BACK TO THE FUTURE? THE IMPACT OF MULTI-MEDIA TECHNOLOGY ON READERSHIP RESEARCH

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Abstract

With the rapid increase in the development of new computer technology, how can the research industry harness these advances to improve the quality of readership research? This paper gives several practical examples of how multimedia research software has been utilised to evaluate printed media in the broadcast listings publications market. In addition it goes on to describe some of the possible implications that multimedia research may have on readership measurement.

Introduction

The late 1980's and early 1990's saw the first major change in the way in which face-to-face market research interviewing was conducted. This revolution was the move from pen and paper data collection to computer-assisted personal interviews or what is better known as CAPI. In the 80's a number of research agencies had started to produce small scale surveys on CAPI. They were small, mainly due to the capital cost of the hardware. The introduction of lower cost PCs meant that, for the first time, it was possible to equip the fieldforce with their own laptop computers. The full details of this revolution and its implications were well catalogued in John Samuel's 1994 ESOMAR paper (1). However, it is worth summarising the benefits:

a)   Faster data

Data is transferred directly from the interviewer's PC via modem into the mainframe computer at head office. That is to say there is no separate data entry stage.

b)   Greater speed and flexibility in questionnaire design

The CAPI system allows the researcher to design complex questionnaires with greater certainty that they will be administered accurately, as one can be sure that the routing and applications of filters will be efficiently handled by the PC. In addition, questionnaires can be distributed quickly to interviewers over a wide geography via e mail. In effect the lead time from creation of a questionnaire to its implementation in the field has been dramatically reduced.

As previously stated, CAPI was a revolution, and transformed the way in which research was carried out in the UK. Perhaps the biggest example of change was in 1991 when RSL moved the National Readership Survey (NRS) over to CAPI. RSL swiftly followed this with the introduction of the first CAPI omnibus known as CAPIBUS. In 1993, BMRB started large scale interviewing with CAPI, and in the space of 12 months the percentage of interviewing carried out at BMRB on paper dropped from 100 percent to 20 percent. For BMRB, as well as most other large scale research agencies in the UK, CAPI interviewing is now commonplace.

Multimedia CAPI (MMCAPI)

So, after the CAPI revolution, where did we go ? During the mid 1990's there was another mini revolution taking place in the computer market. With the introduction of high resolution colour screens and CD technology, the multimedia PC was born. And it is this technological advance that has provided the next step forward for interviewing technology. Multimedia CAPI has all of the advantages of CAPI, with the added dimensions of sound and vision. The interviewer carries a multimedia laptop computer which has a colour screen and soundcard. This enables the interviewer to show photographic images and moving film clips on screen to respondents. It is also possible to play audio clips and to record respondents' verbatim comments direct onto the PC with no additional equipment.

There are many benefits in the use of multimedia CAPI, with perhaps some of the most obvious being in the area of advertising evaluation. BMRB was the first research agency to use multimedia CAPI on a large scale advertising tracking study. Hahlo and Lythgoe's recent ESOMAR paper (2) highlights the move from the use of telepictorials (photographic stills from the commercial), to being able to show the actual TV commercial in the respondent's home. The results illustrate the increased accuracy of commercial recall and the dangers of relying on telepictorials to measure recognition of the advertising. Other benefits in the broadcast media/advertising market include the ability to deconstruct the complex commercial to isolate the contribution that the various elements such as the soundtrack make to the effectiveness of the commercial. But what are the benefits for readership research?

Benefits to readership research

As we all know print media is a high impact visual medium using colour, size and photographic imagery as well as the printed word. With the aid of hand-held prompt material, for example masthead cards (usually black and white) or the specific issues of a publication, researchers have attempted to produce a better measure of exposure to the publication. The advent of multimedia technology greatly improves the quality and practicality of this. These benefits can range from the colour reproduction of mastheads on screen through to the ability to scan a publication onto a CD in the PC.

a)   Mastheads

Obviously one of the key research issues in a fragmented media market is to avoid title confusion. The use of colour in mastheads prompts could lead to less title confusion and possibly a more accurate recognition overall of a title. Equally, in the measurement of newspaper sections, the ability for a respondent to identify clearly a particular section can be aided by accurate colour representation of the banner for that section. Colour printing can be an expensive and time consuming option and there can be difficulties in accurately representing colour schemes. The process is much simpler via a PC screen.

b)   Colour advertisements

Colour is of course one of the key assets of magazine advertising and is now widely used in newspapers and their supplements. The multimedia CAPI system allows the reproduction of colour advertisement display to the respondent on the screen. Again the colour reproduction is much simpler using screen prompts.

c)   Readership within a publication

For many years readership researchers have measured readership via the through the book technique (TTB), by presenting respondents with "stripped" copies of publications. This method of course produced high quality readership detail, but at significant cost both in terms of the length of interview and the physical burden to the interviewers, due to the large number of titles being measured. Multimedia allows whole publications to be scanned into the PC, with respondents able to choose a periodical read from a selection of front covers from the most recent issues (more of which later). Having selected an issue, respondents would then be able to page through a faithful reproduction of the publication, "zooming in" on specific articles or advertisements read. The key advantage of multimedia CAPI here is the large volume of prompt material that can be accessed via the PC. Who knows, multimedia CAPI in overcoming one of the limitations of the TTB methodology, may prove instrumental in seeing a wider use of the technique.

In summary, multimedia CAPI enables the use of vast amounts of visual prompt material with a far greater degree of flexibility than has been possible before. Not only are the practical limitations of using visual prompts reduced but we are able to apply complex filters and rotations to the material used. Of course there are other benefits in the software that we use, although not necessarily specific to readership research. We come on to highlight these features as part of our case study in the next section.

A practical example : Using multimedia CAPI to research future developments for the Radio Times

Background

The Radio Times is the longest established TV listings magazine in this country. It covers all main TV channels, radio listings and features.

In recent years the Radio Times has had to operate in an increasingly competitive market. As part of the Broadcast Act in 1991 the listings market in the UK was deregulated, enabling any publisher access to TV schedules 14 days in advance of broadcasting. This resulted in strong competition, both from new paid-for listings magazines and, more recently, from the weekly guides produced by many national newspapers. At the same time, there have been dramatic changes in the TV market itself. The number of TV channels on offer has multiplied dramatically. To cover all channels in a single publication is now impossible. In the future, digital TV will increase the options yet further.

It is important for the Radio Times to keep abreast of the changes in the market and to adapt its offering accordingly. The Radio Times itself is a very strong brand but increasingly it is having to compete in a crowded and highly competitive market. It needs to clearly stand out from the rest.

Cover design

In the UK the majority of newspaper and magazine purchase is made at the newstand. The impact of the cover is therefore vital in the purchase decision. Furthermore, the cover design will have a key influence on perceptions of the magazine itself. To date, little research has been done in order to understand the impact of different cover designs. Using multimedia CAPI we are able to

understand both the impact and noticeability of different covers as well as gain an understanding of the image that each presents of the content inside.

Electronic programme guides

Today most viewers find which TV programmes they want to watch by referring to some form of printed listings guide or by using a text service on their TV screen (Teletext). In the digital world there will be a choice of hundreds of different TV channels. In such a scenario, the existing TV guides will not be sufficient.

Electronic programme guides (EPG's) will come into their own with the launch of digital TV. These guides will enable viewers to make their choice of TV channel (or interactive service) as easily as possible. The EPG will appear on screen to the viewer. They will be personalised either by choice of genre or channel. Publishers of existing listings magazines are well placed to run such electronic programme guides. The Radio Times itself already has a version operating as part of its web site.

The issues that will face the Radio Times in the future both relate to the web site itself (how can this be best adapted to suit our users needs?) and to the impact on the print version (will there still be a place for a printed magazine ?)

The objectives of the research programme

The objectives of this particular study are therefore twofold:

- To look at ways in which the Radio Times can compete effectively in a competitive marketplace. To understand the impact that covers can have on both the purchase decision and on the image projected to potential purchasers.

- To look at future developments in the listings market. Assessing reactions to the electronic programme guide currently contained within the Radio Times own web site.

  The specific issues to be addressed are:

  Cover design

  - Is the cover attractive and likely to stimulate purchase ?
  - What image do different cover designs project ?
  - Are the cover designs a suitable representation of the magazine concept ?
  - How does the logo contribute to the overall design/communication ?
  - How do the other elements work ? Which elements detract/which add to the overall image ?
  - To whom does the cover appeal ? What types of cover/elements work best for key subgroups ?

  Electronic Programme Guide

  The focus of this part of the study is to understand the general public's reaction to EPG's. The bulk of respondents will not be familiar with the Internet or similar concepts. The purpose of the research is therefore to investigate the **general** concept of EPG's using the web site as a demonstration.

  - Have they heard of the concept ?
  - Have they ever used one ?
  - What is their reaction to the Radio Times version ?
    - Would they use it ?
    - What do they find appealing/unappealing ?
    - Does it seem easy to use ?

The research design

At the time of writing, the survey is about to go into the field. We will be able to report back on results and practical experiences at the time of the symposium. However, we have already undergone significant development in arriving at our final design.

Outline method

The basic methodology is relatively straightforward in both sample design and the nature of the questionnaire.

Our objectives are, not only to understand current readers, but also to identify what might attract potential readers to the Radio Times. We have therefore designed a sample of 200 current regular readers (defined as those who read the title almost always, at least 3 out of every 4 copies) together with a representative sample of 200 non regular readers. At the time of writing we estimate

that regular readers comprise around 8% of adults in the UK.[1] The resulting interviews will be reweighted back to their correct proportions in order to draw conclusions based on the total sample.

We use a method of random location sampling, developed by BMRB which uses enumeration districts stratified by ACORN type as its basis. Interviewers are given very small areas from which to begin their assignment (typically a street of around just 100-150 houses). However, in order to fill their quota of Radio Times readers they will be allowed to move outside this area. Quotas will be placed on respondent's likelihood of being at home (working/non working; housewife's presence of children) as well as stipulating numbers of readers/non readers per assignment.

The questionnaire itself we estimate to last around 30-40 minutes on average. It covers :

- Basic readership measures of relevant titles : recency and frequency of reading, source of copy.
- Use of TV listings guides and behaviour when buying them.
- The impact and imagery of different cover types.
- Awareness and use of existing EPG's
- Reactions to the Radio Times EPG and web site
- Classification : including demographics, other media use and attitudes/take up of new technology.

Within the questionnaire we are able to use the benefits of multimedia technology to full effect. The key applications are outlined in the next sections.

The use of multimedia CAPI for this study

In answering the objectives of the study there are a number of unique benefits that multimedia CAPI can provide.

Readership questions

Although an important variable for the analysis, the aim of this particular survey is not to provide penetration data on readership. Therefore we are able to experiment with a slightly different form of readership measurement. We have retained the standard wording of the National Readership Survey in order to arrive at average issue readership and frequency of reading. However, in place of cards we are using colour mastheads shown on screen.

The mastheads have been scanned in from the relevant publications and a consistent size ensured for each. We have placed all mastheads on screen at once as there was a limited number to research. This will minimise the possibility of title confusion.

The great advantage for the interviewer is a lack of physical prompts to handle. Clearly too, as the images are electronic it is a simple matter to rotate their order on screen.

Cover design

In an increasingly competitive market the impact of the front cover at the newstand is becoming ever more important. We want to test reactions to the existing cover of the Radio Times :

- How well does it stand out against the competition ?
- Which elements of the cover have greatest impact ?
- What types of cover have greatest appeal and does this vary across different types of reader ?

Multimedia CAPI enables us to use techniques which could not have been possible without the new technology. We are able to test impact in a competitive context, replicating the experience a respondent might have at the newstand. In the early part of the interview respondents are shown 4 different covers on screen, the Radio Times plus three key competitors. These covers are shown on screen for a matter of seconds before they are removed from view. We then ask which covers the respondent can remember. This clearly gives a measure of impact and recognition for each title. It is a technique which is also usefully applied to pack design in FMCG markets.

The focus of the interview is on the Radio Times itself rather than the broader competitive context. As we want to test a range of imagery, ten different covers are being used in the research. However, we are aware that respondents will lose interest and concentration if we ask about each in detail. Instead we show just 4 different covers to each respondent and ask further reactions of each one. In this part of the interview our aim is to investigate the relative appeal of each cover and to understand the imagery projected by that cover. The covers shown are rotated across respondents to ensure an even spread of opinion.

Again, this section of the interview would be difficult without the multimedia element. Using pen and paper or CAPI the interviewer would need to cope with large amounts of prompt material and the rotations themselves would be limited. Multimedia CAPI ensures that the covers are kept in consistent condition across the interviewer assignment and that they are presented in a

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[1] National Readership Survey, quarter 2 1997

rotated fashion across the entire sample. This leaves the interviewer free to concentrate on the respondent and developing a good rapport.

Electronic programme guide

Outside the media industry few people have heard of electronic programme guides and only a small number will have seen one in operation. Our aim is to get an understanding of the initial reaction to this type of concept from the general public as well as to identify possible areas for development/improvement in the future.

The web site itself comprises several different elements: highlights of forthcoming TV programmes, features/interviews with personalities and the electronic guide itself. This concept is difficult to describe fully in words. Visual prompts of the screen, together with a verbal description would help but only seeing a live version of the site would really demonstrate the interactivity and personalisation of the guide itself.

The web site is large and takes more than an hour to cover in detail. It also takes some time to find one's way around . It is clear that only a small number of our respondents will be familiar with the Internet and many may have little or no experience of using a PC. Attempting a link onto the World Wide Web is risky. Even if we succeeded in making a connection, the site itself could be slow (depending on the time of day) and many respondents would be concerned at allowing an interviewer to plug into their telephone line.

Our initial idea was to load the entire web site onto each PC (via CD Rom). However, the site itself is linked to a separate database which is too large to incorporate on a CD. Furthermore there was no guarantee that each interviewer would take the respondent through the site in a consistent way.

Having considered the options we decided on a recorded demonstration of the guide. We set up an electronic demonstration of the site which the interviewer can call up to play at a set point in the interview. We have effectively video recorded the site using a technology known as screencam. The resulting clip shows a live journey through the site on screen with a voiceover explaining the options and rationale behind each element. This ensures:

— consistency across interviews
— a clear explanation of the site and its capabilities using layman's language
— a realistic demonstration of the look and feel of the site, most importantly highlighting the interactive elements of the programme guide.

As this was research at the cutting edge we clearly needed to reassure ourselves that the technology and practicalities would work. For this reason we built in both a small scale pilot of the questionnaire and a test mail out of CD Roms and the electronic questionnaire in advance of the main stage.

Other multimedia elements

Alongside these key elements we were able to incorporate other elements which added value to the research design.

Video briefing

In addition to their usual written instructions the interviewers will receive a video briefing on CD Rom. They are able to play this in advance of starting on their assignment. Clearly this will be of great benefit in explaining some of the unusual techniques we have employed in the interview.

This has obvious applications for other face-to-face surveys. We can rarely afford the luxury of a personal briefing on most face-to-face surveys. The costs of paying interviewers for a day long briefing, travel expenses to central locations and the room hire itself can be prohibitively expensive. A video briefing can explain the intricacies of complex or unusual research design at a much lower cost. Of course, there will always be occasions when a personal briefing is necessary. However, a video briefing adds a great deal to the alternative of simple written instructions.

Live recorded verbatims

As an option we are able to audio record respondents' verbatim answers direct onto the PC. Although this can be unwieldy for large amounts of open ended material, it has tremendous benefits for certain types of question. The answers are recorded with the original intonation. Often verbatims which have been typed in by an interviewer can miss elements such as irony. We can also use the recordings in presentations or simply to listen to in our own time. It adds a qualitative feel to quantitative surveys and in this way can bring a survey to life.

The future

Clearly from this case study and from our previous work using multimedia CAPI, there are numerous benefits for readership research. The ability to scan in large amounts of visual prompt material and to use the routing and rotations produced by the PC has great practical advantages for many print surveys.

The range of prompt material that can be used is also of great benefit. There are obvious applications for broadcast research but, as the lines between different media become less distinct, these benefits will also translate to the print environment. Our example for the Radio Times is an illustration of a long established publication moving into the new electronic era of web sites and TV based guides. The web site demonstration would simply not be possible without multimedia CAPI.

Timed exposures on screen enable us to adapt techniques that were developed to research the impact and design of consumer packaging to magazine cover design. Again these techniques are not possible in an in-home environment through any other means.

Although not appropriate to this particular case study, self completion elements of an interview also adapt well to multimedia. As we have greater flexibility in screen layout, use of colour and graphics, we are able to produce better designed and user friendly screens for the respondent themselves to complete. We have been using this approach for simple tasks on standard CAPI surveys for a number of years, the multimedia screens and facilities can only improve the quality of the data collected.

Finally, like CAPI, the technology will again improve the overall quality of our fieldwork. It reduces the amount of prompt material handled by the interviewer and frees her to concentrate on the respondent. Furthermore, we have found the use of video briefings improves the interviewer's understanding of her task.

"Back to the future"? Certainly in some ways we can adapt the tried and tested techniques of the past with greater ease and practicality than ever before. Through The Book readership being an obvious example. In other ways as publishers themselves are adapting to new electronic environments, so too researchers must keep pace. Our case study has shown how, rather than revolutionise the way in which we design research, technology has simply given us the freedom to apply a much wider range of possibilities and yet again, improve the quality of information collected in the field.

References

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