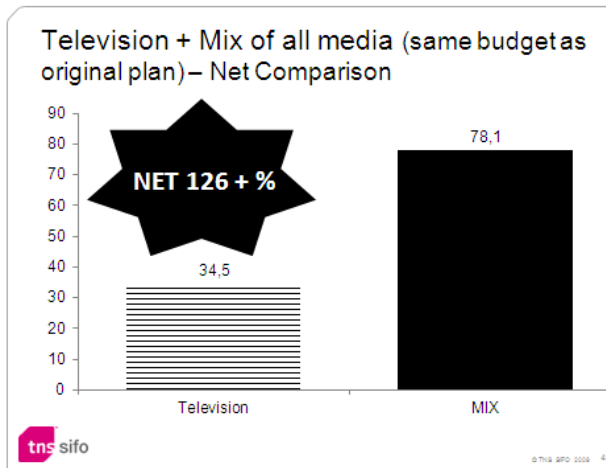
Using dailies (paper and electronic) with TV can create content synergies (and with Internet a dialogue) where the target group can get more and deeper information which can be transformed to action as the morning exposure of the daily mornings can be closer to the point of purchase.

But we may conclude that we compare the overall result of the mixed plans we see that all cross-media (TV plus one other) plans severely outperforms the original plan. What would happen if all of the other media were to be included in the mix?

The planner then made an optimization based on all 4 media with the objective of maximising 1+ reach with a 2.7m SEK (magazines were excluded from the optimization as the necessary time based readership data is not available at present. They were manually allocated 15% of the budget). This resulted in budget shares for TV of 34 %, Magazines 15 %, Dailies 9%, 21% radio and Internet 21% with achieved individual media reach levels as follows:



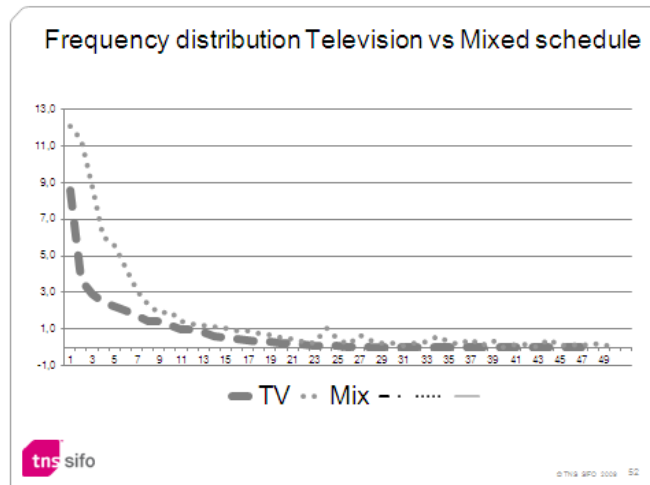
When a complete mix between all media is made total mix reach, as expected, exceeds any single or double media combination. The best duo media combination was the magazine/TV schedule which achieved a 96 % increase in net reach over TV alone. The mixed media plan reached an astonishing 126% more than the original TV plan and at the same time Gross contacts (GRP's) grew significantly by 272%.



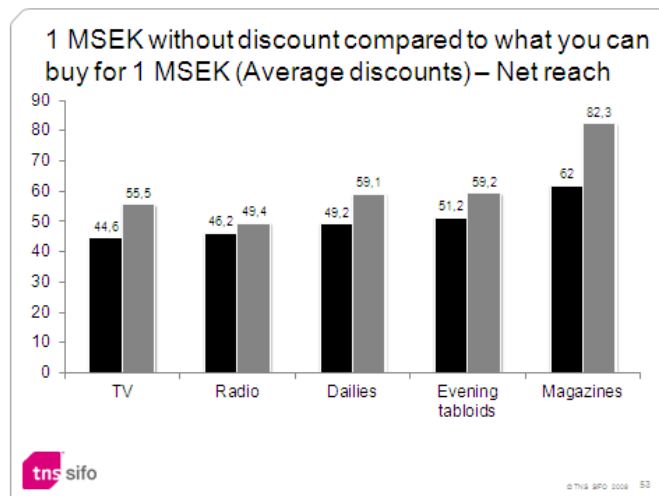
Further analysis by the planner in terms of contribution to net reach by different media showed that as much as 58 % of the target group received exposures from more than one direction. The planner also examined the specific overlap between different media which we do not report here because of the amount of detail.

Even if this might not be the optimal plan from a number of different perspectives it is hard not to look longingly at the significant rise in net, gross and potential synergy value – for the same budget.

The rationale for not going for a more than 100% increase in reach and a more than 200% increase in Gross reach needs to be rather strong. The planner examined the frequency distribution of the TV only and mixed media campaign. While indeed the proportion of the media mix schedule receiving under 10 OTS is much greater than in the TV only schedule the absolute numbers of the target group receiving over 10 OTS in the mixed media campaign is significantly greater than in the TV only campaign. This is because the Gross Reach of the mixed media campaign is so much higher.



Another area which is an essential part of the planning process is the introduction of *negotiated buying rates* which will be an increasingly hot topic in the comparison between the cost/value of different media. In this following example the planner demonstrated to the client the net reach that could be bought for 1MSEK (black bars) compared to what could be achieved at their current market buying rates (grey bars). This of course impacts on the level of the overall budget required as well as on the distribution between the different media.



It is the authors' belief that such ongoing evaluation examination of 'what if' scenarios such as the one described here will lead to increased learning about multi-media relationships and new 'rules of thumb' for cross-media planning process.

Time Planning.

One of the aspects of multi-media schedule evaluation that is crucially different from 'silo' media evaluation is the timing of the usage of different media types over the course of the campaign. Typically a planner will have set out a 'flighting' plan similar to the following (in terms of GRP required by time period). The evaluation requires the assessment of cumulative reach (and FD) over the period as well as week by week (or even day by day results).

| Input by time | Sched:1 (different spots each week) | | | | | | | |
|--------------------------------|-------------------------------------|--------|--------|---------------|---------------|---------------|---------------|---------------|
| TRP' required | week:1 | week:2 | week:3 | week:4 | week:5 | week:6 | week:7 | week:8 |
| | Mo-Su | Mo-Su | Mo-Su | Mo-Su | Mo-Su | Mo-Su | Mo-Su | Mo-Su |
| Internet Apr 2011 | | | | | 25 | 25 | 25 | 25 |
| aftonbladet.se / Total | | | | | 10 | 10 | 10 | 10 |
| expressen.se / Total | | | | | | | | |
| Dailies evenings 2010:3 | Mo-Su | Mo-Su | Mo-Su | Mo-Su (inset) | Mo-Su (inset) | Mo-Su (inset) | Mo-Su (inset) | Mo-Su (inset) |
| Aftonbladet | | | | 1 | 1 | 1 | 1 | 1 |
| Expressen | | | | | | 1 | 1 | 1 |
| Radio 11:1 | Mo-Su | Mo-Su | Mo-Su | Mo-Su | Mo-Su | Mo-Su | Mo-Su | Mo-Su |
| Mix Megapol 05:00-05:00 | | 25 | 25 | | | | | |
| Rix Fm 05:00-05:00 | 10 | | 10 | 20 | | | | |
| Tv 2010:3 | week:1 | week:2 | week:3 | week:4 | week:5 | week:6 | week:7 | week:8 |
| | Mo-Su | Mo-Su | Mo-Su | Mo-Su | Mo-Su | Mo-Su | Mo-Su | Mo-Su |
| Tv3 02:00-02:00 | 24 | 24 | 24 | 0 | 0 | | | |
| Tv4 02:00-02:00 | 0 | 0 | 20 | 10 | 10 | | | |
| Kanal 5 02:00-02:00 | 11 | 6 | 6 | 6 | 0 | | | |

This is therefore a further very important analysis for planners. The evaluation can provide a comparison of a wide range of schedule options. In this case, as a demonstration, we placed (schedule 2) all the GRP weight in the first week and in schedule 3 we selected to use the SAME spot segments for each of the scheduled weeks of each medium. This has the effect of focusing the exposure distribution into a much narrower band (for 'recency' planning). The following analysis output provides the overall Gross and Net Target Reach, those with 3+ exposures and the average OTS plus the week on week results and the cumulative reach results – and the overall performance of each individual channel.

| Output | Gross | | | Net | | | See 3+ | | | Ots | | |
|--------------------------------------|-------|-------|-------|-------|-------|-------|--------|-------|-------|-----|-----|-------|
| | Sch 1 | Sch 2 | Sch 3 | Sch 1 | Sch 2 | Sch 3 | Sch1 | Sch 2 | Sch 3 | S 1 | S 2 | Sch 3 |
| Reach as % | Sch 1 | Sch 2 | Sch 3 | Sch 1 | Sch 2 | Sch 3 | Sch1 | Sch 2 | Sch 3 | S 1 | S 2 | Sch 3 |
| -Total Market- | 497.7 | 499.6 | 503.6 | 77.6 | 77.7 | 77.5 | 50.3 | 50.3 | 61.4 | 6.4 | 6.4 | 6.5 |
| 1. Week - Wk 1-1 | 41.9 | 499.6 | 43.7 | 22 | 77.7 | 22.7 | 5 | 50.2 | 5.3 | 1.9 | 6.4 | 1.9 |
| 2. Week - Wk 1-2 | 94 | 499.6 | 96.3 | 35.9 | 77.7 | 33.9 | 13.1 | 50.3 | 19.4 | 2.6 | 6.4 | 2.8 |
| 3. Week - Wk 1-3 | 200.7 | 499.6 | 205.4 | 53.2 | 77.7 | 50.9 | 26.9 | 50.3 | 40.9 | 3.8 | 6.4 | 4 |
| 4. Week - Wk 1-4 | 263.8 | 499.6 | 268.5 | 63.1 | 77.7 | 60 | 35 | 50.3 | 49.7 | 4.2 | 6.4 | 4.5 |
| 5. Week - Wk 1-5 | 339 | 499.6 | 344 | 69.3 | 77.7 | 65.1 | 42 | 50.3 | 53.6 | 4.9 | 6.4 | 5.3 |
| 6. Week - Wk 1-6 | 402.2 | 499.6 | 407.1 | 74.5 | 77.7 | 73.8 | 47 | 50.3 | 57.7 | 5.4 | 6.4 | 5.5 |
| 7. Week - Wk 1-7 | 449.8 | 499.6 | 455.4 | 76.3 | 77.7 | 76.5 | 48.7 | 50.3 | 59.7 | 5.9 | 6.4 | 6 |
| 8. Week - Wk 1-8 | 497.7 | 499.6 | 503.6 | 77.5 | 77.7 | 77.5 | 50.3 | 50.3 | 61.4 | 6.4 | 6.4 | 6.5 |
| 9. Week - Wk 1 | 41.9 | 499.6 | 43.7 | 22 | 77.7 | 22.7 | 5 | 50.2 | 5.3 | 1.9 | 6.4 | 1.9 |
| 10. Week - Wk 2 | 52.1 | 0 | 52.7 | 27.6 | 0 | 27 | 5.7 | 0 | 6 | 1.9 | 0 | 2 |
| 11. Week - Wk 3 | 106.7 | 0 | 109 | 44.7 | 0 | 44.8 | 15 | 0 | 15.5 | 2.4 | 0 | 2.4 |
| 12. Week - Wk 4 | 63.1 | 0 | 63.1 | 39.8 | 0 | 39 | 5.2 | 0 | 5.4 | 1.6 | 0 | 1.6 |
| 13. Week - Wk 5 | 75.2 | 0 | 75.5 | 37.4 | 0 | 36.7 | 8.2 | 0 | 8.1 | 2 | 0 | 2.1 |
| 14. Week - Wk 6 | 63.2 | 0 | 63.1 | 33.5 | 0 | 32.9 | 6.4 | 0 | 6 | 1.9 | 0 | 1.9 |
| 15. Week - Wk 7 | 47.6 | 0 | 48.3 | 22.9 | 0 | 22.2 | 5.9 | 0 | 5.8 | 2.1 | 0 | 2.2 |
| 16. Week - Wk 8 | 47.9 | 0 | 48.3 | 23.2 | 0 | 22.2 | 5.9 | 0 | 5.8 | 2.1 | 0 | 2.2 |
| 17. Channel - aftonbladet.se / Total | 99.6 | 100.5 | 99.6 | 12.1 | 12.1 | 15.6 | 10.2 | 10.3 | 15.3 | 8.3 | 8.3 | 6.4 |
| 18. Channel - expressen / Total | 39.8 | 39.8 | 40.7 | 7.3 | 7.3 | 7.4 | 5.4 | 5.4 | 7.2 | 5.5 | 5.5 | 5.5 |
| 19. Channel - Aftonbladet.so | 44.7 | 44.7 | 44.4 | 29.8 | 29.8 | 18.3 | 4.1 | 4.1 | 8.9 | 1.5 | 1.5 | 2.4 |
| 20. Channel - Expressen | 39.4 | 39.4 | 39.5 | 25.8 | 25.8 | 25.8 | 3.3 | 3.3 | 1 | 1.5 | 1.5 | 1.5 |
| 21. Channel - Mix Megapol | 36.6 | 36.6 | 36.8 | 15.3 | 15.3 | 12.9 | 5.5 | 5.5 | 9.8 | 2.4 | 2.4 | 2.9 |
| 22. Channel - Rix Fm | 34.4 | 34.5 | 34.7 | 14.8 | 14.6 | 12.1 | 4.8 | 4.9 | 5.6 | 2.3 | 2.4 | 2.9 |
| 23. Channel - Bandit Rock | 3.7 | 3.7 | 3.7 | 2.9 | 2.9 | 2.9 | 0.2 | 0.2 | 0.2 | 1.3 | 1.3 | 1.3 |
| 24. Channel - Tv3 | 73.1 | 74.7 | 75.6 | 21.2 | 21.2 | 16.9 | 11.1 | 11.3 | 15.9 | 3.5 | 3.5 | 4.5 |
| 25. Channel - Tv4 | 101.1 | 101 | 102.6 | 36.4 | 36.7 | 41.4 | 16 | 15.9 | 16.3 | 2.8 | 2.8 | 2.5 |
| 26. Channel - Kanal 5 | 25.5 | 24.7 | 25.9 | 12.3 | 12.3 | 15.5 | 3.6 | 3.4 | 2.3 | 2.1 | 2 | 1.7 |

The need for and the ability to perform such time series schedule evaluations has major implications for media research. The multi-media data base must contain time series data (like diary or panel data) where reach and frequency can simply be 'counted' across time.

If we are to include newspaper and magazine data of this nature their measurement must include (averages of) day by day readership (of specific issues) over time. Such measurement is not difficult for daily newspapers (and is already incorporated in the Orvesto multi-media data bases). However the challenges to measure magazines in this way are technically and politically significant and there will be a great impact on the reach and the role of magazines – although the changes could indeed be very beneficial for magazines².

It also means that the event based data of the electronic media (Radio, TV, Internet) must be preserved in the data integration procedure. Turning such data into probability data (as is almost universal for reach and frequency modeling) essentially loses all aspect of time.

Conclusions

At the end of Field of Dreams the answer to the question "If you build it will they come" becomes apparent. Baseball stars from the past enter the field and hundreds of cars approach the field to be able to see the game.

In the multi-media research world the answer seem to be the same. But it will take time. It will take a lot more time than would have been expected.

But like Ray in Field of Dreams who hears a second whisper urging him to "go the distance" – media researchers need to be persistent and continue.....

But to continue with a better understanding of the agency cross-media planning process (as this paper has described) and a recognition that the media research design in a cross-media planning world cannot remain unchanged. Hallowed conventions of measurement, like the 'recency' model for Print, must change to measuring multiple exposure events across time enabling comparable OTS definitions with electronic media and facilitating TIME planning.

Further without the ability to evaluate cross-media schedules across time we cannot apply a realistic 'response' of 'effect' model to compare schedule performance. This raises the next demand on media research, which is to provide far better insights for planners into the 'effect' of different frequency of placements by medium/combination within time period. While currently the cross-media analysis demonstrated in this paper give planners really significant improvements in insight into multi-media schedule performance we will ultimately need to develop a realistic 'response model' for optimizing the absolutely huge number of (multi) media options available.

But change is taking place within our current state of technology. The baseball stars in our world represented by major media agencies are entering the playing field and more and more will come. And then there will be a lot of change.

We will see new media giants develop. We will see old alliances break and we will see new multi-media ones being formed. We will see transparency and comparability including for media houses.

Media has of course always been the subject of comparisons but planners will, in a couple of minutes, be able to analyze the outcomes of cross-media plans and make cost comparisons between the different media categories creating a 'more perfect' market with inflated rate cards a thing of the past.

The ability of a medium to contribute to a distributive strategy i.e. to reach target groups that the original plan had problem to deliver will be scrutinized and the ability of the medium to create synergies (this ability will in one way be inherent in the media but it will vary a lot depending on media strategy and what other media will be part of the campaign) will be thoroughly examined.

We will see a new breed of researchers, planners and sales reps change the outdated models because in the end *'they will come'*.

The End

² An improved method of collecting and processing readership data by Peter Masson and Dr. Paul Sumner, Bucknull & Masson. (WWRS Prague 2005)

STUDY 2 Repetition, Scheduling, Multi-Media and Retention

Annex 1

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1. Introduction

When allocating marketing resources it is important to know the right combination of scheduling and frequency of exposure to optimize advertising efficacy. Furthermore, an understanding of potential advertising carryover effects between media is also desirable (Naik & Kalyan, 2003). Therefore, the aim of the second study was to investigate how the frequency and scheduling of OTS (Opportunity To See) affects the memory for advertisements. It was also explored whether exposure to one medium (a magazine advertisement) can benefit the efficacy of exposure to another medium (a television commercial).

2. Methods

2.1 Materials

Twenty-four press advertisements and 24 television commercials were selected. Both the press and television advertisements contained six advertisements from each of the four interest domains (mobile phones, health, shampoo and technology) of Study 1. Half of these had a press advertisement and television commercial of the same brand, whereas half of the advertisements were only in press or television format. So out of a total of 36 brand names, 12 appeared only on print advertisements, 12 appeared only as a television commercial and 12 appeared as both. Half of the advertisements were shown twice and half of them were shown four times (either in one or two different media). This resulted in six conditions:

1. 2 magazine advertisements (SM – Small magazine campaign)
2. 2 television commercials (STV – Small television campaign)
3. 4 magazine advertisements (LM – Large magazine campaign)
4. 4 television commercials (LTV – Large TV campaign)
5. 1 magazine advertisement, 1 television commercial (SMix – Small mixed campaign)
6. 2 magazine advertisement, 2 television commercials (LMix – Large mixed campaign)

This means a total of 9 magazine advertisements and 9 commercials for every six brands. Having six brands in each category (the total number of 36 divided by 6) means a total of 54 advertisements divided over 4 virtual magazines and 54 commercials divided over 4 DVDs (13 or 14 in each). The viewing schedule for the advertisements is shown in Table 1.

| | Presentation Session | | | |
|-------------------------|----------------------|-----------|-----------|-----------|
| | 1 | 2 | 3 | 4 |
| Magazine Advertisements | LM (6x) | LM (6x) | LM (6x) | LM (6x) |
| | SM (3x) | SM (3x) | SM (3x) | SM (3x) |
| | LMix (3x) | LMix (3x) | LMix (3x) | LMix (3x) |
| | SMix (2x) | SMix (1x) | SMix (2x) | SMix (1x) |
| Television Commercials | LTV (6x) | LTV (6x) | LTV (6x) | LTV (6x) |
| | STV (3x) | STV (3x) | STV (3x) | STV (3x) |
| | LMix (3x) | LMix (3x) | LMix (3x) | LMix (3x) |
| | SMix (2x) | SMix (1x) | SMix (2x) | SMix (1x) |

Table 1. Advertising schedule for the four presentation sessions. The number in brackets indicates the number of magazine advertisements/television commercials of each condition included in the four magazines and DVDs. For example, the magazine in the first presentation session contained six large magazine campaign adverts, three small magazine campaign adverts, three small mixed campaign adverts and two large mixed campaign adverts.

Participants were shown virtual magazines and DVDs on the screen (resolution 1024 x 768) of a Pentium 4 PC. Each virtual magazine (presented as a PowerPoint show) consisted of 13-14 double pages with a full-size advertisement on one side (either left or right) and an article on the other side. The magazine contained articles on a wide range of topics, e.g. fashion, sport, movies, health etc. The DVDs were episodes of television series ('Friends', 'Father Ted', 'Red Dwarf' and 'Blackadder') with two embedded blocks of 6-7 advertisements set up to look like commercial breaks. To ensure that advertisements did not always appear at the same point in a magazine/ DVD the order of the advertisements was varied across magazines and DVDs and the order of the magazines and DVDs was varied across participants (participants saw the magazines and DVDs in one of two orders).

2.2 Participants

One hundred and three participants took part in this study. They were paid £30 for their participation (£5 if they were part of the control group). Participants were recruited at the University of Nottingham and mainly consisted of undergraduate and postgraduate students of various faculties. Forty of the participants were male and 63 female. The mean age was 25.4 (\pm 6.4) years. The groups did not differ significantly in terms of age, number of hours they read magazines and newspapers or the number of hours they watched television (see Table 2). There were also no significant differences in their average interest in the four domains.

| | group 1 | group 2 | group 3 | group 4 | control group |
|----------------------------|-------------|-------------|-------------|-------------|---------------|
| Scheduling | Spaced | Massed | Spaced | Massed | - |
| Retention interval | Long | Long | Short | Short | - |
| N | 20 | 20 | 20 | 20 | 23 |
| age (years) | 26.9 (3.7) | 26.7 (6.5) | 26.4 (9.3) | 22.9 (3.2) | 24.5 (6.9) |
| N male | 10 | 7 | 6 | 10 | 7 |
| hours newspapers (a month) | 9.0 (8.7) | 11.7(9.6) | 13.1 (10.9) | 10.5 (9.6) | 10.0 (8.5) |
| hours magazines (a month) | 5.2 (3.0) | 12.1 (17.1) | 7.5 (7.9) | 6.5 (10.1) | 7.6 (8.0) |
| hours television (a week) | 12.4 (8.6) | 12.2 (9.0) | 13.6 (10.7) | 11.4 (11.1) | 9.1 (6.4) |
| Mobile interest | 9.5 (4.2) | 11.6 (4.6) | 11.2 (5.6) | 12.5 (4.3) | 10.5 (4.5) |
| Health interest | 16.3 (3.1)) | 15.6 (3.1) | 14.8 (2.9) | 14.4 (2.7) | 15.4 (3.5) |
| Technology interest | 13.8 (3.6) | 14.6 (3.9) | 14.7 (3.1) | 15.9 (3.2) | 14.7 (2.9) |
| Shampoo interest | 12.5 (4.7) | 12.4 (3.5) | 13.1 (3.9) | 12.6 (2.3) | 11.5 (3.8) |

Table 2. Demographics and other characteristics of the four experimental groups and the control group (SD in brackets).

2.3 Design

Participants were allocated to one of five groups. Two of the groups saw the magazines + DVDs over a two-week period ('massed' exposure), whereas the two other groups saw them over a four-week period ('spaced' exposure). Although occasionally some flexibility needed to be allowed to accommodate participants' availability, it was aimed to have at least two days in between sessions when the four sessions took place within two weeks. Of each of those two groups, one group performed the second memory task one week after the last OTS (short delay), whereas the other group was given this task four weeks after the last OTS (long delay). This resulted in the following four groups:

Group 1 (4 week 'spaced' exposure period, delayed retention test at 4 weeks)

Group 2 (2 week 'massed' exposure period, delayed retention at 4 weeks)

Group 3 (4 week 'spaced' exposure period, delayed retention at 1 week)

Group 4 (2 week 'massed' exposure period, delayed retention at 1 week)

Participants in a fifth (control) group were not exposed to any of the advertisements, and performed some of the tasks of the immediate and delayed retention tests in one session. A control group was added to give baseline levels reflecting exposure to the advertisements outside the study. The schedule of the magazine/DVD exposures and memory tests is represented in Figure 1.

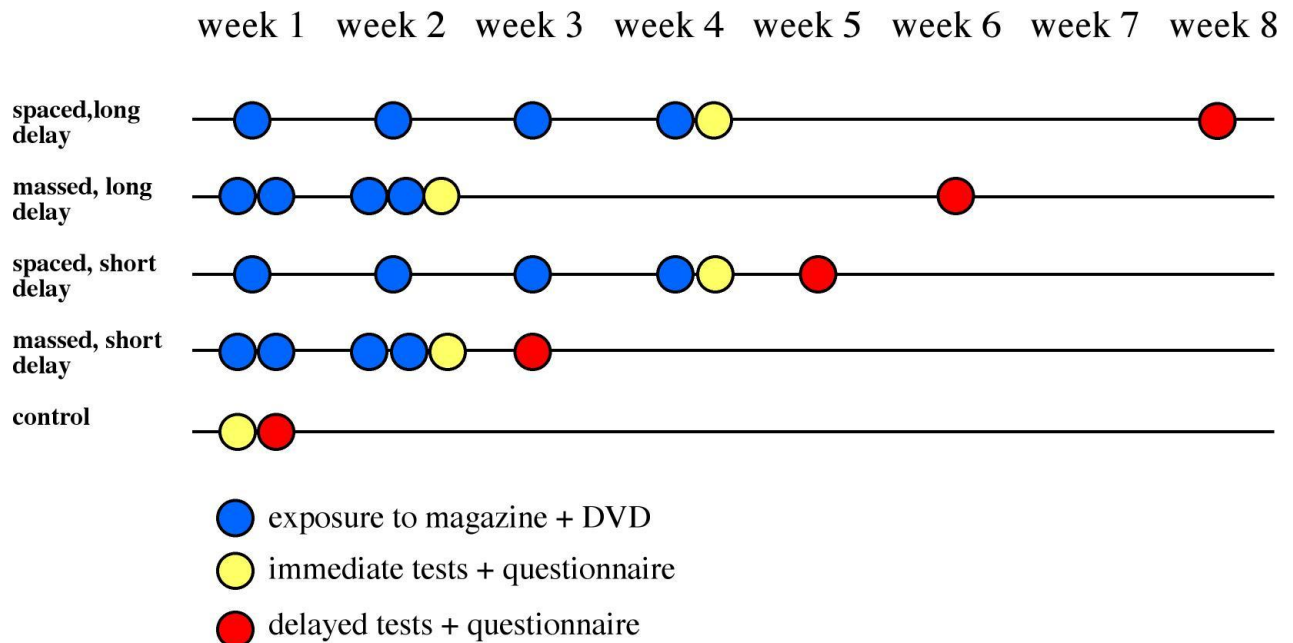


Figure 1. Scheduling of the magazine/DVD exposures and memory tests for the four experimental groups and the control group. Note that participants started the study at various points within a three-month period, so the weeks in this schedule have different starting dates for each participant.

Of the three types of media exposure (magazine only, DVD only, magazine + DVD), half of the advertisements appeared twice (either in 2 magazines, 2 DVDs, or 1 magazine + 1 DVD) and half of the advertisements appeared four times (either in 4 magazines, 4 DVDs or 2 magazines + 2 DVDs). Whether an advertisement appeared twice or four times (either in a single medium or one/two in each) was counterbalanced between the two orders.

2.4 Memory tests

Both the immediate and delayed memory test consisted of several components. In the first task (brand name recognition test), participants (apart from the ones in the control group) were shown four brand names (each of a different interest domain) of which they were asked to select the one for which they thought they had seen an advertisement in any of the magazines and/ or DVDs during the study. In the second task (picture association test), participants were shown a snippet/ fragment of about 500 x 450 pixels taken from either a press advertisement or a frame of a television commercial which did not contain the product or the brand name, but was considered to capture a distinctive feature of the advertisement. Along with the picture four brand names were displayed, of which the participant was asked to choose the one they thought was associated with the picture (see Figure 2). A similar procedure was followed in the third task (slogan association test), with the only difference that instead of a picture a slogan/ message associated with the advertisement was presented. Two different sets of the three memory tests were created. Each set tested recognition memory for half (i.e. 18) of the total number of brand names.



Figure 2. An example trial of the picture recognition test.

2.5 Questionnaire

The questionnaire of Study 1 was adapted to assess familiarity with, previous use of, attitude towards, purchase intentions of and perceived exposure to advertising of the brand names/ products used in the study. Just as with the memory tests, the 36 brand names were split in half and addressed in two separate questionnaires. One of the questionnaires had four additional pages to assess the participant's interest in the four domains (mobile phones, health, shampoo and technology), very similar to the questionnaire in Study 1.

2.6 Procedure

All participants came to the lab on five different occasions. At the start of the first session participants were asked to fill in a consent form and a short questionnaire with demographic questions as well as questions to establish how often they watched television and read magazines (and which categories), to get a rough measure of potential exposure to advertisements. Each of the first four sessions consisted of reading a virtual magazine for 10 minutes followed by watching a DVD for about 30 minutes. Participants read the magazines in their own pace. They were told to first look through the entire magazine and then to go back to the articles that they found most interesting, to simulate what they would do in a more natural situation (e.g. if they were reading a magazine in a waiting room for 10 minutes). After 10 minutes the participants were given two sets of questions related to the magazine. The first set of questions asked the participants which article they found most and least interesting and about which article they knew most beforehand. Subsequently they were given 7 multiple-choice questions related to the content of the articles in the magazine. The two sets of questions served several purposes. First, giving the participants some additional tasks was a way of masking the actual purpose of the study. Secondly, the answers to the questions were also informative, as they would tell us which articles were most and least popular (which might be an indication of how long these pages were viewed) and it would show how 'concentrated' participants had been while reading the magazine. After having watched the DVD, participants were also given two sets of questions. One consisted of 7 multiple-choice questions related to the content of the story, and one asked 1) whether they had seen the particular episode before, 2) whether they considered themselves a fan of the series, and 3) how much they had enjoyed the episode.

After the end of the fourth session, participants performed the first (immediate) memory test. They came back after either one or four weeks to perform the second (delayed) memory test. Half of the participants performed the first set of memory tasks (testing the first half of the brands) immediately after the fourth session, and the other half of the participants performed this set as the delayed retention test (and vice versa). Similarly, after completing the memory tests, participants were asked to fill in one of the two questionnaires (the one which contained questions about the 18 brand names tested for during the respective memory tests).

Participants in the control group performed the picture and slogan recognition tests of both sets in one session. Subsequently, they filled in both questionnaires. Finally, they were shown all the television commercials and press advertisements and asked to rate them on a scale of 1 to 7 (1 = not at all, 7 = very much, extremely) on likeability, distinctiveness and information-content (cf. Brengman, Geuens, de Pelsmacker, 2001).

Full results of this study are available from Bucknull and Masson on request to;

Corporate@Bucknull- Masson.com.