Qualitative Research in Information Systems

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CONTENTS

WELCOME

Welcome to the AIS World Section on Qualitative Research in Information Systems (IS). This section aims to provide qualitative researchers in IS - and those wanting to know how to do qualitative research - with useful information on the conduct, evaluation and publication of qualitative research.

The originally accepted work was published in *MISQ Discovery* in 1997 and is available in the MISQ Discovery archive. This work has received a few awards: the Value-Added Site award for sponsored by the Academy of Management's Organizational Communication and Information Systems Division and AIS World for 1996-1997; an AISWorld Challenge Award from the Association for Information Systems in 2004; and the AIS Technology Challenge Award in 2013.

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INTRODUCTION

This section is dedicated to qualitative research in Information Systems (IS). Qualitative research involves the use of qualitative data, such as interviews, documents, and participant observation data, to understand and explain social phenomena. Qualitative researchers can be found in many disciplines and fields, using a variety of approaches, methods and techniques. In Information Systems we study the managerial and organizational issues associated with innovations in information and communications technology; hence the interest in the application of qualitative research methods.

This section is organized as follows. After a general overview of qualitative research, philosophical perspectives which can inform qualitative research are discussed. This is followed by sections on qualitative research methods, qualitative research techniques, and modes of analyzing and interpreting qualitative data. This is then followed by a number of sub-sections that relate to qualitative research in general, i.e. citation lists, links to resources on the Internet for qualitative researchers, links to software tools and calls for papers.

The goal is to provide the IS community with useful information on qualitative research in IS (subject to copyright considerations) with as much material as possible provided -- through links -- by the original authors themselves.

If you wish to cite this work, the complete citation information is included below. Please send suggestions for improvement to the Section Editor at: m.myers@auckland.ac.nz

OVERVIEW OF QUALITATIVE RESEARCH

Research methods can be classified in various ways, however one of the most common distinctions is between qualitative and quantitative research methods.

Quantitative research methods were originally developed in the natural sciences to study natural phenomena. Examples of quantitative methods now well accepted in the social sciences include survey methods, laboratory experiments, formal methods (e.g. econometrics) and numerical methods such as mathematical modeling. See the ISWorld Section on Quantitative, Positivist Research edited by Straub, Gefen and Boudreau (2004).

Qualitative research methods were developed in the social sciences to enable researchers to study social and cultural phenomena. Examples of qualitative methods are action research, case study research and ethnography. Qualitative data sources include observation and participant observation (fieldwork), interviews and questionnaires, documents and texts, and the researcher's impressions and reactions (Myers 2009).

The motivation for doing qualitative research, as opposed to quantitative research, comes from the observation that, if there is one thing which distinguishes humans from the natural world, it is our ability to talk! Qualitative research methods are designed to help researchers understand people and the social and cultural contexts within which they live. Kaplan and Maxwell (1994) argue that the goal of understanding a phenomenon from the point of view of the participants and its particular social and institutional context is largely lost when textual data are quantified.

Although most researchers do either quantitative or qualitative research work, some researchers have suggested combining one or

more research methods in the one study (called triangulation). Good discussions of triangulation can be found in Gable (1994), Kaplan and Duchon (1988), Lee (1991), Mingers (2001) and Ragin (1987) . An empirical example of the use of triangulation is Markus' (1994) paper on electronic mail.

As well as the qualitative/quantitative distinction, there are other distinctions which are commonly made. Research methods have variously been classified as objective versus subjective (Burrell and Morgan, 1979), as being concerned with the discovery of general laws (nomothetic) versus being concerned with the uniqueness of each particular situation (idiographic), as aimed at prediction and control versus aimed at explanation and understanding, as taking an outsider (etic) versus taking an insider (emic) perspective, and so on. Considerable controversy continues to surround the use of these terms, however, a discussion of these distinctions is beyond the scope of this section. For a fuller discussion see Luthans and Davis (1982), and Morey and Luthans (1984). See also the section on philosophical perspectives below.

»General References on Qualitative Research
»ICIS 1996 Panel on Survey Research

PHILOSOPHICAL PERSPECTIVES

All research (whether quantitative or qualitative) is based on some underlying assumptions about what constitutes 'valid' research and which research methods are appropriate. In order to conduct and/or evaluate qualitative research, it is therefore important to know what these (sometimes hidden) assumptions are.

For our purposes, the most pertinent philosophical assumptions are those which relate to the underlying epistemology which guides the research. Epistemology refers to the assumptions about knowledge and how it can be obtained (for a fuller discussion, see Hirschheim, 1992).

Guba and Lincoln (1994) suggest four underlying "paradigms" for qualitative research: positivism, post-positivism, critical theory, and constructivism. Orlikowski and Baroudi (1991), following Chua (1986), suggest three categories, based on the underlying research epistemology: positivist, interpretive and critical. This three-fold classification is the one that is adopted here. However it needs to be said that, while these three research epistemologies are *philosophically* distinct (as ideal types), in the practice of social research these distinctions are not always so clear cut (e.g. see Lee, 1989). There is considerable disagreement as to whether these research "paradigms" or underlying epistemologies are necessarily opposed or can be accommodated within the one study.

It should be clear from the above that the word 'qualitative' is not a synonym for 'interpretive' - qualitative research may or may not be interpretive, depending upon the underlying philosophical assumptions of the researcher. Qualitative research can be positivist, interpretive, or critical (see Figure 1). It follows from this that the choice of a specific qualitative research method (such as the case study method) is independent of the underlying philosophical position adopted. For example, case study research can be positivist (Yin, 2002), interpretive (Walsham, 1993), or critical, just as action research can be positivist (Clark, 1972), interpretive (Elden and Chisholm, 1993) or critical (Carr and Kemmis, 1986). These three philosophical perspectives are discussed below.

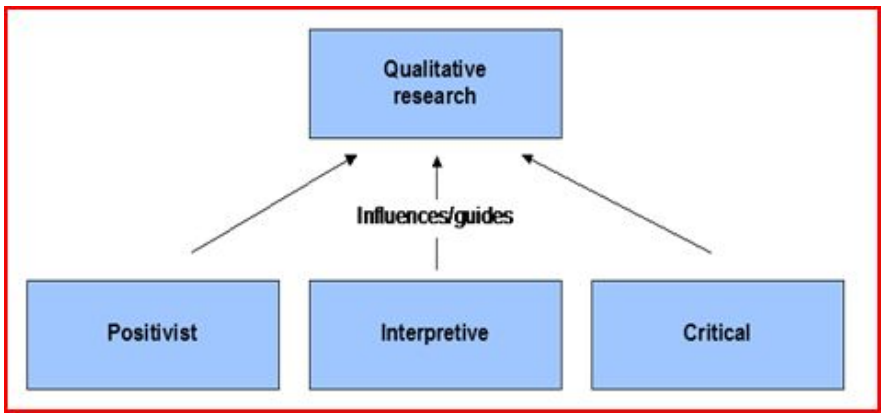

Figure 1 - Underlying philosophical assumptions

1. Positivist Research

Positivists generally assume that reality is objectively given and can be described by measurable properties which are independent of the observer (researcher) and his or her instruments. Positivist studies generally attempt to test theory, in an attempt to increase the predictive understanding of phenomena. In line with this Orlikowski and Baroudi (1991, p.5) classified IS research as positivist if there was evidence of formal propositions, quantifiable measures of variables, hypothesis testing, and the drawing of inferences about a phenomenon from the sample to a stated population.

Examples of a positivist approach to qualitative research include Yin's (2002) and Benbasat et al's (1987) work on case study research. See also the ISWorld Section on Quantitative, Positivist Research edited by Straub, Gefen and Boudreau (2004).

2. Interpretive Research

Interpretive researchers start out with the assumption that access to reality (given or socially constructed) is only through social constructions such as language, consciousness and shared meanings. The philosophical base of interpretive research is hermeneutics and phenomenology (Boland, 1985). Interpretive studies generally attempt to understand phenomena through the meanings that people assign to them and interpretive methods of research in IS are "aimed at producing an understanding of the context of the information system, and the process whereby the information system influences and is influenced by the context" (Walsham 1993, p. 4-5). Interpretive research does not predefine dependent and independent variables, but focuses on the full complexity of human sense making as the situation emerges (Kaplan and Maxwell, 1994).

Examples of an interpretive approach to qualitative research include Boland's (1991) and Walsham's (1993) work. Klein and Myers' (1999) paper suggests a set of principles for the conduct and evaluation of interpretive research.

»References on Interpretive Research

3. Critical Research

Critical researchers assume that social reality is historically constituted and that it is produced and reproduced by people. Although people can consciously act to change their social and economic circumstances, critical researchers recognize that their ability to do so is constrained by various forms of social, cultural and political domination. The main task of critical research is seen as being one of social critique, whereby the restrictive and alienating conditions of the status quo are brought to light. Critical research focuses on the oppositions, conflicts and contradictions in contemporary society, and seeks to be emancipatory i.e. it should help to eliminate the causes of alienation and domination.

One of the best known exponents of contemporary critical social theory is Jurgen Habermas, who is regarded by many as one of the leading philosophers of the twentieth century. Habermas was a member of the Frankfurt School, which included figures such as Adorno, Horkheimer, Lukacs, and Marcuse. Examples of a critical approach to qualitative research include Ngwenyama and Lee's (1997) and Hirschheim and Klein's (1994) work. Myers and Klein (2011) suggest a set of principles for the conduct of critical research.

»References on Critical Social Theory

QUALITATIVE RESEARCH METHODS

Just as there are various philosophical perspectives which can inform qualitative research, so there are various qualitative research methods. A research method is a strategy of inquiry which moves from the underlying philosophical assumptions to research design and data collection. The choice of research method influences the way in which the researcher collects data. Specific research methods also imply different skills, assumptions and research practices. The four research methods that will be discussed here are action research, case study research, ethnography and grounded theory - for more detail see Myers (2009).

1. Action Research

There are numerous definitions of action research, however one of the most widely cited is that of Rapoport?s, who defines action research in the following way:

Action research aims to contribute both to the practical concerns of people in an immediate problematic situation and to the goals of social science by joint collaboration within a mutually acceptable ethical framework (Rapoport, 1970, p. 499).

This definition draws attention to the collaborative aspect of action research and to possible ethical dilemmas which arise from its use. It also makes clear, as Clark (1972) emphasizes, that action research is concerned to enlarge the stock of knowledge of the social science community. It is this aspect of action research that distinguishes it from applied social science, where the goal is simply to apply social scientific knowledge but not to add to the body of knowledge.

Action research has been accepted as a valid research method in applied fields such as organization development and education (e.g. see the Special Issue on action research in *Human Relations*, Vol. 46, No. 2, 1993, and Kemmis and McTaggart, 1988). In information systems, however, action research was for a long time largely ignored, apart from one or two notable exceptions (e.g. Checkland, 1991). More recently, there seems to be increasing interest in action research.

A brief overview of action research is the article by Susman and Evered (1988). The article by Baskerville and Wood-Harper (1996) provides a good introduction to how action research might be used by IS researchers. An empirical example of action research is the article by Ytterstad et al. (1996).

»Investigating Information Systems with Action Research
»References on Action Research
» *MIS Quarterly* Special Issue on Action Research in Information Systems. See Baskerville and Myers (2004).

2. Case Study Research

The term "case study" has multiple meanings. It can be used to describe a unit of analysis (e.g. a case study of a particular organisation) or to describe a research method. The discussion here concerns the use of the case study as a research method.

Case study research is the most common qualitative method used in information systems (Orlikowski and Baroudi, 1991; Alavi and Carlson, 1992). Although there are numerous definitions, Yin (2002) defines the scope of a case study as follows:

A case study is an empirical inquiry that:

- investigates a contemporary phenomenon within its real-life context, especially when
- the boundaries between phenomenon and context are not clearly evident (Yin 2002).

Clearly, the case study research method is particularly well-suited to IS research, since the object of our discipline is the study of information systems in organizations, and "interest has shifted to organizational rather than technical issues" (Benbasat et al. 1987).

Case study research can be positivist, interpretive, or critical, depending upon the underlying philosophical assumptions of the researcher (for a fuller discussion, see the section of Philosophical Perspectives above). Yin (2002) and Benbasat et al. (1987) are advocates of positivist case study research, whereas Walsham (1993) is an advocate of interpretive in-depth case study research.

»References on Case Study Research

3. Ethnography

Ethnographic research comes from the discipline of social and cultural anthropology where an ethnographer is required to spend a significant amount of time in the field. Ethnographers immerse themselves in the lives of the people they study (Lewis 1985, p. 380) and seek to place the phenomena studied in their social and cultural context.

After early ground-breaking work by Wynn (1979), Suchman (1987) and Zuboff (1988), ethnography has now become more widely used in the study of information systems in organizations, from the study of the development of information systems (Hughes et. al, 1992; Orlikowski, 1991; Preston, 1991) to the study of aspects of information technology management (Davies, 1991; Davies and

Nielsen, 1992). Ethnography has also been discussed as a method whereby multiple perspectives can be incorporated in systems design (Holzblatt and Beyer, 1993) and as a general approach to the wide range of possible studies relating to the investigation of information systems (Pettigrew, 1985).

In the area of the design and evaluation of information systems, some very interesting work is taking place in a collaborative fashion between ethnographers on the one hand, and designers, IS professionals, computer scientists and engineers on the other. This collaborative work is especially strong in the UK and Europe and is growing in the US.

»Myers (1999) overview article entitled "Investigating Information Systems with Ethnographic Research" (this is the PDF version of a paper published in *Communications of the AIS*. Please note that the Association for Information Systems owns the copyright and use for profit is not allowed)
»AIS-Pert Workshop on Ethnographic Research in Information Systems from 8-11 March 1999
»References on Ethnographic Research

4. Grounded Theory

Grounded theory is a research method that seeks to develop theory that is grounded in data systematically gathered and analyzed. According to Martin and Turner (1986), grounded theory is "an inductive, theory discovery methodology that allows the researcher to develop a theoretical account of the general features of a topic while simultaneously grounding the account in empirical observations or data." The major difference between grounded theory and other methods is its specific approach to theory development - grounded theory suggests that there should be a continuous interplay between data collection and analysis.

Grounded theory approaches are becoming increasingly common in the IS research literature because the method is extremely useful in developing context-based, process-oriented descriptions and explanations of the phenomenon (see, for example, Orlikowski, 1993). Urquhart, Lehmann and Myers (2010) suggest a set of guidelines for grounded theory studies in information systems.

»References on Grounded Theory
»Wanda Orlikowski's MISQ Paper of the Year '93

QUALITATIVE TECHNIQUES FOR DATA COLLECTION

Each of the research methods discussed above uses one or more techniques for collecting empirical data (many qualitative researchers prefer the term "empirical materials" to the word "data" since most qualitative data is non-numeric). These techniques range from interviews, observational techniques such as participant observation and fieldwork, through to archival research. Written data sources can include published and unpublished documents, company reports, memos, letters, reports, email messages, faxes, newspaper articles and so forth.

In anthropology and sociology it is a common practice to distinguish between primary and secondary sources of data. Generally speaking, primary sources are those data which are unpublished and which the researcher has gathered from the people or organization directly. Secondary sources refers to any materials (books, articles etc.) which have been previously published.

Typically, a case study researcher uses interviews and documentary materials first and foremost, without using participant observation. The distinguishing feature of ethnography, however, is that the researcher spends a significant amount of time in the field. The fieldwork notes and the experience of living there become an important addition to any other data gathering techniques that may be used.

Good discussions of qualitative techniques for data collection can be found in Denzin and Lincoln (2005), Miles and Huberman (1994), Rubin and Rubin (1995) and Silverman (1993). Myers and Newman (2007) suggest guidelines for the conduct of qualitative interviews based on a dramaturgical model of the qualitative interview.

»Should you Tape Research Interviews? A summary of responses to an ISWorld posting

MODES OF ANALYSIS

Although a clear distinction between data gathering and data analysis is commonly made in quantitative research, such a distinction is problematic for many qualitative researchers. For example, from a hermeneutic perspective it is assumed that the researcher's presuppositions affect the gathering of the data - the questions posed to informants largely determine what you are going to find out. The analysis affects the data and the data affect the analysis in significant ways. Therefore it is perhaps more accurate to speak of "modes of analysis" rather than "data analysis" in qualitative research. These modes of analysis are different approaches to gathering, analyzing and interpreting qualitative data . The common thread is that all qualitative modes of analysis are concerned primarily with textual analysis (whether verbal or written).

Although there are many different modes of analysis in qualitative research, just three approaches or modes of analysis will be discussed here: hermeneutics, semiotics, and approaches which focus on narrative and metaphor. It could be argued that grounded theory is also a mode of analysis, but since grounded theory has been discussed earlier, that discussion will not be repeated here.

1. Hermeneutics

Hermeneutics can be treated as both an underlying philosophy and a specific mode of analysis (Bleicher, 1980). As a philosophical approach to human understanding, it provides the philosophical grounding for interpretivism (see the discussion on Philosophical Perspectives above). As a mode of analysis, it suggests a way of understanding textual data. The following discussion is concerned with using hermeneutics as a specific mode of analysis.

Hermeneutics is primarily concerned with the *meaning* of a text or text-analogue (an example of a text-analogue is an organization, which the researcher comes to understand through oral or written text). The basic question in hermeneutics is: what is the meaning of this text? (Radnitzky 1970, p. 20). Taylor says that:

> *"Interpretation, in the sense relevant to hermeneutics, is an attempt to make clear, to make sense of an object of study. This object must, therefore, be a text, or a text-analogue, which in some way is confused, incomplete, cloudy, seemingly contradictory - in one way or another, unclear. The interpretation aims to bring to light an underlying coherence or sense" (Taylor 1976, p. 153).*

The idea of a hermeneutic circle refers to the dialectic between the understanding of the text as a whole and the interpretation of its parts, in which descriptions are guided by anticipated explanations (Gadamer 1976, p. 117). It follows from this that we have an expectation of meaning from the context of what has gone before. The movement of understanding "is constantly from the whole to the

part and back to the whole" (ibid, p. 117). As Gadamer explains, "It is a circular relationship. . . The anticipation of meaning in which the whole is envisaged becomes explicit understanding in that the parts, that are determined by the whole, themselves also determine this whole." Ricoeur suggests that "Interpretation . . . is the work of thought which consists in deciphering the hidden meaning in the apparent meaning, in unfolding the levels of meaning implied in the literal meaning" (Ricoeur 1974, p. xiv).

There are different forms of hermeneutic analysis, from "pure" hermeneutics through to "critical" hermeneutics, however a discussion of these different forms is beyond the scope of this section. For a more in-depth discussion, see Bleicher (1980), Myers (2004), Palmer (1979), and Thompson (1981).

If hermeneutic analysis is used in an information systems study, the object of the interpretive effort becomes one of attempting to make sense of the organization as a text-analogue. In an organization, people (e.g. different stakeholders) can have confused, incomplete, cloudy and contradictory views on many issues. The aim of the hermeneutic analysis becomes one of trying to make sense of the whole, and the relationship between people, the organization, and information technology.

Good examples of research articles in IS which explicitly use hermeneutics are those by Boland (1991), Lee (1994), and Myers (1994). Myers (2004) provides an overview of the use of hermeneutics in IS research.

»References on Interpretive Research

2. Semiotics

Like hermeneutics, semiotics can be treated as both an underlying philosophy and a specific mode of analysis. The following discussion concerns using semiotics as a mode of analysis.

Semiotics is primarily concerned with the meaning of signs and symbols in language. The essential idea is that words/signs can be assigned to primary conceptual categories, and these categories represent important aspects of the theory to be tested. The importance of an idea is revealed in the frequency with which it appears in the text.

One form of semiotics is "content analysis." Krippendorf (1980) defines content analysis as "a research technique for making replicable and valid references from data to their contexts." The researcher searches for structures and patterned regularities in the text and makes inferences on the basis of these regularities.

Another form of semiotics is "conversation analysis." In conversation analysis, it is assumed that the meanings are shaped in the context of the exchange (Wynn, 1979). The researcher immerses himself/herself in the situation to reveal the background of practices.

A third form of semiotics is "discourse analysis." Discourse analysis builds on both content analysis and conversation analysis but focuses on "language games." A language game refers to a well-defined unit of interaction consisting of a sequence of verbal moves in which turns of phrases, the use of metaphor and allegory all play an important part.

A brief introduction to the use of semiotics in information systems is the book by Liebenau and Backhouse (1990). Wynn's (1991) paper is a good example of the use of conversation analysis in information systems, while Klein and Truex's (1995) paper is a good example of the use of discourse analysis in IS.

»References on Interpretive Research

3. Narrative and Metaphor

Narrative is defined by the Concise Oxford English Dictionary as a "tale, story, recital of facts, especially story told in the first person." There are many kinds of narrative, from oral narrative through to historical narrative. Metaphor is the application of a name or descriptive term or phrase to an object or action to which it is not literally applicable (e.g. a window in Windows 95).

Narrative and metaphor have long been key terms in literary discussion and analysis. In recent years there has been increasing recognition of the role they play in all types of thinking and social practice. Scholars in many disciplines have looked at areas such as metaphor and symbolism in indigenous cultures, oral narrative, narrative and metaphor in organizations, metaphor and medicine, metaphor and psychiatry etc.

In IS the focus has mostly been on understanding language, communication and meaning among systems developers and organizational members. In recent years narrative, metaphor and symbolic analysis has become a regular theme in the IFIP 8.2 Working Group conferences, the proceedings of which are now published by Kluwer.

»References on Narrative and Metaphor
»Narrative Psychology is an excellent resource on narrative and related areas.
»MENO (Multimedia, Education and Narrative Organisation) is concerned with the role of narrative in the design of interactive multimedia systems
»Rhetorical Criticism - A summary of responses to an ISWorld posting

WRITING UP QUALITATIVE RESEARCH

Just as there are many different qualitative methods and approaches to qualitative data analysis, so there are many different writing styles and approaches. For a brief overview of some of these styles as they relate to ethnography, see Harvey and Myers (1995) and Myers (1999). It is hard to over-emphasise the importance of good writing.

For writing up qualitative research in general, I highly recommend Wolcott?s (1990) book. This book has many practical suggestions. For example, Wolcott points out that many qualitative researchers make the mistake of leaving the writing up until the end i.e. until they have got ?the story? figured out. However, Wolcott makes the point that ?writing is thinking?. Writing actually helps a researcher to think straight and to figure out what the story should be. The motto of every qualitative researcher should be to start writing as soon as possible.

A common problem for qualitative IS researchers is that IS researchers are expected to publish their work in journal articles. Generally speaking, journal articles are regarded much more highly than books in business schools. However, most types of qualitative research lead to the gathering of a significant mass of data. It can be difficult for qualitative researchers to write up their results within the space constraints of a journal article. Another problem is the expectation that singular findings will be presented in each paper i.e. each journal article should have just one main point. Often a qualitative doctoral thesis such as an ethnographic study will have many points.

One solution is for qualitative researchers to treat each paper as a part of the whole. That is, a qualitative researcher has to devise a

way to carve up the work in such as way that parts of it can be published separately. Then the issue becomes which part of the story is going to told in one particular paper. A qualitative researcher has to come to terms with the fact that it is impossible to tell the "whole story" in any one paper, so he or she has to accept that only one part of it can be told at any one time. One advantage of such a strategy is that there is potential for an ethnographer to publish many papers from just the one period of fieldwork. Usually it is possible to tell the same story but from different angles. For more suggestions about writing and publishing, see Myers (2009).

REFERENCES ON QUALITATIVE RESEARCH

The following are lists of references which relate or are relevant to qualitative research in information systems. Please note that these lists mostly focus on some of the earlier works in information systems or classic works in other fields - these lists are not intended to be definitive. I recommend you consult a bibliographic database such as Google Scholar, Scopus or the AIS e-library if you need a more comprehensive and up-to-date list of the literature. Also bear in mind that there is considerable overlap between the lists because some citations fit into multiple categories.

»General References on Qualitative Research
»References on Interpretive Research
»References on Critical Research
»References on Action Research
»References on Case Study Research
»References on Ethnographic Research
»References on Grounded Theory
»References on Narrative and Metaphor
»Doctoral Dissertations in Information Systems

»An **EndNote file** of all the above references (original version kindly supplied by David Avison) is available in zip format.
»Myers Qualitative website references in EndNote

RESOURCES FOR QUALITATIVE RESEARCHERS

The following are links to resources on the Internet for qualitative researchers:

»The Qualitative Report is an online journal dedicated to qualitative research and critical inquiry.
»Qualitative Research Email Resources
»Sage Publications is arguably the leading publisher of qualitative methodology texts
»Narrative Psychology is an excellent resource on narrative and related areas.
»Association for Qualitative Research
»Qualitative Research Resources on the Internet
»QualPage includes calls for papers, conferences, discussion forums, publishers etc.
»International Journal of Social Research Methodology is a new cross-disciplinary journal designed to foster discussion and debate in social research methodology
»Qualitative Sociology Review is a new journal devoted to qualitative sociology.
»Society for the Study of Symbolic Interactionism
»Research Resources for the Social Sciences
»Semiotics
»Student Guide to Semiotics
»Social Research Update is published by the Department of Sociology, University of Surrey, England.
»Forum: Qualitative Social Research is a bilingual (English/ German) online journal for qualitative research edited by Katja Mruck. The main aim of FQS is to promote discussion and cooperation between qualitative researchers from different nations and social science disciplines.
»The Open Memo Pages of Grounded Theory Methodology
»Evaluation and Social Research Methods has links to books, manuals, and articles on how to do evaluation and social research.

SOFTWARE TOOLS FOR QUALITATIVE RESEARCHERS

The software "bible" for qualitative researchers is the book by Weitzman, E.A. and Miles, M.B. *Computer Programs for Qualitative Data Analysis,* Sage, Thousand Oaks, 1995. Although their discussion about the differences between the various software packages is somewhat dated, their categorisation of the different types of packages and their guidelines for choosing a package are still very useful. An updated edition is supposed to be coming soon.

The following email messages provides a summary of the responses to an AISWorld posting in April 2000 regarding the use of Qualitative Data Analysis (QDA) software.

»Articles/ Books on Qualitative Data Analysis software: A summary of responses to an ISWorld posting

The following are links to resources on the Internet regarding software tools for qualitative researchers:

»CAQDAS is the Computer Assisted Qualitative Data Analysis Software Networking Project
»Qualitative Data Analysis Software Resources
»QSR International offers a few software products for qualitative data analysis. One of these is the most widely used QDA software product called NVivo
»The Ethnograph (v 4.0) is the second most widely used software for qualitative data analysis in the world
»ATLAS/ti is a software product for qualitative data analysis
»Qualrus is a general-purpose qualitative analysis program which supports text and multimedia sources
»WordStat is a content analysis / qualitative analysis software product
»Leximancer identifies key themes, concepts and ideas from unstructured text
»TextAnalyst is a system for semantic text analysis and navigation (released November 1998)
»Annotape is a system for recording, analysing and transcribing audio data for qualitative research
»HyperResearch is qualitative data analysis software package enabling you to code and retrieve, build theories, and conduct analyses of your data
»Social Science Software is a site that lists many of the software tools for social science research. It is mostly in German but an English version is available.
»A list of QDA software is provided in a section of the Social Science Software site mentioned in the previous item.
»A list of transcription software is also provided at the same Social Science Software site mentioned above.

TEACHING QUALITATIVE RESEARCH

If you are involved with the teaching of qualitative research in information systems, the following resources may be helpful:

»The book by Myers (2009) discusses the use of qualitative research in all of the business disciplines including information systems.
» BA 9300 - Qualitative Research Methods in Business. This is Dan Robey's doctoral seminar at Georgia State University.
»Qualitative Research Methods II - MIS 6000. This is Hope Koch's qualitative methods course at Baylor University, Texas.
»INFOSYS 751 - Research Methods (Qualitative) . This is my own qualitative methods course at The University of Auckland Business School.
»MÉTHODOLOGIE DE LA RECHERCHE - RESEARCH METHODS. This was Allen Lee's research methods course (not just qualitative) for all management/business students in the doctoral program at McGill University, Montreal.
»LIS 450EI - Ethnography of Information Systems. This is a an RTF file of Geoffrey Bowker and Susan Leigh Star's doctoral course at the University of Illinois
»The book by Myers and Avison (2002) includes many of the recommended readings from this web site.

CALLS FOR PAPERS

Forthcoming

The following are calls for papers relating to qualitative research in information systems:

»All of the IFIP Working Group 8.2 conferences welcome qualitative research articles. Forthcoming conferences are listed on the IFIP WG 8.2 website.

Previous

The following are previous calls for papers related to qualitative research in information systems. Most of these have details of the final program and papers accepted, some include PDF files of abstracts etc, and others are available in print and in various bibliographic databases.

»A Special Issue entitled "Applying the Grounded Theory Approach in Information Systems Research" was published in the *European Journal of Information Systems* Volume 22, Issue 1, January 2013.
»A Special Issue on Qualitative Research Methods was published in the *European Journal of Information Systems* Volume 21, Issue 2, March 2012.
»QualIT2010. The fifth International Conference on Qualitative Research in IT & IT in Qualitative Research. It was held in Brisbane (29-30 November, 2010), as a co-located event with ACIS 2010.
»QualIT 2007. The fourth International Conference on Qualitative Research in IT & IT in Qualitative Research in the Southern Hemisphere. Held in Wellington, New Zealand, from November 18-20, 2007.
»QualIT 2006. The third International Conference on Qualitative Research in IT & IT in Qualitative Research in the Southern Hemisphere. Held in Brisbane, Australia, from November 27-29, 2006.
»QualIT 2005. The second International Conference on Qualitative Research in IT & IT in Qualitative Research in the Southern Hemisphere. Held in Brisbane, Australia, from November 23-25, 2005.
»QualIT 2004. The first International Conference on Qualitative Research in IT & IT in Qualitative Research in the Southern Hemisphere. Held in Brisbane, Australia, from November 24-26, 2004.
»Qualitative Methods and the Dynamics of Change. Special Issue of *International Journal of Learning and Change*.
»IFIP Working Group 8.2 IS Research Methods Conference - held in Manchester from July 15-17, 2004, 20 years after the original IS research methods conference was held there.
» *MIS Quarterly* Special Issue on Action Research in Information Systems. The special issue was published in September 2004.
» IFIP Working Group 8.2 Working Conference on: Global and organizational discourse about information technology, December 12-14, 2002.
»IFIP Working Group 8.2 Working Conference, Boise, Idaho, US, July 2001.
»IFIP Working Group 8.2 Working Conference, *IS2000: The Social and Organizational Perspective on Research and Practice in Information Technology*, Aalborg, Denmark, 9-11 June, 2000.
»New Information Technologies in Organizational Processes: Field Studies and Theoretical Reflections on the Future of Work, St. Louis, MO, USA, August 20 - 22, 1999
»Information Technology and Critical Theory in the New Millenium: Is there still hope? A Workshop in the Critical Management Studies Conference Hulme Hall, Manchester University, UK, July 14-16 1999
»Journal of Information Technology - Special Issue on Interpretive Research
» MIS Quarterly Special Issue on Intensive Research
»IFIP Working Group 8.2 Working Conference on Information Systems and Qualitative Research, Philadelphia, USA, May 31 - June 3, 1997

Journals

Most IS journals and conferences accept qualitative research. The following journals tend to favor it:

» Information and Organization (formerly Accounting, Management and Information Technologies)
» Information Systems Journal
» Information, Technology & People
» Journal of Systems and Information Technology

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