Online Research

A Practical Handbook

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Introduction

With the global growth of internet penetration, the use of the internet for market research purposes is growing from year to year. Conventional ways of asking respondents such as by face-to-face or telephone are increasingly being replaced by web-based interviewing. The main reason for this is cost-efficiency, but there are also methodical advantages. In internet-based market research, there are no geographical constraints. Also, response rates tend to be higher in surveys conducted online. Finally, there is also proof for the fact that web-based interviews produce longer and more honest answers because the respondent feels freer as he/she is not faced with a personal interviewer. GFK Austria was the pioneer of online research in Austreia and Central Europe. This paper was therefore originally written for use by GfK companies. It has now been updated and adapted for general use.

Online Research Basics

Market Research

Market research is the generic term for different kinds of research in which interviews are being used.

- Market research in the narrower sense (consumer research)
- Public opinion research
- Social research
- Media research

- Market research can be done in a *quantitative* manner - the basis of such studies are samples of at least n>30, and the results are expressed in percentages and absolute numbers.
- If research is done in a *qualitative* manner, samples tend to be small (n<30), and results are given primarily in text form. They aim at explaining motives rather than determining percent distribution of opinions or facts. Results consist of text rather than figures.
- With the advent of the smartphone, another distinction can be made bewtween research in the *passive* mode (no participant action required) and in the *active* mode where respondents are being asked to cooperate.

Market research can be conducted with different types of interviews:

- Face-to-face interviews (CAPI – Computer Assisted Personal Interviews)
- Computer Assisted Telephone Interviews (CATI)
- Interviews executed personally with paper and pencil (PAPI)
- Interviews by internet, referred to as CAWI (Computer Assisted Web Interviews).

This paper deals primarily with practical aspects of online interviewing.

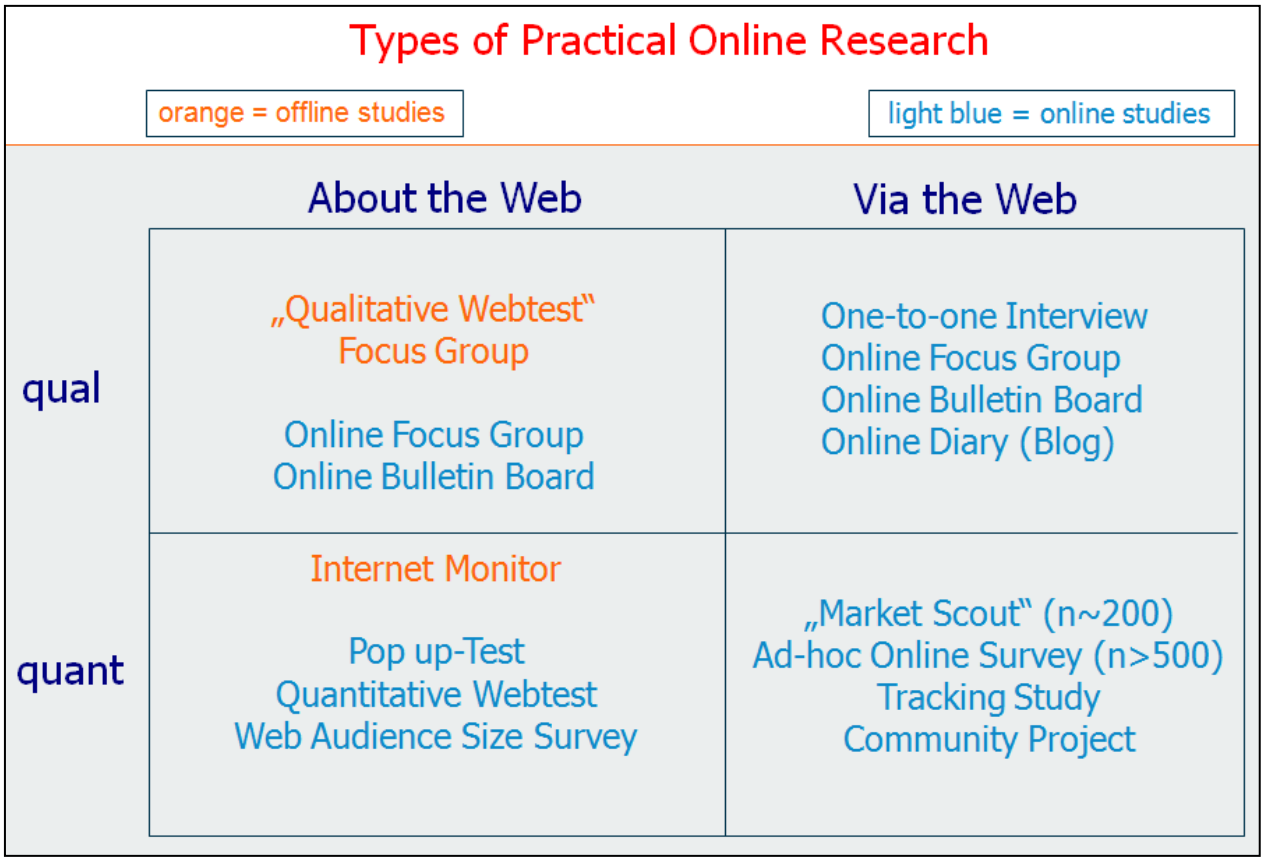
Online Research

As can be seen in the graph below, online research comprises two different applications:

1. Online Research about the Internet (Web)
In this case the aim of surveys is to clarify facts about the Web. Examples are tests about Website performance (usability tests) or surveys to define the number of visitors of a Website (Web audience size measurement). A completely different approach to define audience size is Web metrics which is the use of logfiles for statistical purposes.

Note: Penetration of the Internet (percentage use in a market) must be surveyed *offline.*

2. Online Research via the Internet
This is the use of the internet for all kinds of surveys whose subject is not the Web but phenomena of the „real" world: awareness and acceptance of products or services, social behavior, political opinion, media use, etc.



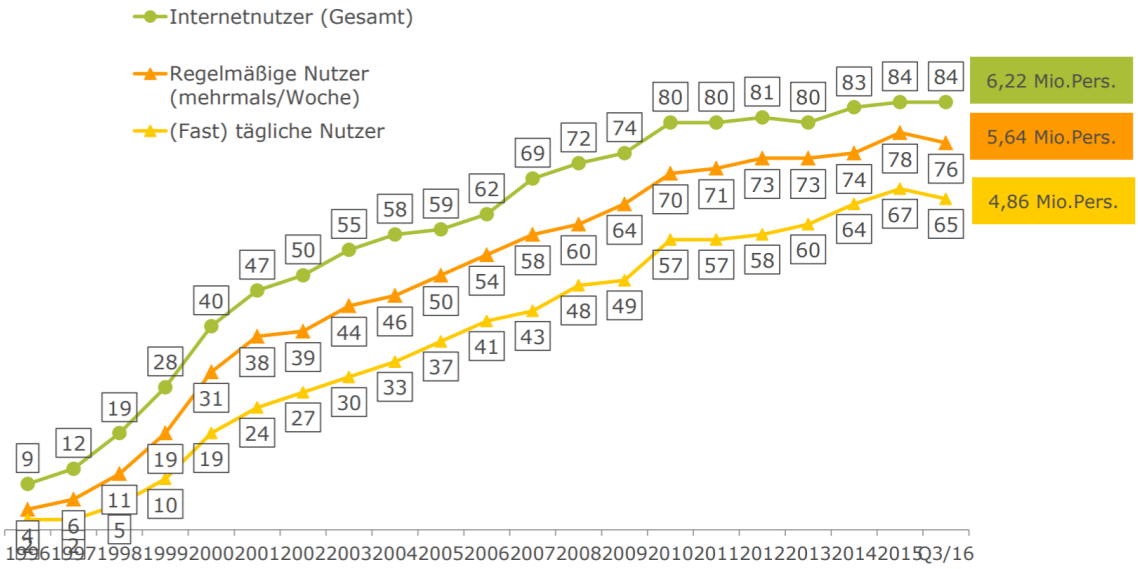
Development of Online Research in at GfK Austria

In 1996, GfK Austria and Integral, under the auspices of the media research department of the Austrian TV and Radio Corporation (ORF), started a continuous measurement of the use of the internet by the Austrian population 14+. This research, called *Austrian Internet Monitor (AIM),* was conducted by both institutes together on a quarterly basis. Today, the AIM is conducted by Integral alone (see below).

After a rather slow start, internet penetration picked up speed in 1999 when broadband and „flat rates" were introduced (in a „flat rate" contract, payment for internet traffic is not by single Megabyte, but by a lump sum which is paid for a maximum number of Gigabytes). In addition, the cost for the use of internet went down rapidly. While schools and business became saturated quite soon, growth has continued at an annual rate of 2-3% in the households. While the younger and higher educated segments of the population are practically all connected to the internet, there is still room for growth in the older and down-market segments. As can be seen in the chart on internet use by age, already 73% of the segment 60-69-years are "onliners". And even in the population 70+, more than 40% already use the internet.

Note: In advanced industrial societies with an internet penetration of 80 % plus there are hardly any differences in the use of the Web by region or size of community.

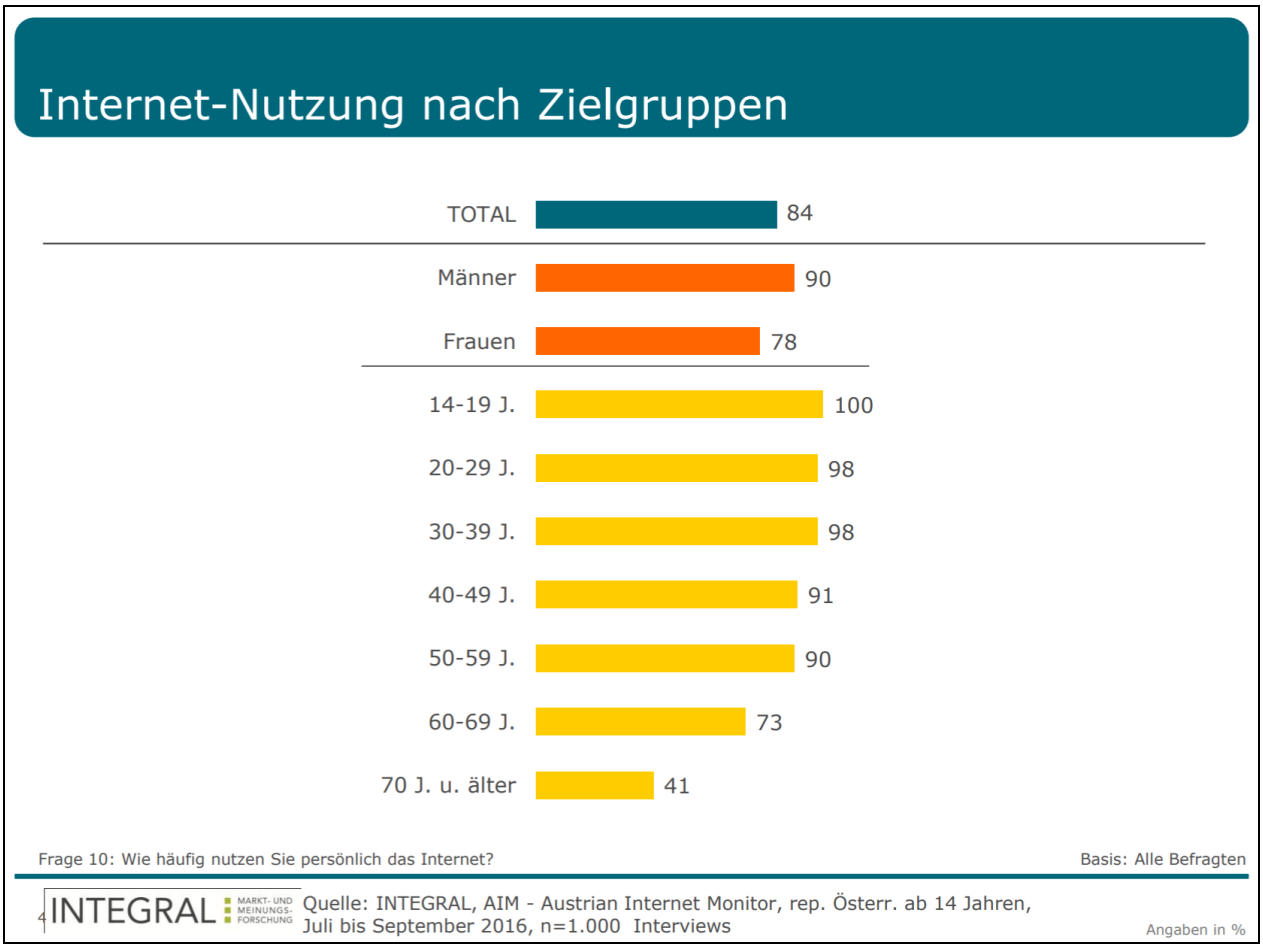
Internet-Nutzung seit 1996



Frage 10: Wie häufig nutzen Sie persönlich das Internet? Bis 2014 jeweils 4. Quartal Basis: Alle Befragten

INTEGRAL MARKT- UND MEINUNGSFORSCHUNG Quelle: INTEGRAL, AIM - Austrian Internet Monitor, rep. Österr. ab 14 Jahren, Juli bis September 2016, n=1.000 Interviews

Angaben in %



Advantages and Disadvantages of Online Research

Most - not all - types of surveys which have traditionally been conducted face-to-face, by telephone or by mail, can today be done online. Of course, results may differ from data gained in conventional research. Likewise, results differed from those gained by face-to-face when telephone interviewing was introduced.

Reasons for different results can typically be:

- Different universes (“onliners” vs. “nonliners”)
- Different levels of education
- Differently worded questions
- The character of the online interview (self-completion)
- Topics that relate to internet or the use of it (information technology topics)
- Different return rates

Advantages of Online Research

- Quick fieldwork and evaluation (down to 24 hours)
- Cost efficiency (no interviewer and/or telephone cost)
- No geographical boundaries: multi-nation surveys easily possible

- Convenience: the respondent can choose when and where to respond
- No interviewer bias (self-completion)
- All types of multi-media content can be tested
- Sensitive topics are easier to ask - respondent is alone (anonymity)
- Higher response rates than in telephone or face-to-face (at least in Europe)
- Candid answers (no social pressure)
- No interviewer training necessary

- No erroneous transcription of answers to open-ended questions possible
- Report/graphs can be generated in real-time and delivered quickly
- Format may impress customers as the most modern type of market research

Disadvantages of Online Research

- Internet does not reach 100% of the population
- Difficult to explain details
- Not applicable when topic is related to internet and internet use
- Especially in qualitative research: no body language to observe
- No possibility to test products by mouth, nose or hand
- Results may be skewed due to different degrees of familiarity with computers

Dealing with Disadvantages of Online Research

- Conducting surveys in *mixed* or *multi-mode*: supplementing online interviews with the necessary number of interviews with „nonliners" *(hybrid surveys*)
- Making online questionnaires self-explanatory
- Delivering product samples to households for testing
- Careful panel management

Note: There will always be applications of market research which must be conducted in the conventional, offline way. But generally, surveys should be offered (also) online.

Where Quality turns into Quantity

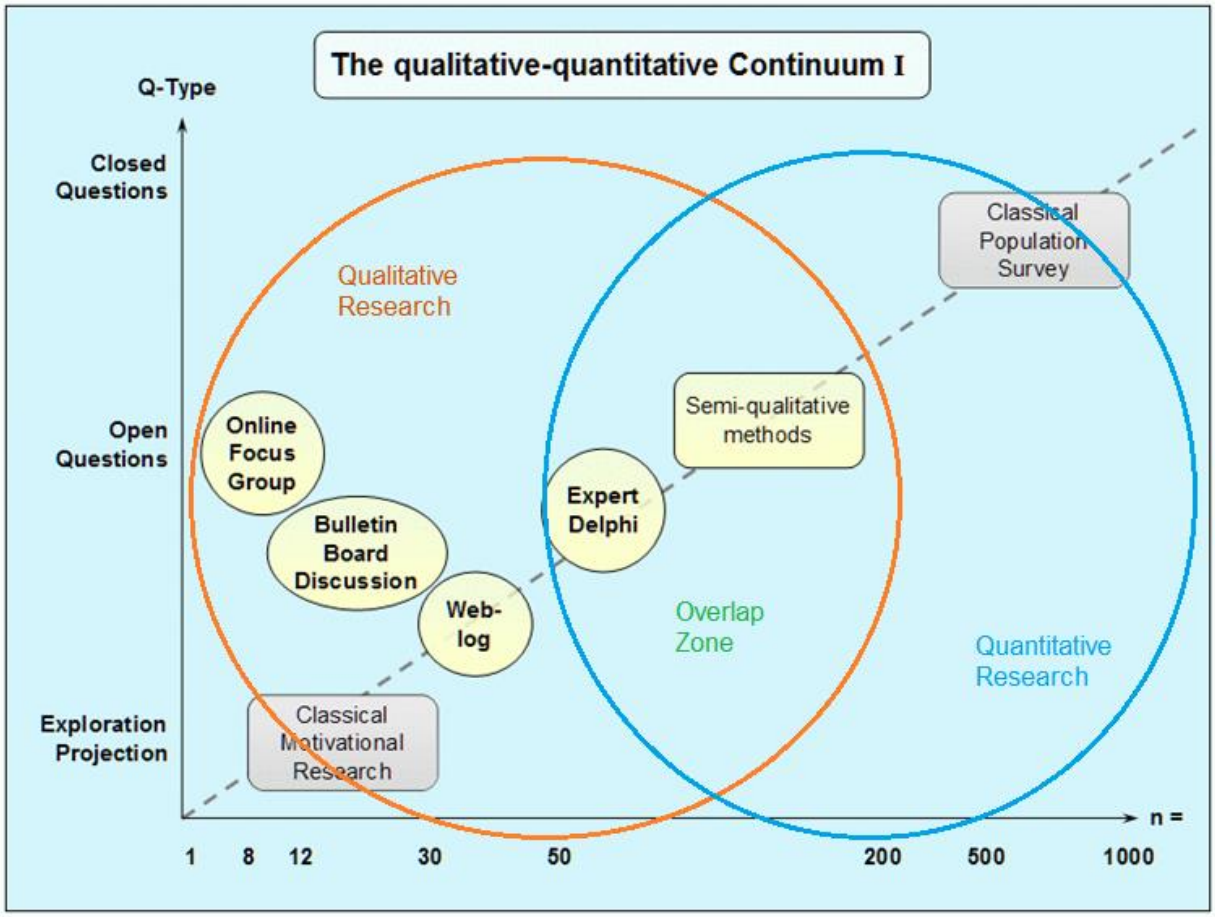
As is shown by the graphs below, online research projects can be classified

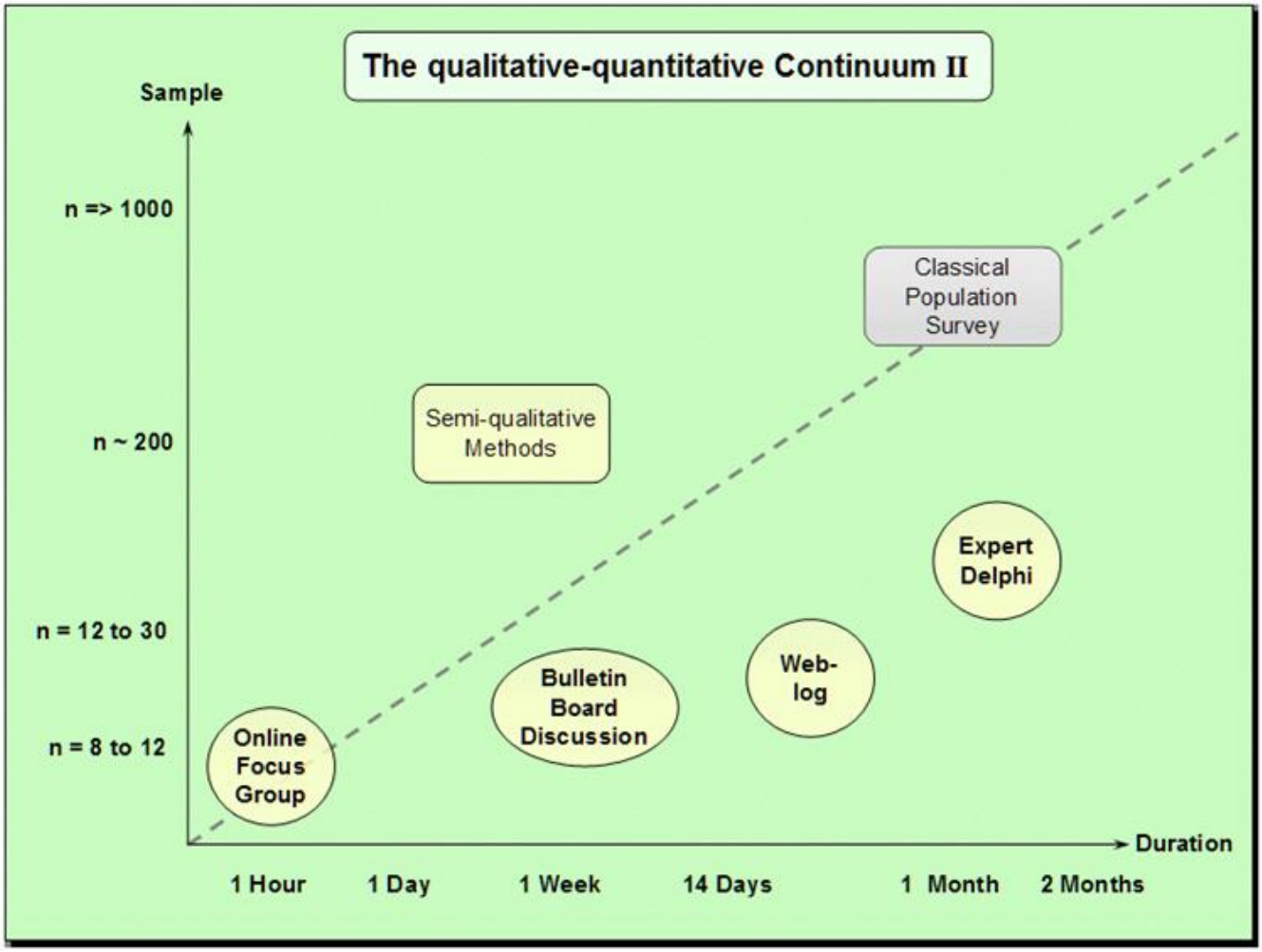
1. According to sample size (x-axis) and "density" of questions - from intensive exploration to closed questions (y-axis) or
2. according to duration (x-axis) and sample size (y-axis)

Online research is well suited for all sample sizes and methodologies - both in the qualitative and the quantitative sector.

Of special interest is the overlap zone: due to the fact that answers to open-ended questions in online surveys need not to be transcribed, small online samples (e.g. n = 200) can be profitably used for „semi-qualitative" explorations in which the emphasis is on the interpretation of text.

„Delphi" surveys used to produce well founded expert opinions collected in a two or three-round interrogation process normally also have small samples.





Quantitative Online Research

Introduction

Quantitative online research has much in common with traditional market research. In some of its features, however, it differs.

By careful coincidence-based recruiting and selection of respondents, researchers seek to build samples that represent the underlying universe as closely as possible. Quality samples drawn from an online address pool are built by a combination of quota and random selection. Within cells like region, age, and education, respondents are automatically selected at random by the panel management software. Precaution is taken that respondents are not invited too often for an interview. Some applications require the “boosting” (i.e. over-representing) of certain segments or target groups, e.g., in order not to discriminate against smaller regions. After fieldwork these segments must be down-weighted again to conform to the actual composition of the universe.

To include segments of the population which are not (yet) connected to the Internet, surveys are being conducted as multi-mode studies.

While response rates in telephone studies have meanwhile reached an all-time low of sometimes less than 20 percent, online surveys can boast return rates of up to 80 percent, as, e.g., in employee surveys. Average response rates in professional internet research will range between 30 and 60%.

In order to secure high response rates, online panels must be managed properly, incentives must be carefully administered, and questionnaire design must follow the special requirements of online research.

Note: In this paper, the number of persons to be invited is indicated by the capital letter "N" (N = 5,000 means that 5,000 panel members are being selected to receive invitation e-mails), while the letter "n" (in lower case) is used to indicate the actual sample size achieved (n = 4,000 means 4,000 completed interviews).

The Online Address Pool („Access Panel")

Panel Recruitment, Panel Maintenance and Quality Assurance

A well-recruited and well-managed online pool („access panel") is the heart of professional online research. Recruitment practices are crucial for creating representative samples. Careful panel maintenance and a practical incentive system are decisive for high response rates. State-of-the-art panel management software is required to assist panel managers with their tasks.

Offline recruiting

The highest quality level for pool recruiting is doing it offline. By this is meant collecting addresses of internet users willing to participate in online surveys via *telephone* or *face-to-face studies.* Of course, this method is expensive and open only to research institutes which conduct a large number of representative telephone and/or face-to-face interviews.

An efficient way to recruit panel members is to include questions like these at the end of all suitable surveys of the institute:

1. *„Do you use Internet?"* and

2. *„Would you be willing to participate in online surveys from time to time?*

This method ensures near-representativity of the online pool, because it is the only way of recruiting also persons to the pool who are not as active within the Web as heavy internet users: By doing so, one is able to create interest for online research in target

groups that never would do something like that pro-actively. Nevertheless, most panels are skewed towards the younger and more educated segments of the population. Another bias is due to the fact that heavy internet users are more likely to sign up. These circumstances must be taken into account in all types of sampling.

Online recruiting

In many cases *offline* recruiting will not be sufficient to build a panel of reasonable size. The alternative is *online* recruiting. The institute may try to find partner sites on which ads (buttons or banners) can be placed, inviting visitors to join the institute's address pool. Potential panel members found in this way will be redirected to the panel management welcome page. There, respondents begin their double-opt-in routine. This means that they formally declare their willingness to participate in surveys. Newcomers to the panel are instructed about the confidentiality of data under ESOMAR rules. They are given information about incentives to be earned by participating in surveys and asked to complete their personal profile (age, occupation, education, leisure habits, purchasing interests etc.). Naturally, the institute can also put a recruiting button on its own homepage or on a special landing page connected to the panel management software.

Other ways to recruit panel members are to book ads (online and offline) or use social networks like Facebook, Linked-in or other communities. Meanwhile, not only young people but also older „netizens" (internet users) can be recruited in this way.

If it is possible to put the invitation link on a popular site (e.g. of a high circulation newspaper), the response rate may be quite satisfactory. As will easily be understood, all these methods can produce unseen or unknown biases.

Note: One must be careful in online recruiting not to collect addresses of „incentive hunters" or „multi-panelists" who are more often than not „routine answerers" or „straight liners" (persons filling in matrix questions without thinking and in a straight line down) Such self-recruited panel members will not represent ordinary Web users.

Incentives

It is accepted practice among panel managers that the most efficient type of rewarding respondents is a „points" system. Respondents are collecting points according to the time it takes to fill in the respective questionnaires. After having reached a certain number of points (e.g. 2500), the panel member is issued a voucher (redeemable in a large number of different shops all over the country). An average online questionnaire completed in Austria will result in the respondent receiving points worth 1-2 Euros.

Note: A reliable and well working rewarding system is crucial for response rates and data quality.

Lotteries are also an alternative - especially when offering attractive prizes. Another form of rewarding is the promise by the institute to donate a certain sum to a *charity institution*

if the respondent fills in the survey properly. In this case, the panel management will have to produce some kind of proof to show that this happens. Finally, there is also the possibility to offer the results of the respective surveys to respondents (especially suited for interviews in the Business-to-Business segment).

Snowballing

Snowballing is a method to recruit respondents by

- paying interviewers for bringing in e-mail addresses of potential respondents,
- asking colleagues in the company to recruit among their friends and acquaintances,
- offering incentives to existing panel members for nominating addresses.

This can be done by a special button in the panel management software. In such cases precaution must be taken in order to keep panel members from trying to earn additional points/money by „shoveling in" masses of addresses. Such attempts can be dealt with in various ways - e.g. by restricting the number of addresses a panel member may suggest to only a few per month.

Note: Potential respondents recruited in one of these ways will be approached by e-mail or phone and asked to fill in a basic profiling questionnaire. When using snowballing as a recruiting option, one has to be very careful and strict in checking the personal data of the recruited persons. Incentives should only be paid to the recommending person after a certain time of active participation of the new recruited panel member. Special care must be taken about bias resulting from recruiting persons of similar interests, background, culture, class etc.

Purchase of e-mail addresses from external vendors.

Although a widespread practice, using addresses bought from commercial vendors contains the risk of bad quality. In some cases addresses are recruited of incentive hunters who are member of several panels. Panel members might be asked to fill in several surveys per week which will most probably result in negligent behavior. In all, response rates tend to be low – also due to a loose relationship in large panels between panel management and respondents.

Optimizing and retaining panel size

In large countries such as Russia, Poland, or Ukraine, large panel sizes may be necessary, in order to be able to sell regional studies. Normally, the size of the online pool should be in proportion to the number of interviews per panel member per year.

Example: Assuming the online pool comprises N = 25,000 members, n = 100,000 online interviews conducted per year would mean a theoretical average workload of only 4 surveys per year per member. Naturally, not all pool members have the same chance to be called up for surveys because some segments of the panel will be more important to clients than others – but the problem remains that respondent fatigue or even mortality

can arise due to a lack of required activity. On the other hand, panel members should not be invited for too many surveys per month, because otherwise there is the danger of non-participation or negligence in filling in questionnaires.

For this reason it is necessary to carefully observe the development of return rates in the panel. Another factor to keep in mind is the administrative cost of panel management. In order to keep respondents happy and active it is advised to create a community (or "club") spirit among panel members by occasional lotteries, a club magazine or interesting news displayed on the pool platform - such as results of surveys or other interesting projects. Panel maintenance should be entrusted to a person who has a personal feeling for panel members and is able to stay with the job for a longer period.

„Natural" and „Artificial" Panel Rotation

If a panel is as representative as possible, it will reflect the dynamics of society. In other words, panel members will marry and get divorced, and they will move house. They may have to go to hospital, and some of them will die. All this causes „natural" rotation - panel members who have to leave or just decide to leave must be replaced by appropriate new persons.

The so-called „artificial" rotation is basically an academic requirement. In practice, panel members are most reliable during the middle of their „lifetime". In the initial period – right after recruitment – they may have still some difficulties in fulfilling their obligations. At the end of their career they may become a little negligent or may lose interest altogether. Getting rid of well-established panel members, therefore, is not ideal. „Natural" rotation amounts to something like 15-20% per year in most panels. To replace larger numbers seems to be necessary only in exceptional cases. An annual general panel update, i.e. a renewal of the personal profile of all members, shows the actual number of active pool members. This is an opportunity also to update the list of or personal possessions, purchasing interests and life-styles
#

Panel Quality Assurance by Respondent Verification

Based on sophisticated technical solutions, appropriate can

1. Identify duplicates by...

... Building a unique profile of respondents based on the characteristics of both the user and his/her device
... Creating a unique digital fingerprint for each respondent which is tracked constantly.

Note: By deploying these measures in real-time it is possible to ensure the integrity of a sample.

2. Identify inattentive, satisfying or fraudulent respondents, such as

- Speeders (fast survey takers)
- Respondents with strange grid behavior (e.g. straight lining, diagonal/extremist completion etc.)
- Persons with contradictory behavioral measures can be checked automatically, e.g. by checking the way text is entered (e.g. no answers, incoherent answers, too few characters, nonsense numbers etc.)
- Persons with inattentive behavior

3. Recording respondent engagement

At the end of a survey, respondent engagement with the study is evaluated in terms of:

- Overall satisfaction with the survey experience
- Interest in the subject
- Perceived length of the survey
- Whether the questionnaire was clear & easy
- Whether the questionnaire was repetitive or not

Standards and Guidelines

1. ISO Certification

Since 2010 there is the possibility in Austria for online pools to be certified by ISO. ÖNORM ISO 26362:2009 - Access panels in market-, opinion- and social research - definition and service specifications.

This ISO standard is valid for all types of access panels, regardless if online or offline recruited and used.

2. ESOMAR Guidelines

ESOMAR, the European Society for Opinion and Market Research, founded in 1948, has published a catalogue of 26 questions relating to the quality of online samples and online research. When conducting online research, researchers should carefully study these questions and prepare answers to them. Clients should ask for the answers when sending out requests and evaluating offers. See Appendix 1

Mobile Online Research

The rapid spreading of mobile phones, smartphones, tablets and other hand-held mobile telecommunication devices all over the world brings up the question of market research via a mobile device. While asking a person to answer questions over a conventional mobile phone is not strictly online research, the use of the smartphone (a mobile phone with access to the internet), the netbook (a small laptop computer with internet access) and the tablet (a flat hand-held computer with internet access) offers the possibility to invite people to answer questionnaires via internet on a mobile basis. (Smartphone based research in the *active* mode).

Note: Most ordinary mobile phones contain the possibility to process short text passages. Therefore, even with these devices some sort of market research is possible.

It is clear - and also addressed by the ESOMAR guidelines for mobile phone based surveys (see Appendix 2) - those interviews via a smartphone pose a number of additional problems.

First, it is of great importance to keep in mind that not all mobile phone target groups can be reached by online research. An internet account is necessary and the user must be experienced in accessing it. Second, the screen size available on smartphones (even the newest larger sizes) is not suited for all possible kinds of questions. And finally, the duration of the interview is also a decisive factor, as respondents may find it difficult to stay online for longer than a few minutes. Thus interviews similar to simple “voting” or “polls” will be more effective than lengthy questionnaires. On the other hand, mobile phone research has the big advantage of allowing for ethnographic applications such as interviews at the time of shopping and at the point of sale, or in the minute of media use (watching TV, listening to the radio or reading a paper, magazine or book). Another application is mystery shopping: data collected by interviewers during test visits can be made available to the client within very short.

Participants with smartphones can use them to take pictures of, for example, the contents of their fridge to send to the research agency asking questions about consumption of groceries. Teenagers - and older groups very soon - are nowadays so experienced in operating the mobile that they will certainly be a well-functioning target group. Autocorrect features, now available with many types of smartphones, assist owners in answering open-ended questions more readily. Thus mobile research via smartphone is a growing business.

Technologies for online research, also qualitative, are unfolding rapidly. With the help of mobile applications, participants can post messages and pictures while they are out of home. Nowadays also geo-location (the automatic recording of a respondent’s geographical location by his/her cell-phone) is an option.

Note: It is advisable to find out by special screening interviews which panel members are most suited to be invited for mobile online research. One possibility is to offer special

apps for smartphone-based online research. Another method is to employ the QR-Code method to lead smartphone users to an online survey project:

http://en.wikipedia.org/wiki/QR_code

QR-Codes (Quick Response Codes) are becoming popular. QR codes can be published on billboards, in newspapers or magazines. By scanning a code with the smartphone the user has direct access to a Website, a micro page (i.e. a button leading to a company page) or a Facebook fan page - without any typing.

Note: Recently, MMRA, the association of mobile marketing research firms, was formed. On their Website more information about mobile research is available, see: http://www.mmra-global.org

Online surveys without an existing address pool

Surveys with client-provided addresses

a) Employee studies (job satisfaction and/or corporate strategy surveys)

One of the most popular and effective ways to use online for research is making surveys about job satisfaction or other corporate topics for big firms such as banks, insurance companies, telephone companies or other large service firms or consumer goods vendors. E-mail is nowadays universally used in most businesses. To conduct an employee survey, the client submits a list of e-mail addresses to the institute which sends out the invitations. This facilitates also the dispatch of automatic reminder mails. Another possibility is to print out non-personalized links in the client's organization. In this way it is guaranteed that the client will be unable to identify individual answers. The best way is to have the whole process organized by the field manager of the institute under full guarantee of ESOMAR anonymity rules. The fact that an objective outsider is doing the job is good for the response rate which in most cases will be quite high (70-90%). Employees can fill out the questionnaire at work or at home, wherever and whenever they feel like it, but they can only do this once.

Research can be about job and salary problems or hierarchy topics. For the latter, the term "360 degrees feedback" has become popular. It incorporates feedback from the employee, his/her peers, superiors, subordinates, and customers. Results of these confidential surveys are tabulated and shared with the employee, usually by a manager. Employee studies can thus be a valuable instrument for clients by telling them about „corporate culture" or collecting strategic suggestions from rank and file about production, marketing and sales.

Note: In many cases it is advisable to seek agreement from relevant trade union officials or shop stewards before starting an employee survey or a mystery shopping project.

b) Organization member studies

In this case, the client is an organization such as an association of advertisers, a group of industrialists, a trade union, a teachers' association, etc. who provide the addresses of their members. Industry managers may want to commission the institute for a periodical study in the form of a business barometer. With only a short questionnaire fielded to corporate managers, e.g., four times per year, the development of a national economy can be reliably measured. For the institute this is a profitable deal because of relatively little effort with the same (or slightly modified) questionnaire every quarter. Quite often organizations want to analyze the raw data themselves or are content with cursory online reports.

c) Subscriber (readership/editors) studies

Another possibility to conduct online surveys without the help of an address pool is to cooperate with a print medium which is interested in the opinion of its regular readers. In this case a sample is drawn at random from the list of subscribers. In case not all e-mail addresses are known, the institute would have to call subscribers asking for cooperation or screen its pool for readers. For general insight, only medium-size samples are required. Should the paper/magazine want to contrast the opinions of its readers with those of its editors, the journalists' e-mails must also be provided. Response rates will be higher with readers, though. The exercise can be done once - in order to find out about reading habits and the general acceptance (likes and dislikes) of the printed product - or in the form of periodical detailed monitoring („tracking“). Also, some magazines use this arrangement for „title page tests” in order to find out with which front page photo or headline will work best with its readers. Another application is testing the efficiency of ads („copy tests“). Papers and magazines that are entirely sold across the counter must be researched in readerships screened from online panels.

Note: Newspapers like to publish opinion polls for publicity and reader interest. For such purposes, readership studies should NOT be used. Surveys on the basis of representative samples are advised. Unfortunately, many newspapers tend to save money offering market researchers to be rewarded “by publication of results”.

d) Customer Satisfaction Studies

With the advent of elaborate customer relations management (CRM), many businesses now dispose of lists of their customers, including their e-mail addresses. On this basis, surveys can be offered to car manufacturers/vendors to keep track of their customers' service habits and their general satisfaction with the vehicle. Of course all online shops and other online-businesses have lists of the e-mail addresses of their patrons. For studies in these fields, no address pool is required - except if the client wants to gain insight into the behavior of *potential* customers. In this case, a representative access panel is required.

Note: Nowadays, free questionnaire software enables industry marketing departments to conduct market research or employee studies by themselves. „Do it yourself" surveys of this kind often lack quality - from sample composition to questionnaire design.

The Quantitative Online Questionnaire

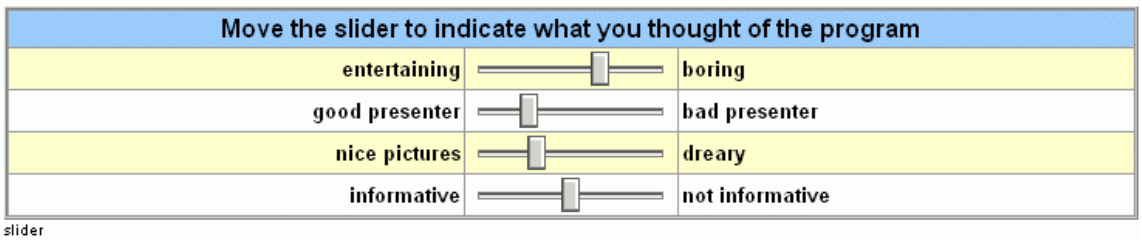
One of the most important things when drawing up an online questionnaire is to bear in mind that quantitative online research („online quant") is different from the interviewer-supported methods like face-to-face and telephone research. There is no interviewer at hand to explain things or drive the interview. The respondent faces the questionnaire on a screen - in most cases alone. Therefore, the design of the questionnaire is crucial. Everything must be done to make the self-administered online interview not only well understood but also agreeable and interesting for the respondent. This will reduce fatigue, prevent malpractices such as „straight lining" (filling in a multi-line matrix question in a straight line down) and keep respondents from breaking off in the middle of the interview. As a result, response rates will be much higher than in any other type of market research.

This is not the place to review all possible forms of questions. Many question types will be identical with conventional offline questions. But a considerable number of question types are only possible (or best done) online.

Here are descriptions of the most interesting question types:

1. The slider

Unlike in the use of conventional scales (steps tagged with numbers or phrases), by moving the slider bar the respondent records his/her judgment by "gut reaction". The data should be read out along a scale between 0 and 100 which results in very precise metrics. Here is an example of a slider used for TV program appreciation.



slider

Question type: Pairs of opposites

Which is your impression of this type of car? Please click the grey bar in the middle and move the respective slider in the direction of your preference. Thus you can decide precicely between the opposites.

old		young
not sporty		sporty
conventional		trendy
spartan		comfortable
expensive		cheap

VW Beetle

Back Help Pause Next

And here is an example of a slider used by the well-known research software "SurveyMonkey":

4. How do you like the moderator of this show? Please give a rating from 0 points = "I don't like him at all" to 100 points = "I like him very much"- Just move the pointer to where you think it should stand between 0 and 100.

0 100 79

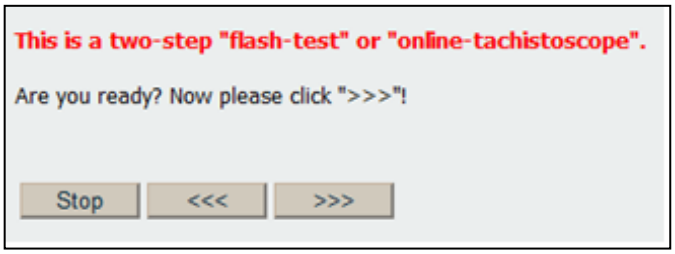
Löschen

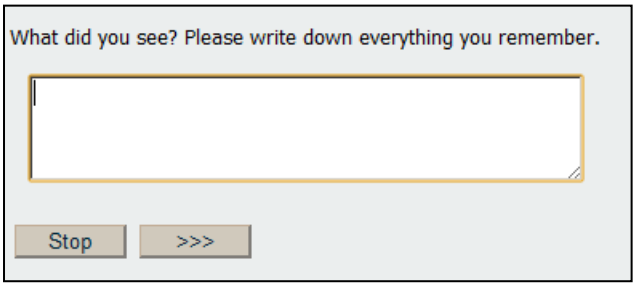
Note: There are sliders in the market with division bars or text-based spacing. The idea of the slider is to avoid any pre-conditioning of the respondent. Thus the slider should be empty with the slider bar sitting in the center or at the minimum point before being operated. The polarities to be measured should be described at either end of the slider.

2. The Tachistoscope

A tachistoscope is an instrument that can flash optical information before the eyes of a respondent for very small and precise amounts of time. Before the advent of the computer, a projector was used which could open a shutter for a split second. The tachistoscope is being used in market research to test posters, ads or logos for their performance. Exposure time can vary from 1/100 of a second to several seconds.

Computer and online based research makes it possible to display an image for any time interval from 1/50 second upwards (shorter time intervals are not enabled because of the inertia of the system). No complicated apparatus is required – the exact exposure time can be programmed into the questionnaire. Practical use is for testing alternative stimuli – like, e.g., three different drafts of a company logo. First, the images are displayed for a split second only - to find out which stimulus is recalled best. When afterwards displayed for 1 to 5 seconds, respondents can be asked about further details.



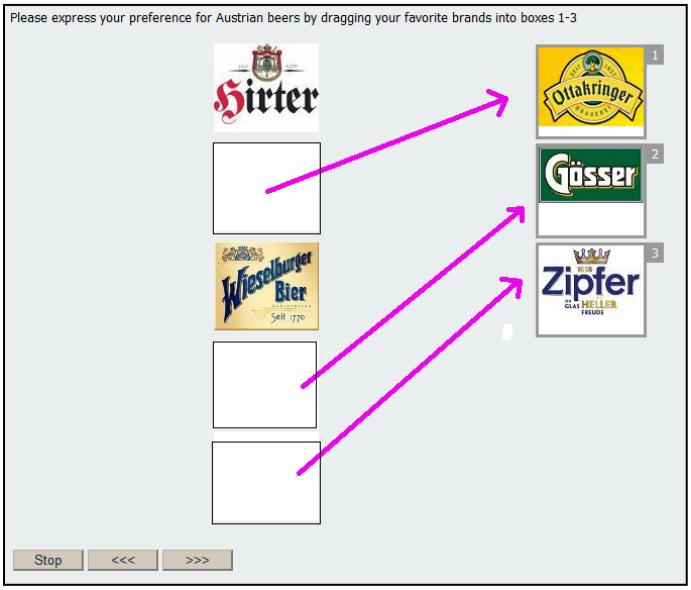


3. Testing video or sound

Online questionnaires may contain video clips to be tested for awareness, recall or appreciation. Another application is the testing of popular music: so-called „hooks" (10-20 second audio clips) are played off when the respective button is clicked. Respondents may be asked about awareness, likes and dislikes, and „burn" (the question about whether a station should continue to play a particular song or take it off the air). Although sound samples can also be transmitted via telephone, the technology is a lot simpler to use in online research. For more details and graphs see the chapter on radio research.

4. Drag and drop

In order to select preferred products from a series of competing offers, the drag-and-drop question is being used in online questionnaires. Question types that contain things to move around are popular with respondents because answering the questionnaire is more fun. .



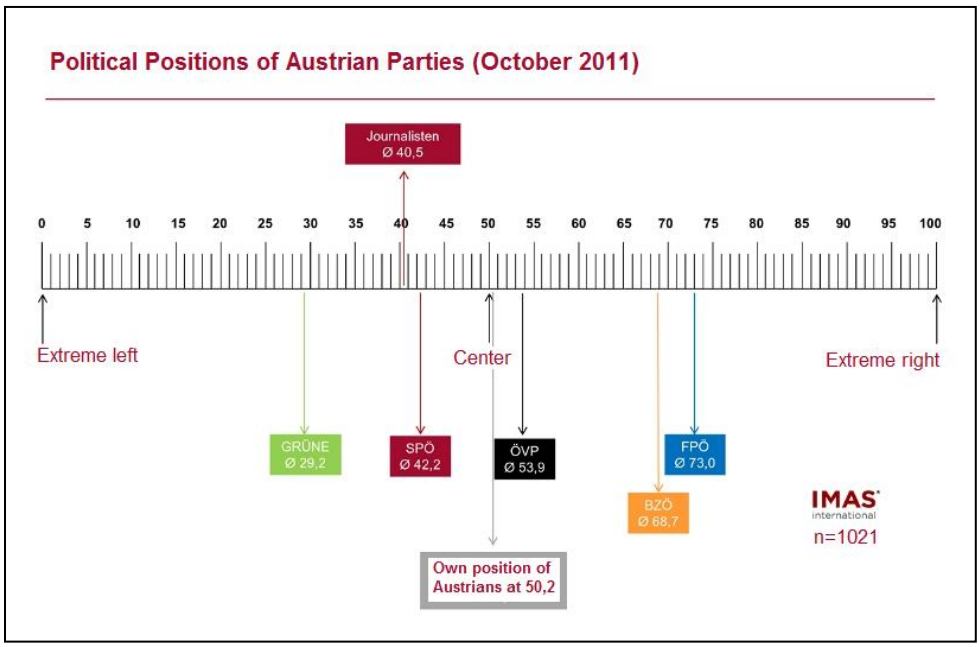
Scales

The 0-10 Scale

In many European countries, rating scales are modeled after school notes. In Austria, school children are judged by a five-point scale from 1 (best) to 5 (worst). Teachers, however, are often forced to use “+” (plusses) or “-“(minuses) to refine the grade, thus avoiding, e.g., giving a “5” by using “4-“.
In market research, there is always some inner resistance by respondents against giving the best value “1” and the worst value “5”. Therefore, the Austrian school note-based scale is practically reduced to a three-point scale (2-3-4). When used in market research, the scale 1-5 thus develops a noticeable trend towards the middle value of 3.

Note: In the US and in the UK, ratings are usually the other way: 1 is worst and 5 is best.

To avoid these problems, it is advised to use a scale with more steps, like a six or seven-point scale. The best solution, however, is to use the scale 0-10 because it evokes clear associations by any user and because results can be compared across international borders: 0 (points) is easily understood in all cultures as the lowest possible rating, whereas 10 (points) signal a very high rating. 10 are (subconsciously) associated with the perfect number of ten fingers, 100 percent, or 100 degrees Celsius. Here is an example from political research:



Source: IMAS-Report http://www.imas.at/index.php/de/imas-report-de/archiv/141-rechts-mitte

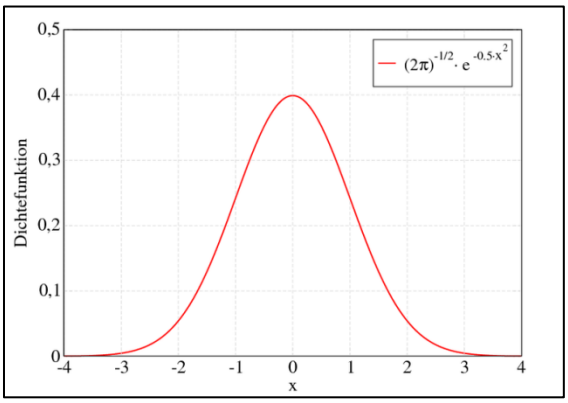
Practical use of the scale 0-10 has shown that products (or media) rated lower than 6.5 will have problems in the market. Excellence is achieved with values higher than 8.0.

Note: Due to its „neutral“ character and sensibility, the scale 0-10 can be universally used for most applications - from measuring poster appeal to having people express their sympathy for other nations.

Second best is the scale 1-10. Probably modeled on the 1-10 grading system in Dutch schools, 1-10 is being used in the TV Appreciation Panels (see below).
In the UK TV appreciation panel, the Appreciation Index (AI) is calculated by multiplying with 10 – the average AI of TV programs being 79 – a sign for the fact that programs that are being viewed are generally also rated positively – otherwise people would just quit viewing.

The Austrian TV meter system “Teletest” which was preceded until 1990 by a TV diary (which in turn was based on telephone surveys employing an index introduced by the former German market research institute *Infratest*) uses a symmetrical six-point appreciation scale. Panelists are instructed to rate all viewed programs along a six-item verbal scale from “very bad” to “very good”. The results (*Infratest-Index*) are calculated to range from 0.0 (worst) to 5.0 (best). Average program appreciation in Austria is 3.9.

Note: The discussion about scales is never-ending. In fact, *all* types of scales measure – because of the sheer statistical effect of large numbers. This is why scales based on school notes are popular in market research. Some researchers, by the way, maintain that respondents must have the opportunity to choose a middle position, others (as does the author) believe in forcing respondents to decide for one of two sides of a scale – thereby avoiding the tendency towards the middle: Results of scales with a small uneven number of steps tend to take the form of a Gaussian bell curve when plotted.



Gamification

Gamification is the use of game design techniques, game thinking and game mechanics to enhance non-game contexts. Gamification seeks to encourage users to engage in desired behaviors, by showing a path to mastery and autonomy, by helping to solve problems and by taking advantage of humans' psychological predisposition to engage in gaming. The technique may encourage people to perform chores that they ordinarily consider boring, such as completing surveys, filling out tax forms, or reading f.

Gamification in market research relates to the observation that willingness of panelists to participate in online surveys and fill out questionnaires properly, goes hand in hand with a certain amount of fun experienced during the interview. While it is common opinion among online researchers that online questionnaires should not be overloaded with complicated or long questions – especially, e.g., multi-line matrix questions – but should be made attractive by the inclusion of images or graphs, some researchers maintain that this is not enough.

According to the theory of gamification, online questionnaires should be playfully filled out, contain quiz-type questions and challenges like competitions in which awards can be won. Some researchers go so far as to hide a research project entirely in a game.

Other advocates of gamification propose to give respondents a tangible benefit - like information sharing or a mystery solving to make the lonely work of taking a survey a social experience providing some fun for the survey taker with the effect of engaging him/her more. One suggestion – to illustrate what is meant – was to design a progress bar as a pirate boat which has to sail along until it reaches a treasure island. Here are some other considerations:

http://www.enterprise-gamification.com/index.php/start/3-examples/53-making-surveys-more-fun

The main argument against (heavy) use of game elements in surveys is the conviction that the results of questions staged as games will differ from the data gathered by

text-only questions. What researchers should also bear in mind is that the sheer amount of design work required to make gamification acceptable must be in relation to the volume of data collected, unless little or no profit can be made by the institute. In other words, a gamified questionnaire which results in no more than a dozen questions answered will not be worth the effort.

Many methodological innovations – especially in the field of online research – have proved to be ineffective and therefore short-lived. Think of the idea to use an „avatar" (a graphical figure representing the interviewer) to administer a questionnaire.

As in all forms of research, extremes should be avoided: Long and dry paperwork transferred to the Web one-to-one, will not make an online questionnaire work properly. On the other hand, an online questionnaire completely presented in the form of a game will hardly fulfill the purpose of serious online research.

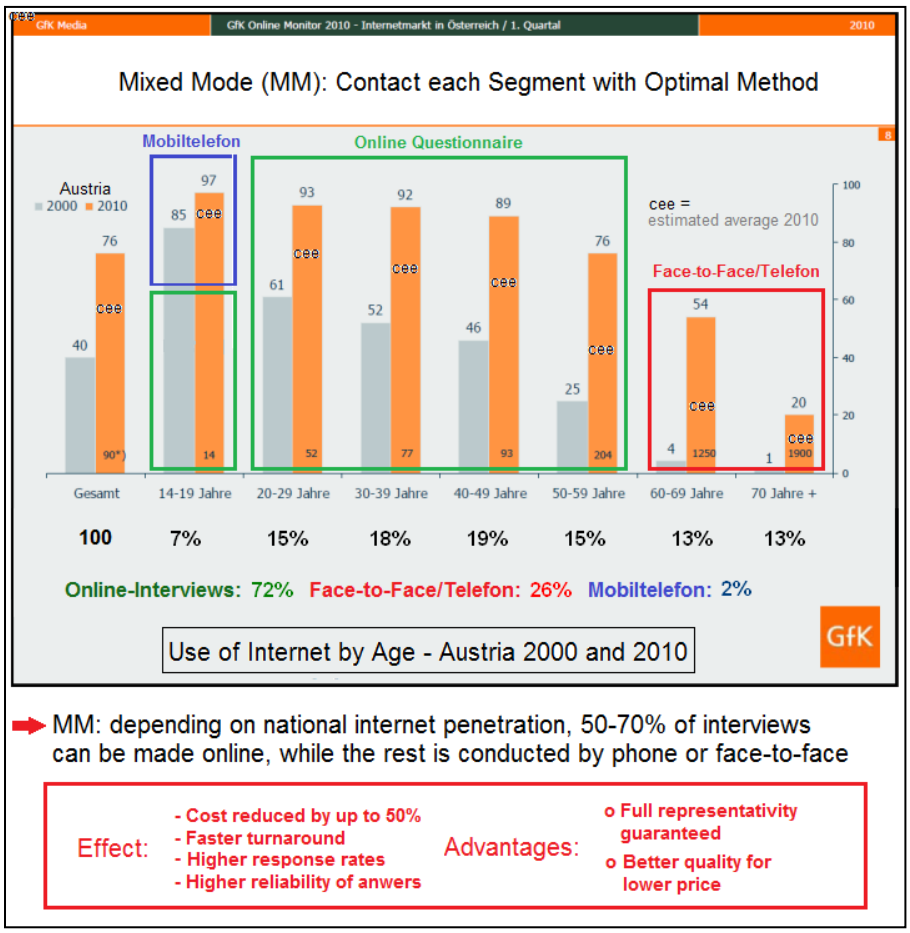
Note: An online survey should be properly designed from the beginning. It should contain not only text but some additional optical stimuli such as little images or drawings. Screens should not be overloaded. Well-designed surveys will not become better nor yield better results by just gamifying them.

Mixed Mode Surveys

There are three types of multi-mode or hybrid surveys:

1. A sample selected from the online panel is augmented with persons who are not online. These respondents will be interviewed face-to-face or by telephone. Multi-mode or mixed-mode surveys are somewhat cheaper and faster than studies with conventional samples.

Note: Due to the fact that 60-70 % of the interviews in a hybrid survey are being done online (with candid answers and comparatively high response rates), survey quality tends to be higher than with conventional samples.



Note: The graph above represents the 2012 hybrid model.

2. Sample fusion. This method combines two or three independent samples for which a common data analysis is carried out: Results from CATI+CAWI (phone plus online) or CAPI+CAWI (personal plus online) or CATI+CAPI+CAWI (phone plus personal plus online) interviews are fused by rather complicated methods.

Explanation of abbreviations:

CATI = Computer Assisted Telephone Interview
CAWI = Computer Assisted Web Interview
CAPI = Computer Assisted Personal Interview

3. Telephone recruited multi-mode. This is premium quality research without using an online pool. A representative telephone sample is drawn by *Randomized Last Digit Dialing (RLD).* Respondents are being asked to choose the interview method suiting those best. From GfK experience, about 50 % will choose to fill in the online

version of the questionnaire while the other 50 % will answer directly by phone, supported by an interviewer. Because of the needed manpower, this is not the most cost efficient project design, but it offers high representative quality as it is based on RLD. This type of project design could be the future for many projects especially in research projects for the media market.

The advantages of multi-mode surveys

- Multi-mode guarantees high representativity
- Multi-mode is generally cheaper than conventional research
- Multi-mode is faster than conventional research
- Multi-mode is well suited for markets with low internet penetration
- The amount of CAWI contained in the sample provides for high response rates
- CAWI will produce honest answers and longer text to open-ended questions

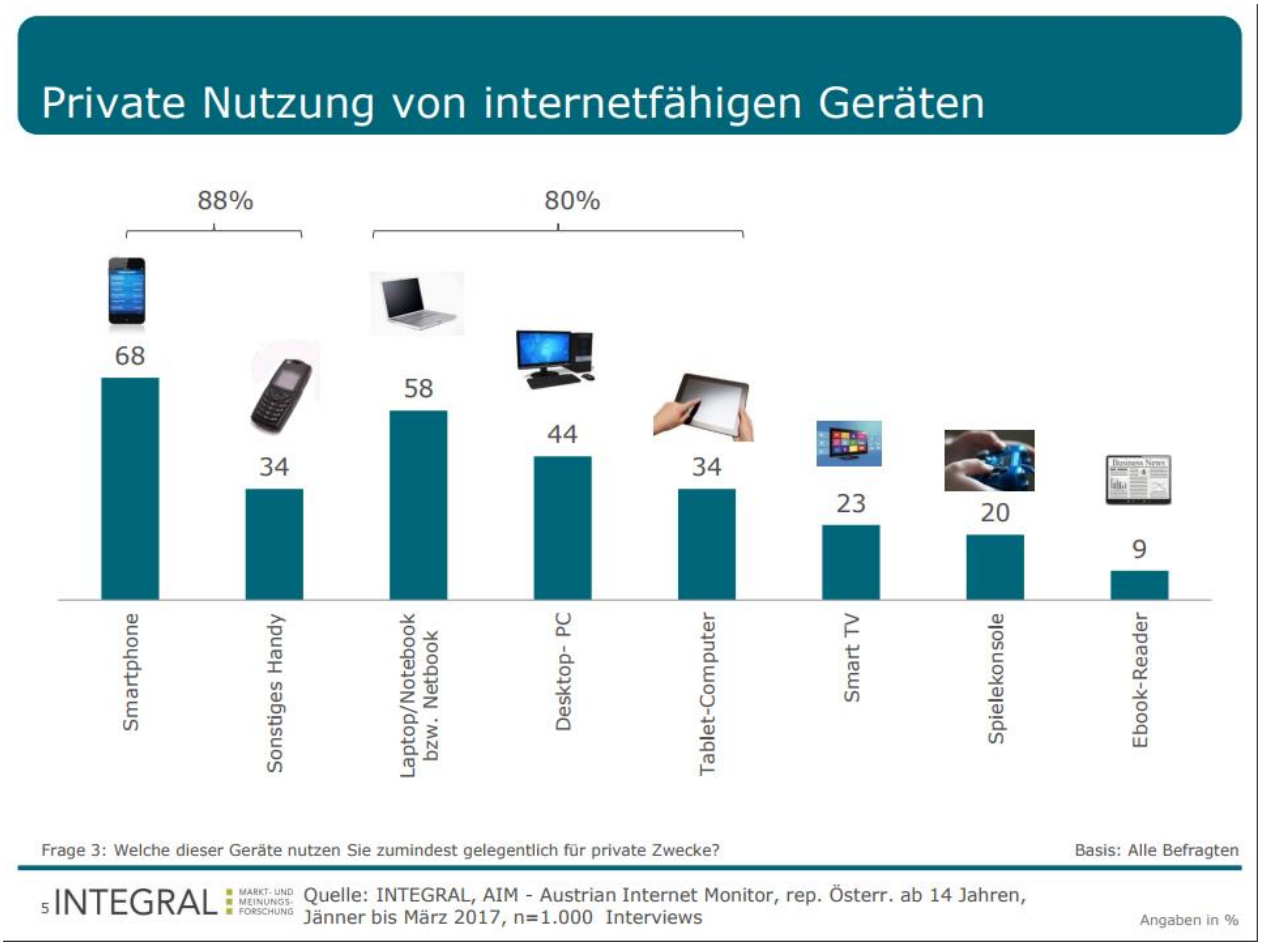
Special section:

The Use of the Smartphone in Market and Media Research

The extremely fast-growing use of the smartphone (ownership rate in Austria between 50 and 85 percent - depending on age, regional affluence/urbanization) and its technical possibilities indicate that telephone and online research (CATI and CAWI) will get ever more competition from smartphone based research.

Smartphone Based Media Research (SMR) indicates that the smartphone is used not only as an ACTIVE research tool (for survey and observation) but, above all, as a PASSIVE data collection tool.

Recent Austrian data on the use of digital devices which allow access to the Internet show that the smartphone has now a penetration of almost 70 percent of the population 14 yrs. Plus (see graph below) .



Smartphone Based Media/Market Research (SMR) offers the following advantages:

a) Due to the high distribution of the smartphone, ad-hoc samples or panels near-representative of the population can be formed and processed with a relatively small effort including relatively small weighting factors. If strict representativeness is demanded, Mixed Mode can be used, so that the elderly population (at present 50% smartphone ownership - and growing) is also recorded.

b) SMR is particularly powerful in the field of audience research. With the help of a special APP, which only has to be downloaded once, audio signals can be recorded in seconds, without the "respondent" having to react or move a finger.

c) Not only the use of radio, but also that of television or any other audio based broadcasting is measurable. Two different methods can be used:

- *Audio Matching*: The phone-collected audio samples are registered and matched by the control center with the entire recorded program offer, whereby the respective station received can be identified. There is no need to agree with all media over the media market.

- *Watermarking:* Market players agree to add a certain inaudible frequency to the audio signal for each station, which is then recognized and registered by the software of the smartphone. This means that Radio and TV usage can be measured without having to continuously record the entire program offer of a market. Mewaningful market shares can of course only be determined if really **all** players participate – which is usually a problem.

d) For both methods it does not matter whether a program is received live or time-shift. Likewise, it makes no difference if the source is terrestrial, analog, digital, satellite or the Internet.

e) With certain limitations, SMR can also measure the use of Internet content. Reading the URLs of visited web sites in combination with the same technology installed in desktop devices allows measurement of the entire digital market (even not participated sites) from a user-centric perspective (including sociodemographics) which is usually a problem in case of site-centric internet measurement.

f) Second-by second multi-channel registration of media exposure is an ideal base for cross-media advertising analysis. Reporting can be (near) live for the total population sample or for campaign target groups.

g) For use in ACTIVE MODE, besides using smartphones for standard surveys, methods are conceivable such as the reading of barcodes used by printed media in order to measure newspaper or magazine readerships. Also, cameras and microphones can be used to record consumer habits (looking into the refrigerator or on the breakfast table), if the respondents are well instructed, sufficiently incentivated and well supervised. Also, the possibility of reading QR codes should not be forgotten.

h) A further plus of SMR is the possibility to record the respective position of the mobile phone via GPS, BTS, WI-FI and accelerometer. This allows the measurement of out-of-home use of radio, TV or online. With the help of GPS , the measurement of outdoor advertising (OOH campaigns) is possible even without action by the panel members. Mobility trajectories can be measured for transport studies, or health studies done by using accelerometer for respondents' movement identification.

i) A not so realistic method would include artificial speech interviews –
as, e.g., by Alexa/Amazon or Siri/Apple (see further below).

k) One should not forget to look at market research for immigrants who are heavy users of the smartphone. The reasons for this include the necessity for affordable contacts with family and friends in the home country and with the local community - both preferably in the social networks. For this application, today's powerful translation programs are of great help

l) What problems do experts see?

→ The smartphone is the most personal and therefore the most delicate of all devices. Think of the possible fear of panel members against violation of their privacy (bank account, social media sites). In this case, it is not only necessary to proceed with sufficient incentives but, above all, by means of detailed information.

→ Apple does not allow APPs to watch other APPs, at least not legally ...

→ Battery power: here we have to test permanent tracking effects first, but with incentives control could work

→ There may be problems with the sensitivity of the microphone on the smartphone - apart from the fact that it can be hidden in a pocket or purse.

A possible solution: the expected spread of the "wireless speaker."

→ With its HomePod Apple wants to offer not only Amazon's Echo, but also multi-room speakers. Voice commands allow users to control music and their Smart Home.

HomePod Bild 1 v

https://www.heise.de/newsticker/meldung/Apple-Siri-Lautsprecher-HomePod-erklingt-ab-Dezember-3734000.html

The tubular, approximately 18 cm high HomePod is integrated into the local network via WLAN with the AC standard. For setting up, it is enough to keep an iPhone close to the wireless Bluetooth AirPod. According to Apple he sound quality lies on the level of high-quality multiroom speakers.

Six built-in microphones help you adjust the sound and take commands for Apple's voice assistant Siri. This should also work with loud music.

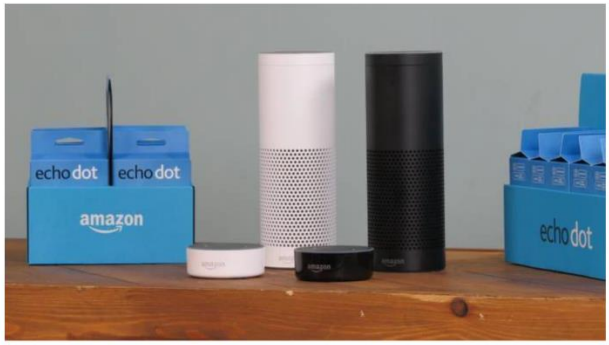
It is emphasized that the HomePod does not process voice commands for data protection reasons until the user orders them with "Hey Siri". Inside is a customized A8 chip, which Apple has already used in iPhones and iPads. Also, a waveform graphic signals when Siri is working.

Apple Music and HomeKit are integrated

According to Apple, HomePod and Apple Music harmonize perfectly with each other, so you can say by voice command, "I like this song".

The Amazon Echo Device

13.02.2017 09:27 Uhr – Volker Zota vorlesen



Interessenten aus Deutschland und Österreich können Amazons sprachgesteuerte Netzwerklautsprecher Echo und Echo Dot jetzt direkt bei Amazon kaufen – ohne Einladung oder Umwege über eBay.

https://www.heise.de/newsticker/meldung/Amazon-Echo-und-Echo-Dot-nun-ohne-Einladung-erhaeltlich-3622955.html

Qualitative Online Research

Introduction

The proliferation of the internet has brought along new technical possibilities for market research. The Web has not only revolutionized quantitative research - which can now be conducted more efficiently, faster, and cheaper than by conventional research - but it also has brought new opportunities for qualitative research.

Side by side with the development of the World Wide Web, other technical innovations have been spreading at hitherto unknown speed: mail has become e-mail; the fixed line telephone tends to be replaced by the cell phone or “mobile”. Smartphones and tablets are taking over from desktops and laptops, and the hard disk will soon be replaced by solid-state storage media or even “cloud” storage, i.e. storage in a Web space provided by internet firms. E-readers like Amazon's *Kindle* are revolutionizing the book market and book reading. From early childhood on, man is confronted with the possibilities – and challenges – of information technology. The digital age is here to stay. Even older age groups and less educated segments of the population are becoming internet-savvy and are, therefore, in a position not only to check answer boxes but also to take part in qualitative online research projects.

The internet has brought about far-reaching changes in the use of media. We now have online newspapers, Web radio and Web TV. It is having enormous effects on our shopping habits and our use of services. Technical innovation is about to fundamentally change interpersonal communication and social behavior. With the Internet slowly reaching out into the segment of senior citizens, the Social Web is becoming a reality for practically all age groups. This means that sooner or later all segments of the population will have become familiar with keyboard, mouse and headphones. As a consequence, social media such as Facebook, Twitter, YouTube and various forms of other communities are beginning to become used by all age groups.

Qualitative online research benefits from these developments. It is possible today to invite average persons to take part in online focus groups, participate in online bulletin boards, keep online diaries or post messages in social networks.

Online has opened new opportunities to psychologists to probe deeply into motives and habits of consumers - regardless of age or region. „Online qual” is quicker and can be offered at lower cost than conventional qualitative research. „Online ethnography” allows researchers to observe via Webcam or mobile device what people own, how they live, shop and consume.

Not all topics lend themselves to online qualitative. There will always be room for person-to-person research – whether because the objects in question or the method may require hands-on-action (smelling, tasting, handling, drawing, or doing) – or because of the sheer importance of a personal appearance before the psychologist and action in the bodily presence of other persons.

Defining Online Qualitative

It is not always clear what is meant by *qualitative* research. Content research, e.g., can have quantitative and qualitative aspects. For our practical purposes, qualitative research is defined as research resulting in text-based rather than numerical analysis of data. Thus not only in-depth interviews, (participant) observation, or the use of psychological tests will be defined as „qual" but also all surveys whose emphasis is on gathering and analyzing answers to open-ended questions, especially, when asking for the "why" rather than the "what".

The possibilities of online qualitative reach from small samples (as, e.g., in one-to-one interviews and online focus groups) to bulletin boards and online diaries with up to 30 respondents. They comprise Delphi studies with, e.g., 50 experts and semi-qualitative projects with up to n ~ 200 representative interviews.

Note: Turn-around time of research projects is an important factor today. Sometimes, quick results are more welcome to clients than statistically valid results.

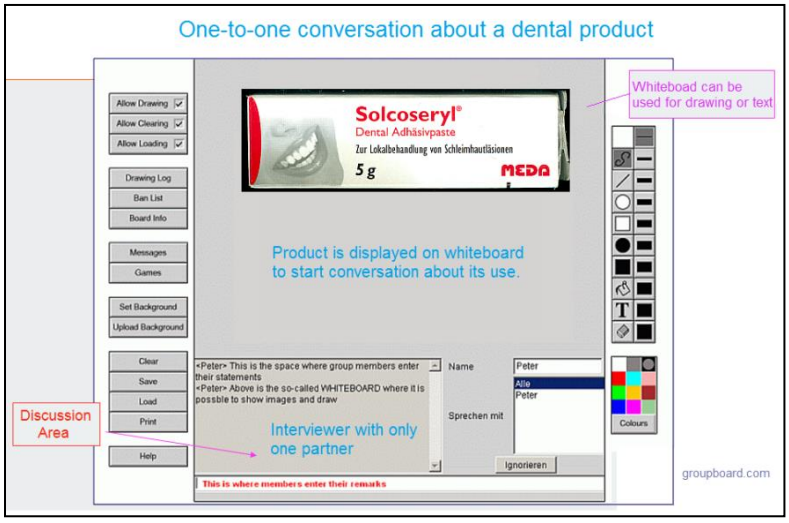
As can be seen in the graphs above, there is an overlap zone in which the emphasis shifts from *qualitative* to *quantitative*. The theory behind this is clear: answers to open-ended questions become repetitive after a certain number of interviews. If n ~ 200 is set as the practical maximum of *semi-qualitative*, this is based on the assumption, that a restricted number of subgroups like male-female, East-West etc. will still enable textual analysis for each group.

Note: The term *open-ended question* is meant to cover all types of questions that produce textual answers which are not provided in the questionnaire but which allow respondents to say whatever they want to say. These can comprise also projective questions, the completion of sentences or storytelling exercises.

One-to-one Research

There are applications in which qualitative interviews are best to be conducted on a one-to-one basis. This ensures in-depth exploration in which various stimuli or psychological tests can be used, and in which rich text can be gained. Care should be taken about the software used. Basically, any up-to-date chat program can be used to engage an individual respondent to "talk" with him/her about a specific topic.

As can be seen in the exhibit below, a modern chat program allows the inclusion of images, video and sound. In this example the conversation is between interviewers specialized in pharmaceutics research communicating with a dental assistant. To introduce the subject, an image of the pharmaceutical drug is displayed on the chat screen: either as part of the thread or on the program's whiteboard.



If the illustration is to be presented on a whiteboard, a program like *Groupboard* can be used (http://groupboard.com).

Since 2012 when this paper was originally written, the possibliteis of chatting via the Web have multiplied. Today almost everybody knows Skype, but there are many other programs, such as *Whats App* and Viber:

https://www.1and1.com/digitalguide/online-marketing/social-media/skype-alternatives-13-other-video-chat-programs/

Online Focus Groups

An online focus group (OFG) is an opportunity to assemble a group of usually six to eight persons to conduct a live discussion via the Web. Most up-to-date OFG software will include a whiteboard. A whiteboard is a separate area on the screen on which the moderator can display objects or links to other sites. The participants can enter text or use the whiteboard for drawing (see graph below). Other focus group programs may also provide for the use of voice and Webcam.

Note: Use of, and drawing on, the whiteboard presupposes that participants have *Java* software enabled in their browsers. This must be mentioned in the invitation e-mail unless there are problems from the beginning of the group.

The work with online focus groups is not without problems. One of the most common objections against real-time discussion on the Web is the contention that body language cannot be observed. In order to overcome the lack of body language and non-verbal expression, Webcams can be used. However, there are technical restrictions. Above all, the number of participants' faces to be displayed simultaneously on one screen is limited to a maximum of eight. This problem arises also in the case of *screen-sharing*. By this is meant the possibility for participants to follow the screen actions of other remote persons.

Practice has shown that the results of online focus group discussions are not very different from those gained in conventional person-to-person discussions. Of course it depends on the situation – participants in online focus groups cannot be asked to smell, taste or handle objects online. Nevertheless there is always the possibility to deliver such test objects to the households before the discussion.

As it is possible to conduct a discussion among persons living in any place of the globe, time-zones must be regarded. An incentive, normally about ten times of what is paid for completing a normal online questionnaire, is necessary to motivate participants to show up punctually and take part actively. Over-recruiting is advised because practical experience has shown that some invitees are not willing or able to attend at the actual time at which the OFG takes place.

Members of focus groups may use nicknames to ensure anonymity. Often thumbnail photographs of participants are being shown with their postings. Participants must be computer-savvy. They must be able to think and type quickly because an online discussion normally runs at quite a pace. Everybody is entitled to enter text at the same time. This is one of the drawbacks of the online focus group method: generally, heavy internet users will have an advantage. On the other hand – many clients are more interested in early adopters and younger, up-market segments of the population anyway. Special target groups, of course, need special recruitment.

Note: Most up-to-date OFG programs allow observers who can communicate with the moderator without being noticed by regular participants. This is often required by experienced clients.

The moderator must be very quick in the uptake. He/she must have a carefully prepared discussion guide at hand with the questions, topics and uploads (images, videos, links etc.) earmarked for being discussed in the short period of time available. Normally, running an online focus group will require that the moderator is aided by a technical assistant who posts the topics, stimuli, and links. The assistant welcomes visitors, discourages latecomers from entering the chat room or invites additional participants if need be, while the moderator keeps the discussion going. The moderator can ban participants who violate the rules set for the discussion. Above all, he/she must encourage shy or reticent participants to speak up.

Usually, an online focus group runs for 60 to 90 minutes. With regard to the limited time, lengthy introduction and welcoming passages must be avoided. For an online group to be effective, every minute counts – otherwise the resulting copy (or video file) will be rather thin. Participants must be instructed about typing (“disregard spelling mistakes”, “keep your sentences short” etc.) and *Netiquette.* This term is used for network etiquette. It prescribes, e.g., to avoid typing in all caps which is considered equal to SHOUTING.

The text produced and the processes triggered in an OFG are recorded on the server so that a precise transcript including images can be downloaded immediately after the

discussion. Modern chat programs enable the moderator to tag statements in order to distinguish between positive, negative, and neutral opinions.

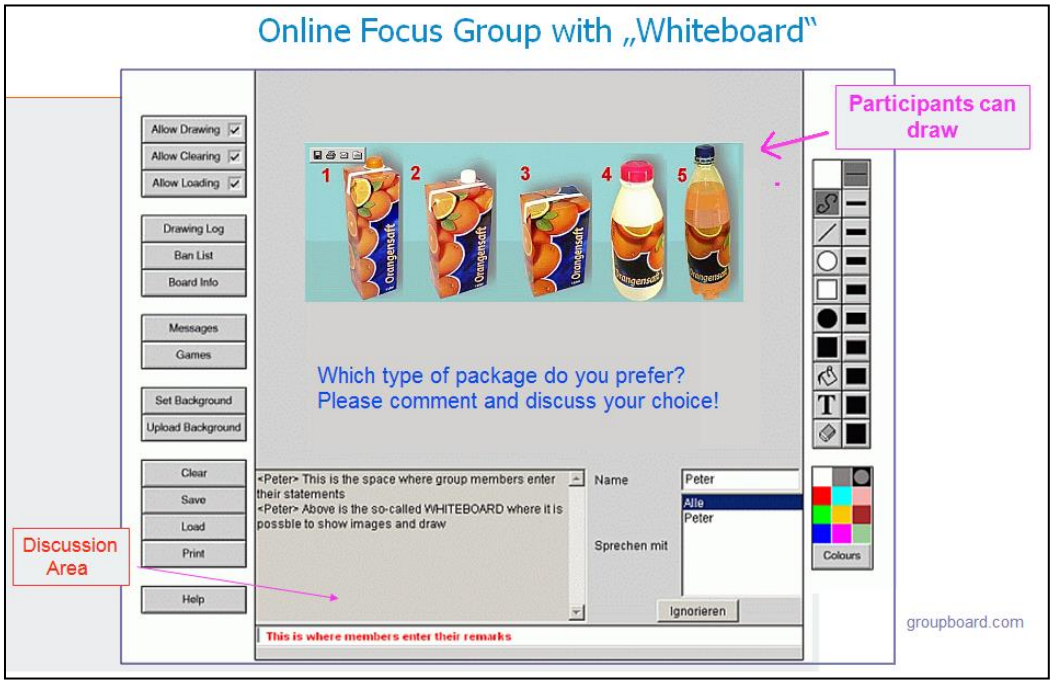
Note: Practice has shown that copy produced by OFG is not as voluminous as text gained via online bulletin boards. Experienced researchers therefore prefer to use the latter method.

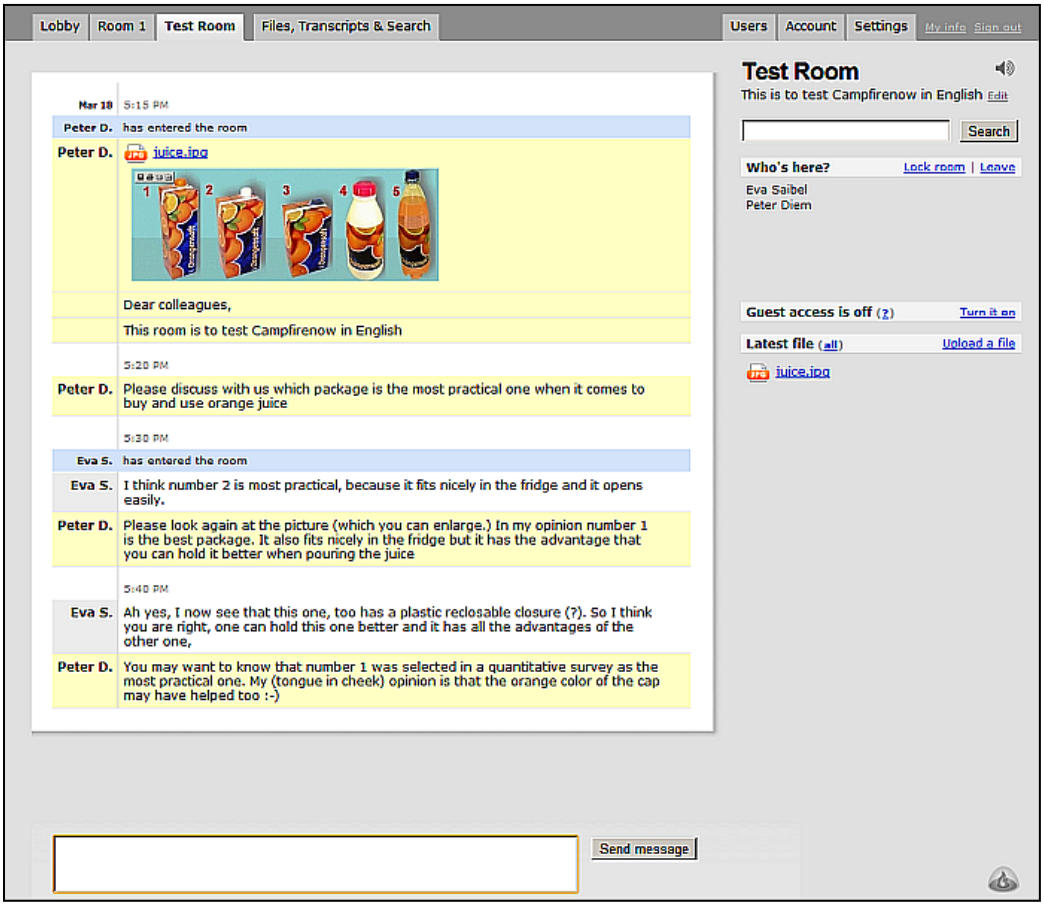
Groupboard includes a whiteboard with a number of nice features: http://groupboard.com (free of charge).

Basecamp https://basecamp.com/

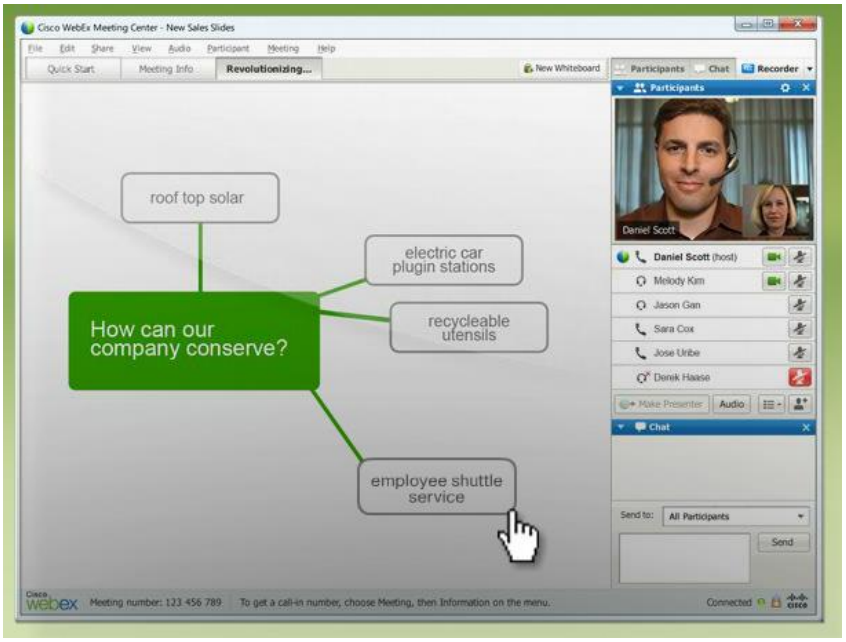
Webex is a fully professional Web conferencing program. It allows simultaneous voice discussion including Webcam transmissions. It has a flexible whiteboard and also allows the use of a chat function:
http://www.Webex.com/

Groupboard - http://groupboard.com





Cisco/Webex - http://www.Webex.com/



Online Bulletin Boards

The online bulletin board (OBB) is a place within the Web where a person can go and post a message. Other visitors of that site can view this message and any visitor can either post another message or reply to any of the messages already on the board. As more messages are put on the board a „thread" is formed like this:

- Message 1
    - 1st reply to message 1
    - 2nd reply to message 1
        - 1st reply to 2nd reply to message 1
    - 3rd reply to message 1

- Message 2
    - 1st reply to message 2
        - 1st reply to 1st reply to message 2
            - 2nd reply to 1st reply to message 2
    - 2nd reply to message 2
    - 3rd reply to message 2

And so on…

Recruitment can be carried out in the same way as for traditional focus groups. But, instead of inviting people to a central location at a specific date and time, people are invited to a Website. Respondents must accept to visit the site e.g. four times or more during a period of one week to ten days. This is the major difference between online bulletin boards and focus groups. An online bulletin board can be kept going for several days. Both the moderator and the respondents can pop-in to the site when it is most convenient for them. Normally, every day in the morning a new topic is introduced or reference is made to prior discussion themes.

E-mails are used for recruitment, containing a link to the discussion board, a password, and instructions. E-mail is also used for sending out reminders („don't forget to visit the GfK online discussion today…"). Initial recruitment should provide for about double the number of participants needed to take part during the entire period.

Note: It is important that the respondents are committed to their task; otherwise there is an obvious risk that people forget to visit the site. Appropriate incentives are a must. Many of the rules and restrictions mentioned above in the section on online focus groups pertain also to the online bulletin board. The decisive difference, however, is the fact that the OBB is not at all hectic as it goes on for days.

The moderator posts topics or questions on the board using a special signature to distinguish him/her from the respondents. The respondents reply to the moderator's messages but can also reply to any other respondent's posts. In this way a discussion *thread* is created. Care should be taken by the moderator that the discussion is more than just question and answer. This is helped by stimuli like pictures, charts or other graphical items. Interesting topics will guarantee active participation.

The moderator should create an open, comfortable environment that allows participants to realize they are talking to a live person. Moderators can truly get to know many of their participants, depending on the length of the board.

Along with providing a personal touch with the moderator, prolonged online research allows participants to glimpse into their fellow members' lives. They start to naturally interact with each other, sharing their opinions and personal stories. Many participants are sad when projects are over.

Sometimes it is advisable to ask participants to do some homework in advance and send it in electronically prior to the group. This can help with setting up the discussion guide. There is an added benefit here: people who send their homework in ahead of time are more likely to show up.

Like in online focus groups there is the possibility to let the client (from any place in the world) visit the site and follow the discussion as an observer – unseen by the participants but able to interact with the moderator.

Note: Many clients nowadays like the possibility to observe qualitative research projects from behind the one-way mirror. Most programs allow them to communicate with the moderator without the participants noticing it. But there is also the opposite opinion: clients should not interfere with the institutes' methodology and activities.

Modern bulletin board software provides for the inclusion of all kinds of multi-media (images, videos, sound, and links). With the help of a whiteboard, respondents are confronted with images of products, maps, graphs and other optical stimuli. They may be asked to comment in writing or drawing. Respondents can be asked to create collages, video or photo journals, metaphors and more. Other projective methods are storytelling, sentence completion and letter-writing.

Some state-of-the-art bulletin board programs enable „sentiment tagging". By this is meant the possibility for respondents to mark objects on the whiteboard and add text to express "likes" or "dislikes". These markers can eventually be condensed into a heat map or analysed via the transcript. Another possibility is to enable the moderator to tag opinions uttered by respondents with his own remarks. These tags/remarks will eventually facilitate the final text analysis.

One of the big advantages of the OBB – functioning as an „asynchronous" discussion – is the rich volume of copy generated (sometimes more than a hundred pages). Postings can be viewed in the transcript in their original form which means that in this phase of the analysis, individual statements can be identified. Respondents can be pre-grouped in segments (young-old, female-male etc.) in order to analyse their posts accordingly. Some programs even provide basic instruments for text analysis such as word frequency counting software or programs producing „word clouds" (for details cf. the section on text analysis p.89)

OBB software should also include a chat feature for occasional real-time conversation between respondents and moderator.

Many clients still hesitate to actively ask for OBB. However, there are – as we have seen – some very obvious advantages which make bulletin boards interesting. It is therefore suggested to study and test this new method in a pilot project – e.g. with colleagues and friends. Wherever applicable, offers for qualitative research should include the OBB option because it is superior to other qualitative online instruments due to its speed, data volume and cost-efficiency.

Note: Online bulletin boards are well suited for brainstorming exercises of all kinds.

Advantages of Online Bulletin Boards

- An OBB makes it possible to form a group of geographically dispersed respondents.
- Respondents do not have to travel to a central location; instead they can take part in the discussion from any internet-connected PC or hand-held device.
- Respondents do not have to reserve a specific hour to participate; instead they can enter the board whenever it is convenient for them. Therefore, target groups that find it inconvenient to take part in a traditional focus group might be easier to recruit to a bulletin board (e.g. professionals, executives, experts in different fields etc.).
- It is possible to handle a relatively large number of respondents per session (up to two dozen persons).
- Bulletin boards provide anonymity to the respondents through the use of nicknames.
- Social cues – like the way someone looks, dresses, and talks – are not relevant.
- People tend to use a detailed and more colorful language when participating in bulletin boards, which results in a more qualitative flavor compared to online focus groups where the discussion is always pressed for time.
- The fact that the respondents can think for a while before giving an answer, makes it possible to ask more complex questions that otherwise would be difficult to answer (e.g. how would you suggest to improve this product/service?)
- There is no limitation on how much they can say in each of their responses, so every participant can have equal airtime to explain their viewpoints. They don't have to negotiate sharing time with others in a designated response window.
- The moderator does not need to act in real-time and can therefore take his time to reflect and revise the guidelines or even consult with the client before asking follow-up questions or launching new topics onto the board.
- OBBs are easier to fit into a moderator’s agenda since the moderator can join in at his/her own convenience. Additional questions or topics can be prepared without rush.

Note: As in all online research, topics which are normally not easy to talk about (alcohol, taxation, sex, health problems) can be discussed more readily in bulletin boards.

Disadvantages of Online Bulletin Boards

- It is not possible to get really spontaneous reactions from respondents.
- There is a lack of non-verbal input from respondents, unless Webcams are used.
- There is no possibility to test taste, smell, and handling of products (unless samples are delivered to the homes)
- It is not possible having respondents do what can be called “get up and move” exercises where they get out of their seats and interact with stimulus, pick things up, physically sort them, etc. which helps to keep respondents engaged
- Traditional psychologists might dislike the „high-tech-feeling” and therefore reject the method. This may also be true for persons normally willing to fill in questionnaires.
- Sometimes the output of a bulletin board (or several) can be so large that analysis becomes too time-consuming.

Recommended software:

FocusVision: https://www.focusvision.com/products/focus-group-solutions/

Dub-Ideastream https://www.dubishere.com/

VisionsLive http://www.visionslive.com/

Online Diaries/Blogs

In contrast to online focus groups and bulletin boards, an online diary (Web log or blog) is kept on an individual basis and for a longer period of time, sometimes for months. “Blog” is a portmanteau word combining the parts of the phrase Web log.
A blog is a personal journal published on the Web, consisting of more or less regular entries (posts). These entries are typically displayed in reverse chronological order so that the most recent post appears on top.

The purpose of an online diary as an instrument of market, media, or social research is to record occurrences on a daily basis in digital form. Typical applications are diaries to record radio and/or other media use, or blogs to collect data on health problems or medication. An example for this was a very successful multi-nation GfK online diary kept by young women suffering from menstruation pain.

Online diaries are kept either with the help of special blogging software or with a program otherwise used for bulletin boards or online focus groups (q.v.). Even more than with bulletin boards, the keeper of an online diary must be ready to enter the required data on a daily basis. Incentives, therefore, must be attractive enough to prevent respondent fatigue and drop-out.

Market Research Communities (MROCs)

Web 2.0, the so-called Social Web, is characterized by the existence of many types of user groups, forums, informal and formal communities and, especially, commercially oriented social networks such as Facebook, Linked-In, Xing, and Google+ There are a very large number of social networks available. Cf. the list at

http://en.wikipedia.org/wiki/List_of_social_networking_Websites

Social networks, communities, and forums come in all sizes – from *Facebook* with its 2.07 billion monthly active Facebook users via *Patients like me* (http://www.patientslikeme.com/) with ca. 150,000 participants down to smaller communities like the Austrian senior citizens' forum *Seniorkom* (http://www.seniorkom.at/) with 15,000 members – still an impressive quantity of members.

Internet-based communities enable quick information sharing and collaboration among their participants. The software used for communication may include the possibility to conduct short polls – mainly informal one-question surveys with instant display of results. For the purpose of professional market research, there are two different options:

1. Using an existing social network by becoming a member and attempting to conduct discussions, polls or surveys among the other members. In some way this resembles acting as a participant observer. As a member of a community it is possible to initiate conversations about specific subjects, conduct polls or at least share and record "buzz" (Web lingo for online communication e.g. between customers or consumers of specific products for the exchange of opinions, criticism and recommendations). A mere company page in Facebook, however, is not considered to be a community. Thus, Ottakringer, the Viennese brewery, has a page on Facebook found under https://www.facebook.com/OttakringerBrauerei. In spite of almost 20,000 "likes" this is not a community. Persons posting on such sites do not form a representative sample.

Note: Activities described above must not be confused with *Web mining* by which is meant the digital method of locating conversations on blogs or in forums (by means of search engines) and extracting text and images from these by means of special software (robots, spiders).

2. Creating an ad-hoc market research community (MROC) for a client with the intention to use it for tracking the distribution of a product or a service or monitoring marketing/advertising campaigns. Participants can be recruited from a sufficiently large online pool (e.g. screening the panel for persons who have their digital photographs printed by a certain company) or from address lists provided by the client (e.g. an electronics chain store). Members must be willing and able to integrate themselves into a community to exchange opinions and comment on topics. Moderators must be experienced in community activity and be able to use the special Web vernacular.

Depending on the product/service, short-term MROCs can be used for qualitative purposes (commenting and discussing topics as, e.g., the awareness and acceptance of an advertising campaign) or for gaining quantitative results - e.g. tracking by means of closed questions or by scaling the quality of a product/service over an extended period.

The question remains*: are communities really an appropriate instrument of professional market research?*

Side-by side studies have shown that reactions by members of online communities do not differ substantially from those of online panels – except for the special interests shared by the members. It is self-evident that e.g. the members of a motorists' forum initiated by a specific car maker will be emotionally closer to their sponsor's product than the general public. Like in any research, target groups must be considered carefully.

Meta-research into studies of communities suggest that community members remain candid and honest over time – despite many months of ongoing participation where they form relationships with one another and the sponsoring company.

Note: Practical experience with research in or by communities is scarce – there are considerable doubts that the effort necessary for recruiting and maintaining a functioning community can be calculated such as to cover the costs, so that at the end the outcome will justify the money spent.

Note: There are specialists for research communities such as https://cspace.com/

Semi-qualitative projects

The "Online Market Scout"

Practical work with online research has shown that it is easy to profit from the special possibilities of this research method. One such possibility the internet offers is a quick yet productive check on a specific problem or market - we shall call it the *Online Market Scout.*

On the basis of approximately n = 200 completed online interviews selected on a representative basis from the online pool, a basic insight can be won into a market whose details are not known so far. The *Market Scout* can be used to serve as a preparatory survey (pilot study) for subsequent more elaborate research. Here is an example:

An Austrian research institute had come into contact with an Egyptian travel agency and was asked to give advice on vacation programs for Egypt. So far, the Austrian researchers had never dealt with this particular market. They had no real idea what Austrians thought about *Holidays in Egypt.*

The sample (about N = 400 invitation e-mails) was asked to answer only two questions:

1. Open-ended question: *What comes to your mind when you think about a vacation in Egypt - please describe in detail*

2. Closed question (multi-punch): *a) I have been to Egypt before b) I have never been to Egypt c) I want to go to Egypt in the future d) I am not interested in Egypt*

By the first (open-ended) question free associations about the topic (vacation in Egypt) were collected, while the second (closed) question was about the relation of the respondent to the topic (actual contact with Egypt, propensity to visit Egypt). After just one day in the field, the number of complete interviews was more than n = 200.

Quick online coding of the open-ended question rendered the following results:

Visiting pyramids	65.7 %
Cruising on the Nile	43.4 %
Swimming/diving	17.6 %
Desert trips	12.4 %
Cultural sights	7.1 %
Very hot climate	6.2 %
Fear of terrorism	5.2 %
No interest etc.	6.0 %

For analysis, the so-called *verbatims*, i.e. the unedited verbal answers entered by the respondents, were coded online. This made it possible to report the results within hours.

What were the special insights of this *quick and clean* method? First of all, within about one day, responses had come from all parts of the country and from all age groups. 14 % of the respondents had said they were definitely interested in a trip to Egypt. Secondly, a rough coding of the *verbatims* showed the hierarchy of interests displayed above. It turned out that fear of terrorism was not really a problem for the great majority of respondents (the study was conducted in 2007!). Besides the results mentioned above, some special ideas of interest to those in the tourism business could be found in the spontaneous answers – such as “quad vehicle driving over the dunes” or “looking for exotic food”.

Note: This kind of study is called semi-qualitative because with n = 200 interviews based on only one open-ended question, it lies somewhere in the middle between in-depth interviews/group discussions and representative quantitative studies. Answers can be coded, but even a simple word frequency count and some browsing through the *verbatims* would enable the researcher to make himself a picture about the major results of the project. Besides its short turn-around, this type of survey has the advantage that panel members do not need to get more than a minimum incentive. The *Market Scout* is therefore a cheap instrument for basic market analysis.

Online Ethnography

Traditionally, „*ethnography*“ is the term used for a type of social or market research in which the researcher acts very close to the respondent – e.g. as a passive observer in a household or in a shopping mall. The first recorded example of an ethnographic study with participant observation was probably the study *Die Arbeitslosen von Marienthal*, carried out in the years 1931-1933. Austrian sociologist **Paul Lazarsfeld** and colleagues evaluated the effects of unemployment with stopwatch in hand in the streets of a worker's settlement close to Vienna. One of the main results of the Marienthal study was that prolonged unemployment leads to a state of apathy in which the victims do not utilize any longer even the few opportunities left to them. For details see:

http://agso.uni-graz.at/marienthal/studie/00.htm

This study was also published in English:
Jahoda, M., Lazarsfeld, P.F., & Ziesel, H. (1971/1932). Marienthal: The sociography of an unemployed community. Chicago: Aldine.

Ethnography allows for the opportunity to observe consumers in their typical settings, acting in their common patterns - with or without the presence of specific products.
In certain situations, research can thus be staged directly in the user’s world – for example, by so-called “tag-alongs”: walk-alongs, sport-alongs, drink-alongs, etc.

In the age of Web-based market research, online or virtual ethnography means the use of digital cameras, smartphones and other devices such as tablets or Webcams to pull in actual situations in households, pantries, refrigerators or in supermarkets, in front of shop shelves or while using mobile phones. Together with online diaries, such an approach can indeed paint a very vivid picture of the real life of today's consumers.

Virtual ethnography attempts to maintain the values of traditional ethnography through providing a “thick” description through the immersion of the researcher in the lives of his subjects. Like in conventional market research, care must be taken also in online ethnography to preserve the privacy of respondents by strict adherence to ESOMAR rules. For the ESOMAR Code see:

https://www.esomar.org/what-we-do/code-guidelines

Note: In contrast to qualitative market research by online ethnography, the term *Netnography* describes sociological research, chiefly by way of participant observation, into processes and habits of communication in social networks and online communities.

Website Usability Research

Testing the Performance of a Website („Usability Check“)

There are several different approaches to testing the performance of a Website and determining the demographic structure of its visitors.

The most productive way of establishing the quality of a Website is to discuss it personally with respondents while they surf the site to be tested: the *Qualitative Webtest* is a one-to-one interview conducted with usually a dozen of persons.

A quicker and less expensive way is to discuss a Website in a focus group session. This can be done offline in the conventional way or by means of an online focus group.

In order to find out about the performance of a Website with a topical character (for example a news media site) the use of an online bulletin board is advised.

Naturally such tests can comprise not only one Website but may include one or two competing sites for comparison.

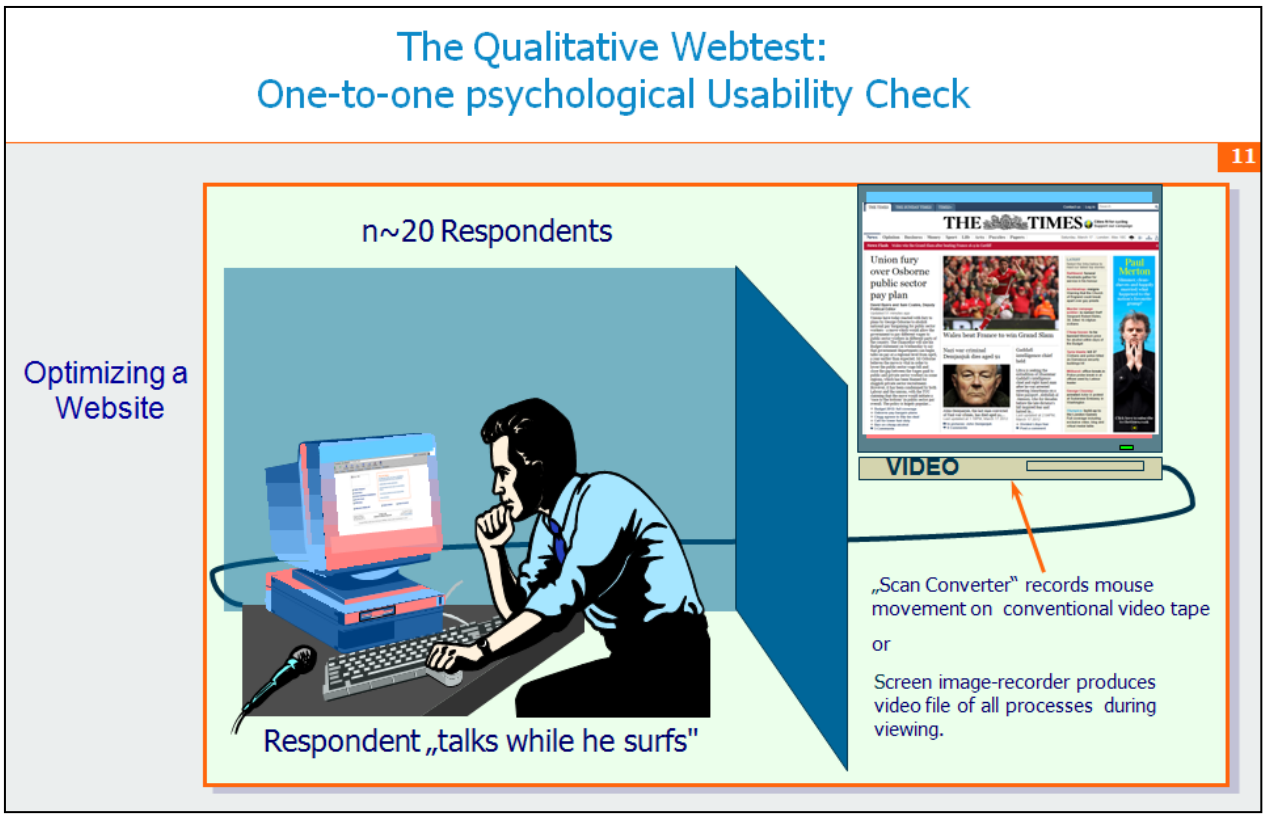
Note: Like in other applications of market research it is possible to corroborate qualitative findings by a subsequent quantitative (online) survey.

Accompanied Surfing (Qualitative Webtest)

The most intensive qualitative approach to discover the usability/performance of a Website is to subject it to a so-called *safari* by a number of respondents.

As can be seen in the graph below, respondents are being invited to the institute to test a Website in a one-to-one situation. With a qualified interviewer accompanying him/her, the respondent is asked to visit a site and go through its pages like a typical user. While the respondent surfs the site, he/she is asked to speak out loudly about his/her experience and observations.

This method is called *think aloud* (Methode des lauten Denkens). It enables the researcher, not only to observe what the test person is doing, but also to listen and pick up the spoken word via microphone and recording device.



The mouse movements on the screen are being recorded. There are a number of programs to record screen movements, such as, e.g., Screencorder 5. See

http://www.matchware.com/en/products/screencorder/default.htm

It is also possible to use a video camera to record the facial expressions of the test person. Today, practically all newly bought digital still cameras enable the interviewer to record respondent behavior in HD.

The exact number of test persons required to produce a detailed report on the usability of a specific Website depends on the details expected. As a minimum, six carefully selected persons (users and/or potential users of the site) should be taken to gain a first insight. Reliable results can be achieved by interviewing 12-24 persons in this manner.

Note: The actual surfing experience should be followed by administering a paper-and-pencil questionnaire to record the demographic data of the respondent and to ask the test person to rate the most important „site dimensions" along a standardized scale (for details see the chapter on „pop-up surveys").

Practice has shown that sometimes – to the great surprise of Webmasters, screen designers, and site owners – accompanied surfing reveals problems in the use of a site nobody had thought of before.

Testing a Website in a Conventional Focus Group

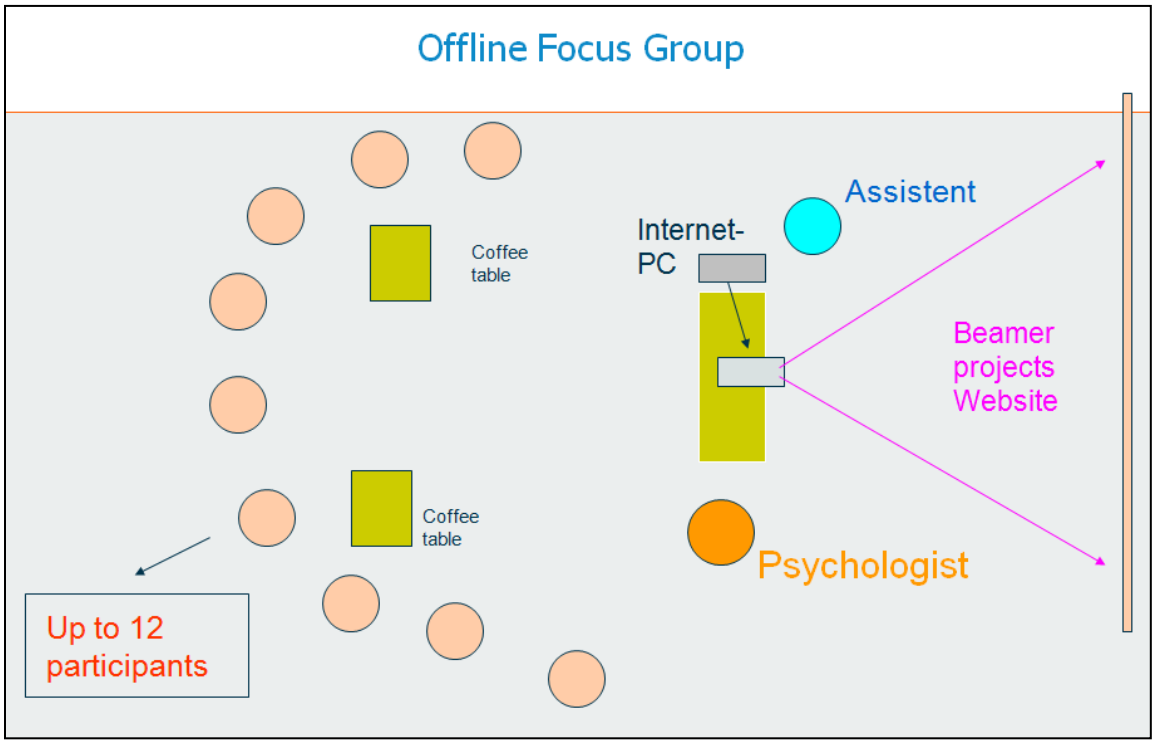
As can be seen in the graphs below, a conventional focus group can be used to discuss the usability/performance of a site - including one or two competing sites.

To optimize discussion, respondents should be seated at small coffee tables in a semi-circle facing a screen where the moderator's assistant shows the sites/pages to be discussed. After the discussion, the respondents are asked to fill in paper-and-pencil questionnaires to rate the standard dimensions of the site(s) and enter their personal demographic data.

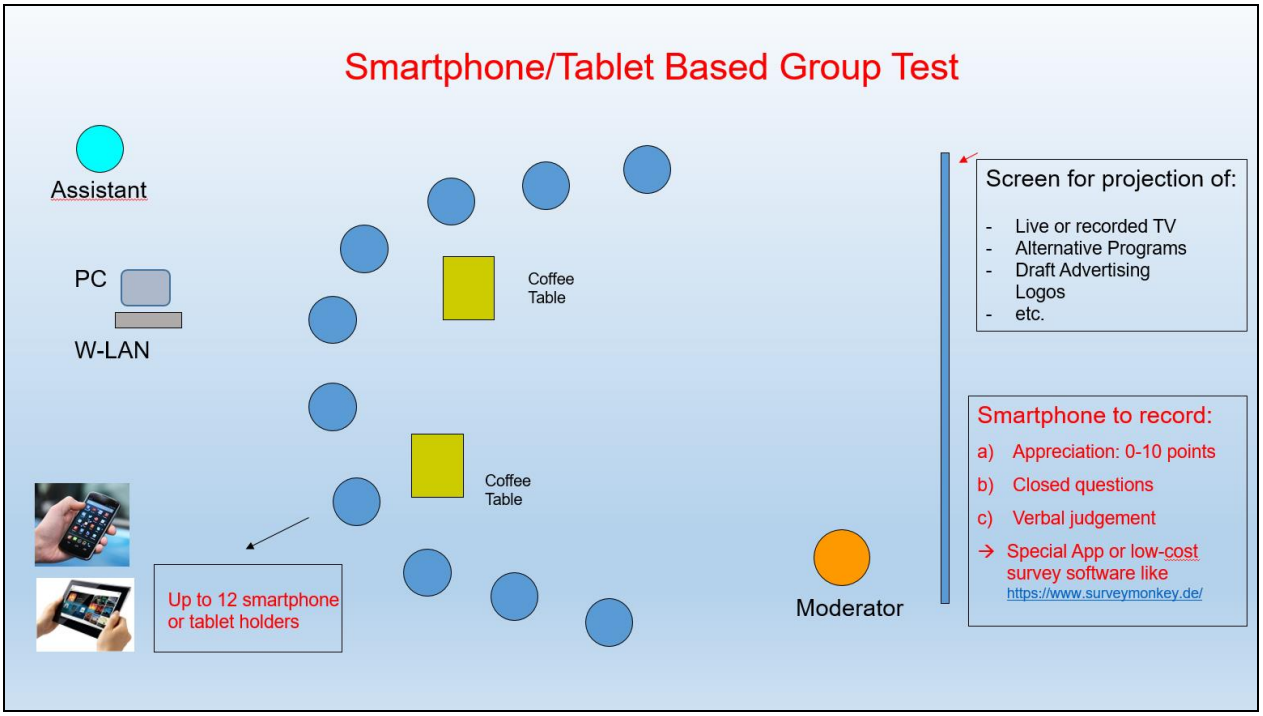
The specific situation of a focus group is different from other methods. In contrast to accompanied surfing, the discussion of a Website in a group of 8-12 persons is not as intensive with regard to personal experience. After all, the surfing process must be simulated by the moderator´s assistant. On the other hand, the discussion in a group can be quite creative: new ideas may spring up; views by one person can be supplemented or corrected by somebody else etc.

Note: The results of a group discussion about a Website may be somewhat more superficial than those achieved by accompanied surfing, but they are gained in a much quicker and definitely cheaper way.

Conventional Offline Focus Group



Offline Focus Group Working with Smartphones or Tablets



The difference of this method to conventional Focus Groups lies in the fact that scaling values or verbatims are entered into digital devices connected to the Internet. By using appropriate market research software such as SurveyMonkey or a specific Focus Group program, the results of the discussion are available in real time. Analysis can thus be very quick – there is even the possibility for the client to follow proceedings live on the Web.

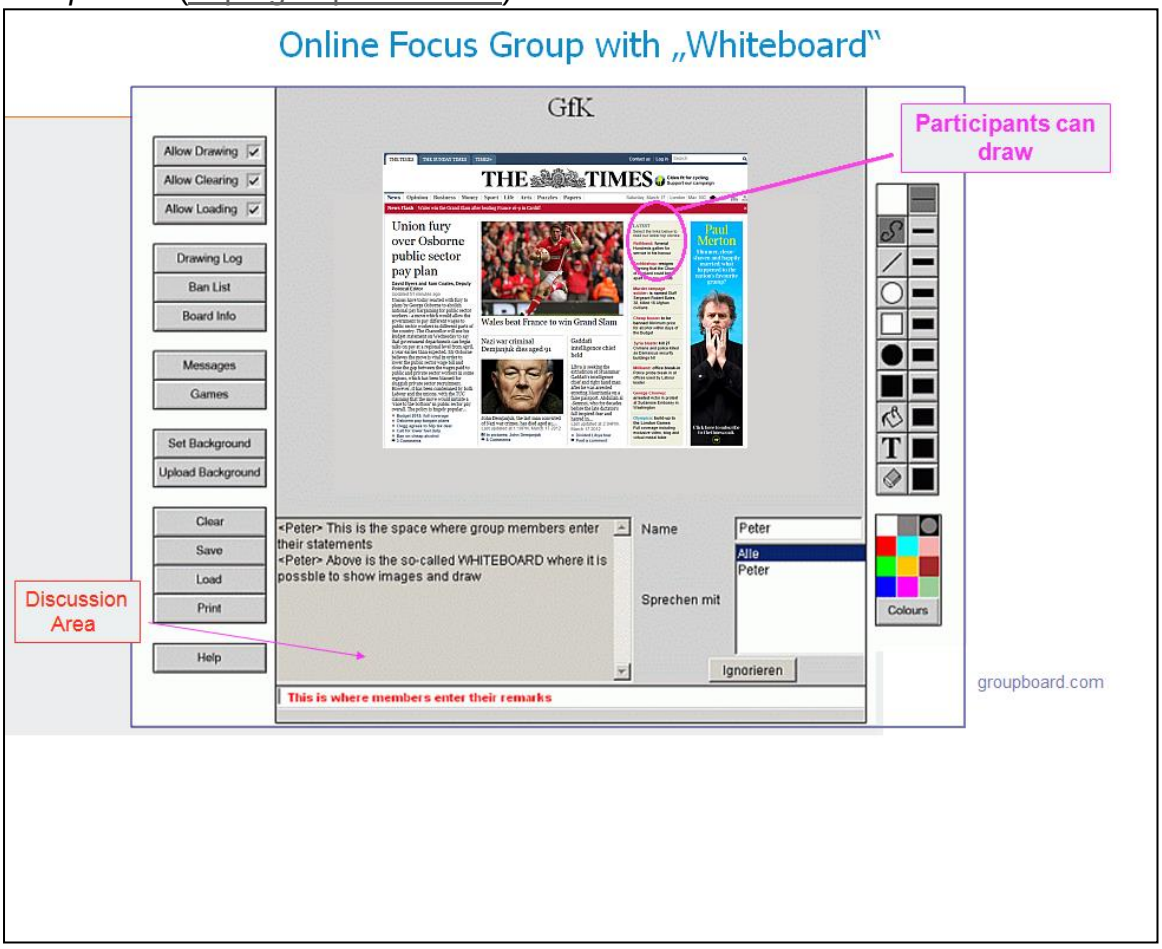
Testing a Website in an Online Focus Group

It is quite clear that testing an object which exists only on the Web should be done online. This method can be called *indigenous research* (Untersuchung ohne Medienbruch) because in this case the test is done in the original setting.

Thus, testing the usability/performance of a Website in a qualitative way will be done best by means of an *online* focus group or an *online* bulletin board.

As can be seen in the graph below, the online focus group is created with the aid of software that allows respondents the use of a whiteboard – a separate screen area on which screenshots of a Website can be shown or a site can be opened by activating the respective link for live viewing.

Groupboard (http://groupboard.com).



The members of an online focus group – usually not more than eight persons – must be recruited from the target group of the site to be tested (users or potential users).

Eye tracking

Eye tracking has long been known and used as a method to study the visual attention of individuals. There are several different techniques to detect and track the movements of eyes. A number of companies offer analyses of Websites, e-mails and other stimuli presented on a computer screen by following the movement of the respondent's eyes. The results of such research are displayed in *gaze plots* (graphs depicting vision paths), *heat maps* on which red color indicates the spots with highest attention, and *focus maps* in which the most visited parts of the object tested are shown as white areas on black background.

The most commonly used non-intrusive eye tracking technique is *Pupil Centre Corneal Reflection (PCCR).* Its basic concept is to use a light source to illuminate the eye causing highly visible reflections, and a camera to capture an image of the eye showing

these reflections. The image captured by the camera is then used to identify the reflection of the light source on the cornea (glint) and in the pupil. Thereby a vector formed by the angle between the cornea and pupil reflections can be calculated – the direction of this vector, combined with other geometrical features of the reflections, will then be used to calculate the gaze direction.

Here are two examples of eye tracking:

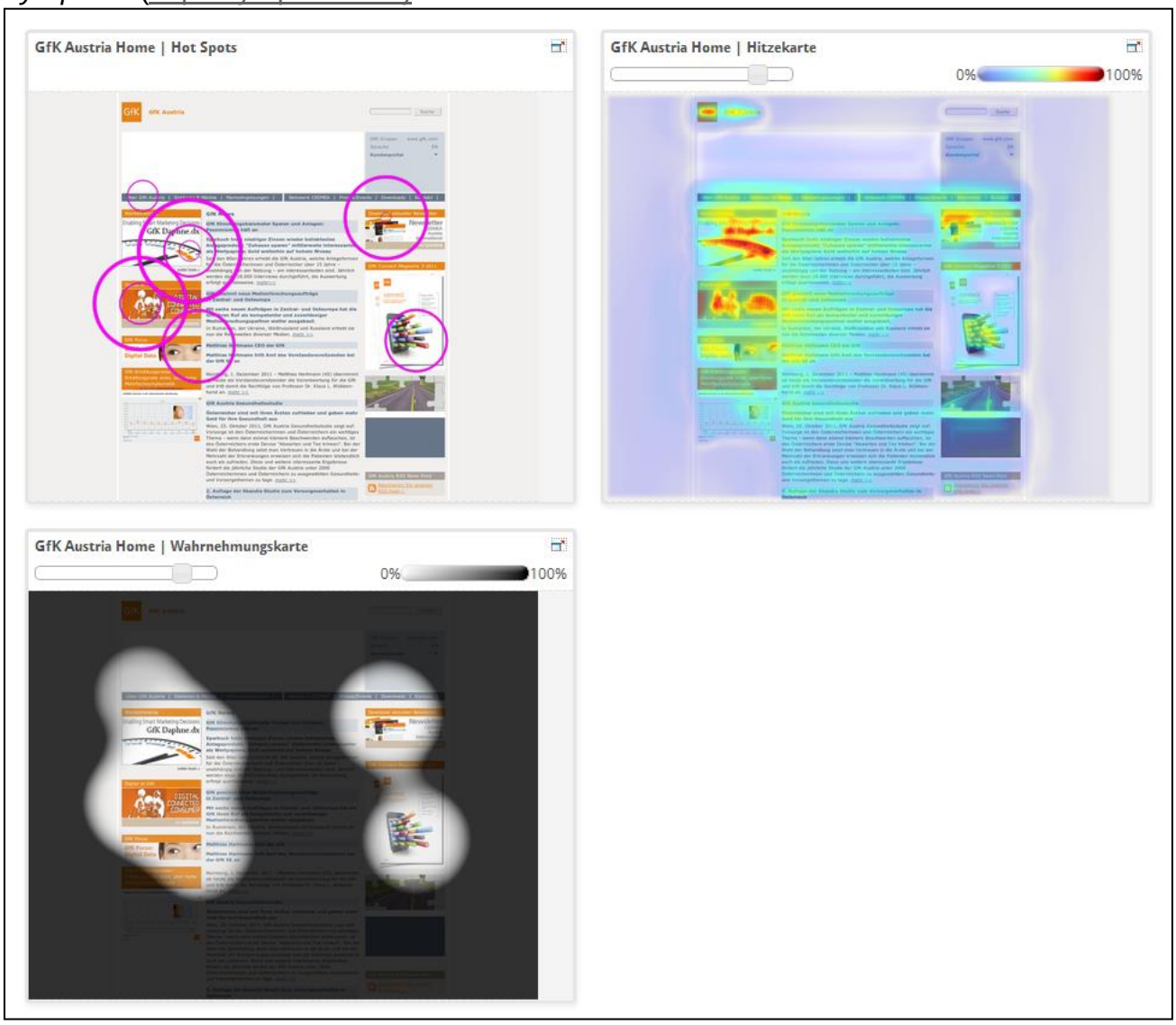
The test situation chosen by **Tobii** resembles the conventional form of accompanied surfing with the respondents *thinking aloud* in front of a specially equipped PC. This method which can be performed in a lab or also by mobile gear in a client's location is described at:

https://www.tobiipro.com/

Eye tracking online

By a sophisticated method, a German firm called **Eyequant** (http://eyequant.com) offers to analyze Websites directly on the Web. Eyequant say they deliver over 90% predictive accuracy when compared to a real eye tracking study with more than 30 human subjects. Results are considered representative for the first 5 seconds of a new visitor's viewing behavior. The resulting heatmap of GfK Austria's homepage can be seen in this free demonstration below.

Eyequant (http://eyequant.com)



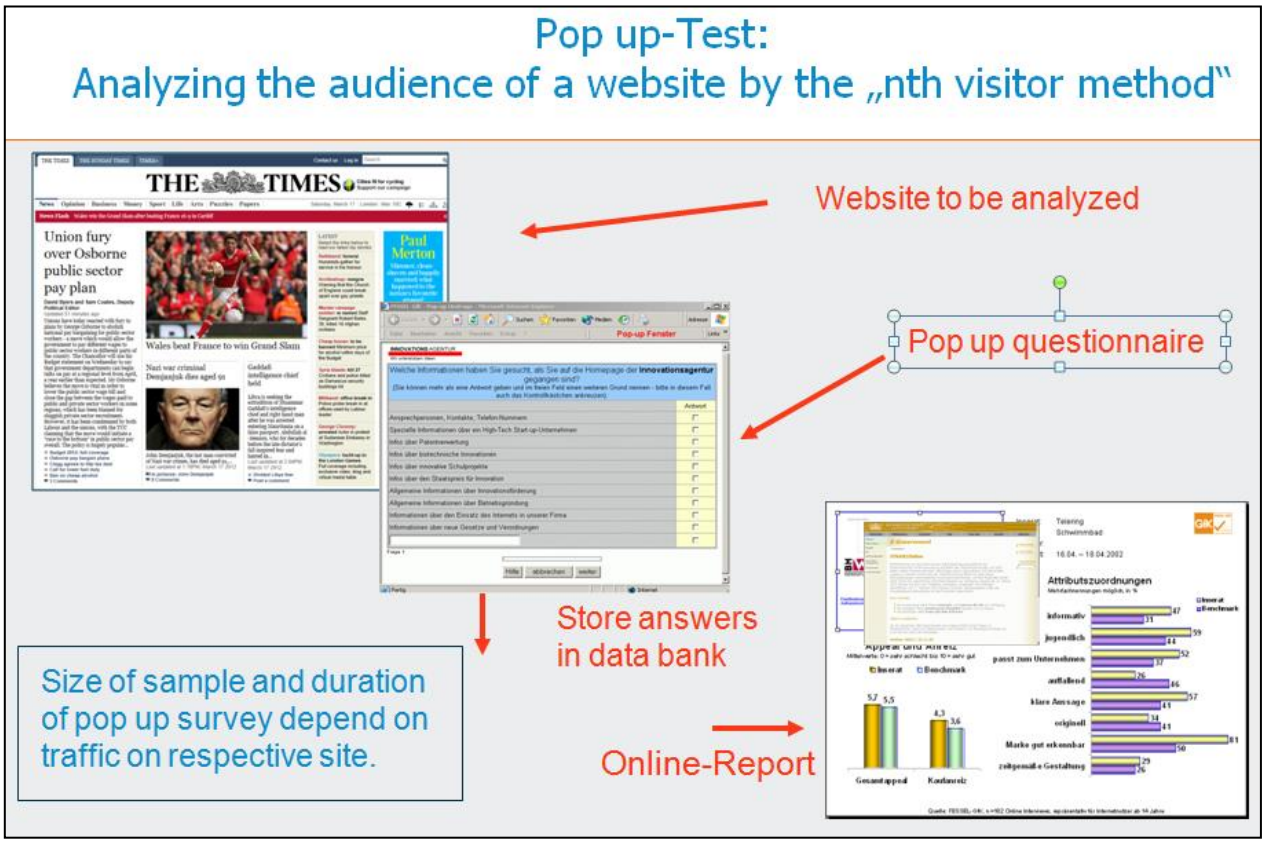
Quantitative Website Tests

On a quantitative basis, the usability/performance of a client's Website can be evaluated in two ways. Either visitors of the site are recruited by coincidence and questioned with the help of the so-called “pop-up” or “n^{th} visitor” method, or the site is presented to respondents in the framework of a regular quantitative online survey using images, sound and links.

Pop-up or nth visitor Survey

This kind of survey is based on a random sample gained via a small script entered into the source text of one or several pages of a Website: with every "nth" person accessing the page (e.g. every 25th visitor), the page displays the invitation to fill in a questionnaire. It is possible to precede the questionnaire with an information box which warns the user that he/she is not being confronted by advertising, but by professional market research. Thereby (the otherwise) low response rates can be increased because clicking away will not be performed automatically. Another possibility to administer an onsite questionnaire is by the so-called layer method which avoids triggering pop-up-blockers contained in modern browsers.

The script which triggers the pop-up can be entered into the source text of any page of a site – thus it is possible to ask the visitor after a certain number of seconds/pages or immediately after leaving the site.

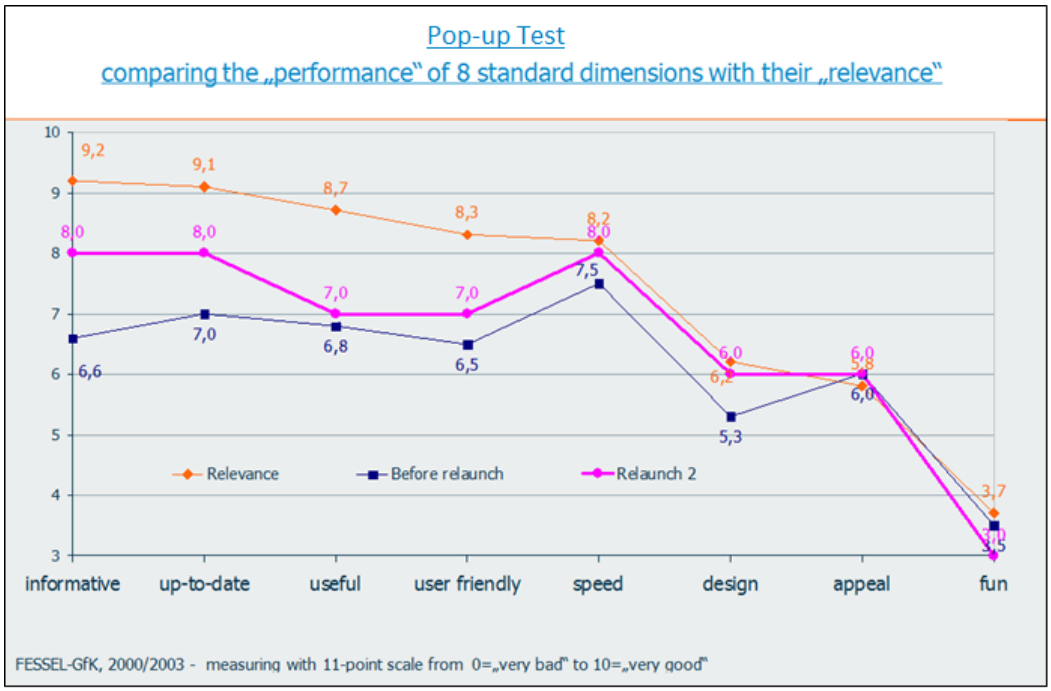


Measuring Website Usability

Most pop-up surveys are being used to find out about the acceptance, usability, and performance of a client's Website. A well-established way of measurement is by rating the eight most important properties of a site on the international 11-point scale (0 points = very bad, 10 points = very good). The properties to be tested are:

1. Information content (the most important feature of a non-entertainment Website)
2. Topicality (i.e. content should be up-to-date, which is also very important)
3. Navigation (user-friendliness, high usability)
4. Loading speed (increasingly less important as broadband becomes standard)
5. Practical usefulness (a subjective overall measure)
6. Design (Note: design is much less important than generally assumed)
7. Emotional Appeal (also a subjective measure)
8. Entertainment/fun (not important in the case of information/business sites)

The 0-10 point scale must be administered twice: first to judge the actual performance of the site tested and second, to establish the importance of the eight factors mentioned above. The following graph illustrates this.



In this experiment, the visitors were asked first to rate the actual performance of the site along the scale 0-10. At the end of the questionnaire, respondents were asked how important each of the 8 dimensions was to them. This measure – again on the 0-10 scale – was used to indicate the importance ("relevance") of each dimension.

The graph above shows that after the first relaunch of the tested Website, information content and topicality were rated much higher than before the relaunch. Also, the results

for user-friendliness and speed went up. While the first five dimensions improved in fulfilling the requirements expressed by the „relevance" value, the other dimensions were practically equal to the required qualities after the relaunch.

Note: By using these metrics in a standardized way, one can create industry benchmarks which will enable exact judgment on the performance of a new client's Website.

Besides these eight dimensions, the pop-up should collect "likes" and "dislikes" by means of two separate open-ended questions. The questionnaire may then continue to ask about "what did you hope to find on this site", "how did you hear about it" and "would you visit the site again" or "would you recommend it to others". The rest of the questionnaire may deal with specific items of the site, according to the wishes of the client. These may pertain to details of the design (e.g. the position of menus), or to the product or image of the client and his competitors. Thus even a short overview about the client's market position is possible.

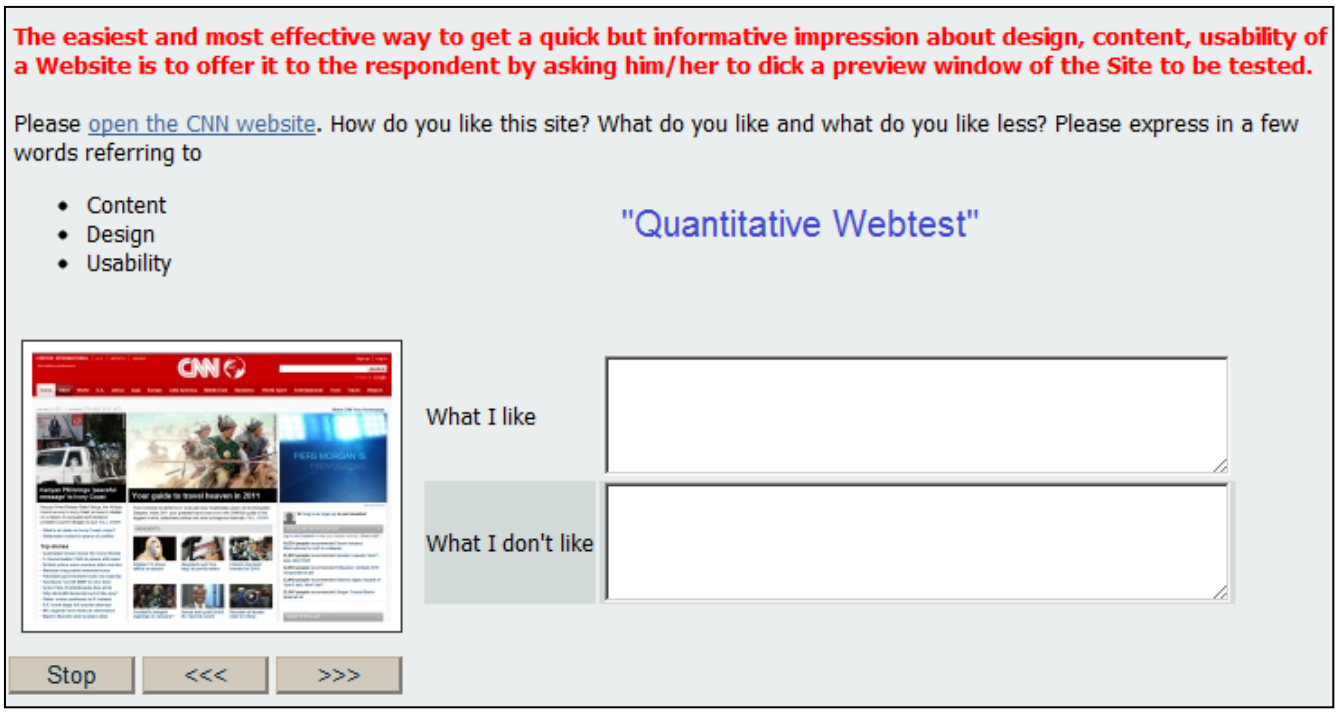
The pop-up questionnaire must not be too long because normally no incentive is given (anonymity). It will close with a concise socio-demographic profile of the user in order to gain a picture about the demographic structure of the site's visitors.

Note: The pop-up test is a simple and relatively reliable way to find out WHO the users of a Website are, WHY they have accessed it, and HOW they like it. Naturally, such results could also be gained by regular online research (which see below), but due to the fact that the audience size of most Websites is very low, extremely large samples would be required.

Performance Test by Quantitative Online Survey („Quantitative Webtest")

The performance/usability of a client's Website (not the size of its audience or the demographic structure of its actual visitors!) can be tested without much effort in a regular quantitative online research project. To this end, first a number of screenshots of the Website must be made. The sample chosen should be large enough to reach at least n = 500 respondents.

The questions will first cover awareness of the site (e.g. "Have you ever visited the site of ...?"). This will be followed by a number of questions relating to its performance. The respondent can then be shown screenshots of the site to be tested and/or asked to open and inspect the site by means of a link leading to it. In contrast to the pop-up survey described above, in a representative study of this kind also *non-users* of the site can be interviewed. A sample of two open-ended questions is shown below.



Note: Quantitative questionnaires about the performance of Websites are best written after previous qualitative research (accompanied surfing or group discussion).

Online Media Research

Introduction

At an ever increasing speed, media use is moving from offline (analogue or digital) media to online (digital) media. Newspapers and books can now be read as "e-papers" on smartphones and other portable devices. TV and radio programs can be received via internet - at any place and even days after transmission.

Nevertheless, the traditional ways of receiving information and consuming entertainment will not disappear. The morning paper and the glossy fashion magazine will still have their place in peoples' lives. TV is likely to remain the primary medium used in the recreation period in the evening, and radio will keep its function as a companion on the way to work and during the day.

The days of cinema are not over - movies have survived the video recorder and will survive online reception. The atmosphere of a darkened movie-theater will always be attractive. The main difference between offline and online media use is an important one and that is the ability to respond and interact immediately.

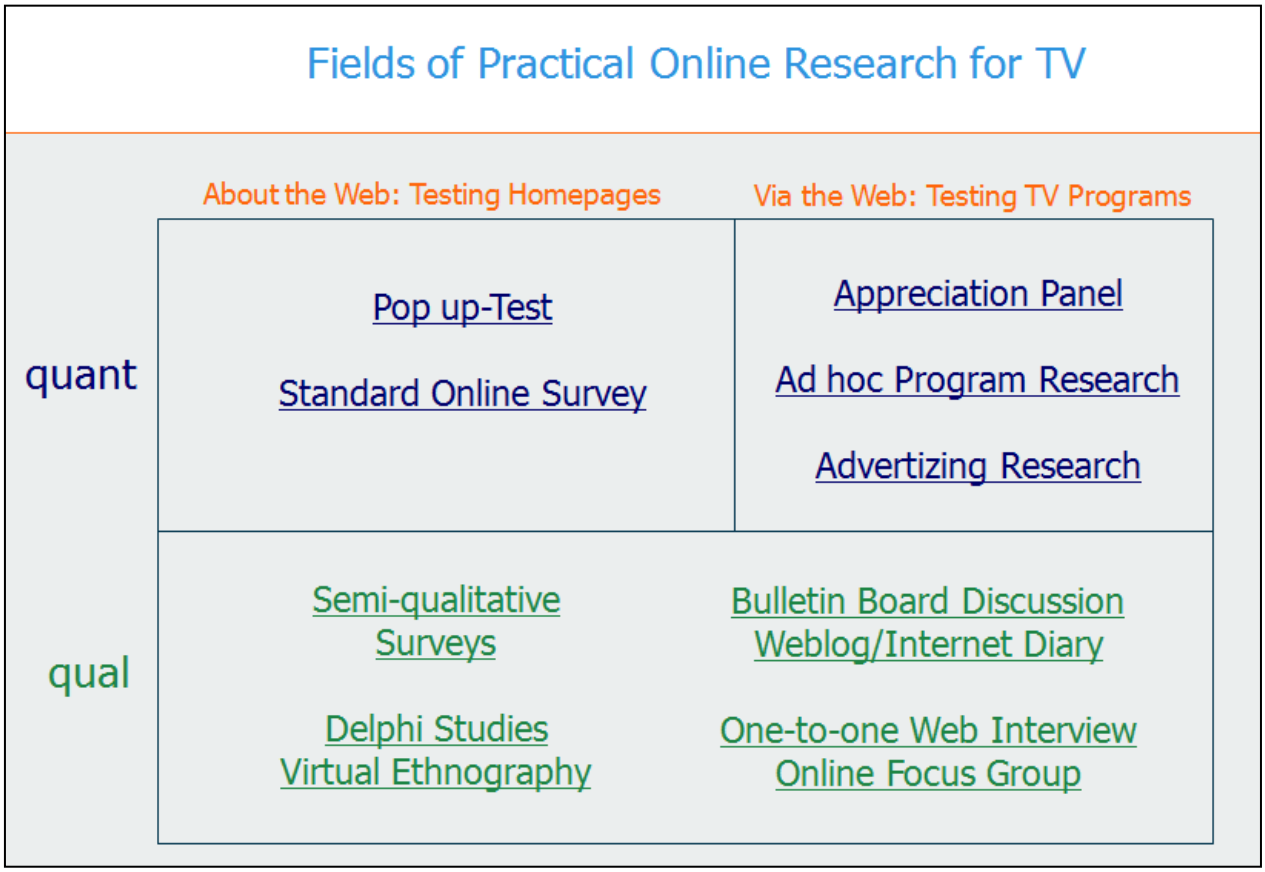
Cross-media use has had its effects also on the advertising world: advertising has spread into the internet where flashy video and sound ads (“thick” advertising) proliferate. Here too, immediate reaction is possible – either by mere click-through or by conversion, i.e. behavior such as actual purchase, intention to buy, went to Website, recommended product etc.

Media – regardless if consumed offline or online or even on two channels simultaneously – are potential objects of Web-based qualitative and quantitative research. Online media research can have a number of aims:

- To determine audience size (readership, TV viewing, radio listening, and Web usage),
- To measure the appreciation of TV or radio programs, or other content
- To assist producers to create new TV or radio programs, or other content
- To measure advertising effectiveness,
- To help newspaper or magazine publishers to test acceptance of content and design.
- To improve the performance of Websites.

Note: It is the intention of this handbook to present a number of practical examples how quantitative and qualitative online research is being (or can be) applied to research into both mass and person-to-person media.

Online Research for TV



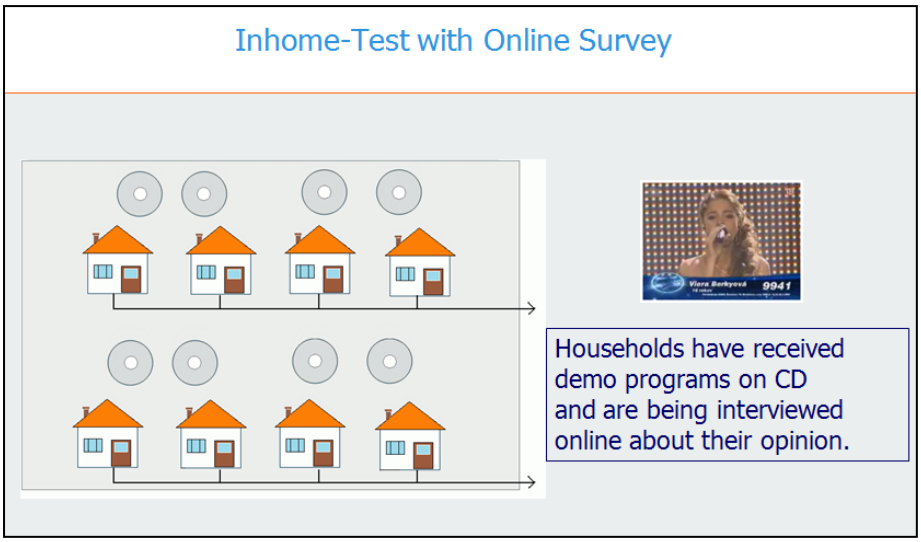
The manifold functions of television (information, entertainment, education, advice, and advertising) and its different forms of reception (live, time-shift, mobile, online) offer a great number of opportunities – and challenges – for practical Web-based research. They are, however, overshadowed by TV meter research (TV Audience Measurement, TAM) which nowadays is also challenged to include measurement of Web TV.

TV management, program directors, TV advertising sales departments, media agencies, and industry representatives in their practical work rely primarily on the data delivered daily by TV meter measurement (ratings, market shares, GRPs and other metrics).

Apart from day-by-day TV measurement, ad-hoc TV program research can be carried out in the form of online discussions or online surveys. Here are some examples.

Online Bulletin Board or Diary

Due to the fact that bulletin boards may last for a week or longer, it is possible to use them for tracking the introduction, e.g., of a daily soap. In case of a longer monitoring period, the use of online diaries is recommended. Pretesting TV programs can also be performed online - best by delivering DVDs or video files to the respondent's homes and asking them to view the test program and comment it on a bulletin board. Another possibility is to upload test material to YouTube – if confidentiality is not at stake.



Quantitative Online Surveys for TV

Of course there is always the possibility to ask a larger sample of respondents to view a specific TV program live. In this case, the panel members are asked to fill in a questionnaire immediately after viewing, i.e. in the same evening or on the next morning. Normally, people like being asked about TV which – especially with older age groups – forms an integral and important part of their lives

Another possibility is to conduct a survey with a questionnaire presenting either a storyboard of a TV program or a summary video (e.g. of 3 minutes) in one of the standard video formats. Naturally, panel management will have to consider that only respondents connected with sufficient bandwidth should be invited to participate in such surveys.

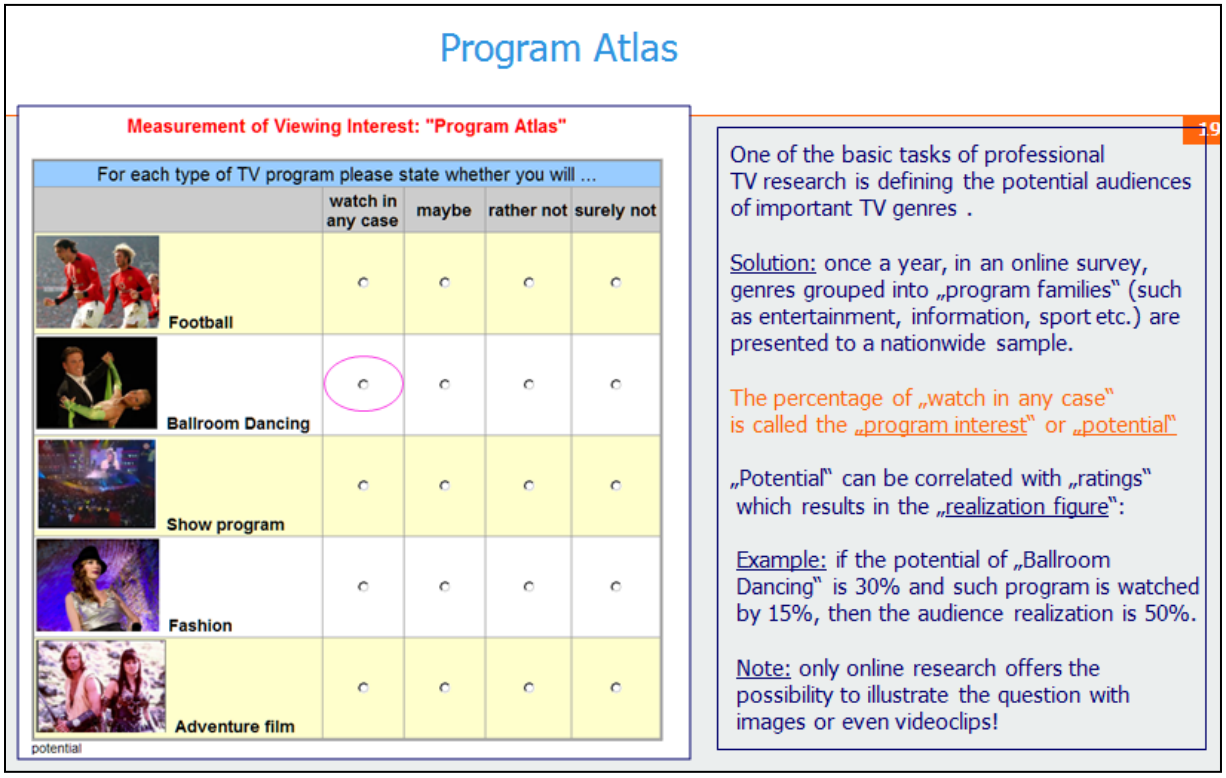
With the spread of the smartphone, online research can now be used to ask panelists in real-time about their actual media use and have them rate the perceived quality of the medium just being used. This, however, needs relatively large samples and is not as easy in practice as it seems in theory.

Online projects with their opportunity to include image, sound and video samples offer ideal technologies for TV research. This includes many types and methods of which only a few examples can be mentioned here.

Possible projects are “celebrity monitors”, gatekeeper studies, employee surveys, and studies of possible harmful effects of violence, sex and crime. But most important are all projects that lead to better programs or more effective scheduling.

Here are some practical examples of basic TV program research:

Program Genre Research



Program Genre Mapping

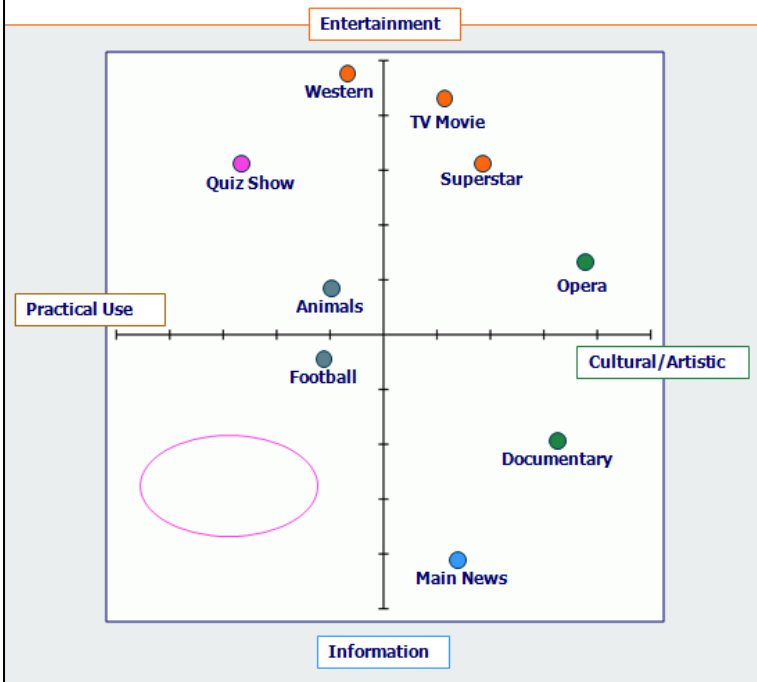
Please rate each program genre by giving points between 0 and 10 for:

	Information	Entertain-ment	Art/Culture	Practical use
 Football	4	6	0	2
 Ballroom Dancing	2	7	5	4
 Show program	1	8	2	0
 Fashion	3	6	4	6
 Adventure film	1	7	1	1

For a TV station it is very important to know which program fields it covers and which not. By scaling the „content" of four constituent elements of each genre, a „genre map" can be drawn by means of a mapping program.

Scaling is performed online similar to the program atlas

Program Genre Map



The data generated by rating the „four elements" of TV genres can be processed in the form of a correspondence analysis in order to produce a „genre map".
In this theoretical case the TV station is missing genres like, e.g.,

Advice Programs

The illustrations above are proposals for online projects. They are based on actual experience for a public-service TV station. For a private TV station other genres may be more relevant.

While the original studies were carried out by means of conventional research methods, online research would make them more precise, cheaper and faster. Program genres (Western movie, nature magazine, ballroom dancing etc.) can be illustrated by thumbnail images in a Web-based questionnaire. Persons answering “I would definitely view this type of program” would be classified as potential viewers. Their number would describe the actual size of the respective target group and their socio-demographic structure would facilitate content planning, scheduling of transmissions and targeting TV advertising.
In this connection, also use of the so-called *Sinus Milieus* can be recommended as offered by Integral, a quality research institute based in Vienna, Heidelberg, and Berlin.

On the basis of scores for “information”, “entertainment”, “art/culture”, and “practical use”, a TV station could map its genres by correspondence analysis and thereby find out about strengths and weaknesses of its program offer.

Note: Qualitative and quantitative online TV research can be a „door opener” for new business. Smaller TV stations will be quite happy with this kind of research because it is cost-efficient, helps them overcome frustration based on their low ratings and market shares, and offers them valuable targeting data in their negotiations with advertising customers.

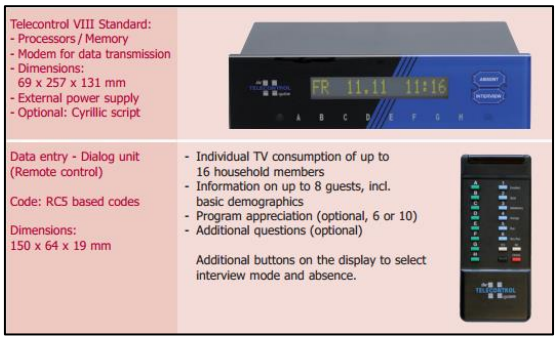
Qualitative Methods in TV Research - Appreciation

There are two basic approaches to practically-oriented qualitative television research. One is based on data delivered as the result of appreciation scaling. Such data can be collected by meter, diary, phone or with the help of online surveys. The second approach is based on the use of in-depth interviews, group discussions or auditorium tests for data collection. These studies can be conducted both offline and online.

Appreciation Measurement by Meter

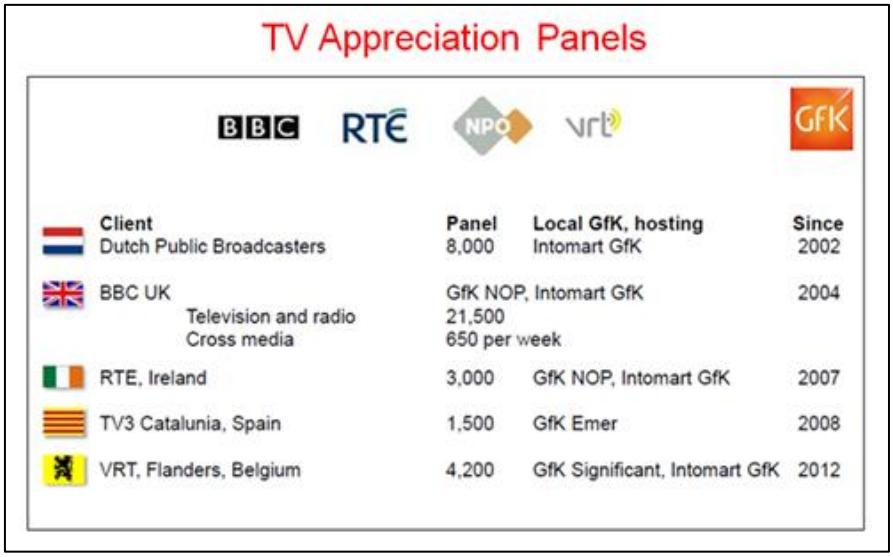
In the Austrian Public Service TV (ORF) use was made of both methods. Austria is probably one of the last countries to run a meter system with integrated program appreciation. Years ago such systems were employed by Belgium, Denmark, Finland, The Netherlands, Norway, Portugal, Spain and Switzerland, while in the UK a supplementary appreciation diary was used which provided Appreciation Indices (AI) for all programs. It is interesting to note that at that time the three major European markets Germany, France, and Italy did not employ such a system. Countries formerly relying on diary collected data, such as the Czech Republic and Slovakia, also used appreciation. The University of Hong Kong in its reports on TV program quality uses the UK-type Appreciation Index (AI).

In the meantime, practically all of the countries mentioned above, have „lost“ appreciation by meter. As TAM contracts were renewed, important customers (chiefly media and advertizing agencies) said they were not interested in appreciation. But public service stations were – due to their „public value“ obligation which calls for the proof of „quality“.



Former Telecontrol VIII People Meter Traditional Nielsen PeopleMeter

So in the course of time, a number of nations ruefully paddled back to appreciation – albeit on the basis of a completely new system: the „*TV Appreciation Panel*“. This type of research was invented and developed by GfK Intomart in the Netherlands (its TV system was formerly very fond of appreciation by meter.) The next to sign up was the UK (BBC and ITV). While Germany (ZDF) and half of UK (ITV) dropped out after a few years, the following countries continue to run a TV Appreciation Panel:



Client	Panel	Local GfK, hosting	Since
Dutch Public Broadcasters	8,000	Intomart GfK	2002
BBC UK		GfK NOP, Intomart GfK	2004
Television and radio	21,500		
Cross media	650 per week		
RTE, Ireland	3,000	GfK NOP, Intomart GfK	2007
TV3 Catalunia, Spain	1,500	GfK Emer	2008
VRT, Flanders, Belgium	4,200	GfK Significant, Intomart GfK	2012

Note: Status 2013

Rating vs. Appreciation

→ There is no fixed correlation between ratings and appreciation.

Large TV audiences are by no means always satisfied audiences. Large audiences are composite audiences, which means that a considerable number of viewers is sitting before the screen without really having personally chosen to watch this particular program. And sometimes it even seems that viewers hate what they have just watched. This is not only the case when the national soccer team suffers a painful loss against an 'inferior' opponent or when ski champions miss a victory by milliseconds. There are also other instances in which rather large audiences may react with disgust. Current affairs programs with violent pictures from a theater of war or discussion programs about unpopular topics are of this type. Thus in many instances, *high ratings may go along with low appreciation*. Relatively low appreciation often occurs with typical Friday or Sunday night thrillers – one has the impression, viewers regret that they „wasted“ time again on some murder case…

The second category is *low appreciation combined with low ratings*. In such cases, a minority program has failed to draw enough satisfied viewers within the target audience. This occurs quite often with programs about modern art or contemporary music which do not appeal to many viewers. Such broadcasts tend to draw small audiences, who on top express their criticism about what they have been offered by low appreciation scores.

A third category comprises programs in which *high appreciation is combined with low ratings.* Good public service broadcasters produce quite a lot of such programs. These programs are aimed at small target groups - opera fans are a typical example - who take pleasure in special offerings. Another examples are religious broadcasts which tend to be highly appreciated by small audiences.

Program makers are naturally most satisfied with the fourth category: *high ratings accompanied by high appreciation*. This type is by no means an exception. There are some program categories which tend to score well in both respects. These include nature/animal programs or expeditions, top-flight cinema films, special folk music offerings etc. Here is a general overview:

Typical Genres - with exceptions	Rating	Appreciation
Classical Concert, Romantic Films, Nature/Science Documentaries, Sports	high	high
Religious Broadcasts, Classical Opera, Ballet, Operetta, Literature	low	high
Reality TV, Comedy, Quiz Shows, Sometimes Current Affairs, Thrillers	high	low
Modern Opera, Avantgarde Films, Reality TV, Horror Films, Thrillers	low	low

What are the advantages of appreciation?

First of all, appreciation is used by public service broadcasters to document the *public value* of their program: Appreciation is a major performance indicator.

Besides helping public broadcasters to justify license fees, an important function of

appreciation scores is their *predictive value*. Many cases have shown that a first episode which is well accepted – not only according to rating but also with respect to appreciation – will result in good ratings for subsequent episodes. Conversely – if a series of episodes starts with a good or satisfactory rating but with low appreciation, it can be assumed that the following episodes will not perform well – except if substantial improvements are being made in the program.

A third intersting feature of high appreciation scores is their *value for the acceptance of TV advertizing*. In contrast to the opinion of most advertizing agents/media agencies, a TV program with high appreciation has a positive influence on ads placed immediately before or after such a program. According to empirical studies performed in the Netherlands (Ster/Intomart/MarketResponse) , ads after well-accepted programs produce a higher buying intention than ads placed in other program environments. According to these findings, even a slight increase in appreciation has a measurable effect on the propensity to buy.

Finally, it should be noted that appreciation is an „*incentive*“ for the members of a TAM panel. Respondents who are invited to judge the programs they watch by having to enter an appreciation score, have more fun in participating and are therefore more disciplined in operating the meter than panelists who do not have a chance to express their opinion in the form of appreciation.

Some methodological considerations

There are some methodological objections against the use of appreciation as an 'one-dimensional' measurement. It is sometimes contended that only by means of a *cluster of qualitative metrics* (measuring a variety of program properties), is it possible to determine the „quality“ of a program. Still, experience with more than 12,000 ORF TV programs per year over a period of almost 15 years has shown that the interpretation of appreciation scores in the context of the respective program genre by experienced researchers and program makers allows for unbiased insight into audience satisfaction.

Of course, *additional qualitative questioning* will lead to a still deeper understanding of program quality. Therefore, in all TV Appreciation Panels, questions are included to measure such factors as viewing attention, personal enrichment, willingness to recommend a program to others etc. In particular, *answers to open questions* (about „likes“ and „dislikes“) collected in online panels give insight into the different factors and motives constituting program „quality“.

The „viewing experience” („Sendungserlebnis“)

Note: The general appreciation score measures the *individual viewing experience*, not the artistic value of a program or the journalistic quality of its content. The motives underlying program appreciation may differ from case to case. As we said, the

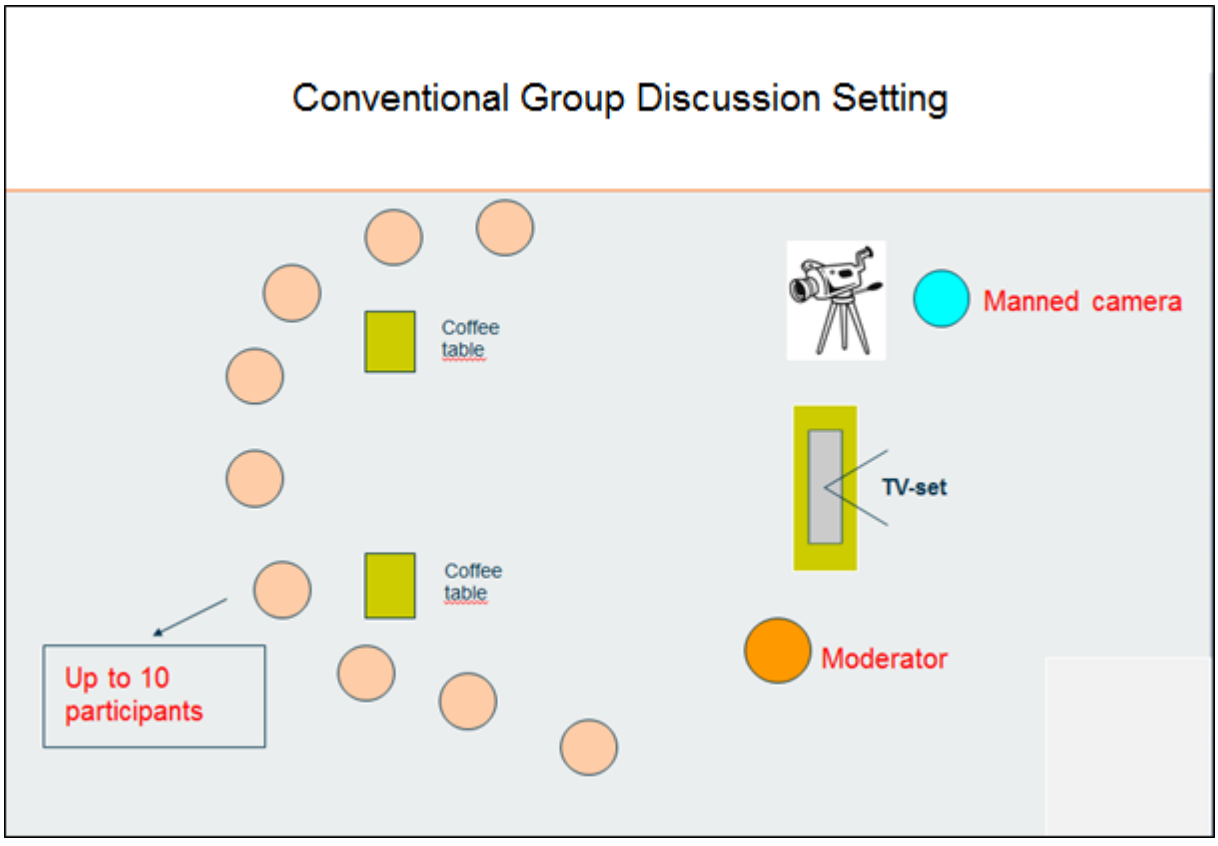
transmission of a sports event may be of high technical quality – but if the national team is defeated, appreciation will be low.

Nevertheless, the average numerical appreciation score (which also needs no further processing) together with the respective program category is a most practical instrument of measuring program quality – simple, cheap and effective.

Other qualitative methods of TV research

In the sphere of radio research the in-depth interview and call-out testing are well established techniques. But also in the field of television, program pretesting by means of focus groups has proved to be a very good solution. In order to collect as much information as possible, a special setting for the use of a focus group was developed by the ORF media research department.

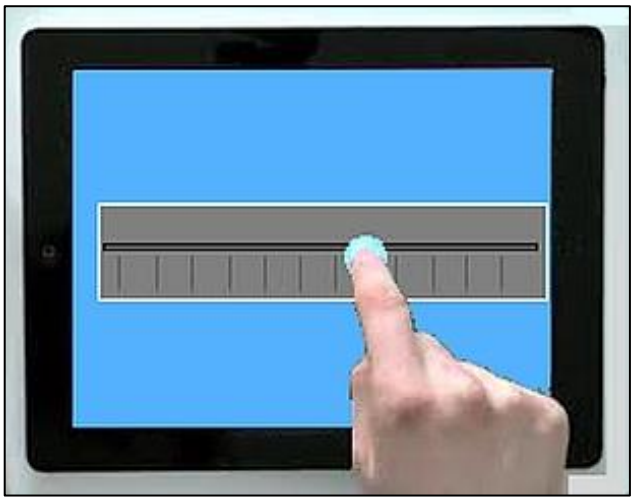
The Videotest



In cooperation with the market research institute Triconsult (http://triconsult.at), the so-called „Videotest“ was developed. This is a special form of group discussion in which the respondents operate electro-mechanical „sliders“ while viewing a live broadcast or a video tape. The data recorded by means of the sliders are fed into a PC and evaluated on a scale from 0,0 („very bad“) to 10,0 („very good“). The results are available

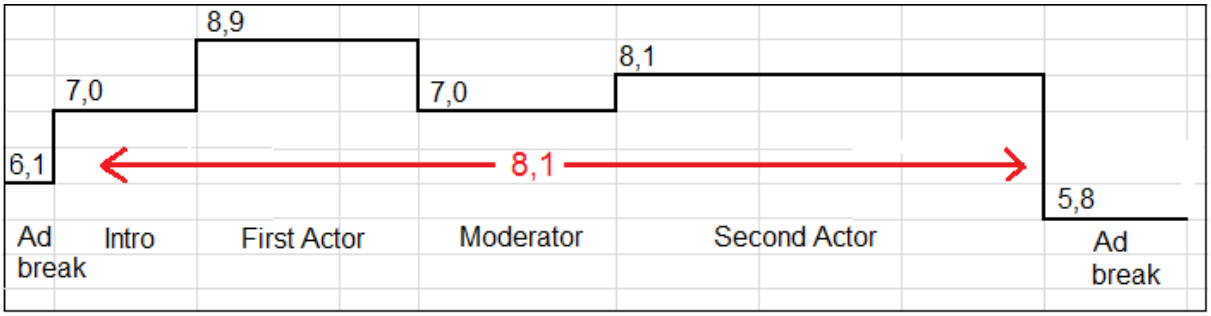
immediately after the viewing and can be displayed along a time axis, thus showing the acceptance of the program parts from beginning to end (see below).

Old-fashioned slider device



Slider scale designed for use on tablet

Slider programmed as an „App“ to be used on a smartphone or tablet

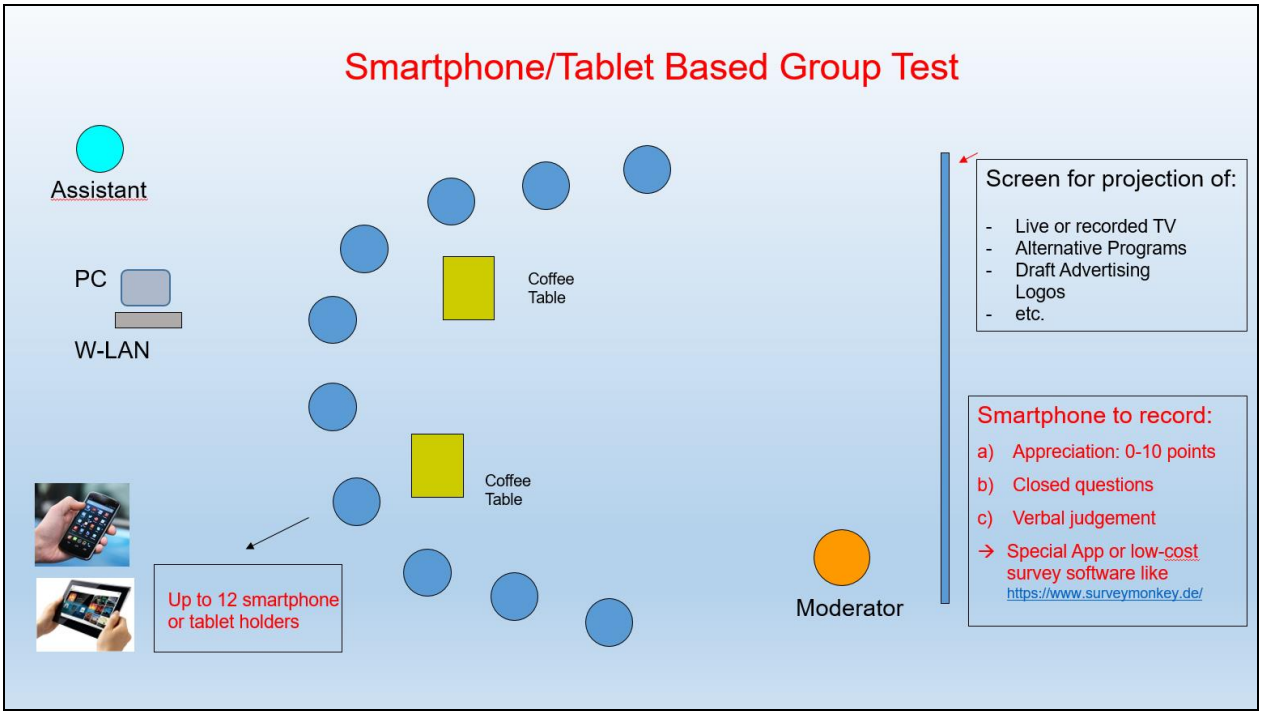


Sample read-out of a number of sliders operated during the viewing of a TV program. In this case, the time-weighted average (or median) appreciation score of the program (without ad breaks) is 8,1. The diagram shows that the first part of the program was better received than the second one.

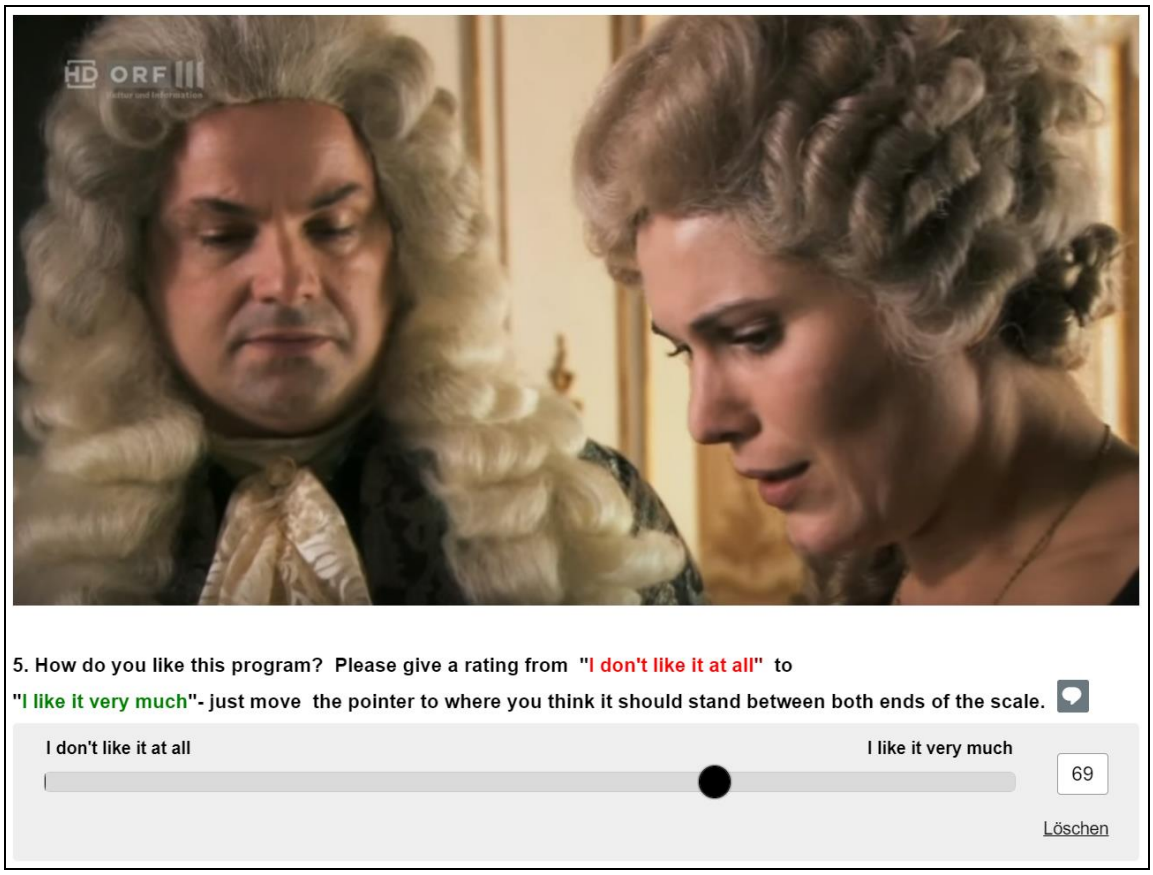
It should be mentioned in this connection that the Austrian sociologist Paul F. Lazarsfeld while doing research at Columbia University in New York in 1937/38, already had test persons judge radio broadcasts by operating a red and a green pen on a moving paper band to record their appreciation of what they were listening.

After having viewed the program, the Videotest group was led into a one-hour session to discuss the *pros* and *cons* of the program. To produce a perfect videotape of this discussion – including body language and facial expression – the group was seated in a semicircle and was being filmed by a semi-professional camera man. Emphasis was led on good lighting and the use of a high quality directional microphone in order to produce a videotape which professional program makers would be willing to view. Body language and facial expression could thus be recorded. Here is a sketch of the set-up using digital devices:

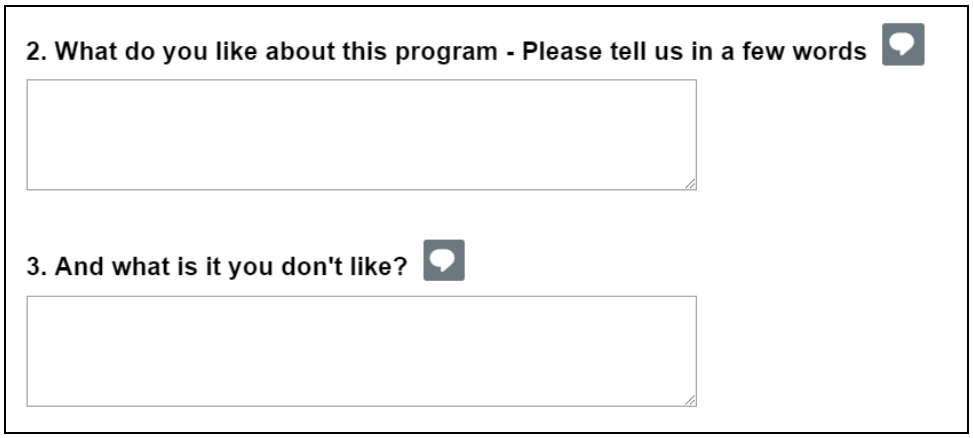
Offline Focus Group Working with Smartphones or Tablets



As described earlier, the Internet makes it possible to use smartphones or tablets on which a conventional online survey program (such as SurveyMonkey or SurveyGizmo) can be used to present scales, closed questions or boxes for open answers.



This is an example for using the “slider” as provided by the market research program “SurveyMonkey” (https://de.surveymonkey.net/). It can be used sequentially in order to judge different parts of a program – one after the other. For continous scaling – like in the case of the electro-mechanical slider described above – a special App would have to be programmed.
To record ”pros” and “cons” of a program, separate boxes shoud be used:

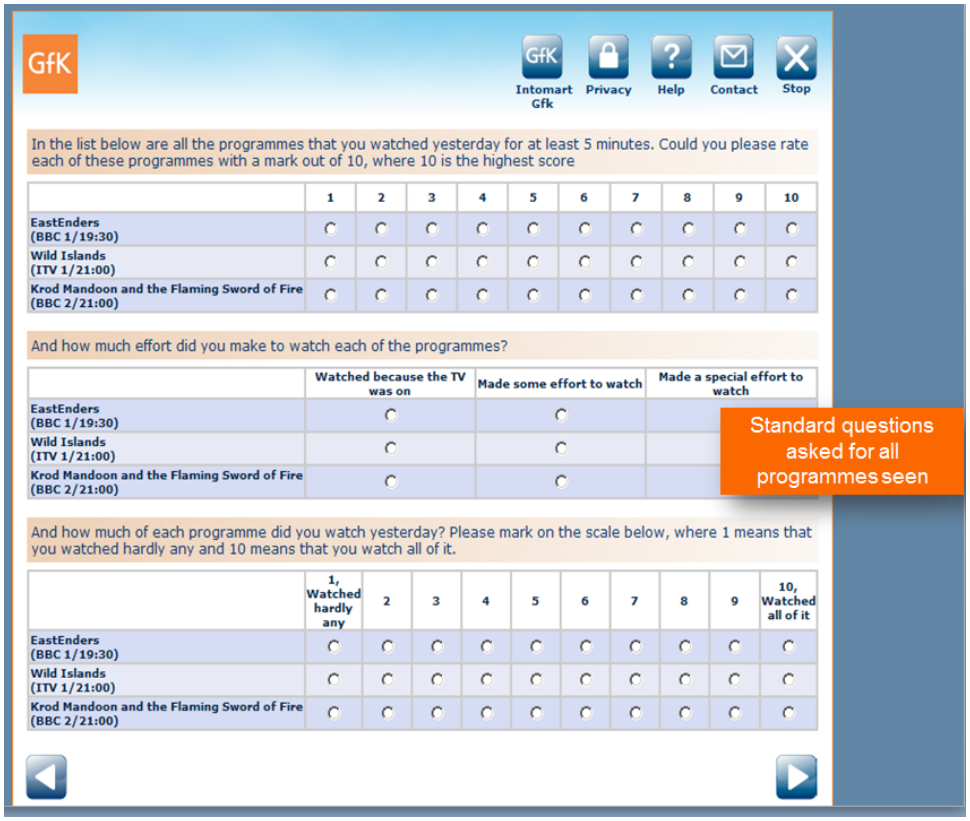


TV Appreciation Panels

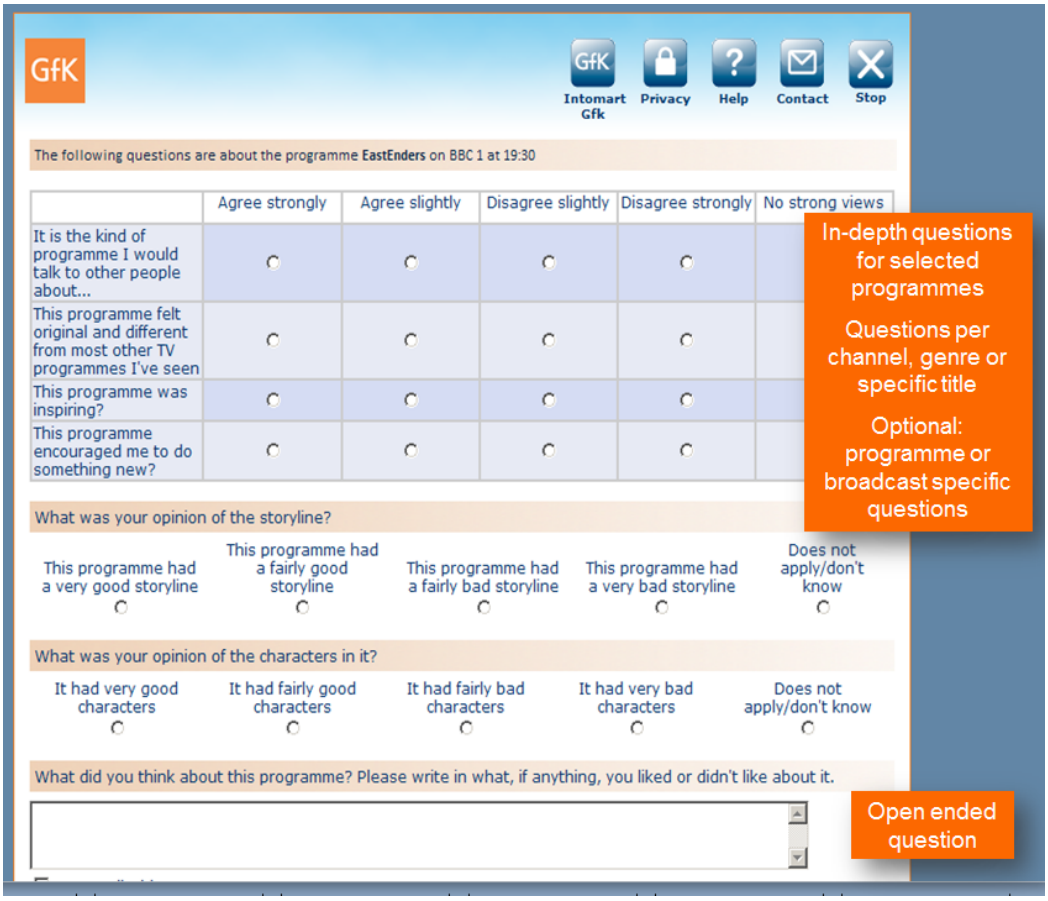
As can be seen in the graphs below, appreciation panels use different types of „additional“ questions after „general“ measurement by the „Appreciation Index“.

1. Selection of programm(s) viewed „yesterday“

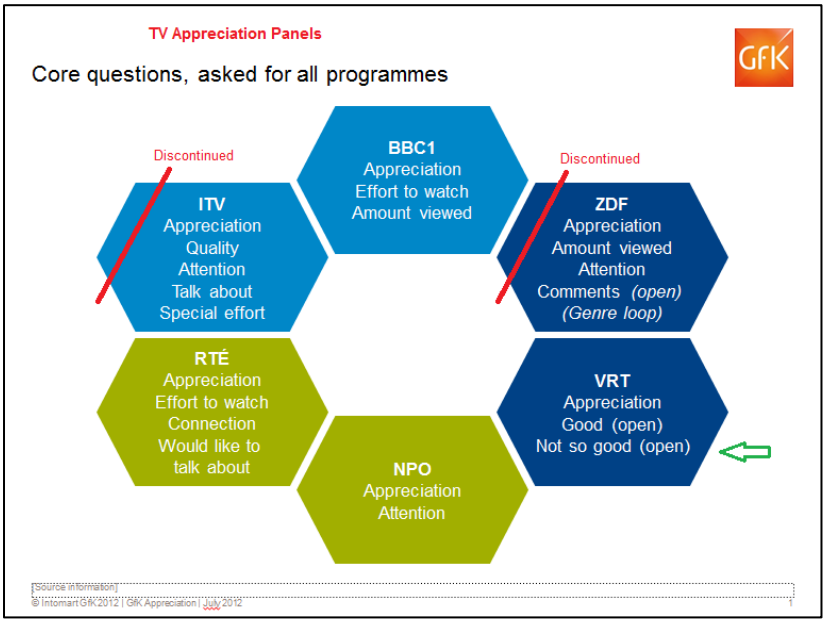
2. Adding appreciation index (1-10), effort to watch, amount of viewing a program



2. Respondents agree/disagree to decriptive statements, enter likes and dislikes.



Note: For expressing „likes“ and „dislikes“ (the so-called „*verbatims*“) it is advisable to use *two* separate text fields. This has already been realized by VRT/ Belgium.



Here are a few examples of general and genre-specific questions used in TV appreciation panels:

All genres except film & children

- This was a high quality programme.
- It is the kind of programme I would talk to other people about.
- Did you feel you learnt anything from watching this programme?
- This programme was thought-provoking.
- Would you recommend this programme to a friend? Please give a mark out of 10, where 10 indicates 'definitely yes', and 1 indicates 'definitely not'.

All genres except film, children & news

- This programme felt original and different from most other TV programmes I've seen.
- This programme was inspiring.

Drama (no film)

- What is your opinion of the storyline?
- What is your opinion of the characters in it?

Entertainment

- How entertaining did you think this programme was?
- And how much did you like the presenter(s), if there were any?

News

- How trustworthy did you think this programme was?
- How impartial did you think this programme was?
- What did you think about the way the programme was presented?

Discussion

The author contends that it would be more efficient to include appreciation in the people meter itself instead of collecting all sorts of „qualitative“ information by a special TV Appreciation Panel. Day-by-day „qualitative“ questionnaires are bound to produce lots of redundant data (which – by the way – become available only two days after transmission). It is much cheaper to conduct *ad hoc* qualitative online research to find out details about viewers‘ attitudes towards certain programs.

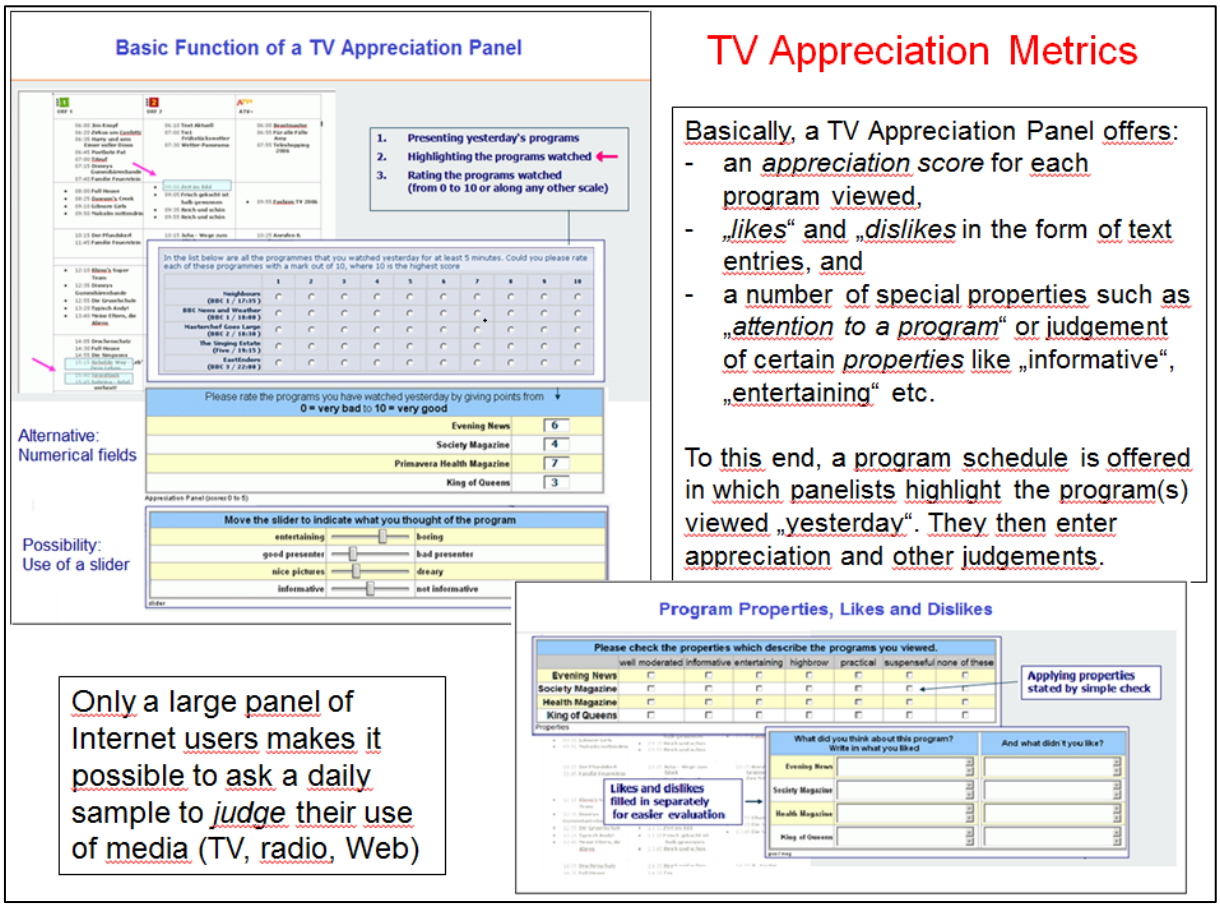
At the moment, there is need for a completely new generation of TAM meters because of digital signal transmission plus internet-based and mobile TV reception. „Sound matching“ and „watermarking“ are the catchwords for the new technologies. Portable recording devices such as „media watches“ and „pagers“ are among the instruments required to meet the new challenges. Such devices are already being used in Kasachstan; and a Moscow based firm is also trying to produce such cutting-edge apparatus. In the view of the author it would be a real pity if these new meters would not provide for appreciation!

The need for a TV Appreciation Panel

If, however, a TAM system does not provide (or has de-activated) the feature of appreciation in the people meters, the TV industry should certainly decide to commission a TV Appreciation Panel. Such a system has several advantages.

First of all, a TV Appreciation Panel delivers quality data in the form of *numerical and verbal TV metrics*. Secondly, it enables researchers to include *ad hoc questions* from time to time - such as testing TV personalities. The third advantage of an online operated panel is the possibility to extend quality research also to *radio and internet*.

When negotiating an Appreciation Panel, a few modifications should be considered. As shown below, it is suggested to use simple „checkmark“ questions for determining programm „properties“ („entertaining“, „informative“, „practical“ „suspenseful“, „well presented“, „high quality“ „none of these“ etc.) The proportion of such properties will explain *why* the respective Appreciation Index was given. In contrast to the evaluation of the „*verbatims*“ which requires additional effort (e.g. text analysis software) these data are delivered automatically by the system. Furthermore, if the *same* „properties“ are being asked across *all* program types, this will facilitate the creation of a *reception quality catalogue* or „*genre mapping*“ which in turn could be used to optimize program schedules. Sometimes progam makers are not fully aware of factual audience tastes. For example, TV programs about animals are not only considered „informative“, but also „entertaining“ and „useful“.



As shown above, three types of questions can be used to record appreciation. In spite of the possibility of „straight-lining“ (entering the same score in all lines), the matrix question with radio buttons is the most popular one.

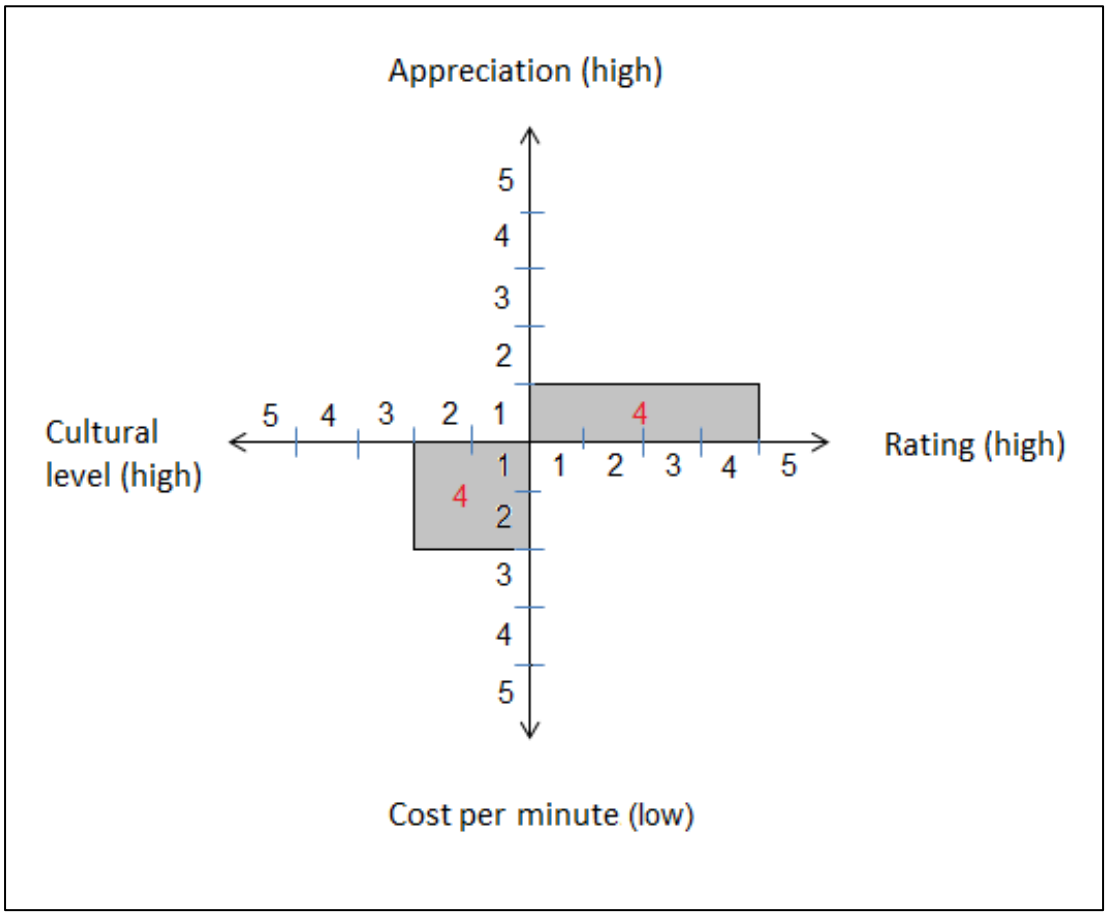
Performance Indicators for (Public Service) TV

In an article published in the German media research journal „Media Perspektiven“ 2(1994), the author suggested the combination of four dimensions of quality control and performance measurement for TV programs:

1. *Rating* (percentage of adult viewers)
2. *Appreciation* (measured in the form of an index and recorded by meter, diary, online panel, or ad-hoc research)
3. *Cost per minute* (preliminary internal and external expenses, indexed over the average program cost)
4. Cultural/intellectual level (from a purely commercial to a high cultural standard)

Without going into details, the idea of this system is the following: TV programs are classified according to their audience size (rating), their perceived quality (appreciation), their cost efficiency (total cost per minute) and their fulfilment of cultural standards. The latter is based on a collective assessment by program makers. (Other authors have suggested to measure this dimension by means of an analysis of program reviews by public critics.)

Each factor is expressed by a range of 5 classes (very high, high, medium, low, very low). Here is an example:



In spite of a satisfactory rating, the program in this example has a **low overall performance** due to its low appreciation, ist low esteem and ist relatively high cost per minute. The larger the total area, the better the performance.

Online Radio Research

In general, radio stations in Europe fall into four groups:

- Commercial or public service music stations (popular or classical)
- Information programs – predominantly public service
- "Culture" programs – predominantly public service
- Mixed, family or regional programs (both commercial and public service)

Online research can be used for audience size measurement, for program research, music research, advertising research, gatekeeper studies etc. Here are some examples:

- Measuring radio use by means of cost-saving multi-mode surveys including small passive meter segments for calibration
- Testing the acceptance of a specific radio program by means of an online bulletin board
- Studying listening habits, listener attitudes, station images by online survey or diary
- Testing pop music for appreciation and "burnout" (necessity to discontinue broadcasting a certain song)
- Proving the cost-effectiveness of radio advertising
- Testing the usability of a radio station's Website

Radio Audience Size Measurement

Traditionally, radio audiences are being measured by day-after-recall surveys – either by telephone or by diary.

The respondent is led through a quarter-by-quarter hour grid covering the day-parts during which he/she had listened to radio on the previous day ("Day Budget Study"). Thus radio ratings are based on memory, the currency being "remembered contact with the respective station by quarter hour". From this metric, daily net reach, listening time and market shares can be calculated. Compared to second-by-second measurement of TV use, this is a rather rough measurement on a more or less subjective basis.

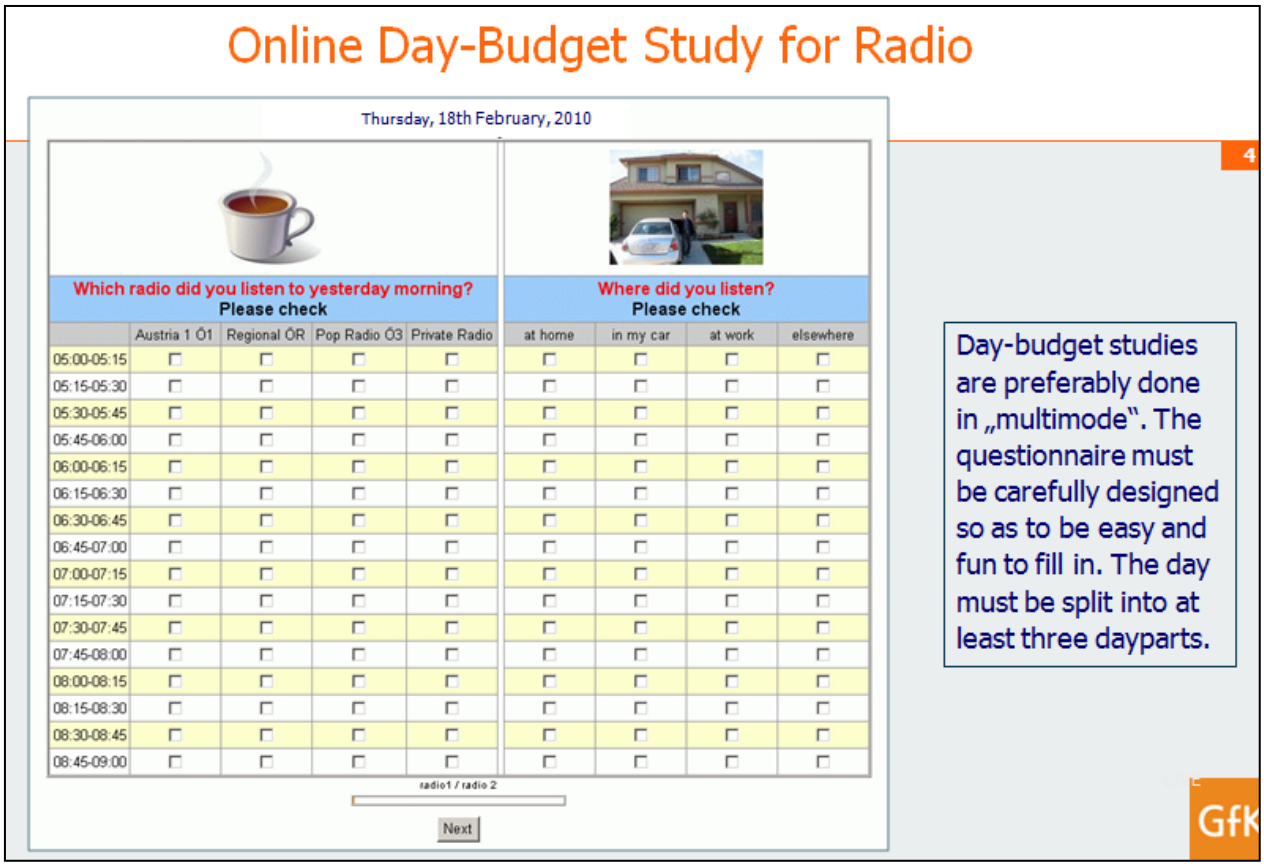
With the high penetration of internet in Western Europe, elements of online research are being implemented in form of multi-mode samples, as they are used in the Netherlands:

In February 2012, the Dutch industry committee NLO (Nationaal Luister Onderzoek) has extended Intomart GfK's contract for national radio audience measurement for another four years. GfK Intomart will use its patented 'GfK Hybrid Model for Radio', which taps into feedback from around 7,500 listeners who record their daily radio consumption online or on paper in 15-minute blocks.

Additionally 325 members of GfK's „Mediawatch" panel will wear a passive electronic meter, built into a wristwatch, to record snatches of the radio program they are listening to, several times per minute.

Through the combination of these two sets of data, GfK says it can offer the Dutch radio market minute-by-minute information on radio audiences for the first time.

Here is a simple model for a radio audience size study to be carried out online. In practice, only the periods of the day in which the respondent first declared that he/she had listened to radio are being displayed (→ filter by day-part listened). Note that not only radio listening at home is indicated but also radio reception in the car and at work. If required, questions could be added as to simultaneous use of other media (newspaper, book, or internet).



Passive Radio Audience Size Measurement

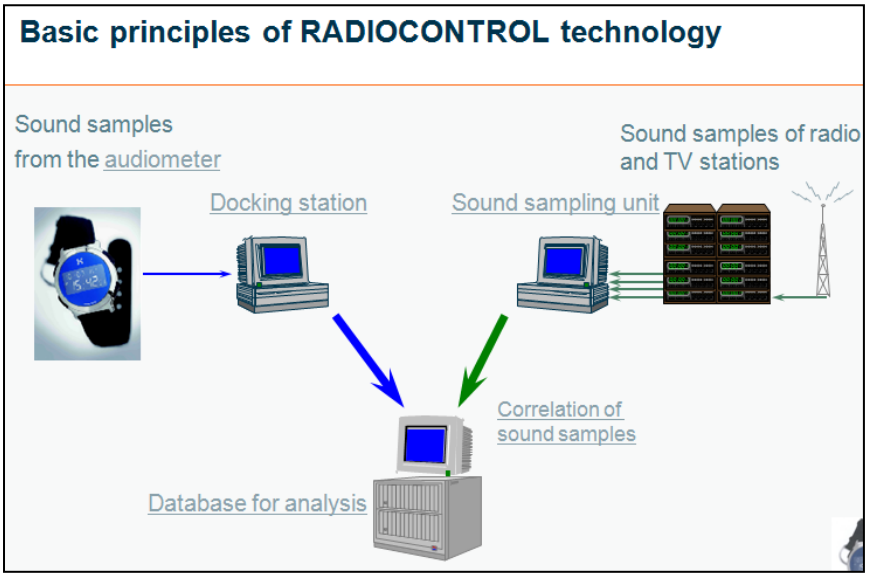
While traditional radio audience research is based on subjective ("active" or "declarative") day-after recall, there are now technical methods for the objective ("passive") measurement of radio signals without any action by the respondent. By means of a small device worn on the body ("Pager") or by a smartphone equipped with a special App, sound samples are picked up from the air, stored, and transmitted to a center for comparison with recorded audio offers and subsequent analysis.

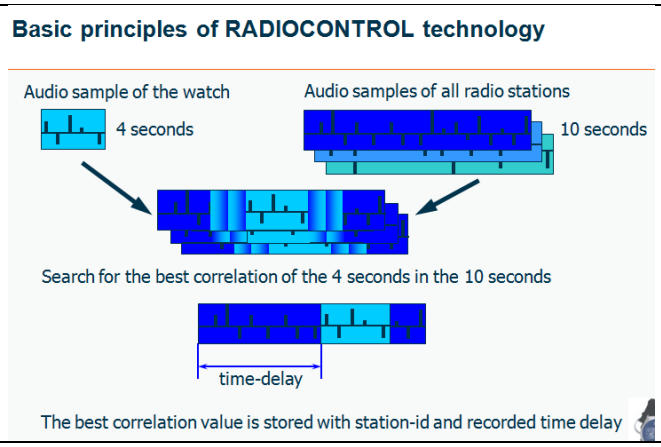
The Mediawatch

The Mediawatch, developed in Switzerland and described below, is a device specially designed to record usage of new/poorly marketed stations with low awareness, especially in congested radio markets in the same way in which strong stations are measured. Although the Mediawatch is not a typical instrument of online research, its technical principle is explained here.

Basically, the Mediawatch is a computerized wristwatch which picks up tiny sound samples every minute from the air. These samples are later stored in a docking station and transmitted to the research center where they are compared with 100% logged soundtracks of all stations in the respective market. A special interface on the watch allows also for registration of newspaper or magazine use.

Note: the Mediawatch can basically measure ALL radio stations which can be received in the area covered by the sample. The same is true if used for measuring TV-channels.





Passive registration of a panel member's exposure to radio sound is much more precise than any subjective recall. All on-air exposure to radio signals can be measured – regardless if such signals are noticed consciously or not – like, e.g., in restaurants of shops. However, running a Mediawatch based panel is technically very complex and therefore extremely expensive.

For this reason only relatively small Mediawatch-based samples are being used in practice – primarily for the calibration of larger recall-based surveys.

The Arbitron Pager

In some markets, research firms such as Arbitron/Nielsaen use portable pager-type devices to record media use automatically. Unlike the Mediawatch, this system is based on picking up a special inaudible sound signal which radio or TV stations must embed in their audio transmissions ("*watermarking*"). Thus only stations cooperating with the institute can be measured.

Note: Watermarking is by no means a simple and cheap procedure. There is the danger of distortion of the audio signal and the possibility of harming the hearing of household pets.

In Denmark, national radio is measured with the help of a portable meter on a minute by minute basis in a panel of n = 750 members with daily reporting.

Nielsen/Arbitron

Loading Station

Kantar/Gallup (DK)

Earphone Adapter

USA:

The **Portable People Meter** (PPM) is a system developed by Arbitron (now Nielsen Audio) to measure how many people are exposed or listening to individual radio stations and television stations, including cable television. The PPM is worn like a pager, and detects hidden audio tones within a station or network's audio stream, logging each time it finds such a signal.
Although the makers of the PPM claim that it is more accurate than traditional alternatives like handwritten logs or wired meters, critics have raised issues about its accuracy. Another sales argument is that the device is immune to human forgetfulness, something that can be an issue in studies that rely on self-reporting by test subjects. There are several parts to the PPM system:

- An encoder that inserts the tones subliminally into a station's or broadcast network's airchain via psychoacoustic masking ;
- A monitor that checks that the encoder is working properly;
- The wearable Portable People Meter carried by each panelist;
- A base station for each PPM, where each panelist in the household places it overnight to recharge the battery; and
- A portable recharger for vacations and other trips away from the home base.

The original PPM concept required the base station to be connected to a telephone line to transmit panelists' listening data from the PPM to the collection point.
The PPM 360, introduced in 2010, uses cellular telephone technology to accomplish this without the need for a wired telephone service. They also have a motion sensor to detect when the PPM is being worn by an active person: After a period of 30 minutes of no activity, they go into a low-power "sleep" mode to conserve battery life.

The Use of the PPM in Sweden

PPM is provided by Nielsen (that made the acquisition of Arbitron) and Nielsen runs all operations in US and in cooperation with Kantar in Canada (where both radio and TV is measured with the PPM) for Numeris. Outside of North America, Kantar runs operations with the same meters for radio measurement in Norway, Denmark, Sweden, Russia, Kazakhstan etc.
→ Kantar is presently changing meter technology to a meter called "**Rate On Air**" provided by Médiamétrie and with Kantar watermarking technology.

The technology works like this: Any sound (radio, tv, video, music, whatever) can be encoded with watermarks that are then detected and decoded by the small pager-like meters worn by a panelists of a panel. Central is the size of the panel in relation to how fragmented the consumption unit you want to measure is. Small channels/radio stations are harder to measure than big ones.
Methodologically the system is solid. Compared to the People Meter there is more information to validate and exclude non-cooperating panelists since validating rules is built on how well panelists carry their meter. The system registers the movement of the meter, and the international standard criteria for inclusion in measurement is set to *eight hours of movement*. If a person forgets their meter at home or does not carry the meter with themselves most parts of the day, that person's data will be excluded. This validation procedure is made on a daily basis as data is collected from the meters that connect to servers over the GPRS network.

In Sweden there is an average in-tab-rate of 82-85% which is of course lower than that of the People Meter which has no possibility of excluding non-cooperation on an individual level. Carrying a meter every day is demanding, so churn (panel turn-over-rate) is higher in a portable meter panel than in a People Meter panel. Churn in Sweden has been steadily decreasing from 70% year 1 to 40% year 4 - now. In Norway, that has had the system longer, they are now down to below 30% churn.
When you go from CATI (or diary) to Portable Meter numbers of Reach rise significantly while listening time decreases. Expected changes based on Nordic examples are:

- Daily reach increased more than 20 %
- Weekly reach increased mor than 10 %
- Channel ranking is unchanged
- 12 – 19 year olds increased more than other age groups (due to the "exposure to radio" definition of listening)
- Shift from AQH to 1 min rating [minute rating day after day is a great advantage]
- Time spent listening dropped due to different calculation rules and over-estimation of time spent when self-reporting (CATI)

Courtesy of **Jakob Bjur**, Research Director | Media KANTAR SIFO

The smartphone approach by Ipsos and Median

IPSOS (FR/UK)

The British-French company **Ipsos** offers their system under the name **MediaCell**. It is a solution in which the software can detect the use of the station both with the help of a code (as in PPM, see above) and with the help of so-called audio matching on the smartphone. Ipsos received a three-year contract from the BBC to test the multi-media measurement

MediaCell provides passive audience and media measurement at an affordable price. IPSOS solutions challenge the established business models offering greater scale for better value, enabling clients to understand their consumers, whether in terms of their cross media consumption or exposure to advertising. Audience measurement is people measurement. Ipsos keeps this in mind and provides the most passive and simple respondent and panelist experience, which in turns leads to the best measurement.
MediaCell is a software technology that enables Ipsos to measure what consumers are exposed to, whether that is the radio, TV viewing, cinema or anything that contains audio. MediaCell is a passive technology application which fits inside everyday consumer devices like smartphones or tablets, transforming them into powerful meters.

- Ipsos meters can use both signal encoding and audio matching – either one alone or both in combination to provide both granularity and platform information.
- Personal Meters: installed on a smartphone, either self-installed by the respondents or Ipsos provided, **MediaCell** enables the tracking of all audio content (TV, radio, cinema, etc.) to which the respondent is exposed. It can track media consumption across channels or can be used to track commercial campaigns across media . All respondents need to do is carry their phone and keep it charged.

People Meters: the powerful TV People Meter provides an affordable alternative to traditional meters, combining an everyday consumer device, at home in the modern living room. The application is installed on a **locked-down tablet** and is integrated with a personalized handset to link back to the viewers. Once mailed to panel homes, they are able to self-install each meter in minutes, greatly impacting the ease and simplicity of the overall panel experience. A key advantage of legacy people meters is the usage of the tablet's touch screen, which becomes a very user friendly interface, greatly enhances the necessary interactions with the metering technology and improving the accuracy of TV viewing attribution.

Set Meters: installed on a **locked-down smartphone** MediaCell is also a Set Meter. This provides information on what is being viewed, and uses advanced modelling techniques to impute who is viewing. This is an affordable route to scalable panels. All panelists need to dois self-install the pre-configured Set Meter by plugging it and leaving it near the television: they can effectively forget about it. Data are then seamlessly received from the panel home without any need for panelists to be further involved.

Median (CZ)

Since July 2014, the Czech Institute Median has measured the use of 19 TV stations, 65 radio stations (85% of the market) and 450 print titles. For two years Czech radio has been conducting program research on the two information programs **CRo Radijournal and CRo Dvojka** with this modern audio-matching technology. Until now, the device was not used by the Czech radio for the current ratings measurement, because at present changes in the method are difficult to introduce in the conservative market.The data desired in addition to the automatic measurement of R/TV and Internet are currently still available via Internet questionnaires.

Further details

The Prague-based company **Median** developed an app for the smartphone in 2012, with which a single-source investigation (radio, TV, Internet, also print) has been conducted since 2014 with a panel of n = 1,000 (15-69 years).
The app is branded "adMeter" and must be downloaded to the smartphones of the panel members.It fully automatically registers all sound signals in the room (radio, TV, cinema) and sends samples of them compressed to the control center.
Audio-matching requires no code and therefore no cooperation with the media providers. The participation of all radio and TV stations for the installation of a code would be very difficult or is practically impossible in Austria and the Czech Republic. (But all media would have to cooperate, since otherwise one can not determine correct market shares).

- The app can also be downloaded to desktop PC and tablet. The battery level is monitored.
- All broadcasts of all stations are recorded fully automatically by "grabbing PCs" spread across the districts of the country and compressed for storage in the institute.
- The sound samples sent from the smartphones of the panel members every second to the research center are compared with the compressed broadcast material (1 MB of data per day).
- This determines the exact ratings during the day in "real time".
- The sensitivity of the microphone can be adjusted via the software. (Also after consultation with user)
- The motion sensor of the smartphone indicates whether the phone is worn or remains unmoved.
- Using the GPS contained in the smartphone, the route of the carrier can be determined (poster research!)
- The adMeter registers every browser-driven URL (internet measurement!)
- If headphones are used, the software accesses the sound card and not the microphone.
- The special feature of the adMeter is the option of scanning the barcode of printed media used in cooperation with the panel members, thus determining not only the radio media but also the newspaper coverage.
- Likewise, consumer research can be operated with the help of the barcode scanner.

Thus, the adMeter makes it easy to use cross-media research (single-source multi-media research), which is becoming increasingly important for the advertising industry.

Utilization of adMeter data

- Cross-media planning and assessment of television, radio, Internet and other media types
- Enables measuring and analysis of the objective impact and effectiveness of cross-media campaigns.
- Cross-media analysis in which the following things, among others, are assessed:
  - ✓ reader behaviour of print in electronic form,
  - ✓ consumption of video content on the Internet in comparison with television ratings,
  - ✓ overlaps of radio audience and television audience.

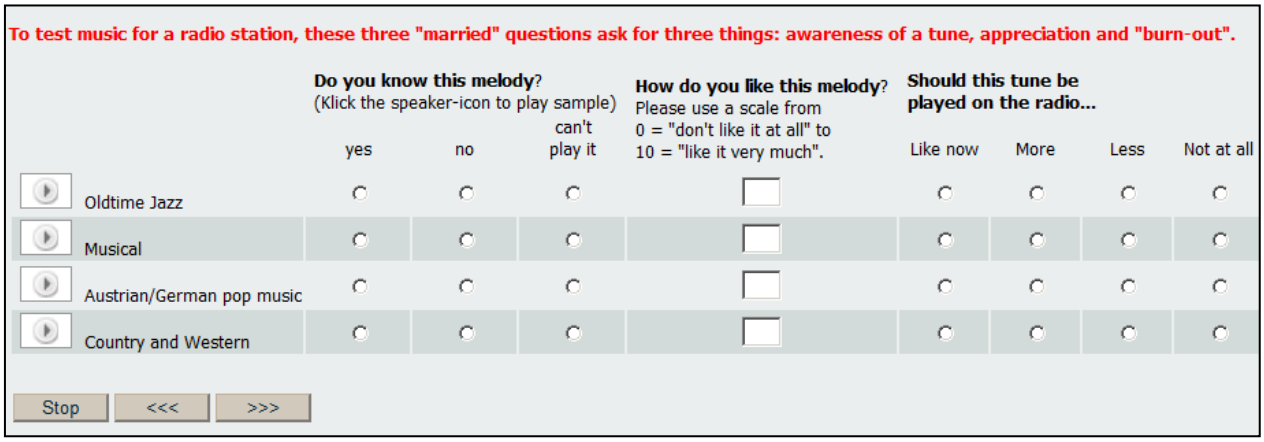
Thus adMeter enables the unification of information about cross-media overlaps and the incremental reach of media types in cross-media campaigns and cross-media behaviour of media consumers.

Music testing

Traditionally, radio music is being tested with the help of so-called auditorium tests. This method requires respondents to travel to a central location (sometimes a room in the radio station itself) where they are asked to listen to hundreds of music samples and entering their judgment into paper-and-pencil questionnaires. Another possibility is telephone research in which music samples are fed into the wire from a hard disk. Both methods are relatively time-consuming and expensive.
Note: Meanwhile, of course, smartphones could be used to record the appreciation figures .

Online research is well suited for testing radio music. Especially commercial pop stations are using this method to test their “music clock” (hourly sequence of titles). In a typical music test, 10 to 20 second music samples (so-called “hooks“) are presented to respondents to be followed by questions about awareness, appreciation and readiness to listen to them again (“burn“).

Another possibility would be to provide households with music samples or upload music videos to YouTube for subsequent testing by online survey. See sample questionnaire below.



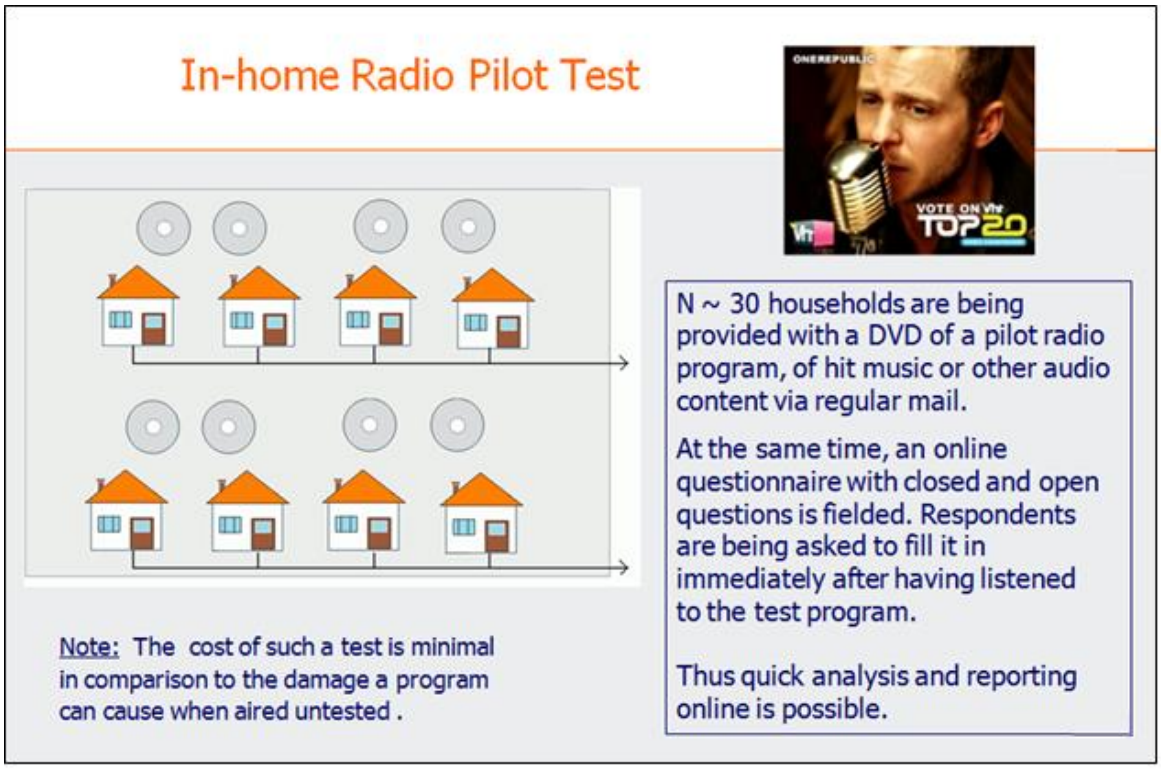
To test music for a radio station, these three "married" questions ask for three things: awareness of a tune, appreciation and "burn-out".

	Do you know this melody? (Klick the speaker-icon to play sample)			How do you like this melody? Please use a scale from 0 = "don't like it at all" to 10 = "like it very much".	Should this tune be played on the radio...			
	yes	no	can't play it		Like now	More	Less	Not at all
Oldtime Jazz	○	○	○		○	○	○	○
Musical	○	○	○		○	○	○	○
Austrian/German pop music	○	○	○		○	○	○	○
Country and Western	○	○	○		○	○	○	○

Stop <<< >>>

In-Home Music Test

Another posibility is to provide a medium-size sample of respondents with audio material at home (by sending them a disc or mailing them mp3-files) and ask them for their opinon.
This can be called a semi-qualitative test as the sample size does not warrant precise information about demographic subgroups, nevertheless the number is big enough to produce credible average data that will not change substantially even with several hundred respondents.
Besides rating along the scale 0-10 it is the sum of verbal statements (“verbatims”) about the different items tested that will make the exercise worthwhile.



Oline Diary for a Culture, Information, or Classical Music Station

In conventional qualitative radio research, paper & pencil diaries are being used to record exposure to a station’s transmissions, find out about attentive listening and enter appreciation scores. With the help of such diaries, radio programs can be rated and “likes” and “dislikes” can be entered in text boxes. Using online for a radio diary has the big advantage that ratings can be swiftly analyzed and comments collected need not to be transcribed. Since the spread of the Internet also into the older segments of the population, online radio diaries will become feasible in practical radio research. See graph below for a simple questionnaire design.

Qualitative Online Radio Diary

	What program did you listen to and how attentively? Please check				
	Radio was on	With attention	My points (0-10)	What was positive?	What was negative?
05:00-05:15 Early Morning News	☐	☐			
05:15-05:30 Baroque Music	☐	☐			
05:30-05:45 Baroque Music	☐	☐			
05:45-06:00 Baroque Music	☐	☐			
06:00-06:15 Morning News & Traffic	☐	☐			
06:15-06:30 Freddy's Morning Show	☐	☐			
06:30-06:45 Freddy's Morning Show	☐	☐			
06:45-07:00 Freddy's Morning Show	☐	☐			
07:00-07:15 Morning News & Traffic	☐	☐			
07:15-07:30 Favorite Classics	☐	☐			
07:30-07:45 Favorite Classics	☐	☐			
07:45-08:00 Program Tips for Today	☐	☐			

etc.

Projective Radio Program Test

This associative test is modeled on the principle of the „Market Scout" (cf. p.43)

Now let's think of something completely different.
Imagine yourself standing before a mysterious garden gate which opens into a world of fantasy.

Please close your eyes. You are now in "Radio 1 Paradise".
Without having to press a button, you can wish for any type of radio program - music, news, anything - whatever you like. At a snap of your fingers your favorite radio program will play.

Please describe in detail what program you would like to listen to in this "Radio 1 Paradise" and jot down what your ideal radio program would be like.

Stop <<< >>>

Online Print Research

Newspaper and magazine publishers can book online research to determine readership sizes, assist editors in optimizing content, and to check advertising effectiveness. Besides, online research can be used to evaluate general readability. Thus leaflets, instruction slips and other printed material can be tested for ease of reading or recall of content.

Note: It is very interesting to observe the differences in perception of newspaper or magazine content/design when comparing the views of readers/subscribers with the views of editors/journalists of one and the same paper.

In the qualitative field, print research can also be done by recording eye movements (eye tracking) – the technology which was described above (cf. p.51).

Here are two practical examples for *quantitative* online print research:

CAWI Print

GfK Austria has been conducting a special online print readership survey since 2006. This project is open to print media which can prove a circulation of at least 20,000 printed copies. The survey is a chance for all those publications to be measured which cannot take part in Media Analysis, the big national media survey, for different reasons (cost, regulations etc.)

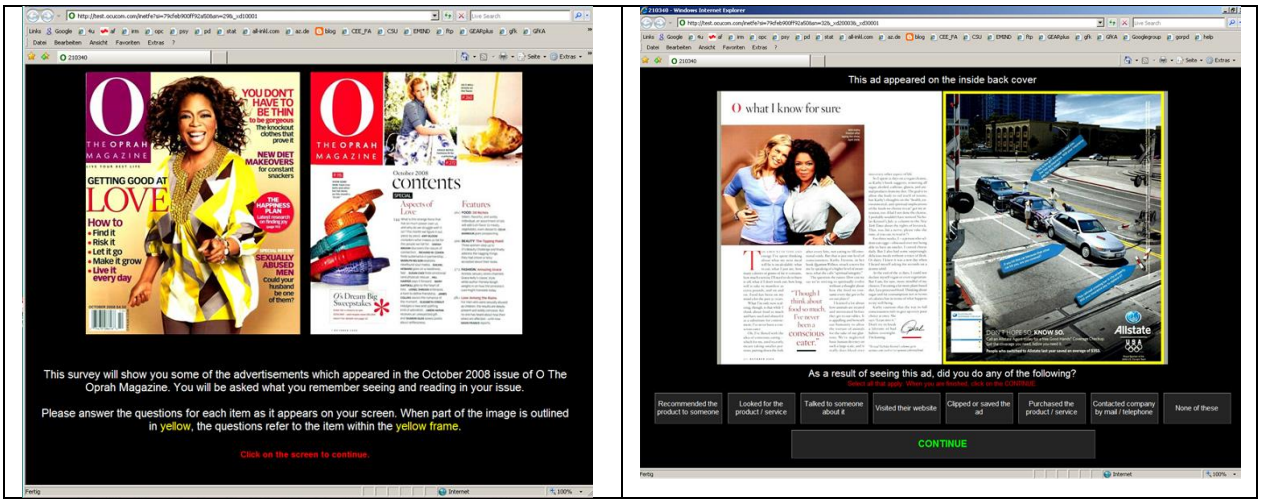
CAWI print is carried out *online* with n= 6.000 (14-69) and uses up-to-date international methodology: contact is being recorded according to the *recent reading model* while according to the *specific issue model* cover images of the last two issues are presented in addition – to the advantage for less known titles. The survey contains numerous questions regarding personal interests, leisure activities and lifestyles.

For more details see:
http://www.tmc.at/dat/cawiprint/CAWI-Print-2016-Hauptergebnisse.pdf

STARCH - a practical way to measure print advertising

Starch Digital is a US syndicated service to measure the readership and effectiveness of digital advertising in online consumer magazines.

For nearly a century, *Starch Advertising Research* has been a trusted source of market intelligence about print advertising effectiveness. Printed pages are being scanned and images presented to respondents online.



In May of 2011, Starch began measuring magazine readers also of digital publications to build a database of ad effectiveness metrics. To date, Starch has measured consumer recall of and response to more than 33,000 digital ads across nearly 1,700 issues of US consumer magazines on tablets, e-readers and in other electronic sources.

Starch Digital provides key ROI metrics on a monthly basis, aggregated by platform or medium used (tablet, e-reader, electronic reproduction) for more than 25 magazine genres and 625 advertised product categories. Metrics include:

- The percentage of readers who noticed a digital advertisement
- How well an ad was read (read any and read most)
- Actions taken as a result of reading a digital advertisement (conversion)

Additionally, Starch Digital's survey is designed to customize questions on unique features in each advertisement. For instance, when a digital ad includes a video or a photo gallery, ad readers are asked if they viewed these features.

Since March 2012, Starch Digital measures every ad in every issue of approximately 40 leading consumer magazines on Tablets, eReaders and in digital reproductions.

The big advantage of the Starch system is the possibility to build a database which allows comparing ads tested with industry benchmarks.

→ http://www.starchresearch.com/services.html

Web Audience Size Measurement

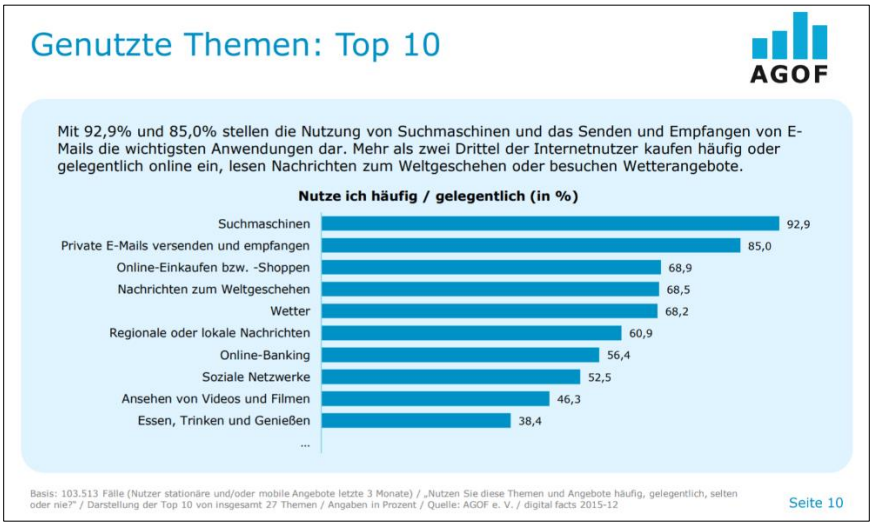
While Internet is the first medium that claims to be able to measure itself, practical measurement of the number of visitors of a Website, their demographic structure and their interests is by no means a simple task. This has to do with facts such as these:

a) As a rule, Websites consist of several pages and contain a variety of files (text, graphs, images, sound, video, banners and other forms of advertising). In comparison with other media, they are rather complex objects.

b) The internet market is extremely fragmented. Except for the top international and national offers, most Websites have audiences well below one percent of the population.
c) Internet is being used not only at home, but also at work, in school, and in different other places. The graph below illustrates the amount of out-of-home use.
d) Increasingly, internet is accessed with mobile devices, especially smartphones, tablets and netbooks.

A thorough measurement system will have to take account of these facts.

Some basic facts about the use of the Internet



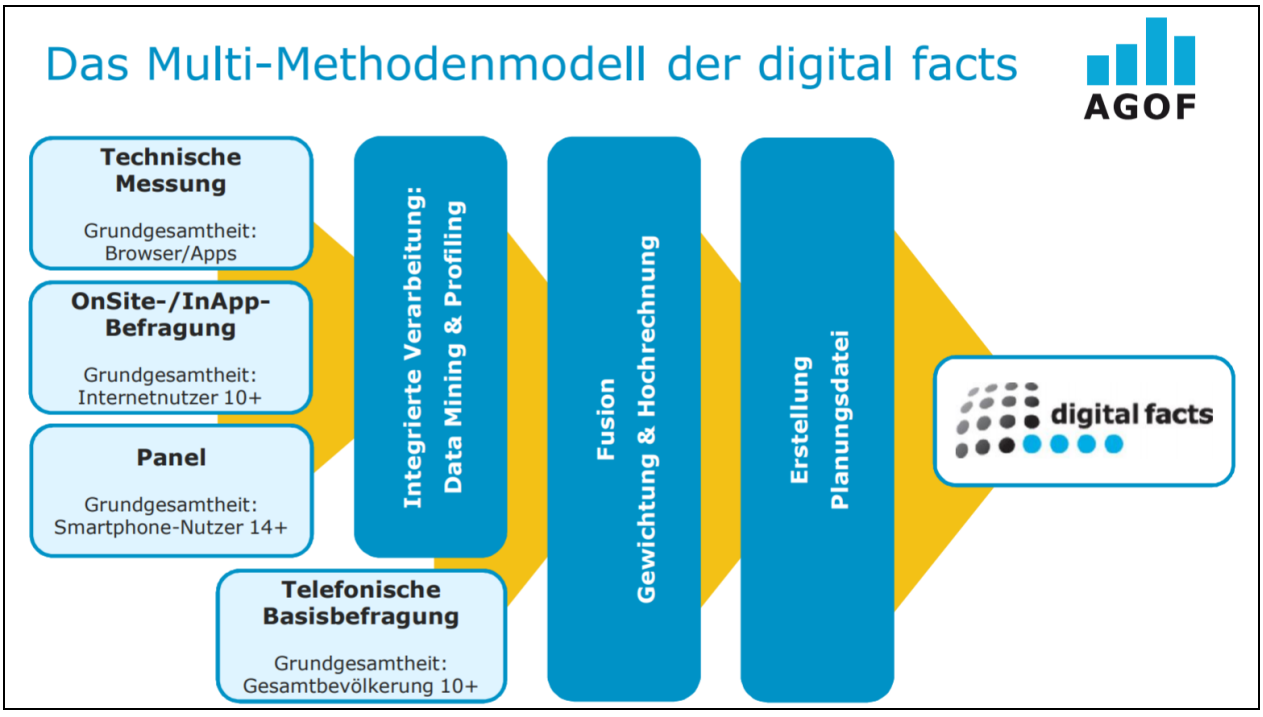
Basically, there are three different approaches measuring the use of a Website:

1. Automatic Web Traffic Measurement (Web Analytics) in combination with surveys

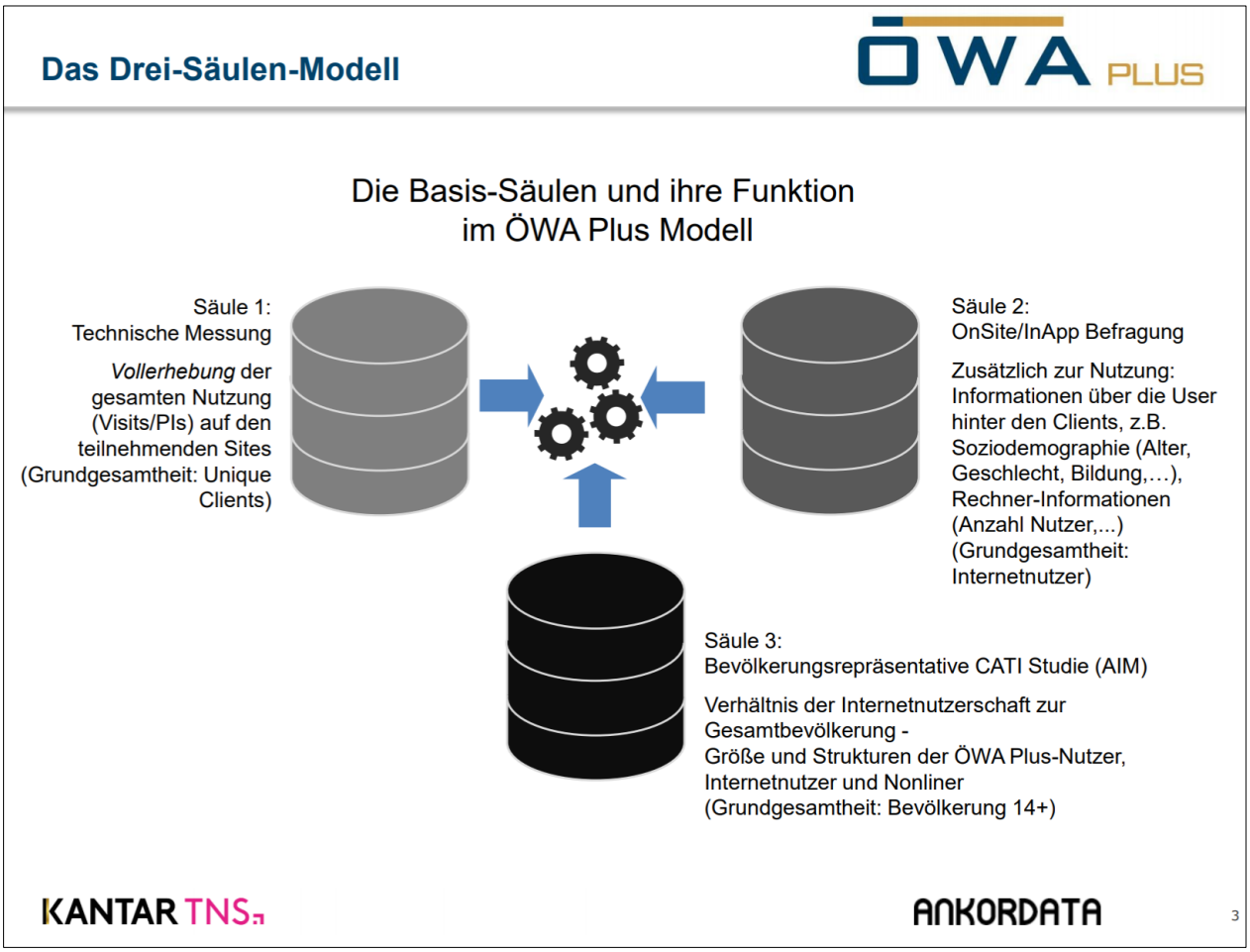
Web traffic can be measured with the help of logfiles recorded on the Web server. A *hit* is generated when any file is served. A page itself is considered to be a file, but images are also files, thus a page with 5 images could generate 6 *hits* (the 5 images and the page itself). A *page view* is generated when a visitor requests any page within the Web site. A *visit* is the uninterrupted use of a single Website's pages. In this way, very precise measurement is possible about contact and length of contact of a *device* (PC, laptop, tablet etc.) with a Web page and its content. Thus precise comparison of Websites regarding the number of *hits*, *unique users*, and *visits*, as well as the duration of visits is possible. Ads entered in a Website by a Web server can also be recorded.

The main problem of automatic (objective) Web traffic measurement is that hits, page views and visits are generated by devices and not by persons. Logfile analysis can therefore not be considered a reliable guide to the actual number of human visitors. Moreover, the demographic structure of the visitors of a site and the actual location where access takes place (at home, at work, at school etc.) remain unknown.
This is why a combination of methods is used.

The German Approach



The Austrian model is quite similar:
Clickstream measurement (Visits, Page impressions) + OnSite Survey + CAWI Survey

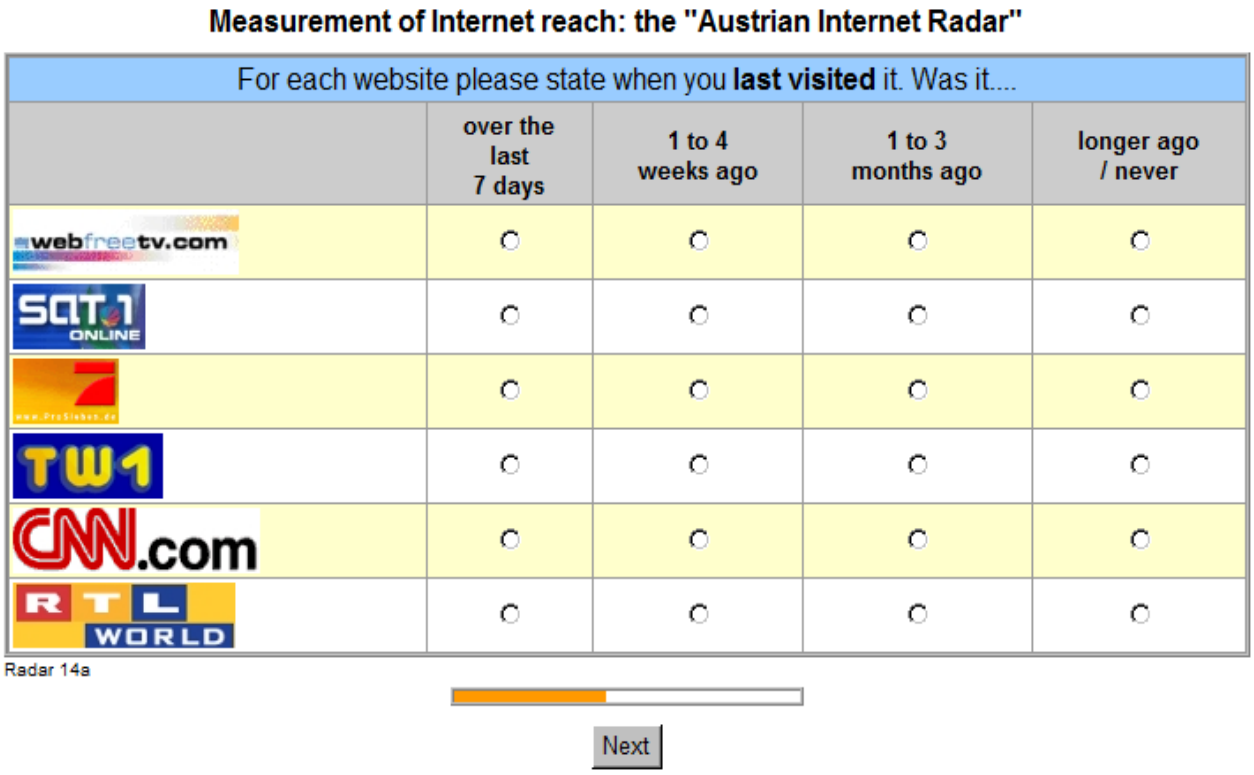


2. Audience Size Measurement by Recall

Similar to the measurement of newspaper reading or radio listening, the number of visitors of a Website can be determined by recall. Due to the fragmentation of Internet use, very large samples (n = 5,000-10,000) are required to get statistically relevant results. Respondents are asked to fill in a questionnaire containing thumbnail screenshots or logos at least of the Websites whose owners are booking the survey. This method is more reliable than asking about use of Websites by telephone. Nevertheless, such demoscopic method has two major disadvantages. First, it has to rely on the memory of the respondent (subjective measurement) and second, not all available Websites can be contained in the questionnaire (an open-ended question asking for Websites visited would be even less precise).
On the other hand, the survey-based recall method has the advantage that it records contact with a Website regardless of the location it was used at or the device it was accessed with. Also, this method can deliver not only a complete socio-demography of the user but also information about his/her possessions, shopping habits, lifestyles etc.

An Experiment: The Austrian Internet Radar

For a number of years, GfK Austria conducted the Austrian Internet Radar (AIR). This was a demoscopic survey based on n = 5,000 interviews, asking the recall for about 120 leading Austrian Websites. The questionnaire contained the logos of all Websites to be tested. All logos were “hot”, i.e., they were linked to the homepage of the respective Website so that respondents could have a look if they were not sure if they had visited that particular site recently. The measurement provided for reach “over the last 7 days” etc. as can be seen in the graph below. The survey also included a question about the frequency of use in order to enable segmentation and to facilitate advertising planning.



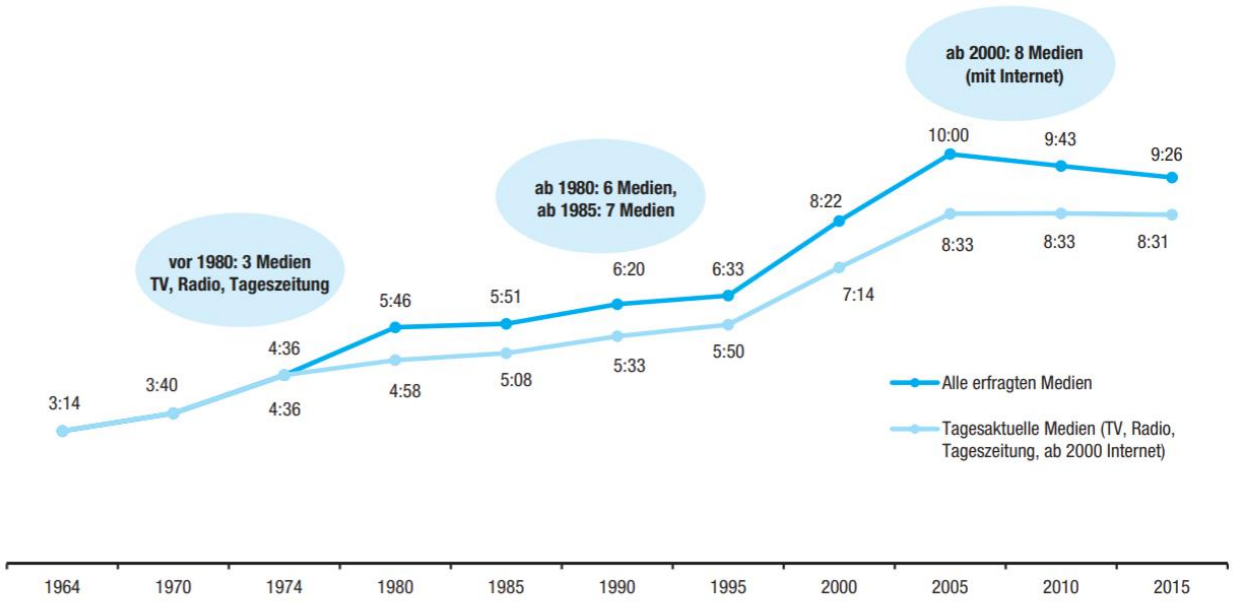
The Austrian Internet Radar was a syndicated study with the ORF as its main customer. Due to the richness of its demographic breaks it was good value for money.

Cross Media Measurement

Increasing Use of Media

Research conducted in Germany 1964-2015 shows a steady increase in the time spent with consuming printed and audiovisual media including the Internet. Although we do not have comparable data for 2016 and 2017, it can be assumed that with the high penetration of the Internet, a culmination point my have been reached with 10:00 hrs already about ten years ago:

Abb. 1 Tägliches Zeitbudget für Medien 1964 bis 2015 – Gesamtbevölkerung
Personen ab 14 J., in Std.: Min./Tag (brutto)



Ab 1980: Außer TV, Radio, Tageszeitung zusätzlich Tonträger, Bücher, Zeitschriften.
Ab 1985: zusätzlich Video.
Ab 2000: zusätzlich Internet.
Basis: BRD gesamt (bis 1990 nur alte Bundesländer), Mo-So (bis 1990 Mo-Sa), 5.00 Uhr-24.00 Uhr; 1964: Pers. ab 15 J.; 1964/1970: 5.00-1.00 Uhr; 1974-1985: 5.30-24.00 Uhr; bis 2005 Deutsche, ab 2010 deutschspr. Bevölkerung.

Quelle: ARD/ZDF-Langzeitstudie Massenkommunikation. In: Media Perspektiven 11/2015, S. 506.

Tab. 4 Nutzungsdauer der Medien 2015
Mo-So, 5.00-24.00 Uhr, Personen ab 14 J., in Min./Tag

Fernsehen	208
Radio	173
Internet	107
CD/LP/MC/MP3	24
Tageszeitung	23
Bücher	19
Zeitschriften	6
Video/DVD/Blu-ray	6

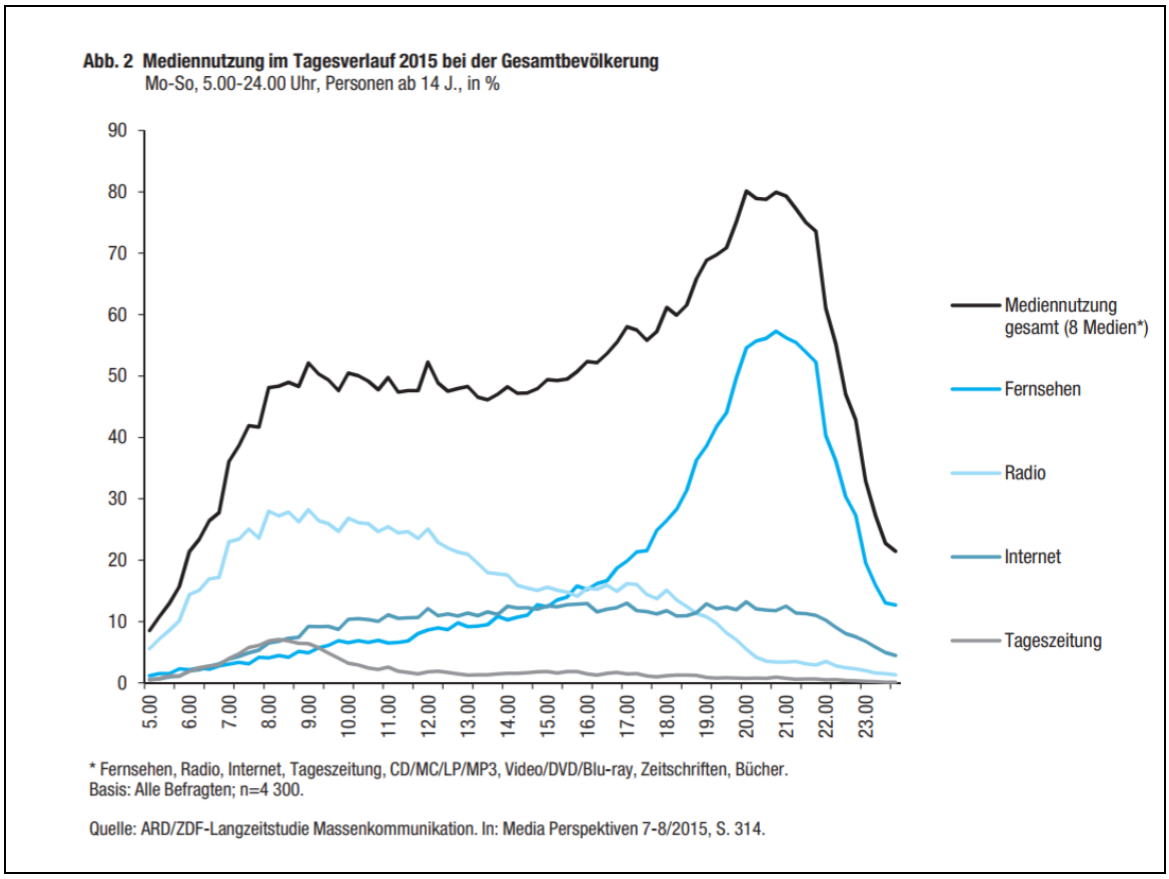
Basis: Alle Befragten; n=4300.

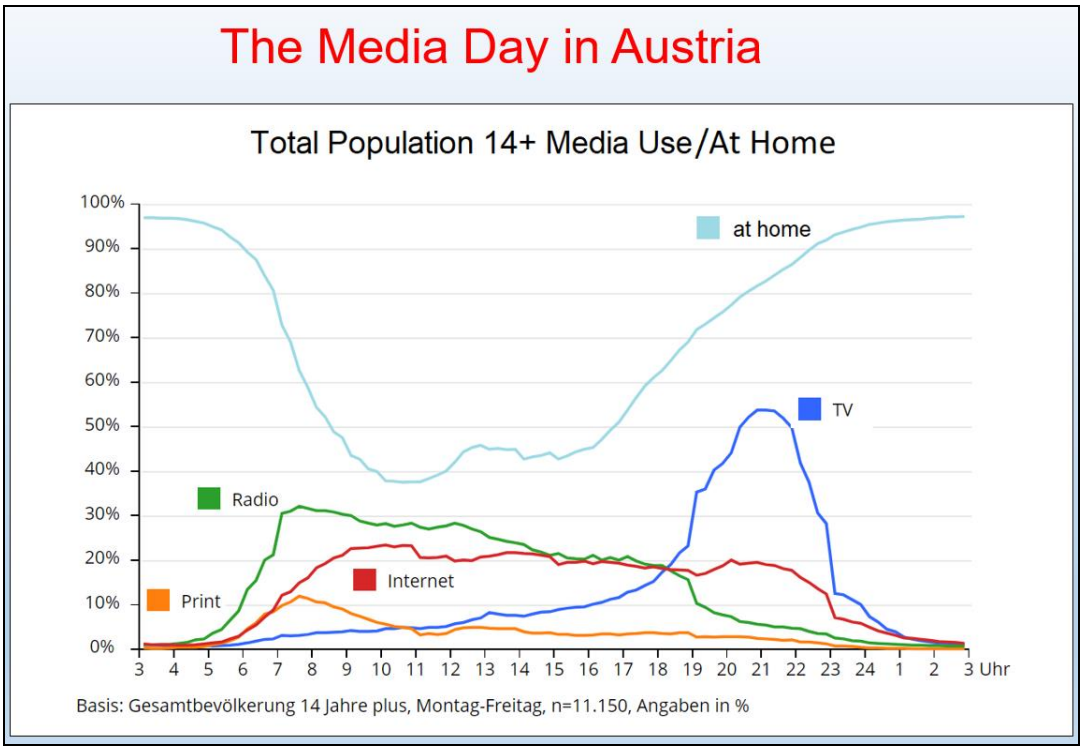
Quelle: ARD/ZDF-Langzeitstudie Massenkommunikation.

The graph to the left shows the time spent on the different media groups by persons 14 plus in Germany from Monday to Sunday in 2015.

Source: http://www.ard-werbung.de/fileadmin/user_upload/media-perspektiven/pdf/2016/02-2016_Klingler_Turecek.pdf

Media use over the average day in Germany and Austria:

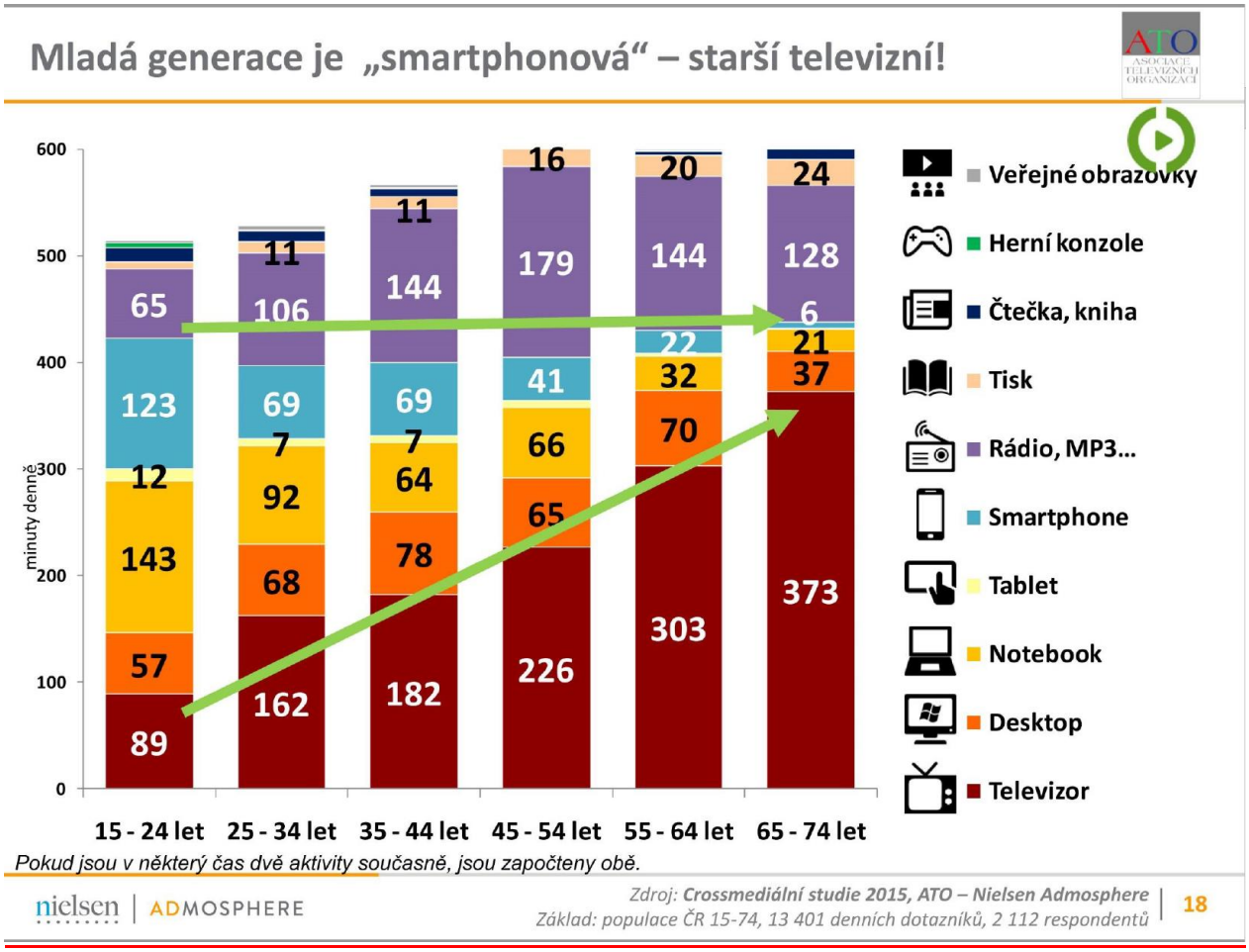




Cross-media and **cross-platform** research are important tasks today not only because of the large amount of time spent with media in today's fragmented media markets, but also because of the big differences in media use amoung age brackets.

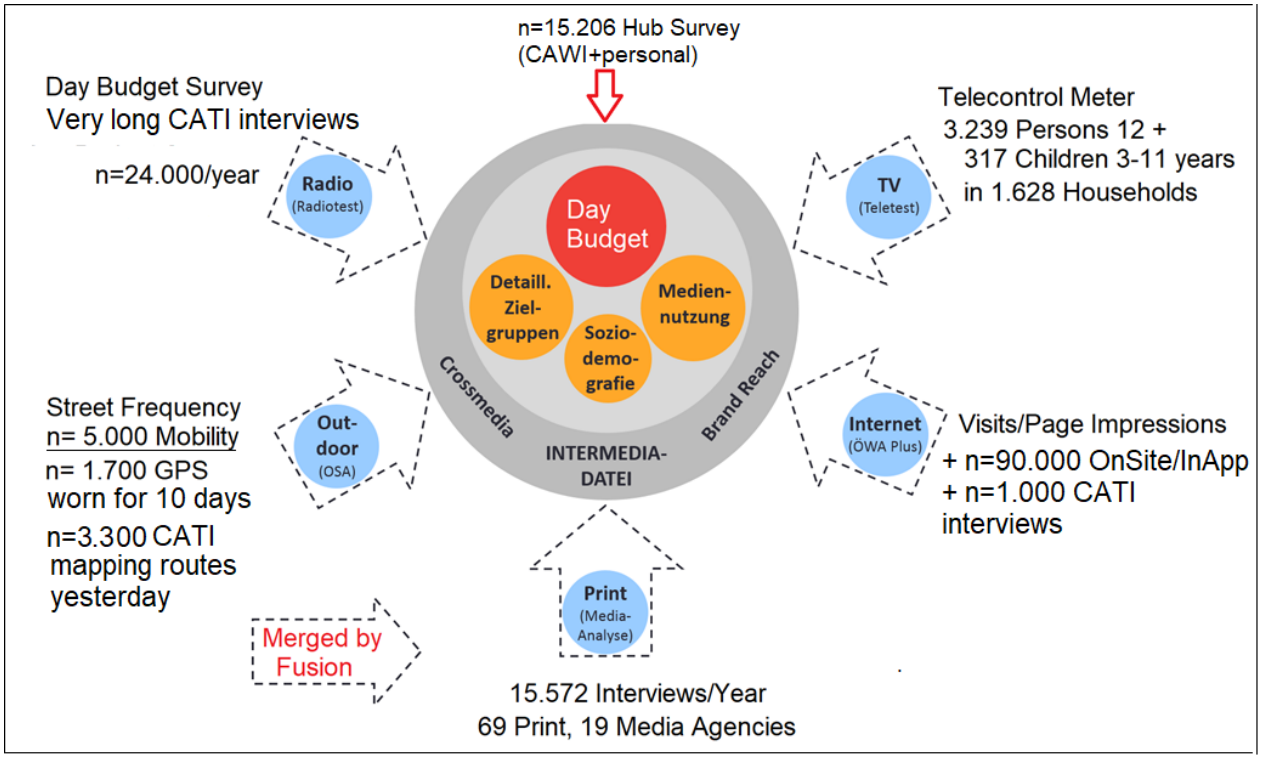
This is best shown by a graph published by the Czech Television Organization ATO. The graph illustrates the daily minutes devoted by the Czech population to the following media:

Public Screens, Gaming console, E-Book and Book, Printed Media, Radio/mp3, Smartphone, Tablet, Notebook, Desctop PC and Television.



The data above are practically equal with those from Germany and Austria.
As a consequece of the developments in media consumption, up-to-date models of cross-media and cross-platform research have been developed. Below please find some examples.

The Austrian "Media Server"



The Austrian **Media Server** is a multi-media project that combines the so-called "currency studies" (Teletest, Media Analysis, Radiotest, ÖWA Plus, Outdoor Server Austria) by fusion into one data set. For media companies, advertising industry and media agencies it providews a sound basis for strategic planning. More and more media houses offer their content on different platforms. The media landscape and subsequently media behavior are becoming increasingly complex and fragmented. Intermedia planning has become an everyday necessity. The Media Server is conceived as an objective and valid innstrument accepted by all classical media types players in the advertising business. Here are the characteristics of the all-important "Hub survey":

- Universe for the "Hub" survey: German-speaking resident population 14 years +
- Sampling: Random Last Digit RLD - Recruitment via Telephone with C-ERS
- DAR ("Day after Recall"): 15,206 interviews, daily routine on a quarter-hour basis and profiling questionnaire (= approx. 50 minutes)
- Questionnaire: on request via the Internet (CAWI) or in person (CAPI-CASI)
- Field time: 1 July 2014 to 30 June 2015
- Incentivization: 8 Euro voucher / 8 Euro donation per interview
- Institute: Field and Evaluation: Project Association GfK Austria / IFES
- Fusion: GfK Austria / H.T.S.

Respondents are recruited by telephone using the RLD procedure and, as a matter of principle, can choose one of the following two options during the recruiting interview:

CAWI: Respondents receive a link from the institute with which they can enter and complete the questionnaire. Respondents who are technically capable of this method will be offered first.

Online CAPI-CASI: An interviewer visits the respondent and hands over the interviewing laptop with a request to complete the questionnaire. If necessary, the interviewer may assist the respondent.

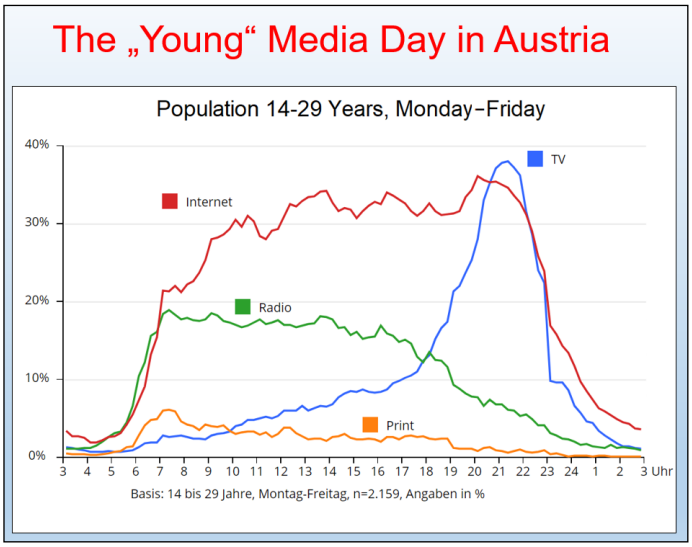
Contents of this survey are the daily routine on a quarter-hour basis and a detailed profiling questionnaire.

The association Media Server has developed and programmed its own procedure for querying the daily routine. By using the drag-and-drop technique and the interactive, individual presentation of the daily routine, which adapts to the individual daily routine of the respondents, the response and the depth of detail of the answers are improved. The contents of the survey are in detail:

Daily routine on a quarter-hour basis:

Whereabouts (At Home, Not At Home Job / Education, Not At Home Elsewhere, On The Road)

Main activities / transport (such as housework, food / drink, hobbies / leisure / sports, shopping / errands, cafes / restaurants / bars, car / motorbike, metro, etc.)Media genres (Print: Total, Newspapers / Regional (weekly) Newspapers, Magazines and Periodicals; TV: Total, TV program on TV, Recorded TV program on TV, Media libraries on TV, Television programs / Media libraries online; Radio total; Internet: etc. etc.



Especially when looking at the average daily media consumption of persons 14-29 years – where Internet has already passed radio in importance – it becomes clear how important it is to create models of cross-media research which offer to the advertising industry data for strategic planning with the intention to optimize media plan so as to avoid unnecessary duplication of contacts.
Source: https://www.vereinmediaserver.at

Cross-Platform (1): Average Audiences of Streaming TV in Austria

Whereas “Cross-Media Research” deals with determining and analyzing the best way of advertising across different types of media, “Cross-Platform Research” is intended to determine the audience created by one medium transmitting on different channels. The most important case in point is the analysis of ratings created by terrestrial or satellite TV and its simultaneous reception by Internet (“streaming”). In the case of Austrian TV like in other countries this is carried out by “tagging” all video signals of participating stations thus enabling the research institute to produce an additional rating figure for TV watched online. Here is an example of the average reach of Web TV in Austria:

AGTT Streaming Hitlisten | Nutzung in der Woche | nach Anbieter — **Live + VOD**

KW 49, 04.12.2017 - 10.12.2017 — vorläufige Daten

Inklusive Autostart, gegebenenfalls auch im nicht sichtbaren Bereich.

ORF

Pos	Sender	Cliptype	SendungsBeitragsName	Dauer	DRW_AT TOTAL	BV_AT TOTAL
1	ORFeins	live & VOD	WILLKOMMEN OESTERREICH MIT STERMANN UND GRISSEMANN - Gesamtsendung - 2017-12-05 22:03:00	00:54:59	22.361	161.358
2	ORFeins	live	SLALOM HERREN VAL D ISERE DG2 - Gesamtsendung - 2017-12-10 12:30:05	00:58:46	13.368	70.662
3	ORFeins	live	RTL HERREN VAL D ISERE DG2 - Gesamtsendung - 2017-12-09 12:30:00	00:52:51	12.380	61.905
4	ORFeins	live & VOD	SOKO DONAU - Gesamtsendung - 2017-12-05 20:16:03	00:42:43	12.378	20.197
5	ORF2	live & VOD	ZEIT IM BILD 1 - Gesamtsendung - 2017-12-04 19:30:11	00:17:34	10.416	86.485
6	ORFeins	live & VOD	VORSTADTWEIBER - Gesamtsendung - 2017-12-04 20:15:25	00:46:32	8.811	15.945
7	ORF2	live & VOD	ZEIT IM BILD 1 - Gesamtsendung - 2017-12-06 19:29:29	00:18:09	7.968	59.993
8	ORF2	live & VOD	ZEIT IM BILD 2 - Gesamtsendung - 2017-12-06 22:00:58	00:24:55	7.935	52.996
9	ORF2	live & VOD	ZEIT IM BILD 1 - Gesamtsendung - 2017-12-09 19:30:02	00:16:11	7.889	67.418
10	ORFeins	live	SLALOM HERREN VAL D ISERE DG1 - Gesamtsendung - 2017-12-10 09:30:00	00:46:45	7.771	34.781

ATV

Pos	Sender	Cliptype	SendungsBeitragsName	SeasonID	Dauer	DRW_AT TOTAL	BV_AT TOTAL
1	ATV	VOD	Austria's Next Topmodel - Gesamtsendung - 2017-12-07 20:15:00	8	02:08:03	5.935	92.231
2	ATV	VOD	- Gesamtsendung - *	14	01:33:32	5.389	77.274
3	ATV	VOD	Austria's Next Topmodel - Gesamtsendung - 2017-11-30 20:15:00	8	01:48:19	2.322	31.086
4	ATV	live	TOI TOI TOI GEWINNZAHLEN MO SO - Gesamtsendung - 2017-12-07 21:49:58	-	00:00:44	894	906
5	ATV	live	AUSTRIAS NEXT TOPMODEL - Gesamtsendung - 2017-12-07 20:16:29	-	02:08:06	849	3.314
6	ATV	live	BAUER SUCHT FRAU - Gesamtsendung - 2017-12-06 20:15:23	-	01:33:35	819	2.218
7	ATV	live	LOTTO JOKER QUOTEN MO DO - Gesamtsendung - 2017-12-07 20:51:40	-	00:01:29	815	847
8	ATV	live	TOI TOI TOI - Gesamtsendung - 2017-12-06 21:44:25	-	00:00:44	793	806
9	ATV	live	LOTTO - Gesamtsendung - 2017-12-06 20:42:50	-	00:00:40	753	767
10	ATV	VOD	Austria's Next Topmodel - Gesamtsendung - 2017-11-23 20:15:00	8	01:51:05	740	11.457

P7S1P4

Pos	Sender	Cliptype	SendungsBeitragsName	Dauer	DRW_AT TOTAL	BV_AT TOTAL
1	SAT.1	VOD	THE VOICE OF GERMANY - Gesamtsendung - 2017-12-03 20:15:36	02:18:45	8.542	111.516
2	PRO7	live & VOD	THE VOICE OF GERMANY - Gesamtsendung - 2017-12-07 20:15:01	02:10:09	8.102	116.753
3	SAT.1	live & VOD	THE TASTE - Gesamtsendung - 2017-12-06 20:15:14	02:29:33	2.651	42.696
4	Voice of Ger	VOD	The Voice of Germany - Gesamtsendung - *	00:02:54	1.855	3.489
5	PRO7	VOD	THE VOICE OF GERMANY - Gesamtsendung - 2017-11-30 20:15:29	02:12:20	1.783	27.701
6	SAT.1	VOD	HOCHZEIT AUF DEN ERSTEN BLICK - Gesamtsendung - 2017-12-03 17:30:55	01:45:22	1.678	25.374
7	SAT.1	live & VOD	LUKE DIE WOCHE UND ICH - Gesamtsendung - 2017-12-03 23:28:42	00:42:26	1.467	8.158
8	SAT.1	live & VOD	THE VOICE OF GERMANY - Gesamtsendung - 2017-12-10 20:14:10	02:16:53	1.409	17.059
9	PRO7	VOD	DIE BESTE SHOW DER WELT - Gesamtsendung - 2017-12-02 20:16:06	03:05:26	1.358	21.209
10	PULS 4	live & VOD	PRO UND CONTRA DER PULS 4 NEWS TALK - Gesamtsendung - 2017-12-04 22:35:52	00:51:14	1.337	6.142

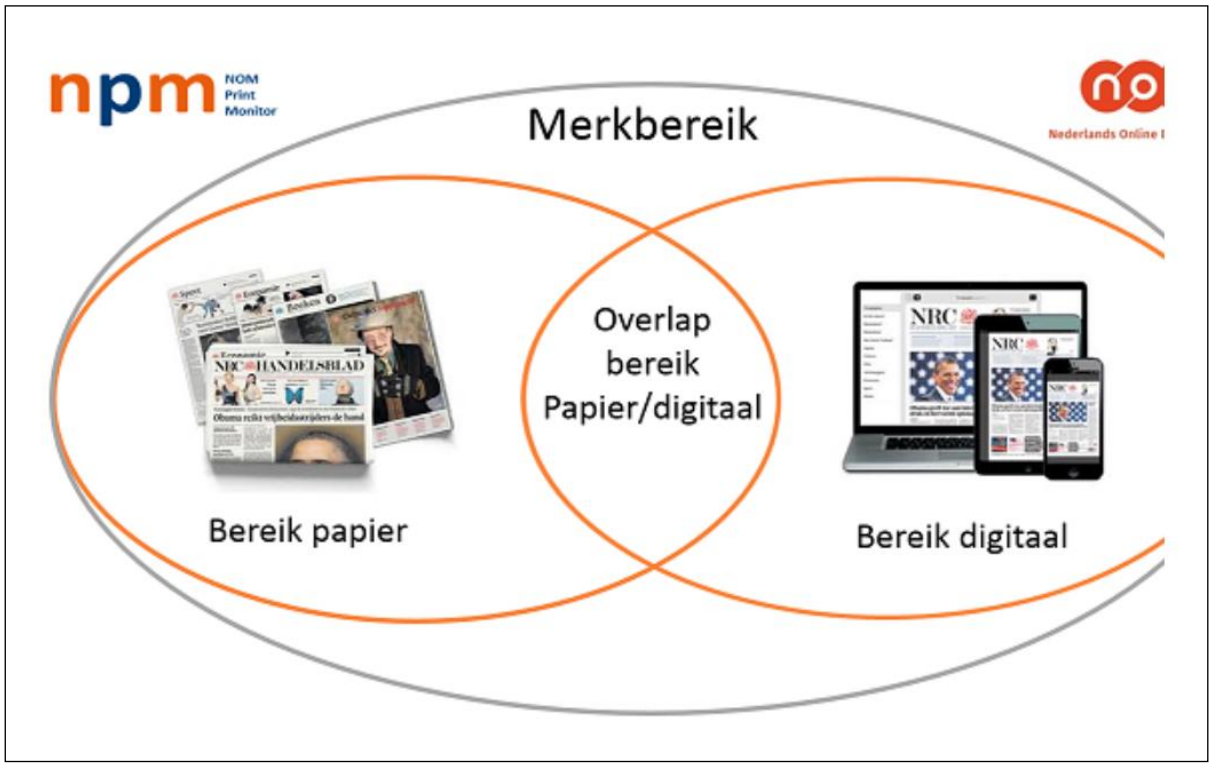
IP

Pos	Sender	Cliptype	SendungsBeitragsName	Dauer	DRW_AT TOTAL	BV_AT TOTAL
1	VOX	VOD	CLUB DER ROTEN BAENDER - Gesamtsendung - 2017-12-04 20:15:58	00:45:52	1.715	9.351
2	RTL	VOD	GUTE ZEITEN SCHLECHTE ZEITEN - Gesamtsendung - 2017-12-04 19:38:13	00:22:06	1.654	5.303
3	RTL2	VOD	Berlin - Tag & Nacht - Gesamtsendung - 2017-12-04 19:00:00	00:44:22	1.608	8.237
4	VOX	VOD	CLUB DER ROTEN BAENDER - Gesamtsendung - 2017-12-04 21:12:02	00:44:51	1.556	7.610
5	RTL	VOD	GUTE ZEITEN SCHLECHTE ZEITEN - Gesamtsendung - 2017-12-05 19:39:07	00:21:50	1.464	4.596
6	RTL2	VOD	Berlin - Tag & Nacht - Gesamtsendung - 2017-12-07 19:00:00	00:44:37	1.355	6.459
7	RTL2	VOD	Berlin - Tag & Nacht - Gesamtsendung - 2017-12-05 19:00:00	00:44:58	1.351	7.267
8	RTL2	VOD	Berlin - Tag & Nacht - Gesamtsendung - 2017-12-06 19:00:00	00:44:19	1.300	6.610
9	RTL2	VOD	Berlin - Tag & Nacht - Gesamtsendung - 2017-12-08 19:00:00	00:44:14	1.277	5.930
10	RTL2	VOD	Köln 50667 - Gesamtsendung - 2017-12-04 18:00:00	00:43:43	1.196	6.232

Note: The additional ratings are relatively low - which raises the question of cost efficiency of the exercise. It is probably the idea to monitor TV use by young viewers.

Cross-Platform (2) Print plus Online

Another example is a recent project started in the Netherlands, where the readership data of 154 print objects and 88 online brands were fused by GfK into one databank which offers many possibilities for strategic cross-platform planning:



Source: http://www.vinex.nl/nieuws/

Online Advertising Research

Note: Most methodological approaches that have been dealt with under the other headings of this paper are also applicable to advertising research.

1. Web advertising

Internet advertising agencies measure the efficiency of Web advertising (banners and "rich" media inserted into Websites by special ad servers) with sophisticated logfile analyses (hits, page views, visits, unique clients, duration of visits, click-through and path analyses). This is important, because advertisers have become used to relating cost to exact contact or follow-up data (click-throughs, conversions, etc.).

Note: Without surveys, demographics cannot be determined because clickstream measurement dedlivers data only of "devices" not of "persons".

However, online advertising - like any other type of advertising - can also be tested by means of qualitative or quantitative online research in the form of pre-testing, post-testing or tracking studies.

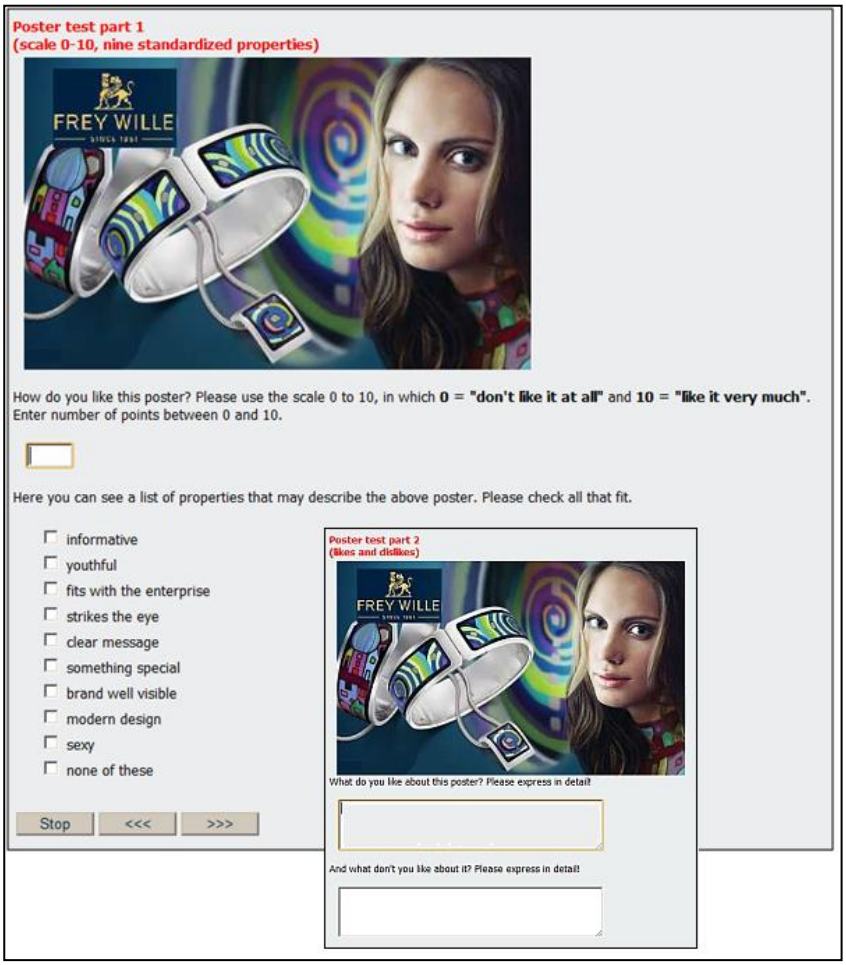
2. Offline advertising

From magazine ads to outdoor billboards, measurement of advertising efficiency can be effected by qualitative online research (mostly bulletin boards). One method is to comment and compare different drafts of posters, logos, leaflets, or text („copy test“). Another possibility, already mentioned, is eye tracking which must always be followed by intensive interviewing about the “whys“.

The Poster Test

The testing of posters and outdoor billboards can be easily done by a quantitative online survey. Below please find an example of the Poster Test developed by GfK Austria.
It is conducted by means of regular surveys with a sample size of n = 200.

On a first screen the poster is displayed and the general appeal is measured with the “points” scale 0-10.

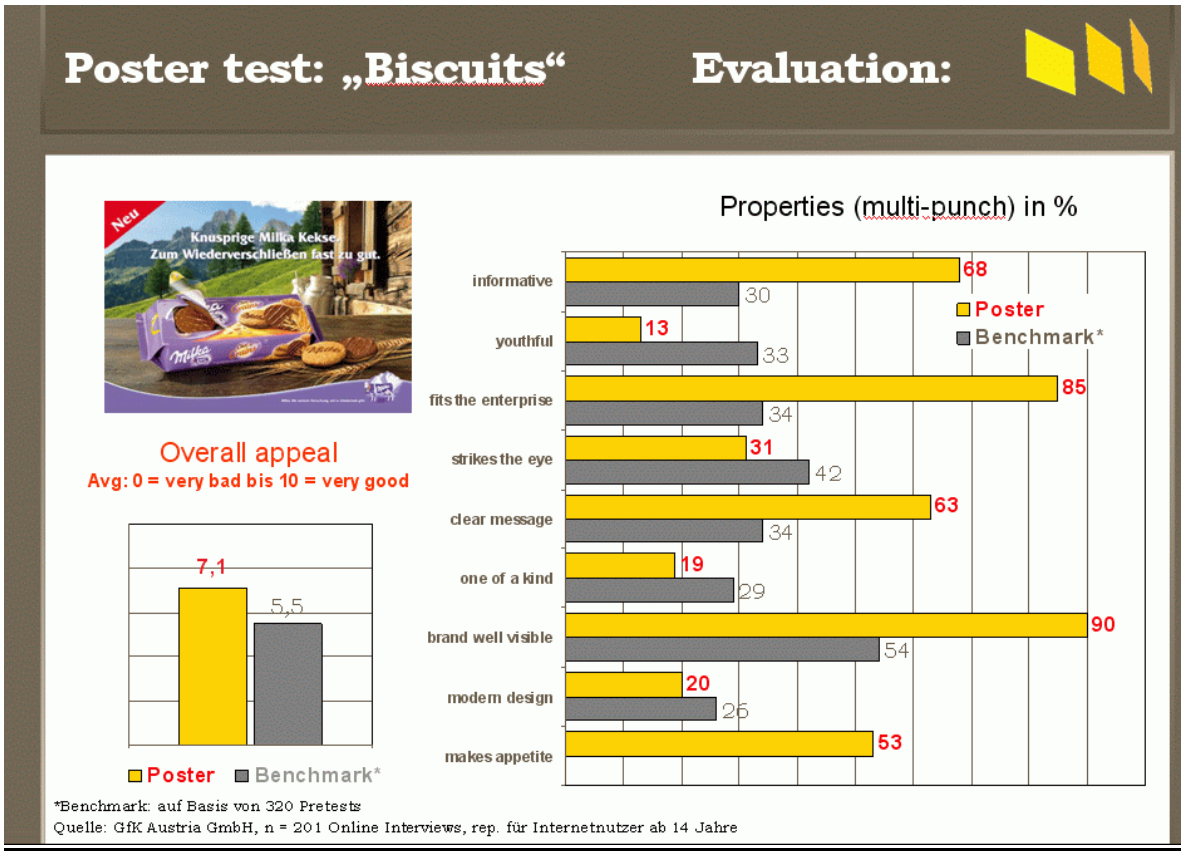


The respondents are then asked to check any of eight special properties relating to advertising on billboards.

In a second screen, “likes” and “dislikes” are to be entered into two separate boxes, The main results and the unchanged entries (verbatims) into these boxes are made available to the client with a PowerPoint Presentation.

By storing all results in a database, the Poster Test can establish industry benchmarks.

Thus, the dimensions of any newly tested billboard can be compared with the average data in the same category.



The example above contains the results for a very well-received poster. The poster itself shows crispy chocolate cookies in front of an alpine chalet preparing for the delivery of milk. Note the high percentages for *informative, fits the enterprise, has a clear message brand well visible*. The dimension *makes appetite* was not a standard property but was included upon request of the client.

High percentages as the ones shown above are quite rare – they explain the overall appeal of this poster which received an excellent score of 7,1. The average rating of more than 320 Austrian posters along the scale 0-10 was relatively low (around 5.5 points).

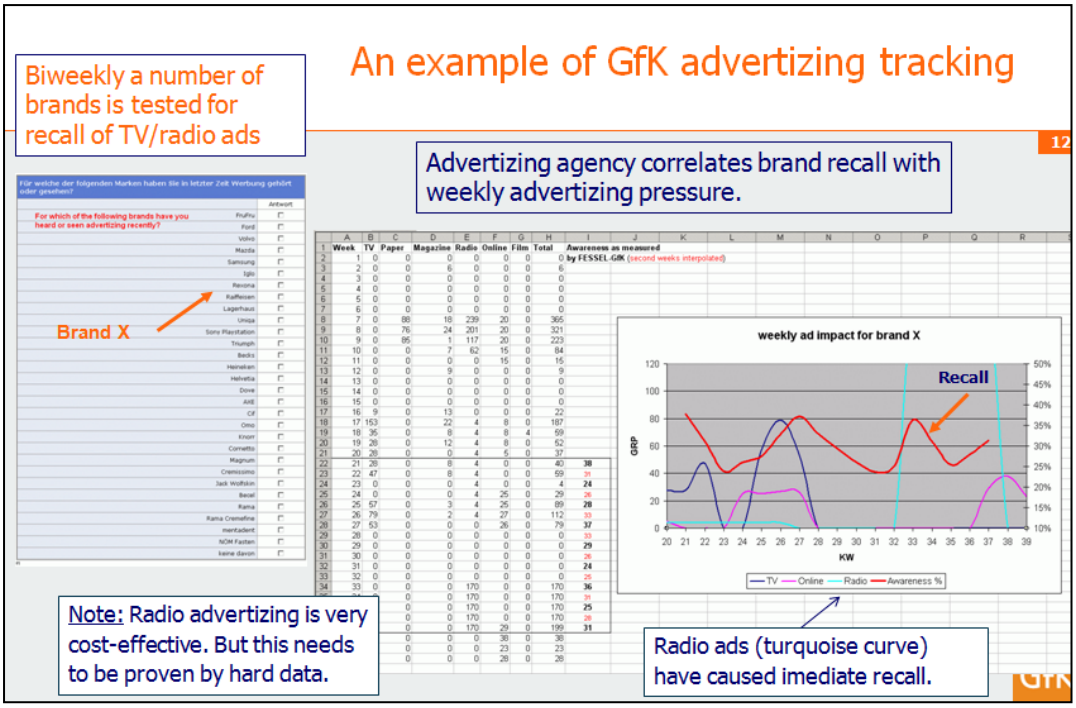
What about neuroscience?

Physiological measures of various kinds - including electroencephalography (EEG) measures of brain waves, galvanic skin response, heart rates, pupil dilation and new brain imaging techniques such as functional magnetic resonance imaging (fMRI) - are being used in an attempt to explore the underlying neurological basis of advertising effectiveness. These so-called “hard” measures gained in personal one-to-one exercises with the aid of complex and costly apparatus may well show attention peaks. But they have two decisive drawbacks: first, results contain no “reasons why”, and second, for

practical reasons the number of cases is low. “Soft” online tests like the one described above have no such problems.

Advertising Tracking

The graph below describes a tracking project to measure the effects of different advertising campaigns on the awareness of a product. The method is simple: brand recall is being asked online in periodical surveys. Increased advertising pressure in TV and Radio (dark and light blue curves) is instantly followed by higher recall (red curve).



Special Target Groups of Online Research

Tests with doctors, patients or medicine users

Research in the field of pharmaceutics and health needs special methods. Medical doctors are stressed by a multitude of questionnaires and are therefore quite money-oriented. Online research may work better than conventional telephone based studies.

Persons with health risks, patients and medicine users, on the other hand, are not always ready to talk about their situation. This is where online research comes in: it is much easier to “talk” to a computer than to spread out one's health problems in front of an interviewer. Since people with health problems inform themselves increasingly via the Internet, they are also more ready to take part in online research.

Note: Unless addresses can be provided by the client, participants must be recruited from address pools by special screening.

Delphi Studies

A “Delphi” is a semi-qualitative survey project, usually with experts in a specific field, which runs in at least two consecutive rounds.

Conducting an expert Delphi study requires recruiting a sample of professionals who are willing and able to take part in a multi-stage online research exercise. The participants must be informed about the institute's intention to conduct two or three survey rounds with them. They should be willing to accept the opinions of other colleagues. As a rule, incentives will be higher than average.

After analysis of the data of the first round (or „wave“), the results are communicated to the participants. In the light of the results of the first wave, in the second wave participantsa can modify their previous opinions or stick to them. Conducting a third wave would lead to further refinement of arguments.

Note: In an optimal arrangement, the topic in question should first be prepared by desk research and then discussed in an online bulletin board to collect enough material for designing the questionnaire for the first quantitative Delphi wave.

Online is very well suited for Delphi surveys because experts are hard to reach on the phone and also because of the possibility to use graphs or other multi-media material in the questionnaires. As in all forms of online research there are con geographical restraints.

Note: For details have a look at:

http://en.wikipedia.org/wiki/Delphi_method or at

http://www.horx.com/Zukunftsforschung/2-09.aspx

Qualitative Data Analysis

Word Clouds

A word cloud generator can be used to quickly analyze a text *corpus*: answers to open-ended questions (verbatims) or any other text can be converted into a colorful *cloud* which displays the words in sizes according to the frequency of their occurrence.

Wordclouds: https://www.wordclouds.com/

Using this program, all one has to do is to paste the text into the box on http://wordclouds.com. The free program accepts also texts from Web pages or blogs. It is possible to restrict the number of words displayed and to select a specific layout and coloring. In the first example below, the answers to the "Online Market Scout" about travelling to Egypt are presented in the form of a Word Cloud.

The second example shows the results of an open question asking Czechs and Austrians: "What personality can you think of with regard to your neighboring country?"

Czech respondents about Austria

Austrians about the Czech Republic

„Tocloud"

This free program also creates word clouds. They are not as flashy but can display the number of occurrences (word frequency). So it can be used for a first look at a text corpus to find out which words dominate it. The following example is an analysis of the US constitution. The words „United", „States" and „State" were excluded and the number of words was restricted to 100: http://www.tocloud.com/

Text Analysis and Coding

Many researchers are reluctant to use open-ended questions in quantitative research because they know from experience that transcription, coding, and analysis will cause a lot of work, leading to higher cost and longer turn-around time. However, open-ended questions are the salt in the soup of (online) research. Answers can illustrate quantitative findings, clarify motives and point to problems which were possibly overlooked. Probing into a market by semi-qualitative surveys can give a fast basic overview of its character (cf. the section above on the "Online Market Scout").

In strictly qualitative online research - such as in online bulletin boards, communities, blogs, or online focus groups, a lot of text is created which has to be processed.

Web based market research makes it easy to collect and process verbal input: answers to open-ended questions are the original expression of the respondent and need not be transcribed. Answers given online are generally more candid and have more content than answers given over the telephone. Texts from online group discussions or bulletin boards can be readily downloaded for analysis.

Practice teaches us that coding by hand is generally indispensable, as professional text analysis programs tend to be expensive and cannot do the whole job - even if they can

rely on a large thesaurus of pre-coded words (a list of positive and negative expressions for “sentiment analysis”). Nevertheless, there are a number of free or very cheap programs which can help to gain a first impression of the content and meaning of a text.

Word Frequency Counting Programs

Textanz

This very handy program not only counts frequencies but also produces data about the average length of words and sentences in a text. For practical text analysis it contains the possibility to create a list of short words that will be disregarded in the frequency count („stop list“). This list can be created in any language by the user himself. Thus Textanz helps to gain a clear picture of what the text is all about right from the beginning. Textanz which is programmed in St. Petersburg costs € 42 and can be downloaded from:

http://www.textanz.com/

Note: To prepare for an efficient frequency count, it is necessary to create a so-called “stop list” or “exclusion list”. This is a list of very short words (pronouns, prepositions etc.) which normally occur often in a text without really contributing to its meaning. These filling words are also called *function words* as opposed to the more important *content words*.

To create a stop list in your own language, take any long text and make a frequency count. You will find many short words with very high frequencies. From these words select the most common ones, add the letters of the alphabet and save them in a text file e.g. under the name *stoplist.txt,* in which the items are separated by commas.
An English language stop list could look like this:

a, b, c, d, e, f, g, h, i, j, k, l, m, n, o, p, q, r, s, t, u, v, w, x, y, z, -, --, ago, all, am, an, and, any, are, as, at, be, but, by, can, did, do, else, ex, far, for, from, he, here, him, his, I, if, ii, iii, in, is, it, its, iv, my, no, nor, not, of, on, one, or, our, so, that, the, their, then, there, these, they, this, those, too, two, up, us, vi, was, we, were, what, when, where, whether, which, who, why, with, yet, you.

Online Text Analyser

This free online tool offers frequency count, percentages, occurrence of phrases (2-8 words). It is fast, simple, and can read Cyrillic and other alphabets.
http://www.online-utility.org/text/analyzer.jsp

AntConc

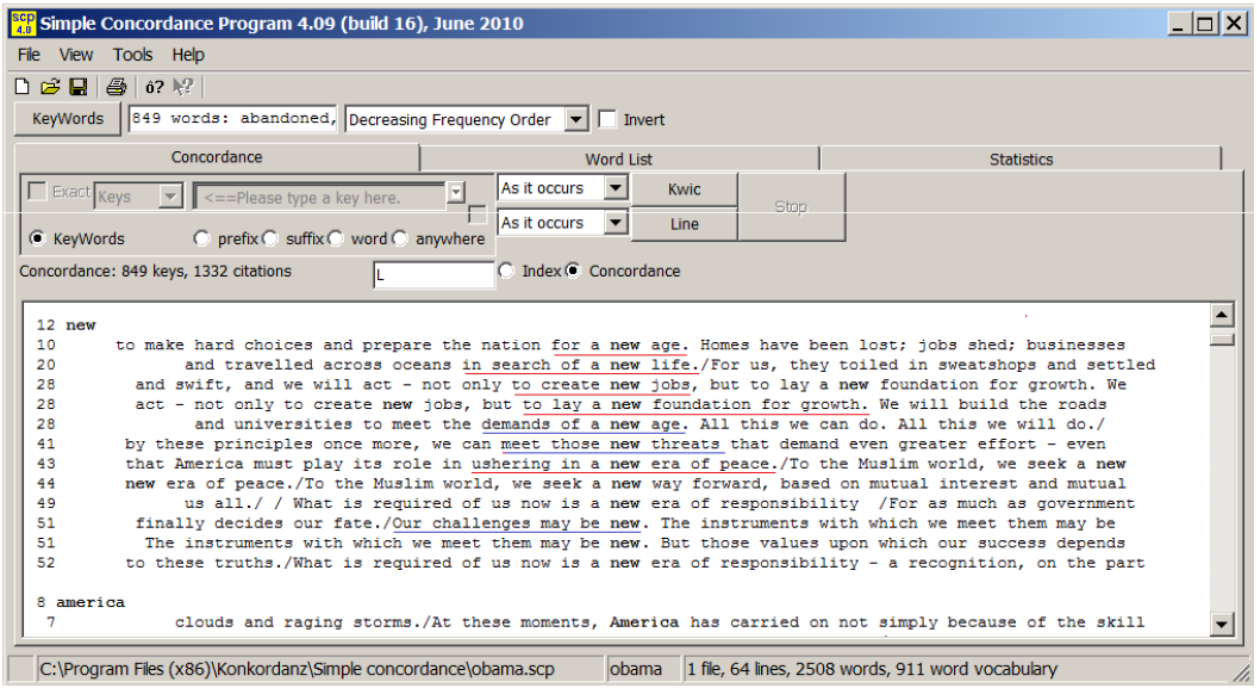
This program is another free, a bit academic, online tool. It offers frequency count/wordlist, one-click concordance, multi-language. Download it from:
http://www.laurenceanthony.net/software/antconc/

Concordance Programs

While frequency counts give you a first impression of the main ideas contained in a text corpus, concordance opens the way to a better understanding of context.

Simple Concordance
Download it from: http://www.textworld.com/scp/

This free program allows you to see key words in their contextual environment (*concordance* is here called „Kwic" = *Key words in context*). In the screenshot below you have an example analyzing the context of the frequently used word „**new**" (from an Obama speech). This helps to distinguish between its use in positive and negative context.



Note: The richness of textual answers gained in online research makes it necessary to familiarize oneself more than it was necessary in the past with (digital) text analysis.

Coding Programs

Sophisticated data analysis and coding software is available from different firms, mostly at considerable cost.

Weft QDA is an easy-to-use, free and open-source "historical" tool for the analysis of textual data such as interview transcripts, field notes and other documents.
Note: This software has not been maintained or updated since it was issued in April 2006. Download from: http://www.pressure.to/qda/

Transana is software for professional researchers who want to analyze *digital video or audio data.* Transana allows analyzing and managing data in very sophisticated ways. With it you can transcribe videos, identify analytically interesting clips, assign keywords to clips, arrange and rearrange clips, create complex collections of interrelated clips, explore relationships between applied keywords, and share your analysis with colleagues. Download from: http://www.transana.org Price: from US$ 150

MAXQDA is qualitative data analysis software - also called QDA software - which supports performing qualitative data or content analysis by helping to systematically evaluate and interpret textual data. MAXQDA 10 is the newest member of the MAX software family. The first version of MAXQDA was released in 1989, which makes it a pioneer in the field of qualitative data analysis.
Download from: http://www.maxqda.com/ Price: from EUR 1,178

Atlas.ti is a commercial coding program available at practically the same price.
Download from: http://www.atlasti.com/

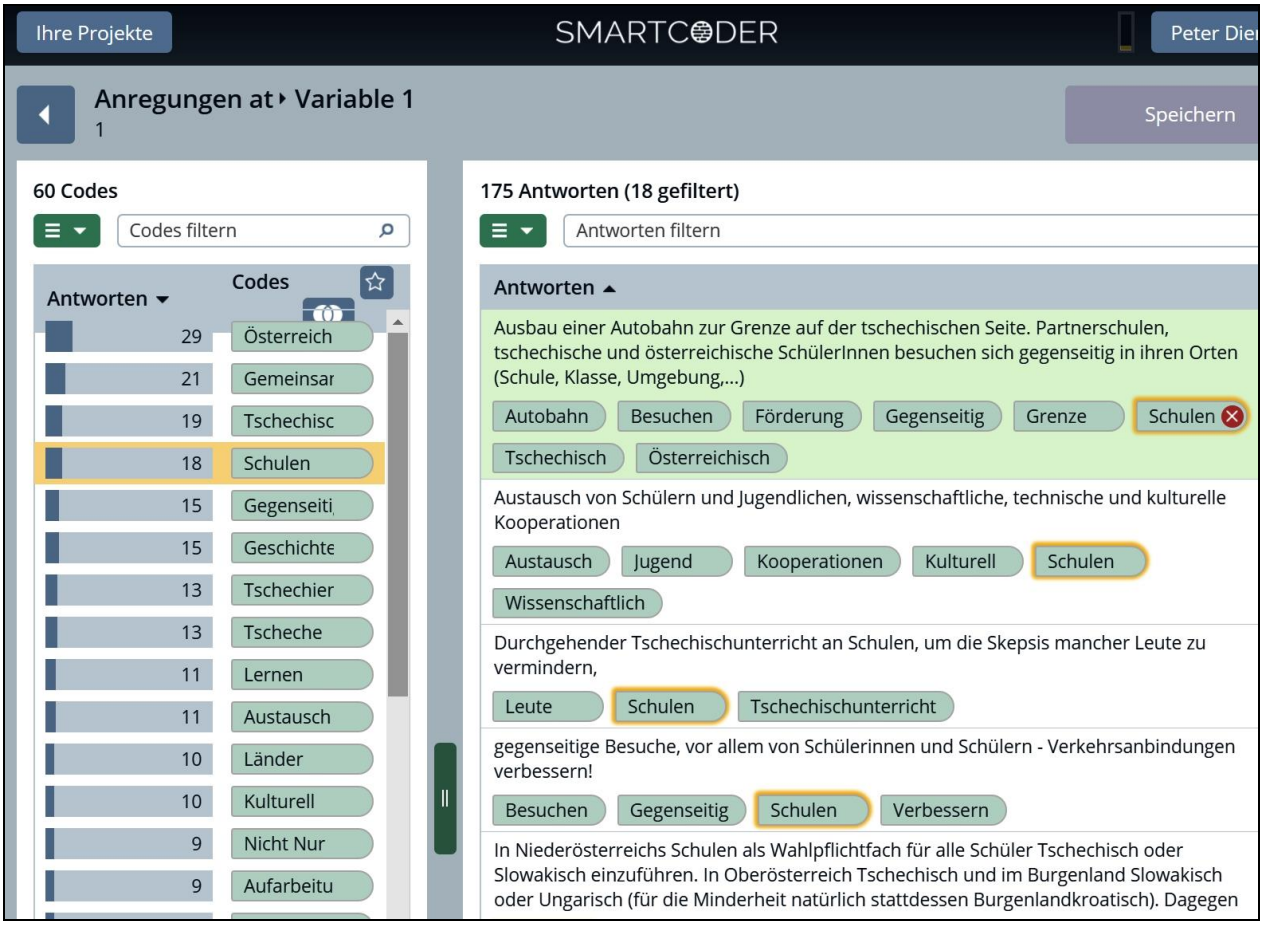
NVivo 9 is software that helps you to work with unstructured information like documents, surveys, audio, video and pictures - so that you can ultimately make better decisions.
Download from: http://www.qsrinternational.com/products_nvivo.aspx
Price: from EUR 75

QDA Miner is an easy-to-use mixed methods qualitative data analysis software package for coding, annotating, retrieving and analyzing small and large collections of documents and images. QDA Miner qualitative data analysis software may be used to code interview or focus-group transcripts, legal documents, journal articles, even entire books, as well as drawing, pictures, paintings, and other types of visual documents.
Download from:
https://provalisresearch.com/products/qualitative-data-analysis-software/
Price: from EUR 2,195

Online Pre-Coding by SMARTCODER https://www.smatcoder.at/de

Pre-coding, i.e. creating the most appropriate codes for analyzing a given text (or a series of answers to open-ended questions) is possible with the help of an attractive commercial online service which is available for ca. 2 cents per text line. The service delivers so-called „smart codes“, word frequencies and a word cloud. The service is billing the user according to the number of lines coded.

Below please find an example of how SMARTCODER proposes codes in the results of an open question a survey between Austrians and Czechs on about Austro-Czech relations.



Note: For further reference on qualitative text analysis go to:

http://www.restore.ac.uk/lboro/research/software/caqdas.php

https://digitalresearchtools.pbworks.com/w/page/17801708/Text-Analysis-Tools

Web Mining

Web content mining is three-stage process:

First one has to find out which sources to work on: search engines are employed for this purpose to browse the Web in order to select appropriate sites, blogs, communities etc. The second step is to extract text automatically. Finally, data analysis procedures are used to classify and code the copy gained. Software to support analysis was mentioned above.

In order to arrive at meaningful results with reasonable effort, special programs have been developed (natural language processing, computational linguistics etc.). Mainly, they help finding about emotions and polarities.

Note: So far it has not been established if Web Mining is a product which can be sold by research institutes at a reasonable price with regard to the high program-based and manual effort involved.

Compare: https://en.wikipedia.org/wiki/Web_mining

Sentiment Analysis: Filtering the Web for Feelings

Sentiment analysis or *opinion mining* intends to identify and extract subjective information in source materials such as answers to open-ended questions, transcripts of bulletin boards, content of Weblogs, “buzz” etc.

Sentiment analysis aims to determine the attitude of a speaker or a writer with regard to some topic or the overall contextual polarity of a document. The attitude may be his or her judgment, affective state or the intended emotional communication.

A basic task in sentiment analysis is classifying the *polarity* of a given text - whether the expressed opinion in a document is *positive, negative, or neutral. Beyond polarity sentiment classification* looks at emotional states such as *angry*, *sad*, and *happy*.

The Social Web contains an enormous amount of user-generated content. This produces the need for an automatic evaluation of emotions transported via tweets, comments, and blog entries. For companies, organizations and individuals it is not only interesting to see who has published related content where and when on Facebook, Twitter and many other social Websites, but also whether such content contains criticism or praise, positive or negative comments. *Sentiment analysis is an attempt to search the Web for moods and emotions of the user*. This technology filters the Web for key words: they are based on analyses of polarity, subjectivity, or of the types of chosen words. With the help of complicated algorithms, at least a tendency can be given about the emotions that are expressed by a particular text. Currently, sentiment analysis is still in its infancy, and the accuracy is far from 100 percent, but the technology opens up some interesting application scenarios. Below are some examples which illustrate what is meant.

Example 1: Tweetfeel

Tweetfeel (http://www.tweetfeel.com/index.php) is a free analysis tool for Twitter. The general sentiment of any key word contained in a tweet is evaluated. Tweetfeel orients itself primarily on unique words like “love“, “hate“ or “better“ and therefore analyzes only English language tweets.

Example 2: Context Sense

Context Sense (http://www.wingify.com/contextsense/) is an interesting tool that analyzes any site in terms of their overall polarity. The result is output as a percentage from 0 (negative) and 1 (positive). This service is only applicable to English pages. See graph on next page:

Contextual Targeting API and Sentiment Detection API

Contextsense is an API to extract and rank concepts, tags and categories from webpages, URLs and text. Determine the sentiment expressed on a webpage. As a demonstration of Wingify's contextual targeting technology, contextually similar links to the input are also fetched from the web.

https://www.aidforafrica.org/home/ GO

SENTIMENTS

POSITIVE (0.68)

TAGS

AFRICA AID CHARITY CHILDREN LEARN AFRICAN BLOG WILDLIFE SAVE SELECT

CONCEPTS

1. Society and Culture (3.40)
2. Personal Pages (1.38)
3. Aid and Development (1.35)
4. Kenya (0.84)
5. Organizations (0.73)
6. Adoption (0.72)

CATEGORIES

1. Regional > Africa > Kenya > Society and Culture > Personal Pages (1.38)
2. Regional > Africa > Malawi > Society and Culture > Aid and Development (0.74)
3. Regional > North America > United States > South Carolina > Localities > G > Greenville > Society and Culture (0.73)

Example 3: Rank Speed

With the search engine „*RankSpeed"* it is possible to extend search terms with additional emotion-laden adjectives. Thus, Rank Speed can look for smartphones which are "excellent", "easy" or "cool". The software analyzes the statements made on blogs and Twitter, allowing also conventional Web search as well as product search. About the quality of search results one can indeed have one's doubts, but Speed Rank is nevertheless an inspiring foretaste of what might become possible with further development of sentiment analysis.

Note: The prerequisite for a useful and accurate analysis of emotions is an extensive database of words and language including different abbreviations, slang, and the constantly changing youth slang. Moreover, intelligent semantic technology is necessary to understand the overall context. This will have to include the ability to identify negations (e.g. "not at all satisfactory") and distinguish between completely different fields of meaning (e.g. Apple computer vs. apple pie)

In conclusion, it can be said that it would be an interesting project – probably best to be undertaken together with national linguists – to create text processing programs for special use by market research institutes to analyze text not only for word frequency and context but also for "sentiment". Even small experiments in this feld would be valuable.

Appendix 1

26 QUESTIONS TO HELP RESEARCH BUYERS OF ONLINE SAMPLES

These questions, in combination with additional information, will help researchers consider issues which influence whether an online sampling approach is fit for purpose in relation to a particular set of objectives; for example whether an online sample will be sufficiently representative and unbiased. They will help the researcher ensure that they receive what they expect from an online sample provider

COMPANY PROFILE

1. What experience does your company have with providing online samples for market research?

SAMPLE SOURCE

2. Please describe and explain the types of source(s) for the online sample that you provide (are these databases, actively managed panels, direct marketing lists, Web intercept sampling, river sampling or other)?
3. What do you consider to be the primary advantage of your sample over other sample sources in the marketplace?
4. If the sample source is a panel or database, is the panel or database used solely for market research? If not, please explain.
5. How do you source groups that may be hard-to-reach on the internet?
6. What are people told when they are recruited?

PANEL RECRUITMENT

7. If the sample comes from a panel, what is your annual panel turnover/attrition/retention rate and how is

it calculated?
8. Please describe the opt-in process.

9. Do you have a confirmation of identity procedure? Do you have procedures to detect fraudulent respondents at the time of registration with the panel? If so, please describe.
10. What profile data is kept on panel members? For how many members is this data collected and how often is this data updated?
11. What is the size and/or the capacity of the panel, based on active panel members on a given date? Can you provide an overview of active panelists by type of source?

PANEL AND SAMPLE MANAGEMENT

12. Please describe your sampling process including your exclusion procedures if applicable. Can samples be deployed as batches/replicates, by time zones, geography, etc? If so, how is this controlled?
13. Explain how people are invited to take part in a survey. What does a typical invitation look like?
14. Please describe the nature of your incentive system(s). How does this vary by length of interview, respondent characteristics, or other factors you may consider?
15. How often are individual members contacted for online surveys within a given time period? Do you keep data on panelist participation history and are limits placed on the frequency that members are contacted and asked to participate in a survey?

POLICIES AND COMPLIANCE

16. Is there a privacy policy in place? If so, what does it state? Is the panel compliant with all regional, national and local laws with respect to privacy, data protection and children e.g. EU Safe Harbor, and COPPA in the US? What other research industry standards do you comply with e.g. ICC/ESOMAR International Code on Market and Social Research, CASRO guidelines etc.?
17. What data protection/security measures do you have in place?
18. Do you apply a quality management system? Please describe it.
19. Do you conduct online surveys with children and young people? If so, please describe the process for obtaining permission.
20. Do you supplement your samples with samples from other providers? How do you select these partners? Is it your policy to notify a client in advance when using a third party provider? Do you de-duplicate the sample when using multiple sample providers?

PARTNERSHIPS AND MULTIPLE PANEL MEMBERSHIP

21. Do you have a policy regarding multi-panel membership? What efforts do you undertake to ensure that survey results are unbiased given that some individuals belong to multiple panels?

DATA QUALITY AND VALIDATION

22. What are likely survey start rates, drop-out and participation rates in connection with a provided sample? How are these computed?
23. Do you maintain individual level data such as recent participation history, date of entry, source, etc., on your panelists? Are you able to supply your client with a per job analysis of such individual level data?
24. Do you use data quality analysis and validation techniques to identify inattentive and fraudulent respondents? If yes, what techniques are used and at what point in the process are they applied?
25. Do you measure respondent satisfaction?
26. What information do you provide to debrief your client after the project has finished?

Appendix 2

ESOMAR GUIDELINE FOR CONDUCTING SURVEY RESEARCH VIA MOBILE PHONE

1. INTRODUCTION

As mobile phones become the preferred mode of telephone communication on a global scale, it is critical for ESOMAR to establish clear guidance on the conduct of market, social and opinion research via mobile phone. The aim is to promote professional standards, best practices, and respectful relationships with the individuals being called and to assist researchers in addressing legal, ethical, and practical considerations when conducting research via mobile phone.

Mobile phone technology and communications have grown rapidly in some countries and at a slower pace in others, and mobile communication laws and regulations are still evolving. Only a few countries have addressed the legal parameters for unsolicited communication and interaction with mobile phone users. The regulatory dimension is complicated by the multiple communication mediums that the mobile phone provides to the user.

Further, there may be national laws that pertain specifically to the mobile phone user, e.g., restrictions on using mobile phones while driving. Such regulations indirectly affect, and could potentially be construed as establishing legal liability for a researcher contacting a potential survey participant via mobile phone.

Given the above conditions, it is critical that the researcher is aware of and respects regional, national and local laws and regulations and relevant cultural dispositions which may mandate a stricter standard of practice than that being required in this guideline.

The guideline may well apply to any form of telephone research project even if is intended to contact land-lines since it may be impossible for researchers to identify whether a given telephone number relates to a fixed-line phone or a mobile and a fixed-line number may be set to divert to a mobile.

2. SCOPE

The ICC/ESOMAR International Code on Market and Social Research requires that the same fundamental ethical and professional principles which govern face to face, mail and online research also apply to research via mobile phone (see Appendix). This guideline must therefore be read in conjunction with the ICC/ESOMAR International Code and other ESOMAR guidelines available at www.esomar.org
While recognising that many mobile phones and mobile devices permit the use of online research methodologies, including e-mail and Web surveys, the ESOMAR Guideline for Online Research covers research using email, browser-based or downloaded applications and this Guideline for Research via Mobile Phone applies to research conducted by using voice or text message (SMS) to contact respondents on their mobile phones. If a combination of mobile and online is used, e.g. mobile phone to contact and internet browser to respond, then the appropriate parts of each guideline should be applied.

3. KEY PRINCIPLES

As a general rule, researchers knowingly calling or sending text messages to a mobile phone for the purpose of conducting a survey shall observe the principles of respect and disclosure that are practised in fixed-line telephone research in line with the ICC/ESOMAR International Code. These include identification of the calling party, the identity of the organisation that will receive the data if the company carrying out the call is only providing data collection and not analysis, notification as to the purpose of the call/survey (see the ICC/ESOMAR Code Notes on transparency for more details), the voluntary nature of participation, the guarantee of confidentiality and consideration of local expectations about appropriate times for telephone calls.

Due to the nature of mobile phones and the patterns of use that have evolved over time there are a range of additional legal and ethical considerations to be observed. While these considerations may vary by country and culture it is essential that researchers understand these variations and adapt their survey protocols accordingly. For instance, while most legislation restricts unsolicited calls for commercial purposes but not market research, it is mandatory to consult and apply research-specific do-not-contact lists for mobile as well as fixed line phones if such exist. In addition, researchers should be aware that the mobile phone service provider may cut the service should they receive a complaint about unsolicited approaches by text or other electronic messages to potential respondents. Researchers are therefore required to verify that individuals contacted by such means for research have a reasonable expectation that they will receive a contact for research (see ESOMAR Guideline for Online Research)
If calling, researchers must remain mindful of concerns about privacy and intrusion and politely terminate the call when it becomes apparent that the recipient is not in a position or does not wish to take the call, is not competent, or is a child (unless the researcher receives consent from an appropriate adult to proceed with the call). The legally and socially accepted age of children varies from country to country. If the respondent is a child, the researcher must not go further with the interview unless consent is obtained from a parent or legal guardian to invite a child to participate in a research survey (see ESOMAR Guideline on Interviewing children and young people

4. RESPONDENT COSTS

In some countries, calls to mobile telephones, unlike fixed line calls, can involve a charge to both the caller and the recipient. Also, in instances where survey calls are made to mobile numbers across regional or national boundaries, additional „roaming" charges may be incurred by the called party and this can also apply to sending and receiving SMS.

Respondents using mobile phones to take part in surveys may incur air-time, roaming or data costs in so doing. If possible, the researcher should design the study so that the respondent incurs no cost. If this is not possible, the researcher must be prepared to compensate respondents for their costs. Where mobile respondents are added to a panel or sampling database the issue of cost and compensation should be agreed at the „sign up" stage.

5. RESPONDENT SAFETY AND CONFIDENTIALITY

Due to the nature and usage patterns of mobile telephones researchers sometimes will contact potential respondents who are engaged in an activity or in a setting not normally encountered in fixed-line calling. This might include driving a vehicle, operating machinery, walking in a public space, or when the caller is in another country/time zone. The researcher has an obligation to take all reasonable precautions to ensure that respondents are not harmed or adversely affected as a direct result of participating in an interview. Therefore, where it is known that the call is to a mobile number or there is cause to believe this to be the case, the researcher should confirm whether the potential respondent is in a situation where it is legal, safe and not inconvenient to take the call. If the researcher does not receive confirmation, then the call should be terminated while allowing the possibility of making further attempts at another time.

Furthermore, a researcher might contact a potential respondent who is engaged in an activity or in a work or social situation where others may overhear the call and confidentiality is compromised. Since a respondent could be reached in a public or semi-private space, the researcher must consider the nature of the survey content in light of the possibility that the respondent might be overheard and personal information or behaviour inadvertently disclosed or responses modified on account of the respondent's situation. If appropriate, the call should be rescheduled to another time or location when confidentiality will not to be compromised.

Researchers should be aware that any research data stored locally on the respondent's phone is potentially available to others should the device be stolen or used by another person For these reasons, special care should be taken if using SMS to return data, as the text message may be stored in the sent

messages file of the phone. It is good practice to warn respondents who will be using SMS to send responses of this and to send a final message at the end of the research reminding respondents to delete research replies in their sent mail. This requirement must be observed if sensitive data is being collected.

6. CONTACT TIMES

A number of countries have laws or standards that specify calling hours allowed for unsolicited calls of any type and these should be observed for surveys via mobile phones as well. In the absence of such requirements, researchers should observe the same calling hours as for fixed-line phone surveys. For telephone surveys in the business to business sector, acceptable times are implicit in the office hours of the business concerned.

Similar attention should be paid to the sending of SMS text messages to mobile phones in order to avoid the respondent receiving the message received alert outside „normal hours".

Mobile phone numbers rarely indicate the respondent's location and it is therefore incumbent on the researcher to anticipate that the person being contacted might be in a different time zone, and to verify the convenience of the time, location and situation.

7. INTERVIEW DURATION

While there is little empirical evidence, some researchers report anecdotally that mobile telephone respondents are more difficult to keep online than are respondents called on fixed lines. It may well be that the nature of mobile technology means that respondents are more easily distracted or more likely to lose concentration, or that the call is more likely to be interrupted or dropped. In addition, the respondent's environment may change during the course of an interview to one where safety or confidentiality is at risk. The researcher should take these issues into consideration and ensure that the interview length is kept as short as possible.

8. AUTOMATED DIALLING AND CALLING EQUIPMENT

Researchers should note that a number of countries restrict the use of auto-diallers and other automated dialling equipment including predictive diallers. Some countries may permit the use of such equipment only if a respondent has given prior explicit consent (for example, as a member of an opt-in panel) to be dialled by automated dialling equipment. Where automated diallers are permitted and used, „abandoned or silent calls", where no live interviewer is immediately available, are not allowed.

9. LOCATION DATA

It is now possible to capture additional data from interactive mobile devices and smartphones such as real time location data. ESOMAR's Guideline on Passive Data Collection addresses this issue. The researcher must have the respondent's permission before processing it.

10. CALLING PROTOCOLS

Some people consider their mobile phone to be a personal and private instrument. The researcher has an obligation to be sensitive to these privacy concerns. It is appropriate for the calling protocols for research via mobile phone to differ from the practices that are used in fixed-line telephone research. For example, the researcher should consider limiting the number and pattern of call-backs when contacting a known mobile number.

In line with the ICC/ESOMAR Code requirement that researchers shall identify themselves, calls to mobile numbers should be set to allow the display of the caller's number where this is possible and this facility should not be deliberately suppressed. If the researcher chooses to leave a voicemail message for a potential respondent (who may have to pay to retrieve the message) then this message should detail how the researcher will offer to recompense for the cost of retrieval.

Wherever feasible, it should be made possible for the called party to contact the researcher by calling the number displayed to establish the researcher's identity. It is good practice to provide a toll-free contact number, recognising that the respondent may need to call the researcher over a fixed-line.

FURTHER INFORMATION

Queries about implementing the Guideline should be sent to the ESOMAR Professional Standards Committee, professional.standards@esomar.org

APPENDIX - KEY FUNDAMENTALS OF THE ICC/ESOMAR CODE

The Code is based on these key fundamentals:

1. Market researchers shall conform to all relevant national and international laws.
2. Market researchers shall behave ethically and shall not do anything which might damage the reputation of market research.
3. Market researchers shall take special care when carrying out research among children and young people.
4. Respondents' cooperation is voluntary and must be based on adequate, and not misleading, information about the general purpose and nature of the project when their agreement to participate is being obtained and all such statements shall be honoured.
5. The rights of respondents as private individuals shall be respected by market researchers and they shall not be harmed or adversely affected as the direct result of cooperating in a market research project.
6. Market researchers shall never allow personal data they collect in a market research project to be used for any purpose other than market research.
7. Market researchers shall ensure that projects and activities are designed, carried out, reported and documented accurately, transparently and objectively.
8. Market researchers shall conform to the accepted principles of fair competition.

http://www.esomar.org/uploads/public/knowledge-and-standards/codes-and-guidelines/ESOMAR_Guideline-for-conducting-Research-via-Mobile-Phone.pdf

The author is grateful for any corrections, comments, and additions.

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