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**Qualitative Social Research on ICTs:
Developments and Applications**

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METHODOLOGICAL WORKSHOP

**QUALITATIVE SOCIAL RESEARCH ON ICTS: DEVELOPMENTS
AND APPLICATIONS**

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QUALITATIVE SOCIAL RESEARCH ON ICTS: DEVELOPMENTS AND APPLICATIONS

Presented here are a series of papers that formed a methodological workshop at the British Academy of Management 2004 hosted by St Andrews University 30th August – 1st September. The theme of the conference was “Management Futures” and it was felt appropriate to host a workshop to address the central question: How does the impact of information and communication technologies (ICTs) within a research context bring about the need to re-evaluate and extend existing qualitative methods of research enquiry?

ICTs include, but are not limited to, the Internet and wireless multimedia. These technologies are increasingly pervasive and are widely seen as a key element in ongoing social and organizational changes to structures and practices, such as the erosion of hierarchy and rise of networked organizations. The management impact of ICTs has been a topic of research interest for many years but has received renewed attention since the advent of the Internet in 1991 and is continuing to be stimulated by the growth in mobile devices. The unique nature of these phenomena has resulted in debate over whether it is sufficient to apply existing theories and methods to the study of ICTs or whether methodological innovation is required (see for example Jones 1999). Furthermore, it is recognized that the essential nature of social science enquiry involves an ongoing interplay between the research subject and the method employed.

This workshop brought together researchers from various branches of management research to discuss the application and development of qualitative research techniques in the study of ICTs. It is hoped that the resultant discussion has relevance not only to those researching the impact of ICTs but also to researchers in other areas subject to rapid change and contributes to the wider methodological debate. The workshop focuses on qualitative methods. Qualitative techniques are often used when very little is known about a research area. Since qualitative research is a starting point for data gathering defined as exploratory and explanatory, it was felt appropriate to focus on this area.

The workshop addressed two key themes. The first theme examined new sources of data and/or methods of research brought about by developments in ICTs and the second theme examined the transferability of traditional/established methods of research to the new media (ICTs).

In response to the first theme, the paper by Harrison introduces and discusses a valuable new source of data - the Internet Archive and critically evaluates use of the established technique of content analysis. Harrison uses the Internet Archive to access previous versions of pension provider web site and uses content analysis to identify clear longitudinal trends and patterns. She notes that there is scope for teaming content analysis with other methods and using it as part of a multi-method investigation. Sillence and Briggs also describe innovation in ICT research through using log data as a way of enriching and probing self reports. Their study shows that participants recall is imperfect and that real-time self report diaries are subject to error. The comparison between participant reports and automated data logs reveals interesting inconsistencies which inform our understanding of how individuals

process online information as well as providing a useful template for future online behaviour research.

In response to the second theme, Crosbie builds on the issues surrounding self-report data by describing the practical problems encountered when transferring the established method of activity diaries to ICT research, particularly when used in different communities. This honest account will inform other researchers who might be considering this methodology. Crosbie notes that the main lesson to be drawn from her experiences is that careful costing in terms of time and money is essential. In the fourth paper, Grant draws on his experience as a former marketing practitioner to decide which of the established and emerging qualitative techniques might be appropriate when gathering data from new media marketing practitioners. This paper enables us to gain insight into the careful detailed internal debate that any researcher of ICTs should undertake when considering their research design.

Subsequent workshop discussion was rich and varied. In response to the paper by Harrison audience members discussed the option of undertaking content analysis of web sites using a more flexible model or even a grounded theory approach (Strauss and Corbin, 1990). With regards to the use of activity diaries audience members considered several studies that had managed to provide alternative incentives to research participants (i.e. Buchanan and Boddy, 1992). It was concluded that use of activity diaries amongst certain groups, for example students or those with a strong involvement in the research area such as through health issues in the Sillence and Briggs study, militated most strongly for success. Grant's paper initiated an interesting debate on the extent to which the richness of the face to face data is actually incorporated in the final research account and whether in some circumstances the use of the telephone might be equally efficacious.

The concluding question created a link with the earlier Virtual Society? ESRC research programme, participants were asked to comment on the extent to which their work indicated that the virtual was the more real (Woolgar, 2002). Harrison felt that the virtual showed no indication of replacing the real in the pensions supply chain, Grant noted that there was a distinct contrast between practitioner and consumers wants in the virtual realm, Crosbie noted that the virtual is affecting the real in terms of mobile phone communication when individuals purposefully are less precise with making social arrangements and finally Sillence noted that again there were instances where virtual communication in terms of online information was being integrated in the real life of the GP surgery as patients brought what they had learnt on the internet into medical consultations.

Finally, I would like to take this opportunity to thank the workshop panel for their hard work, audience members who contributed to the subsequent discussion, the track chair for giving us the opportunity to hold this workshop and the members of the conference team at St Andrews for organising such a worthwhile event.

Kathryn Waite, Edinburgh University, 2005

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THE INTERNET ARCHIVE AND CONTENT ANALYSIS

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Abstract

The Internet Archive serves as a digital library, providing valuable access to archived web material since 1996. In order to derive useful research data from the archive, researchers need to consider the techniques most appropriate. While a range of online techniques exist, most of these are suited to 'live' sites that are interactive. The study of archived sites requires a different approach. Content analysis is an established research technique that has been used extensively in traditional forms of communication, and is now receiving renewed attention in the study of web evaluation. The paper introduces and discusses the Internet Archive, critically evaluates the technique of content analysis and illustrates an application of content analysis to the study of archived web pages from the Internet Archive drawing on a recent research study.

Introduction

The web comprises a substantial part of our digital culture; the speed of change makes academic study of the web challenging. Web sites are like shifting sands – the average life of a web page is said to be around 100 days, after which it either changes or disappears altogether. Preserving our digital heritage is crucial to understanding both how and why the web has developed and continues to develop. In this context, the Internet Archive (www.archive.org) offers a valuable cultural artefact for the study of the web.

Alongside the need to preserve and study the web are methods for such investigation. The new medium has brought with it developments in new online techniques, such as online focus groups, surveys and usage studies. Most of these techniques are suited to the study of 'live' sites where interaction with actual site users is required. To study archived material requires the application of other techniques, such as content analysis. Content analysis has been used in traditional forms of communication and is being used increasingly in the study of the web environment.

The purpose of this paper is threefold: to outline and discuss the Internet Archive as a research resource; to critically discuss the technique of content analysis; and to illustrate the application of content analysis to archived web pages from a recent longitudinal study of the information content of pension provider web pages.

The Internet Archive

The Internet Archive is a public non-profit organisation that was founded in 1996 with the purpose of building an "Internet Library" offering permanent access for researchers, historians and scholars to historical collections that exist in digital format (www.archive.org).

The Internet Archive works in collaboration with institutions including the Library of Congress and the Smithsonian.

The Archive is reported to be the largest digital database in existence, holding over 100 terabytes of data, which if it were in book text form would occupy over 3000 miles of shelf space. Moreover, the archive is adding a further 10 terabytes every month (Marks, 2001).

The Internet Archive works by using the “Wayback Machine”, The Wayback Machine is a service that allows visitors to access archived versions of a web site. Visitors can type in a URL and select a date range. The Wayback Machine then displays in tabular form the total number of web pages and dates they were captured within each year since its start in 1996. By clicking on a particular date, visitors can view and explore web pages at a particular point in time.

In addition to archived web pages, the Archive is also now collecting other digital material, such as moving images, film and music.

Uses of the Internet Archive

The Archive has many uses which will vary according to discipline, phenomena under investigation and context, to mention a few. Some of the common themes identified for research include:

- **Studies of language change** – Studies of language change have been conducted based on printed material in order to understand how language is used and how it evolves. The Internet Archive not only provides easier access to vast amounts of data but can also provide an insight into language use in a particular context. Combined with more traditional studies of offline communication, language developmental patterns can be contrasted and compared to understand any interactions between the medium and language use.
- **Tracking studies** – Tracking studies can track a variety of phenomena. One key area is studies of web evolution, which investigate how and in what ways the web has evolved. Such studies can be in either a general or specific context and may attempt to compare and contrast across industrial sectors or countries, say. Historical analyses of how the web has evolved can be useful in understanding the impact of likely future events on further development.
- **Understanding the connectedness of the web** – By exploring the link structures within web sites, research can help to understand the connectedness of economic structures and how the web may affect commerce. Such research can help understand the interconnectedness of communication and distribution networks and the specific role of the web alongside other virtual or physical structures.
- **Behavioural analyses** – Using snapshots from the Archive in combination with usage statistics can show how and why people are using the web. Comparative studies can be made across contexts and countries to understand differential web usage patterns.

Limitations of the Internet Archive

While the Archive is a valuable resource in terms of accessing otherwise obsolete web pages, it is not without its limitations. Some of the key limitations include: pages disabled or not in the archive, links within sites not working and graphics not supported. These problems are to be expected as technology evolves and earlier versions are no longer supported by current

technological developments. The Internet Archive is working to overcome these issues by collecting the software to support the web pages in addition to the actual pages.

Another limitation is that access to some sites has been blocked by site owners rendering the Archive incomplete. In the UK, this could change if proposals are accepted to bring the legal depositing of web pages at the British Library in line with the current legislation for books. This will mean that site owners will have a legal obligation to make their digital material available to the British Library for public use.

Content Analysis

Content analysis is an observational research method that is used to systematically, objectively, and quantitatively analyse message characteristics (Neuendorf, 2002). According to Kolbe and Burnett (1991), messages or forms of communication can be analysed along many levels or dimensions, including image, word, roles etc. Indeed, there is no limit to the types of variables that may be measured or the context in which messages are created or presented.

In traditional forms of communication (such as broadcast or print advertisements) content analysis is an established technique (Titscher et al., 2000). With the increased popularity of the Internet, content analysis has also proved to be a valuable technique in the evaluation of web sites (see for example, Philport and Arbittier, 1997; Dholakia and Rego, 1998). Moreover, Weare and Lin (2000) note that, in addition to making new sources of data available and dramatically reducing the costs of data collection, the Internet opens up new areas of research and contributes towards improving the quality and validity of content analysis. In particular they state that “an important area for future study will be longitudinal studies of changes in Web content” (p 287). Using the Internet Archive provides greater accessibility to web pages and makes historical and longitudinal analyses easily achievable.

A distinguishing characteristic from other qualitative or interpretive forms of message analysis, is the attempt to meet standards of scientific method. By most definitions content analysis fits the positivist paradigm of social research (Gunter, 2000). This includes attention to objectivity, *a priori* research designs, reliability, validity, generalisability and hypothesis testing. According to Kassajian (1977) earlier uses of content analysis did not meet rigorous methodological standards. The goal of content analysis is to produce counts of categories and measurements of the amounts of other variables. These are quantitative measures. Some maintain that non-quantitative content analysis is feasible, although not a view shared by the progenitors of content analysis (Neuendorf, 2002).

Applications of Content Analysis

The uses and benefits of content analysis are many. Kolbe and Burnett (1991) outline some of the most valuable:

- Content analysis allows for an unobtrusive appraisal of communications, which is especially valuable in situations where direct methods of enquiry might yield biased responses.
- It allows for relationships to be tested and explored, such as the effects of environmental variables and source characteristics on message content, in addition to the effects of different message content on receiver responses.

- It can provide an empirical starting point for generating new research evidence about the nature and effect of specific communications.
- It can be used as a companion research method in multimethod studies.

The study of any type of message pool may be deemed a content analysis. The range of applications include: individual messaging (interviews or other one-to-one conversations), interpersonal and group messaging (focus groups, mobile text messaging), organisational messaging (meetings, conferences), mass messaging (advertising) applied contexts (including the internet).

Broadly speaking all message characteristics are available to content analyse. It is worthwhile, however, outlining some subtle features of content analysis with respect to the differences in manifest or latent content and the differences between content and form characteristics.

- **Manifest versus latent content** – the majority of content analysis reported tends to be focused on manifest content (i.e. elements that are physically present and countable, for example the advert communicates a price of the product). It is also possible to consider the latent content, consisting of unobserved concepts that cannot be measured directly but can be measured by one or more indicators (i.e. empowerment). These two types of content are analogous to ‘surface’ and ‘deep’ structures of language. Traditionalists would argue that content analysis is only concerned with manifest content. However, there are numerous examples of latent content analysis. Ghose and Dou’s (1998) study of internet web sites measured the latent variable ‘interactivity’ (conceptualised as relating to ‘presence’ or a sense of ‘being there’) from a set of 23 manifest variables that are easily measurable, such as presence or absence of a key word search, electronic couponing, online contests and downloading of software.
- **Content versus Form Characteristics** – Content attributes (often called substance characteristics) are those that may appear or exist in any medium. Form attributes (also called formal features) are those relevant to the medium through which the message is sent. It is not necessary to classify messages into either category (since some types of content sit on the borderline), however, it is argued that content analysis should include both.

Limitations of Content Analysis

No research method is without its limitations and these should be considered when applying the method. The main limitations of content analysis relate to the effects of bias, limited scope and type of data it yields (Kolbe and Burnett, 1991).

- **Bias:** Susceptibility to the effects of researcher bias. These can be minimised or reduced by careful training of coders, pre-testing of instruments and measuring inter-rater reliabilities.
- **Scope:** Content analysis is often constrained in terms of what can be reported. Often limited to reporting specific pre-determined elements of communication.
- **Data:** Content analysis often yields categorical data. While such data is rich in descriptive, classificatory and identification powers, they are less sensitive to the subtleties of communication obtained from higher-order scales and from other research methods. A way to overcome such limitations is to triangulate content analysis data with other research methods.

Research Application: Content Analysis of Archived Pensions Web Pages

The internet has been described as an “information superhighway” (Koelsch, 1995) and claims exist that the information potential of the internet is heralding a new age of consumer empowerment. However, questions remain concerning the amount and extent of information provision and the potential of the information to aid decision-making. Research by Harrison and Waite (2004) was undertaken to examine the information content of web sites belonging to UK pension providers. The rationale for focusing on pension providers was based on the complexity of pensions, the difficulties associated with accessing and assessing pension information and the concerns over lack of adequate provision for retirement amongst UK consumers. The specific aims of the study were:

- To investigate changes in the amount of information provided;
- To investigate changes in the nature and type of information; and
- To comment on the potential of the information to empower consumers to make more informed choices.

The research addresses the overall question of whether online information provision has evolved over time to supply pension consumers with easily accessible information of sufficient quantity and quality to aid decision-making.

Measurement Instrument

The instrument used to measure the information content of pension provider web sites was developed *a priori* in line with recommendations by Neuendorf (2002) and was based on Resnik and Stern’s (1997) Information Content Paradigm. Resnik and Stern developed some 14 evaluative criteria which “represent a morphology of factors identified as information cues which could potentially be used in intelligent decision-making”.

The informativeness of the communicated message was determined according to the number of informational cues recorded. Subsequent researchers have adapted the original instrument (see Fay and Currier, 1994). Indeed, some adaptation was necessary for this study, given that the original application predominantly was in the context of products high in tangibility and low in credence, contrasting with the characteristics of pensions. This resulted in the exclusion of 3 items: ‘taste’, ‘packaging or shape’ and ‘nutrition’ and the separation of ‘price or value’ into two items to reflect both the cost and benefit to the consumer. ‘New Ideas’ was re-labelled ‘innovativeness’ to overcome the problems Pollay (1984) encountered in applying this measure historically.

Pre-testing

The instrument was pre-tested to ensure both its validity with regards to the phenomena under investigation and to test for inter-rater reliability to ensure that the same results are capable of being achieved on repeated trials and by different coders. The instrument was tested using a total of 25 web pages of the 5 largest long-term UK insurance groups, based on UK premiums in 2001 (Association of British Insurers, 2002). The two coders involved each gathered the data independently and the data were then compared.

In a survey of content analysis studies conducted by Kolbe and Burnett (1991), a large proportion of the research was found to be lacking in terms of inter-rater reliability; the most

frequently used reliability index was the percentage agreement, however over 30% of studies did not report any reliability measures. The simple percentage agreement is insufficient as it does not take account of chance agreement between raters (which increases when there are fewer coders and fewer categories). Thus, Perreault and Leigh's (1989) 'Index of Reliability' was selected as the most appropriate measure due to its superior qualities over other measures, such as Cohen's Kappa which has been criticised for its over conservatism and, under some conditions, inability to reach 1 even when there is perfect agreement (Rust, 2001).

The inter-rater reliability scores showed good reliability overall. Items which show poor agreement need to be revisited. High levels of disagreement can suggest weaknesses in the research method, poor operational definitions, categories and coder training. Each coder was provided with a clear operational definition of each item (as shown in Appendix 1).

For the main data collection a random sample of 20 pension providers was compiled from the HM Treasury Annual Report, 2001. The procedure involved evaluating the last recorded web page in the Archive for each year since it began in 1996 up to the last recorded page for 2004. Potentially, this could have resulted in 126 pages (due to 3 companies having a web presence since 1997, 7 since 1998, 6 since 1999, 5 since 2000 and 1 since 2001) However, due to the limitations of the Archive already discussed, the total usable pages was 80. In evaluating each web site against the criteria, the question was asked: "Does this web site communicate any of the following cues about pensions?" A simple presence/absence measure was used to record the data.

Findings and Their Uses

The purpose is not to report on the findings per se that were generated from the study, but rather to discuss how findings of such a study can be used. The findings generated from the study enabled clear patterns and trends in information content of pension provider web sites to be studied over a particular time period. The study, thus, allowed both the volume of informational cues to be measured over time and changes in the volume of information, as well as more subtle changes in the particular type of information communicated. This data is very revealing in terms of describing changes in information provision.

However, the methodology only allowed the information to be evaluated at face value. No indication can be made from this analysis that the information communicated on the web sites is the information that consumers actually desire or require in order to make pension purchase decisions. Neither can conclusions be drawn with any accuracy as to the events or actions that may have led to changes in informational content. Notwithstanding, by teaming content analysis with other research methods such questions can be answered. The insight derived from such a study of archived web pages can generate further research questions to be explored by different methods and potentially different contexts. Some of the ways in which findings from this study are being used include:

1. Using insight from interviews with practitioners, which explore decisions and events involved in web development, to shed light on key factors or forces that have shaped information content. Data is used qualitatively to offer explanations for changes in web content based on practitioners' reported reactions or responses to key external stimuli.

2. Using the findings to generate further research questions to be used in consumer research, to explore consumer attitudes and reactions to web content.
3. Investigating the extent to which key informational cues are the actual cues that consumer desire and require to make informed choices, and to understand where gaps in information provision may exist.

Conclusion

This paper has introduced and discussed the Internet Archive as a valuable research resource in terms of accessing historical web pages and other digital data. Content analysis was discussed as a technique for researching archived web pages. The benefits and limitations of content analysis have been explored and the illustrative example of content analysis applied to the study of pension provider web pages shows the scope and value of the technique. While content analysis data is often descriptive in nature, there is clearly scope for teaming content analysis with other research methods and using it as part of a multimethod investigation.

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APPENDIX 1 - Evaluative Criteria Used

Criteria	Description
1.Price	Information regarding the actual price in monetary value or other indications of the cost to the consumer (i.e. expressed as % of salary etc)
2.Value	Information regarding the benefit to the consumer (i.e. set as final salary or other), death benefits and benefits to beneficiaries.
3.Quality	Any inferences of the quality of the product/company, any industry ratings (i.e. Standard and Poors etc). Any comparison with other pensions/companies.
4.Testimonials and Endorsements	Any assertions regarding product performance or usage from identified individuals or groups, including seals of approvals or awards.
5.Components or Contents	What the pension is comprised of, any opportunity to make AVC's. Any additional services and features connected to the core product.
6.Product Variations	Any information regarding 'families' of products, different types of pensions or different types of saving and investment for retirement.
7.Directions for Use	Information regarding how to use the product, how to get best use from it, how to manage it, and alternative uses for it.
8.Performance	Any indication of how current or past pensions have performed: examples or cases.
9.Competitive Advantage	Any assertions regarding advantage of the product over and above competing products.
10.Availability	When or how the pension is available i.e. does it indicate how to access, set up and transact?
11.Special Offers/Incentives	Any discounts, special rates etc. Any gifts, coupons etc at time of purchase.
12.Guarantees or Warrantees	Any assurances, insurances, availability of service or redress, compensation etc.
13.Safety Features	Any mention of safety, security of pension.
14.Independent Research	Any research reported by independent bodies that might support the pension and its quality
15.Company-Sponsored Research	Any research reported by the company itself that might support the pension and its quality.
16.Innovativeness	Any indications that the company is developing new pensions ideas, concepts, savings etc. identified as an innovator?
17.Links to Further Information	Assertions regarding how further information may be obtained, brochures, catalogues, interviews, email or telephone links etc.

WHAT PEOPLE DO AND WHAT THEY SAY THEY DO - USING LOG DATA TO ENRICH OUR UNDERSTANDING OF SELF REPORTS

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Abstract

In this paper we present a new form of timeline analysis as a way of helping to understand the decisions people make when searching for information and advice online. Our study forms part of a larger investigation of the ways in which individuals with particular health problems seek health information online. The web log data from 15 women searching for information and advice on the menopause was analysed in terms of activities taking place during different time slices. This timeline analysis proves valuable as a way of enriching self-report data as well as highlighting the different decision making processes that occur during a time limited search.

Introduction

Why are online consumers prepared to engage with some sites and not others? This is an issue of critical importance to site developers within any profession, but it is one that has been investigated heavily within an e-commerce context. Trying to find out which sites users choose to engage with and which they reject, and importantly why, presents a number of methodological difficulties for researchers. Typically participants are asked for self-reports of web visits or else the researcher makes use of web or transaction logs. Both of these methods have their limitations and it may be that a combination of techniques or a triangulation approach would provide a fuller picture of site selection and rejection decisions.

In this paper we report on the use of a triangulation study to explore real users searching for health advice about the menopause. The benefits of using multiple data collection methods are described and we report on some interesting timeline findings which could have an impact on the way we understand how users decide to select or reject health websites.

How do real consumers search online for information and advice about their health?

The Internet is increasingly seen as a legitimate source of health information and advice. Yet with over 10,000 health-related sites available on the Internet, (Pew Internet Research, 2000), many of dubious quality, how do people make their decisions about which sites to engage with and perhaps to trust? A great deal is known about how experts judge the quality of health information online, (Standford et al, 2002) but surprisingly little is known about the ways in which ordinary health consumers evaluate sites.

The findings reported in this study are part of a larger three-year project which aims to build up an entire picture of the trust processes involved in seeking health information advice online. In the current study, the emphasis is on the initial heuristic judgments involved in the advice-seeking process – specifically in terms of the ways in which people screen

information and make initial accept or reject decisions. Concurrent work is examining how users choose to engage with sites over longer time spans.

Data Collection Techniques

In trying to understand how consumers search for and evaluate information and advice online a number of different data collection methods have been employed. The two main methods have been self-reports and data logging.

Self-reports include diaries, logbooks, retrospective surveys and interviews. Self-reports can provide more detailed information especially into the users personal history and motivations but can suffer from a number of biases. Retrospective self-reports tend to over or to underestimate usage frequencies or to idealise web behaviour (Payton & Brennan, 1999). Respondents may not recall the actual events but use instead various cognitive heuristics to estimate frequencies. Other biases involve pleasing the experimenter or difficulties in concurrent verbalisation, especially under conditions of high information load (Ericsson & Simon, 1993).

Inconsistencies are not just limited to retrospective self-reports. Eysenbach & Kohler (2002) found little correlation between what users said that would look for in terms of online health advice and what they actually sought and recalled. Likewise Nielsen (2001) suggests that self-reports of user actions or intentions are unreliable and that researchers should pay attention to what users do rather than what they say.

Data logs provide a large scale way of addressing questions such as what do real users search for and how do they search for information and advice. They have also been useful in debunking some of the myths surrounding Internet usage. Data log studies, however, do not provide any insights into the users themselves, who they are and how they evaluated the results.

Method

Fifteen women at various stages of the menopause participated in the study (mean age 49 years). All the women were interested in finding out more about the menopause and all used the Internet at least once a week. Each participant attended a total of four 2-hour sessions held in an Internet café in Newcastle-upon-Tyne, UK. During all four sessions, participants used the Internet to search for information and advice on the menopause, followed by a group discussion with a facilitator. Participants were told to freely surf the web during sessions 1 and 4, and were directed to specific web sites during sessions 2 and 3.

All the websites visited by the participants were logged and the amount of time spent on each site was recorded. In addition the participants were asked to record their perceptions of each site visited in a logbook and use this information during the discussion sessions. All the discussions were transcribed and subject to content analysis. The timeline data from week 1, the free web search was collected and analysed. By timeline analysis we mean that sites were split according to the length of time viewed and then these websites were examined and categorized. A coding scheme was developed in accordance with the aims of the research, the discussion guide and the emerging and recurring themes. Although a detailed discussion of the themes is beyond the scope of this paper, (see Sillence et al, 2004 for more details) attention focused on discussion about the way in which the participants screened and rejected sites or selected sites to engage with in more depth. The transcripts were examined

for instances where the participants talked about sites they had viewed and any discrepancies between sites viewed and those recorded by the participants in their logbooks were noted.

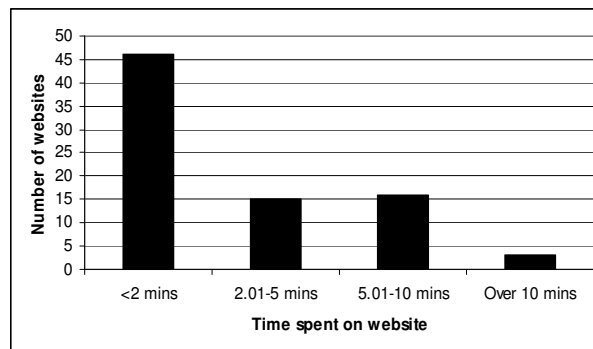
Results

During week 1 the participants each looked at between 2 and 6 sites. In total more than 30 sites were recorded in the logbooks during the first session. A number of different search engines were used with Google being the most popular. To begin with participants carried out simple searches using single keywords.

Time to reject

The data from the website logs is shown in Figure 1. Participants spent different amounts of time on different websites. 80 sites were logged automatically as being viewed. Only 34 of those sites, however, were recorded in the logbooks as being viewed by the participants. The 46 remaining sites were rejected by participants at different times. A significant finding was that any site viewed for less than 2 minutes was not recorded in the log book. Of the 15 sites in the 2.01- 5min category 3 were not recorded by the participants. All sites viewed for more than 5 minutes were recorded in the participants' logbooks.

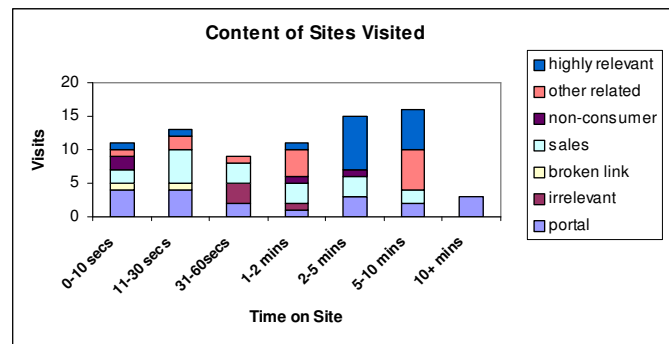
Figure 1: Break down of time spent on different websites according to data logs



Awareness of rejection

Any site viewed for less than 2 minutes was not recorded in the logbook. To try and understand why this might be an analysis of the content of websites rejected at different stages was carried out. Figure 2 shows the content of sites rejected almost immediately (under 10 seconds) as well as content of sites rejected during other time slices. All those sites viewed for over two minutes were recorded in the participants' logbooks. The transcripts of the discussions were examined for any examples where the participants showed awareness that that had visited a site but had failed to write it down in the logbook.

Figure 2: Content of sites visited in terms of time spent on site



Some participants were able to describe instances in which the decision to reject a website had taken place. These instances often referred to irrelevant content. For example:

“That happens a lot especially when you’re surfing you get a lot of stuff which has absolutely got no relevance and you think well how did I get to this screen?” (Female, 54)

Others indicated that a failure to latch onto the site or to become more engaged had led to a quick rejection:

“I think I went onto that when we did the first browse but there was something about it I didn’t like and I came straight off.” (Female, 47)

Sometimes the group discussion prompted the participants to recall that they had visited a site but that they had failed to make a record of it in their logbooks:

“Yes I went there as well but I didn’t write it down ‘cos I didn’t really look at it don’t know why I just switched off (Female, 52)

Pattern of rejection

One of the first issues of note is the effectiveness of rapid heuristic processing of information. Within a thirty second window, participants were able to efficiently sift information – recognizing and rejecting general portals and sales sites quickly. This may be because such sites have distinctive design features associated with them, but some content processing is also underway.

Many of the sites rejected within just 10 seconds were unrelated to the menopause or were not menopause specific. Entering search terms in a search engine often throws up websites in which the search term itself is buried somewhere beyond the first page. Other times the search term used meant that some inappropriate yet still related pages were found. The participants reported that some initial filtering of the search results occurred. They tended to work through the search results choosing to click on ones that sounded promising. They looked for certain keywords and source identifiers. Or others said it was just a random choice. Many presumed that the first search results returned on Google were superior and the log data indicated that the first few results were almost always explored. In addition many of the sites that were rejected within 1.01-2 minutes were commercial sites.

Sites purely devoted to selling products were generally mistrusted and rejected swiftly. Sites that were recorded in the logbooks were usually specifically related to the menopause. Fewer

of the sites were commercial sites. Sites that sold products also provided information and advice about the menopause. The recorded sites were often more complex and provided more in-depth information than the un-recorded sites.

Discussion

This current study has focused upon the initial heuristic judgments involved in the advice-seeking process – specifically in terms of the ways in which people screen information and make initial accept or reject decisions. Whilst the setting for the study was an Internet café, people reported searching in a similar way to normal. One person reported that she would if anything have spent less time on some sites at home than she actually did during the sessions.

The study has shown that people are not always very good at recalling or verbalising their thoughts and actions. Despite the fact that people were asked to make a record of their reactions to each and every site they visited (in real time) they failed to record any site that they had not stayed on for more than two minutes. When prompted during the group discussions, some participants showed awareness of this failure. Timeline analysis allows a fuller picture of users' web searches to be established and could also be used as a way of prompting users to recall certain sites that they have visited. The results also suggest some implications in terms of the decision-making strategies being used by the participants at the different time slots. It suggests that at different time periods their selection or rejection decisions are being underpinned by different factors.

At 10 seconds

During the first 10 seconds of scanning websites participants are keen to find something that is immediately relevant to them and to find content that they can 'latch onto'. Many of the rejected sites at this stage were portal sites. Portal sites often require participants to carry out a deeper search or to input additional search terms.

At 30 seconds

The largest category of sites rejected at this point were sales based. Participants were clearly able to detect and reject signs of commercial activity and a sales orientation very rapidly.

At 1 minute

Sites rejected at this stage were often irrelevant. Whilst at the 10 second stage irrelevant sites were quickly spotted and rejected some sites require further exploration before it is possible to assess their relevance

At 2 minutes

Many sites rejected at this stage were either sales based or were classified as 'other related'. Some sales sites do not reveal their commercial element until the user has explored the site in some detail. Participants may search through the site and then make a decision to reject the site after discovering its commercial motivation. In terms of the 'other related' sites, participants may have spent two minutes trying to work out whether the site was actually relevant to their own needs and then decided not to engage with it any further.

Conclusion

With just ten seconds to look people are making judgements on the basis of the immediate relevance of the site. At one minute users may only just be starting to discover that some sites are irrelevant or have a strong commercial motivation. At two minutes people make a decision based on whether they have been able to extract any useful information from what might be a potentially useful and engaging website.

These findings suggest that future work needs to consider the time pressures that people are under when they are making decisions about which websites to select and engage with in more depth. In particular the speed with which consumers will reject information should provide a salutary lesson regarding the importance of providing the right cues to site content in a highly visible manner. Future work will examine the sites reported in the log books and in the discussions as these are the ones which have meaning to the participants.

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USING ACTIVITY DIARIES AS A RESEARCH TOOL: SOME METHODOLOGICAL LESSONS

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Abstract

This paper discusses some of the methodological issues surrounding the use of activity diaries as a research tool. Its main concern is to highlight the lessons that have been learnt from the use of activity diaries as a supplementary method of data collection in an ongoing study.¹ This research is primarily concerned with whether different levels of access to/and use of information and communication technologies (ICTs) enable different paces of life in different communities, and how this process might be contributing to social and spatial polarisation. However, the insights gained from this study, into how activity dairies can be successfully applied, are relevant to research within any discipline where this method of data collection is being considered. This paper begins with a very brief introduction to activity diaries, it then goes on to highlight some of the difficulties encountered when using this research method and how these problems were resolved. The paper concludes with some remarks concerning how activity diaries might be used most productively.

Activity Diaries

Activity diaries have been used within a wide range of disciplines to examine issues as disparate as, community participation in leisure services (Baker 2000) and the travel impacts of apartheid policies in South Africa (Behrens 2001). Increasingly activity diaries are being used to examine the social and/or spatial issues arising from the use of ICTs in general and the internet in particular.² Sorokin pioneered the diary approach to data collection in the 1930s (Sorokin & Berger 1938). However, the theoretical foundations of current activity-based research methods lie primarily in geography and more specifically in ‘time geography’³ (Behrens 2001). Essentially, activity diaries involve respondents keeping a detailed log of how they allocate their time during the day, often focusing on particular activities pertinent to the research being undertaken. For example, some activity diaries focus on travel behaviour, others on communications activities (Axhausen 1995, Harvey 2003) and in some

¹ This study is an 18 month ESRC-funded E-society project entitled “Multispeed cities: The Logistics of Living in an Information Age, which is due for completion in December 2004.

² See Gershuny (2002), Livingstone (2002), Lyons and Kenyon (2003) and Kenyon (2004).

³ Time Geography was pioneered in the 1960’s and 1970’s by the ‘Lund School’ in Sweden, from this perspective, time and space are resources, and the primary determinants of the human experience are the constraints that restrict an individual’s utilisation of these resources. See for example Hägerstrand’s (1970) seminal paper which posed the question “what about people in regional science?” The theoretical perspective of time-geography underpinned the ground-breaking studies into activity-based methods undertaken at the Transport Studies Unit at Oxford University in the 1980’s (Behrens 2001), See for example Clarke et al 1981 and Jones et al 1983.

cases they focus on leisure activities⁴. There are also variations in whose activities are recorded, in that some activity diaries focus on household activity patterns and others the activities of individuals (Axhausen 1995, Harvey 2003).

There is not enough space here to discuss the advantages and disadvantages of the wide array of approaches taken in the design of activity diaries.⁵ It is sufficient to say here, that the approach taken in the design of the activity diaries used in the research discussed in this paper drew primarily on those diaries used in research concerned with travel and/or communications activities.⁶ Neither does this paper dwell on the physical design of activity diaries, which is already well documented elsewhere⁷; rather its main focus is on issues of research methodology outside of the physical design of activity diaries, such as how activity diaries are disseminated and returned and how the data they capture can be clarified or equalised.

The Research

Within the research discussed in this paper, activity diaries were used as one of a number of research methods, which also included face-to-face interviews and a questionnaire. This small-scale predominantly qualitative study is designed to examine how the interactions of multiple ICTs (that is landline telephones, mobile telephones and the Internet) work cumulatively across multiple sectors to influence the logistics of daily life and experiences of time and space for a relatively privileged and a relatively disadvantaged neighbourhood within one UK city.⁸ The central aim of the project is to understand how uneven access to ICTs, with their supports for new time-space dynamics and logistical practices within everyday life, effect the grounded realities of social inclusion and exclusion within two contrasting place-based neighbourhoods, that are simultaneously socially and economically poles apart, yet are geographically very close within the same city. The communities chosen as the focus of the study are the wards of Blakelaw and Jesmond in Newcastle-upon-Tyne, the former being among the twenty percent most deprived wards in England and the latter being among the most affluent twenty percent.

From the outset of the research it was intended that the information gained from the activity diaries would be used to supplement the interview material, which was the primary method data collection. The diaries were designed to record when, where, with whom and how

⁴ See for example Gershuny (2002).

⁵ See Axhausen (1995) and Harvey (2003) for such a discussion.

⁶ Activity diaries focusing on travel are sometimes described as 'travel diaries, typically they are designed to capture information on the origin and destination of the trip; departure and arrival times; mode(s) used; and whether or not the traveller was accompanied (Kenyon 2004). For a recent example of this style of diary see Behrens (2002). Those activity diaries which focus on communications activities are often referred to as 'communications diaries' (Kenyon 2004) in general they are designed to record the time and mode of communications activities, who else was involved in those activities and the direction of communication (see Anderson et al 1999; Gershuny 2000; Mokhtarian and Meenakshisundaram 1999). Currently there are one or two studies as well as the one discussed in this paper attempting to combine travel and communications approaches to designing activity diaries to explore the questions surrounding communications, mobility and social polarisation, see for example Kenyon (2004) and Lyons and Kenyon (2003).

⁷ See Kenyon (2004), Axhausen (1995) and Harvey (2003).

⁸ This approach is more ambitious than other work in this area, which tends to focus on a particular technology, see for example Kenyon's (2004).

people communicate electronically and when, how, where and why they travel. Self-completion activity diaries were chosen to capture this information, as they are argued to be a reliable method of gathering data concerning events that are difficult to accurately recall (Corti 1993). However, questions designed to uncover research participant's travel and communication patterns were also incorporated within the interview schedules. These augmented the information gained from the activity diaries and provided a failsafe option should the activity diaries prove less satisfactory at gathering data than anticipated. Incidentally, this has allowed the assessment of the value and limitations of activity diaries as a method of data collection without compromising the goals of the research project.

Designing the activity diaries

One of the early decisions made when designing an activity diary concerns whether to use an open format, allowing respondents to record activities and events in their own words, or to use a more structured format where all activities are pre-categorised. In this research it was decided to attempt to integrate both these formats, by pre-coding the activities with which the study was concerned and also providing a space for respondents to describe these activities (see figure 1 which presents the example of a correctly completed page of the diary used to illustrate how the diary should be completed).

Figure 1 Example of a correctly completed page of the activity diary.

Activity	Night			Morning			Please tell us about this activity
	4 am 0400	5 am 0500	6am 0600	7am 0700	8am 0800	9am 0900	
1 Travel by car / taxi	0400	0410	0420	0700	0710	0720	Took Taxi from home to local train station in Hartlepool to catch train to work
2 Travel on foot / bicycle	0400	0410	0420	0700	0710	0720	On journey to work walked from Haymarket metro station to office in Claremont road
3 Travel by public transport	0400	0410	0420	0700	0710	0720	On journey to work travelled by train and metro to Haymarket metro station in Newcastle
4 E-mailing / instant messaging	0400	0410	0420	0700	0710	0720	Received and Replied to work related internal and external e-mails - external sent to Durham and London. - external received from Teesside, York and Hull
5 Telephone call -fixed line	0400	0410	0420	0700	0710	0720	Telephoned national rail enquires from home to check Train was running - also made internal work related telephone calls
6 Telephone call- public call box	0400	0410	0420	0700	0710	0720	
7 Mobile phone call	0400	0410	0420	0700	0710	0720	Called taxi from company in H/pool for son to go to work. Called son to make sure he was out of bed.
8 Text/ picture message	0400	0410	0420	0700	0710	0720	Received and replied to text message from girl friend d in Hull to arrange lunch time meeting in Newcastle
9 Surfing the web -PC	0400	0410	0420	0700	0710	0720	
10 Surfing the web - mobile	0400	0410	0420	0700	0710	0720	
11 Surfing the web - digitalTV	0400	0410	0420	0700	0710	0720	
12 Other (please specify)	0400	0410	0420	0700	0710	0720	

The next crucial stage of the design process involved deciding the length of time the activity diary should record activities for. It was decided that asking respondents to record their activities for two days would provide sufficient data for the purposes of the project, without

exhausting the good will of potential research participants. The decision to restrict the diaries to two days and the ways in which different activities were coded were both informed by the selection of postal administration as the dissemination method for the diaries⁹. The reasoning being that keeping the length of the diaries to a minimum might increase the response rate. In a further attempt to encourage participation in the research, potential participants were offered a £5 gift voucher for completing the activity diaries.

Poor Response Rates

The postal administration of the activity diaries and the questionnaire was also used to recruit interviewees for the project.¹⁰ Initially, 400 activity diaries were posted to respondents selected from a data set of all the adults living in the two wards with which the research was concerned. However, the response rate from this approach was less than 3%. When compared to the 25% response rate obtained from the postal administration of the questionnaire, also used within the study, this indicates a problem with activity diaries. This is despite the fact, that when piloted respondents reported that activity diaries were less time consuming to complete than the more traditional style questionnaire piloted at the same time. The reason for the poor response rate for the activity diaries maybe that while most people have filled in numerous questionnaires and therefore completing them is somewhat intuitive, completing an activity diary is not intuitive in this way. It demands that the research participant reads and digests a page of instructions (see figure. 2).

It would seem that having to read and digest a page of instructions deterred many potential research participants from completing the activity diary.¹¹ This would appear to have occurred even though the instructions were kept to the bare minimum (see figure 2), in that they were written as clearly and concisely as possible, as is advised in the design diary methods of data collection (Corti 1993).

The activity diaries also reduced respondents' willingness to take part in further research. Some 30 percent of those who filled in the questionnaire indicated that they were prepared to take part in further research, but none of the few respondents that completed the activity diaries indicated that they were prepared to do so.

Given the time and financial constrains of the project, it was decided that asking interviewees to fill in an activity diaries at the end of the interview and return them by post in a pre-paid envelope, provided the most obvious method of attempting to improve the response rates obtained from the postal administration of the activity diaries. This greatly increased the response rate to almost 50 %. Had the time and financial constraints of the project not prevented it, these response rates may have been further increased by personally picking up the completed activity diaries. However, as the main form of data collection within this research was face to face interviews, which it was felt offered the greatest

⁹ It was not possible to use personal placement and pick-up visits to administer the diary, which is the preferred method of disseminating activity diaries (Corti, 1993) due to the financial and time constraints of the project.

¹⁰ The covering letter sent out with the activity diaries and the questionnaire requested that respondents indicate whether or not they would be prepared to take part in further research.

¹¹ Also, due to the financial and time constraints of the project the piloting of the activity diaries was restricted to giving them to colleagues family and friends to complete, obviously this meant that these initial respondents had a greater impetus to fill in the diaries than those to whom the diary was posted.

opportunity to collect data pertinent to the research, it was not feasible to devote this much attention to the activity diary phase of the research.

Figure 2, the instructions given concerning how to complete the activity diaries.

How to complete the diary

1. A number of activities are listed on the left hand side of each of the tables presented on the following pages, these should cover most of the ways people communicate electronically and travel around. If there is not an appropriate description in this list for one of the ways you travel or communicate electronically, please use the row marked other (Code 12) at the bottom of the table and write what you were doing at the time in the 'please tell us about this activity' section of the table.
2. **It is important** that one of the days you record your travel and communications activity is a **working day** and the other is a **non-working day**. If you do not have formal employment or educational activities please tell us about **one mid-week day** and **one day at the weekend**, and **WRITE THE DATE AT THE TOP OF EACH PAGE.**
- 3 Please **try to record all of your travel and communication activities, for the whole of the two days.** We understand that there might be gaps in the table when you are not travelling or using communications technology.
- 4 In the "**please tell us about this activity**" section please tell us
 - Where you were travelling from and to and the reason for your trip
 - Where you were and where the person you were contacting (or were being contacted by) was at the time of the call text message etc. and the reason for this communication.
 - Which web site you accessed and why

If you have too many communication activities to describe in this way please be more general. For example, you could describe 10 fixed line telephone calls made at work as either internal or external work related telephone calls.

- 5 If you make a mistake please just cross it out.
- 6 An example of a completed section of the table is given on the next page,* in this example the person
 - Took a taxi from home to local train station (Code1)
 - Travelled by train and by metro to work (Code 3)
 - Walked from metro station into work (Code 2)
 - Received and replied to e-mails (Code 4)
 - Called national rail enquires by telephone from home (Code 5)
 - Called son on a mobile telephone (Code 7)
 - Called Taxi Company on a mobile telephone (Code 7)
 - Received and replied to text messages on a mobile telephone (Code 8)
 - Made work related telephone calls (Code5)
 -

* See figure 1

The quality of data collected

Another problem with the activity diaries concerned the level of accuracy with which respondents completed them. In some cases the diaries were only partially completed for example, five respondents recorded their travel and communications activities for a single day, rather than the two days requested, while other respondents neglected to fill in the face sheet information concerning gender and age etc. The second of these difficulties was solved by time-consuming telephone calls to obtain the information omitted.

Problems were also encountered with the level of detail with which the activity diaries were completed. Some respondents filled in the diaries very carefully allowing the capture of

information concerning the number and time of their communication and travel activities and the reason for those activities. However, others paid much less attention to detail, often merely indicating that they had made numerous telephone calls etc during the entire day, although in these cases the data captured on the time of travel activities was more time specific. It has been possible to use the data obtained from the activity diaries to compare when, how and where the people living in the two wards under examination travel and to make some limited comparisons between the amount and types of electronic communication activities they undertake. However these findings are based on both less rich data than expected and a smaller data-set than anticipated. The total number of satisfactorily completed activity diaries obtained was a mere thirty-two, out of a total of four hundred and fifty.¹² Given the amount of time energy and effort that designing and administering the activity diaries entailed, they yielded a very small amount of data in comparison to the wealth of data contained within the transcripts of the fifty face to face interviews, also conducted as part of this project.

Conclusions

The response rate received from the postal administration of the activity diaries was abysmal (less than 3%), and given the time involved in personally delivering the activity diaries, explaining how they had to be filled in and requesting their return by post the response rate received on the effort expended was merely modest - even at 48%.

It would appear to obtain a totally satisfactory response rate using this method of data collection it is necessary for researchers to deliver and collect the activity diaries, making contact with the respondent in the process. This has obvious cost and time implications for a research project using activity diaries.

However this does not solve the problems caused by the different levels of detail and accuracy with which respondents complete activity diaries. Here an obvious solution is for researchers to go through the completed diaries with respondents. Again this is time consuming and costly. Indeed, using an interview to clarify diary entries may require a third visit to respondents, to allow the researcher time to examine the interviewees initial responses within the activity diary and tailor the interview schedule to cover the omitted information. Here it must also be noted, that when using activity diaries to examine issues arising out of the use of ICTs the clarification of the responses given by means of an interview, may not completely solve the problems encountered with the level of detail with which respondents complete activity diaries. It is possible, that the pervasive nature of electronic communications has led to them becoming so integrated within the daily lives of some individuals, that recording each of them becomes almost an impossibility for those individuals, regardless of the methods used in an attempt to do so.

Setting the above problem to one side, it would seem that the most profitable way of employing activity diaries is some form of diary/interview method, where the diary keeping period is followed by an interview asking detailed questions about the diary entries. This places activity diaries at the centre of the research project, as they become the main form of data collection upon which any other methods of data collection employed in that project build. However, the research demonstrated that using activity diaries, rather than more

¹² Twenty four of these were generated out of those disseminated during the fifty interviews, giving a return rate of forty eight percent on these particular activity diaries.

traditional forms of surveys, reduces respondents' willingness to take part in the research. Consequently, it is expedient to offer potential research participants a substantial monetary incentive to take part in a project employing activity diaries.

In summary, the main lesson to be drawn from the research discussed here is that although activity diaries can be productive when used in conjunction with an interview, the careful costing of projects using activity diaries, in terms of both time and money, is essential. Unless sufficient time and money are built into a research project at the outset, this method of data collection should be avoided.

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METHODOLOGICAL CONSIDERATIONS WHEN INTERVIEWING ICT PRACTITIONERS

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Abstract

There is a strong temptation when conducting qualitative research involving the ICT subject matter to turn the burgeoning range of online research techniques. It is recognised that online qualitative research offer a number of credible advantages. However, there is need for careful consideration of a number of issues before deciding on the most effective research method. This paper will discuss a practitioner based research study which utilised traditional qualitative techniques to explore how marketing practitioners mobilise new and more traditional media channels when targeting a youth audience.

Exploring the World of Marketing Practitioners

ICT has had a profound effect on most if not all aspects of commerce. One profession which has embraced the internet and mobile revolution has been marketing. In marketing communications for example, internet advertising now accounts for over £150 million in the UK alone (Nielsen April 2004) whilst mobile marketing is growing fast. New media agencies serving the client community are growing fast and virtually all of the major networked advertising agencies now have an established new media arm. This undoubtedly reflects the growing levels of internet and mobile access enjoyed by the population at large.

Much attention within academic and practitioner communities has been paid to the consumption of new media technologies, across a diverse range of consumer groups. A typical example of this was Tapscott's (1998) description of the 'net generation' of young consumers during the late nineties. There are also numerous practitioner texts outlining the best ways to utilise new media technologies for effective marketing communications. However, far less attention has been paid to creators of new media communications, the marketing practitioners.

This paper is a consequence of a research study that set out to explore the perceptions and strategies used by marketing agency practitioners when targeting a teenage audience. The research was carried out between the autumn of 2002 and the spring of 2003. An important aspect of the contribution of this research was its ability to compare and contrast practitioner viewpoints with the multimedia experiences of a youth audience.

Researching Marketing Practitioners – Methodological Issues

Given the lack of empirical research to date and the desire to gain deeper understandings of practitioner perceptions, quantitative survey research was rejected in favour of pursuing

exploratory qualitative options. A further reason for using qualitative research was the nature of the research audience. To gain rich insights, it was decided that the research should seek the purported 'experts' in the specialist field of youth related marketing communications. 'Expert' was defined as "the most influential, the most prominent and the well informed" in any organisation or community (Marshall and Rossman 1995). The rationale for this was that experts would possess more insightful experiences and attitudes to draw on for describing ways and means of targeting a youth audience. The limited number of recognisable 'experts' known to have a youth specialism effectively ruled out a quantitative methodology.

Central to the success of the research were decisions taken over qualitative research methodology. Given the rise in prominence of online qualitative research techniques, there was a temptation to marry research subject matter and research method. However, a conscious decision was taken to use traditional 'face – to face' interviewing techniques rather than contemporary online interviewing options. Before discussing some of the reasons for this, it is worth briefly outlining the emergence of online qualitative research techniques.

The Emergence of Online Qualitative Research Techniques

The burgeoning growth in online research techniques reflects both technological advances and increasing consumer access and use. Used initially for quantitative techniques, online research methods are now more widely found in academic and commercial qualitative research projects. Techniques include moderated e-mail exchanges (Adriaenssens and Cadman 1999), online discussion groups (Tse 1999) and an online version of ethnography known as netnography (Kozinets 1997).

Researchers have noted a number of advantages offered specifically by online qualitative research techniques. Deal and Hodson (cited in Nancarrow *et al* (2001)) for example suggested that online discussion groups encourage greater freedom of speech, reduce moderator dominance and encourage frankness in discussions. Online discussions can provide for immediate feedback, work across boundaries and allow for interaction over an extended period of time (Kent and Lee 2001). It has also been suggested that a richer vein of data can be accessed because greater control has been passed over to the participants (Maclaran and Catterall 2002). From a client point of view, online techniques provide for a fast and cost effective method of accessing respondents.

However, such techniques are not without their problems. Researchers have highlighted the lack of genuine human interaction that traditional techniques deploy (Brown *et al* 2001), the problems of establishing visual rapport in a faceless interface (O'Connor and Madge 2003) and issues concerning online ethics (Nancarrow *et al* 2001). It has been argued that many of the problems associated with online research techniques can be overcome with careful consideration. O'Connor and Madge used personal biographies and photographs for example to provide participants with a visual image and some contextual information to relate to. Similarly, it is argued that ethical issues such as invasion of privacy can be overcome by adhering to internet research guidelines such as those published by ESOMAR.

Nancarrow *et al* (2001) summarised that researchers need to give careful thought to the following factors: intended use, sensitivity of topic, characteristics of the population, use of stimulus, importance of reading body language, skills of moderator, budget and timings.

There is no doubt therefore that online research techniques are an important consideration when conducting any form of qualitative research including ICT related issues.

Considerations When Selecting Method of Qualitative Research

The remainder of this paper will describe some of the important considerations that influenced the choice of qualitative research method used in this research study. Where appropriate, it will compare and contrast the merits of online versus traditional forms of qualitative research. Six main considerations will be outlined: gaining access, research objectives, researcher position, style of questioning, data interpretation and dissemination.

Gaining access

As a former marketing practitioner, the author was cognisant of the difficulties involved in researching a practitioner audience. The thirty-five *potential* participants identified for this research study lived in dispersed geographic centres of marketing communication excellence including London, Amsterdam, and Edinburgh. Therefore, location dispersion was problematic from a time and budget point of view. In addition, agency practitioners, in keeping with most spheres of business, are notoriously busy and so gaining access was always going to be problematic. Using a form of online interviewing might have been one potential solution given its asynchronous qualities, allowing participants the luxury of responding at a time that suited their own timescales. This alone however would have ignored a number of other important considerations that pointed towards more traditional forms of qualitative methods.

The geographical dispersion also ruled out any consideration of traditional focus group methodology and pointed towards 'face to face interviewing. 'Face to face' interviewing also allows for a more personal, intimate form of research which recognises the 'expert' nature of the participant.

Research objectives

One of the most fundamental considerations shaping any research proposal is the research objectives. This research was concerned with how practitioners use new media communications in their attempts to establish contact and relationships with a youth audience.

The author was cognisance of the need to separate out research subject matter from (qualitative) research method. There was a danger that when conducting discussions on the merits and uses of ICT, use of ICT research methods might have incurred bias. In particular, participants who perceived themselves to be more conformable in the use of ICT research techniques might be more pre-disposed to take part. Ironically, the research found that a number of marketing practitioners contributing to new media communications strategies confessed to either being "internet dinosaurs" or acknowledged being cynical and rejecting of the mountain of e-mail they received. Consequently, their participation using online methods was far from guaranteed.

Another potential source of bias to consider was whether practitioner responses would have been conditioned or influenced by the research method technology. For example, practitioners may have been less than honest or frank when discussing issues such as

consumer privacy and perceived intrusion had discussions taken place using the world wide web or e-mail (the very same mediums at the centre of such consumer concerns).

Researcher position

Careful consideration was also given to the 'position' of the researcher. Researchers can adopt a number of different positions when conducting qualitative researcher, each once with different implicit assumptions regarding epistemology, researcher experience and style of interviewing adopted. An objective position for example assumes that the researcher remains detached and fully independent, before, during and after the process of interviewing. The researcher is assumed to have no prior knowledge of the subject matter or willing to holdback any such knowledge during the interview process. A more subjective position on the other hand assumes that the researcher acknowledges a level of subjective knowledge and is willing to share that knowledge with the participant in the hope that this will encourage a more empathetic discussion. The researcher is assumed to be an intrinsic part of the interview process, contributing to and very much central to the research process.

In this research study, the researcher in question was a former marketing consultant with fifteen years working with marketing consultancies, research companies and agencies. This commercial experience undoubtedly brought with it a level of 'insider information'. To ignore this and not use it in the course of discussions could have been problematic. Therefore, the researcher used such experiences to become an active participant in the dialogue, a mode of interviewing consistent with the concept of the 'empathetic observer'. In this mode, the researcher was better able to comprehensively understand the "subjective meanings and actions" voiced by the expert informer. The subjective position taken encouraged more exchange of insightful stories and a higher level of confidence between interviewer and interviewee.

The position of 'empathetic observer' would have been more difficult to operationalise using online researcher techniques. Such techniques encourage a more detached style of interviewing, reducing the moderator influence rather than placing it centrestage. This is because ICT technology places a certain distance between interviewee and interviewer, with its lack of a visual dimension, 'face to face' interaction and spontaneity. Traditional 'face to face' interviewing on the other hand offers such benefits. It should be pointed out that the position of an 'empathetic observer' should only be considered by an experienced and knowledgeable researcher.

Style of questioning

The style of questioning adopted also plays an important part when interviewing 'experts'. Conducting interviews with senior practitioners requires a style of questioning which reflects their level of status and likely contribution. In this study, the researcher was aware that a more flexible and responsive style of questioning would be required to interview perceived experts. Interviewees were often at senior management or directorial level and had their own set of personal agendas and at times, forceful points of view.

Consequently, the researcher developed a series of 'grand tour' topic areas (Spradley 1979) for interview procedures rather than a more tightly defined set of pre-prepared questions. The topic areas ranged from 'practitioner understanding of youth media use' and 'attitudes

towards traditional and new media' to 'strategies and tactics adopted in targeting young consumers'. A more directional style might have risked inhibiting the naturalistic outcome of the discussions and preventing deeper insights from emerging. During the interviews conducted, the subject matter often veered off at very lateral tangents. At times, these tangents turned out to be highly beneficial. In one example, the subject matter shifted towards the interviewee's previous experiences of working for a rival agency. During the discussion, it emerged that the rival agency's policy towards e-mailing practices was markedly different from the interviewee's current employers. From what started as a discussion about moving agencies turned into a very in-depth debate about the ethics of e-mailing practices. Without this flexible approach, such a discussion might have never emerged during the interview process.

There is no doubt that online interviewing styles do offer tangible benefits. In particular, online interviewing can allow for an ongoing discussion to emerge, sometimes over a period of days or even weeks. In this sense, the process can be more considered allowing the interviewer and interviewee time to reflect on the subject matter, without the cost of re-interviewing 'face to face'. In this case however, what the researcher might have gained such an ongoing discussion could have been lost through lack of spontaneity. 'Face to face' interviewing techniques can be invaluable in reacting to and capitalising on nuances of discussions. Skilled moderators are able to respond to subtle changes in verbal and visual cues, mood and body language towards a specific topic or a more controversial line of questioning. In the event, the researcher did return to re-interview two interviewees incurring considerable time and money.

Interpretation of data

The method for accessing and interpreting interview data requires consideration when conducting ICT informed research using either traditional or online methods. Online interviewing for example offers an almost immediate record of the interview proceedings with little need for the expensive and time consuming procedures of transcription. In this research, time and cost was incurred in visiting disparate locations and conducting full transcriptions of interview records using agency transcribers.

There are a number of well-known methods for analysing and interpreting the interview data. Here, the researcher chose to analyse the text following the broad principles of grounded theory (Strauss and Corbin 1990). By spreading the interviews out over a period of four to five months, interviews could be fully transcribed and sometimes analysed in advance of subsequent interviews. This allowed the researcher to develop emergent conceptualisations as the interview process continued and a significant degree of flexibility in altering lines of questioning in response to new findings emerging. Given that issues of ICT often develop and change over a very short period of time, it was important to identify issues that had a temporal dimension such as mobile phone consumption. Therefore, the researcher had to be cognisant in using a grounded theory approach that temporal factors were clearly defined and identified.

The researcher considered used a competing philosophy for conducting qualitative research known as phenomenology (Thompson *et al* 1989) Phenomenology encourages participants to draw from first hand experience and re-tell vivid experiences in the form of 'thick' descriptions. However, it is less consistent with a more probing approach adopted by the

interviewer. Given the prior knowledge of the researcher concerning ICT issues, a more probing form of questioning in responding to lines of inquiry allowed the researcher to exchange viewpoints and at times challenge accepted wisdoms. For example, the researcher was keen to uncover levels of importance practitioners attached to issues such as consumer rights in response to incoming practitioner directed e-mail. At times, this required a more probing style of questioning inconsistent with the principles of phenomenology.

Dissemination

The final consideration concerned the dissemination of the research findings. The researcher felt it was important to share the findings with the participating practitioners before publishing any findings. There is no doubt that online media allowed the researcher a quick and easy way to send drafts of the final results before publishing any of the findings. However, in two cases, comments by the practitioners warranted further investigation. In both cases, the practitioners disagreed with aspects of the researcher's interpretation of the discussions. Again, it was felt that 'face to face' discussions would allow the researcher to go back over the subject matter and instigate a meaningful discussion. Although this policy does have attendant risks should the practitioner withdraw the right to use data, the subsequent discussions prove fruitful and worth the risk.

Closing Thoughts and Future Directions

Decisions over the optimal method for conducting ICT research are often a matter of fine judgement. In the case of practitioner orientated research, researchers need to very carefully consider their subject matter, epistemological approach and perhaps most importantly, own personal skills and qualities. Conducting face to face interviews with senior managers requires a great deal of tenacity to secure the interviews and confidence to achieve a meaningful result. The end result can however be a very satisfactory one. The findings from this research study can be found in Grant (2004).

Although the small potential sampling frame ruled out the possibility of generalising the findings through quantitative techniques, a future consideration for many ICT research designs would be how appropriate online survey techniques are having completed initial qualitative exploration. Online survey techniques undoubtedly offer advantages of speed, cost, data compilation and for many respondents, ease of completion. However, concerns over respondent bias still apply when considering ICT subject areas. Questions would have to be piloted very carefully to ensure that the technology does not inhibit or unfavourably influence the responses given.

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