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## 1. Introduction

The PressEdge as an instrument of revised media planning was first carried out in 2001/2002. The current study, which will be introduced in the following article, is configured as a follow-up of the first part. The terms for media planning, especially in print, were not basically altered during the last years.

Whereas the instruments of media planning are continuously being refined, global performance values are still going to be supplemented and partially replaced by detailed planning according to target groups which considers interests, attitudes and conditions in addition to demographic and consumption characteristics. In the course of time especially demographics are becoming more and more poor substitutes for media planning realigning on new environmental variables such as interests, expressed by preferred music colours, above-average use of specific TV-programs and - in the print media- editorial contents. The editorial environment is logically considered to be highly important during the planning process.

In the case of television there are no longer individual television stations but programs, i.e. the television station's value is mainly defined via the program's attractiveness by relying on individual target groups. The television station itself plays a subordinate role as an identifiable characteristic.

The situation in print media is slightly different, because the individual titles are solitary. Planning is done on the basis of "media exposure opportunities" and not of the "advertising exposure probability". While the editorial content is in fact sometimes considered during the planning process this is not usually done by referring to empirical data but rather on the basis on editorial suppositions. For example, advertisements for cooking products are frequently placed exclusively in the recipe parts of magazines, car advertisements are often shown only in a technical environment etc. The so called "Specials" with exclusive issues more and more magazines and even newspapers are publishing at regular intervals are actually as well a significant example.

While this method of ad positioning - to choose an editorial environment that is similar to the product or service the advertisement is showing - may reinforce the success of communication, it is not reliable and can in fact be counterproductive. The advertisements were to be fully ignored if the interest in this special issue is limited or even not existing. The determining factor for advertisement perception is therefore still the reader's range of interests.

Although the connection between reading of editorial articles and the attention to advertisements is highly discussed among researches, the fact that the interest in specific issues affects both attention to articles and thematically associated advertisements is beyond controversy. On the other hand emerges the notion that this connection could possibly be influenced by a distraction of advertisements caused by enthralling articles. The answers to this are ever so often in design and composition highly striking advertisements to attract the reader's attention. But even in this case require the advertisements some interest of the reader in the shown products or services if they ought to make an impact. Thus the personal attitudes and interests play still a very significant role for the positioning of advertisements in print media. Simultaneously the advertisements are not obliged to show up in the same thematically background as the editorial contents. It should not be excluded that the positioning of an advertisement in another thematically background than the advertisement itself could have an positive effect if there is a significant enough correlation between the reader's interest in the editorial background and in the product or service of the advertisement.

Not only the affinity of certain target groups to individual magazines must therefore be measured, but also those contents with an above-average or below-average opportunity of attracting attention within the magazines and newspapers. The basic hypothesis applied is that magazines and newspapers are mainly bought or subscribed to on account of their range and variation of editorial contents.

On behalf of Mediaedge: CIA of Germany, Czaia Marktforschung in conjunction with Immediate Software developed the PressEdge as an appropriate research tool to optimize ad positioning in print media. This instrument has also been used successfully for TA-Media AG Zurich.

## 2. Methodology

### 2.1. Universe

According to the last survey some changes in the universe have taken place. Instead of 54 magazines, now 61 magazines and two daily newspapers comprise the relevant set for this study. Unaltered the universe is defined as at least a reader of one specific issue of one of these titles. In addition the universe is still limited to persons aged between 14 and 64 years and living in private households.

### 2.2. Sample

A representative sample of the population serves as the bases, which is supplemented by data about persons with an increased opportunity of being reached, especially for titles with limited circulation, e.g. persons who have agreed during previous studies to again be questioned and who were known to read magazines. In addition the sampling benefits of the special german situation of similar telephone numbers and similar social-economic status in same residential neighbourhoods. The neighbourhoods differ only in the last digits of the telephone number while the first two or three digits stay the same in many urban and suburban areas. This fact is taken advantage of in randomizing the last digits of telephone numbers of people who were already known of reading titles with limited circulation. The procedure is appointed assuming that similar titles were read in neighbourhoods with similar social- economic status.

### 2.3. Data Collection

The way of data collection has long been a subject of discussion. The objectives - establishing of a recurrent instrument to analyze new ways for ad positioning - should be attained, irrespective of variations in the reader's general behaviour that were determined by subjects of topicality or being able to describe "regularities" when using the editorial contributions according to titles. Therefore monographs or case studies, such as response studies for a specific issue of relevant titles, were excluded as method for data collection.

The continuously recording of data over a period was ensured not by using the common TV measurement procedure of "people metering" via a panel but via a representative random sample. Diaries in which respondents could have entered their reading behaviour were also deemed irrelevant, as the danger that the usual reading behaviour could be altered by specifying the use of diaries was too great. In addition there were practical problems of feasibility. Recording the readers of defined titles and issues face-to-face by using a representative population sample and supplying the readers with up-to-date diaries, would already be thwarted by postal periods, especially as there have to be included daily newspapers. This also applies to written questionnaires - connected with further imponderables such as "which member of the household completed the form?" Additionally the interviewer would have to be accompanied by an assistant to carry the many different versions of the questionnaire. Over and above there are the not to be neglected costs which would be of an above-average magnitude if a corresponding face-to face approach would have been chosen. An acceptable price-performance ration would no longer exist.

Actually there has been an extra inconvenience in matters of data collection caused by the Iraqi war. As all the magazines and newspapers have appeared to feature the whole war or at least parts of the war's implications the variation of editorial contents was exceedingly restricted. To cover the standard variations of issues the start of data collection had to be prolonged.

Independent of this situation the data collection also involves another change. The data collection process was developed into a revolving process. This year 150 additional interviews for magazines already queried in the last wave and 450 interviews for newly included magazines, evenly spread over six months, take place. The intention consists in sorting out the oldest data over three years. The underlying idea implies that the general reading behavior is not likely to change over then three years but to alter gradually. Naturally explicit relaunches ought to be considered and get involved in the process of data collection by increasing the number of interviews for this special title.

### 2.3.1. CATI

The solution for the many problems of collecting data was therefore developed according to the newest technical standards and possibilities. Data is collected by telephone since May of this year and will probably be completed at the end of September. The basis for the telephone interviews is specially modified software for this type of study.

As already mentioned before is the main advantage of CATI basically the timeliness of the interviews - a fact that first allows to include daily newspapers and simplifies the monitoring of the latest three issues of magazines at a time. Secondary the usual advantages of CATI like the availability of difficult and mobile target groups apply. On the other hand the disadvantages of CATI should not be denied. In the course of CATI the out-of-home usage will be neglected. The interviewees are only at home available and the same obtains to the queried magazines: only the magazines which are at home available can be questioned. The usage of print media en-route and elsewhere does not take place. But this in the first instance slightly negative effect of CATI also inheres a positive effect in setting an emphasis on regular readers with intensified and homogenous usage at home. And the intensity of readership has always been a crucial fact in ad positioning.

### 2.3.2. Questionnaire

Altogether there are now 26 monthly titles, 13 fortnightly titles, 22 weeklies, and 2 daily newspapers each with the latest three issues included in the study. The following table shows the names of the titles as well as the quantity of interviews for each title in the accumulated database:

| Monthly Titles: | Number of interviews |  |  | Bimonthly Titles: | Number of interviews |  |  | Weekly Titles: |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  | Num interv |  | of |
|  | First wave | Second wave | total |  | First <br> wave | Second wave | total |  | First wave | Second wave | total |
| Allegra | 447 | 150 | 597 |  | Auto Motor Sport | 487 | 150 | 637 | Auto Bild | 484 | 150 | 634 |
| Amica | 505 | 150 | 655 | Brigitte | 561 | 150 | 711 | Börse Online | 476 | 150 | 626 |
| Cinema | 446 | 150 | 596 | Capital | 476 | 150 | 626 | Bella | 443 | 150 | 593 |
| Cosmopolitan | 503 | 150 | 653 | Computer Bild | 574 | 150 | 724 | Bild am Sonntag | 527 | 150 | 677 |
| DM | 452 | 150 | 602 | Für Sie | 507 | 150 | 657 | Bild der Frau | 584 | 150 | 734 |
| Elle | 515 | 150 | 665 | Freundin | 530 | 150 | 680 | Bunte | 568 | 150 | 718 |
| Eltern | 549 | 150 | 699 | Journal für die Frau | 495 | 150 | 645 | Der Spiegel | 601 | 150 | 751 |
| Familie \& Co. | 500 | 150 | 650 | Max | 499 | 150 | 649 | Die Zeit | 584 | 150 | 734 |
| FHM |  | 400 | 400 | TV 14 | 613 | 150 | 763 | Focus | 639 | 150 | 789 |
| Fit for Fun | 419 | 150 | 569 | TV Direkt | 501 | 150 | 651 | Focus Money |  | 400 | 400 |
| Glamour |  | 400 | 400 | TV Movie | 533 | 150 | 683 | Frankfurter Allgemeine Zeitung am Sonntag |  | 400 | 400 |
| GQ | 390 | 150 | 540 | TV Spielfilm | 545 | 150 | 695 | Gala | 447 | 150 | 597 |
| Impulse | 439 | 150 | 589 | TV Today | 557 | 150 | 707 | Hörzu | 568 | 150 | 718 |
| InStyle | 422 | 150 | 572 |  |  |  |  | Kicker | 464 | 150 | 614 |
| Joy | 451 | 150 | 601 |  |  |  |  | Laura | 447 | 150 | 597 |
| Madame | 503 | 150 | 653 |  |  |  |  | Lisa | 471 | 150 | 621 |
| Manager | 440 | 150 | 590 | Daily Newspaper: |  |  |  | Sport Bild | 439 | 150 | 589 |
| Magazin |  |  |  |  |  |  |  |  |  |  |  |
| Marie Claire | 428 | 150 | 578 | Frankfurter Allgemeine Zeitung |  | 400 | 400 | Stern | 563 | 150 | 713 |
| Maxi |  | 400 | 400 | Handelsblatt |  | 400 | 400 | Super Illu | 474 | 150 | 624 |
| Maxim |  | 400 | 400 |  |  |  |  | Telebörse | 394 | 150 | 544 |
| Men's Health | 473 | 150 | 623 |  |  |  |  | Tina | 555 | 150 | 705 |
| Petra | 497 | 150 | 647 |  |  |  |  | Welt am Sonntag | 540 | 150 | 690 |
| Playboy | 517 | 150 | 667 |  |  |  |  | Wirtschaftswoche | 560 | 150 | 710 |
| Shape |  | 400 | 400 |  |  |  |  |  |  |  |  |
| Vogue | 470 | 150 | 620 |  |  |  |  |  |  |  |  |
| Wellfit |  | 400 | 400 |  |  |  |  |  |  |  |  |
| Playboy | 517 | 150 | 667 |  |  |  |  |  |  |  |  |

The centrepiece - response to editorial contributions - is carried out on one of the issues that has already been read and is still available in the household. If this approach is appropriate for more than one of the included titles or issues, the test issue was chosen by random by the interview software, although titles with lower reach figures were preferred. Title selection during the field period was dynamically controlled by means of the sample management system according to the number of copy tests that have already been carried out. This procedure demands daily control of conducted interviews as well as of the magazines and newspapers questioned in it. The sample management system is therefore subject to continuous adjustments.

The front covers and all the pages, excluding the $100 \%$ advertising pages, of altogether 915 different issues of the last wave and 900 new issues of the current revolving process were to be scanned via digital camera. A total of approximately 241.000 plus the similar number in the current survey, in summary nearly 500.000 editorial pages will be available in the database for further evaluations. Every article as well as the announcements and the follow-ups of articles in the same issue were coded. If one pages contains articles and announcements of different content they were questioned separately. All through the interview the software shows the interviewer the at present questioned page of the magazines to simplify an intelligible conversation with the interviewee.

Exceptions to this are the newspapers. The questionnaire for the weekly newspapers covers only a prototypic selection of several articles for different sections without showing the pages on the interviewer's screen. In the questionnaire of the daily newspapers the single pages and super ordinate segments were evaluated.

The interviewees are requested to refer to the test issue and jointly go through it with the interviewer. The front cover is superimposed by the interviewers for verification: the issue number, headlines, picture contents etc. were to be compared.

For every contribution or every editorial page the total attention and, insofar as available, partial use and attention to specific details were measured:

- Recognition: Headline, content abstraction, picture(s) and/or graphics, picture descriptions and subtitles and sub headlines.
- Text: Everything or almost everything, about half, less than half, the text was not read or no details were noticed.


To shorten the questionnaire and not to lose the respondents patience the evaluation of the read articles is in this year not any longer queried. Simultaneously could therewith an enhancement in the quality of the copy test be achieved.

To ensure a reasonable duration of the interview it is also impossible to collect the response to all editorial contributions of one issue. Just as many editorial contributions - from among all of them - are therefore chosen at random for the single interview, that a maximum number of 400 details per interview will not be exceeded. The random selection guarantees that questions concerning the pages were asked in an ascending sequence and contributions on following pages would always be studied completely.

The copy test is supplemented by questions on "openness to advertising", travel and holidays, investment, shopping and buying decisions in the household according to product groups, car ownership and buying intentions as well as demography.

The method ensures that titles, issues and editorial contributions are clearly identified, the data is close to the time when an issue was most recently read and even rather irregular readers are included. No interview could be carried out if the possible test titles or issues were no longer available in the household or were exclusively read outside the home. However, affinity to the defined media was established: the interviewers tried to get an interview at a later time.

This procedure was altered in the study that was carried out in Switzerland for TA-Media: for use outside the home or when the test issue was no longer available, an issue was sent to the respondent by post or courier and the data was subsequently collected.

### 2.4. Basic figures

A total of 27.000 interviews in the first wave and approximately 11.000 in the current wave will be carried out on approximately 1800 different issues:

- 26 monthly magazines
- 13 bimonthly magazines
- 22 weekly magazines and newspaper
- 2 daily newspapers.

There are nearly 6.5 billion measuring points (contribution/editorial pages * persons) that will increase to 19 billion with the current wave. But even this large number does not allow the level of attention to be proved for single issues - irrespective of the limitation to consumer target groups, for example.

### 2.5. Weighting

The interview data will be adjusted to the readership's (AIR) demographic structure according to NRS (MA Presse 2003/II) by an iteratively weighting procedure per title. Gender, school education and net household income were weighted within three age groups. If a magazine is not included in the MA, the VA 2003 (like TGI) or AWA 2003 will be chosen as the reference database for weighting.

Certainly, the AIR in the MA, VA or AWA only illustrates the readership insufficiently, e.g. for women's magazines the proportion of male readers is underestimated. A total of $13 \%$ of male readers was proved in the MA Presse 2001/II, the proportion of men for Vogue was $26 \%$ in the last year's study, which is a value that probably reflects the actual readership more accurately, especially when considering the professional use.

### 2.6. Content analysis

The results of response measurements for the different issues do not allow generalized patterns to be derived: a content analysis is required, in order to objectively systematize the specific characteristics of tested editorial contributions.

The content analysis takes places on two different levels: the title level and the editorial level. At the title level editorial sections in every title that recur issue to issue (according to content lists) have been coded as criteria for aggregation and evaluation: requests for advertisement positioning can be put in concrete terms. However, no regularities are deducible for all media.

At the editorial level all editorial contributions independent from titles were coded on the basis of 483 categories with multiple codes and main issues in contrary to sub-level issues. The basic change in comparison with the last year conducted survey is made of the multiple codes as well as the differentiation between the main and sub-level issues. That means that a single editorial contribution can be coded to different main and sub-level categories. This procedure improves the possibilities of the evaluation definitely. The basis for different analysis has increased and the quality of the classification of the single contribution has also improved.

The categorization system used on the editorial level was developed hierarchically, ranging from 27 main subjects up to three sub-levels, so that conclusions that are particularly interesting from the marketing point of view could be evaluated in detail. The main subject areas and examples for the further subdivision of the individual categories are given below, in addition to formal criteria such as pages, range etc.

| Character of contribution | Main issue of contribution | Sub-level issue of contribution, e.g. Health, medicine and the psyche |
| :---: | :---: | :---: |
| Other | Job, Profession and career | Other |
| Reports | Car, Motorbike and Traffic | Allergies |
| Cartoons / Jokes / Caricature | Education, College, University | Ageing, death and Decease |
| Editorial | Computer,Telecommunications andInternet, <br> entertainment equipment | Therapy, healing and surgery Reports of diseased people |
| Essays | Parties and public holidays | Health Care |
| TV program | Finances, insurances and shares | Research |
| Horoscope | Leisure and hobbies | Maladies |
| Masthead | Friendship, partnership, sex and singles | Medicaments, vitamins |
| Table of contens | Society, the church, religion and social events | Pathogenic germs, noxious germs, insanitary substances |
| Interview | Health, medicine and the psyche | Psychological tests |
| Retrospection | Children, development, upbringing and education | Psyche, psychological well-being, self discovery |
| Column, views, satire | Cooking, eating and drinking | Positive coenesthesis |
| Short story, serialized novel | Cosmetics, hairdressing and beauty | Pestilences, epidemics |
| Letters to the editor | Art and cultural events | Plastic surgery |
| Brain teaser, riddles, quiz, lottery | Media and advertising | Tips for physical well-being |
| Miscellany column, short contributions | Fashion | Tips for mental balance |
| Service | Politics |  |
| Promotion, bargains | VIPs, artists and aristocracy |  |
|  | Law, justice and criminality |  |
|  | Editorial service pages |  |
|  | Sport |  |
|  | Entertainment, humour and anthology |  |
|  | Holiday and travel |  |
|  | Economics (commerce) |  |
|  | Science, nature, technology, the environment and energy |  |
|  | Home, House and Garden |  |

## 3. Evaluation

The main objective is to obtain help for deciding where to position advertisements. The data therefore have to be integrated into media planning software, i.e. unlimited definition of target groups, media selection and tabulation functions for a more extensive analysis of results, including the ability to display the test pages as bitmaps. Five different data bases are made available for further analysis: the information out of the copy tests, the interview data, the data of the content analysis, the classification of editorial segments and the tested pages in the form of bitmaps.

### 3.1. Databases

The database with copytest information includes the recognition of the editorial contribution for about 63 titles with approximately 1800 issues based on approximately 38.000 interviews for nearly 500.000 editorial contribution pages.

On the basis of the content coding the titles with the highest rate of certain issues can precisely be determinated. A crosstabulation of issues and titles shows for each title the amount of pages and cases (pages*persons) in which a certain issue main subject or sublevel - is recognized and read. Simultaneously the structure of the titles on the basis of the issue coding can be analyzed. This procedure allows the identification of issues of interest and the check of incidence in the respective title.

The interview data are consisting of demography and consumption characteristics. The consumption characteristics contain information about media usage, attitudes towards advertising in general, holidays, telecommunication, cars, financial investments and shopping information for a range of products. Both the demographical structure of titles and interests can be analyzed with the help of these data. A detailed breakdown of who reads the different magazines and who is interested in which contents can be carried out. Any special target group can be created and even the readers of selected magazines can be crossed with the interests in contents and issues. Above all this analysis can help to identify which contents beyond the ones in the read magazines are of additional interest to which kind of target group.


For every title the contents and editorial contributions are available for content analysis. The number of contributions or pages can be given per title, or the total number of tested pages can be expressed as a percentage. This allows detailed comparisons of the single titles and their content structure. Also a ranking with different editorial contents by titles is possible and offers numerous possibilities for picking out the adequate title for special target groups.

The classification of editorial segments contains predominantly the information of the content coding. The editorial segments of
each title are unveiled and provide an additional tool in analyzing and comparing the contents of the different magazines and newspapers. The attention values for single categories the contributions were coded to can be shown per title via the individual title analysis.
At least the bitmaps account for a great deal of the data. Every tested page of every tested issue can be shown as bitmap. Besides the "qualified attention" values are specified. "Qualified attention" means everything or almost everything was read and/or all of a contribution's details have been noticed. Above all the "total attention", which means at least one detail has been noticed, can also be used for further analysis. Every editorial contribution can be compared to every other in regard to the attention values and their overall success in addressing the reader. Furthermore the bitmaps can serve as examples for the coding categories.

### 3.2. Software

To merge all these databases and provide an easy to use planning program a special software program was developed. This program is interactive and the functionalities can easily be learned. It is based on the often used media planning program "Masterplan" and includes additional information from the above pictured databases which are associated and linked. Every imaginable evaluation is therefore possible and besides easy to handle. The combination of the database information is in no way limited.


Above all a tool for data analysis over the www is planned and will on the one hand enforce the opportunities and usefulness of this instrument for its users and on the other hand simplify the data handling and implementation of the software through a permanent availability.

### 3.2.1. Optimization

Results from the evaluations, outlined above, allow the editorial environments at least to be determined, i.e. in which environment an increased communication performance can be expected and for which target groups and with which titles the advertising effect will possibly increase. Price-performance-relations are not taken into account.
The database developed for this survey has the advantage of minimized storage capacities. This solves the problem of the often long-lasting dataprocessing in working with optimization. For the optimization process itself algorithms derived from topology, combinatorics and metaheuristics were included to succeed in an acceptable speed.

The improvement by this instrument is obvious compared with the conventional methods outlined above. According to the results there should not only be one media exposure probability for each reader and title. We are now able to define "real" advertising exposure opportunities depending on the individual noting scores for the editorial environment.

The optimization is generated by integrating these noting scores of the editorial environment and thus providing an additional tool for ad positioning. The following first screenshot shows the optimization without and the second one with integrated noting scores of the editorial environment. The target group defined are people who spent a larger holiday in the last 12 months.
The first optimization process only provides the names of the magazines,

while the second one the attention values includes. In addition to the names of the magazines the editorial sections for the optimal ad positioning were shown. Overall the selection of magazines changes as well.


The extent of the optimization in this way can sure enough be questioned. The amount of profit in using this tool depends on the basic objectives of the individual media planner. If it is used as basic information for supporting the planning decision or only as fine-tuning of decisions already made - in each case the information and possibilities provided by PressEdge are reasonable and beneficial for every decision to be made.

## 4. Results

The simple visualization of the structure of interest independent from the titles read already shows results which would not be supposed in the first place. Many issues, which would mostly be assigned to women's interest have been read only by the half of the women but, equally astounding, by one third of men.

Alongside this very simple example the elaborate possibilities of the instrument in conjunction with the software can provide much more insight in the process of recognition and attention. Numerous analysis show that the criteria of an effective ad positioning vary within different titles as well as within different target groups. This is originated from the highly specific range of interests the different target groups of the magazines are equipped with. The effects of different lifestyle and periods of life are widely known, but their transformation into an effective media plan requires information provided by this instrument.
Next to the range of interests there is an additional factor concerning the media plans which should be kept in mind: the circulation and especially the reach of magazines. Detailed analysis point at the incidence that a title with lower reach figures could become more relevant for media planning when its attention figures are likewise taken into consideration. If a magazine thus has an above-average recognition of e.g. its title issue, the reach could be weighted accordingly.

Recapitulating the objectives of the survey as well as all the possibilities the reporting features this instrument provides profound insights in the diversification of interests of different target groups, the structure of the editorial content of various titles, the recognition of these contents and on this basis breaks new grounds in ad positioning.

